

# FLOOD INSURANCE STUDY

## FEDERAL EMERGENCY MANAGEMENT AGENCY

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### A Report of Flood Hazards in CHATHAM COUNTY, NORTH CAROLINA AND INCORPORATED AREAS



Community Name	Community Number
CHATHAM COUNTY	370299
TOWN OF CARY*	370238
TOWN OF GOLDSTON**	370569
TOWN OF PITTSBORO	370420
TOWN OF SILER CITY	370058

\*Area Not Included

\*\*No Special Flood Hazard Areas Identified



**PRELIMINARY: 3/28/2024**

**REVISED:**

**Federal Emergency Management Agency  
State of North Carolina  
Flood Insurance Study Number  
37037CV000F**

**[www.fema.gov](http://www.fema.gov) and [www.ncfloodmaps.com](http://www.ncfloodmaps.com)**



# FOREWORD

This countywide Flood Insurance Study (FIS) Report was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long-term approach to floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain areas at the state level. As a part of this effort, the State of North Carolina has joined with FEMA in a Cooperating Technical State (CTS) agreement to produce and maintain this FIS Report and the accompanying digital Flood Insurance Rate Map (FIRM) for North Carolina.

Flood Insurance Study (FIS) means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations, flood hazard risk zones, and other flood data in a community issued by the North Carolina Floodplain Mapping Program (NCFMP). The Flood Insurance Study (FIS) is comprised of the following products used together: the Digital Flood Hazard Database, the Water Surface Elevation Rasters, the digitally derived, auto-generated Flood Insurance Rate Map and the Flood Insurance Survey Report. A Flood Insurance Survey is a compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. This report contains detailed flood elevation data, data tables and FIRM indices. When a flood study is complete for the National Flood Insurance Program (NFIP), the digital information, reports and maps are assembled into a FIS. Information shown on in the FIS is provided in digital format by the NCFMP.

## NOTICE TO FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the North Carolina Floodplain Mapping Program. It is advisable to use [www.fris.nc.gov/fris](http://www.fris.nc.gov/fris) or contact the community repository for any additional data.

The following is a list of the publication dates of this Countywide FIS Report starting with the initial Report accompanying the North Carolina Statewide FIRM:

Date	Reason
5/2/2006	FIRM update as a Border with Wake County
9/6/2006	FIRM update as a Border with Alamance County
2/2/2007	Initial Statewide FIS Report Effective Date
1/2/2008	FIRM update as a Border with Randolph County
11/17/2017	Countywide FIS Revision
10/19/2018	FIRM update as a Border with Durham County
7/22/2022	FIRM Update as Border with Wake County

This FIS has been produced as part of the North Carolina Floodplain Mapping Program. Chatham County, North Carolina, falls under the administrative jurisdiction of Region IV of the Federal Emergency Management Agency (FEMA). Questions concerning this FIS may be directed to the North Carolina Floodplain Mapping Program at [www.ncfloodmaps.com](http://www.ncfloodmaps.com), the FEMA Map Assistance Center by calling the toll-free information line at 1-877-FEMA MAP (1-877-336-2627), or by contacting the FEMA Regional Office at the following address:

**FEMA, Federal Insurance and Mitigation Administration  
Koger Center - Rutgers Building  
3005 Chamblee Tucker Road  
Atlanta, Georgia 30341  
(770) 220-5400**

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# 1.0 Introduction

## 1.1 The National Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally backed flood insurance available in communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. Federally backed flood insurance is available in more than 19,000 communities across the United States and its territories.

The NFIP is managed by the Federal Insurance and Mitigation Administration of the Federal Emergency Management Agency (FEMA). The Federal Insurance and Mitigation Administration manages the insurance component of the NFIP and oversees the flood hazard mapping and the floodplain management aspects of the program.

The NFIP, through involvement with communities, the insurance industry, and the lending industry, helps reduce flood damage by nearly \$800 million a year. Further, buildings constructed in compliance with NFIP building standards suffer approximately 80% less damage annually than those not built in compliance. In addition, every \$3 paid in flood insurance claims saves \$1 in disaster assistance payments. The NFIP is self-supporting for the average historical loss year, which means that operating expenses and flood insurance claims are not paid by the taxpayer, but through premiums collected for flood insurance policies.

Additional information of interest to homeowners, community officials, insurance companies, lenders, and study contractors is available in Section 9.0 of this FIS Report and on the NFIP Internet homepage at <http://www.fema.gov/business/nfip/>.

## 1.2 Purpose of this Flood Insurance Study

Flood Insurance Studies (FISs) are one of the primary means by which the NFIP administers the National Flood Insurance Act of 1968, the Flood Disaster Protection Act of 1973, and the National Flood Insurance Reform Act of 1994. FISs develop flood risk data that are used to establish actuarial flood insurance rates. The information in this FIS Report will also be used by Chatham County and the jurisdictions therein (hereinafter referred to collectively as Chatham County) to facilitate the adoption and maintenance of floodplain management ordinances, which form the basis of communities' continued participation in the NFIP. Minimum requirements for participation in the NFIP are set forth in Title 44, Part 60, Section 3 of the Code of Federal Regulations (44 CFR 60.3). In some States and/or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. In such cases, the more restrictive criteria will take precedence, and the State and/or community (or other jurisdictional agency) will be able to explain them.

This FIS investigates the existence and severity of flood hazards in, or revises and updates previous FISs for, the geographic area of Chatham County, North Carolina, including the jurisdictions listed in Table 1.

**Table 1 - Jurisdictions in Chatham County**

Community	Included in this FIS	If Not Included, Location of Flood Hazard/Flood Insurance Rate Data
CHATHAM COUNTY	Yes	
TOWN OF CARY*	No	Wake County FIS Report, 2022
TOWN OF GOLDSTON**	Yes	
TOWN OF PITTSBORO	Yes	
TOWN OF SILER CITY	Yes	

\*Area Not Included

\*\*No Special Flood Hazard Areas Identified

## 1.3 FIS Components

A Flood Insurance Study (FIS) is an analysis of flood hazards, typically presented as a set of Flood Insurance Rate Map (FIRM) panels and the FIS Report, which includes a set of Flood Profiles and/or Water-surface elevation rasters.

### Flood Insurance Study Report

The FIS Report provides a context for the information shown on the FIRM, as well as a summary of the data upon which the analyses are based. It also includes an index of sources of additional information on the NFIP.

## 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).

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 28, "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 Chatham County became Effective on 2/2/2007. Refer to Table 24 for information about subsequent revisions to FIRMs.

Selected FIRM panels for the community may contain information (such as floodways and cross sections that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels. In addition, former flood hazard zone designations have been changed as follows:

Old Zone	New Zone
A1 through A30	AE
V1 through V30	VE
B	X (shaded)
C	X (unshaded)

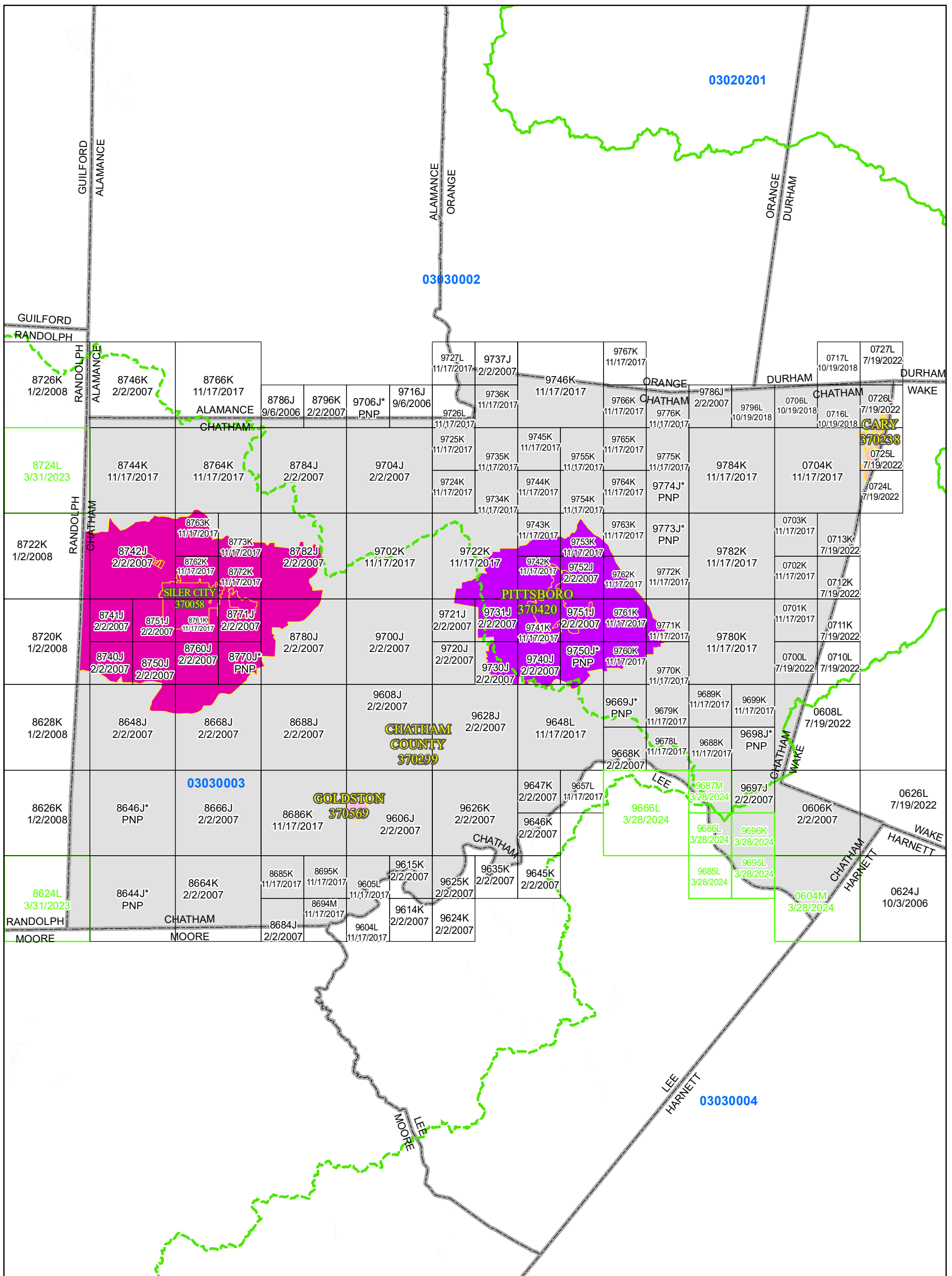
FEMA does not impose floodplain management requirements or special insurance ratings based on Limit of Moderate Wave Action (LiMWA) delineations at this time. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. If the LiMWA is shown on the FIRM, it is being provided by FEMA as information only. For communities that do adopt Zone VE building standards in the area defined by the LiMWA, additional Community Rating System (CRS) credits are available. Refer to Section 2.5.4 for additional information about the LiMWA.

The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Visit the FEMA Web site at <http://www.fema.gov> or contact your appropriate FEMA Regional Office for more information about this program.

Previous FIS Reports and FIRMs may have included levees that were accredited as reducing the risk associated with the 1% annual chance flood based on the information available and the mapping standards of the NFIP at that time. For FEMA to continue to accredit the identified levees, the levees must meet the criteria of the Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10), titled "Mapping of Areas Protected by Levee Systems".

Since the status of levees is subject to change at any time, the user should contact the appropriate agency for the latest information regarding levees presented in Table 7 of this FIS Report. For levees owned or operated by the U.S. Army Corps of Engineers (USACE), information may be obtained from the USACE national levee database. For all other levees, the user is encouraged to contact the appropriate local community.

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>.



1 in = 4.2 miles  
 0 0.5 1 2 3 Miles

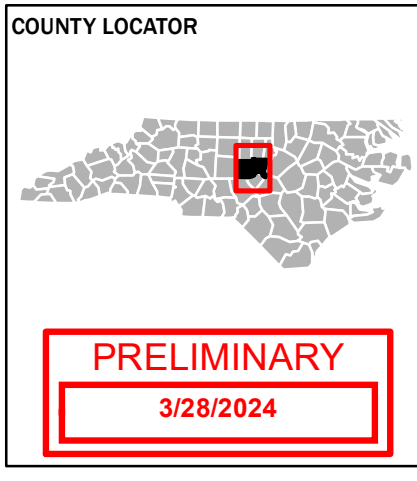
Map Projection:  
 North Carolina State Plane Projection Feet (Zone 3200)  
 Datum: NAD 1983 (Horizontal), NAVD 1988 (Vertical)

The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels previously issued under the North Carolina Seamless paneling scheme

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

[HTTPS://FRIS.NC.GOV/FRIS](https://FRIS.NC.GOV/FRIS)  
[HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION  
 \*PANEL NOT PRINTED



### NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

**CHATHAM COUNTY, NORTH CAROLINA** And Incorporated Areas

PANELS PRINTED:  
 0604, 0606, 0608, 0626, 0700, 0701, 0702, 0703, 0704, 0706, 0710, 0711, 0712, 0713, 0716, 0717, 0724, 0725, 0726, 0727, 8624, 8626, 8628, 8648, 8664, 8666, 8668, 8684, 8685, 8686, 8688, 8694, 8695, 8720, 8722, 8724, 8726, 8740, 8741, 8742, 8744, 8746, 8750, 8751, 8760, 8761, 8762, 8763, 8764, 8766, 8771, 8772, 8773, 8780, 8782, 8784, 8786, 8796, 9604, 9605, 9606, 9608, 9614, 9615, 9624, 9625, 9626, 9628, 9635, 9645, 9646, 9647, 9648, 9657, 9666, 9668, 9678, 9679, 9685, 9686, 9687, 9688, 9689, 9695, 9696, 9697, 9699, 9700, 9702, 9704, 9716, 9720, 9721, 9722, 9724, 9725, 9726, 9727, 9730, 9731, 9734, 9735, 9736, 9737, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9751, 9752, 9753, 9754, 9755, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9770, 9771, 9772, 9775, 9776, 9780, 9782, 9784, 9786, 9796

FEDERAL EMERGENCY MANAGEMENT AGENCY  
 U.S. DEPARTMENT OF HOMELAND SECURITY

**FEMA**  
 MAP NUMBER  
 37037CINDOF

# 2.0 Floodplain Management Applications

Flood events of a magnitude expected to occur with a 10%, 2%, 1%, or 0.2% annual chance have been selected as having special significance for developing sound floodplain management programs. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10%, 2%, 1%, and 0.2% chance, respectively, of being equaled in any given year. Therefore, FIS Reports typically determine water-surface elevations for floods with these probabilities. The FIRM delineates 1% and 0.2% annual chance floodplains and 1% annual chance floodway boundaries, and depicts 1% annual chance flood elevations, rounded to the nearest foot, to assist in developing floodplain management measures.

## 2.1 Floodplains

To provide a national standard without regional discrimination, the 1% annual chance flood has been adopted by FEMA as the base flood for floodplain management purposes. A 1% annual chance flood, or base flood, is defined as that having a 1% chance of being equaled or exceeded in any given year. The 1% annual chance floodplains shown on the FIRM identify areas that are expected to be inundated by the 1% annual chance flood. This 1% annual chance floodplain is also called a Special Flood Hazard Area (SFHA), where the NFIP's floodplain management regulations must be enforced by the community as a condition of participation in the NFIP. The 0.2% annual chance floodplain is employed to indicate additional areas of flood risk associated with exceptionally severe floods.

## 2.2 Floodways

Encroachment on floodplains such as that caused by placement of 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, floodways are provided as a tool to assist local communities in this aspect of floodplain management. Under this concept, the 1% annual chance riverine floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. Figure 2, "Floodway Schematic," illustrates this principle. Minimum Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this FIS are presented to local agencies as a minimum standard that can be adopted directly or that can be used as a basis for additional encroachment studies.

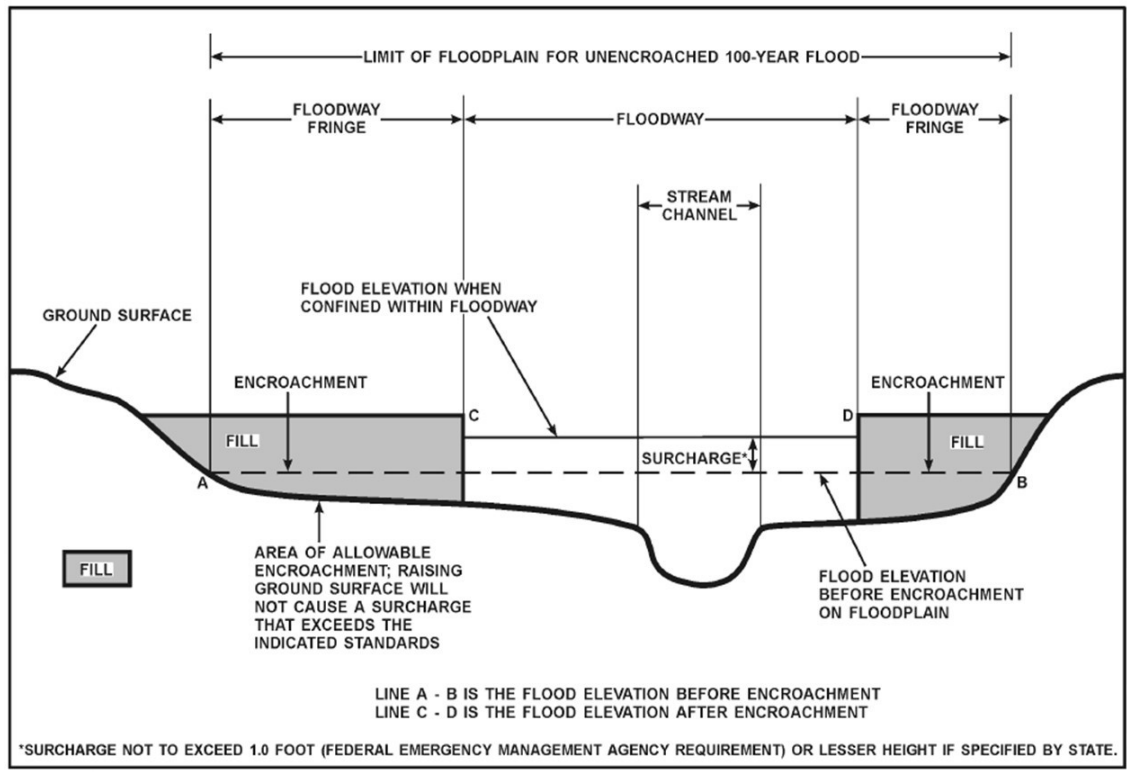


Figure 2- Floodway Schematic

## 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 Watershed Characteristics

Because a FIS is a probability analysis that may not account for some of the factors listed below, communities are strongly encouraged to consider adopting more restrictive or higher floodplain management criteria or ordinances than the minimum Federal requirements. Communities may also increase the validity of their flood hazard data by investing in continuous maintenance of river gages (see the Data Validity and Reliability paragraph below). If the North Carolina Emergency Management, National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS) or other agencies do not maintain gages on the flooding sources of interest, partnerships may be pursued with federal, state and local agencies to encourage these agencies to install gauges. For more information, see Section 9.0 of this report.

This flood hazard study represents an analysis of certain watershed characteristics, some of which are summarized as follows:

### Drainage Area

In general, streams that drain larger areas have greater flood hazards. FISs, in North Carolina, do not typically analyze flood hazards in places with rural drainage areas of less than one square mile and within urban drainage areas of less than ½ square mile.

### Soil Permeability and Infiltration

Differences in the types of soil and the amount of vegetation in a watershed have a significant effect on the amount of water that the soil can absorb; soils with a high sand content absorb much more water than soils with a high clay content. The presence of vegetation increases infiltration; the presence of pavement decreases infiltration and also speeds runoff to receiving waters. As soil permeability and infiltration decrease, the volume and rate of overland flow increases.

### Soil Moisture Conditions

In addition to soil permeability and infiltration, the level of the water table helps determine the saturation point, beyond which no water is absorbed. As rainfall duration increases, the height of the water table increases.

### Channel and Floodplain Geometry

The geometric contour of a streambed, termed channel geometry, and the geometric contour of a floodplain determine the volume of water that a channel can hold and partially determine the rate at which water flows through it.

### Channel and Floodplain Roughness

The roughness of a surface affects the characteristics of runoff whether the water is on the surface of the watershed or in the channel.

FIS Reports include analyses of how these factors will combine to produce overland flow patterns during floods that have a certain probability of occurring in any given year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at shorter intervals or even within the same year. The risk of experiencing a rare flood increases when longer periods are considered. For example, the risk of having a flood which equals or exceeds the 1% annual chance flood (1% chance of annual exceedance) in any 50-year period is approximately 40% (4 in 10), but for any 90-year period, the risk increases to approximately 60% (6 in 10).

It is important to note that the 1% annual chance flood is used as the national standard to allow a consistent approach to floodplain management, flood hazard assessment, and flood hazard mapping. In any given community, a number of factors may result in flooding characteristics that do not conform to predicted conditions. Therefore, the determination that an area is not shown on the FIRM as being within a Special Flood Hazard Area is no guarantee that it will not flood during a 1% annual chance flood. Examples of these

factors include Data Validity and Reliability; Developmental and Topographic Changes Over Time; Erosion, Deposition, and Debris Flow; and Meandering and Lateral Migration.

### **Data Validity and Reliability**

Certain types of analysis methods yield more justifiable characterizations of flood hazards. For example, a gage analysis, to determine peak discharges, is based on actual measurements of watershed conditions over time and, therefore, is typically considered the most accurate method of hydrologic analysis. However, it is not feasible to install enough gages to gather data on every stream. In addition, for many of the gage sites that do exist, there are interruptions in the period of record. The usefulness of gage data for the purpose of predicting flooding behavior decreases with interruptions in the period of record; predicted flooding conditions over a 100-year period based on 20 years of measurements spread over a 35-year period are less valid than those based on 30 years of continuous measurements. A regression analysis is typically considered the best method in the absence of gage data, as it uses gage data from watersheds with similar characteristics to estimate flood frequency and magnitude in an ungaged watershed. Regression equations reflect average conditions for a region; therefore, the results will not exactly match the results of a gage analysis at a particular location. The standard errors of the North Carolina rural regression equations range from 44 to 51 percent for estimates of the 1% annual chance flood. That means the difference between the results of the regression equation and the gage analysis for approximately two-thirds of the locations that gage data exists are within 44 to 51 percent of the gage analysis results. A rainfall-runoff hydrologic analysis may be used for gaged or ungaged watersheds, and can estimate the effects of storage areas and flood control structures and measures. This method is most valid when calibrated against historical data.

### **Developmental and Topographic Changes Over Time**

A FIRM is based on the best topographic and planimetric information available to FEMA and the State of North Carolina at the time the study is produced. In time, however, development and/or natural phenomena can alter the physical characteristics of a watershed and its drainage channels, resulting in changes in the flood hazards in those areas. For example, constructing a housing subdivision reduces the amount of soil that is available to absorb water; this in turn causes an increase in the volume of surface water that flows into the channel.

### **Erosion, Deposition, and Debris Flow**

The flood hazards shown on a FIRM are based on the assumption of unobstructed flow. The FIRM does not reflect an analysis of areas that are subject to erosion caused by the increased water-surface elevations and velocities that occur during flooding. In addition to the risks of landslides or a weakening of the ground underneath roads or structures, any sediment that is removed from one location will be deposited in another; accumulated deposits may have a pronounced effect on flood hazards in those areas. Similarly, debris such as fallen trees or branches, litter, or other items may obstruct stream channels or hydraulic structures, increasing water-surface elevations, velocities, and floodplain width.

### **Meandering and Lateral Migration**

FISs are based on the assumption that channel geometry will remain stable during normal drainage and during flood events. This assumption is valid for most streams, which flow over bedrock or between bedrock outcroppings that form non-alluvial channels. However, alluvial streams change the channel geometry with time, significantly so during flood events. Alluvial streams are subject to erosion and deposition, which may result in braided or meandering channels. Streams of this type may be characterized by lateral migration, or channel shifting, in which the stream may change course entirely during a flood. Whenever clear evidence is available, a FIRM will identify the alluvial nature of a studied flooding source and designate wider floodways to allow for potential migration. However, these floodways are based on qualitative assessments and not on quantitative geomorphic and engineering analyses.

## **2.5 Coastal Flood Hazard Areas**

This section is not applicable to this FIS project.

## 3.0 Insurance Applications

### 3.1 National Flood Insurance Program Insurance Zones

For flood insurance applications, the FIRM designates flood insurance rate zones and, in 1% annual chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use the zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies. Table 2, "Flood Zone Designations," includes a description of each type of flood hazard zone.

**Table 2 - Flood Designations**

Zone	Description
A	Zone A is the flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined in the FIS Report by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations or depths are shown within this zone.
AE	Zone AE is the flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined in the FIS Report by detailed methods. In most instances, whole-foot Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.
AH	Zone AH is 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 Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.
AO	Zone AO is 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 detailed hydraulic analyses are shown within this zone.
AR	Zone AR is 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.
A99	Zone A99 is 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 depths are shown within this zone.
V	Zone V is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no Base Flood Elevations are shown within this 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. Whole-foot Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.
X	Zone X is the flood insurance rate zone that corresponds to areas outside the 0.2% annual chance floodplain, areas within the 0.2% annual chance floodplain, and to areas of 1% annual chance flooding where average depths are less than 1 foot, areas of 1% annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone.
X (Future)	Zone X (Future Base Flood) is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined based on future-conditions hydrology. No BFEs or base flood depths are shown within this zone.
D	Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

## 4.0 Area Studied

Chatham County is found in the Piedmont region of North Carolina. It is surrounded by Alamance and Orange Counties to the north, Wake County to the east, Lee County to the south, Randolph County to the west.

## 4.1 Basin Description

Table 3, "Basin Description" 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 area.

**Table 3 - Basin Description**

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description	HUC Area (square miles)
Deep	03030003	Deep River	The Deep River Basin flows out of southeast Forsyth County. From there it continues southeast, draining parts of Guilford, Randolph, Moore, and Lee Counties before emptying into the Cape Fear River in Chatham County.	1,450
Haw	03030002	Haw River	The Haw River Basin begins in eastern Forsyth County, flowing across low, rolling hills. The basin drains large portions of Guilford, Alamance, and Chatham counties before entering B. Everett Jordan Lake at the headwaters of the Cape Fear River.	1,707
Upper Cape Fear	03030004	Cape Fear River	The Upper Cape Fear Basin begins just downstream of B. Everett Jordan Lake in Chatham County flowing through low, rolling hills until exiting in Cumberland County.	1,630

## 4.2 Principal Flood Problems

Table 4, "Principal Flood Problems" contains a list of principal flooding problems in Chatham County.

**Table 4 - Principal Flood Problems**

Flooding Source	Problem
All Sources	Past flooding on the streams within Chatham County indicates that flooding may occur during any season of the year; most floods, however, occur during the spring as a result of heavy rainfall. Floods are often associated with tropical storms moving north

## 4.3 Historic Flood Elevations

### Hurricane Floyd (9/16/1999)

Hurricane Floyd made landfall near Wilmington with category two winds of 105 to 110 mph. Rainfall totals from Floyd were as high as 15 to 20 inches over portions of eastern North Carolina; with a record of 23.45 inches of rain falling in the month of September at Wilmington, NC. This breaks the previous record of 21.12 inches set in July 1886. These rains combined with saturated ground from previous rain events, including Hurricane Dennis, to produce an inland flood disaster. There were 74 deaths in the United States, including 52 in North Carolina, due to drowning from flood waters. This makes Floyd the deadliest U.S. hurricane since Agnes in 1972. Data from the USGS indicate that eleven of their stream gage monitoring sites in North Carolina (Ahoskie, Rocky Mount, Hilliardston, White Oak, Enfield, Tarboro, Lucama, Hookerton, Trenton, Chinquapin, and Freeland) exceeded 0.2% annual chance flood levels due to Floyd. Total losses in North Carolina approach \$5 billion with an estimated \$3.5 billion in damages to North Carolina homes, businesses, roads, and infrastructure. Floyd passed relatively close to the entire U.S. east coast, justifying hurricane warnings from Florida to Massachusetts and requiring an estimated two million people to evacuate. The last hurricane to require warnings for as large a stretch of coastline was Hurricane Donna in 1960.

### Hurricane Bonnie (8/26/1998)

The landfall location of Bonnie was in southern North Carolina near Cape Fear very close to landfall of both Hurricanes Bertha and Fran in 1996. Even though a powerful storm, damage from Bonnie was much less than Fran, which was also Category 3. Winds gusted up to 100 knots and storm tides of 5 to 8 feet above normal were reported mainly in eastern beaches of Brunswick County, while a storm surge of 6 feet was reported at Pasquotank and Camden Counties in the Albemarle Sound.

### Hurricane Fran

(9/5/1996)

The landfall location of Fran near the city of Wilmington and its progression into the Raleigh-Durham area caused an estimated \$1.275 billion in damage in North Carolina alone. Fran hit with gusts up to 105 mph and a storm surge of approximately 16 feet. Over \$1 billion in damage was reported in North Topsail Beach and Surf City and 23 people were killed.

### Hurricane Bertha

(7/12/1996)

1996 was a damaging year in the hurricane history of North Carolina. Tropical Storm Arthur, Hurricane Bertha, and Hurricane Fran all made direct landfall on the North Carolina coastline. It was the most active tropical cyclone season in the state since 1955, when Hurricanes Connie, Diane, and Lone all hit the coast. Bertha entered North Carolina in North Topsail Beach with 105 mph gust and a storm surge of approximately 5 feet.

### Hurricane Gloria

(9/26/1985)

The landfall location of Gloria was Cape Hatteras, with 90 knot winds and a storm surge of approximately 6-8 feet.

### Hurricane Diana

(9/13/1984)

The landfall location of Diana was 38 miles south of Wilmington with 90 mph winds at its closest approach to Wilmington. Diana had 115 mph sustained winds before landfall. Storm surge was approximately 5-6 feet.

Table 5, "Historic Flood Elevations", lists selected flooding sources in Chatham County with records of past stages. The table shows the historic peak, a location description, approximate stream station, the date of the historic peak, and approximate recurrence interval of the flood elevation. The approximate recurrence interval for a flood is often estimated based on an analysis of rainfall amounts from a storm and /or stream gage data.

