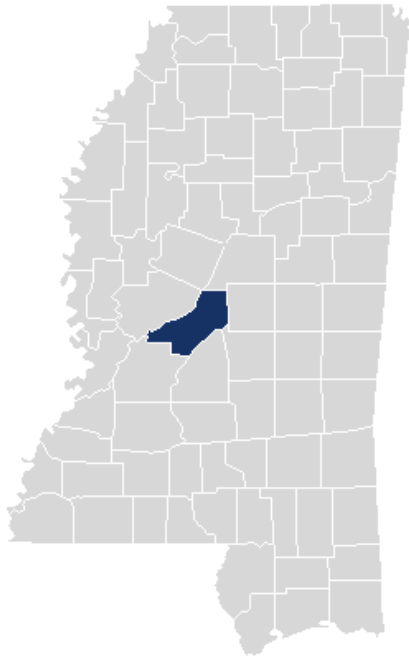


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 3



MADISON COUNTY, MISSISSIPPI

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
CANTON, CITY OF	280109
FLORA, TOWN OF	280399
JACKSON, CITY OF	280072
MADISON, CITY OF	280229
MADISON COUNTY, UNINCORPORATED AREAS	280228
PEARL RIVER VALLEY WATER SUPPLY DISTRICT	280338
RIDGELAND, CITY OF	280110



FEMA

PRELIMINARY
2/09/2018

REVISED:

FLOOD INSURANCE STUDY NUMBER
28089CV001B

Version Number 2.3.3.3

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Volume 3

Exhibits

Flood Profiles	<u>Panel</u>
Batchelor Creek	01-03 P
Batchelor Creek Tributary 1	04 P
Batchelor Creek Tributary 2	05 P
Bear Creek	06-11 P
Beaver Creek	12 P
Beaver Creek Tributary	13 P
Bogue Chitto Creek	14-15 P
Brashear Creek	16-19 P
Brown Creek	20 P
Culley Creek	21-22 P
Haley Creek	23 P
Hanging Moss Creek	24 P
Hanging Moss Creek Tributary 4	25 P

Hearn Creek	26 P
Hearn Creek Tributary	27 P
Limekiln Creek	28-29 P
Little Bear Creek	30-32 P
Little Bear Creek Tributary 1	33 P
Panther Creek	34-35 P
Purple Creek	36-39 P
Purple Creek Tributary 1	40 P
Purple Creek Tributary 3	41 P
Purple Creek Tributary 4	42 P
Purple Creek Tributary 5	43 P
Purple Creek Tributary 6	44 P
Purple Creek Tributary 7	45 P
School Creek	46-47 P
School Creek Tributary 1	48 P
School Creek Tributary 2	49 P
Spring Creek	50 P
Stream A	51-52 P
Stream B	53-54 P
Stream C	55 P
Stream D	56 P
Stream E	57-58 P
Stream E Tributary 1	59 P
Stream F	60 P
Stream G	61-62 P
Stream H	63 P
Stream I	64-65 P
Stream J	66 P
Stream K	67-68 P
Stream L	69 P
Stream M	70 P
Stream N	71 P
Stream O	72 P
Stream P	73-74 P
Stream Q	75-76 P
Stream R	77 P
Stream S	78 P
Stream T	79 P
Walnut Creek	80-82 P
White Oak Creek	83-84 P
White Oak Creek Tributary 1	85-86 P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT MADISON COUNTY, MISSISSIPPI

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60.3, *Criteria for land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal Government. Congress also recognized that most of these floodprone buildings were built by individuals who did not have sufficient knowledge of the flood hazard to make informed decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is

later. These buildings are generally referred to as “Post-FIRM” buildings.

1.2 Purpose of this Flood Insurance Study Report

This Flood Insurance Study (FIS) Report revises and updates information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data that will be used to establish actuarial flood insurance rates and to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community’s regulations.

1.3 Jurisdictions Included in the Flood Insurance Study Project

This FIS Report covers the entire geographic area of Madison County, Mississippi.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the 8-digit Hydrologic Unit Codes (HUC-8) sub-basins affecting each, are shown in Table 1. The Flood Insurance Rate Map (FIRM) panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

The location of flood hazard data for participating communities in multiple jurisdictions is also indicated in the table.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Canton, City of	280109	08060202	28089C0245F 28089C0275G 28089C0405G 28089C0410G 28089C0430G	
Flora, Town of	280399	08060202	28089C0365F 28089C0370F 28089C0375F	
Jackson, City of	280072	03180002	28089C0566F 28089C0567G 28089C0568F 28089C0569G	Madison County FIS Report, TBD

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Madison, City of	280229	03180002, 08060202	28089C0390G 28089C0395G 28089C0555G 28089C0556F 28089C0557G 28089C0558F 28089C0559F 28089C0576G 28089C0577G 28089C0578F 28089C0579F 28089C0585F 28089C0586F 28089C0587F	
Madison County, Unincorporated Areas	280228	03180001, 03180002, 08060201, 08060202	28089C0025F *28089C0050F *28089C0075F 28089C0100F 28089C0125G 28089C0150G *28089C0175F 28089C0200G 28089C0225G 28089C0240F 28089C0245F 28089C0250F 28089C0275G 28089C0300G 28089C0325F 28089C0350F 28089C0365F 28089C0370F 28089C0375G 28089C0380G 28089C0385F 28089C0390G 28089C0395F 28089C0405G 28089C0410G 28089C0415G	

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Madison County, Unincorporated Areas	280228	03180001, 03180002, 08060201, 08060202	28089C0420G 28089C0430G 28089C0435F 28089C0440G 28089C0445F 28089C0475F 28089C0500F 28089C0525F 28089C0550G 28089C0555G 28089C0556F 28089C0557G 28089C0558F 28089C0565F 28089C0566F 28089C0567G 28089C0576G 28089C0577G 28089C0579F 28089C0587F 28089C0585F	
Pear River Valley Water Supply District	280338	03180002	28089C0325F 28089C0420G 28089C0435F 28089C0440G 28089C0445F 28089C0475F 28089C0500F 28089C0577G 28089C0579F 28089C0585F 28089C0586F 28089C0587F 28089C0588F 28089C0589F 28089C0595F 28089C0625F	

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Ridgeland, City of	280110	03180002	28089C0555F 28089C0558F 28089C0559F 28089C0565F 28089C0566F 28089C0567F 28089C0568F 28089C0569F 28089C0578F 28089C0586F 28089C0587F 28089C0588F 28089C0589F	

1.4 Considerations for using this Flood Insurance Study Report

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1% annual chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1% annual chance and 0.2% annual chance floodplains; and 1% annual chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

- Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 31, "Map Repositories," within this FIS Report.

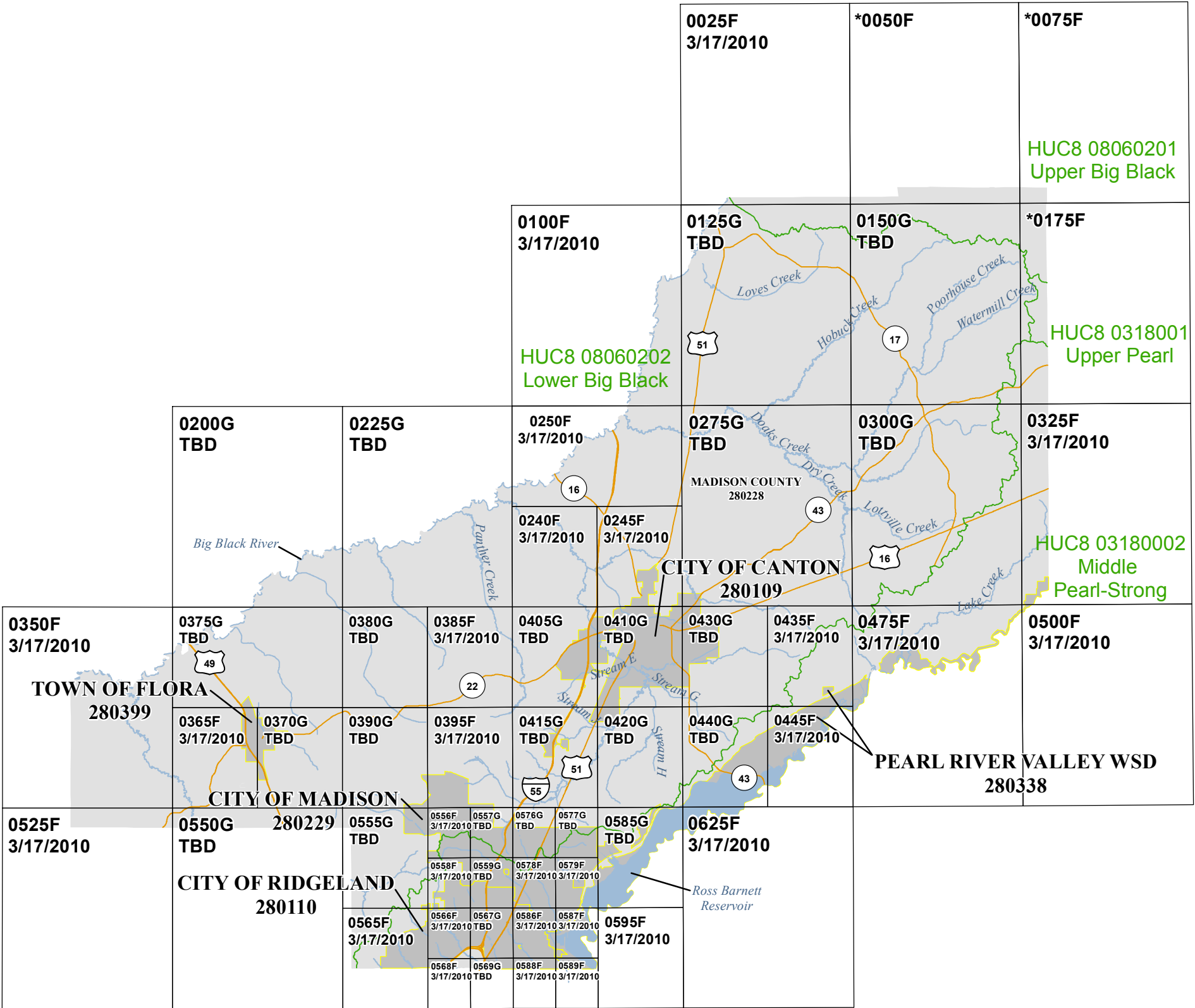
- New FIS Reports are frequently developed for multiple communities, such as entire counties. A countywide FIS Report incorporates previous FIS Reports for individual communities and the unincorporated area of the county (if not jurisdictional) into a single

document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for Madison County became effective on April 15, 1994. Refer to Table 28 for information about subsequent revisions to the FIRMs.

- FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at <http://www.fema.gov/online-tutorials>.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Madison County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and USGS HUC-8 codes.



1 inch = 27,500 feet

1:330,000

0

7,500

15,000

30,000

45,000

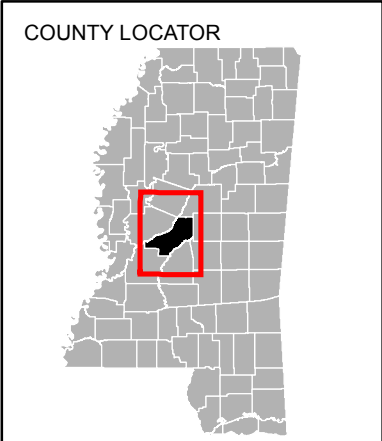
60,000

Feet

Map Projection:
State Plane Coordinate System
Mississippi West, FIPS Zone 2302

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://MSC.FEMA.GOV](http://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

MADISON COUNTY, MISSISSIPPI and Incorporated Areas
PANELS PRINTED:

0025, 0100, 0125, 0150, 0200, 0225, 0240, 0245, 0250, 0275,
0300, 0325, 0350, 0365, 0370, 0375, 0380, 0385, 0390, 0395,
0405, 0410, 0415, 0420, 0430, 0435, 0440, 0445, 0475, 0500,
0525, 0550, 0555, 0556, 0557, 0558, 0559, 0565, 0566, 0567,
0568, 0569, 0576, 0577, 0578, 0579, 0585, 0586, 0587, 0588,
0589, 0595, 0625



FEMA

MAP NUMBER
28089CIND0B

MAP REVISED

PRELIMINARY 2/09/2018

* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

Figure 2: FIRM Notes to Users

<div><h2>NOTES TO USERS</h2><p>For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.</p><p>Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.</p><p>For community and countywide map dates, refer to Table 28 in this FIS Report.</p><p>To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.</p><p>PRELIMINARY FIS REPORT: FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.</p></div>
<div><p>The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.</p><p>BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.</p><p>FLOODWAY INFORMATION: Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.</p></div>

Figure 2. FIRM Notes to Users

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.3 "Non-Levee Flood Protection Measures" of this FIS Report for information on flood control structures for this jurisdiction.

PROJECTION INFORMATION: The projection used in the preparation of the map was Mississippi State Plane West FIPS Zone 2302. The horizontal datum was NAD83, Western Hemisphere. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

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

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 31 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on the FIRM was provided in digital format by Mississippi Department of Environmental Quality, Automated Resource Information System, and the United States Department of Agriculture. Orthoimagery was originally produced by Fugro Earthdata in 2006 and has a 2- foot pixel resolution. Supplemental imagery was produced by National Agriculture Imagery Program (NAIP) in 2014 and has a 1 – meter ground sample distanced. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables may reflect stream channel distances that differ from what is shown on the map.

Corporate limits shown on the map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Figure 2. FIRM Notes to Users

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Madison County, MS, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 28 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for Madison County, MS, effective **TBD**.

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Madison County.

Figure 3: Map Legend for FIRM

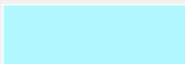
<p>SPECIAL FLOOD HAZARD AREAS: <i>The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.</i></p>	
	Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)
Zone A	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
Zone AE	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone, either at cross section locations or as static whole-foot elevations that apply throughout the zone.
Zone AH	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
Zone AO	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
Zone AR	The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
Zone A99	The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
Zone V	The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
Zone VE	Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.

Figure 3: Map Legend for FIRM







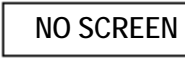








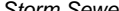
	Regulatory Floodway determined in Zone AE.
OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.
	Area with Reduced Flood Risk due to Levee: Areas where an accredited levee, dike, or other flood control structure has reduced the flood risk from the 1% annual chance flood. See Notes to Users for important information.
	Area with Flood Risk due to Levee: Areas where a non-accredited levee, dike, or other flood control structure is shown as providing protection to less than the 1% annual chance flood.
OTHER AREAS	
	Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible
	Unshaded Zone X: Areas determined to be outside the 0.2% annual chance flood hazard
FLOOD HAZARD AND OTHER BOUNDARY LINES	
 (ortho)  (vector)	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet
GENERAL STRUCTURES	
   	Channel, Culvert, Aqueduct, or Storm Sewer

Figure 3: Map Legend for FIRM





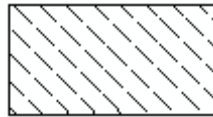

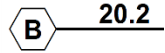
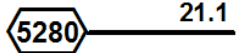
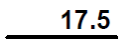
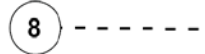







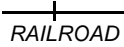



	Dam, Jetty, Weir
	Levee, Dike or Floodwall
	Bridge
COASTAL BARRIER RESOURCES SYSTEM (CBRS) AND OTHERWISE PROTECTED AREAS (OPA): CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. See Notes to Users for important information.	
 <p>CBRS AREA 09/30/2009</p>	Coastal Barrier Resources System Area: Labels are shown to clarify where this area shares a boundary with an incorporated area or overlaps with the floodway.
 <p>OTHERWISE PROTECTED AREA 09/30/2009</p>	Otherwise Protected Area
REFERENCE MARKERS	
 <p>22.0</p>	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
	Base Flood Elevation Line

Figure 3: Map Legend for FIRM

ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
<u>Missouri Creek</u>	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
<u>MAPLE LANE</u>	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
 RAILROAD	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
⁴² 76 ^{000m} E	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1% annual chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2% annual chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and Madison County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1% annual chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 23), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1% and 0.2% annual chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1% annual chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1% and 0.2% annual chance floodplain boundaries are close together, only the 1% annual chance floodplain boundary is shown on the FIRM. Figure 3, “Map Legend for FIRM”, describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within Madison County, respectively.

Table 2, “Flooding Sources Included in this FIS Report,” lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 13. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1% annual chance floodplain corresponds to the SFHAs. The 0.2% annual chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

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. The procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
All Zone A Streams Studied in the 1994 FIS	Madison County and Incorporated Areas	Madison County and Incorporated Areas	Various	03170009, 08060202	Various		N	A	1989
Bailey Branch	Madison County Unincorporated Areas	County Boundary	4,310 feet upstream of County Boundary	08060202	0.9		N	A	2014
Batchelor Creek	Canton, City of; Madison County Unincorporated Areas	Confluence with Tilda Bogue	2,715 feet upstream of Highway 43	08060202	5.3		Y	AE	1989
Batchelor Creek Tributary 1	Canton, City of; Madison County Unincorporated Areas	Confluence with Batchelor Creek	2,875 feet upstream of Highway 16	08060202	1.6		Y	AE	1989
Batchelor Creek Tributary 2	Canton, City of; Madison County Unincorporated Areas	Confluence with Batchelor Creek	3,440 feet upstream of mouth	08060202	0.7		Y	AE	1989
Bear Creek	Canton, City of; Madison, City of; Madison County Unincorporated Areas	Heindl Road	State Highway 22 Bridge	08060202	3.5		Y	AE	1989
Bear Creek	Canton, City of; Madison County Unincorporated Areas	State Highway 22 Bridge	Weisenberger Road	08060202	16.8		Y	AE	1994

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Bear Creek	Madison, City of; Madison County, Unincorporated Areas	Weisenberger Road	Reunion Lake #2	08060202	8.0		Y	AE	2008
Beaver Creek	Madison, City of; Ridgeland, City of	Confluence with Brashear Creek	Highway 51	03180002	1.3		Y	AE	1978
Beaver Creek	Ridgeland, City of	Highway 51	60 feet downstream of Wheatley Street	03180002	0.5		Y	AE	2008
Beaver Creek Tributary	Ridgeland, City of	Confluence with Beaver Creek	Washington Street W	03180002	0.6		Y	AE	1976
Bogue Chitto Creek	Madison County Unincorporated Areas	Confluence with Big Black River	County Boundary	08060202	15.32		Y	AE	1978
Brashear Creek	Madison, City of; Ridgeland, City of; Pear River Valley Water Supply District	County Boundary	Madison Avenue	03180002	9.3		Y	AE	1996
Brashear Creek	Madison, City of	Madison Avenue	8,070 feet upstream of Park Place Boulevard	03180002	1.5		Y	AE	2008
Brown Creek	Madison County Unincorporated Areas; Pearl River Valley Water Supply District	Ross Barnett Reservoir	Ratliff Ferry Road	03180002	3.5		Y	AE	1978