**Table 5 - Historic Flood Elevations**

Flooding Source/Tropical Storm	Location Description	Approx. Stream Station	Historic Peak (Feet NAVD 88)	Date	Approximate Recurrence Interval (in years)
Beaver Creek / Heavy Rain	At upstream face of Castleburg Drive	48370	355.0	*	10
Beaver Creek / Hurricane Floyd	At upstream face of Kelly Road	30400	279.6	9/1/1999	10
Brush Creek / Hurricane Fran	Bottom of bridge	29407	412.7	9/1/1996	25
Cane Creek (South) Tributary 1 / Hurricane Fran	2863 Stephens Trail - Fence Post	23448	602.7	9/1/1996	50
Deep River / Hurricane Fran	Deep River	36500	230.3	9/1/1996	25
Deep River Tributary 8 / Unknown storm	Sweetgum Trees	2600	241.1	9/1/1996	25
Georges Creek / Hurricane Fran	Georges Creek - Concrete walls	8970	230.2	9/1/1996	10
Greenbriar Creek / Hurricane Fran	Approximately 200 feet downstream of Staley Store Road - Hardwood Tree	27040	648.3	9/1/1996	50
Morris Branch / Hurricane Fran	At upstream face of Howard Road	16330	327.4	9/1/1996	50
North Prong Rocky River / Hurricane Fran	North Prong Rocky River - base of Satellite dish	13750	615.2	9/1/1996	50
Robeson Creek Tributary 5 / Unknown storm	Robeson Creek Tributary 5 - Location	6308	413.4	9/1/1996	25
Shaddox Creek / Unknown storm	Shaddox Creek - Gravel Driveway	7648	173.9	9/1/1996	25

\* Data Not Available

## 4.4 Flood Protection Measures

Flood protection measures may be structural (such as levees, dams, and reservoirs) or non-structural (such as land-use management ordinances, policies, or practices).

Table 6, "Non-Levee Flood Protection Measures", lists the flood protection measures undertaken to mitigate flood damage in Chatham County.

**Table 6 - Non-Levee Flood Protection Measures**

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Haw River	B. EVERETT JORDAN	DAM	B. Everett Jordan Dam on B. Everett Jordan Lake	Undetermined Flood Protection

Table 7, "Levees" is not applicable in Chatham County.

## 4.5 Scope of Study

For this map maintenance revision, a scoping meeting was held in Chatham County to present the results of initial research to the county and communities within the county and to discuss their floodplain mapping needs. The county and communities were asked to provide input on proposed study priorities and analysis methods. These meetings resulted in the identification of flooding sources having a floodplain mapping need. Map Maintenance Plans were developed based on the results of the scoping meetings and were both mailed to each jurisdiction within Chatham County and posted to the State's website at [www.ncfloodmaps.com](http://www.ncfloodmaps.com).

Draft basin plans were developed based on the results of the initial scoping meetings. Final scoping meetings were held by the State and FEMA to provide counties and communities an overview of the draft basin plans, including the proposed scope and schedule for the project, and to provide an opportunity for additional county and community input. After the final scoping meeting was held, the Final Basin Plans were produced.

This FIS covers the geographic area of Chatham County, North Carolina, and all jurisdictions therein. The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction. Limits of detailed study are indicated on the Flood Profiles and/or Water-surface elevation rasters and/or the FIRM.

Table 8P, "Scope of Revisions: Revised or New Detailed Study – Preliminary", lists flooding sources that were newly studied by detailed methods or were previously studied by detailed methods and had a change in backwater elevation due to flooding effects from a newly studied flooding source.

**Table 8P - Scope of Revisions: Revised or New Detailed Study - Preliminary**

Source	Riverine Sources		Affected Communities
	From	To	
Cape Fear River	At the Cumberland/Bladen County boundary	At Harnett/Lee County boundary	Chatham County

Table 9P, "Scope of Revisions: Redelineated - Preliminary" is not applicable in Bladen County.

Table 10P, "Scope of Revisions: Limited Detailed - Preliminary", lists flooding sources that were newly studied by limited detailed methods or were previously studied by limited detailed methods and had a change in backwater elevation due to flooding effects from a newly studied flooding source.

**Table 10P - Scope of Revisions: Limited Detailed - Preliminary**

Source	Riverine Sources		Affected Communities
	From	To	
Buckhorn Creek <sup>1</sup>	The confluence with the Cape Fear River	Approximately 2.0 miles upstream of the confluence with the Cape Fear River	Chatham County
Cape Fear River	Approximately 1.5 miles upstream from Lee and Harnett County boundary.	Approximately 2.7 miles downstream from US 1.	Chatham County
Gulf Creek <sup>1</sup>	The confluence with the Cape Fear River	Approximately 0.5 mile upstream of the Norfolk Southern Railroad	Chatham County

<sup>1</sup>Revised to reflect backwater effects from new detailed study

Table 8, "Flooding Sources Studied by Detailed Methods", lists all flooding sources within the county that were studied by detailed methods for this FIS and previous FISs.

**Table 8 - Flooding Sources Studied by Detailed Methods**

Source	Riverine Sources		Affected Communities
	From	To	
Beaver Creek	The Chatham/Wake County boundary	Approximately 1,350 feet upstream of Castleburg Drive	Chatham County
Cape Fear River	At the Cumberland/Bladen County boundary	At Harnett/Lee County boundary	Chatham County
Dry Creek	At the confluence with Haw River	Approximately 500 feet upstream of NC Highway 87	Chatham County
Haw River	At the confluence with Cape Fear River	Immediately downstream of B. Everett Jordan Lake Dam	Chatham County
Haw River	Jordan Lake	Approximately 0.5 mile upstream of the Guilford/Alamance County boundary	Chatham County Chatham County
Indian Creek (into Deep River)	At the confluence with Deep River	Approximately 0.6 mile downstream of Roberts Chapel Road	Town Of Pittsboro
Little Indian Creek	At the confluence with Indian Creek (into Deep River)	Approximately 2.3 miles upstream of confluence with Indian Creek (into Deep River)	Chatham County
Loves Creek	The confluence with Rocky River	Approximately 630 feet upstream of Pine Forest South Drive	Town Of Siler City
Loves Creek Tributary 1	At the confluence with Loves Creek	Approximately 400 feet upstream of US Highway 64	Town Of Siler City
Morris Branch	The confluence with Panther Creek	Approximately 0.7 mile upstream of confluence with Panther Creek	Chatham County Town Of Cary
Morris Branch	Approximately 400 feet downstream of the Chatham/Wake County boundary	Approximately 500 feet downstream of Highway 55	Town of Cary
Northeast Creek	Approximately 1,050 feet upstream of county boundary	Approximately 130 feet upstream of So-Hi Drive	Chatham County
Panther Creek	The confluence with Northeast Creek	At the Chatham County Boundary	Chatham County Town Of Cary
Pokeberry Creek	Approximately 1.2 miles downstream of US Highway 15-501	Approximately 1.4 miles upstream of Great Ridge Parkway	Chatham County
Robeson Creek	The confluence with Haw River / B. Everett Jordan Lake	Approximately 1,370 feet upstream of the Power Line Easement	Chatham County Town Of Pittsboro
Robeson Creek Tributary 3	At the confluence with Robeson Creek	Approximately 1,800 feet upstream of Oakwood Drive	Town Of Pittsboro
Rocky River	Approximately 0.25 mile downstream of US Highway 64	Approximately 0.25 mile upstream of Siler City Snow Camp Road (SR 1004)	Town Of Siler City
Rocky River Tributary 1	At the confluence with Rocky River	Approximately 800 feet upstream of Siler City Snow Camp Road	Town Of Siler City
Southwest Creek	The Durham/Chatham County boundary	Approximately 750 feet upstream of Ebon Road	Chatham County
White Oak Creek	The Chatham/Wake County boundary	Approximately 1,060 feet upstream of Green level Church Road	Town Of Cary
Wilkinson Creek	Approximately 1,300 feet upstream of Andrews Store Road	Approximately 0.6 mile upstream of Lamont Norwood Road	Chatham County

Table 9 Flooding Sources Studied by Detailed Methods: Redelineated' is not applicable in this County.

Table 10, "Flooding Sources Studied by Detailed Methods: Limited Detailed", lists all flooding sources within the county that were studied by limited detailed methods for either this FIS or previous FISs.

**Table 10 - Flooding Sources Studied by Limited Detailed Methods**

Source	Riverine Sources		Affected Communities
	From	To	
B. Everett Jordan Lake	Entire shoreline within Chatham County (Unincorporated Areas)	Entire shoreline within Chatham County (Unincorporated Areas)	Chatham County Town Of Pittsboro
Bear Creek	The confluence with Rocky River	Approximately 2.7 miles upstream of confluence of Bear Creek Tributary 1	Chatham County
Bear Creek (into Indian Creek)	The confluence with Indian Creek (into Deep River)	Approximately 400 feet upstream of Bonlee Caribnton Road	Chatham County
Bear Creek Tributary 1	The confluence with Bear Creek	Approximately 0.5 mile upstream of confluence with Bear Creek	Chatham County
Beaver Creek Tributary 1	The confluence with B. Everett Jordan Lake	Approximately 1.3 miles upstream of Tody Goodwin Road	Chatham County
Beaver Creek Tributary 2	The confluence with B. Everett Jordan Lake	Approximately 1.1 miles upstream of Tody Goodwin Road	Chatham County
Beaver Creek Tributary 3	The confluence with B. Everett Jordan Lake	Approximately 0.6 mile upstream of confluence with B. Everett Jordan Lake	Chatham County
Blood Run Creek	At the confluence with Brush Creek	Approximately 1580 feet upstream of US 64	Town Of Siler City
Brooks Creek	Approximately 0.6 miles upstream of Old Graham Road	Approximately 400 feet upstream of NC 87	Chatham County

**Table 10 - Flooding Sources Studied by Limited Detailed Methods**

Source	Riverine Sources		Affected Communities
	From	To	
Brooks Creek	The confluence with Haw River	Approximately 0.6 mile upstream of Old Graham Road	Chatham County Town Of Pittsboro
Brooks Creek Tributary	Approximately 2,040 feet downstream of The Parks Drive	Approximately 1,175 feet upstream of The Parks Drive	Chatham County
Brooks Creek Tributary 1	The confluence with Brooks Creek	Approximately 970 feet upstream of Russells Chapel Church Road	Chatham County Town Of Pittsboro
Brush Creek	The confluence with Deep River	Approximately 0.4 mile upstream of Old Liberty Road	Town Of Siler City
Buckhorn Creek	The confluence with Cape Fear River	At Harris Reservoir Dam	Chatham County
Buckhorn Creek Tributary 1	The confluence with Buckhorn Creek	Approximately 0.6 mile upstream of confluence with Buckhorn Creek	Chatham County
Buckhorn Creek Tributary 2	The confluence with Buckhorn Creek	Approximately 0.7 mile upstream of confluence with Buckhorn Creek	Chatham County
Buckhorn Creek Tributary 3	The confluence with Buckhorn Creek	Approximately 530 feet upstream of Railroad	Chatham County
Buckhorn Creek Tributary 4	At Harris Reservoir	Approximately 0.4 mile upstream of confluence with Harris Reservoir	Chatham County
Bush Creek	The confluence with B. Everett Jordan Lake	Approximately 1.4 miles upstream of Big Woods Road	Chatham County
Cape Fear River	At the Lee/Harnett County boundary	Approximately 2.7 miles downstream from US 1.	Chatham County
Cedar Creek	The confluence with Deep River	Approximately 1.2 miles upstream of Henry Oldham Road	Chatham County
Cedar Creek Tributary 1	The confluence with Cedar Creek	Approximately 1.4 miles upstream of Henry Oldham Road	Chatham County
Cedar Creek Tributary 2	The confluence with Cedar Creek Tributary 1	Approximately 0.4 mile upstream of an unnamed road	Chatham County
Collins Creek	Confluence with Haw River	Approximately 0.8 mile upstream of Orange Grove Road	Chatham County
Crows Creek	The confluence with Terrells Creek	Approximately 550 feet upstream of an unnamed road	Chatham County
Cub Creek	The confluence with B. Everett Jordan Lake	Approximately 1.0 mile upstream of Nature Trail Road	Chatham County
Deep River	The confluence with Cape Fear River	The Chatham/Moore County boundary	Chatham County
Deep River	The Moore/Chatham County boundary	The Moore/Randolph County boundary	Chatham County
Deep River Tributary 5	The confluence with Deep River	Approximately 0.5 mile upstream of Alton King Road	Chatham County
Deep River Tributary 6	The confluence with Deep River Tributary 5	Approximately 0.8 mile upstream of Alton King Road	Chatham County
Deep River Tributary 7	The confluence with Deep River	Approximately 1.7 miles upstream of Alton King Road	Chatham County
Deep River Tributary 8	The confluence with Deep River	Approximately 0.6 mile upstream of Alton King Road	Chatham County
Dry Creek	Approximately 470 feet upstream of NC 87	Approximately 0.8 mile upstream of White Smith Road	Chatham County
Dry Creek	The confluence with Haw River	Approximately 0.8 mile upstream of White Smith Road	Chatham County
East Price Creek	Approximately 530 feet downstream of Amber Wood Road	Approximately 0.6 mile upstream of the Chatham/Orange County boundary	Chatham County
Folkner Branch	The confluence with B. Everett Jordan Lake	Approximately 600 feet upstream of Farrells Creek Road	Chatham County
Georges Creek	The confluence with Deep River	Approximately 1,060 feet upstream of Henry Oldham Road	Chatham County
Georges Creek Tributary 1	The confluence with Georges Creek	Approximately 0.8 mile upstream of confluence with Georges Creek	Chatham County
Georges Creek Tributary 2	The confluence with Georges Creek	Approximately 1.1 miles upstream of confluence with Georges Creek	Chatham County
Greenbriar Creek	The confluence with Rocky River	Approximately 1.1 miles upstream of Staley Store Road	Chatham County
Gulf Creek	The confluence with Cape Fear River	Approximately 2.2 miles upstream of railroad	Chatham County
Harlands Creek	The confluence with Rocky River	Approximately 1.6 miles upstream of US 64	Chatham County Town Of Pittsboro
Harris Reservoir	Entire shoreline within Chatham County	Entire shoreline within Chatham County	Chatham County
Harts Creek	The confluence with Bear Creek (into Indian Creek)	Approximately 1.6 miles upstream of confluence with Bear Creek (into Indian Creek)	Chatham County
Herndon Creek	Approximately 0.8 miles upstream of Jack Bennett Road	Approximately 1.8 mile upstream of Jack Bennett Road	Chatham County
Herndon Creek	The confluence with Bush Creek	Approximately 0.8 mile upstream of Jack Bennett Road	Chatham County

**Table 10 - Flooding Sources Studied by Limited Detailed Methods**

Source	Riverine Sources		Affected Communities
	From	To	
Hill Creek	The confluence with Robeson Creek	Approximately 300 feet upstream of X-Campbell Road	Town Of Pittsboro
Indian Creek (into Deep River)	Approximately 1,950 feet upstream of the confluence of Bear Creek (into Indian Creek)	Approximately 1,060 feet upstream of Goldston Glendon Road	Chatham County
Kit Creek	The confluence with Northeast Creek	Approximately 1.7 miles upstream of confluence with Northeast Creek	Chatham County Town Of Cary
Lacy Creek	The confluence with Rocky River	Approximately 0.7 mile upstream of confluence of Rocky River	Town Of Siler City
Landrum Creek	The confluence with Rocky River	Approximately 500 feet upstream of Pleasant Hill Church Road	Chatham County
Landrum Creek Tributary	The confluence with Landrum Creek	Approximately 0.9 mile upstream of Jay Shambley Road	Chatham County
Lick Creek	The confluence with Terrells Creek (West)	Approximately 2.4 miles upstream of confluence with Terrells Creek West	Chatham County
Line Creek	The confluence with Deep River	Approximately 1.0 mile upstream of Goldston Carbondon Road	Chatham County
Little Brush Creek	The confluence with Brush Creek	Approximately 1.6 miles upstream of Jim Paige Road	Chatham County Town Of Siler City
Little Indian Creek	Approximately 2.1 miles upstream of the confluence with Indian Creek (into Deep River)	Approximately 1,060 feet upstream of Goldston Glendon Road	Chatham County
Long Branch	The confluence with Dry Creek	Approximately 1.5 miles upstream of NC 87	Chatham County
Loves Creek Tributary 2	The confluence with Loves Creek Tributary 1	Approximately 0.8 mile upstream of Garden Avenue	Town Of Siler City
Loves Creek Tributary 3	The confluence with Loves Creek Tributary 1	Approximately 400 feet upstream of Garden Avenue	Town Of Siler City
Meadow Branch	The confluence with Terrells Creek	Approximately 350 feet upstream of Jones Ferry Road	Chatham County
Meadow Creek	The confluence with Rocky River	Approximately 1.3 miles upstream of Rives Chapel Church Road	Chatham County
Mill Branch	Entire shoreline within Chatham County (Unincorporated Areas)	Entire shoreline within Chatham County (Unincorporated Areas)	Chatham County
Mill Branch	The confluence with B. Everett Jordan Lake	Approximately 1,530 feet upstream of confluence with B. Everett Jordan Lake	Chatham County
Morgan Creek	The confluence with Jordan Lake	The Durham/Orange County boundary	Chatham County
Morris Branch	The confluence with Panther Creek	Approximately 0.7 mile upstream of confluence with Panther Creek	Chatham County Town Of Cary
Mud Lick Creek	The confluence with Rocky River	Approximately 0.6 mile upstream of Silk Hope Liberty Road	Chatham County
Nancy Branch	Approximately 0.4 mile upstream of confluence with Panther Creek	Approximately 0.1 miles upstream of Del Webb Avenue	Chatham County Town Of Cary
Nancy Branch	The confluence with Panther Creek	Approximately 0.4 mile upstream of confluence with Panther Creek	Chatham County
New Hope Creek	The Durham/Chatham County Boundary	Approximately 1,400 feet downstream of Old Chapel Hill Road	Chatham County
New Hope River Tributary 1	The confluence with B. Everett Jordan Lake	Approximately 1,480 feet upstream of B. Everett Jordan Lake	Chatham County
North Prong Rocky River	The confluence with Rocky River	Approximately 210 feet upstream of South Cook Street	Chatham County
Northeast Creek	The confluence with B. Everett Jordan Lake	Approximately 1,050 feet upstream of county boundary	Chatham County
Overcup Creek	The confluence with B. Everett Jordan Lake	Approximately 1.0 mile upstream of the confluence with Overcup Tributary	Chatham County
Overcup Creek Tributary	The confluence with Overcup Creek/B. Everett Jordan Lake	Approximately 1.0 mile upstream of the confluence with Overcup Creek/B. Everett Jordan Lake	Chatham County
Panther Creek	The confluence with Northeast Creek	Approximately 0.6 mile upstream of confluence with Morris Branch	Chatham County Town Of Cary
Parkers Creek	The confluence with B. Everett Jordan Lake	Approximately 0.4 mile upstream of Big Woods Road	Chatham County
Persimmons Nursery Branch	The confluence with Collins Creek	Approximately 550 feet upstream of Collins Mountain Road	Chatham County
Pokeberry Creek	The confluence with Haw River	Approximately 1.0 mile upstream of Bynum Ridge Road	Chatham County
Reedy Fork	The confluence with Brush Creek	Approximately 0.4 mile upstream of Wrenn Smith Road	Town Of Siler City
Robeson Creek Tributary 1	The confluence with Robeson Creek	Approximately 1,800 feet upstream of Prince Creek Road	Town Of Pittsboro
Robeson Creek Tributary 2	The confluence with Robeson Creek Tributary 1	Approximately 480 feet upstream of Tom Womble Road	Town Of Pittsboro

**Table 10 - Flooding Sources Studied by Limited Detailed Methods**

Source	Riverine Sources		Affected Communities
	From	To	
Robeson Creek Tributary 3A	Oakwood Drive	Approximately 455 feet upstream of Hillsboro Street	Town Of Pittsboro
Robeson Creek Tributary 4	The confluence with Robeson Creek	Approximately 320 feet upstream of NC 87	Town Of Pittsboro
Robeson Creek Tributary 5	The confluence with Robeson Creek Tributary 4	Approximately 1.0 mile upstream of Arthur Alston Road	Chatham County Town Of Pittsboro
Rocky Branch (into Deep River)	The confluence with Deep River	Approximately 0.5 mile upstream of confluence with Deep River	Chatham County
Rocky Branch (into Georges Creek)	The confluence with Georges Creek	Approximately 0.6 mile upstream of Rosser Road	Chatham County
Rocky Ford Branch	The confluence with White Oak Creek	Approximately 0.7 mile upstream of Luther Road	Chatham County
Rocky River	Approximately 0.3 miles upstream of Siler City Snow Camp Road	Approximately 0.4 mile upstream of Dam	Chatham County Town Of Siler City
Rocky River	The confluence with Deep River	Approximately 0.25 miles downstream of Highway 64	Chatham County Town Of Siler City
Rocky River Tributary 1	The confluence with Rocky River	Approximately 1.0 mile upstream of Siler City Snow Camp Road	Town Of Siler City
Sandy Branch	The confluence with Bear Creek	Approximately 200 feet upstream of NC 902	Chatham County
Shaddox Creek	Approximately 565 feet downstream of New Elam Church Road	Approximately 1,170 feet downstream of Obler Road	Chatham County
Shaddox Creek	The confluence with Haw River	Approximately 2.5 miles upstream of US 1	Chatham County
South Fork	Confluence with Cane Creek (South)	Alamance/Chatham County boundary	Chatham County
Stinking Creek	The confluence with B. Everett Jordan Lake	Approximately 450 feet upstream of Talon Drive	Chatham County
Terrells Creek	The confluence with Haw River	The Chatham/Orange County boundary	Chatham County
Terrells Creek (West)	The confluence with Haw River	Approximately 1.5 miles upstream of Woody Store Road	Chatham County
Tick Creek	The confluence with Rocky River	Approximately 300 feet upstream of Siler City Glendon Road	Chatham County
Tick Creek Tributary	The confluence with Tick Creek	Approximately 0.6 mile upstream of confluence of Tick Creek	Chatham County
Tick Creek Tributary 1	The confluence with Tick Creek	Approximately 0.9 mile upstream of Mount Vernon Springs Road	Chatham County Town Of Siler City
Tributary A	The confluence with Indian Creek (into Deep River)	Approximately 530 feet upstream of Little Indian Creek Road	Chatham County
Turkey Creek	The confluence with Robeson Creek	Approximately 2.9 miles upstream of US 15/US 501/NC 87	Town Of Pittsboro
Tyson's Creek	The confluence with Deep River	Approximately 0.4 mile upstream of Mert McManess Road	Chatham County
Tyson's Creek Tributary	The confluence with Tyson's Creek	Approximately 0.8 mile upstream of NC Highway 42	Chatham County
Varnell Creek	The confluence with Rocky River	Approximately 2.3 miles upstream of US 64	Town Of Siler City
Weaver Creek	The confluence with B. Everett Jordan Lake	Approximately 1.9 miles upstream of confluence with B. Everett Jordan Lake	Chatham County
Weaver Creek Tributary	The confluence with B. Everett Jordan Lake	Approximately 1.2 miles upstream of confluence with B. Everett Jordan Lake	Chatham County
Welch Creek	The confluence with Tick Creek	Approximately 0.6 mile upstream of confluence with Tick Creek	Chatham County
West Price Creek	The Chatham/Orange County boundary	Approximately 1,920 feet upstream of Chatham/Orange County boundary	Chatham County
White Oak Creek Tributary 1	The confluence with White Oak Creek/B. Everett Jordan Lake	Approximately 1.0 mile upstream of confluence with White Oak Creek/B. Everett Jordan Lake	Chatham County
Wilkinson Creek	Approximately 500 feet downstream of Gilmore Road	Approximately 85 feet south of Chatham County/Orange County boundary	Chatham County
Wilkinson Creek	The confluence with Haw River	Approximately 0.6 mile south of Chatham County/Orange County boundary	Chatham County
Wilkinson Creek	The confluence with Haw River	Approximately 1300 feet upstream of Andrews Store Road	Chatham County
Windfall Branch	The confluence with B. Everett Jordan Lake	Approximately 0.6 mile upstream of confluence with Parkers Creek	Chatham County

Table 11, "Stream Name Changes" is not applicable in Chatham County.

Table 12, "Letters of Map Revision" is not applicable in Chatham County.

# 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.

## 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. For details on the county’s hydrologic analyses, the hydrologic report is available by request.

A summary of the drainage area-peak discharge relationships for the flooding sources studied by detailed and limited detailed methods is shown in Table 13, “Summary of Discharges”.