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Burnt Corn Creek	Madison County Unincorporated Areas	4,250 feet downstream of Ergon Road	2,050 feet upstream of Caney Creek Road	08060202	5.5		N	A	2014
Culley Creek	Madison, City of; Ridgeland, City of; Pear River Valley Water Supply District	Confluence with Brashear Creek	Hoy Road	03180002	4.0		Y	AE	1989
Dry Creek	Madison County Unincorporated Areas	Dry Creek Road Crossing	5,050 feet upstream of Old Highway 16 Road	08060202	9.25		N	A	2014
Gallant Creek	Madison, City of; Madison County Unincorporated Areas	3,460 feet downstream of Highway 51	1,520 feet upstream of Highway 51	08060202	1.0		N	A	2014
Haley Creek	Madison, City of; Madison County Unincorporated Areas; Pearl River Valley Water Supply District	Just upstream of Natchez Trace	3,840 feet upstream of Old Rice Road	03180002	1.1		Y	AE	2016
Hanging Moss Creek	Madison County Unincorporated Areas; City of Ridgeland	County Boundary	3,000 feet upstream of County Boundary	03180002	9.1		Y	AE	1976
Hanging Moss Creek Tributary 4	Madison County Unincorporated Areas; City of Ridgeland	Confluence with Hanging Moss Creek	85 feet upstream of Livingston Road	03180002	5.6		Y	AE	1989

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Hearn Creek	Madison, City of; Madison County Unincorporated Areas; Pearl River Valley Water Supply District	Natchez Trace Parkway	1,000 feet upstream of Natchez Trace Parkway	03180002	0.2		Y	AE	1989
Hearn Creek	Madison, City of; Pear River Valley Water Supply District	Natchez Trace Parkway	Hoy Road	03180002	1.5		Y	AE	1996
Hearn Creek Tributary	Madison, City of	Confluence with Hearn Creek	625 feet upstream of Hoy Road	0318002	0.5		Y	AE	1989
Hobuck Creek	Madison County Unincorporated Areas	16,220 feet downstream of Loring Road	9,280 feet upstream of Cooper Road	08060202	8.0		N	A	2014
Limekiln Creek	Madison County Unincorporated Areas	County Boundary	200 feet downstream of Robinson Springs Road	08060202	1.0		Y	AE	1978
Limekiln Creek	Madison County Unincorporated Areas	200 feet downstream of Robinson Springs Road	3,120 feet upstream of Gus Green Road	08060202	3.4		Y	AE	2014
Little Bear Creek	Canton, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	80 feet upstream of Yandell Road	08060202	8.1		Y	AE	1978
Little Bear Creek	Madison County Unincorporated Areas	80 feet upstream of Yandell Road	6,800 feet upstream of Yandell Road	08060202	1.3		N	AE	2014

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Little Bear Creek	Madison County Unincorporated Areas	6,800 feet upstream of Yandell Road	9,700 feet upstream of Yandell Road	08060202	0.5		N	A	1978
Little Bear Creek Tributary 1	Madison County Unincorporated Areas	Confluence with Little Bear Creek	9,560 feet upstream of Confluence	08060202	1.8		N	AE	2014
Lottville Creek	Madison County Unincorporated Areas	Confluence with Dry Creek	14,690 feet upstream of Potluck Road	08060202	4.5		N	A	2014
Loves Creek	Madison County Unincorporated Areas	3,580 feet downstream of Highway 51	5,095 feet upstream of Old 51 Road	08060202	3.0		N	A	2014
Panther Creek	Madison County Unincorporated Areas	Approximately 6,170 feet downstream of Virillia Road	400 feet upstream of Stokes Road	08060202	9.4		Y	AE	1978
Panther Creek	Madison County Unincorporated Areas	400 feet upstream of Stokes Road	160 feet upstream of Catlett Road	08060202	7.0		Y	AE	2008
Persimmon Creek	Madison County Unincorporated Areas	Just downstream side of Virillia Road	7,950 feet upstream of Stokes Road	08060202	6.2		N	A	2014
Poorhouse Creek	Madison County Unincorporated Areas	Highway 17 Crossing	20,090 feet upstream of Camden Road	08060202	5.2		N	A	2014
Purple Creek	Ridgeland, City of	County Boundary	190 feet downstream of Interstate 55	03180002	1.9		Y	AE	2008
Purple Creek	Ridgeland, City of	190 feet downstream of Interstate 55	Old Agency Road	03180002	0.8		Y	AE	1976

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Purple Creek	Ridgeland, City of	Old Agency Road	Highland Colony Parkway	03180002	0.3		N	X	2008
Purple Creek	Ridgeland, City of	Highland Colony Parkway	320 feet upstream of Steed Road	03180002	0.5		Y	AE	2016
Purple Creek	Ridgeland, City of	320 feet upstream of Steed Road	3,825 feet upstream of Steed Road	03180002	1.5		Y	AE	1976
Purple Creek Tributary 1	Ridgeland, City of	Confluence with Purple Creek	410 feet upstream of Graves Street	03180002	1.0		Y	AE	2014
Purple Creek Tributary 3	Ridgeland, City of	Confluence with Purple Creek	3,505 feet upstream of confluence with Purple Creek	03180002	0.7		Y	AE	1976
Purple Creek Tributary 4	Ridgeland, City of	Confluence with Purple Creek	140 feet upstream of Wheatley Street South	03180002	0.7		Y	AE	2014
Purple Creek Tributary 5	Ridgeland, City of	Confluence with Purple Creek	1,066 feet upstream of Ford Street East	03180002	0.8		Y	AE	2014
Purple Creek Tributary 6	Ridgeland, City of	Confluence with Purple Creek	235 feet upstream of Commerce Park Drive	03180002	0.6		Y	AE	2014
Purple Creek Tributary 7	Ridgeland, City of	Confluence with Purple Creek	1,795 feet upstream of confluence with Purple Creek	03180002	0.3		Y	AE	1976
School Creek	Ridgeland, City of	County Boundary	40 feet downstream of Lake Harbor Drive	03180002	1.1		Y	AE	2008

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
School Creek	Ridgeland, City of	40 feet downstream of Lake Harbor Drive	820 feet upstream of School Street E	03180002	1.2		Y	AE	1989
School Creek Tributary 1	Ridgeland, City of	Confluence with School Creek	Rice Road	03180002	0.9		N	AE	2008
School Creek Tributary 2	Ridgeland, City of	Confluence with School Creek	Camelia Lane	03180002	0.3		N	AE	2008
Spring Creek	Madison County Unincorporated Areas	Confluence with Bogue Chitto Creek	Spring Creek Road	08060202	1.5		Y	AE	1978
Stream A	Ridgeland, City of	County Boundary	2,650 feet upstream of Livingston Road	03180002	2.3		Y	AE	1976
Stream B	Madison County Unincorporated Areas	County Boundary	7,400 feet upstream of Lake Cavalier Road	08060202	9.9		Y	AE	1978
Stream C	Madison County Unincorporated Areas	Confluence with Stream B	6,000 feet upstream of Greens Crossing Road	08060202	2.3		Y	AE	1978
Stream D	Madison County Unincorporated Areas	Confluence with Stream B	1,680 feet upstream of confluence with Stream B	08060202	0.6		Y	AE	1978
Stream E	Canton, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	4,555 feet upstream of Interstate 55	08060202	3.2		Y	AE	2014

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Stream E Tributary 1	Madison County Unincorporated Areas	Confluence with Stream E	740 feet upstream of Nissan Parkway	08060202	0.6		Y	AE	2014
Stream F	Canton, City of	Confluence with Walnut Creek	Hart Road	08060202	1.4		Y	AE	1978
Stream G	Canton, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	3,250 feet upstream of Private Drive	08060202	5.1		Y	AE	2014
Stream H	Madison County Unincorporated Areas	Confluence with Little Bear Creek	11,230 feet upstream of confluence with Little Bear Creek	08060202	2.0		Y	AE	2014
Stream I	Madison County Unincorporated Areas	Confluence with Bear Creek	7,050 feet upstream of US Highway 51	08060202	2.6		Y	AE	1989
Stream I	Madison County Unincorporated Areas	7,050 feet upstream of US Highway 51	500 feet upstream of Calhoun Parkway	08060202	2.6		Y	AE	2014
Stream J	Madison County Unincorporated Areas	Confluence with Stream I	400 feet upstream of Railroad	08060202	0.3		Y	AE	1989
Stream J	Madison County Unincorporated Areas	400 feet upstream of Railroad	250 feet upstream of Hawkins-Thompson Lane	08060202	0.3		Y	AE	2014
Stream K	Madison, City of; Madison County Unincorporated Areas	Confluence with Limekiln Creek	2,250 feet upstream of Annandale Drive	08060202	3.8		Y	AE	2014

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Stream L	Madison County Unincorporated Areas	Confluence with Pearl River	5,060 feet upstream of Natchez Trace Parkway	03180002	1.7		Y	AE	1978
Stream M	Madison County Unincorporated Areas; Pear River Valley Water Supply District	Confluence with Pearl River	Whiddon Road	03180002	2.9		Y	A, AE	1989
Stream N	Madison County Unincorporated Areas	Confluence with Bear Creek	200 feet upstream of Stribling Road	08060202	2.5		Y	AE	2014
Stream O	Madison County Unincorporated Areas	Confluence with Bear Creek	235 feet downstream of Gluckstadt Road	08060202	0.4		Y	AE	2008
Stream O	Madison County Unincorporated Areas	235 feet downstream of Gluckstadt Road	30 feet upstream of Ridgefield Drive	08060202	1.1		Y	AE	2014
Stream P	Madison County Unincorporated Areas	Confluence with Bear Creek	380 feet upstream of Clarkdell Road	08060202	2.6		Y	AE	2014
Stream Q	Madison, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	Reunion Lake #1	08060202	5.0		Y	AE	2008
Stream R	Madison County Unincorporated Areas	Confluence with Stream Q	Deweese Road	08060202	1.6		Y	AE	2008

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Stream S	Madison, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	6,060 feet upstream of confluence with Bear Creek	08060202	1.14		Y	AE	1994
Stream T	Madison, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	6,340 feet upstream of confluence with Bear Creek	08060202	1.2		Y	AE	2014
Walnut Creek	Canton, City of; Madison County Unincorporated Areas	Confluence with Bear Creek	Hart Road	08060202	8.0		Y	AE	1978
White Oak Creek	Jackson, City of; Madison County Unincorporated Areas; Ridgeland, City of	Confluence with Hanging Moss Creek	350 feet upstream of Aaron Lane	03180002	8.1		Y	AE	1976
White Oak Creek Tributary 1	Ridgeland, City of	Confluence with White Oak Creek	360 feet downstream of Bridgewater Crossing	03180002	1.7		N	A, AE	2008

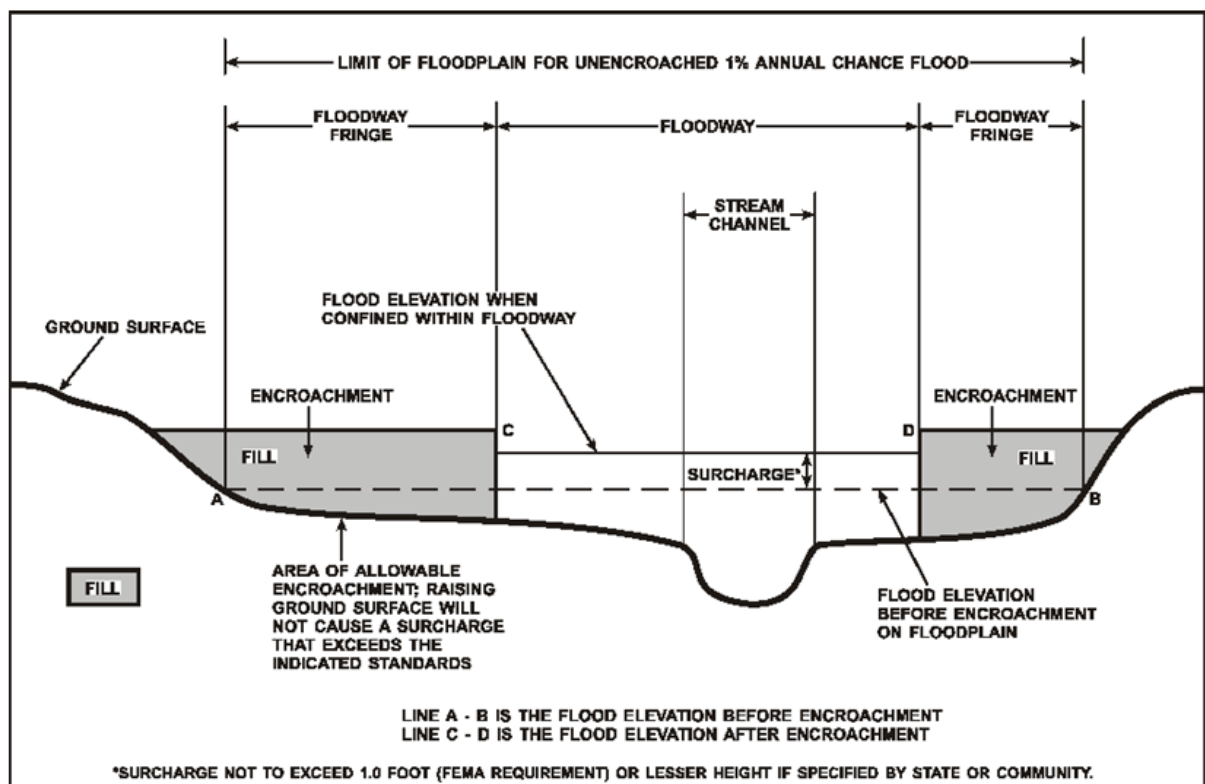
2.2 Floodways

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 balancing floodplain development against increasing flood hazard. With this approach, the area of the 1% annual chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1% annual chance flood. The floodway fringe is the area between the floodway and the 1% annual chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1% 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 4.

To participate in the NFIP, Federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

Figure 4: Floodway Schematic



Floodway widths presented in this FIS Report and on the FIRM were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. For certain stream segments, floodways were adjusted so that the amount of floodwaters conveyed on each side of the floodplain would be reduced equally. The results of the floodway computations have been tabulated for selected cross sections and are shown in Table 24, "Floodway Data."

All floodways that were developed for this Flood Risk Project are shown on the FIRM using the symbology described in Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Madison County.

Figure 3. In cases where the floodway and 1% annual chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

2.3 Base Flood Elevations

The hydraulic characteristics of flooding sources were analyzed to provide estimates of the elevations of floods of the selected recurrence intervals. The Base Flood Elevation (BFE) is the elevation of the 1% annual chance flood. These BFEs are most commonly rounded to the whole foot, as shown on the FIRM, but in certain circumstances or locations they may be rounded to 0.1 foot. Cross section lines shown on the FIRM may also be labeled with the BFE rounded to 0.1 foot. Whole-foot BFEs derived from engineering analyses that apply to coastal areas, areas of ponding, or other static areas with little elevation change may also be shown at selected intervals on the FIRM.

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. BFEs 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.

2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

2.5 Coastal Flood Hazard Areas

This section is not applicable to this Flood Risk Project.

2.5.1 Water Elevations and the Effects of Waves

This section is not applicable to this Flood Risk Project.

Figure 5: Wave Runup Transect Schematic

[Not applicable to this FIS project]

2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

This section is not applicable to this Flood Risk Project.

2.5.3 Coastal High Hazard Areas

This section is not applicable to this Flood Risk Project.

Figure 6: Coastal Transect Schematic

[Not applicable to this FIS project]

2.5.4 Limit of Moderate Wave Action

This section is not applicable to this Flood Risk Project.

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

For flood insurance applications, the FIRM designates flood insurance rate zones as described in Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Madison County.

Figure 3, “Map Legend for FIRM.” Flood insurance zone designations are assigned to flooding sources based on the results of the hydraulic or coastal analyses. Insurance agents use the zones shown on the FIRM and depths and base flood elevations in this FIS Report in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

The 1% annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (e.g. Zones A, AE, V, VE, etc.), and the 0.2% annual chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood insurance zones in Madison County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Canton, City of	A, AE, X
Flora, Town of	A, X
Jackson, City of	N/A
Madison, City of	A, AE, X
Ridgeland, City of	A, AE, X
Madison County (Unincorporated Areas)	A, AE, X
Pearl River Valley Water Supply District	A, AE, X

3.2 Coastal Barrier Resources System

This section is not applicable to this Flood Risk Project.

Table 4: Coastal Barrier Resources System Information

[Not applicable to this FIS project]

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

Table 5 contains a description of the characteristics of the HUC-8 sub-basins within which each community falls. The table includes the main flooding sources within each basin, a brief description of the basin, and its drainage area.

Table 5: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Upper Pearl	03180001	Pearl River	Located along the northeastern edge of Madison County.	2,490
Middle Pearl-Strong	03180002	Pearl River	Encompassing most of the southern and eastern borders of Madison County.	1,990
Upper Big Black	08060201	Big Black River	Encompassing the northern border of Madison County.	1,470
Lower Big Black	08060202	Big Black River	The Lower Big Black is the largest basin in Madison County, MS covering all of the western border of Madison County.	1,900

4.2 Principal Flood Problems

Table 6 contains a description of the principal flood problems that have been noted for Madison County by flooding source.