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Bear Creek</b>					
At the confluence with Rocky River	51.70	*	*	8775	*
Approximately 1,430 feet upstream of Woody Dam Road	51.50	*	*	8747	*
Approximately 210 feet upstream of Mays Chapel Road	50.50	*	*	8640	*
Approximately 0.6 mile upstream of Mays Chapel Road	49.50	*	*	8534	*
Approximately 0.8 mile downstream of Pittsboro-Goldston Road	48.50	*	*	8432	*
Approximately 0.4 mile upstream of Pittsboro-Goldston Road	47.50	*	*	8324	*
At the confluence of Harts Creek	43.60	*	*	7887	*
Approximately 0.5 mile upstream of the confluence of Harts Creek	43.20	*	*	7836	*
Approximately 480 feet upstream of Meronies Chapel Road	42.30	*	*	7734	*
Approximately 0.6 mile upstream of Meronies Chapel Road	41.30	*	*	7624	*
Approximately 0.8 mile downstream of Vernie Phillips Road	40.30	*	*	7509	*
Approximately 1,850 feet downstream of Vernie Phillips Road	39.80	*	*	7449	*
Approximately 0.5 mile upstream of Vernie Phillips Road	38.80	*	*	7335	*
Approximately 0.7 mile downstream of US 421	38.00	*	*	7238	*
Approximately 0.4 mile downstream of US 421	32.60	*	*	6578	*
Approximately 0.5 mile downstream of US 421	32.60	*	*	6581	*
Approximately 900 feet upstream of Ralph Sipe Road	31.60	*	*	6451	*
Approximately 1.3 miles upstream of Ralph Sipe Road	30.80	*	*	6345	*
Approximately 790 feet upstream of the confluence of Sandy Branch	25.50	*	*	5636	*
At the confluence of Sandy Branch	25.50	*	*	5637	*
Approximately 0.8 mile upstream of the confluence of Sandy Branch	25.10	*	*	5580	*
Approximately 0.9 mile upstream of the confluence of Sandy Branch	22.70	*	*	5243	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Bear Creek</b>					
Approximately 0.8 mile downstream of Bonlee School Road	22.50	*	*	5213	*
Approximately 1,000 feet upstream of Bonlee School Road	21.50	*	*	5069	*
Approximately 1,480 feet upstream of Bonlee School Road	14.80	*	*	4012	*
Approximately 1,210 feet downstream of NC 902	14.10	*	*	3898	*
Approximately 630 feet downstream of NC 902	11.90	*	*	3500	*
Approximately 0.7 mile downstream of Edwards Hill Church Road	10.90	*	*	3321	*
Approximately 0.4 mile upstream of confluence of Bear Creek Tributary 1	7.70	*	*	2604	*
Approximately 350 feet upstream of confluence of Bear Creek Tributary 1	7.70	*	*	2660	*
Approximately 1.0 mile upstream of confluence of Bear Creek Tributary 1	6.20	*	*	2325	*
Approximately 1.9 miles upstream of confluence of Bear Creek Tributary 1	5.30	*	*	2116	*
Approximately 2.5 miles upstream of confluence of Bear Creek Tributary 1	4.10	*	*	1798	*
<b>Bear Creek (into Indian Creek)</b>					
At the confluence with Indian Creek (into Deep River)	4.90	*	*	2008	*
Approximately 0.7 mile downstream of Goldston Glendon Road	3.80	*	*	1718	*
Approximately 0.5 mile upstream of Goldston Glendon Road	2.90	*	*	1435	*
<b>Bear Creek Tributary 1</b>					
Approximately 500 feet upstream of confluence with Bear Creek	2.60	*	*	1347	*
<b>Beaver Creek</b>					
At Chatham/Wake boundary	19.20	*	*	5890	*
At the Chatham/Wake County boundary	19.20	2510	4790	5890	9280
<b>Beaver Creek Tributary 1</b>					
Approximately 1,370 feet downstream of Tody Goodwin Road	1.10	*	*	782	*
At the confluence with B. Everett Jordan Lake	1.10	*	*	811	*
Approximately 0.5 mile upstream of Tody Goodwin Road	0.50	*	*	484	*
<b>Beaver Creek Tributary 2</b>					
At the confluence with B. Everett Jordan Lake	2.40	*	*	1302	*
Approximately 0.4 mile downstream of Tody Goodwin Road	1.80	*	*	1085	*
Approximately 1,530 feet upstream of Tody Goodwin Road	1.40	*	*	907	*
<b>Beaver Creek Tributary 3</b>					
At the confluence with B. Everett Jordan Lake	0.10	*	*	211	*
<b>Blood Run Creek</b>					
At the Chatham/Randolph County boundary	7.90	*	*	2714	*
Approximately 0.5 mile upstream of Wrenn Smith Road	7.30	*	*	2590	*
Approximately 0.6 mile upstream of Wrenn Smith Road	6.00	*	*	2292	*
Approximately 1,430 feet upstream of an unnamed road	5.70	*	*	2222	*
Approximately 1.1 miles downstream of Old US Highway 64	4.70	*	*	1972	*
Approximately 0.5 mile downstream of Old US Highway 64	3.80	*	*	1724	*
Approximately 1,110 feet downstream of Old US Highway 64	3.20	*	*	1544	*
Approximately 1,210 feet downstream of Ellington Road	2.30	*	*	1264	*
Approximately 850 feet upstream of U.S. Highway 64	1.60	*	*	984	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Brooks Creek</b>					
At the confluence with Haw River	9.90	*	*	3118	*
Approximately 0.8 mile upstream of the confluence with Haw River	9.30	*	*	3007	*
<b>Brooks Creek Tributary</b>					
Immediately upstream of confluence with Brooks Creek	0.94	394	725	838	1160
Immediately downstream of The Parks Drive	0.84	374	689	796	1100
<b>Brooks Creek Tributary 1</b>					
Approximately 200 feet upstream of confluence with Brooks Creek	2.20	*	*	1234	*
Approximately 490 feet upstream of Russells Chapel Church Road	2.20	*	*	1226	*
<b>Brush Creek</b>					
At the Chatham/Randolph County boundary	19.60	*	*	4778	*
Approximately 1.0 mile upstream of Coleridge Road	18.60	*	*	4631	*
Approximately 0.5 mile downstream of Moons Chapel Road	17.60	*	*	4474	*
Approximately 480 feet downstream of Moons Chapel Road	16.60	*	*	4318	*
Approximately 1,320 feet upstream of Moons Chapel Road	16.20	*	*	4243	*
Approximately 0.5 mile upstream of Moons Chapel Road	14.50	*	*	3957	*
<b>Buckhorn Creek</b>					
Approximately 0.4 mile upstream of the confluence with Cape Fear River	80.10	*	*	16441	*
At the confluence of Buckhorn Creek Tributary 1	78.40	*	*	16232	*
Approximately 0.7 mile downstream of NC 42	78.10	*	*	16199	*
Approximately 1,480 feet downstream of NC 42	76.60	*	*	16016	*
Approximately 110 feet upstream of NC 42	76.50	*	*	15997	*
At the confluence of Buckhorn Creek Tributary 2	75.40	*	*	15858	*
At the confluence of Buckhorn Creek Tributary 3	71.20	*	*	15334	*
<b>Buckhorn Creek Tributary 1</b>					
Approximately 1,370 feet upstream of the confluence with Buckhorn Creek	0.30	*	*	313	*
At the confluence with Buckhorn Creek	0.30	*	*	342	*
<b>Buckhorn Creek Tributary 2</b>					
Approximately 900 feet upstream of the confluence with Buckhorn Creek	1.00	*	*	734	*
At the confluence with Buckhorn Creek	1.00	*	*	741	*
Approximately 0.4 mile upstream of the confluence with Buckhorn Creek	0.80	*	*	666	*
<b>Buckhorn Creek Tributary 3</b>					
At the confluence with Buckhorn Creek	4.00	*	*	1782	*
Approximately 0.7 mile upstream of the confluence with Buckhorn Creek	3.90	*	*	1737	*
Approximately 1.0 mile upstream of the confluence with Buckhorn Creek	3.60	*	*	1669	*
<b>Buckhorn Creek Tributary 4</b>					
Approximately 1,900 feet upstream of the confluence with Harris Reservoir	0.70	*	*	605	*
Approximately 0.7 mile upstream of the confluence with Harris Reservoir	0.60	*	*	549	*
<b>Bush Creek</b>					
At the confluence with B. Everett Jordan Lake	8.50	*	*	2832	*
At the confluence of Herndon Creek	5.30	*	*	2107	*
Approximately 690 feet upstream of Big Woods Road	4.90	*	*	2018	*
Approximately 0.6 mile upstream of Big Woods Road	4.00	*	*	1762	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Cape Fear River</b>					
At the Chatham/Harnett County boundary	3324.20	*	*	79004	*
Approximately 0.5 mile upstream of the Chatham/Harnett County boundary	3242.80	*	*	78803	*
Approximately 1,800 feet downstream of NC 42	3216.50	*	*	77673	*
<b>Cedar Creek</b>					
Approximately 1.3 miles upstream of confluence with Deep River	11.30	*	*	3391	*
At the confluence of Cedar Creek Tributary 1	4.70	*	*	1970	*
Approximately 0.4 mile upstream of Henry Oldham Road	4.10	*	*	1812	*
<b>Cedar Creek Tributary 1</b>					
At the confluence with Cedar Creek	5.60	*	*	2177	*
At the confluence of Cedar Creek Tributary 2	3.80	*	*	1702	*
Approximately 1.0 mile upstream of the confluence of Cedar Creek Tributary 2	3.10	*	*	1499	*
<b>Cedar Creek Tributary 2</b>					
At the confluence with Cedar Creek Tributary 1	1.30	*	*	870	*
<b>Collins Creek</b>					
At the confluence with Haw River	19.60	*	*	4779	*
At the confluence of Persimmons Nursery Branch	16.20	*	*	4253	*
<b>Crows Creek</b>					
At the confluence with Terrells Creek	2.60	*	*	1365	*
Approximately 0.5 mile downstream of Jones Ferry Road	2.10	*	*	1175	*
Approximately 110 feet downstream of unnamed road	1.20	*	*	823	*
<b>Cub Creek</b>					
At the confluence with B. Everett Jordan Lake	8.50	*	*	2828	*
Approximately 0.9 mile downstream of Old Farrington Point Road	7.60	*	*	2657	*
Approximately 210 feet downstream of Old Farrington Point Road	6.70	*	*	2445	*
Approximately 0.5 mile upstream of Old Farrington Point Road	5.80	*	*	2228	*
Approximately 0.6 mile upstream of Nature Trail Road	5.00	*	*	2026	*
<b>Deep River</b>					
At the confluence with Cape Fear River	1385.40	*	*	54900	*
Approximately 1.1 miles downstream of the confluence of Rocky Branch (into Deep River)	1377.30	*	*	54600	*
At the confluence of Rocky Branch (into Deep River)	1369.50	*	*	54500	*
Approximately 1.3 miles upstream of the confluence of Rocky Branch (into Deep River)	1125.30	*	*	53200	*
At the confluence of Little Buffalo Creek	1109.70	*	*	53100	*
At the confluence of Georges Creek	1107.30	*	*	52900	*
At the confluence of Big Buffalo Creek	1085.00	*	*	52700	*
At the confluence of Cedar Creek	1070.00	*	*	52600	*
At the confluence of Patterson Creek	1069.00	*	*	52500	*
At the confluence of Pocket Creek	1067.70	*	*	52000	*
At the confluence of Indian Creek (into Deep River)	1064.10	*	*	51900	*
At the confluence of Smith Creek	1037.30	*	*	51600	*
At the Chatham/Moore County boundary	1036.60	*	*	51500	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Deep River Tributary 5</b>					
At the confluence of Deep River	0.50	*	*	511	*
<b>Deep River Tributary 6</b>					
At the confluence with Deep River Tributary 5	0.90	*	*	701	*
<b>Deep River Tributary 7</b>					
At the confluence with Deep River	1.90	*	*	1103	*
Approximately 1.0 mile upstream of Alton King Road	1.10	*	*	783	*
<b>Deep River Tributary 8</b>					
At the confluence with Deep River	0.70	*	*	601	*
<b>Dry Creek</b>					
Immediately upstream of confluence with Haw River	20.73	2580	4070	4700	6270
Approximately 2.3 miles downstream of Old Graham Road	19.23	2470	3890	4490	6010
Approximately 1.0 mile downstream of Old Graham Road	18.40	2400	3790	4380	5850
Immediately downstream of Old Graham Road	17.72	2350	3710	4280	5730
Approximately 0.7 mile upstream of Old Graham Road	16.09	2210	3500	4040	5410
Approximately 0.8 mile downstream of NC Highway 87	11.98	1840	2930	3390	4560
Immediately downstream of NC Highway 87	11.67	1810	2890	3340	4490
Approximately 0.7 mile upstream of NC 87	11.00	*	*	3325	*
Approximately 0.4 mile downstream of Emerson Cook Road	10.00	*	*	3136	*
Approximately 420 feet upstream of Emerson Cook Road	9.00	*	*	2943	*
Approximately 210 feet upstream of W R Clark Road	8.10	*	*	2763	*
Approximately 1,800 feet downstream of Silk Hope Gumspring Road	7.40	*	*	2595	*
Approximately 160 feet downstream of Silk Hope Gumspring Road	6.70	*	*	2449	*
Approximately 0.6 mile upstream of Silk Hope Gumspring Road	6.00	*	*	2278	*
Approximately 1,210 feet upstream of Bowers Store Road	3.60	*	*	1649	*
Approximately 0.8 mile upstream of Bowers Store Road	0.90	*	*	679	*
<b>Folkner Branch</b>					
At the confluence with B. Everett Jordan Lake	1.90	*	*	1120	*
Approximately 1,640 feet downstream of M. T. Holland Road	1.00	*	*	765	*
<b>Georges Creek</b>					
At the confluence with Deep River	10.70	*	*	3681	*
Approximately 0.8 mile upstream of the confluence with Deep River	10.60	*	*	3653	*
At the confluence of Georges Creek Tributary 1	10.10	*	*	3494	*
At the confluence of Georges Creek Tributary 2	10.00	*	*	3133	*
Approximately 0.7 mile upstream of Georges Creek Tributary 2	9.60	*	*	3065	*
At the confluence of Rocky Branch (into Georges Creek)	4.50	*	*	1920	*
Approximately 1.6 miles upstream of Rocky Branch (into Georges Creek)	3.20	*	*	1539	*
Approximately 2.2 miles upstream of Rocky Branch (into Georges Creek)	3.00	*	*	1467	*
<b>Georges Creek Tributary 1</b>					
At the confluence with Georges Creek	0.40	*	*	409	*
<b>Georges Creek Tributary 2</b>					
At the confluence with Georges Creek	1.80	*	*	1064	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Georges Creek Tributary 2</b>					
Approximately 0.8 mile upstream of the confluence with Georges Creek	1.50	*	*	974	*
<b>Greenbriar Creek</b>					
At the confluence with Rocky River	9.00	*	*	2951	*
Approximately 0.4 mile upstream of the confluence with Rocky River	8.70	*	*	2878	*
Approximately 740 feet downstream of Silk Hope Liberty Road	7.80	*	*	2699	*
<b>Greenbriar Creek</b>					
Approximately 110 feet upstream of Silk Hope Liberty Road	6.20	*	*	2339	*
Approximately 0.9 mile downstream of Staley Snow Camp Road	5.70	*	*	2218	*
Alamance/Chatham County boundary	3.70	*	*	1693	*
<b>Gulf Creek</b>					
Approximately 1.2 miles upstream of the confluence with Cape Fear River	6.60	*	*	2430	*
Approximately 160 feet upstream of Railroad	5.80	*	*	2247	*
Approximately 1.2 miles upstream of railroad	4.30	*	*	1864	*
<b>Harlands Creek</b>					
At the confluence with Rocky River	15.80	*	*	4180	*
Approximately 1.0 mile upstream of the confluence with Rocky River	15.00	*	*	4047	*
Approximately 2.1 miles upstream of the confluence with Rocky River	14.20	*	*	3918	*
Approximately 0.5 mile downstream of NC 902	13.40	*	*	3780	*
Approximately 0.4 mile upstream of NC 902	12.50	*	*	3604	*
Approximately 1,850 feet downstream of Alston Chapel Road	11.50	*	*	3424	*
Approximately 1,580 feet upstream of Alston Chapel Road	10.90	*	*	3307	*
Approximately 0.9 mile downstream of US 64	10.00	*	*	3148	*
Approximately 740 feet downstream of US 64	9.10	*	*	2962	*
Approximately 370 feet downstream of US 64	7.80	*	*	2683	*
Approximately 1,380 feet upstream of US 64	7.60	*	*	2642	*
Approximately 0.7 mile upstream of US 64	6.60	*	*	2418	*
Approximately 0.9 mile upstream of US 64	4.00	*	*	1784	*
Approximately 1.1 miles upstream of US 64	2.30	*	*	1245	*
<b>Harts Creek</b>					
At the confluence with Bear Creek (into Indian Creek)	3.10	*	*	1508	*
Approx. 1.3 miles upstream of the confluence with Bear Creek (into Indian Creek)	2.50	*	*	1333	*
<b>Haw River</b>					
Immediately downstream of Jordan Lake Dam	1707.46	16400	17400	18000	20300
Approximately 1.9 miles downstream of US Highway 64	1299.91	43800	63000	71100	91400
Immediately downstream of US Highway 15-501	1272.11	43700	62800	70800	91100
Approximately 400 feet upstream of US Highway 15-501	1262.20	43300	62200	70200	90400
Immediately upstream of confluence of Dry Creek	1229.05	42000	60500	68300	87900
Immediately upstream of confluence of Terrells Creek	1210.84	41300	59600	67200	86500
Approximately 0.6 mile upstream of the confluence of Terrells Creek (West)	1175.50	*	*	69600	*
At the confluence with B. Everett Jordan Lake	8.40	*	*	2813	*
Approximately 0.6 mile upstream of the confluence with B. Everett Jordan Lake	7.90	*	*	2704	*
<b>Herndon Creek</b>					
Approximately 0.8 mile upstream of Jack Bennett Road (SR 1717)	1.81	574	943	1100	1510

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Herndon Creek</b>					
Approximately 0.9 mile upstream of Jack Bennett Road (SR 1717)	1.72	556	915	1070	1470
Approximately 1.6 miles upstream of Jack Bennett Road (SR 1717)	1.00	398	661	776	1070
<b>Hill Creek</b>					
At the confluence with Robeson Creek	1.40	*	*	928	*
Approximately 690 feet upstream of US 64 Business	1.20	*	*	855	*
Approximately 420 feet upstream of Dogwood Lane	0.30	*	*	357	*
<b>Indian Creek (into Deep River)</b>					
Immediately upstream of confluence with Deep River	26.01	2970	4670	5380	7160
Immediately downstream of Railroad	25.74	2950	4640	5340	7120
Immediately downstream of Goldston Carbonton Road	25.30	2920	4590	5290	7050
Approximately 1,400 feet upstream of Goldston Carbonton Road	13.28	1960	3120	3610	4840
Approximately 1.2 miles downstream of Roberts Chapel Road	12.66	1910	3030	3510	4710
<b>Kit Creek</b>					
At the confluence with Northeast Creek	9.80	*	*	3105	*
Approximately 0.8 mile upstream of the confluence with Northeast Creek	9.50	*	*	3039	*
Approximately 1.4 miles upstream of the confluence with Northeast Creek	8.60	*	*	2861	*
<b>Lacy Creek</b>					
At the confluence with Rocky River	4.30	*	*	1854	*
Approximately 0.5 mile upstream of a dam	3.90	*	*	1747	*
<b>Landrum Creek</b>					
At the confluence with Rocky River	17.50	*	*	4456	*
Approximately 1.1 miles downstream of NC 902	17.10	*	*	4397	*
Approximately 1.1 miles downstream of NC 902	14.80	*	*	4018	*
Approximately 110 feet upstream of NC 902	14.40	*	*	3941	*
Approximately 0.9 mile downstream of Hadley Mill Road	13.40	*	*	3771	*
Approximately 0.4 mile downstream of Hadley Mill Road	12.40	*	*	3593	*
Approximately 1,740 feet downstream of Hadley Mill Road	11.20	*	*	3377	*
At the confluence of Landrum Creek Tributary	4.30	*	*	1864	*
Approximately 0.7 mile downstream of Jay Shambley Road	3.50	*	*	1635	*
Approximately 1,210 feet downstream of Pleasant Hill Church Road	2.50	*	*	1328	*
<b>Landrum Creek Tributary</b>					
At the confluence with Landrum Creek	6.20	*	*	2322	*
Approximately 0.4 mile upstream of Jay Shambley Road	5.60	*	*	2184	*
Approximately 0.6 mile upstream of Jay Shambley Road	2.50	*	*	1321	*
Approximately 0.9 mile upstream of Jay Shambley Road	2.30	*	*	1263	*
<b>Lick Creek</b>					
At the confluence with Terrells Creek (West)	6.00	*	*	2284	*
Approximately 0.5 mile upstream of the confluence with Terrells Creek (West)	5.70	*	*	2216	*
Approximately 1.9 miles upstream of the confluence with Terrells Creek (West)	4.70	*	*	1968	*
<b>Line Creek</b>					
At the confluence with Deep River	2.20	*	*	1210	*
Approximately 0.4 mile downstream of Lakewood Falls	0.80	*	*	672	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Little Brush Creek</b>					
Approximately 0.5 mile downstream of Lanes Mill Road	19.00	*	*	4700	*
At the Chatham/Randolph County boundary	17.30	*	*	4429	*
<b>Little Brush Creek</b>					
Approximately 740 feet upstream of the Chatham/Randolph County boundary	16.40	*	*	4287	*
Approximately 0.5 mile upstream of Jim Gilland Road	15.50	*	*	4133	*
Approximately 0.6 mile upstream of Jim Gilland Road	13.60	*	*	3799	*
Approximately 0.9 mile upstream of Jim Gilland Road	9.10	*	*	2955	*
Approximately 0.8 mile downstream of Airport Road	8.80	*	*	2908	*
Approximately 0.4 mile downstream of Airport Road	7.80	*	*	2698	*
Approximately 1.2 miles downstream of Jim Paige Road	7.10	*	*	2532	*
Approximately 1.0 mile downstream of Jim Paige Road	6.10	*	*	2303	*
Approximately 0.9 mile downstream of Jim Paige Road	5.20	*	*	2091	*
Approximately 0.5 mile downstream of Jim Paige Road	5.00	*	*	2050	*
Approximately 1,740 feet downstream of Jim Paige Road	4.10	*	*	1786	*
Approximately 0.5 mile upstream of Jim Paige Road	3.60	*	*	1650	*
Approximately 1.3 miles upstream of Jim Paige Road	2.60	*	*	1352	*
<b>Little Indian Creek</b>					
Confluence with Indian Creek (into Deep River)	10.84	1730	2760	3200	4300
Approximately 1.6 miles upstream of confluence with Indian Creek	9.70	1620	2580	2990	4030
Approximately 2.1 miles upstream of confluence with Indian Creek	9.57	1600	2560	2970	4000
Approximately 1,430 feet upstream of Wall Road	3.00	*	*	1488	*
<b>Long Branch</b>					
At the confluence with Dry Creek	2.30	*	*	1267	*
Approximately 1,530 feet downstream of NC 87	2.00	*	*	1163	*
Approximately 1.3 miles upstream of NC 87	1.10	*	*	788	*
<b>Loves Creek</b>					
At the confluence with Rocky River	8.20	1640	2690	3040	4030
Approximately 0.4 mile upstream of the confluence with Rocky River	8.10	1620	2660	3010	3990
Approximately 1.3 miles downstream of South Second Avenue	7.60	1360	2310	2640	3590
Approximately 0.7 mile downstream of South Second Avenue	5.80	1280	2140	2430	3270
At the confluence of Loves Creek Tributary 1	3.30	737	1290	1570	2390
Approximately 790 feet upstream of Fayetteville Avenue	2.90	668	1170	1430	2190
Approximately 0.6 mile upstream of Fayetteville Avenue	2.00	522	925	1140	1750
Approximately 110 feet downstream of Pine Forest South Drive	1.10	364	653	808	1250
<b>Loves Creek Tributary 1</b>					
Immediately upstream of confluence with Loves Creek	2.16	1140	1780	1970	2590
Immediately downstream of Fayetteville Avenue	2.05	1100	1730	1910	2510
Immediately downstream of S Chatham Avenue	1.96	1060	1660	1840	2420
Immediately downstream of W Raleigh Street	1.89	1020	1610	1780	2350
Immediately downstream of W Second Street	1.13	794	1260	1400	1850
Approximately 100 feet downstream of W Fifth Street	1.03	722	1170	1290	1720
Immediately downstream of E Sixth Street	0.36	384	647	721	973

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Loves Creek Tributary 1</b>					
Immediately downstream of E Seventh Street	0.33	348	594	665	901
Immediately downstream of Cottage Grove Avenue	0.28	312	538	603	820
Immediately downstream of US Highway 64	0.23	257	454	512	701
<b>Loves Creek Tributary 2</b>					
At the confluence with Loves Creek Tributary 1	0.70	*	*	616	*
Approximately 1,480 feet upstream of Garden Avenue	0.30	*	*	370	*
<b>Loves Creek Tributary 3</b>					
At the confluence of Loves Creek Tributary 1	0.60	*	*	554	*
<b>Meadow Branch</b>					
At the confluence with Terrells Creek	3.20	*	*	1541	*
Approximately 790 feet downstream of Jones Ferry Road	2.70	*	*	1374	*
<b>Meadow Creek</b>					
At the confluence with Rocky River	5.60	*	*	2194	*
Approximately 370 feet upstream of Rives Chapel Church Road	4.90	*	*	2006	*
<b>Mill Branch</b>					
At the confluence with B. Everett Jordan Lake	1.40	*	*	925	*
<b>Morgan Creek</b>					
At the confluence with Jordan Lake	47.70	*	*	11200	*
<b>Morris Branch</b>					
At the confluence with Panther Creek	1.55	819	1340	1490	1990
Approximately 1,550 feet upstream of the confluence with Panther Creek	1.52	815	1330	1480	1980
Approximately 1,550 feet upstream of the confluence with Panther Creek	1.46	794	1300	1450	1930
At Chatham/Wake County boundary	1.40	821	1380	1730	2730
<b>Mud Lick Creek</b>					
At the confluence with Rocky River	8.50	*	*	2845	*
Approximately 950 feet downstream of R.C. Overman Road	8.00	*	*	2729	*
Approximately 320 feet upstream of an unnamed road	4.70	*	*	1969	*
Approximately 0.5 mile downstream of Silk Hope Liberty Road	3.80	*	*	1722	*
Approximately 690 feet upstream of Silk Hope Liberty Road	3.40	*	*	1595	*
Approximately 0.6 mile upstream of Silk Hope Liberty Road	2.50	*	*	1317	*
<b>Nancy Branch</b>					
Approximately 0.5 mile upstream of the confluence with Panther Creek	1.86	715	1230	1390	1890
Approximately 0.7 mile upstream of the confluence with Panther Creek	1.63	682	1170	1320	1790
Approximately 1,620 feet downstream of Del Webb Avenue	1.53	666	1140	1290	1750
Approximately 410 feet downstream of Del Webb Avenue	1.23	567	985	1120	1530
Approximately 380 feet upstream of Del Webb Avenue	1.07	521	910	1040	1410
<b>New Hope River Tributary 1</b>					
At the confluence with B. Everett Jordan Lake	0.10	*	*	154	*
<b>North Prong Rocky River</b>					
At the confluence with Rocky River	12.90	*	*	3676	*
Approximately 1.3 miles upstream of the confluence with Rocky River	12.10	*	*	3545	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>North Prong Rocky River</b>					
Approximately 0.4 mile downstream of Staley Snow Camp Road	11.20	*	*	3363	*
Approximately 1,160 feet downstream of Staley Snow Camp Road	10.20	*	*	3174	*
Approximately 0.5 mile upstream of Staley Snow Camp Road	9.60	*	*	3061	*
Approximately 1,000 feet upstream of Ben Smith Road	8.60	*	*	2862	*
<b>Northeast Creek</b>					
At the confluence with B. Everett Jordan Lake	46.00	*	*	10600	*
At the confluence of Panther Creek	35.90	*	*	10000	*
<b>Northeast Creek</b>					
Approximately 530 feet downstream of O Kelly Church Road	35.00	*	*	9940	*
Approximately 690 feet upstream of O Kelly Church Road	34.00	*	*	9880	*
At the confluence of Kit Creek	23.50	*	*	9060	*
<b>Overcup Creek</b>					
At the confluence with B. Everett Jordan Lake	0.90	*	*	696	*
Approximately 1.2 miles upstream of the confluence with B. Everett Jordan Lake	0.40	*	*	435	*
<b>Overcup Creek Tributary</b>					
At the confluence with Overcup Creek/B. Everett Jordan Lake	1.00	*	*	755	*
<b>Panther Creek</b>					
At the confluence with Northeast Creek	8.90	*	*	2931	*
Approximately 0.4 mile upstream of the confluence with Northeast Creek	8.70	*	*	2874	*
Approximately 0.5 mile upstream of the confluence with Northeast Creek	8.68	2110	3280	3650	4780
Approximately 0.7 mile upstream of the confluence with Northeast Creek	8.40	2100	3250	3620	4740
Approximately 1.0 mile upstream of the confluence with Northeast Creek	8.07	2080	3220	3580	4680
Approximately 930 feet downstream of the confluence of Nancy Branch	7.89	2060	3190	3550	4640
At the confluence of Nancy Branch	5.80	*	*	2233	*
Just upstream of the confluence of Nancy Branch	5.48	1710	2660	2960	3880
At the confluence of Morris Branch	3.90	*	*	1741	*
Just upstream of the confluence of Morris Branch	3.89	1320	2110	2360	3120
Approximately 1,200 feet upstream of the confluence of Morris Branch	3.84	1300	2080	2330	3090
Approximately 0.5 Mile upstream of the confluence of Morris Branch	3.74	1280	2050	2300	3040
Approximately 0.6 mile upstream of the confluence of Morris Branch	3.70	*	*	1688	*
<b>Parkers Creek</b>					
At the confluence with B. Everett Jordan Lake	1.90	*	*	1121	*
<b>Persimmons Nursery Branch</b>					
At the confluence with Collins Creek	2.50	*	*	1320	*
<b>Pokeberry Creek</b>					
Approximately 1.1 miles downstream of Karen Calhoun Road	10.55	1700	2720	3150	4230
Approximately 1.1 miles downstream of Karen Calhoun Road	8.81	1490	2510	2870	3870
Approximately 1,600 feet downstream of Karen Calhoun Road	8.05	1400	2380	2720	3680
Immediately downstream of Karen Calhoun Road	7.22	1330	2250	2580	3480
Immediately downstream of US Highway 15	7.21	1330	2250	2580	3480
Immediately downstream of Morris Road	6.41	1190	2040	2350	3180

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Pokeberry Creek</b>					
Approximately 800 feet upstream of Morris Road	5.58	1130	1940	2220	3010
Approximately 1,900 feet downstream of Andrews Store Road	4.52	1030	1770	2030	2750
Immediately downstream of Andrews Store Road	4.01	950	1640	1890	2570
Approximately 1,100 feet upstream of Andrews Store Road	3.36	833	1460	1680	2290
Approximately 0.8 mile downstream of Briar Chapel Parkway	2.95	791	1390	1590	2170
Approximately 2,300 feet downstream of Briar Chapel Parkway	2.55	716	1270	1460	2000
Approximately 1,700 feet upstream of Briar Chapel Parkway	1.71	675	1120	1320	1830
Approximately 200 feet downstream of Great Ridge Parkway	0.80	347	578	680	941
Approximately 1,800 feet upstream of Great Ridge Parkway	0.70	319	533	628	870
Approximately 2,700 feet upstream of Great Ridge Parkway	0.48	253	425	502	698
Approximately 1,400 feet downstream of Cart Path at Hole 9 of Twin Lakes Golf Course	0.28	183	357	416	585
Approximately 400 feet downstream of Cart Path at Hole 9 of Twin Lake Golf Course	0.20	175	333	385	538
Immediately downstream of Cart Path at Hole 9 of Twin Lakes Golf Course	0.08	80	173	203	293
Immediately downstream of Cart Path at Hole 8 of Twin Lakes Golf Course	0.07	70	144	172	245
Immediately downstream of Cart Path at Hole 7 of Twin Lakes Golf Course	0.05	50	116	139	203
Immediately downstream of Private Drive at 62 Willow Way	0.03	40	90	105	153
<b>Reedy Fork</b>					
At the Chatham/Randolph County boundary	1.70	*	*	1038	*
Approximately 420 feet upstream of Wrenn Smith Road	1.20	*	*	832	*
<b>Robeson Creek</b>					
At the confluence with Jordan Lake	28.80	3090	5080	6080	8850
Approximately 0.5 mile upstream of the confluence with Jordan Lake	28.30	3060	5030	6020	8770
Approximately 0.4 mile downstream of the confluence of Robeson Creek Tributary 1	24.40	2770	4580	5490	8020
At the confluence of Robeson Creek Tributary 1	22.20	2600	4310	5170	7570
Approximately 630 feet upstream of the confluence of Robeson Creek Tributary 1	21.50	2550	4220	5070	7420
Approximately 1,160 feet upstream of the confluence of Robeson Creek Tributary 1	20.80	2490	4140	4970	7280
Approximately 1,060 feet downstream of the confluence of Turkey Creek	16.30	2120	3540	4260	6270
At the confluence of Turkey Creek	11.60	1690	2860	3450	5120
At the confluence of Robeson Creek Tributary 3	8.10	1330	2270	2750	4110
Approximately 110 feet downstream of the confluence of Hill Creek	6.30	1120	1930	2340	3520
At the confluence of Robeson Creek Tributary 4	1.30	394	705	870	1350
Approximately 0.5 mile downstream of the confluence of Power Line Easement	0.30	160	296	371	590
<b>Robeson Creek Tributary 1</b>					
At the confluence with Robeson Creek	2.10	*	*	1193	*
Approximately 530 feet upstream of the confluence with Robeson Creek	2.00	*	*	1141	*
At the confluence of Robeson Creek Tributary 2	0.60	*	*	555	*
Approximately 420 feet upstream of US 64	0.20	*	*	289	*
<b>Robeson Creek Tributary 2</b>					
At the confluence with Robeson Creek Tributary 1	1.00	*	*	755	*
Approximately 0.6 mile upstream of Love Street	0.30	*	*	378	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Robeson Creek Tributary 3</b>					
Immediately downstream of Pittsboro Elementary School Road	1.74	661	1150	1310	1780
Immediately upstream of confluence with Robeson Creek	1.74	662	1150	1310	1780
Immediately downstream of West Street	1.60	555	994	1140	1570
Immediately downstream of Salisbury Street	1.57	525	950	1100	1520
Approximately 900 feet upstream of Salisbury Street	1.50	494	903	1050	1450
Approximately 1,200 feet downstream of Oakwood Drive	1.30	422	789	919	1280
Immediately downstream of Oakwood Drive	0.55	275	462	544	756
<b>Robeson Creek Tributary 3A</b>					
Approximately 200 feet upstream of Hillcrest Drive	0.22	196	370	427	596
Immediately downstream of Hillsboro Street	0.18	161	310	358	502
<b>Robeson Creek Tributary 4</b>					
At the confluence with Robeson Creek	4.50	*	*	1916	*
At the confluence of Robeson Creek Tributary 5	2.10	*	*	1175	*
Approximately 1,640 feet upstream of US 64 Business	1.30	*	*	877	*
Approximately 0.7 mile downstream of Mitchells Chapel Road	0.40	*	*	393	*
<b>Robeson Creek Tributary 5</b>					
At the confluence with Robeson Creek Tributary 4	1.90	*	*	1096	*
Approximately 110 feet downstream of Old Siler City Road	1.00	*	*	746	*
Approximately 1,640 feet upstream of Arthur Alston Road	0.30	*	*	386	*
<b>Rocky Branch (into Deep River)</b>					
At the confluence with Deep River	5.00	*	*	2036	*
<b>Rocky Branch (into Georges Creek)</b>					
At the confluence with Georges Creek	4.10	*	*	1796	*
Approximately 160 feet upstream of an unnamed road	3.50	*	*	1636	*
Approximately 210 feet downstream of Rosser Road	2.50	*	*	1333	*
Approximately 0.5 mile upstream of Rosser Road	1.60	*	*	990	*
<b>Rocky Ford Branch</b>					
At the confluence with White Oak Creek	3.40	*	*	1600	*
Approximately 480 feet upstream of Luther Road	3.00	*	*	1470	*
<b>Rocky River</b>					
At the confluence with Deep River	243.30	*	*	23096	*
Approximately 0.5 mile upstream of the confluence with Deep River	242.50	*	*	23046	*
Approximately 1.1 miles upstream of the confluence with Deep River	238.50	*	*	23001	*
Approximately 1.5 miles downstream of US 15/NC 501	237.90	*	*	22807	*
Approximately 1,690 feet downstream of US 15/NC 501	235.30	*	*	22773	*
Approximately 0.6 mile upstream of US 15/NC 501	234.70	*	*	22615	*
Approximately 530 feet upstream of Chatham Church Road	233.70	*	*	22579	*
Approximately 1,740 feet upstream of Chatham Church Road	181.80	*	*	22520	*
At the confluence of Bear Creek	181.10	*	*	19251	*
Approximately 1.9 miles downstream of Pittsboro Goldston Road	178.60	*	*	19202	*
Approximately 1.7 miles downstream of Pittsboro Goldston Road	177.80	*	*	19037	*
Approximately 1.0 mile downstream of Pittsboro Goldston Road	177.10	*	*	18981	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Rocky River</b>					
Approximately 1,580 feet downstream of Pittsboro-Goldston Road	173.60	*	*	18939	*
Approximately 1,160 feet downstream of Pittsboro-Goldston Road	173.00	*	*	18701	*
Approximately 0.5 mile downstream of the confluence of Harlands Creek	156.20	*	*	18658	*
At the confluence of Harlands Creek	154.30	*	*	17505	*
Approximately 0.5 mile downstream of the confluence of Landrum Creek	136.60	*	*	17371	*
At the confluence of Landrum Creek	134.60	*	*	16097	*
Approximately 0.5 mile downstream of NC 902	131.20	*	*	15950	*
Approximately 0.4 mile upstream of NC 902	130.90	*	*	15697	*
Approximately 0.8 mile upstream of NC 902	127.70	*	*	15680	*
Approximately 1.9 miles downstream of the confluence of Tick Creek	126.00	*	*	15433	*
Approximately 1.0 mile downstream of the confluence of Tick Creek	104.00	*	*	15309	*
At the confluence of Tick Creek	103.50	*	*	13580	*
Approximately 0.6 mile downstream of the confluence of Meadow Creek	96.90	*	*	13540	*
At the confluence of Meadow Creek	96.50	*	*	12991	*
Approximately 1,370 feet upstream of the confluence of Meadow Creek	95.50	*	*	12957	*
Approximately 0.4 mile downstream of Rives Chapel Church Road	95.30	*	*	12874	*
Approximately 850 feet downstream of Rives Chapel Church Road	94.40	*	*	12856	*
Approximately 0.8 mile upstream of Rives Chapel Church Road	93.40	*	*	12780	*
Approximately 0.9 mile upstream of Rives Chapel Church Road	91.10	*	*	12696	*
Approximately 1.7 miles upstream of Rives Chapel Church Road	90.80	*	*	12503	*
Approximately 0.7 mile downstream of the confluence of Varnell Creek	79.90	*	*	12475	*
At the confluence of Varnell Creek	79.00	*	*	11517	*
Approximately 1,900 feet upstream of the confluence of Varnell Creek	78.50	*	*	11434	*
Approximately 0.8 mile downstream of confluence of Loves Creek	69.51	5450	8420	9640	12700
Approximately 400 feet downstream of US Highway 64	69.44	5450	8410	9640	12700
Immediately upstream of confluence with Rocky River Tributary 1	66.99	5330	8230	9430	12400
Approximately 1.5 miles downstream of Siler City Snow Camp Road	65.18	5240	8100	9280	12200
Approximately 0.6 mile downstream of Siler City Snow Camp Road	57.13	4830	7480	8580	11300
Approximately 200 feet downstream of Siler City Snow Camp Road	56.62	4800	7440	8540	11300
Approximately 0.6 mile downstream of Siler City Snow Camp Road	56.50	*	*	9332	*
Approximately 1,160 feet upstream of Siler City Snow Camp Road	55.40	*	*	9272	*
Approximately 1,740 feet upstream of Siler City Snow Camp Road	54.40	*	*	9161	*
Approximately 530 feet downstream of a dam	47.30	*	*	9052	*
Approximately 1,000 feet upstream of Ed Clapp Road	37.80	*	*	8297	*
At the confluence of Mud Lick Creek	27.70	*	*	7211	*
At the confluence of Greenbriar Creek	14.80	*	*	5940	*
At the confluence of North Prong Rocky River	14.60	*	*	4010	*
Approximately 50 feet downstream of Piney Grove Church Road	12.60	*	*	3974	*
Approximately 740 feet upstream of Piney Grove Church Road	11.60	*	*	3635	*
Approximately 1.6 miles upstream of Piney Grove Church Road	11.20	*	*	3455	*
Approximately 2.7 miles upstream of Piney Grove Church Road	8.80	*	*	3374	*
Approximately 2.9 miles upstream of Piney Grove Church Road	7.40	*	*	2891	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Rocky River</b>					
Approximately 260 feet downstream of Staley Snow Camp Road	6.90	*	*	2612	*
<b>Rocky River Tributary 1</b>					
Immediately upstream of confluence with Rocky River	2.29	909	1500	1690	2260
Immediately downstream of US Highway 421	2.11	854	1420	1600	2150
Immediately downstream of Loves Creek Church Road	2.03	810	1360	1540	2070
Approximately 1,100 feet upstream of Loves Creek Church Road	1.96	778	1310	1490	2010
Approximately 2,200 feet upstream of Loves Creek Church Road	1.58	664	1140	1290	1750
Approximately 0.5 mile downstream of 15th Street	1.36	590	1020	1170	1590
Approximately 200 feet downstream of 15th Street	0.88	321	615	720	1010
Immediately downstream of Siler City Snow Camp Road	0.75	333	556	654	906
Approximately 0.7 mile upstream of Siler City Snow Camp Road	0.30	*	*	380	*
<b>Sandy Branch</b>					
At the confluence with Bear Creek	4.30	*	*	1866	*
Approximately 0.5 mile downstream of NC 902	4.00	*	*	1774	*
<b>Shaddox Creek</b>					
At the confluence with Haw River	16.10	*	*	4223	*
Approximately 370 feet upstream of Railroad	15.00	*	*	4048	*
Approximately 1,480 feet upstream of Corinth Road	14.60	*	*	3987	*
Approximately 0.8 mile upstream of Corinth Road	13.90	*	*	3858	*
Approximately 0.5 mile downstream of Old US 1 Highway	7.60	*	*	2650	*
Approximately 110 feet upstream of Old US 1 Highway	7.40	*	*	2607	*
Approximately 0.7 mile downstream of US 1	6.50	*	*	2396	*
Approximately 1,740 feet downstream of US 1	3.70	*	*	1694	*
Approximately 1.1 miles upstream of US 1	2.90	*	*	1441	*
Approximately 2.3 miles upstream of US 1	2.40	*	*	1293	*
Immediately downstream of New Elam Church Road (SR 1910)	2.28	666	1090	1270	1730
Approximately 1,000 feet upstream of New Elam Church Road (SR 1910)	1.89	590	968	1130	1550
Approximately 0.5 mile upstream of New Elam Church Road (SR 1910)	1.51	513	846	992	1360
Approximately 0.7 mile upstream of New Elam Church Road (SR 1910)	0.62	371	664	758	1040
<b>South Fork</b>					
Approximately 250 feet upstream of Bethel South Fork Road (SR 2351)	8.00	*	*	3140	*
Approximately 1.2 miles upstream of South Fork Bethel Road	5.90	*	*	2590	*
Approximately 370 feet upstream of Moon Lindley Road	4.20	*	*	2110	*
Approximately 0.5 mile upstream of Moon Lindley Road	4.10	*	*	2070	*
<b>Stinking Creek</b>					
Approximately 480 feet downstream of Gum Springs Church Road	6.90	*	*	2497	*
Approximately 0.4 mile downstream of Talon Drive	1.20	*	*	832	*
Approximately 850 feet downstream of Talon Drive	1.20	*	*	819	*
<b>Terrells Creek</b>					
At the confluence with Haw River	15.90	*	*	4204	*
At the confluence of Crows Creek	13.10	*	*	3722	*
Approximately 0.7 mile upstream of the confluence of Crows Creek	12.70	*	*	3654	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Terrells Creek</b>					
Approximately 1,950 feet downstream of the confluence of Meadow Branch	11.80	*	*	3484	*
At the confluence of Meadow Branch	7.50	*	*	2615	*
Approximately 0.7 mile upstream of Crawford Dairy Road crossing	6.50	*	*	2405	*
<b>Terrells Creek (West)</b>					
At the confluence with Haw River	29.10	*	*	6130	*
Approximately 1,110 feet upstream of the confluence with Haw River	28.90	*	*	6100	*
At the confluence of Lick Creek	21.00	*	*	4997	*
Approximately 0.6 mile upstream of NC 87	20.70	*	*	4954	*
Approximately 1.1 miles upstream of NC 87	19.70	*	*	4804	*
Approximately 1.4 miles downstream of Castle Rock Farm Road	15.50	*	*	4125	*
Approximately 0.6 mile downstream of Castle Rock Farm Road	15.00	*	*	4049	*
Approximately 0.5 mile upstream of Castle Rock Farm Road	14.20	*	*	3914	*
Approximately 0.8 mile upstream of Castle Rock Farm Road	12.60	*	*	3625	*
Approximately 1.1 miles upstream of Castle Rock Farm Road	11.60	*	*	3442	*
Approximately 0.6 mile upstream of White Smith Road	6.70	*	*	2452	*
Approximately 1,160 feet downstream of Woody Store Road	6.60	*	*	2418	*
Approximately 1,640 feet downstream of the Chatham/Orange County boundary	5.60	*	*	2193	*
Approximately 0.8 mile upstream of Woody Store Road	3.10	*	*	1499	*
Approximately 1.0 mile upstream of Woody Store Road	2.90	*	*	1448	*
Approximately 1.5 miles upstream of Woody Store Road	2.70	*	*	1394	*
<b>Tick Creek</b>					
At the confluence with Rocky River	21.00	*	*	5850	*
Approximately 1.1 miles upstream of the confluence with Rocky River	20.40	*	*	5840	*
Approximately 160 feet upstream of Rives Chapel Church Road	19.50	*	*	5810	*
Approximately 320 feet upstream of Rives Chapel Church Road	18.70	*	*	5780	*
Approximately 0.5 mile downstream of Ike Brooks Road	17.80	*	*	5730	*
Approximately 850 feet downstream of Ike Brooks Road	17.00	*	*	5680	*
Approximately 1,580 feet downstream of US 421	16.00	*	*	5600	*
At the confluence of Welch Creek	13.10	*	*	4620	*
At the confluence of Tick Creek Tributary	9.80	*	*	3520	*
Approximately 1.5 miles downstream of Petty Road	8.90	*	*	3240	*
Approximately 0.6 mile downstream of Petty Road	3.80	*	*	1720	*
Approximately 1,580 feet upstream of Petty Road	3.00	*	*	1482	*
Approximately 160 feet upstream of Siler City Glendon Road	1.80	*	*	1078	*
<b>Tick Creek Tributary</b>					
Approximately 0.4 mile downstream of Mount Vernon Springs Road	3.90	*	*	1743	*
At the confluence with Tick Creek	3.00	*	*	1490	*
<b>Tick Creek Tributary 1</b>					
Approximately 410 feet upstream of confluence with Tick Creek	4.10	*	*	1807	*
Approximately 630 feet upstream of Mount Vernon Springs Road	3.30	*	*	1574	*
Approximately 1,690 feet upstream of Mount Vernon Springs Road	2.80	*	*	1417	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Tributary A</b>					
At the confluence with Indian Creek (into Deep River)	1.10	*	*	793	*
<b>Turkey Creek</b>					
At the confluence with Robeson Creek	4.50	*	*	1909	*
Approximately 690 feet upstream of Moncure Pittsboro Road	3.90	*	*	1732	*
Approximately 0.7 mile upstream of Sanford Road	1.50	*	*	959	*
Approximately 1.1 miles upstream of Sanford Road	1.30	*	*	857	*
Approximately 2.2 miles upstream of Sanford Road	0.30	*	*	348	*
<b>Tysons Creek</b>					
Approximately 230 feet upstream of the Chatham/Moore County boundary	7.50	*	*	3100	*
Approximately 290 feet downstream of NC 42	4.40	*	*	2630	*
Approximately 1,340 feet upstream of NC 42	4.30	*	*	1890	*
Approximately 0.9 mile downstream of Mert McManness Road	3.30	*	*	1860	*
Approximately 1,500 feet upstream of confluence with Tysons Creek	2.50	*	*	1320	*
<b>Tysons Creek Tributary</b>					
The confluence with Tysons Creek	2.60	*	*	1350	*
Approximately 400 feet upstream of NC Highway 42	2.40	*	*	1290	*
Approximately 1,600 feet upstream of NC Highway 42	2.30	*	*	1260	*
Approximately 0.5 mile upstream of NC Highway 42	2.20	*	*	1230	*
Approximately 0.7 mile upstream of NC Highway 42	1.00	*	*	731	*
<b>Varnell Creek</b>					
At the confluence with Rocky River	10.10	*	*	3158	*
Approximately 740 feet upstream of Stage Coach Road	9.70	*	*	3073	*
Approximately 0.6 mile upstream of US 64	8.80	*	*	2900	*
Approximately 0.6 mile upstream of US 64	7.80	*	*	2689	*
Approximately 1.2 miles upstream of US 64	7.50	*	*	2631	*
Approximately 1.9 miles upstream of US 64	6.60	*	*	2418	*
<b>Weaver Creek</b>					
At the confluence with B. Everett Jordan Lake	1.20	*	*	851	*
Approximately 1,530 feet upstream of the confluence of Weaver Creek Tributary	1.00	*	*	750	*
Approximately 1.3 miles upstream of the confluence of Weaver Creek Tributary	0.40	*	*	431	*
<b>Weaver Creek Tributary</b>					
At the confluence with B. Everett Jordan Lake	1.00	*	*	742	*
Approximately 1.0 mile upstream of the confluence with B. Everett Jordan Lake	0.50	*	*	496	*
<b>Welch Creek</b>					
At the confluence with Tick Creek	1.80	*	*	1077	*
<b>West Price Creek</b>					
The Chatham/Orange County boundary	0.90	*	*	903	*
Approximately 450 feet upstream of Chatham/Orange County boundary	0.80	*	*	671	*
Approximately 1,430 feet upstream of Chatham/Orange County boundary	0.70	*	*	570	*
<b>White Oak Creek Tributary 1</b>					
At the confluence with White Oak Creek/B. Everett Jordan Lake	0.30	*	*	351	*

**Table 13 - Summary of Discharges**

Flooding Source		Discharges (cfs)			
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
<b>Wilkinson Creek</b>					
Approximately 0.9 mile upstream of the confluence with Haw River	8.70	*	*	2876	*
Approximately 0.5 mile downstream of Hamlets Chapel Road	7.90	*	*	2710	*
Approximately 0.4 mile downstream of Hamlets Chapel Road	7.10	*	*	2536	*
Approximately 0.4 mile upstream of Hamlets Chapel Road	6.20	*	*	2320	*
Approximately 0.6 mile downstream of Manns Chapel Road	5.06	1080	1750	2030	2760
Approximately 2,200 feet downstream of Manns Chapel Road	3.63	882	1430	1670	2270
Immediately downstream of Manns Chapel Road	3.42	850	1380	1610	2190
Approximately 1,900 feet upstream of Manns Chapel Road	3.11	802	1310	1520	2080
Immediately downstream of Tobacco Road	2.63	723	1180	1380	1880
Approximately 2,000 feet downstream of Lamont Norwood Road	2.31	667	1090	1280	1750
Approximately 800 feet downstream of Lamont Norwood Road	1.86	584	959	1120	1540
Immediately downstream of Lamont Norwood Road	1.55	522	859	1010	1380
<b>Windfall Branch</b>					
At the confluence with B. Everett Jordan Lake	1.10	*	*	782	*
Approximately 690 feet upstream of the confluence with B. Everett Jordan Lake	1.00	*	*	760	*

\*Data Not Available

The stillwater elevations have been determined for the 1% [add 10%, 2%, and 0.2% here if that data is available] annual chance flood for the flooding sources studied by detailed methods and are summarized in Table 14, "Summary of Stillwater Elevations."

**Table 14 – Summary of Stillwater Elevations**

Flooding Source	FIRM Panel Number(s)	Elevations (feet NAVD)		
		2% Annual Chance	1% Annual Chance	0.2% Annual Chance
B. Everett Jordan Lake	0700,0701,0702,0703,0704,0706,0711,0712,0713,0716,9678,9679,9689,9699,9760,9770,9771,9780,9782,9784,9796	*	237.8	*
Harris Reservoir	0606	*	232	*

\* Data Not Available

Table 15, "Gage Information", lists the stream gages located in Chatham County, including the drainage area of the flooding source at the gage and the period of record available at the time of the publication of this FIS Report.

**Table 15 - Gage Information**

Gage Number	Flooding Source	Site Name	Drainage Area (square miles)	Period of Record	
				From	To
02097000	B. Everett Jordan Lake	HAW RIVER NEAR PITTSBORO, NC	1310.00	1928	1973
02101890	Bear Creek	BEAR CREEK NEAR GOLDSTON, NC	43.20	1952	1971
02102000	Deep River	DEEP RIVER AT MONCURE, NC	1430.00	1931	2003
02096960	Haw River	Haw River near Bynum, NC	1275.00	1974	2011
02098198	Haw River	HAW R BELOW B. EVERETT JORDAN DAM NR MONCURE NC	1690.00	1980	1992
02097010	Robeson Creek Tributary 4	ROBESON CREEK NEAR PITTSBORO, NC	1.13	1954	1976
0210166029	Rocky River	ROCKY R AT SR1300 NR CRUTCHFIELD CROSSROADS, NC	7.42	1989	2010
02101800	Tick Creek	TICK CREEK NEAR MOUNT VERNON SPRINGS, NC	15.50	1959	2003

## 5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the flood elevations for the selected recurrence intervals. Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles and/or Water-surface elevation rasters. For stream segments for which BFEs were computed, selected cross-section locations are also shown on the FIRM. Flood Profiles and/or Water-surface elevation rasters were developed showing computed water-surface elevations for floods of the selected recurrence intervals.

Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles and/or Water-surface elevation rasters or in the Floodway Data tables in the FIS Report. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in the FIS 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 Flood Profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

For details on the county's hydraulic analyses, the hydraulic report is available by request.

For the streams studied by detailed methods, water surface elevations of floods of the selected recurrence intervals were computed through use of the Army Corps of Engineers' HEC RAS step backwater computer program. The hydraulic analyses were based on unobstructed flow. The flood elevations shown on the Profiles and/or Water-surface elevation rasters are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail. The computer models were calibrated using historic high water data collected during field investigations.

The cross section geometries were obtained from a combination of digital elevation data obtained by Light Detection and Ranging (LIDAR) and field surveys. All bridges, dams, and culverts were field surveyed to obtain elevation data and structural geometry. Natural floodplain cross sections were surveyed approximately every 4000 feet along the detail study reaches to obtain the channel geometry between bridges and culverts. Overbank cross section data for the backwater analyses were obtained from recently flown LIDAR data.

Channel roughness factors (Manning's "n") used in the hydraulic computations were made in the field by an engineer where stream access was possible, with orthophotos used to supplement areas that could not be accessed. The channel and overbank "n" values for all of the streams studied by detailed methods are shown in Table 16, "Roughness Coefficients".

**Table 16 – Roughness Coefficients**

Stream	Channel "n"	Overbank "n"
Bear Creek	0.040 to 0.050	0.100 to 0.150
Bear Creek (into Indian Creek)	0.050 to 0.060	0.150
Bear Creek Tributary 1	0.050	0.050 to 0.140
Beaver Creek	0.043 to 0.050	0.100 to 0.200
Beaver Creek Tributary 1	0.040 to 0.050	0.120 to 0.150
Beaver Creek Tributary 2	0.040 to 0.050	0.140 to 0.150
Beaver Creek Tributary 3	0.040 to 0.050	0.100 to 0.150
Blood Run Creek	0.045 to 0.050	0.110 to 0.150
Brooks Creek	0.045 to 0.050	0.050 to 0.150
Brooks Creek Tributary	0.050 to 0.060	0.050 to 0.140
Brush Creek	0.050	0.100 to 0.150
Buckhorn Creek	0.048	0.145
Buckhorn Creek Tributary 1	0.050	0.150 to 0.162
Buckhorn Creek Tributary 2	0.050	0.145
Buckhorn Creek Tributary 3	0.040	0.140 to 0.684
Buckhorn Creek Tributary 4	0.035 to 0.045	0.145
Bush Creek	0.040 to 0.050	0.100 to 0.150
Cane Creek (South) Tributary 1	0.045 to 0.050	0.100 to 0.150

**Table 16 – Roughness Coefficients**

Stream	Channel "n"	Overbank "n"
Cape Fear River	0.030 to 0.059	0.050 to 0.666
Cedar Creek	0.045 to 0.050	0.130 to 0.150
Cedar Creek Tributary 1	0.045	0.130 to 0.150
Cedar Creek Tributary 2	0.045 to 0.050	0.130 to 0.150
Collins Creek	0.040 to 0.050	0.100 to 0.150
Crows Creek	0.045	0.150
Cub Creek	0.040 to 0.550	0.120 to 0.150
Deep River	0.020 to 0.070	0.040 to 0.200
Deep River Tributary 5	0.051	0.110 to 0.150
Deep River Tributary 6	0.049	0.140 to 0.830
Deep River Tributary 7	0.051	0.140 to 0.150
Deep River Tributary 8	0.035 to 0.053	0.130 to 0.150
Dry Creek	0.040 to 0.055	0.050 to 0.140
East Price Creek	0.034 to 0.060	0.050 to 0.150
Folkner Branch	0.040 to 0.050	0.100 to 0.150
Georges Creek	0.050	0.100 to 0.150
Georges Creek Tributary 1	0.050	0.110 to 0.150
Georges Creek Tributary 2	0.050	0.110 to 0.150
Greenbriar Creek	0.050 to 0.055	0.080 to 0.200
Gulf Creek	0.040 to 0.050	0.110 to 0.150
Harlands Creek	0.045 to 0.050	0.120 to 0.150
Harts Creek	0.050	0.100 to 0.150
Haw River	0.030 to 0.140	0.045 to 0.200
Herndon Creek	0.040 to 0.055	0.110 to 0.130
Hill Creek	0.045 to 0.050	0.100 to 0.150
Indian Creek (into Deep River)	0.050 to 0.059	0.050 to 0.310
Kit Creek	0.030 to 0.070	0.070 to 0.130
Lacy Creek	0.050	0.110 to 0.150
Landrum Creek	0.050	0.100 to 0.150
Landrum Creek Tributary	0.050	0.110 to 0.140
Lick Creek	0.040 to 0.050	0.110 to 0.150
Line Creek	0.020 to 0.055	0.020 to 0.100
Little Brush Creek	0.040 to 0.050	0.110 to 0.150
Little Indian Creek	0.047 to 0.058	0.080 to 0.200
Long Branch	0.040 to 0.050	0.100 to 0.150
Loves Creek	0.045 to 0.050	0.120 to 0.150
Loves Creek Tributary 1	0.045 to 0.060	0.050 to 0.150
Loves Creek Tributary 2	0.040 to 0.050	0.100 to 0.140
Loves Creek Tributary 3	0.040 to 0.050	0.120 to 0.140
Meadow Branch	0.050	0.140
Meadow Creek	0.050	0.110 to 0.150
Mill Branch	0.050	0.140
Morgan Creek	0.037 to 0.061	0.045 to 0.910
Morris Branch	0.030 to 0.050	0.100 to 0.200
Mud Lick Creek	0.050	0.100 to 0.150
Nancy Branch	0.045 to 0.050	0.035 to 0.150
New Hope Creek	0.035 to 0.060	0.040 to 0.180
New Hope River Tributary 1	0.045 to 0.050	0.150
North Prong Rocky River	0.050	0.100 to 0.150
Northeast Creek	0.040 to 0.061	0.066 to 0.200
Overcup Creek	0.045 to 0.050	0.150
Overcup Creek Tributary	0.045 to 0.050	0.150
Panther Creek	0.030 to 0.070	0.070 to 0.130
Parkers Creek	0.045 to 0.050	0.150
Persimmons Nursery Branch	0.050	0.110 to 0.140
Pokeberry Creek	0.040 to 0.070	0.030 to 0.350
Reedy Fork	0.045 to 0.050	0.110 to 0.150
Robeson Creek	0.040 to 0.050	0.128 to 0.150
Robeson Creek Tributary 1	0.045 to 0.050	0.100 to 0.150
Robeson Creek Tributary 2	0.036 to 0.050	0.080 to 0.110
Robeson Creek Tributary 3	0.045 to 0.055	0.050 to 0.150

**Table 16 – Roughness Coefficients**

Stream	Channel "n"	Overbank "n"
Robeson Creek Tributary 3A	0.050 to 0.120	0.050 to 0.150
Robeson Creek Tributary 4	0.045 to 0.050	0.110 to 0.150
Robeson Creek Tributary 5	0.045 to 0.050	0.110 to 0.150
Rocky Branch (into Deep River)	0.055	0.145 to 0.150
Rocky Branch (into Georges Creek)	0.050 to 0.060	0.100 to 0.150
Rocky Ford Branch	0.045 to 0.050	0.150
Rocky River	0.045 to 0.060	0.050 to 0.150
Rocky River Tributary 1	0.040 to 0.055	0.080 to 0.150
Sandy Branch	0.050	0.100 to 0.140
Shaddox Creek	0.040 to 0.050	0.050 to 0.150
South Fork	0.045 to 0.050	0.110 to 0.269
Southwest Creek	0.030 to 0.050	0.080 to 0.200
Stinking Creek	0.040 to 0.050	0.140 to 0.150
Terrells Creek	0.040 to 0.050	0.100 to 0.150
Terrells Creek (West)	0.040 to 0.050	0.100 to 0.150
Tick Creek	0.050	0.100 to 0.150
Tick Creek Tributary	0.045 to 0.050	0.120 to 0.150
Tick Creek Tributary 1	0.049	0.060 to 0.130
Tributary A	0.150	0.130 to 0.150
Turkey Creek	0.040 to 0.050	0.110 to 0.150
Tyson's Creek	0.035 to 0.055	0.050 to 0.090
Tyson's Creek Tributary	0.055	0.060 to 0.090
Varnell Creek	0.050 to 0.055	0.100 to 0.150
Weaver Creek	0.045 to 0.050	0.150
Weaver Creek Tributary	0.045 to 0.050	0.150
Welch Creek	0.050	0.110 to 0.150
West Price Creek	0.046 to 0.060	0.060 to 0.140
White Oak Creek	0.045 to 0.050	0.100 to 0.150
White Oak Creek Tributary 1	0.045 to 0.050	0.110 to 0.150
Wilkinson Creek	0.040 to 0.060	0.050 to 0.200
Windfall Branch	0.045 to 0.050	0.150

For flooding sources studied by limited detailed methods in the county, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this report and the FIRM panels. This method entails developing a HEC-RAS hydraulic model, resulting in the calculation of BFEs and the delineation of the 1% annual chance floodplain (designated as Zone AE). Cross sections for the flooding sources studied by limited detailed methods were obtained using digital elevation data obtained with LIDAR technology developed as part of the North Carolina Statewide Floodplain Mapping Program. The hydraulic model is prepared using this digital elevation data, without surveying bathymetric or structural data. Where bridge or culvert data are readily available, such as from the North Carolina Department of Transportation, these data have been reflected in the hydraulic model. If these structural data are not readily available, field measurements of these structures were made to approximate their geometry in the hydraulic models. In addition, this method does not include field surveys that determine specifics on channel and floodplain characteristics. A limited detailed study is a “buildable” product that can be upgraded to a fully detailed study at a later date by verifying stream channel characteristics, bridge and culvert opening geometry, and by analyzing multiple recurrence intervals.

The results of the HEC-RAS computations are tabulated for all cross sections (Table 17, “Limited Detailed Flood Hazard Data”). Flood Profiles have not been developed for streams studied by limited detailed methods. Water-surface elevation rasters were developed for streams studied by limited detailed methods. In addition, floodways for streams studied by limited detailed methods are not delineated on the FIRM. However, the 1% annual chance water-surface elevations, flood discharges, and non-encroachment widths from the limited detailed studies for every modeled cross section are given in Table 17. The non-encroachment widths given at modeled cross sections can be used by communities to enforce floodplain management ordinances that meet the requirement defined in 44 CFR 60.3(c)(10).

Between cross sections for streams studied by limited detailed methods, 1% annual chance water-surface elevations can be calculated by mathematical interpolation using the distance along the stream centerline. Non-encroachment widths and, therefore, the location of a non-encroachment area boundary between cross sections should be determined based on either 1) mathematical interpolation, or 2) the non-encroachment width at the upstream or downstream cross section, whichever is larger. If the width determined by this second method is wider than the Special Flood Hazard Area (SFHA) or the 1% annual chance floodplain delineated on the FIRM for this location along the stream, the non-encroachment area shall be considered to be coincident with the SFHA. A full detailed study incorporating field survey data in the HEC-RAS hydraulic model may be submitted for a Letter of Map Revision (LOMR) request to map a regulatory floodway along a section of a stream in lieu of applying the non-encroachment widths listed in Table 17.