Table 6: Principal Flood Problems

Flooding Source	Description of Flood Problems
All sources	Most flooding in Madison County occurs on the Big Black River and its tributaries. Most other rivers and streams in the county flood less frequently. Although the Pearl River and the Big Black River have experienced flooding

Flooding Source	Description of Flood Problems
	in the past, little damage to property has occurred since the land along both rivers is generally underdeveloped, except in the Ross Barnett Reservoir area on the Pearl River. However, development in the floodplains of other streams is occurring at a rapid pace due to the expansion of the metropolitan area of Jackson. Streams flowing through developing areas include Bear Creek, Batchelor Creek, Culley Creek, School Creek, and others. Purple Creek has experience major development and has had several detention basins constructed along the creek. A portion of Culley Creek has been relocated. Several new developments have been constructed along unstudied streams in the Town of Flora.
Big Black River	The Big Black River forms northeast of Canton in Webster County, and flows generally southwest forming the western boundary of Madison County, to its confluence with the Mississippi River south of Vicksburg. Its major tributaries are Black Creek, Bear Creek, Panther Creek, Bogue Chitto Creek and Doaks Creek, which drain most of the county.
Pearl River	The extreme southern and eastern portions of Madison County are drained by the Pearl River. The Pearl River forms northeast of Canton in Winston County and flows initially southwest forming the eastern boundary of Madison County. The river flows south to its confluence with the Gulf of Mexico. Several Pearl River tributaries, including Brashear Creek, Purple Creek, and White Oak Creek, drain the extreme southern portion of Madison County.
Ross Barnett Reservoir	The 1.0-percent annual chance peak discharge of the inflow hydrograph at Ross Barnett Reservoir is estimated at 106,000 cfs. Present operations of the reservoir utilize any available storage to reduce downstream flooding, with the pool level at the dam reaching a peak elevation of 299.8 feet NGVD during 1979. Information on the 1979 and 1983 floods were used to develop the 1.0-percent annual chance and 110 year chance respectively. The flood frequencies at the Jackson gage 15 miles downstream were 200- year for the 1979 flood and 38-year percent annual chance for the 1983 flood. The elevations of the 1979 and 1983 floods were used to develop the 1-percent annual chance water surface profile upstream of the Ross Barnett Dam. Under present condition the reservoir pool will not be allowed to exceed elevation 300 feet NGVD at the emergency spillway.

Table 7 contains information about historic flood elevations in the communities within Madison County.

Table 7: Historic Flooding Elevations

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Pearl River	Ross Barnett Dam	299.8	1979	110	Pearl River Valley Water Supply District FIS report 1996

4.3 Non-Levee Flood Protection Measures

Table 8 contains information about non-levee flood protection measures within Madison County such as dams, jetties, and or dikes. Levees are addressed in Section 4.4 of this FIS Report.

Table 8: Non-Levee Flood Protection Measures

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Bailey Branch	Lake Lorman Dam	Dam	850 feet upstream of county line	Privately maintained, primarily for recreation and residential aesthetics.
Bear Creek	Reunion Lake Number 2 Dam	Dam	2,745 feet upstream of Reunion Parkway	Privately maintained, primarily for recreation and residential aesthetics.
Britton Lake	Britton Lake Dam	Dam	250 feet southeast of Stribling Road	Owned/maintained by Johnstone Property Owners Assoc, primarily for recreation and residential aesthetics. Normal pool area is 31 acres.
Brookstone Lake	Brookstone Lake Dam	Dam	600 feet south of Ingleside Drive	Privately maintained, primarily for recreation and residential aesthetics.
Camden Lake	Camden Lake Dam	Dam	700 feet east of McMillon Road	Privately maintained, primarily for recreation and residential aesthetics
Chestnut Hill Lake	Chestnut Hill Lake Dam	Dam	2,300 feet southwest of Mannsdale Road	Owned/maintained by Chestnut Hill Developers, LLC, primarily for recreation. Normal pool area is 46 acres.
Costas Lake	Costas Lake Dam	Dam	412 feet upstream of Highland Colony Parkway	Owned/Maintained by TPC Parkway Properties, primarily a recreational facility
Cypress Lake	Cypress Lake	Dam	Lake Circle	Approximately 27 acre lake, owned by Cypress Lake Property Owners Association
Deer Haven Lake	Deer Haven Dam	Dam	Deer Haven Drive	Privately maintained, primarily for recreation and residential aesthetics.
Eden Lake	Persimmon-Burnt Corn WS Str. #5	Dam	Eden Lane	Owned/maintained by Persimmon-Burnt Corn Drainage District, primarily for Flood control. Normal pool area is 43 acres.

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Johnstone Lake	Johnstone Lake Dam	Dam	2,415 feet southeast of Stribling Road	Owned/maintained by Johnstone Property Owners Assoc, primarily for recreation and residential aesthetics. Normal pool area is 104 acres.
Panther Creek	Lake Caroline Dam	Dam	Bellevue Road	Privately maintained, primarily a recreational facility
Ross Barnett Reservoir	Ross Barnett Reservoir Dam	Dam	Spillway Road	Very large water supply/recreational reservoir maintained by Pearl River Valley Water Supply District
Sanctuary Lake	Sanctuary Lake Dam	Dam	Patrick Road	Privately maintained, primarily for recreation and residential aesthetics
Stream B Tributary 2	Lake Cavalier Dam	Dam	Lake Cavalier Road	Privately maintained, primarily for recreation and residential aesthetics.
Stream N	Gilmer Lake Dame	Dam	West of Samuels Drive	Privately maintained, primarily for recreation and residential aesthetics
Stream O	Arrington Lake Dam	Dam	2,325 feet upstream of Gluckstadt Road	Privately maintained, primarily for recreation and residential aesthetics.
Stream Q	Reunion Lake Number 1 Dam	Dam	3,630 feet upstream of Gluckstadt Road	Privately maintained, primarily for recreation and residential aesthetics.
Sulphur Springs Lake	Sulphur Springs Lake Dam	Dam	Burns Road	Owned/maintained by Madison Count Board of Supervisors, primarily a recreational facility

4.4 Levees

This section is not applicable to this Flood Risk Project.

Table 9: Levees

[Not applicable to this FIS project]

SECTION 5.0 – ENGINEERING METHODS

For the flooding sources 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 at least once on the average during any 10-, 25-, 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-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2% annual 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 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 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.

The engineering analyses described here incorporate the results of previously issued Letters of Map Change (LOMCs) listed in Table 27, “Incorporated Letters of Map Change”, which include Letters of Map Revision (LOMRs). For more information about LOMRs, refer to Section 6.5, “FIRM Revisions.”

5.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak elevation-frequency relationships for floods of the selected recurrence intervals for each flooding source studied. Hydrologic analyses are typically performed at the watershed level. Depending on factors such as watershed size and shape, land use and urbanization, and natural or man-made storage, various models or methodologies may be applied. A summary of the hydrologic methods applied to develop the discharges used in the hydraulic analyses for each stream is provided in Table 13. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

A summary of the discharges is provided in Table 10. A summary of stillwater elevations developed for non-coastal flooding sources is provided in Table 11. Stream gage information is provided in Table 12.

Table 10: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Batchelor Creek	At Mouth	7.52	3,070	*	4,620	5,690	8,600
Batchelor Creek	At Cross Section E	4.66	2,680	*	3,990	4,890	7,600
Batchelor Creek	At Cross Section H	2.41	1,770	*	2,600	3,150	4,800
Batchelor Creek	At Cross Section N	1.32	1,010	*	1,490	1,770	3,100
Batchelor Creek	At Cross Section R	0.7	630	*	910	1,080	1,430
Batchelor Creek Tributary 1	At confluence with Batchelor Creek	1.16	800	*	1,180	1,400	1,960
Batchelor Creek Tributary 2	At confluence with Batchelor Creek	1.09	670	*	1,020	1,220	1,800
Bear Creek	At Cross Section A	104.6	10,600	*	17,600	20,800	30,200
Bear Creek	At U.S. Highway 51	87.0	9,500	*	15,800	18,600	27,000
Bear Creek	At Cross Section H	67.5	8,160	*	13,600	16,000	23,200
Bear Creek	At Cross Section I	58.5	7,490	*	12,500	14,700	21,300
Bear Creek	At Cross Section J	37.5	6,410	*	10,700	13,700	20,100
Bear Creek	At U.S. Highway 51	24.4	5,800	*	9,050	10,600	15,500

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Bear Creek	At Cross Section V	17.4	4,740	*	7,390	8,650	12,700
Bear Creek	At Cross Section W	8.0	2,520	*	3,980	4,800	7,100
Bear Creek	At Interstate 55	5.98	2,392	*	3,397	3,750	4,992
Bear Creek	At Cross Section AC	4.08	498	*	724	810	1,106
Beaver Creek	At Mouth	2.28	1,590	*	2,330	2,820	4,300
Beaver Creek	At Cross Section C	1.74	1,330	*	1,940	2,350	3,500
Beaver Creek	At U.S. Highway 51	1.09	940	*	1,350	1,630	2,400
Beaver Creek	At Planters Grove	0.38	283	*	368	435	684
Brashear Creek	At Rice Road	13.02	4,186	*	5,990	6,933	8,795
Brashear Creek	Upstream of confluence of Beaver Creek	6.83	1,477	*	2,568	3,050	3,988
Brashear Creek	At Interstate 55	2.88	1,377	*	2,319	2,570	3,346
Brashear Creek	At Park Place Boulevard	1.54	904	*	1,420	1,730	2,280
Brashear Creek	At Cross Section AC	0.91	596	*	920	1,120	1,460
Brown Creek	At Natchez Trace Parkway	4.28	1,500	*	2,320	2,810	3,660
Brown Creek	At Cross Section B	1.73	690	*	1,040	1,280	1,650
Brown Creek	At Cross Section C	1.04	500	*	730	890	1,140