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
003	307.9	8775.0	292.4 <sup>1</sup>	66.0 / 40.0
009	850.8	8775.0	292.4 <sup>1</sup>	55.0 / 31.0
015	1535.4	8775.0	292.4 <sup>1</sup>	52.0 / 87.6
020	2000.0	8775.0	292.7	89.0 / 76.7
025	2522.3	8775.0	293.5	31.0 / 53.0
028	2814.0	8775.0	294.5	40.0 / 40.0
028	2846.0	8775.0	295.0	40.0 / 40.0
030	3009.1	8775.0	295.4	40.0 / 40.4
034	3429.2	8775.0	296.9	40.0 / 40.7
040	3965.6	8775.0	298.3	40.0 / 50.8
045	4450.7	8747.0	299.5	34.0 / 70.6
050	4963.3	8747.0	300.4	36.0 / 49.9
056	5561.9	8747.0	301.8	35.0 / 33.4
060	5952.3	8747.0	302.9	33.0 / 47.6
064	6401.7	8747.0	304.4	34.0 / 37.4
069	6944.2	8747.0	308.3	34.0 / 40.7
075	7477.9	8747.0	310.3	39.0 / 60.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
081	8096.6	8747.0	311.6	38.0 / 52.3
084	8449.6	8747.0	312.9	36.0 / 38.0
090	8952.0	8747.0	315.1	45.0 / 50.0
095	9457.7	8747.0	319.5	38.0 / 50.0
100	10031.4	8747.0	321.2	34.0 / 90.0
105	10455.7	8747.0	322.1	50.0 / 94.8
15	11493.6	8747.0	325.5	123.0 / 138.2
121	12112.4	8747.0	326.5	64.0 / 104.7
125	12500.0	8747.0	327.2	73.0 / 146.8
128	12849.0	8747.0	327.6	225.0 / 81.7
133	13294.1	8747.0	327.9	87.0 / 85.0
133	13344.6	8747.0	328.4	87.0 / 85.0
136	13571.2	8640.0	328.7	42.0 / 76.9
139	13873.6	8640.0	329.0	64.0 / 45.4
145	14500.0	8640.0	329.8	41.0 / 36.3
150	14957.4	8640.0	331.5	61.0 / 62.0
155	15478.8	8640.0	332.5	101.0 / 51.6
159	15945.2	8640.0	333.1	88.0 / 31.9
164	16424.4	8640.0	333.6	45.0 / 60.5
171	17120.1	8534.0	334.5	37.0 / 82.3
175	17472.3	8534.0	334.9	38.0 / 84.3
180	17974.1	8534.0	335.3	38.0 / 50.6
184	18448.7	8534.0	336.1	104.0 / 30.5
191	19104.0	8534.0	337.1	39.0 / 44.2
195	19467.1	8534.0	338.8	40.0 / 102.7
200	20004.4	8534.0	339.9	50.0 / 104.6
205	20513.6	8534.0	340.7	55.0 / 183.3
208	20772.6	8534.0	340.9	57.0 / 95.4
218	21781.4	8534.0	342.2	35.0 / 45.1
227	22701.9	8432.0	344.0	65.0 / 38.3
235	23454.3	8432.0	345.3	231.0 / 45.0
238	23837.6	8432.0	345.5	95.0 / 33.6
244	24414.3	8432.0	346.3	188.0 / 45.0
250	24950.2	8432.0	346.8	144.0 / 131.2
255	25462.3	8432.0	347.2	165.0 / 163.9
260	26000.0	8432.0	347.5	172.0 / 104.5
263	26301.8	8432.0	347.7	206.0 / 55.0
268	26784.7	8432.0	348.0	51.0 / 62.5
268	26836.7	8432.0	348.8	51.0 / 62.5
273	27284.7	8432.0	349.3	60.0 / 134.7
278	27828.6	8432.0	349.7	268.0 / 55.0
287	28706.9	8432.0	350.2	90.0 / 71.4
291	29096.8	8324.0	350.7	133.0 / 187.2
295	29476.5	8324.0	350.8	46.0 / 77.9

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
300	30000.0	8324.0	351.2	52.0 / 196.1
305	30547.7	8324.0	351.5	54.0 / 189.5
315	31500.0	8324.0	352.6	149.0 / 43.5
319	31899.2	8324.0	353.4	37.0 / 89.6
327	32671.9	8324.0	354.8	140.0 / 38.0
331	33099.2	8324.0	355.3	57.0 / 44.0
335	33500.0	8324.0	355.9	136.0 / 49.4
340	34000.0	8324.0	356.7	40.0 / 166.9
345	34500.0	7887.0	357.5	47.0 / 107.1
352	35162.4	7887.0	358.5	36.0 / 155.1
358	35839.4	7887.0	359.3	164.0 / 38.0
363	36303.9	7887.0	359.7	108.0 / 42.0
369	36929.2	7836.0	360.5	96.0 / 95.4
375	37537.5	7836.0	360.9	66.0 / 129.7
380	38000.0	7836.0	361.2	49.0 / 90.3
385	38506.0	7836.0	361.7	196.0 / 47.0
392	39213.3	7836.0	362.1	67.0 / 44.0
396	39595.0	7836.0	362.4	44.0 / 60.3
400	40000.0	7836.0	362.8	41.0 / 74.6
405	40531.0	7836.0	363.2	43.0 / 56.5
411	41100.9	7836.0	363.7	121.0 / 35.0
415	41462.5	7836.0	363.9	102.0 / 61.0
415	41514.5	7836.0	364.0	102.0 / 61.0
418	41823.1	7836.0	364.4	124.0 / 30.5
426	42626.8	7734.0	364.8	40.0 / 136.4
431	43141.8	7734.0	365.1	114.0 / 50.0
435	43500.0	7734.0	365.3	130.0 / 40.0
441	44053.2	7734.0	365.8	127.0 / 42.0
445	44500.0	7734.0	366.0	55.0 / 59.8
450	45000.0	7624.0	366.4	54.0 / 65.3
456	45570.6	7624.0	366.8	50.0 / 82.7
460	45962.3	7624.0	367.0	47.0 / 64.6
464	46442.4	7624.0	367.6	210.0 / 37.0
470	47000.0	7624.0	367.9	130.0 / 69.1
475	47500.0	7624.0	368.4	160.0 / 167.9
477	47741.0	7624.0	368.5	173.0 / 195.9
485	48482.3	7509.0	368.8	58.0 / 139.2
491	49144.1	7509.0	369.3	51.0 / 37.0
494	49413.5	7509.0	369.8	130.0 / 39.5
498	49836.2	7509.0	369.9	65.0 / 45.0
504	50409.4	7509.0	370.8	42.0 / 101.4
509	50922.0	7449.0	371.7	84.0 / 68.3
514	51440.6	7449.0	372.5	86.0 / 59.9
520	52000.0	7449.0	373.7	92.0 / 39.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
524	52373.7	7449.0	374.7	70.0 / 72.0
524	52413.7	7449.0	375.2	70.0 / 72.0
530	53000.0	7449.0	376.2	69.0 / 32.0
535	53532.9	7449.0	377.2	44.0 / 39.9
540	53956.3	7449.0	378.2	46.0 / 62.6
544	54350.9	7449.0	379.2	78.0 / 34.7
559	55899.8	7335.0	381.8	54.0 / 150.1
566	56589.7	7335.0	382.8	136.0 / 43.9
572	57169.6	7335.0	383.3	42.0 / 186.1
575	57500.0	7335.0	383.6	64.0 / 87.9
579	57881.9	7238.0	384.1	156.0 / 46.0
585	58481.0	6581.0	384.7	70.0 / 113.8
589	58895.4	6578.0	384.9	89.0 / 58.1
595	59517.9	6578.0	385.5	275.0 / 41.0
602	60198.5	6578.0	385.9	55.0 / 61.0
606	60570.8	6578.0	386.4	57.0 / 50.0
610	61018.3	6578.0	387.1	61.0 / 45.0
611	61083.8	6578.0	388.0	61.0 / 45.0
616	61593.1	6578.0	388.3	60.0 / 65.0
620	61964.6	6578.0	388.9	61.0 / 75.0
624	62440.6	6578.0	389.5	43.0 / 43.0
625	62489.1	6578.0	390.2	43.0 / 43.0
629	62920.2	6578.0	391.1	88.0 / 35.0
635	63508.8	6451.0	392.2	42.0 / 119.2
638	63777.3	6451.0	392.5	42.0 / 116.8
642	64206.8	6451.0	392.9	60.0 / 77.9
651	65076.5	6451.0	394.0	151.0 / 49.0
656	65646.1	6451.0	394.9	45.0 / 243.3
665	66483.0	6451.0	396.0	236.0 / 55.2
670	67000.0	6451.0	396.6	197.0 / 56.0
675	67500.0	6451.0	397.2	73.0 / 67.6
681	68126.7	6451.0	398.3	34.0 / 87.8
685	68500.0	6451.0	398.8	157.0 / 43.0
689	68917.2	6451.0	399.5	92.0 / 58.0
696	69574.3	6345.0	400.7	43.0 / 79.5
701	70068.3	6345.0	402.0	208.0 / 44.2
706	70606.9	6345.0	402.8	234.0 / 38.0
711	71081.4	6345.0	403.8	32.0 / 144.5
715	71473.8	6345.0	404.7	188.0 / 39.0
720	71959.2	6345.0	405.7	267.0 / 29.0
725	72500.0	6345.0	406.2	64.0 / 45.1
729	72915.8	6345.0	407.3	195.0 / 42.6
735	73500.0	6345.0	407.9	148.0 / 56.2
739	73949.3	6345.0	408.5	69.0 / 113.8

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
747	74735.4	6345.0	409.4	166.0 / 40.0
752	75165.7	5637.0	409.7	51.0 / 80.0
752	75218.2	5637.0	410.0	51.0 / 80.0
756	75630.3	5637.0	410.7	61.0 / 177.0
757	75660.3	5637.0	411.9	61.0 / 177.0
761	76122.8	5636.0	412.1	42.0 / 266.6
769	76909.9	5636.0	412.4	265.0 / 94.8
774	77446.5	5636.0	412.5	94.0 / 53.9
781	78106.1	5636.0	413.3	101.0 / 90.0
786	78636.4	5636.0	414.0	34.0 / 197.7
794	79356.2	5580.0	414.7	94.0 / 80.0
800	80000.0	5243.0	415.5	145.0 / 25.0
804	80437.6	5243.0	416.2	77.0 / 97.5
810	81000.0	5243.0	416.6	39.0 / 135.8
814	81432.1	5243.0	417.1	92.0 / 41.9
822	82151.0	5243.0	418.0	23.0 / 152.9
830	82957.2	5213.0	419.0	126.0 / 30.8
836	83649.1	5213.0	419.7	38.0 / 252.6
843	84265.4	5213.0	420.2	101.0 / 157.1
846	84554.9	5213.0	420.5	143.0 / 40.0
850	85000.0	5213.0	421.0	145.0 / 40.0
856	85624.1	5213.0	421.7	44.0 / 101.5
862	86208.9	5213.0	422.4	108.0 / 31.2
867	86696.0	5213.0	423.0	72.0 / 112.7
869	86941.5	5213.0	423.3	105.0 / 95.7
870	86987.5	5213.0	423.7	105.0 / 95.7
875	87500.0	5213.0	424.1	240.0 / 62.5
881	88061.5	5069.0	424.5	27.0 / 203.3
886	88647.3	4012.0	425.0	131.0 / 52.1
891	89136.1	4012.0	425.4	405.0 / 43.0
902	90201.6	4012.0	425.8	302.0 / 55.3
907	90673.5	4012.0	426.1	408.0 / 46.0
916	91586.9	4012.0	426.6	41.0 / 405.5
925	92500.0	4012.0	427.6	87.0 / 85.5
930	93000.0	4012.0	428.5	138.0 / 30.0
937	93671.8	4012.0	429.6	102.0 / 204.8
944	94393.5	4012.0	430.2	232.0 / 60.5
951	95090.8	4012.0	430.7	68.0 / 67.6
955	95500.0	4012.0	431.5	45.0 / 73.1
961	96109.8	4012.0	432.7	245.0 / 21.7
965	96500.0	4012.0	433.1	158.0 / 47.1
971	97069.1	3898.0	433.7	39.0 / 78.3
975	97537.0	3500.0	434.3	37.0 / 50.8
979	97903.8	3500.0	434.8	37.0 / 36.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
980	97961.3	3500.0	435.5	37.0 / 36.0
984	98408.6	3500.0	436.2	100.0 / 31.6
990	98997.3	3500.0	437.8	22.0 / 113.6
995	99500.0	3500.0	439.8	82.0 / 25.0
1001	100117.3	3500.0	441.4	98.0 / 45.7
1005	100465.2	3500.0	442.0	41.0 / 83.8
1010	101000.0	3321.0	443.0	101.0 / 44.0
1015	101500.0	3321.0	443.7	35.0 / 89.7
1020	102000.0	3321.0	444.6	76.0 / 78.5
1024	102351.5	3321.0	445.2	46.0 / 67.1
1030	103000.0	3321.0	447.1	53.0 / 50.1
1036	103550.8	3321.0	449.2	27.0 / 131.3
1039	103923.1	3321.0	449.8	42.0 / 58.4
1042	104202.8	3321.0	451.1	65.0 / 50.0
1042	104247.3	3321.0	451.9	65.0 / 50.0
1045	104500.0	3321.0	452.6	66.0 / 56.4
1050	105000.0	3321.0	453.5	48.0 / 124.2
1058	105751.5	3321.0	454.3	84.0 / 129.9
1060	106000.0	3321.0	454.5	126.0 / 76.2
1065	106500.0	3321.0	455.1	149.0 / 62.0
1070	106951.7	3321.0	455.7	182.0 / 72.7
1075	107500.0	3321.0	456.3	156.0 / 53.7
1075	107500.0	3321.0	456.3	155.9 / 53.7
1079	107948.0	2660.0	456.9	100.0 / 13.6
1085	108501.0	2660.0	458.4	73.0 / 55.9
1090	108996.0	2660.0	459.0	52.0 / 51.0
1093	109299.0	2660.0	459.8	65.0 / 134.5
1093	109336.0	2660.0	459.9	65.0 / 134.5
1095	109497.0	2660.0	460.1	21.0 / 259.9
1099	109949.0	2604.0	460.4	109.0 / 59.3
1105	110496.0	2604.0	460.7	169.0 / 140.2
1110	111007.0	2604.0	461.0	204.0 / 10.5
1115	111499.0	2604.0	461.8	41.0 / 73.1
1120	111993.0	2604.0	462.8	91.0 / 119.6
1125	112499.0	2604.0	463.6	112.0 / 31.6
1130	113006.0	2325.0	464.5	34.0 / 62.9
1135	113494.0	2325.0	465.8	35.0 / 93.1
1140	114003.0	2325.0	466.8	94.0 / 40.0
1141	114075.0	2325.0	467.1	94.0 / 40.0
1145	114500.0	2325.0	467.7	43.0 / 102.3
1150	115048.0	2325.0	468.7	195.0 / 29.7
1155	115540.0	2325.0	469.2	163.0 / 44.3
1161	116052.0	2325.0	469.9	49.0 / 213.3
1166	116553.0	2325.0	470.5	78.0 / 88.2

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek</b>				
1169	116916.0	2325.0	471.5	92.0 / 93.0
1175	117505.0	2116.0	472.2	281.0 / 9.2
1180	118004.0	2116.0	472.6	199.0 / 90.5
1186	118580.0	2116.0	473.5	47.0 / 133.4
1190	118955.0	2116.0	474.5	22.0 / 241.2
1195	119474.0	2116.0	474.8	174.0 / 174.3
1200	120007.0	2116.0	475.0	70.0 / 134.0
1205	120501.0	2116.0	475.8	91.0 / 60.9
1208	120818.0	1798.0	476.3	48.0 / 122.1
1208	120848.0	1798.0	476.4	48.0 / 122.1
1211	121106.0	1798.0	476.9	8.0 / 90.5
1215	121532.0	1798.0	477.7	72.0 / 110.6
1216	121562.0	1798.0	477.8	72.0 / 110.6
1220	121971.0	1798.0	479.0	108.0 / 129.6
<b>Bear Creek (into Indian Creek)</b>				
001	65.0	2008.0	243.9 <sup>1</sup>	40.0 / 55.0
011	1057.0	2008.0	248.1	74.0 / 16.9
016	1579.0	2008.0	252.9	26.0 / 24.0
022	2249.0	2008.0	262.8	24.0 / 16.8
027	2742.0	2008.0	268.8	17.0 / 41.5
032	3169.0	2008.0	273.4	17.0 / 16.8
036	3558.0	2008.0	278.1	47.0 / 18.5
040	4001.0	2008.0	280.7	17.0 / 16.8
045	4484.0	2008.0	286.9	34.0 / 35.7
051	5113.0	2008.0	291.0	29.0 / 28.7
054	5435.0	2008.0	294.9	38.0 / 16.8
060	6011.0	2008.0	299.7	64.0 / 16.9
064	6443.0	2008.0	302.4	39.0 / 29.9
069	6935.0	2008.0	305.2	125.0 / 16.8
075	7496.0	2008.0	308.4	18.0 / 56.2
082	8225.0	2008.0	312.5	79.0 / 23.1
086	8647.0	2008.0	315.0	17.0 / 29.2
091	9077.0	2008.0	318.7	17.0 / 38.8
095	9533.0	2008.0	320.9	40.0 / 27.1
101	10084.0	2008.0	322.9	69.0 / 19.8
105	10529.0	2008.0	324.8	17.0 / 58.7
114	11361.0	1718.0	328.9	37.0 / 36.8
118	11789.0	1718.0	330.7	43.0 / 38.9
122	12177.0	1718.0	332.1	38.0 / 66.6
125	12548.0	1718.0	333.6	73.0 / 59.4
132	13215.0	1718.0	335.8	203.0 / 15.4
139	13943.0	1718.0	339.3	35.0 / 20.6
142	14241.0	1718.0	342.6	66.0 / 15.6
149	14890.0	1718.0	347.4	43.0 / 25.4

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bear Creek (into Indian Creek)</b>				
154	15403.0	1718.0	352.0	25.0 / 63.8
158	15828.0	1718.0	354.1	37.0 / 50.2
162	16218.0	1718.0	356.2	51.0 / 29.1
166	16610.0	1718.0	358.5	26.0 / 50.9
171	17107.0	1718.0	360.7	55.0 / 79.0
176	17649.0	1435.0	362.8	57.0 / 58.2
181	18147.0	1435.0	365.7	26.0 / 43.0
189	18894.0	1435.0	369.8	47.0 / 111.4
194	19376.0	1435.0	371.6	96.0 / 28.9
197	19690.0	1435.0	373.4	53.0 / 30.9
200	19966.0	1435.0	375.3	58.0 / 52.6
203	20304.0	1435.0	376.5	160.0 / 14.0
205	20476.0	1435.0	377.0	85.0 / 24.3
208	20822.0	1435.0	380.4	27.0 / 43.9
212	21203.0	1435.0	384.6	44.0 / 14.5
215	21487.0	1435.0	387.2	45.0 / 46.5
217	21733.0	1435.0	388.5	39.0 / 124.1
222	22243.0	1435.0	390.8	15.0 / 116.5
<b>Bear Creek Tributary 1</b>				
005	504.0	1347.0	456.5 <sup>1</sup>	9.0 / 93.1
994	994.0	1347.0	456.5 <sup>1</sup>	128.0 / 8.6
014	1422.0	1347.0	456.5 <sup>1</sup>	116.0 / 82.5
020	1962.0	1347.0	457.7	21.0 / 161.3
024	2448.0	1347.0	459.1	9.0 / 147.0
<b>Beaver Creek Tributary 1</b>				
010	1000.0	811.0	237.8 <sup>1</sup>	223.0 / 267.0
015	1500.0	811.0	237.8 <sup>1</sup>	46.0 / 194.0
021	2119.4	782.0	237.8 <sup>1</sup>	102.0 / 160.0
025	2541.4	782.0	237.8 <sup>1</sup>	114.0 / 177.0
030	3000.0	782.0	237.8 <sup>1</sup>	86.0 / 136.0
034	3367.1	782.0	237.8 <sup>1</sup>	15.0 / 15.0
035	3503.1	782.0	237.8 <sup>1</sup>	15.0 / 15.0
040	4000.0	782.0	237.8 <sup>1</sup>	27.0 / 22.0
045	4476.2	782.0	237.8 <sup>1</sup>	37.0 / 29.0
050	5000.0	782.0	237.8 <sup>1</sup>	55.0 / 60.0
056	5583.8	782.0	237.8 <sup>1</sup>	24.0 / 35.0
060	6000.0	782.0	237.8 <sup>1</sup>	71.0 / 53.0
064	6420.2	484.0	237.8 <sup>1</sup>	160.0 / 70.0
070	7000.0	484.0	237.8 <sup>1</sup>	8.0 / 14.0
075	7454.0	484.0	237.8 <sup>1</sup>	14.0 / 10.0
080	8000.0	484.0	238.7	14.0 / 10.0
085	8500.0	484.0	245.4	95.0 / 31.0
089	8858.4	484.0	249.1	10.0 / 9.0
095	9500.0	484.0	257.1	17.0 / 7.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Beaver Creek Tributary 1</b>				
100	10000.0	484.0	266.2	25.0 / 7.0
105	10500.0	484.0	275.2	10.0 / 8.0
<b>Beaver Creek Tributary 2</b>				
012	1164.4	1302.0	237.8 <sup>1</sup>	374.0 / 348.0
015	1500.0	1302.0	237.8 <sup>1</sup>	260.0 / 284.0
020	2000.0	1302.0	237.8 <sup>1</sup>	219.0 / 225.0
025	2500.0	1302.0	237.8 <sup>1</sup>	185.0 / 230.0
030	3000.0	1302.0	237.8 <sup>1</sup>	21.0 / 312.0
035	3500.0	1085.0	237.8 <sup>1</sup>	279.0 / 67.0
040	4000.0	1085.0	237.8 <sup>1</sup>	234.0 / 26.0
045	4500.0	1085.0	237.8 <sup>1</sup>	227.0 / 30.0
048	4840.8	1085.0	237.8 <sup>1</sup>	210.0 / 62.0
053	5283.8	1085.0	237.8 <sup>1</sup>	15.0 / 15.0
054	5433.8	1085.0	237.8 <sup>1</sup>	15.0 / 15.0
055	5500.0	1085.0	237.8 <sup>1</sup>	60.0 / 60.0
060	6000.0	1085.0	237.8 <sup>1</sup>	32.0 / 58.0
065	6500.0	1085.0	237.8 <sup>1</sup>	27.0 / 55.0
069	6903.8	907.0	237.8 <sup>1</sup>	20.0 / 79.0
075	7500.0	907.0	237.8 <sup>1</sup>	70.0 / 25.0
081	8073.0	907.0	237.8 <sup>1</sup>	87.0 / 23.0
085	8500.0	907.0	238.1	85.0 / 35.0
089	8865.9	907.0	238.7	82.0 / 34.0
095	9500.0	907.0	241.1	65.0 / 20.0
100	10000.0	907.0	244.3	35.0 / 51.0
104	10399.7	907.0	245.7	74.0 / 15.0
110	11000.0	907.0	249.2	37.0 / 36.0
113	11346.3	907.0	251.3	50.0 / 15.0
<b>Beaver Creek Tributary 3</b>				
002	200.3	211.0	237.8 <sup>1</sup>	45.0 / 117.0
005	500.0	211.0	237.8 <sup>1</sup>	46.0 / 12.0
010	1005.1	211.0	237.8 <sup>1</sup>	16.0 / 21.0
015	1500.0	211.0	237.8 <sup>1</sup>	7.0 / 6.0
020	2000.0	211.0	237.8 <sup>1</sup>	9.0 / 6.0
027	2666.2	211.0	252.3	39.0 / 10.0
030	3000.0	211.0	257.0	8.0 / 10.0
034	3402.6	211.0	263.2	8.0 / 4.0
<b>Blood Run Creek</b>				
002	205.2	2714.0	495.3 <sup>1</sup>	77.0 / 23.0
010	1000.0	2714.0	495.3 <sup>1</sup>	21.0 / 192.0
016	1554.8	2714.0	495.3 <sup>1</sup>	26.0 / 35.0
020	2000.0	2714.0	500.1	60.0 / 15.0
024	2418.5	2714.0	503.3	41.0 / 18.0
030	3026.5	2714.0	507.4	13.0 / 56.0
035	3500.0	2714.0	510.6	14.0 / 56.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Blood Run Creek</b>				
039	3876.5	2714.0	512.5	33.0 / 33.0
045	4500.0	2714.0	515.1	45.0 / 36.0
050	5000.0	2714.0	517.6	19.0 / 65.0
054	5390.9	2714.0	520.1	52.0 / 22.0
059	5893.6	2714.0	522.0	46.0 / 96.0
065	6500.0	2714.0	523.4	60.0 / 35.0
070	7000.0	2714.0	525.4	44.0 / 49.0
075	7500.0	2714.0	526.6	36.0 / 35.0
079	7932.1	2714.0	527.6	87.0 / 27.0
081	8090.7	2714.0	528.0	88.0 / 46.0
081	8130.2	2714.0	528.2	88.0 / 46.0
084	8448.2	2714.0	528.2	28.0 / 42.0
090	9046.9	2714.0	529.7	48.0 / 48.0
095	9500.0	2714.0	530.8	40.0 / 109.0
100	9962.7	2714.0	531.6	63.0 / 33.0
106	10593.2	2590.0	533.0	54.0 / 45.0
112	11226.1	2590.0	534.3	152.0 / 20.0
119	11901.1	2292.0	535.8	62.0 / 31.0
125	12500.0	2292.0	540.5	55.0 / 33.0
128	12752.5	2292.0	543.1	38.0 / 33.0
128	12792.0	2292.0	543.4	38.0 / 33.0
130	13000.0	2292.0	545.3	17.0 / 24.0
136	13622.3	2292.0	552.8	35.0 / 49.0
140	14000.0	2292.0	555.3	29.0 / 38.0
145	14500.0	2222.0	556.7	28.0 / 59.0
150	15031.4	2222.0	557.5	30.0 / 65.0
157	15701.6	2222.0	558.5	23.0 / 36.0
161	16072.1	2222.0	559.5	44.0 / 36.0
165	16500.0	2222.0	560.1	42.0 / 71.0
172	17194.5	2222.0	560.9	23.0 / 56.0
176	17593.8	2222.0	561.4	19.0 / 41.0
179	17907.0	2222.0	562.4	45.0 / 36.0
186	18568.4	2222.0	563.7	98.0 / 36.0
195	19471.2	1972.0	565.6	61.0 / 46.0
201	20051.8	1972.0	566.6	147.0 / 186.0
207	20652.8	1972.0	567.1	75.0 / 69.0
210	21000.0	1972.0	568.3	58.0 / 77.0
216	21580.1	1972.0	570.2	48.0 / 37.0
219	21949.4	1972.0	571.4	59.0 / 75.0
226	22578.9	1724.0	572.2	245.0 / 74.0
230	23000.0	1724.0	572.5	118.0 / 51.0
238	23812.4	1724.0	573.8	104.0 / 12.0
245	24456.8	1544.0	574.9	68.0 / 277.0
249	24889.5	1544.0	575.0	26.0 / 26.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Blood Run Creek</b>				
249	24935.5	1544.0	575.7	26.0 / 26.0
255	25526.6	1544.0	577.3	75.0 / 23.0
260	25958.8	1544.0	578.8	45.0 / 39.0
266	26558.0	1264.0	580.3	31.0 / 138.0
271	27070.6	1264.0	581.0	165.0 / 23.0
275	27499.7	1264.0	581.4	105.0 / 53.0
276	27581.7	1264.0	583.2	105.0 / 53.0
278	27829.5	1264.0	583.2	237.0 / 23.0
279	27853.5	1264.0	583.2	237.0 / 23.0
285	28519.8	1264.0	583.9	198.0 / 16.0
291	29091.8	1264.0	585.0	26.0 / 195.0
296	29628.6	1264.0	586.5	49.0 / 100.0
299	29916.0	1264.0	587.3	22.0 / 22.0
300	30031.0	1264.0	589.9	22.0 / 22.0
303	30259.6	1264.0	590.6	116.0 / 96.0
307	30744.8	1264.0	591.0	70.0 / 56.0
311	31134.2	984.0	592.1	87.0 / 65.0
316	31576.3	984.0	593.6	136.0 / 8.0
<b>Brooks Creek</b>				
010	955.6	3118.0	318.9 <sup>1</sup>	28.0 / 38.3
015	1475.3	3118.0	320.1	21.0 / 134.7
019	1888.5	3118.0	322.8	40.0 / 110.0
029	2874.6	3118.0	332.6	215.0 / 40.0
034	3442.1	3118.0	336.0	70.0 / 40.0
041	4120.5	3118.0	339.7	130.0 / 34.3
047	4704.7	3007.0	343.6	97.0 / 109.0
053	5333.0	3007.0	350.6	45.0 / 110.0
059	5902.3	3007.0	354.1	26.0 / 69.0
070	7013.1	3007.0	360.4	70.0 / 26.7
074	7422.1	3007.0	363.1	55.0 / 30.0
080	7989.6	3007.0	368.2	22.0 / 110.0
084	8369.5	3007.0	370.6	25.0 / 140.0
088	8822.4	3007.0	372.8	80.0 / 85.0
093	9288.4	3007.0	374.7	150.0 / 45.0
098	9769.5	3007.0	376.3	45.0 / 100.0
103	10281.9	3007.0	378.6	120.0 / 50.0
109	10935.5	3007.0	380.8	30.0 / 110.0
116	11582.8	3007.0	383.4	150.0 / 50.0
123	12303.0	2300.0	385.5	176.0 / 44.1
128	12806.0	2300.0	387.5	62.0 / 92.2
135	13499.9	2300.0	390.5	20.0 / 100.7
140	13982.9	2300.0	392.5	30.0 / 60.0
140	14037.9	2300.0	393.6	30.0 / 60.0
143	14326.8	2300.0	394.7	34.0 / 102.8