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Bogue Chitto Creek	At Cross Section A	151.0	15,200	*	25,400	30,500	40,200
Bogue Chitto Creek	At Cross Section D	134.0	14,700	*	24,800	30,100	39,800
Culley Creek	At Mouth	3.16	1,246	*	1,719	2,166	2,755
Culley Creek	At Cross Section E	2.47	1,024	*	1,531	1,806	2,304
Culley Creek	At Cross Section F	2.17	776	*	934	1,356	1,735
Culley Creek	At Cross Section I	1.72	1,120	*	1,670	1,960	2,520
Culley Creek	At St. Augustine Drive	1.26	927	*	1,370	1,600	2,040
Culley Creek	At Cross Section O	0.72	702	*	1,000	1,170	1,470
Culley Creek	At Cross Section S	0.21	306	*	437	509	639
Haley Creek	At Natchez Trace Parkway	1.83	920	*	1,410	1,720	2,600
Haley Creek	At Cross Section C	0.89	580	*	860	1,040	1,500
Haley Creek	At Cross Section E	0.57	440	*	640	760	1,060
Haley Creek Tributary 1	At a point approximately 0.2 mile downstream of the Natchez Trace Parkway	1.17	*	*	*	1,083	*
Haley Creek Tributary 1	At a point approximately 0.1 mile downstream of Old Rice Road	0.9	*	*	*	967	*

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Hanging Moss Creek	At County Line Road	1.17	1,180	*	1,690	1,900	2,400
Hanging Moss Creek	At Cross Section A	0.99	1,100	*	1,560	1,750	2,250
Hanging Moss Creek	At Cross Section B	0.75	950	*	1,350	1,500	1,950
Hanging Moss Creek Tributary 4	At County Line Road	2.02	1,550	*	2,200	2,500	3,200
Hanging Moss Tributary 4	At Interstate 220	1.46	1,300	*	1,900	2,120	2,730
Hanging Moss Tributary 4	At Cross Section C	1.23	1,200	*	1,750	1,950	2,500
Hearn Creek	At Mouth	1.83	920	*	1,410	1,720	2,600
Hearn Creek	At Cross Section C	0.89	580	*	860	1,040	1,500
Hearn Creek	At Cross Section E	0.57	440	*	640	760	1,060
Hearn Creek Tributary	At Mouth	0.32	270	*	410	470	610
Limekiln Creek	At Cross Section A	18.50	4,950	*	6,144	9,570	12,570
Limekiln Creek	At Cross Section B	8.49	4,074	5,154	5,995	7,066	8,594
Limekiln Creek	At Cross Section D	4.15	3,221	4,062	4,835	5,678	6,889
Limekiln Creek	At Cross Section F	3.72	1,388	1,767	2,111	2,457	2,998
Limekiln Creek	At Cross Section G	2.15	1,052	1,331	1,580	1,826	2,209
Limekiln Creek	At Cross Section H	1.66	830	1,051	1,251	1,441	1,741

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Little Bear Creek	At Cross Section A	17.40	3,860	*	6,250	7,600	9,980
Little Bear Creek	At Cross Section B	8.37	2,270	*	3,600	4,360	5,700
Little Bear Creek	At Cross Section E	5.22	1,830	*	2,850	3,400	4,430
Little Bear Creek	At Cross Section F	3.72	1,646	2,090	2,492	2,897	3,515
Little Bear Creek	At Cross Section G	1.16	675	831	998	1,145	1,397
Little Bear Creek Tributary 1	Approximately 500 feet downstream of W. Elbridge Way	0.53	370	456	541	615	739
Little Bear Creek Tributary 1	At Yandell Road	0.41	327	402	477	540	648
Little Bear Creek Tributary 1	At Cross Section G	0.23	223	281	338	380	459
Panther Creek	At Cross Section A	28.50	4,530	*	7,440	9,140	12,000
Panther Creek	At Cross Section E	20.60	3,950	*	6,450	8,010	10,500
Panther Creek	At Cross Section G	14.50	2,742	*	3,898	4,514	5,550
Panther Creek	At State Route 22	11.70	1,659	*	2,317	2,669	3,259
Panther Creek	At Cross Section I	7.49	1,344	*	1,869	2,146	2,611
Panther Creek	At Cross Section J	4.43	1,093	*	1,498	1,707	2,050

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Purple Creek	At County Line Road	*	2,520	*	3,560	4,000	5,150
Purple Creek	At Cross Section E	*	2,098	*	2,725	2,996	3,769
Purple Creek	At U.S. Highway 51	*	2,069	*	2,688	2,951	3,716
Purple Creek	At Cross Section K	*	1,750	*	2,450	2,700	3,500
Purple Creek	At Interstate 55	2.39	1,630	*	2,300	2,590	3,300
Purple Creek	At Old Agency Road	1.95	1,500	*	2,170	2,420	3,130
Purple Creek	At Steed Road	1.26	1,200	*	1,750	1,970	2,500
Purple Creek	At Cross Section Q	1.03	1,100	*	1,600	1,760	2,300
Purple Creek Tributary 1	At Mouth	0.49	360	564	682	765	945
Purple Creek Tributary 1	At Cross Section C	0.34	331	470	569	637	785
Purple Creek Tributary 1	At Holmes Street	0.25	201	359	438	488	604
Purple Creek Tributary 3	At Mouth	*	180	*	250	280	360
Purple Creek Tributary 3	At Wheatley Street	*	120	*	170	190	240
Purple Creek Tributary 3	Approximately 1,795 feet upstream of Wheatley Street	*	25	*	35	40	50

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Purple Creek Tributary 4	At Mouth	0.26	511	605	700	795	988
Purple Creek Tributary 4	At Wolcott Circle	0.15	297	354	410	466	581
Purple Creek Tributary 4	At Wheatley Street	0.04	116	138	163	181	225
Purple Creek Tributary 5	At Lakeland Drive	0.31	454	530	606	682	837
Purple Creek Tributary 5	At Ford Avenue	0.24	191	227	264	300	375
Purple Creek Tributary 5	Approximately 1,000 feet upstream of Ford Avenue	0.11	116	138	169	185	224
Purple Creek Tributary 6	At Mouth	0.31	360	442	537	600	741
Purple Creek Tributary 6	Approximately 3,200 feet upstream of mouth	0.11	201	248	306	338	420
Purple Creek Tributary 7	At Mouth	*	190	*	270	310	390
Purple Creek Tributary 7	At upstream corporate limits of Ridgeland	*	120	*	160	180	240
School Creek	At County Line Road	2.37	2,556	*	3,396	3,860	4,641

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
School Creek	At Northpark Drive	1.85	2,458	*	3,263	6,715	4,472
School Creek	At Towne Center Boulevard	1.02	1,863	*	2,486	2,841	3,426
School Creek	At Lake Harbor Drive	0.67	500	*	630	710	910
School Creek Tributary 1	At Lake Harbour Drive	0.2	*	*	*	455	*
School Creek Tributary 1	At Wendover Way	0.08	*	*	*	771	*
School Creek Tributary 2	At Mouth	0.12	*	*	*	1,1185	*
School Creek Tributary 2	At Camelia Lane	0.09	*	*	*	829	*
Spring Creek	At Cross Section A	2.31	1,120	*	1,680	1,910	2,460
Spring Creek	At Cross Section B	1.48	850	*	1,250	1,400	1,800
Stream A	At Cross Section B	2.39	1,730	*	2,450	2,750	3,540
Stream A	At Cross Section D	1.73	1,420	*	2,020	2,300	3,000
Stream A	At Cross Section E	1.44	1,300	*	1,870	2,100	2,700
Stream A	At Railroad	1.19	770	*	1,080	1,260	1,570
Stream A	At Frey's Street	1.07	740	*	1,030	1,200	1,500
Stream B	At Cross Section A	8.44	2,800	*	4,380	5,110	6,660
Stream B	At Cross Section C	4.71	1,860	*	2,875	3,340	4,330
Stream B	At Cross Section E	4.28	1,740	*	2,680	3,115	4,040

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Stream B	At Cross Section F	3.08	1,420	*	2,140	2,490	3,220
Stream B	At Cross Section H	2.56	1,210	*	1,820	2,150	2,780
Stream B	At Cross Section I	1.40	805	*	1,180	1,350	1,730
Stream C	At Mouth	2.87	1,250	*	1,900	2,240	2,890
Stream C	At Cross Section B	1.99	1,042	*	1,550	1,800	2,300
Stream C	At Cross Section D	1.60	950	*	1,400	1,600	2,040
Stream C	At Cross Section E	1.17	700	*	1,010	1,130	1,440
Stream D	At Mouth	0.97	590	*	855	960	1,220
Stream E	At Mouth	3.10	1,230	1,529	1,795	2,087	2,514
Stream E	At Railroad	2.43	1,139	1,419	1,670	1,934	2,323
Stream E	At Interstate 55	1.31	611	785	943	1,082	1,318
Stream E	Cross Section G	0.48	297	365	407	460	553
Stream E Tributary 1	At Mouth	0.26	153	188	225	253	306
Stream E Tributary 1	At Nissan Parkway	0.16	134	173	212	235	240
Stream F	At Cross Section A	8.62	2,480	*	3,930	4,700	6,140
Stream F	At Cross Section B	1.42	655	*	975	1,150	1,470
Stream G	At Mouth	6.76	2,031	2,510	2,812	3,253	3,981
Stream G	At Cross Section A	4.06	1,379	1,688	1,883	2,172	2,647
Stream G	At Endris Road	1.95	916	1,115	1,237	1,414	1,757
Stream G	At Cross Section F	0.77	555	674	743	838	993