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Brooks Creek</b>				
149	14881.4	2300.0	397.2	100.0 / 25.0
155	15536.4	2300.0	402.8	55.0 / 25.0
160	15971.3	2300.0	404.5	64.0 / 58.9
164	16402.8	2300.0	405.9	23.0 / 49.1
169	16868.5	2300.0	408.5	57.0 / 47.6
174	17442.4	2300.0	410.8	20.0 / 80.0
183	18257.3	2300.0	415.5	30.0 / 35.0
189	18926.6	2300.0	419.3	75.0 / 65.0
195	19468.0	2300.0	421.8	100.0 / 62.9
201	20056.7	2300.0	425.5	65.0 / 60.0
206	20557.8	1880.0	427.3	140.0 / 40.0
213	21267.2	1880.0	428.7	80.0 / 55.0
217	21662.7	1880.0	429.9	60.0 / 117.0
222	22248.7	1880.0	431.4	75.0 / 50.4
223	22303.7	1880.0	433.9	75.0 / 50.4
228	22761.1	1880.0	434.3	33.0 / 100.0
233	23345.5	1510.0	435.3	59.0 / 81.3
239	23880.2	1510.0	436.7	60.0 / 40.0
246	24552.5	1510.0	439.8	60.0 / 15.0
253	25262.0	1480.0	443.6	54.0 / 36.0
253	25262.4	1510.0	443.6	54.0 / 36.2
257	25706.0	1180.0	445.1	55.0 / 45.0
260	25951.0	1180.0	446.0	50.0 / 50.0
261	26147.0	1180.0	446.8	50.0 / 70.0
263	26320.0	1180.0	447.2	65.0 / 40.0
265	26489.0	1180.0	447.7	80.0 / 16.0
267	26716.0	1180.0	448.6	50.0 / 16.0
269	26851.0	1180.0	449.5	18.0 / 32.0
271	27094.0	1180.0	450.6	40.0 / 40.0
273	27337.0	1180.0	451.7	40.0 / 45.0
277	27667.0	1180.0	453.7	55.0 / 80.0
280	28007.0	1050.0	454.5	60.0 / 35.0
285	28529.0	1050.0	455.4	80.0 / 45.0
288	28811.0	1050.0	455.9	150.0 / 40.0
291	29128.0	1050.0	456.5	40.0 / 75.0
295	29471.0	1050.0	457.1	130.0 / 13.0
297	29742.0	1050.0	457.7	55.0 / 45.0
301	30062.0	1050.0	458.9	50.0 / 75.0
303	30311.0	1050.0	459.4	30.0 / 85.0
306	30624.0	1050.0	459.8	55.0 / 45.0
309	30904.0	1050.0	460.4	45.0 / 45.0
312	31184.0	869.0	461.6	25.0 / 170.0
314	31415.0	869.0	462.4	16.0 / 160.0
317	31657.0	869.0	463.7	45.0 / 100.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Brooks Creek</b>				
318	31844.0	856.0	464.4	45.0 / 95.0
320	32048.0	659.0	465.0	45.0 / 45.0
322	32169.0	659.0	466.3	21.0 / 145.0
323	32282.0	659.0	471.4	50.0 / 48.0
324	32366.0	659.0	471.4	150.0 / 100.0
<b>Brooks Creek Tributary</b>				
001	132.0	838.0	444.1 <sup>1</sup>	30.0 / 12.0
004	418.0	838.0	444.2	20.0 / 20.0
007	661.0	838.0	446.2	28.0 / 12.0
009	877.0	838.0	447.8	14.0 / 26.0
011	1095.0	838.0	450.5	20.0 / 20.0
013	1292.0	838.0	453.0	20.0 / 20.0
015	1455.0	838.0	455.1	20.0 / 20.0
016	1629.0	838.0	456.9	16.0 / 24.0
018	1785.0	838.0	457.7	18.0 / 25.0
020	1971.0	838.0	458.9	20.0 / 20.0
021	2083.0	796.0	460.1	27.0 / 20.0
021	2145.0	796.0	460.6	25.0 / 25.0
022	2239.0	796.0	461.7	25.0 / 25.0
024	2359.0	796.0	462.2	20.0 / 44.0
026	2587.0	796.0	463.9	20.0 / 20.0
028	2846.0	796.0	466.3	49.0 / 37.0
031	3069.0	796.0	467.3	28.0 / 61.0
034	3360.0	796.0	469.0	48.0 / 71.0
<b>Brooks Creek Tributary 1</b>				
002	195.0	1234.0	384.6 <sup>1</sup>	54.0 / 18.0
010	1019.0	1226.0	391.3	18.0 / 36.0
015	1499.0	1226.0	397.4	8.0 / 30.0
<b>Brush Creek</b>				
726	72576.3	4778.0	498.6	71.0 / 62.0
729	72932.9	4778.0	498.9	23.0 / 135.0
735	73500.0	4778.0	499.5	44.0 / 51.0
740	74000.0	4778.0	500.7	50.0 / 22.0
745	74459.9	4778.0	503.8	28.0 / 93.0
750	75000.0	4778.0	505.8	38.0 / 60.0
755	75485.4	4778.0	507.2	53.0 / 92.0
760	76000.0	4778.0	509.2	277.0 / 50.0
765	76536.5	4778.0	510.0	23.0 / 41.0
770	77026.9	4778.0	515.1	42.0 / 42.0
771	77066.4	4778.0	515.6	42.0 / 42.0
776	77598.1	4778.0	517.2	22.0 / 25.0
781	78051.4	4778.0	520.4	23.0 / 46.0
784	78407.3	4778.0	521.4	65.0 / 23.0
789	78883.2	4778.0	523.1	76.0 / 21.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Brush Creek</b>				
795	79500.0	4778.0	525.5	75.0 / 20.0
798	79846.7	4778.0	527.1	133.0 / 27.0
806	80568.3	4778.0	528.4	207.0 / 23.0
810	81016.3	4778.0	528.9	39.0 / 131.0
815	81500.0	4778.0	529.5	26.0 / 170.0
820	82000.0	4778.0	530.1	20.0 / 75.0
825	82522.9	4631.0	530.9	31.0 / 55.0
830	83000.0	4631.0	531.8	23.0 / 52.0
835	83500.0	4631.0	532.5	42.0 / 31.0
841	84115.3	4631.0	533.5	55.0 / 38.0
845	84505.6	4631.0	534.1	31.0 / 72.0
848	84845.5	4631.0	535.0	80.0 / 55.0
856	85581.8	4631.0	537.0	92.0 / 99.0
861	86128.0	4474.0	537.9	31.0 / 37.0
866	86573.6	4474.0	539.0	18.0 / 47.0
870	86965.7	4474.0	540.1	30.0 / 60.0
875	87500.0	4474.0	541.2	21.0 / 53.0
880	88023.4	4474.0	543.1	39.0 / 92.0
885	88513.7	4474.0	544.7	80.0 / 80.0
886	88562.7	4474.0	545.1	80.0 / 80.0
890	89000.0	4318.0	546.0	31.0 / 24.0
895	89535.1	4318.0	548.5	18.0 / 65.0
900	90000.0	4243.0	549.4	33.0 / 50.0
905	90451.9	4243.0	550.3	26.0 / 110.0
912	91205.6	4243.0	551.0	113.0 / 47.0
922	92201.5	3957.0	551.7	22.0 / 113.0
925	92500.0	3957.0	551.9	35.0 / 41.0
935	93500.0	3957.0	553.0	194.0 / 23.0
<b>Buckhorn Creek</b>				
057	5722.6	11532.0	162.6'	637.0 / 816.0
068	6837.3	11532.0	163.9'	38.0 / 487.0
082	8217.4	11532.0	163.9'	595.0 / 38.0
094	9366.7	11532.0	163.9'	445.0 / 106.0
102	10168.6	11532.0	164.6	100.0 / 55.0
108	10813.9	11532.0	165.5	164.0 / 38.0
114	11443.4	11532.0	166.5	126.0 / 200.0
120	11994.2	11532.0	166.8	54.0 / 114.0
127	12656.9	11532.0	167.8	157.0 / 116.0
131	13124.3	11378.0	168.1	292.0 / 38.0
139	13883.2	11378.0	168.8	38.0 / 658.0
149	14902.8	11378.0	169.2	38.0 / 389.0
158	15842.3	11378.0	170.1	279.0 / 290.0
173	17256.7	11353.0	171.0	109.0 / 38.0
188	18759.3	11218.0	172.7	37.0 / 524.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Buckhorn Creek</b>				
198	19754.0	11218.0	173.1	168.0 / 97.0
201	20097.1	11218.0	173.4	57.0 / 56.0
201	20139.6	11218.0	173.8	57.0 / 56.0
204	20421.9	11204.0	174.0	37.0 / 72.0
209	20850.1	11204.0	174.4	37.0 / 66.0
212	21158.8	11204.0	175.0	37.0 / 139.0
217	21655.8	11102.0	175.3	37.0 / 101.0
220	22025.9	11102.0	175.7	85.0 / 92.0
225	22498.0	11102.0	175.8	37.0 / 37.0
228	22753.4	11102.0	176.8	37.0 / 110.0
230	23012.5	10715.0	177.0	36.0 / 70.0
232	23182.2	10715.0	176.9	36.0 / 36.0
239	23947.8	10715.0	232.3	250.0 / 83.0
240	24015.0	10715.0	232.3	250.0 / 83.0
<b>Buckhorn Creek Tributary 1</b>				
002	178.8	342.0	167.9 <sup>1</sup>	5.0 / 28.0
004	402.1	342.0	167.9 <sup>1</sup>	31.0 / 5.0
006	582.6	342.0	167.9 <sup>1</sup>	27.0 / 7.0
012	1213.2	342.0	176.7	6.0 / 10.0
016	1607.2	313.0	185.7	21.0 / 5.0
020	1976.7	313.0	193.6	11.0 / 11.0
024	2368.5	313.0	199.6	17.0 / 5.0
027	2706.1	313.0	209.2	9.0 / 8.0
028	2788.0	313.0	213.1	7.0 / 6.0
029	2895.7	313.0	219.7	6.0 / 5.0
030	3042.1	313.0	226.7	8.0 / 9.0
035	3479.8	313.0	236.7	10.0 / 7.0
<b>Buckhorn Creek Tributary 2</b>				
002	174.6	741.0	175.0 <sup>1</sup>	13.0 / 13.0
004	370.0	741.0	175.0 <sup>1</sup>	13.0 / 13.0
007	670.6	741.0	175.0 <sup>1</sup>	13.0 / 13.0
009	910.9	734.0	174.8	13.0 / 6.0
011	1123.0	734.0	178.3	13.0 / 15.0
015	1464.0	734.0	182.7	14.0 / 10.0
018	1796.8	734.0	187.4	13.0 / 13.0
022	2169.0	666.0	195.9	13.0 / 12.0
025	2532.3	666.0	202.1	12.0 / 12.0
028	2809.3	666.0	207.7	12.0 / 12.0
032	3204.9	666.0	214.6	12.0 / 12.0
036	3583.6	666.0	221.8	12.0 / 12.0
<b>Buckhorn Creek Tributary 3</b>				
007	735.2	1782.0	176.9	53.0 / 25.0
010	1007.0	1782.0	177.0	56.0 / 30.0
013	1302.5	1782.0	177.1	25.0 / 52.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Buckhorn Creek Tributary 3</b>				
015	1527.0	1782.0	177.3	16.0 / 76.0
016	1606.6	1782.0	177.3	28.0 / 28.0
019	1931.6	1782.0	180.0	28.0 / 28.0
021	2148.8	1782.0	180.0	44.0 / 175.0
026	2614.0	1782.0	180.1	16.0 / 127.0
031	3091.6	1782.0	180.2	43.0 / 70.0
034	3419.4	1782.0	180.2	36.0 / 35.0
038	3817.7	1737.0	180.6	32.0 / 84.0
047	4657.0	1737.0	182.1	98.0 / 15.0
052	5235.5	1737.0	184.4	18.0 / 20.0
056	5555.7	1669.0	186.5	31.0 / 40.0
059	5930.6	1669.0	189.1	30.0 / 30.0
062	6222.0	1669.0	189.0	76.0 / 44.0
065	6475.1	1669.0	190.9	88.0 / 145.0
<b>Buckhorn Creek Tributary 4</b>				
000	30.6	605.0	232.2 <sup>1</sup>	33.0 / 75.0
004	360.9	605.0	232.2 <sup>1</sup>	17.0 / 62.0
006	621.5	605.0	232.2 <sup>1</sup>	6.0 / 50.0
010	1049.8	605.0	232.2 <sup>1</sup>	6.0 / 21.0
014	1448.5	605.0	237.7	6.0 / 6.0
019	1937.6	549.0	245.3	7.0 / 8.0
022	2220.3	549.0	250.5	10.0 / 5.0
024	2413.7	549.0	258.4	5.0 / 6.0
026	2554.9	549.0	282.2	150.0 / 210.0
027	2733.5	549.0	282.2	111.0 / 50.0
<b>Bush Creek</b>				
002	181.6	2832.0	237.8 <sup>1</sup>	146.0 / 117.0
005	500.0	2832.0	237.8 <sup>1</sup>	235.0 / 336.0
010	1000.0	2832.0	237.8 <sup>1</sup>	58.0 / 334.0
014	1421.4	2832.0	237.8 <sup>1</sup>	336.0 / 152.0
020	2000.0	2832.0	237.8 <sup>1</sup>	285.0 / 193.0
025	2500.0	2832.0	237.8 <sup>1</sup>	76.0 / 276.0
030	3000.0	2832.0	237.8 <sup>1</sup>	258.0 / 127.0
038	3837.2	2107.0	237.8 <sup>1</sup>	400.0 / 88.0
045	4500.0	2107.0	237.8 <sup>1</sup>	320.0 / 250.0
049	4883.2	2107.0	237.8 <sup>1</sup>	40.0 / 25.0
050	5030.2	2107.0	237.8 <sup>1</sup>	40.0 / 25.0
055	5500.0	2107.0	237.8 <sup>1</sup>	150.0 / 80.0
060	6000.0	2018.0	237.8 <sup>1</sup>	200.0 / 150.0
065	6500.0	2018.0	237.8 <sup>1</sup>	230.0 / 135.0
071	7137.9	2018.0	237.8 <sup>1</sup>	275.0 / 94.0
075	7500.0	2018.0	237.8 <sup>1</sup>	197.0 / 186.0
080	8000.0	1762.0	237.8 <sup>1</sup>	165.0 / 521.0
086	8606.9	1762.0	237.8 <sup>1</sup>	31.0 / 398.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Bush Creek</b>				
095	9500.0	1762.0	239.8	231.0 / 76.0
100	10000.0	1762.0	241.8	112.0 / 152.0
105	10500.0	1762.0	243.4	151.0 / 54.0
116	11626.1	1762.0	246.7	64.0 / 70.0
120	12000.0	1762.0	248.8	47.0 / 32.0
125	12500.0	1762.0	252.7	41.0 / 38.0
<b>Cape Fear River</b>				
9889	988900.0	78803.0	164.0	989.0 / 401.0
9893	989286.0	78803.0	164.1	822.0 / 553.0
9900	989985.0	78803.0	167.5	846.0 / 445.0
9905	990485.0	78803.0	167.8	1002.0 / 422.0
9910	990985.0	78803.0	168.1	839.0 / 475.0
9915	991485.0	78803.0	168.3	946.0 / 300.0
9920	991985.0	78803.0	168.5	852.0 / 206.0
9925	992485.0	78803.0	168.7	878.0 / 296.0
9930	992985.0	78803.0	169.0	810.0 / 261.0
9935	993485.0	78803.0	169.2	925.0 / 265.0
9940	993985.0	78803.0	169.4	1158.0 / 288.0
9945	994485.0	78803.0	169.6	1202.0 / 261.0
9950	994985.0	78803.0	169.9	1256.0 / 403.0
9955	995485.0	78803.0	170.2	1353.0 / 468.0
9960	995985.0	78803.0	170.3	1265.0 / 738.0
9965	996485.0	78803.0	170.5	1371.0 / 928.0
9970	996985.0	78803.0	170.7	1485.0 / 1284.0
9975	997485.0	78803.0	171.0	950.0 / 1623.0
9980	997985.0	78803.0	171.1	1622.0 / 1742.0
9985	998485.0	78803.0	171.2	950.0 / 1822.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Cape Fear River</b>				
9990	998985.0	77673.0	171.3	794.0 / 1917.0
9995	999485.0	77673.0	171.5	550.0 / 1992.0
10002	1000176.0	77673.0	171.6	696.0 / 2262.0
10003	1000280.0	77673.0	171.8	700.0 / 700.0
10003	1000330.0	77673.0	172.4	700.0 / 700.0
10010	1000985.0	77673.0	172.5	451.0 / 2374.0
10015	1001485.0	77673.0	172.6	385.0 / 2366.0
10020	1001985.0	77673.0	172.7	388.0 / 2278.0
10025	1002485.0	77673.0	172.7	412.0 / 2279.0
10030	1002985.0	77673.0	172.8	531.0 / 2227.0
10035	1003485.0	77673.0	172.9	697.0 / 2445.0
10040	1003985.0	77673.0	173.0	768.0 / 2702.0
10045	1004485.0	77673.0	173.1	720.0 / 2945.0
10050	1004985.0	77673.0	173.2	604.0 / 3226.0
10055	1005485.0	77673.0	173.2	534.0 / 3304.0
10060	1005985.0	77673.0	173.3	758.0 / 3628.0
10065	1006485.0	77673.0	173.4	1122.0 / 3408.0
10070	1006985.0	77673.0	173.4	1324.0 / 3421.0
10075	1007485.0	77673.0	173.4	1578.0 / 3022.0
10080	1007985.0	77673.0	173.5	1700.0 / 2802.0
10085	1008485.0	77399.0	173.5	1530.0 / 2606.0
10090	1008985.0	77399.0	173.6	1384.0 / 1500.0
10095	1009485.0	77399.0	173.6	1300.0 / 500.0
10100	1009985.0	77399.0	173.6	1530.0 / 183.0
10101	1010061.0	77399.0	173.7	1300.0 / 200.0
10101	1010101.0	77399.0	174.3	1300.0 / 200.0
10105	1010485.0	77399.0	174.5	2384.0 / 183.0
10110	1010985.0	77399.0	174.7	3205.0 / 183.0
10115	1011485.0	77399.0	174.8	3572.0 / 202.0
10120	1011985.0	77399.0	174.9	4148.0 / 428.0
10125	1012485.0	77399.0	175.0	3993.0 / 715.0
10130	1012985.0	77399.0	175.1	3941.0 / 1208.0
10135	1013485.0	77399.0	175.2	3821.0 / 1454.0
10140	1013985.0	77399.0	175.2	3530.0 / 1644.0
10145	1014485.0	77399.0	175.2	1490.0 / 1746.0
10150	1014985.0	77399.0	175.3	1439.0 / 2154.0
10155	1015485.0	76880.0	175.3	227.0 / 1984.0
10160	1015985.0	76880.0	175.5	182.0 / 1138.0
10165	1016485.0	76880.0	176.0	182.0 / 2267.0
10170	1016985.0	76880.0	176.0	182.0 / 2313.0
10175	1017485.0	76880.0	176.2	182.0 / 2740.0
10180	1017985.0	76880.0	176.3	182.0 / 2870.0
10185	1018485.0	76880.0	176.3	182.0 / 763.0
10190	1018985.0	76880.0	176.4	182.0 / 527.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Cape Fear River</b>				
10195	1019485.0	76880.0	176.8	182.0 / 3921.0
10200	1019985.0	76880.0	177.0	1901.0 / 1264.0
10206	1020609.0	76846.0	177.0	182.0 / 1422.0
<b>Cedar Creek</b>				
101	10094.9	3391.0	232.5 <sup>1</sup>	21.0 / 426.0
112	11230.7	3391.0	232.5 <sup>1</sup>	326.0 / 600.9
125	12496.8	3391.0	232.5 <sup>1</sup>	161.0 / 232.8
133	13328.5	3391.0	232.5 <sup>1</sup>	182.0 / 604.2
138	13821.5	3391.0	232.5 <sup>1</sup>	37.0 / 724.8
144	14389.8	3391.0	232.5 <sup>1</sup>	21.0 / 416.5
151	15059.3	3391.0	232.5 <sup>1</sup>	254.0 / 90.7
155	15537.2	3391.0	232.5 <sup>1</sup>	418.0 / 20.9
163	16270.6	1970.0	232.5 <sup>1</sup>	366.0 / 87.9
167	16688.3	1970.0	232.5 <sup>1</sup>	327.0 / 139.1
174	17393.3	1970.0	232.5 <sup>1</sup>	22.0 / 434.9
178	17813.8	1970.0	232.5 <sup>1</sup>	134.0 / 113.5
183	18291.0	1970.0	232.5 <sup>1</sup>	374.0 / 16.6
189	18856.3	1970.0	232.5 <sup>1</sup>	425.0 / 118.4
193	19328.4	1970.0	232.5 <sup>1</sup>	32.0 / 31.7
194	19396.4	1970.0	232.5 <sup>1</sup>	32.0 / 31.7
201	20088.1	1970.0	233.2	269.0 / 16.7
205	20537.7	1970.0	233.6	346.0 / 45.3
209	20876.7	1970.0	233.8	273.0 / 16.7
214	21360.3	1970.0	234.3	375.0 / 16.6
216	21567.8	1812.0	234.5	349.0 / 82.8
224	22355.6	1812.0	235.4	331.0 / 15.8
233	23288.8	1812.0	238.6	244.0 / 15.8
242	24182.8	1812.0	242.2	257.0 / 15.8
248	24832.4	1812.0	244.7	232.0 / 15.8
258	25826.5	1812.0	248.1	173.0 / 15.8
<b>Cedar Creek Tributary 1</b>				
005	507.9	2177.0	232.5 <sup>1</sup>	351.0 / 17.3
017	1664.7	2177.0	232.5 <sup>1</sup>	289.0 / 52.9
030	2955.1	2177.0	232.5 <sup>1</sup>	479.0 / 17.3
039	3922.7	2177.0	232.5 <sup>1</sup>	351.0 / 17.4
047	4694.1	2177.0	232.5 <sup>1</sup>	398.0 / 17.3
047	4732.6	2177.0	232.5 <sup>1</sup>	329.0 / 25.0
048	4802.6	2177.0	235.6	329.0 / 25.0
059	5943.7	1702.0	235.8	386.0 / 132.1
070	6996.1	1702.0	236.2	296.0 / 15.3
076	7604.7	1702.0	236.8	345.0 / 15.3
083	8267.3	1702.0	237.7	365.0 / 15.3
089	8908.9	1702.0	238.9	250.0 / 42.7
096	9631.1	1702.0	241.5	132.0 / 15.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Cedar Creek Tributary 1</b>				
107	10660.8	1499.0	244.5	14.0 / 333.6
112	11246.4	1499.0	246.1	142.0 / 88.7
126	12551.7	1499.0	251.6	53.0 / 130.9
<b>Cedar Creek Tributary 2</b>				
012	1224.7	870.0	235.6 <sup>1</sup>	115.0 / 36.3
017	1669.9	870.0	235.6 <sup>1</sup>	109.0 / 87.7
023	2266.6	870.0	235.9	60.0 / 100.2
027	2720.7	870.0	237.9	67.0 / 136.1
033	3348.3	870.0	240.7	9.0 / 92.9
038	3813.6	870.0	243.2	50.0 / 73.9
039	3858.6	870.0	243.1	50.0 / 73.9
044	4354.3	870.0	246.3	60.0 / 48.8
044	4441.0	870.0	246.7	24.0 / 50.7
045	4481.0	870.0	247.0	24.0 / 50.7
050	5037.9	870.0	250.1	28.0 / 105.0
058	5826.9	870.0	252.8	79.0 / 46.4
063	6336.6	870.0	255.9	88.0 / 32.1
068	6807.9	870.0	258.6	138.0 / 8.6
<b>Collins Creek</b>				
003	335.1	4779.0	400.8 <sup>1</sup>	18.0 / 18.0
008	822.9	4779.0	400.8 <sup>1</sup>	18.0 / 17.0
014	1356.1	4779.0	400.8 <sup>1</sup>	20.0 / 17.0
019	1893.6	4779.0	407.8	18.0 / 20.0
024	2436.3	4779.0	425.1	51.0 / 59.5
027	2690.6	4779.0	429.3	60.0 / 60.0
027	2735.1	4779.0	429.8	60.0 / 60.0
033	3314.8	4779.0	431.6	21.0 / 36.0
039	3882.4	4779.0	437.3	35.0 / 33.0
044	4436.9	4779.0	439.2	16.0 / 40.7
050	4951.1	4779.0	440.4	16.0 / 75.4
055	5478.8	4779.0	441.1	128.0 / 51.1
061	6086.8	4779.0	441.8	44.0 / 61.9
066	6554.9	4779.0	442.3	91.0 / 25.0
071	7081.5	4779.0	443.1	40.0 / 57.1
076	7621.5	4779.0	443.9	24.0 / 79.7
081	8066.8	4779.0	444.5	49.0 / 125.4
086	8647.6	4779.0	444.9	16.0 / 115.9
092	9222.7	4779.0	445.4	51.0 / 45.0
096	9610.7	4779.0	446.2	40.0 / 159.8
103	10297.0	4779.0	447.1	576.0 / 25.0
109	10884.5	4779.0	447.6	88.0 / 126.7
113	11346.4	4779.0	448.2	36.0 / 334.5
119	11876.7	4253.0	448.7	84.0 / 44.9
125	12524.0	4253.0	449.8	111.0 / 72.2

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Collins Creek</b>				
132	13166.7	4253.0	450.5	118.0 / 73.4
137	13737.1	4253.0	450.9	53.0 / 47.6
<b>Crows Creek</b>				
001	142.3	1365.0	374.4 <sup>1</sup>	22.0 / 28.0
002	162.1	1365.0	374.4 <sup>1</sup>	15.0 / 24.0
002	218.1	1365.0	374.4 <sup>1</sup>	15.0 / 24.0
003	285.4	1365.0	374.4 <sup>1</sup>	9.0 / 76.0
008	810.9	1365.0	374.4 <sup>1</sup>	55.0 / 104.0
014	1363.4	1365.0	374.4 <sup>1</sup>	130.0 / 4.0
020	1993.8	1365.0	374.4 <sup>1</sup>	60.0 / 37.0
020	2046.8	1365.0	375.0	60.0 / 37.0
024	2432.1	1365.0	375.4	21.0 / 53.4
029	2903.6	1365.0	378.3	41.0 / 27.2
035	3529.8	1365.0	380.1	61.0 / 73.0
043	4280.4	1175.0	381.5	88.0 / 59.2
050	4992.4	1175.0	383.6	53.0 / 28.7
056	5630.8	1175.0	385.5	5.0 / 182.2
061	6120.7	1175.0	386.3	70.0 / 10.0
065	6549.3	1175.0	387.7	30.0 / 30.0
066	6604.3	1175.0	391.1	30.0 / 30.0
072	7189.1	1175.0	391.3	10.0 / 28.6
082	8186.6	1175.0	396.1	30.0 / 176.0
087	8732.9	1175.0	397.7	10.0 / 104.0
094	9425.4	1175.0	400.2	53.0 / 65.5
099	9868.8	1175.0	402.1	104.0 / 26.4
102	10225.2	823.0	403.3	35.0 / 35.0
103	10261.2	823.0	403.4	35.0 / 35.0
108	10821.7	823.0	406.3	83.0 / 15.1
<b>Cub Creek</b>				
013	1309.0	2828.0	237.8 <sup>1</sup>	284.0 / 289.0
020	2000.0	2828.0	237.8 <sup>1</sup>	149.0 / 200.0
025	2500.0	2828.0	237.8 <sup>1</sup>	97.0 / 265.0
029	2922.0	2828.0	237.8 <sup>1</sup>	70.0 / 247.0
039	3925.0	2828.0	237.8 <sup>1</sup>	165.0 / 252.0
045	4500.0	2828.0	237.8 <sup>1</sup>	145.0 / 174.0
050	5000.0	2828.0	237.8 <sup>1</sup>	159.0 / 244.0
055	5500.0	2828.0	237.8 <sup>1</sup>	208.0 / 281.0
060	6000.0	2828.0	237.8 <sup>1</sup>	282.0 / 104.0
065	6500.0	2828.0	237.8 <sup>1</sup>	228.0 / 152.0
071	7079.0	2828.0	237.8 <sup>1</sup>	191.0 / 197.0
076	7644.0	2657.0	237.8 <sup>1</sup>	246.0 / 185.0
080	8000.0	2657.0	237.8 <sup>1</sup>	221.0 / 134.0
085	8500.0	2657.0	237.8 <sup>1</sup>	58.0 / 199.0
091	9140.0	2657.0	237.8 <sup>1</sup>	82.0 / 244.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Cub Creek</b>				
100	10000.0	2657.0	237.8 <sup>1</sup>	164.0 / 189.0
106	10558.0	2657.0	237.8 <sup>1</sup>	347.0 / 76.0
111	11108.0	2657.0	237.8 <sup>1</sup>	133.0 / 351.0
115	11500.0	2657.0	238.0	239.0 / 350.0
125	12545.0	2445.0	239.6	100.0 / 396.0
130	13000.0	2445.0	239.9	13.0 / 519.0
136	13587.0	2445.0	240.2	165.0 / 140.0
140	14000.0	2445.0	240.8	328.0 / 36.0
146	14584.0	2228.0	241.7	243.0 / 99.0
150	15000.0	2228.0	242.4	209.0 / 97.0
155	15500.0	2228.0	243.3	237.0 / 13.0
160	16049.0	2228.0	244.3	60.0 / 362.0
165	16500.0	2228.0	244.9	94.0 / 259.0
170	17000.0	2228.0	246.2	67.0 / 169.0
175	17500.0	2228.0	247.5	389.0 / 13.0
182	18211.0	2228.0	249.7	99.0 / 213.0
189	18872.0	2228.0	255.3	153.0 / 384.0
195	19520.0	2228.0	255.6	44.0 / 272.0
199	19863.0	2228.0	255.9	55.0 / 353.0
207	20662.0	2228.0	256.5	465.0 / 12.0
211	21065.0	2228.0	257.1	209.0 / 13.0
214	21443.0	2228.0	259.3	263.0 / 13.0
218	21809.0	2228.0	260.6	15.0 / 100.0
224	22432.0	2026.0	263.4	31.0 / 161.0
229	22855.0	2026.0	265.0	18.0 / 229.0
234	23355.0	2026.0	266.7	12.0 / 249.0
238	23843.0	2026.0	268.8	112.0 / 87.0
244	24355.0	2026.0	270.6	69.0 / 30.0
<b>Deep River</b>				
005	5.2	54900.0	176.5	765.0 / 48.1
010	964.3	54900.0	176.4	241.0 / 156.8
017	1711.1	54900.0	176.7	449.0 / 986.0
022	2250.0	54900.0	176.7	363.0 / 938.0
028	2791.0	54900.0	176.8	157.0 / 156.8
038	3750.0	54900.0	177.0	157.0 / 156.8
046	4620.8	54900.0	177.3	293.0 / 439.7
055	5490.8	54900.0	177.5	234.0 / 156.8
063	6316.8	54900.0	177.7	322.0 / 183.6
068	6779.5	54900.0	177.8	157.0 / 156.8
077	7737.4	54900.0	178.1	358.0 / 249.0
084	8434.7	54900.0	178.2	271.0 / 156.8
091	9125.0	54900.0	178.4	358.0 / 186.8
102	10209.2	54900.0	178.6	157.0 / 156.8
114	11403.3	54900.0	178.9	170.0 / 156.8

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River</b>				
117	11676.2	54900.0	178.5	1600.0 / 725.0
117	11721.2	54900.0	181.6	1600.0 / 725.0
127	12681.6	54900.0	182.2	278.0 / 274.6
133	13251.2	54900.0	182.3	304.0 / 195.9
142	14222.0	54900.0	182.7	340.0 / 342.0
143	14278.0	54900.0	182.8	340.0 / 342.0
150	15000.0	54900.0	183.0	173.0 / 194.1
154	15359.8	54900.0	183.1	300.0 / 320.0
155	15491.8	54900.0	183.5	300.0 / 320.0
160	16038.2	54900.0	183.6	288.0 / 186.0
169	16940.8	54900.0	183.8	241.0 / 258.9
171	17054.9	54900.0	185.6	400.0 / 260.0
178	17797.8	54900.0	185.6	157.0 / 156.8
190	18971.4	54900.0	186.9	280.0 / 156.8
197	19709.9	54900.0	187.8	338.0 / 156.8
208	20773.9	54900.0	189.5	157.0 / 156.8
220	21961.6	54900.0	191.8	157.0 / 156.8
226	22584.3	54900.0	193.7	157.0 / 156.8
232	23250.0	54900.0	194.9	157.0 / 156.8
237	23665.4	54600.0	196.4	156.0 / 156.0
242	24233.8	54600.0	197.6	156.0 / 156.0
249	24947.8	54600.0	198.7	156.0 / 156.1
255	25500.0	54600.0	199.7	220.0 / 156.0
262	26158.6	54600.0	200.4	156.0 / 156.0
270	27000.0	54600.0	201.3	156.0 / 156.0
278	27750.0	54600.0	202.0	156.0 / 156.0
286	28598.8	54600.0	203.1	156.0 / 330.9
294	29374.0	54600.0	203.7	156.0 / 173.1
300	30000.0	54600.0	204.1	156.0 / 156.1
308	30750.0	54500.0	204.9	155.0 / 155.4
315	31462.5	54500.0	205.6	155.0 / 155.3
322	32223.6	54500.0	206.4	245.0 / 155.3
328	32782.5	54500.0	206.8	209.0 / 299.9
337	33679.3	54500.0	207.3	155.0 / 155.3
344	34432.7	54500.0	207.9	264.0 / 203.2
351	35101.8	54500.0	208.5	155.0 / 155.3
359	35928.0	54500.0	209.2	155.0 / 155.3
367	36718.1	54500.0	210.3	133.0 / 132.9
374	37428.0	53200.0	212.1	366.0 / 203.2
382	38178.0	53200.0	213.0	490.0 / 154.6
391	39092.0	53200.0	213.8	522.0 / 132.9
397	39678.0	53200.0	214.3	506.0 / 132.9
404	40428.0	53200.0	214.9	597.0 / 132.9
412	41178.0	53200.0	215.4	688.0 / 138.4

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River</b>				
420	42041.7	53200.0	215.9	435.0 / 268.8
428	42806.3	53200.0	216.3	300.0 / 254.3
434	43428.0	53200.0	216.7	209.0 / 172.2
442	44162.9	53200.0	217.2	243.0 / 132.8
449	44891.9	53200.0	217.6	215.0 / 183.4
457	45741.4	53200.0	218.2	133.0 / 394.2
464	46362.8	53200.0	218.5	133.0 / 418.5
471	47104.6	53200.0	218.8	133.0 / 322.3
476	47639.6	53200.0	219.1	201.0 / 211.6
484	48397.4	53200.0	219.5	219.0 / 147.9
493	49266.8	53200.0	219.9	236.0 / 132.6
501	50057.8	53200.0	220.3	205.0 / 132.6
510	50958.1	53200.0	220.9	260.0 / 213.0
515	51471.9	53200.0	221.1	280.0 / 191.6
521	52128.2	53200.0	221.4	332.0 / 132.6
529	52926.4	53200.0	221.7	438.0 / 132.6
537	53676.2	53200.0	222.0	488.0 / 132.5
548	54774.1	53200.0	222.4	224.0 / 413.8
554	55361.0	53100.0	222.6	204.0 / 476.3
557	55714.5	53100.0	222.7	132.0 / 416.0
558	55766.5	53100.0	223.0	132.0 / 416.0
562	56156.7	53100.0	223.2	191.0 / 418.0
569	56919.8	53100.0	223.5	132.0 / 403.1
574	57420.3	53100.0	223.7	132.0 / 417.7
581	58117.7	53100.0	223.9	355.0 / 131.4
593	59299.3	53100.0	224.3	388.0 / 357.0
601	60067.9	53100.0	224.5	380.0 / 271.2
608	60751.6	53100.0	224.7	475.0 / 152.2
612	61189.9	53100.0	224.8	475.0 / 131.4
628	62805.4	53100.0	225.3	500.0 / 135.0
640	63967.7	52900.0	225.5	269.0 / 130.1
645	64491.0	52900.0	225.7	292.0 / 130.1
652	65169.8	52900.0	226.1	321.0 / 595.5
659	65919.8	52900.0	226.3	137.0 / 917.9
667	66669.8	52900.0	226.4	141.0 / 955.7
682	68169.8	52900.0	226.6	386.0 / 528.5
689	68919.8	52900.0	226.8	473.0 / 390.5
697	69746.6	52900.0	226.9	434.0 / 218.2
704	70419.8	52900.0	227.0	350.0 / 129.8
711	71136.3	52900.0	227.2	318.0 / 129.8
717	71737.1	52900.0	227.4	416.0 / 129.8
725	72499.4	52900.0	227.6	774.0 / 129.8
741	74080.2	52900.0	227.8	128.0 / 127.9
749	74919.8	52700.0	228.1	199.0 / 386.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River</b>				
757	75687.4	52700.0	228.2	128.0 / 324.0
764	76419.8	52700.0	228.4	178.0 / 600.0
778	77827.3	52700.0	228.8	162.0 / 127.8
787	78669.8	52700.0	229.0	171.0 / 129.6
794	79408.0	52700.0	229.2	128.0 / 127.8
801	80148.9	52700.0	229.4	128.0 / 127.8
809	80917.2	52700.0	229.6	128.0 / 359.9
817	81667.2	52700.0	229.8	341.0 / 199.9
824	82355.8	52700.0	230.0	410.0 / 352.6
832	83167.2	52700.0	230.0	128.0 / 127.8
839	83917.2	52700.0	230.2	128.0 / 127.8
848	84758.5	52700.0	230.4	154.0 / 127.8
854	85417.2	52700.0	230.6	128.0 / 142.3
862	86167.2	52700.0	230.7	128.0 / 127.8
863	86313.8	52700.0	230.4	170.0 / 175.0
864	86365.8	52700.0	231.0	170.0 / 175.0
864	86444.7	52700.0	231.6	128.0 / 127.8
865	86515.3	52700.0	231.6	192.0 / 203.0
865	86549.3	52700.0	231.6	192.0 / 203.0
869	86917.6	52700.0	232.2	128.0 / 489.7
875	87546.6	52700.0	232.3	128.0 / 340.1
882	88202.9	52700.0	232.5	640.0 / 246.9
892	89242.4	52700.0	232.9	500.0 / 200.0
901	90143.7	52600.0	232.7	500.0 / 200.0
909	90908.0	52600.0	232.9	200.0 / 200.0
916	91612.4	52600.0	232.9	177.0 / 171.0
917	91657.4	52600.0	232.8	177.0 / 171.0
922	92159.7	52600.0	234.9	571.0 / 126.5
930	92964.3	52600.0	235.0	694.0 / 126.5
936	93567.3	52600.0	235.1	883.0 / 126.5
944	94367.8	52600.0	235.2	1042.0 / 145.4
950	94951.5	52600.0	235.3	829.0 / 226.7
959	95881.7	52600.0	235.4	460.0 / 351.6
966	96591.6	52600.0	235.5	226.0 / 333.1
973	97299.4	52600.0	235.6	278.0 / 245.9
974	97421.0	52600.0	235.6	254.0 / 254.0
976	97559.0	52600.0	235.8	254.0 / 254.0
978	97835.9	52600.0	236.2	286.0 / 382.0
989	98937.2	52600.0	236.4	243.0 / 290.7
995	99457.7	52500.0	236.4	347.0 / 145.7
1003	100266.4	52500.0	236.5	289.0 / 125.7
1011	101081.6	52500.0	236.6	300.0 / 125.7
1018	101823.6	52500.0	236.7	276.0 / 125.7
1024	102358.4	52500.0	236.8	299.0 / 125.7

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River</b>				
1034	103377.7	52500.0	237.0	270.0 / 125.7
1041	104066.0	52500.0	237.1	356.0 / 125.7
1045	104531.6	52500.0	237.1	380.0 / 125.7
1056	105584.9	52500.0	237.3	380.0 / 127.7
1063	106310.4	52500.0	237.4	606.0 / 125.7
1072	107246.2	52500.0	237.6	315.0 / 476.6
1081	108140.8	52500.0	237.6	424.0 / 286.2
1092	109248.1	52000.0	237.8	406.0 / 668.3
1098	109845.0	52000.0	237.9	429.0 / 455.6
1104	110365.8	52000.0	238.0	586.0 / 402.0
1113	111326.2	52000.0	238.1	998.0 / 122.2
1122	112228.5	52000.0	238.2	1177.0 / 169.0
1131	113148.3	52000.0	238.3	1147.0 / 123.1
1138	113782.9	52000.0	238.4	815.0 / 342.1
1148	114800.7	52000.0	238.5	122.0 / 1114.4
1157	115734.7	52000.0	238.7	122.0 / 1958.9
1168	116777.2	52000.0	238.8	122.0 / 3285.9
1182	118209.4	52000.0	238.9	122.0 / 3141.7
1192	119165.8	52000.0	238.9	122.0 / 3015.0
1197	119653.1	52000.0	239.0	238.0 / 1700.0
1197	119701.1	52000.0	239.1	238.0 / 1700.0
1211	121108.4	52000.0	239.2	536.0 / 2263.6
1226	122608.4	52000.0	239.3	480.0 / 332.6
1234	123358.4	52000.0	239.4	197.0 / 759.2
1241	124108.4	52000.0	239.4	197.0 / 570.4
1249	124858.4	52000.0	239.5	196.0 / 871.4
1258	125828.8	52000.0	239.6	926.0 / 365.8
1265	126455.5	52000.0	239.7	1148.0 / 255.5
1271	127108.4	52000.0	239.7	882.0 / 548.0
1279	127858.4	52000.0	239.8	769.0 / 512.4
1286	128608.4	52000.0	239.8	891.0 / 366.5
1295	129515.0	52000.0	239.9	954.0 / 335.2
1301	130108.4	52000.0	239.9	837.0 / 196.3
1316	131608.4	52000.0	240.1	450.0 / 290.0
1324	132428.0	51900.0	240.1	350.0 / 600.0
1326	132571.0	51900.0	240.1	350.0 / 600.0
1337	133741.0	51600.0	241.0	616.0 / 652.4
1348	134754.0	51600.0	241.2	914.0 / 73.0
1356	135582.0	51600.0	241.7	728.0 / 107.0
1364	136396.0	51600.0	242.5	523.0 / 114.0
1371	137093.0	51600.0	242.8	367.0 / 73.0
1378	137803.0	51600.0	243.2	400.0 / 112.0
1386	138608.0	51600.0	243.8	523.0 / 80.0
1394	139416.0	51500.0	244.5	676.0 / 78.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River</b>				
1401	140114.0	51500.0	244.7	548.0 / 141.0
1412	141159.0	51500.0	245.4	539.0 / 154.0
1421	142080.0	51500.0	245.9	621.0 / 118.0
1428	142849.0	51500.0	246.3	685.0 / 102.0
1435	143504.0	51500.0	246.9	749.0 / 145.0
1447	144727.0	51500.0	247.6	445.0 / 250.0
1460	145997.0	51500.0	248.2	308.0 / 774.0
1465	146528.0	51500.0	248.4	157.0 / 835.0
1478	147830.0	51500.0	249.0	696.0 / 608.0
1493	149265.0	51500.0	249.4	1302.0 / 48.0
1500	150039.0	51500.0	249.4	1389.0 / 134.0
1520	151957.0	51500.0	249.7	235.0 / 1110.0
1526	152607.0	51500.0	249.8	85.0 / 1096.0
1533	153297.0	51400.0	250.2	1317.0 / 969.0
<b>Deep River Tributary 5</b>				
008	821.2	511.0	239.5 <sup>1</sup>	16.0 / 17.1
014	1417.6	511.0	239.5 <sup>1</sup>	15.0 / 44.8
017	1704.2	511.0	239.5 <sup>1</sup>	21.0 / 28.0
022	2153.3	511.0	239.5 <sup>1</sup>	16.0 / 15.6
026	2568.6	511.0	239.5 <sup>1</sup>	18.0 / 18.5
026	2626.6	511.0	239.5 <sup>1</sup>	18.0 / 18.5
028	2804.2	511.0	239.5 <sup>1</sup>	32.0 / 21.1
030	2979.2	511.0	239.5 <sup>1</sup>	41.0 / 27.5
036	3570.3	511.0	242.2	15.0 / 15.2
043	4333.3	511.0	262.5	15.0 / 25.5
048	4780.0	511.0	273.8	18.0 / 17.3
<b>Deep River Tributary 6</b>				
005	456.4	701.0	239.5 <sup>1</sup>	31.0 / 36.8
009	868.0	701.0	239.5 <sup>1</sup>	15.0 / 14.8
013	1331.1	701.0	239.5 <sup>1</sup>	89.0 / 15.2
018	1807.6	701.0	239.5 <sup>1</sup>	16.0 / 26.0
021	2055.2	701.0	239.5 <sup>1</sup>	24.0 / 18.0
021	2129.2	701.0	239.5 <sup>1</sup>	24.0 / 18.0
025	2502.2	701.0	239.5 <sup>1</sup>	16.0 / 32.3
029	2903.4	701.0	239.5 <sup>1</sup>	21.0 / 15.9
035	3495.7	701.0	239.5 <sup>1</sup>	51.0 / 54.9
040	3951.6	701.0	239.5 <sup>1</sup>	41.0 / 29.1
044	4353.1	701.0	240.8	35.0 / 20.2
050	5012.2	701.0	245.4	15.0 / 36.8
056	5565.0	701.0	249.2	17.0 / 29.5
060	5977.7	701.0	252.3	14.0 / 50.4
<b>Deep River Tributary 7</b>				
036	3631.6	1103.0	239.9 <sup>1</sup>	38.0 / 29.7
042	4159.4	1103.0	239.9 <sup>1</sup>	210.0 / 30.5

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Deep River Tributary 7</b>				
044	4432.9	1103.0	239.9 <sup>1</sup>	100.0 / 84.5
051	5092.4	1103.0	239.9 <sup>1</sup>	80.0 / 130.2
056	5647.0	1103.0	239.9 <sup>1</sup>	162.0 / 147.4
062	6240.8	1103.0	239.9 <sup>1</sup>	97.0 / 157.6
063	6306.8	1103.0	239.9 <sup>1</sup>	97.0 / 157.6
067	6670.7	1103.0	239.9 <sup>1</sup>	15.0 / 151.1
074	7395.7	1103.0	239.9 <sup>1</sup>	33.0 / 65.7
079	7916.6	1103.0	239.9 <sup>1</sup>	39.0 / 61.8
084	8375.6	1103.0	239.9 <sup>1</sup>	15.0 / 109.8
087	8713.5	1103.0	241.4	65.0 / 44.4
092	9194.9	1103.0	244.3	70.0 / 54.9
097	9732.2	1103.0	248.0	119.0 / 15.2
102	10159.8	1103.0	250.2	127.0 / 36.4
108	10761.7	1103.0	254.2	87.0 / 16.5
113	11325.2	1103.0	258.5	17.0 / 78.7
123	12291.7	783.0	266.1	113.0 / 25.7
130	12962.1	783.0	273.2	17.0 / 70.0
135	13458.6	783.0	280.5	27.0 / 23.9
138	13764.4	783.0	286.3	12.0 / 25.0
143	14340.2	783.0	294.4	25.0 / 16.8
148	14769.2	783.0	299.7	17.0 / 16.8
<b>Deep River Tributary 8</b>				
002	237.7	601.0	240.1 <sup>1</sup>	10.0 / 9.5
003	333.9	601.0	240.1 <sup>1</sup>	11.0 / 11.0
004	369.9	601.0	240.1 <sup>1</sup>	11.0 / 11.0
005	508.7	601.0	240.1 <sup>1</sup>	10.0 / 12.1
006	580.5	601.0	240.1 <sup>1</sup>	100.0 / 110.0
010	995.9	601.0	240.1 <sup>1</sup>	163.0 / 156.0
013	1339.3	601.0	240.1 <sup>1</sup>	135.0 / 141.1
016	1623.4	601.0	240.1 <sup>1</sup>	188.0 / 122.4
022	2192.5	601.0	240.1 <sup>1</sup>	80.0 / 126.4
028	2787.5	601.0	240.1 <sup>1</sup>	97.0 / 96.5
033	3273.8	601.0	240.1 <sup>1</sup>	24.0 / 102.4
038	3785.4	601.0	240.1 <sup>1</sup>	50.0 / 42.0
044	4350.0	601.0	240.1 <sup>1</sup>	41.0 / 12.0
046	4605.5	601.0	240.1 <sup>1</sup>	17.0 / 12.0
051	5078.9	601.0	242.4	13.0 / 22.4
054	5421.0	601.0	245.1	11.0 / 11.0
<b>Dry Creek</b>				
300	30023.2	3504.0	458.9	21.0 / 216.0
306	30640.7	3504.0	459.5	200.0 / 35.0
312	31193.2	3504.0	460.2	25.0 / 135.0
320	32033.0	3504.0	462.1	50.0 / 202.0
327	32706.3	3504.0	463.4	80.0 / 20.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Dry Creek</b>				
336	33602.0	3325.0	465.8	25.0 / 45.0
342	34243.7	3325.0	467.8	80.0 / 41.0
348	34843.0	3325.0	468.7	184.0 / 25.0
355	35548.9	3325.0	469.5	118.0 / 136.0
364	36353.4	3325.0	470.4	80.0 / 25.0
370	37041.7	3325.0	471.8	50.0 / 47.0
377	37656.3	3325.0	472.5	75.0 / 26.0
383	38267.9	3325.0	473.5	210.0 / 25.0
389	38938.2	3325.0	473.9	26.0 / 184.0
396	39597.7	3325.0	474.7	16.0 / 146.0
403	40251.9	3136.0	475.5	48.0 / 119.0
411	41051.2	3136.0	475.9	64.0 / 361.0
415	41516.6	3136.0	476.3	22.0 / 54.0
418	41846.8	3136.0	478.7	62.0 / 31.0
419	41886.8	3136.0	480.0	62.0 / 31.0
425	42497.5	2943.0	481.4	29.0 / 106.0
430	43033.8	2943.0	482.8	89.0 / 53.0
436	43562.6	2943.0	483.8	106.0 / 104.0
440	44038.0	2943.0	484.5	220.0 / 121.0
445	44534.5	2943.0	485.0	158.0 / 130.0
451	45129.9	2943.0	485.7	286.0 / 28.0
459	45895.5	2943.0	486.4	80.0 / 150.0
460	45963.5	2943.0	486.3	80.0 / 150.0
466	46575.0	2763.0	487.4	40.0 / 361.0
472	47193.6	2763.0	488.2	23.0 / 139.0
479	47871.2	2763.0	490.3	96.0 / 63.0
484	48427.8	2595.0	491.7	110.0 / 20.0
490	48950.0	2595.0	492.7	39.0 / 36.0
497	49692.5	2449.0	495.3	26.0 / 26.0
497	49746.0	2449.0	496.1	26.0 / 26.0
505	50515.4	2449.0	497.5	65.0 / 20.0
512	51198.0	2449.0	499.5	40.0 / 75.0
519	51915.1	2449.0	501.6	61.0 / 86.0
526	52622.0	2449.0	503.5	69.0 / 31.0
532	53170.9	2278.0	505.4	46.0 / 63.0
537	53694.7	2278.0	506.6	220.0 / 30.0
544	54375.4	2278.0	508.0	45.0 / 135.0
550	55015.0	2278.0	510.8	103.0 / 47.0
556	55589.1	2278.0	512.5	25.0 / 130.0
564	56372.6	2278.0	514.8	81.0 / 44.0
570	57007.8	2278.0	516.7	11.0 / 98.0
576	57596.5	2278.0	518.1	132.0 / 60.0
583	58317.3	2278.0	519.1	64.0 / 131.0
590	58951.0	2278.0	520.1	86.0 / 65.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Dry Creek</b>				
595	59468.2	2278.0	520.5	53.0 / 51.0
596	59552.2	2278.0	522.4	53.0 / 51.0
603	60289.7	2278.0	522.8	86.0 / 81.0
610	60996.4	1649.0	524.0	57.0 / 208.0
616	61618.9	1649.0	524.8	147.0 / 86.0
623	62307.3	1649.0	526.1	93.0 / 91.0
629	62919.8	1649.0	527.3	75.0 / 95.0
638	63776.4	679.0	529.1	25.0 / 80.0
645	64522.5	679.0	532.3	50.0 / 55.0
<b>East Price Creek</b>				
067	6676.4	1500.0	406.5	35.0 / 50.0
072	7157.5	1500.0	409.1	35.0 / 64.0
075	7546.8	1500.0	411.8	65.0 / 20.0
080	8043.3	1500.0	416.1	30.0 / 50.0
084	8416.5	1500.0	418.7	30.0 / 50.0
088	8831.2	1500.0	423.5	20.0 / 60.0
092	9194.6	1500.0	425.8	15.0 / 64.0
<b>Folkner Branch</b>				
072	7184.4	1120.0	237.8 <sup>1</sup>	163.0 / 16.0
080	8000.0	1120.0	237.8 <sup>1</sup>	181.0 / 58.0
085	8500.0	1120.0	237.8 <sup>1</sup>	77.0 / 59.0
090	9000.0	1120.0	237.8 <sup>1</sup>	71.0 / 56.0
095	9500.0	1120.0	237.8 <sup>1</sup>	48.0 / 150.0
100	10000.0	1120.0	237.8 <sup>1</sup>	70.0 / 32.0
105	10500.0	1120.0	237.8 <sup>1</sup>	38.0 / 108.0
110	11000.0	1120.0	237.8 <sup>1</sup>	59.0 / 68.0
115	11500.0	765.0	237.8 <sup>1</sup>	73.0 / 28.0
120	12000.0	765.0	237.8 <sup>1</sup>	69.0 / 22.0
125	12500.0	765.0	237.8 <sup>1</sup>	31.0 / 36.0
131	13055.9	765.0	239.3	33.0 / 23.0
131	13095.9	765.0	240.3	33.0 / 23.0
135	13500.0	765.0	242.2	51.0 / 27.0
140	14000.0	765.0	246.2	40.0 / 29.0
145	14500.0	765.0	250.0	43.0 / 17.0
151	15052.6	765.0	252.3	21.0 / 21.0
151	15127.6	765.0	254.4	21.0 / 21.0
155	15500.0	765.0	255.6	6.0 / 30.0
<b>Georges Creek</b>				
037	3749.3	3681.0	224.9 <sup>1</sup>	303.0 / 539.0
047	4726.4	3653.0	224.9 <sup>1</sup>	311.0 / 111.4
051	5070.5	3653.0	224.9 <sup>1</sup>	512.0 / 53.2
056	5607.8	3653.0	224.9 <sup>1</sup>	498.0 / 16.8
062	6214.4	3653.0	224.9 <sup>1</sup>	206.0 / 305.9
066	6567.3	3653.0	224.9 <sup>1</sup>	134.0 / 543.8

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Georges Creek</b>				
073	7292.7	3653.0	224.9 <sup>1</sup>	261.0 / 341.9
078	7757.3	3653.0	224.9 <sup>1</sup>	129.0 / 506.7
084	8411.9	3494.0	224.9 <sup>1</sup>	180.0 / 442.2
089	8942.8	3494.0	224.9 <sup>1</sup>	28.0 / 31.1
090	8995.3	3494.0	224.9 <sup>1</sup>	28.0 / 31.1
095	9544.3	3494.0	224.9 <sup>1</sup>	455.0 / 16.2
101	10063.0	3133.0	224.9 <sup>1</sup>	589.0 / 15.1
102	10215.8	3133.0	224.9 <sup>1</sup>	448.0 / 15.1
108	10828.3	3133.0	224.9 <sup>1</sup>	385.0 / 122.4
114	11408.3	3133.0	224.9 <sup>1</sup>	448.0 / 15.1
128	12836.3	3133.0	224.9 <sup>1</sup>	427.0 / 76.5
135	13450.2	3065.0	224.9 <sup>1</sup>	274.0 / 55.5
137	13746.9	3065.0	224.9 <sup>1</sup>	378.0 / 14.8
142	14203.9	3065.0	224.9 <sup>1</sup>	369.0 / 14.8
146	14621.4	3065.0	224.9 <sup>1</sup>	368.0 / 14.8
154	15418.5	3065.0	224.9 <sup>1</sup>	359.0 / 14.9
156	15645.0	3065.0	224.9 <sup>1</sup>	349.0 / 14.8
163	16331.5	3065.0	225.5	462.0 / 14.8
177	17725.0	3065.0	227.4	370.0 / 14.8
187	18731.8	3065.0	228.3	633.0 / 14.9
194	19350.8	3065.0	228.7	529.0 / 14.9
202	20217.5	3065.0	229.8	132.0 / 308.3
206	20635.3	1920.0	230.4	216.0 / 300.8
207	20685.8	1920.0	232.1	216.0 / 300.8
208	20798.1	1920.0	232.1	272.0 / 380.0
217	21743.4	1920.0	232.5	143.0 / 127.7
220	21992.2	1920.0	232.8	167.0 / 92.9
230	22959.2	1920.0	233.7	341.0 / 49.3
239	23859.1	1920.0	234.4	270.0 / 67.5
243	24309.5	1920.0	235.0	447.0 / 26.0
248	24790.2	1920.0	235.7	136.0 / 123.5
250	25039.9	1920.0	236.4	200.0 / 44.9
252	25231.6	1920.0	237.0	229.0 / 11.3
258	25849.4	1920.0	238.4	273.0 / 96.5
265	26482.1	1920.0	239.6	182.0 / 245.2
269	26887.5	1920.0	240.4	175.0 / 163.2
272	27206.7	1920.0	241.1	185.0 / 153.7
280	27998.3	1920.0	242.7	246.0 / 11.3
285	28490.7	1920.0	243.5	411.0 / 76.6
289	28944.4	1539.0	244.1	195.0 / 41.1
292	29232.4	1539.0	245.0	178.0 / 28.1
299	29888.2	1539.0	246.6	149.0 / 86.4
304	30423.5	1539.0	247.4	248.0 / 9.5
308	30811.0	1539.0	248.1	94.0 / 144.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Georges Creek</b>				
311	31097.2	1539.0	248.8	178.0 / 9.5
316	31632.8	1539.0	250.6	94.0 / 74.2
318	31798.9	1539.0	251.5	141.0 / 9.5
323	32309.3	1467.0	253.4	83.0 / 69.8
327	32741.3	1467.0	254.4	56.0 / 154.4
331	33085.2	1467.0	255.9	9.0 / 207.7
335	33508.5	1467.0	258.8	81.0 / 161.0
338	33831.2	1467.0	260.3	9.0 / 246.8
<b>Georges Creek Tributary 1</b>				
005	478.6	409.0	224.9 <sup>1</sup>	9.0 / 116.1
009	893.3	409.0	224.9 <sup>1</sup>	8.0 / 57.2
011	1140.7	409.0	224.9 <sup>1</sup>	10.0 / 10.0
012	1190.7	409.0	224.9 <sup>1</sup>	10.0 / 50.0
014	1446.3	409.0	224.9 <sup>1</sup>	45.0 / 42.0
021	2092.2	409.0	226.6	8.0 / 40.2
027	2724.2	409.0	231.5	9.0 / 65.7
032	3164.8	409.0	235.0	18.0 / 27.4
036	3581.7	409.0	238.8	10.0 / 65.6
042	4193.8	409.0	243.7	8.0 / 56.1
<b>Georges Creek Tributary 2</b>				
011	1141.2	1064.0	224.9 <sup>1</sup>	4.0 / 215.0
015	1500.0	1064.0	224.9 <sup>1</sup>	114.0 / 35.1
021	2113.9	1064.0	224.9 <sup>1</sup>	123.0 / 30.9
026	2550.0	1064.0	224.9 <sup>1</sup>	41.0 / 78.8
032	3168.6	1064.0	225.2	97.0 / 36.2
035	3547.3	1064.0	226.3	196.0 / 3.8
042	4156.8	974.0	227.9	180.0 / 20.0
045	4500.0	974.0	228.9	26.0 / 123.8
052	5194.4	974.0	231.4	160.0 / 69.4
056	5574.1	974.0	232.9	3.0 / 150.0
059	5859.7	974.0	234.2	20.0 / 158.4
064	6402.6	974.0	236.7	69.0 / 32.1
<b>Greenbriar Creek</b>				
002	239.0	2951.0	586.1 <sup>1</sup>	283.0 / 244.0
005	532.9	2951.0	586.1 <sup>1</sup>	114.0 / 48.4
010	1000.0	2951.0	586.1 <sup>1</sup>	61.0 / 64.2
015	1500.0	2951.0	586.1 <sup>1</sup>	72.0 / 59.8
022	2232.9	2878.0	586.1 <sup>1</sup>	105.0 / 322.4
026	2586.4	2878.0	586.1 <sup>1</sup>	80.0 / 82.6
031	3090.3	2878.0	586.3	27.0 / 83.5
035	3500.0	2878.0	586.9	79.0 / 36.3
040	4000.0	2878.0	587.7	33.0 / 58.7
045	4500.0	2878.0	588.7	31.0 / 61.0
050	5000.0	2878.0	589.9	57.0 / 60.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Greenbriar Creek</b>				
055	5500.0	2878.0	590.7	62.0 / 73.2
061	6057.5	2878.0	592.4	16.0 / 85.7
065	6475.9	2878.0	594.2	12.0 / 39.7
070	7000.0	2878.0	596.2	275.0 / 42.6
076	7604.6	2878.0	597.0	50.0 / 137.6
080	8000.0	2878.0	597.6	85.0 / 45.0
083	8317.0	2699.0	598.4	90.0 / 35.0
089	8941.4	2699.0	600.1	53.0 / 53.0
090	8987.4	2699.0	600.6	53.0 / 53.0
095	9500.0	2339.0	601.0	35.0 / 30.0
100	10000.0	2339.0	604.7	30.0 / 16.4
105	10500.0	2339.0	606.2	22.0 / 22.8
110	11000.0	2339.0	607.4	31.0 / 17.2
115	11500.0	2339.0	609.1	17.0 / 66.9
120	12000.0	2339.0	610.1	10.0 / 12.0
126	12583.6	2339.0	614.8	62.0 / 61.0
134	13400.4	2339.0	616.3	21.0 / 58.5
140	14000.0	2339.0	617.9	42.0 / 15.1
145	14500.0	2339.0	619.4	15.0 / 193.9
150	15000.0	2218.0	620.0	103.0 / 87.9
155	15500.0	2218.0	620.8	20.0 / 206.8
162	16190.0	2218.0	622.2	64.0 / 73.5
168	16845.1	2218.0	623.6	15.0 / 229.4
175	17500.0	2218.0	624.7	35.0 / 157.5
180	18000.0	2218.0	625.8	84.0 / 79.3
185	18500.0	2218.0	626.8	17.0 / 149.4
190	19000.0	2218.0	627.7	247.0 / 42.6
194	19447.2	2218.0	627.9	57.0 / 15.0
197	19677.7	2218.0	629.4	25.0 / 26.8
197	19731.7	2218.0	630.3	25.0 / 26.8
201	20111.6	2218.0	631.1	188.0 / 120.4
208	20787.7	1693.0	631.7	106.0 / 146.4
<b>Gulf Creek</b>				
099	9873.2	2430.0	173.0 <sup>1</sup>	222.0 / 200.0
105	10474.1	2430.0	173.0 <sup>1</sup>	248.0 / 250.0
111	11141.6	2430.0	173.0 <sup>1</sup>	49.0 / 451.8
115	11527.5	2430.0	173.0 <sup>1</sup>	79.0 / 286.2
119	11884.6	2430.0	173.0 <sup>1</sup>	50.0 / 50.0
119	11928.6	2430.0	173.0 <sup>1</sup>	50.0 / 50.0
126	12577.9	2430.0	173.0 <sup>1</sup>	489.0 / 191.8
132	13239.4	2430.0	173.0 <sup>1</sup>	489.0 / 31.0
135	13526.9	2430.0	173.0 <sup>1</sup>	100.0 / 100.0
136	13558.4	2430.0	173.0 <sup>1</sup>	100.0 / 100.0
141	14104.2	2247.0	173.0 <sup>1</sup>	103.0 / 252.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Gulf Creek</b>				
147	14709.6	2247.0	173.0 <sup>1</sup>	45.0 / 308.6
154	15431.0	2247.0	173.0 <sup>1</sup>	282.0 / 36.7
161	16082.4	2247.0	173.0 <sup>1</sup>	222.0 / 25.0
165	16462.7	2247.0	173.0 <sup>1</sup>	50.0 / 50.0
165	16506.7	2247.0	173.5	50.0 / 50.0
168	16828.4	2247.0	174.1	138.0 / 218.4
172	17217.3	2247.0	174.5	54.0 / 263.2
177	17667.9	2247.0	175.7	19.0 / 359.2
185	18458.3	2247.0	177.8	375.0 / 48.9
190	19011.3	2247.0	178.7	291.0 / 179.4
197	19669.5	2247.0	179.9	130.0 / 126.9
202	20188.1	1864.0	180.7	121.0 / 164.0
211	21064.7	1864.0	182.1	202.0 / 40.0
217	21651.8	1864.0	183.0	191.0 / 57.1
225	22477.4	1864.0	184.7	22.0 / 413.9
229	22921.6	1864.0	185.3	26.0 / 424.3
233	23326.5	1864.0	186.0	31.0 / 262.3
237	23688.7	1864.0	186.6	25.0 / 128.1
244	24385.8	1864.0	189.3	25.0 / 295.6
251	25077.8	1864.0	190.3	147.0 / 148.3
256	25632.3	1864.0	191.0	40.0 / 221.9
<b>Harlands Creek</b>				
117	116.7	4180.0	331.4 <sup>1</sup>	16.0 / 26.5
005	500.0	4180.0	331.4 <sup>1</sup>	22.0 / 30.5
010	1000.0	4180.0	331.4 <sup>1</sup>	23.0 / 47.1
015	1522.2	4180.0	331.4 <sup>1</sup>	40.0 / 35.0
020	2000.0	4180.0	334.0	70.0 / 47.2
024	2369.5	4180.0	335.9	80.0 / 80.0
024	2409.5	4180.0	336.0	80.0 / 80.0
026	2621.6	4180.0	336.2	35.0 / 50.0
030	3000.0	4180.0	338.6	113.0 / 21.8
035	3500.0	4180.0	340.7	87.0 / 21.0
040	3994.5	4180.0	343.8	29.0 / 49.6
045	4500.0	4180.0	347.3	37.0 / 37.3
050	5000.0	4180.0	350.6	26.0 / 103.1
055	5500.0	4047.0	352.4	147.0 / 23.3
060	6000.0	4047.0	353.8	115.0 / 24.0
065	6500.0	4047.0	355.3	142.0 / 60.1
071	7063.3	4047.0	356.4	43.0 / 108.4
077	7680.8	4047.0	357.8	314.0 / 63.2
081	8101.0	4047.0	358.5	285.0 / 43.9
089	8862.0	4047.0	360.0	30.0 / 360.0
095	9500.0	4047.0	361.9	32.0 / 67.8
100	10000.0	4047.0	364.7	33.0 / 39.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Harlands Creek</b>				
105	10500.0	4047.0	366.6	18.0 / 69.5
110	11000.0	3918.0	367.8	119.0 / 79.5
115	11500.0	3918.0	368.3	53.0 / 52.0
120	12000.0	3918.0	369.0	248.0 / 44.8
126	12582.1	3918.0	369.1	21.0 / 56.3
130	13000.0	3918.0	370.6	24.0 / 109.0
135	13500.0	3918.0	372.1	93.0 / 49.5
140	14000.0	3918.0	373.3	24.0 / 85.8
145	14532.6	3918.0	374.4	86.0 / 106.2
149	14938.6	3918.0	375.2	328.0 / 38.0
155	15500.0	3780.0	376.6	34.0 / 277.6
162	16171.0	3780.0	377.8	109.0 / 53.0
169	16851.2	3780.0	381.8	20.0 / 40.7
174	17408.2	3780.0	387.1	17.0 / 107.0
175	17544.9	3780.0	387.8	41.0 / 40.2
176	17619.9	3780.0	390.4	41.0 / 40.2
179	17868.9	3780.0	390.7	48.0 / 86.4
185	18500.0	3780.0	392.6	29.0 / 57.6
190	19000.0	3780.0	394.5	72.0 / 25.0
196	19557.2	3604.0	396.0	52.0 / 72.1
200	20000.0	3604.0	397.2	59.0 / 61.7
204	20435.4	3604.0	398.1	22.0 / 72.4
210	21000.0	3604.0	399.8	30.0 / 70.1
215	21500.0	3604.0	401.0	38.0 / 73.6
220	22000.0	3604.0	401.9	58.0 / 47.6
224	22429.9	3604.0	402.6	38.0 / 140.0
225	22469.9	3604.0	403.2	38.0 / 140.0
231	23148.7	3424.0	403.4	400.0 / 35.0
235	23500.0	3424.0	403.5	470.0 / 50.0
240	24000.0	3424.0	403.5	40.0 / 75.0
244	24385.2	3424.0	404.1	55.0 / 45.0
244	24424.2	3424.0	404.7	55.0 / 45.0
250	25000.0	3424.0	405.5	139.0 / 23.0
255	25500.0	3424.0	406.1	23.0 / 102.7
259	25933.3	3307.0	407.0	20.0 / 105.1
267	26656.3	3307.0	408.3	153.0 / 158.0
274	27430.6	3307.0	409.3	48.0 / 92.5
280	28000.0	3307.0	410.8	45.0 / 76.9
282	28170.1	3307.0	411.2	45.0 / 45.0
282	28210.1	3307.0	411.7	45.0 / 45.0
285	28500.0	3307.0	412.5	242.0 / 33.0
290	29000.0	3307.0	413.0	92.0 / 135.6
295	29500.0	3307.0	413.6	100.0 / 61.4
300	30000.0	3307.0	414.7	140.0 / 37.9