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Stream H	At Cross Section A	3.39	1,442	1,820	2,151	2,501	3,021
Stream H	At Cross Section B	2.53	1,388	1,752	2,074	2,400	2,886
Stream I	At Mouth	5.78	1,390	*	2,210	2,750	4,300
Stream I	At Cross Section B	4.00	1,080	*	1,700	2,130	3,400
Stream I	At Nissan Drive	1.51	614	774	920	1,060	1,289
Stream I	At Calhoun Parkway	0.68	381	471	556	635	765
Stream J	At Mouth	1.07	490	*	720	860	1,400
Stream J	At Nissan Drive	0.36	260	324	387	437	528
Stream K	At Cross Section C	3.12	1,944	2,466	2,915	3,390	4,076
Stream K	At Annandale Drive	1.08	646	833	996	1,141	1,384
Stream L	At Natchez Trace Parkway	1.25	720	*	1,050	1,210	1,550
Stream L	At Cross Section B	0.97	650	*	930	1,060	1,350
Stream M	At Natchez Trace Parkway	1.60	790	*	1,180	1,380	1,780
Stream M	At Cross Section	1.24	690	*	1,010	1,180	1,510
Stream N	At Mouth	1.88	810	1,005	1,183	1,367	1,648
Stream N	At Interstate Route 55	1.21	743	926	1,094	1,258	1,514
Stream N	At Samuels Drive	0.63	419	521	618	703	846
Stream O	At Mouth	1.88	720	*	1,090	1,300	1,900

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Stream O	At Interstate 55	1.36	460	*	750	880	1,400
Stream O	At Gluckstadt Road	1.01	667	811	948	1,086	1,294
Stream P	At Mouth	2.00	883	1,111	1,318	1,517	1,829
Stream P	At Cross Section E	1.23	739	932	1,109	1,273	1,537
Stream P	At Clarkdell Road	0.45	312	394	476	539	656
Stream Q	At Mouth	6.18	1,670	*	2,640	3,210	4,900
Stream Q	At Gluckstadt Road	4.66	1,510	*	2,350	2,880	4,400
Stream Q	At Cross Section G	2.21	109	*	150	173	279
Stream R	At Mouth	2.32	1,550	*	2,380	2,930	4,600
Stream R	At Cross Section C	1.20	580	*	850	1,030	1,550
Stream S	At Mouth	1.33	600	*	890	1,060	1,600
Stream T	At Mouth	1.23	1,381	1,727	2,034	2,349	2,804
Walnut Creek	At Cross Section A	9.04	2,560	*	4,060	4,860	6,350
Walnut Creek	At Cross Section B	8.62	2,480	*	3,930	4,700	6,140
Walnut Creek	At Cross Section C	5.70	1,920	*	2,990	3,580	4,660
White Oak Creek	At Interstate Street	4.47	2,320	*	3,300	3,700	4,600
White Oak Creek	At Cross Section D	3.65	2,100	*	3,000	3,320	4,300
White Oak Creek	At Cross Section F	2.50	1,730	*	2,450	2,720	3,520

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
White Oak Creek	At Cross Section G	1.06	1,100	*	1,600	1,800	2,300
White Oak Creek Tributary 1	At a point approximately 1000 feet downstream of Old Agency Road	0.60	*	*	*	624	*
White Oak Creek Tributary 1	Approximately 200 feet downstream of Oakhurst Trail	0.27	*	*	*	393	*
White Oak Creek Tributary 1	Approximately 1000 feet upstream of Oakhurst Trail	0.14	*	*	*	261	*

*Not calculated for this FIS project

Figure 7: Frequency Discharge-Drainage Area Curves

[Not applicable to this FIS project]

Table 11: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Ross Barnett Reservoir	At Dam	*	*	*	299.7	*
Reunion Lake #1	(Stream Q)	326.3	*	327.0	327.5	328.5
Reunion Lake #2	(Bear Creek)	326.3	*	327.0	327.5	328.5

*Not calculated for this Flood Risk Project

Table 12: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record	
					From	To
Purple Creek	02485650	USGS	Purple Creek at Jackson, MS	6.12	1952	2012

5.2 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. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. 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. The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

For streams for which hydraulic analyses were based on cross sections, locations of selected cross sections are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 6.3), selected cross sections are also listed on Table 24, "Floodway Data."

A summary of the methods used in hydraulic analyses performed for this project is provided in Table 13. Roughness coefficients are provided in Table 14. Roughness coefficients are values representing the frictional resistance water experiences when passing overland or through a channel. They are used in the calculations to determine water surface elevations. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

Table 13: Summary of Hydrologic and Hydraulic Analyses

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
All Zone A Streams Studied in the 1994 FIS	Madison County and Incorporated Areas	Various	LOG-PEARSON Type III Frequency Analysis	HEC-2	1989	A	
Bailey Branch	County Boundary	4,310 feet upstream of County boundary	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Batchelor Creek	Confluence with Tilda Bogue	2,715 feet upstream of Highway 43	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Batchelor Creek Tributary 1	Confluence with Batchelor Creek	2,875 feet upstream of Highway 16	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Batchelor Creek Tributary 2	Confluence with Batchelor Creek	3,440 feet upstream of mouth	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Bear Creek	Heindl Road	State Highway 22 Bridge	LOG-PEARSON Type III Frequency Analysis	HEC-RAS	1989	AE w/ Floodway	
Bear Creek	State Highway 22 Bridge	Weisenberger Road	LOG-PEARSON Type III Frequency Analysis	HEC-RAS	1994	AE w/ Floodway	
Bear Creek	Weisenberger Road	Reunion Lake #2	TR-20 Model	HEC-RAS 3.1.3	2008	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Beaver Creek	Confluence with Brashear Creek	Highway 51	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Beaver Creek	Highway 51	60 feet downstream of Wheatley Street	HEC-1	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Beaver Creek Tributary	Confluence with Beaver Creek	Washington Street W	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
Bogue Chitto Creek	Confluence with Big Black River	County Boundary	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Brashear Creek	County Boundary	Madison Avenue	Regression Equations 1982	HEC-2	1996	AE w/ Floodway	
Brashear Creek	Madison Avenue	8,070 feet upstream of Park Place Boulevard	Regression Equations 1991	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Brown Creek	Ross Barnett Reservoir	Ratliff Ferry Road	Regression Equations 1982	HEC-2	1978	AE w/ Floodway	
Burnt Corn Creek	4,250 feet downstream of Ergon Road	2,050 feet upstream of Caney Creek Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Culley Creek	Confluence with Brashear Creek	Hoy Road	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Dry Creek	Dry Creek Road Crossing	5,050 feet upstream of Old Highway 16 Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Gallant Creek	3,460 feet downstream of Highway 51	1,520 feet upstream of Highway 51	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Haley Creek	Just upstream of Natchez Trace	3,840 feet upstream of Old Rice Road	Regression Equations 1976	HEC-RAS 4.1.0	2016	AE w/ Floodway	
Hanging Moss Creek	County Boundary	3,000 feet upstream of County Line	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
Hanging Moss Creek Tributary 4	Confluence with Hanging Moss Creek	85 feet upstream of Livingston Road	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Hearn Creek	Natchez Trace Parkway	1,000 feet upstream of Natchez Trace Parkway	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
Hearn Creek	1,000 feet upstream of Natchez Trace Parkway	Hoy Road	Regression Equations 1982	HEC-2	1996	AE w/ Floodway	
Hearn Creek Tributary	Confluence with Hearn Creek	625 feet upstream of Hoy Road	Regression Equations 1976	HEC-2	1989	AE w/ Floodway	
Hobuck Creek	16,220 feet downstream of Loring Road	9,280 feet upstream of Cooper Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Limekiln Creek	County Boundary	200 feet downstream of Robinson Springs Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Limekiln Creek	200 feet downstream of Robinson Springs Road	3,120 feet upstream of Gus Green Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Little Bear Creek	Confluence with Bear Creek	80 feet upstream of Yandell Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Little Bear Creek	80 feet upstream of Yandell Road	6,800 feet upstream of Yandell Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE	
Little Bear Creek	6,800 feet upstream of Yandell Road	9,700 feet upstream of Yandell Road	Regression Equations 1976	HEC-2	1978	A	
Little Bear Creek Tributary 1	Confluence with Little Bear Creek	9,560 feet upstream of Confluence	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE	
Lottville Creek	Confluence with Dry Creek	14,690 feet upstream of Potluck Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Loves Creek	3,580 feet downstream of Highway 51	5,095 feet upstream of Old 51 Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Panther Creek	Approximately 6,170 feet downstream of Virillia Road	400 feet upstream of Stokes Road	Regression Equations 1976	HEC_2	1978	AE w/ Floodway	
Panther Creek	400 feet upstream of Stokes Road	160 feet upstream of Catlett Road	HEC-1	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Persimmon Creek	Just downstream side of Virillia Road	7,950 feet upstream of Stokes Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Poorhouse Creek	Highway 17 Crossing	20,090 feet upstream of Camden Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	A	
Purple Creek	County Boundary	190 feet downstream of Interstate 55	HEC-1	HEC-RAS 3.1.3	2008	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Purple Creek	190 feet downstream of Interstate 55	Old Agency Road	Gage Data	HEC-2	1976	AE w/ Floodway	
Purple Creek	Old Agency Road	Highland Colony Parkway	HEC-1	HEC-RAS 3.1.3	2008	X	
Purple Creek	Highland Colony Parkway	320 feet upstream of Steed Road	HEC-1	HEC-RAS 4.1.0	2016	AE w/ Floodway	
Purple Creek	320 feet upstream of Steed Road	3,825 feet upstream of Steed Road	Gage Data	HEC-2	1976	AE w/ Floodway	
Purple Creek Tributary 1	Confluence with Purple Creek	410 feet upstream of Graves Street	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Purple Creek Tributary 3	Confluence with Purple Creek	700 feet upstream of Towne Center Boulevard	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
Purple Creek Tributary 4	Confluence with Purple Creek	140 feet upstream of Wheatley Street South	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Purple Creek Tributary 5	Confluence with Purple Creek	1,066 feet upstream of Ford Street East	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Purple Creek Tributary 6	Confluence with Purple Creek	235 feet upstream of Commerce Park Drive	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Purple Creek Tributary 7	Confluence with Purple Creek	1,795 feet upstream of confluence with Purple Creek	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
School Creek	County Boundary	40 feet downstream of Lake Harbor Drive	HEC-1	HEC-RAS 3.1.3	2008	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
School Creek	40 feet downstream of Lake Harbor Drive	820 feet upstream of School Street E	Regression Equations 1982	HEC-2	1989	AE w/ Floodway	
School Creek Tributary 1	Confluence with School Creek	Rice Road	Regression Equations 1991	HEC-RAS 3.1.3	2008	AE	
School Creek Tributary 2	Confluence with School Creek	Camelia Lane	Regression Equations 1991	HEC-RAS 3.1.3	2008	AE	
Spring Creek	Confluence with Bogue Chitto Creek	Spring Creek Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Stream A	County Boundary	2,650 feet upstream of Livingston Road	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
Stream B	County Boundary	7,400 feet upstream of Lake Cavalier Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Stream C	Confluence with Stream B	6,000 feet upstream of Greens Crossing Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Stream D	Confluence with Stream B	1,680 feet upstream of confluence with Stream B	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Stream E	Confluence with Bear Creek	4,555 feet upstream of Interstate 55	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream E Tributary 1	Confluence with Stream E	740 feet upstream of Nissan Parkway	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE	
Stream F	Confluence with Walnut Creek	Hart Road	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Stream G	Confluence with Bear Creek	3,250 feet upstream of Private Drive	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream H	Confluence with Little Bear Creek	11,230 feet upstream of confluence with Little Bear Creek	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream I	Confluence with Bear Creek	7,050 feet upstream of US Highway 51	Regression Equation 1982	HEC-2	1989	AE w/ Floodway	
Stream I	7,050 feet upstream of US Highway 51	500 feet upstream of Calhoun Parkway	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream J	Confluence with Stream I	400 feet upstream of Railroad	Regression Equation 1982	HEC-2	1989	AE w/ Floodway	
Stream J	400 feet upstream of Railroad	250 feet upstream of Hawkins Thompson Lane	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream K	Confluence with Limekiln Creek	2,250 feet upstream of Annandale Drive	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream L	Confluence with Pearl River	7,100 feet upstream of Natchez Trace Parkway	Regression Equations 1976	HEC-2	1978	AE w/ Floodway	
Stream M	Confluence with Pearl River	Whiddon Road	Regression Equations 1982	HEC-2	1989	A, AE w/ Floodway	
Stream N	Confluence with Bear Creek	200 feet upstream Stribling Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Stream O	Confluence with Bear Creek	235 feet downstream of Gluckstadt Road	Regression Equations 1991	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Stream O	235 feet downstream of Gluckstadt Road	25 feet upstream of Ridgefield Drive	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream P	Confluence with Bear Creek	380 feet upstream of Clarkdell Road	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Stream Q	Confluence with Bear Creek	Reunion Lake #1	HEC-1	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Stream R	Confluence with Stream Q	Deweese Road	Regression Equations 1991	HEC-RAS 3.1.3	2008	AE w/ Floodway	
Stream S	Confluence with Bear Creek	6,000 feet upstream of confluence with Bear Creek	Regression Equation 1982	HEC-2	1989	AE w/ Floodway	
Stream T	Confluence with Bear Creek	6,340 feet upstream of confluence with Bear Creek	Regression Equations 1991	HEC-RAS 4.1.0	2014	AE w/ Floodway	
Walnut Creek	Confluence with Bear Creek	Hart Road	Regression Equations 1976	HEC-2	1978	A, AE w/ Floodway	
White Oak Creek	Confluence with Hanging Moss Creek	350 feet upstream of Aaron Lane	Regression Equations 1976	HEC-2	1976	AE w/ Floodway	
White Oak Tributary 1	Confluence with White Oak Creek	360 feet downstream of Bridgewater Crossing	Regression Equations 1991	HEC-RAS 3.1.3	2008	A, AE	

Table 14: Roughness Coefficients

Flooding Source	Channel “n”	Overbank “n”
Bailey Branch	0.05	0.15
Batchelor Creek	0.028-0.10	0.055-0.20
Batchelor Creek Tributary 1	0.028-0.10	0.055-0.20
Batchelor Creek Tributary 2	0.028-0.10	0.055-0.20
Bear Creek	0.03-0.06	0.1-0.12
Beaver Creek	0.04-0.05	0.1-0.12
Beaver Creek Tributary	0.028-0.10	0.055-0.20
Bogue Chitto Creek	0.028-0.10	0.055-0.20
Burnt Corn Creek	0.05	0.15
Brashear Creek	0.028-0.10	0.055-0.20
Brown Creek	0.028-0.10	0.055-0.20
Culley Creek	0.028-0.10	0.055-0.20
Dry Creek	0.05	0.15
Gallant Stream	0.05	0.15
Haley Creek	0.028-0.10	0.055-0.20
Hanging Moss Creek	0.028-0.10	0.055-0.20
Hanging Moss Creek Tributary 4	0.028-0.10	0.055-0.20
Hearn Creek	0.028-0.10	0.055-0.20
Hearn Creek Tributary	0.028-0.10	0.055-0.20
Hobuck Creek	0.05	0.15
Limekiln Creek	0.028-0.10	0.055-0.20
Limekiln Creek	0.04	0.05-0.15
Little Bear Creek	0.03-0.04	0.04-0.15
Little Bear Tributary 1	0.03	0.1-0.15
Lottville Creek	0.05	0.15
Loves Creek	0.05	0.15
Panther Creek	0.05	0.03-0.16
Persimmon Creek	0.05	0.15
Poorhouse Creek	0.05	0.15
Purple Creek	0.028-0.10	0.055-0.20
Purple Creek Tributary 1	0.035-0.05	0.06-0.15

Flooding Source	Channel "n"	Overbank "n"
Purple Creek Tributary 3	0.028-0.10	0.055-0.20
Purple Creek Tributary 4	0.033	0.06-0.08
Purple Creek Tributary 5	0.033-0.05	0.06-0.15
Purple Creek Tributary 6	0.033-0.035	0.06-0.15
Purple Creek Tributary 7	0.028-0.10	0.055-0.20
School Creek	0.04	0.025-0.16
School Creek Tributary 1	0.015-0.04	0.1-0.13
School Creek Tributary 2	0.015-0.04	0.1-0.13
Spring Creek	0.028-0.10	0.055-0.20
Stream A	0.028-0.10	0.055-0.20
Stream B	0.028-0.10	0.055-0.20
Stream C	0.028-0.10	0.055-0.20
Stream D	0.028-0.10	0.055-0.20
Stream E	0.03-0.06	0.1-0.15
Stream E Tributary 1	0.04-0.056	0.11-0.13
Stream F	0.028-0.10	0.055-0.20
Stream G	0.05	0.11-0.15
Stream H	0.04-0.06	0.12-0.15
Stream I	0.028-0.10	0.055-0.20
Stream I	0.04-0.06	0.1-0.15
Stream J	0.028-0.10	0.055-0.20
Stream J	0.04-0.045	0.1-0.15
Stream K	0.04-0.05	0.1-0.15
Stream L	0.028-0.10	0.055-0.20
Stream M	0.028-0.10	0.055-0.20
Stream N	0.04-0.05	0.1-0.15
Stream O	0.045-0.06	0.08-0.15
Stream O	0.04-0.06	0.1-0.15
Stream P	0.04-0.05	0.1-0.15
Stream Q	0.035-0.05	0.08-0.12
Stream R	0.028-0.10	0.055-0.20
Stream S	0.028-0.10	0.055-0.20
Stream T	0.04	0.1-0.15

Flooding Source	Channel “n”	Overbank “n”
Walnut Creek	0.028-0.10	0.055-0.20
White Oak Creek	0.028-0.10	0.055-0.20
White Oak Creek Tributary 1	0.05	0.1-0.18

5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

Table 15: Summary of Coastal Analyses

[Not applicable to this FIS project]

5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas

[Not applicable to this FIS project]

Table 16: Tide Gage Analysis Specifics

[Not applicable to this FIS project]

5.3.2 Waves

This section is not applicable to this Flood Risk Project.

5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 17: Coastal Transect Parameters

[Not applicable to this FIS project]

Figure 9: Transect Location Map

[Not applicable to this FIS project]

5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

Table 18: Summary of Alluvial Fan Analyses

[Not applicable to this FIS project]

Table 19: Results of Alluvial Fan Analyses

[Not applicable to this FIS project]

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

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

To obtain current elevation, description, and/or location information for benchmarks in the area, please contact information services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

The datum conversion locations and values that were calculated for Madison County were not available. The NGVD to NAVD conversion factor given in the FIS dated March 17, 2010, for Madison County is -0.15 feet.

Table 20: Countywide Vertical Datum Conversion

[Not applicable to this FIS project]

Table 21: Stream-by-Stream Vertical Datum Conversion

[Not applicable to this FIS project]