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Harlands Creek</b>				
305	30500.0	3307.0	415.5	20.0 / 98.7
310	31000.0	3307.0	417.8	297.0 / 34.0
315	31500.0	3307.0	418.4	40.0 / 129.1
320	32000.0	3307.0	419.3	94.0 / 89.7
325	32500.0	3148.0	420.2	268.0 / 30.0
331	33125.9	3148.0	420.8	224.0 / 40.5
335	33500.0	3148.0	421.1	85.0 / 65.4
341	34134.9	3148.0	422.1	21.0 / 165.1
345	34500.0	3148.0	422.8	311.0 / 33.0
350	35000.0	3148.0	423.3	122.0 / 37.0
355	35500.0	3148.0	424.1	36.0 / 83.8
359	35938.5	2962.0	425.0	32.0 / 135.3
364	36411.1	2683.0	425.5	152.0 / 87.4
365	36543.5	2683.0	425.5	30.0 / 29.7
367	36716.5	2683.0	426.6	33.0 / 33.0
369	36916.0	2683.0	426.8	101.0 / 207.2
370	36956.5	2683.0	427.8	101.0 / 207.2
374	37428.0	2683.0	427.9	276.0 / 94.1
374	37428.0	2683.0	427.9	276.0 / 94.1
380	38008.0	2642.0	428.0	145.0 / 263.7
385	38502.0	2642.0	428.2	77.0 / 204.2
389	38937.0	2642.0	428.6	122.0 / 51.8
394	39413.0	2642.0	429.5	45.0 / 86.0
399	39883.0	2642.0	430.6	42.0 / 79.7
404	40390.0	2418.0	431.5	28.0 / 182.6
409	40881.0	2418.0	432.0	37.0 / 157.7
414	41358.0	1784.0	432.7	85.0 / 89.0
420	41996.0	1784.0	433.8	107.0 / 91.2
425	42533.0	1245.0	435.2	109.0 / 26.2
431	43148.0	1245.0	438.2	44.0 / 56.4
438	43819.0	1245.0	442.0	31.0 / 95.4
444	44368.0	1245.0	443.5	209.0 / 15.6
448	44835.0	1245.0	444.6	70.0 / 108.8
<b>Harts Creek</b>				
005	475.4	1508.0	356.8 <sup>1</sup>	21.0 / 37.7
010	1000.0	1508.0	360.9	28.0 / 29.2
015	1500.0	1508.0	364.2	96.0 / 15.0
020	2020.0	1508.0	367.7	50.0 / 60.0
024	2397.4	1508.0	371.2	50.0 / 70.0
031	3132.3	1508.0	376.6	45.0 / 20.0
036	3591.6	1508.0	378.6	40.0 / 90.0
040	4042.1	1508.0	379.9	24.0 / 85.9
046	4591.6	1508.0	384.8	17.0 / 148.5
051	5091.6	1508.0	386.7	22.0 / 255.1

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Harts Creek</b>				
056	5551.2	1508.0	389.8	44.0 / 59.6
060	6014.8	1508.0	393.6	7.0 / 107.4
066	6591.6	1508.0	395.0	91.0 / 134.6
072	7166.6	1333.0	396.3	65.0 / 68.6
076	7591.6	1333.0	398.2	38.0 / 72.3
081	8091.6	1333.0	400.6	11.0 / 139.4
086	8591.6	1333.0	402.6	118.0 / 43.6
<b>Herndon Creek</b>				
005	455.2	1413.0	237.8 <sup>1</sup>	223.0 / 243.0
008	816.9	1413.0	237.8 <sup>1</sup>	66.0 / 115.0
012	1186.1	1413.0	237.8 <sup>1</sup>	70.0 / 194.0
014	1416.8	1413.0	237.8 <sup>1</sup>	164.0 / 111.0
016	1607.6	1413.0	237.8 <sup>1</sup>	106.0 / 95.0
017	1660.6	1413.0	237.8 <sup>1</sup>	106.0 / 95.0
020	1950.0	1413.0	237.8 <sup>1</sup>	356.0 / 48.0
024	2432.5	1413.0	237.8 <sup>1</sup>	55.0 / 23.0
030	2962.3	1142.0	237.8 <sup>1</sup>	209.0 / 30.0
035	3534.0	1142.0	237.8 <sup>1</sup>	50.0 / 92.0
041	4072.0	1142.0	237.9	20.0 / 144.0
045	4499.9	1142.0	240.3	21.0 / 82.0
051	5091.2	1142.0	244.3	105.0 / 84.0
056	5567.9	1142.0	247.9	147.0 / 33.0
059	5942.7	1078.0	251.0	82.0 / 107.0
059	5943.0	1100.0	251.0	82.0 / 107.0
061	6092.0	1100.0	252.3	73.0 / 32.0
063	6310.0	1100.0	253.9	32.0 / 193.0
065	6496.0	1070.0	254.4	163.0 / 22.0
066	6610.0	1070.0	255.8	41.0 / 47.0
067	6670.0	1070.0	258.8	35.0 / 28.0
067	6735.0	1070.0	258.9	25.0 / 20.0
069	6883.0	1070.0	259.7	20.0 / 46.0
071	7088.0	1070.0	260.2	20.0 / 70.0
072	7229.0	1070.0	260.7	20.0 / 85.0
075	7453.0	1070.0	261.2	112.0 / 45.0
076	7636.0	1070.0	261.5	120.0 / 8.0
079	7873.0	1070.0	262.7	30.0 / 20.0
080	8045.0	1070.0	264.1	30.0 / 25.0
082	8168.0	1070.0	264.8	25.0 / 25.0
084	8357.0	1070.0	266.0	14.0 / 20.0
085	8509.0	1070.0	266.9	11.0 / 20.0
086	8623.0	1070.0	267.3	12.0 / 10.0
088	8758.0	1070.0	269.2	12.0 / 10.0
089	8916.0	1070.0	270.9	11.0 / 11.0
090	9050.0	1070.0	272.0	16.0 / 14.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Herndon Creek</b>				
092	9188.0	1070.0	273.4	16.0 / 20.0
093	9318.0	1070.0	274.4	11.0 / 11.0
095	9469.0	1070.0	277.9	16.0 / 20.0
097	9691.0	1070.0	279.7	18.0 / 15.0
098	9803.0	1070.0	281.2	50.0 / 11.0
099	9899.0	1070.0	283.3	50.0 / 16.0
101	10079.0	1070.0	284.1	14.0 / 32.0
102	10192.0	1070.0	284.3	12.0 / 32.0
103	10341.0	1070.0	285.5	20.0 / 16.0
105	10517.0	776.0	286.1	5.0 / 21.0
107	10739.0	776.0	288.4	10.0 / 10.0
109	10907.0	776.0	290.3	14.0 / 11.0
111	11079.0	776.0	292.9	20.0 / 32.0
112	11221.0	776.0	294.3	7.0 / 13.0
113	11332.0	776.0	295.6	17.0 / 24.0
115	11457.0	776.0	297.1	33.0 / 15.0
<b>Hill Creek</b>				
004	359.1	928.0	368.9 <sup>1</sup>	22.0 / 35.1
009	926.0	928.0	370.1	51.0 / 35.1
014	1402.2	928.0	372.3	90.0 / 16.3
016	1604.6	928.0	372.9	21.0 / 20.0
018	1771.6	928.0	377.4	21.0 / 20.0
020	1951.7	928.0	378.3	17.0 / 19.0
025	2541.9	855.0	382.1	47.0 / 127.6
032	3158.6	855.0	396.0	18.0 / 137.8
032	3208.6	855.0	397.8	18.0 / 137.8
038	3771.9	855.0	399.4	125.0 / 32.3
044	4351.0	855.0	401.0	24.0 / 81.7
049	4858.4	855.0	405.1	15.0 / 25.7
054	5388.2	855.0	411.7	35.0 / 30.0
058	5802.9	855.0	416.4	18.0 / 35.3
059	5858.9	855.0	424.0	18.0 / 35.3
064	6417.4	855.0	425.1	10.0 / 43.0
069	6878.3	855.0	429.9	99.0 / 10.0
073	7292.8	855.0	432.9	60.0 / 50.0
074	7372.8	855.0	439.1	60.0 / 60.0
076	7612.3	855.0	439.2	79.0 / 60.0
082	8188.9	357.0	439.6	54.0 / 64.8
087	8662.9	357.0	442.9	16.0 / 14.1
092	9195.2	357.0	454.2	15.0 / 15.0
097	9730.9	357.0	466.3	10.0 / 9.8
101	10055.6	357.0	472.3	54.0 / 15.0
106	10612.8	357.0	489.3	14.0 / 11.0
107	10686.8	357.0	490.1	14.0 / 11.0
110	10980.9	357.0	510.9	15.0 / 8.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Indian Creek (into Deep River)</b>				
204	20430.9	2630.0	249.7	124.0 / 43.0
210	21037.0	2073.0	251.8	24.0 / 17.0
215	21474.7	2073.0	255.8	18.0 / 82.0
220	21966.7	2073.0	260.0	48.0 / 17.0
224	22395.3	2073.0	262.9	87.0 / 35.0
229	22888.9	2073.0	266.2	17.0 / 45.0
232	23205.1	2073.0	268.4	44.0 / 42.0
234	23388.1	2073.0	269.2	20.0 / 53.0
236	23563.1	2073.0	270.2	37.0 / 32.0
237	23673.1	2073.0	271.5	37.0 / 32.0
244	24354.1	2073.0	273.1	24.0 / 24.0
247	24749.0	2073.0	276.2	23.0 / 23.0
253	25277.9	2073.0	280.4	20.0 / 23.0
257	25714.8	2073.0	283.4	76.0 / 19.0
264	26398.8	2073.0	287.8	36.0 / 20.0
268	26820.0	2073.0	292.1	17.0 / 37.0
271	27077.2	2073.0	294.8	44.0 / 23.0
273	27326.7	1802.0	298.5	15.0 / 15.0
276	27631.8	1802.0	303.3	28.0 / 27.0
282	28216.3	1802.0	307.6	38.0 / 27.0
288	28836.5	1802.0	311.5	27.0 / 40.0
292	29235.9	1802.0	314.8	26.0 / 46.0
295	29539.2	1802.0	317.4	55.0 / 38.0
300	29963.9	1802.0	320.3	86.0 / 16.0
304	30373.8	1802.0	322.6	24.0 / 85.0
312	31154.0	1802.0	325.9	55.0 / 16.0
317	31739.8	1802.0	328.4	51.0 / 37.0
320	32018.6	1802.0	329.8	21.0 / 20.0
321	32068.6	1802.0	331.4	21.0 / 20.0
326	32615.6	1802.0	333.9	43.0 / 34.0
330	33018.1	1802.0	335.6	81.0 / 31.0
<b>Kit Creek</b>				
002	169.6	3105.0	238.2 <sup>1</sup>	20.0 / 1242.0
005	500.0	3105.0	238.2 <sup>1</sup>	20.0 / 1335.0
010	1000.0	3105.0	238.2 <sup>1</sup>	20.0 / 940.0
020	2000.0	3105.0	238.2 <sup>1</sup>	256.0 / 1020.0
027	2720.4	3105.0	238.2 <sup>1</sup>	95.0 / 999.0
032	3200.6	3105.0	238.2 <sup>1</sup>	404.0 / 685.0
035	3500.0	3105.0	238.2 <sup>1</sup>	307.0 / 470.0
040	4000.0	3105.0	238.2 <sup>1</sup>	20.0 / 241.0
045	4500.0	3039.0	238.2 <sup>1</sup>	196.0 / 182.0
050	5000.0	3039.0	239.7	213.0 / 517.0
060	6000.0	3039.0	240.6	20.0 / 200.0
065	6500.0	3039.0	241.4	55.0 / 316.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Kit Creek</b>				
070	7000.0	3039.0	241.7	220.0 / 20.0
075	7470.5	2861.0	242.3	417.0 / 384.0
080	8000.0	2861.0	242.5	610.0 / 500.0
085	8500.0	2861.0	242.9	756.0 / 503.0
088	8807.9	2861.0	243.0	520.0 / 649.0
<b>Lacy Creek</b>				
002	206.1	1854.0	544.2 <sup>1</sup>	82.0 / 48.0
005	545.6	1854.0	544.2 <sup>1</sup>	70.0 / 19.0
008	818.8	1854.0	544.2 <sup>1</sup>	34.0 / 14.0
009	888.8	1854.0	539.7	11.0 / 10.0
009	928.8	1854.0	561.2	90.0 / 90.0
016	1617.5	1854.0	561.3	100.0 / 100.0
020	2000.0	1854.0	561.9	79.0 / 87.1
025	2500.0	1854.0	562.8	97.0 / 57.8
030	2973.1	1854.0	563.6	44.0 / 72.9
035	3500.0	1854.0	564.3	119.0 / 80.5
040	4000.0	1747.0	564.6	44.0 / 124.9
<b>Landrum Creek</b>				
003	316.3	4456.0	336.9 <sup>1</sup>	25.0 / 20.0
010	1000.0	4456.0	336.9 <sup>1</sup>	30.0 / 25.0
015	1500.0	4456.0	339.5	18.0 / 57.5
020	2000.0	4456.0	341.8	23.0 / 108.3
025	2500.0	4456.0	343.3	83.0 / 65.3
029	2888.6	4456.0	343.9	101.0 / 57.3
035	3500.0	4456.0	345.0	154.0 / 36.2
040	4000.0	4456.0	345.6	96.0 / 55.9
048	4820.5	4456.0	347.2	30.0 / 198.1
055	5500.0	4456.0	349.8	23.0 / 60.4
061	6065.7	4397.0	355.1	43.0 / 59.3
065	6500.0	4018.0	358.4	193.0 / 32.0
070	7000.0	4018.0	360.2	23.0 / 296.3
075	7545.4	4018.0	362.1	52.0 / 44.3
080	8000.0	4018.0	365.9	51.0 / 31.9
085	8500.0	4018.0	368.7	18.0 / 81.3
091	9080.3	4018.0	370.6	80.0 / 56.3
095	9528.8	4018.0	371.6	64.0 / 63.8
100	10000.0	4018.0	372.6	102.0 / 18.8
105	10500.0	4018.0	374.0	71.0 / 96.7
110	11000.0	4018.0	375.4	37.0 / 79.7
115	11500.0	4018.0	378.0	18.0 / 71.6
118	11769.9	4018.0	380.0	140.0 / 50.0
118	11810.4	4018.0	380.4	140.0 / 50.0
120	12000.0	3941.0	380.8	25.0 / 116.7
125	12500.0	3941.0	382.9	23.0 / 170.5

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Landrum Creek</b>				
130	12966.3	3941.0	384.8	77.0 / 77.0
135	13500.0	3941.0	386.9	89.0 / 44.5
140	14000.0	3941.0	388.3	39.0 / 51.3
145	14500.0	3941.0	390.6	49.0 / 139.5
150	15000.0	3941.0	392.1	123.0 / 39.0
155	15500.0	3941.0	393.8	20.0 / 152.0
160	16000.0	3941.0	396.2	176.0 / 32.0
165	16455.8	3941.0	398.0	218.0 / 38.0
170	17000.0	3941.0	400.2	39.0 / 43.3
175	17500.0	3941.0	402.3	59.0 / 34.3
180	18000.0	3941.0	403.6	92.0 / 86.6
185	18500.0	3941.0	404.4	144.0 / 147.5
190	19000.0	3941.0	404.9	99.0 / 181.2
195	19500.0	3771.0	405.6	20.0 / 92.2
200	20000.0	3771.0	406.7	42.0 / 80.1
205	20545.1	3771.0	408.3	36.0 / 74.2
210	21000.0	3771.0	410.3	15.0 / 130.3
215	21500.0	3771.0	410.9	44.0 / 400.4
224	22403.1	3593.0	411.4	50.0 / 382.2
230	23000.0	3593.0	411.9	146.0 / 123.8
235	23500.0	3377.0	412.4	161.0 / 35.0
240	24000.0	3377.0	414.2	30.0 / 139.6
243	24346.9	3377.0	415.2	228.0 / 35.0
244	24386.4	3377.0	415.2	228.0 / 35.0
253	25258.4	3377.0	417.9	52.0 / 40.1
260	26000.0	3377.0	422.9	41.0 / 152.7
265	26500.0	3377.0	427.3	69.0 / 26.0
269	26931.6	3377.0	433.4	40.0 / 40.0
273	27308.8	3377.0	439.2	40.0 / 50.0
279	27891.4	3377.0	443.5	25.0 / 60.0
285	28500.0	3377.0	446.2	20.0 / 48.3
290	29000.0	3377.0	451.5	46.0 / 64.6
295	29500.0	3377.0	453.3	55.0 / 60.9
300	30000.0	3377.0	454.6	43.0 / 74.5
304	30385.1	3377.0	455.5	152.0 / 62.2
309	30894.8	1864.0	456.0	110.0 / 96.9
315	31500.0	1864.0	456.6	20.0 / 94.4
320	31973.5	1864.0	458.9	50.0 / 52.8
320	32026.5	1864.0	458.9	50.0 / 52.8
325	32500.0	1864.0	460.4	215.0 / 40.7
331	33076.6	1864.0	461.4	250.0 / 30.0
335	33500.0	1864.0	463.1	154.0 / 33.0
340	34000.0	1864.0	466.5	58.0 / 108.6
345	34500.0	1864.0	467.8	230.0 / 23.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Landrum Creek</b>				
350	35000.0	1864.0	468.8	226.0 / 59.4
355	35457.6	1864.0	470.3	151.0 / 125.5
360	36000.0	1635.0	472.4	260.0 / 21.6
367	36656.9	1635.0	474.7	222.0 / 17.0
375	37500.0	1635.0	477.3	136.0 / 97.3
380	38000.0	1635.0	478.9	18.0 / 125.4
385	38500.0	1635.0	481.0	169.0 / 12.5
390	39000.0	1635.0	483.6	57.0 / 117.4
395	39500.0	1635.0	485.8	338.0 / 42.0
398	39811.2	1635.0	487.1	186.0 / 50.0
404	40419.5	1328.0	490.2	91.0 / 160.0
410	41000.0	1328.0	493.1	30.0 / 75.0
413	41296.4	1328.0	496.1	37.0 / 40.0
414	41371.4	1328.0	496.7	37.0 / 40.0
416	41642.2	1328.0	498.9	32.0 / 179.9
418	41841.4	1328.0	500.3	65.0 / 39.7
<b>Landrum Creek Tributary</b>				
002	226.2	2322.0	455.7 <sup>1</sup>	162.0 / 144.9
006	588.6	2322.0	455.7 <sup>1</sup>	14.0 / 199.0
012	1210.5	2322.0	455.7 <sup>1</sup>	267.0 / 16.0
019	1922.0	2322.0	456.9	42.0 / 99.2
022	2174.2	2322.0	457.6	30.0 / 62.0
022	2213.2	2322.0	457.6	30.0 / 62.0
025	2500.0	2322.0	458.4	83.0 / 65.3
030	3000.0	2322.0	459.6	25.0 / 153.0
035	3500.0	2322.0	460.5	146.0 / 56.2
040	4000.0	2322.0	461.0	35.0 / 270.5
045	4500.0	2184.0	461.6	54.0 / 47.0
053	5309.3	1321.0	463.5	61.0 / 155.0
059	5901.0	1321.0	464.2	208.0 / 9.8
065	6500.0	1321.0	465.5	139.0 / 16.0
070	7000.0	1263.0	468.4	147.0 / 78.7
<b>Lick Creek</b>				
003	289.3	2284.0	424.1 <sup>1</sup>	29.0 / 62.9
007	731.8	2284.0	424.1 <sup>1</sup>	33.0 / 24.7
013	1323.0	2284.0	426.2	24.0 / 72.4
020	1961.1	2284.0	428.4	62.0 / 22.8
025	2513.8	2284.0	431.0	24.0 / 93.3
030	3037.6	2216.0	433.3	22.0 / 66.7
035	3508.0	2216.0	436.0	50.0 / 22.4
042	4157.2	2216.0	441.2	23.0 / 22.6
045	4527.9	2216.0	444.1	23.0 / 22.6
053	5264.8	2216.0	449.3	14.0 / 21.0
057	5734.3	2216.0	453.0	18.0 / 27.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Lick Creek</b>				
063	6251.2	2216.0	455.7	27.0 / 37.1
068	6801.0	2216.0	459.1	30.0 / 46.2
075	7465.9	2216.0	460.9	87.0 / 53.3
084	8354.1	2216.0	462.8	110.0 / 42.2
088	8817.6	2216.0	464.2	46.0 / 20.0
093	9340.1	2216.0	466.3	29.0 / 32.1
101	10074.9	1968.0	469.2	17.0 / 60.3
108	10766.6	1968.0	470.8	84.0 / 79.9
116	11579.6	1968.0	471.8	136.0 / 38.0
121	12146.1	1968.0	472.7	64.0 / 295.2
125	12540.9	1968.0	473.3	29.0 / 235.4
<b>Line Creek</b>				
001	72.0	1210.0	250.0 <sup>1</sup>	46.0 / 50.0
001	130.0	1210.0	250.0 <sup>1</sup>	41.0 / 54.0
002	167.0	1210.0	250.0 <sup>1</sup>	52.0 / 43.0
002	213.0	1210.0	250.0 <sup>1</sup>	63.0 / 50.0
003	257.0	1210.0	250.0 <sup>1</sup>	99.0 / 17.0
003	312.0	1210.0	250.0 <sup>1</sup>	27.0 / 17.0
006	574.0	1210.0	250.0 <sup>1</sup>	169.0 / 165.0
009	878.0	1210.0	250.0 <sup>1</sup>	138.0 / 128.0
016	1606.0	1210.0	250.0 <sup>1</sup>	129.0 / 350.0
018	1838.0	1210.0	250.0 <sup>1</sup>	58.0 / 92.0
019	1930.0	1210.0	250.0 <sup>1</sup>	100.0 / 51.0
020	2012.0	1210.0	250.0 <sup>1</sup>	132.0 / 21.0
022	2171.0	1210.0	250.0 <sup>1</sup>	298.0 / 20.0
030	3034.0	1210.0	250.0 <sup>1</sup>	139.0 / 147.0
040	3987.0	1210.0	250.0 <sup>1</sup>	105.0 / 20.0
047	4742.0	1210.0	250.0 <sup>1</sup>	34.0 / 20.0
051	5138.0	1210.0	250.0 <sup>1</sup>	71.0 / 16.0
057	5658.0	1210.0	250.0 <sup>1</sup>	24.0 / 49.0
060	6027.0	1210.0	251.5	20.0 / 40.0
064	6443.0	672.0	254.9	34.0 / 20.0
069	6869.0	672.0	256.6	20.0 / 23.0
073	7336.0	672.0	260.9	20.0 / 20.0
078	7752.0	672.0	267.0	20.0 / 20.0
081	8101.0	672.0	270.7	20.0 / 20.0
<b>Little Brush Creek</b>				
130	13000.0	4429.0	453.9	80.0 / 26.0
136	13576.3	4429.0	454.8	38.0 / 20.0
143	14317.1	4287.0	456.4	84.0 / 20.0
150	15000.0	4287.0	457.7	44.0 / 19.0
155	15500.0	4287.0	458.8	37.0 / 49.0
160	16034.1	4287.0	459.6	65.0 / 19.0
165	16500.0	4287.0	460.2	53.0 / 19.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Little Brush Creek</b>				
170	17000.0	4287.0	460.9	24.0 / 48.0
176	17639.3	4287.0	462.0	24.0 / 81.0
180	18000.0	4287.0	462.3	24.0 / 57.0
184	18371.8	4287.0	462.8	22.0 / 25.0
186	18561.0	4287.0	463.4	44.0 / 24.0
186	18601.0	4287.0	463.6	44.0 / 24.0
192	19171.4	4287.0	464.3	27.0 / 62.0
195	19500.0	4287.0	464.7	49.0 / 46.0
200	20000.0	4287.0	465.2	66.0 / 58.0
215	21500.0	4133.0	467.3	20.0 / 115.0
220	22000.0	3799.0	468.0	57.0 / 37.0
224	22421.7	3799.0	468.8	53.0 / 81.0
229	22856.6	3799.0	469.2	37.0 / 88.0
236	23601.4	2955.0	470.5	158.0 / 43.0
245	24455.9	2955.0	471.1	29.0 / 56.0
251	25083.1	2955.0	472.1	23.0 / 51.0
255	25500.0	2955.0	472.7	47.0 / 23.0
260	26000.0	2908.0	473.6	318.0 / 61.0
266	26611.5	2908.0	473.8	44.0 / 87.0
270	27000.0	2908.0	474.3	134.0 / 60.0
275	27500.0	2908.0	474.9	74.0 / 23.0
279	27911.7	2908.0	476.4	98.0 / 37.0
285	28500.0	2698.0	477.4	188.0 / 156.0
290	29000.0	2698.0	477.8	137.0 / 22.0
295	29500.0	2698.0	479.2	16.0 / 63.0
299	29873.1	2698.0	480.7	20.0 / 86.0
302	30199.0	2698.0	481.7	40.0 / 29.0
302	30239.0	2698.0	482.2	40.0 / 29.0
305	30500.0	2698.0	482.8	21.0 / 43.0
310	31000.0	2698.0	485.2	25.0 / 48.0
316	31647.8	2698.0	487.1	321.0 / 14.0
321	32060.4	2698.0	487.4	156.0 / 19.0
325	32500.0	2698.0	488.5	53.0 / 97.0
330	33000.0	2698.0	489.9	57.0 / 42.0
335	33500.0	2698.0	491.4	77.0 / 49.0
339	33920.7	2698.0	492.7	46.0 / 52.0
346	34631.3	2698.0	495.0	142.0 / 17.0
350	35000.0	2698.0	496.1	137.0 / 67.0
355	35488.3	2698.0	497.1	85.0 / 57.0
360	35981.8	2698.0	498.5	73.0 / 159.0
365	36500.0	2532.0	499.5	68.0 / 69.0
370	37000.0	2532.0	500.8	200.0 / 18.0
374	37386.6	2532.0	501.8	212.0 / 59.0
378	37810.0	2303.0	502.7	119.0 / 80.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Little Brush Creek</b>				
384	38411.7	2091.0	504.3	28.0 / 283.0
393	39314.4	2091.0	506.8	167.0 / 51.0
401	40070.5	2091.0	508.8	73.0 / 131.0
405	40500.0	2050.0	509.4	44.0 / 26.0
411	41064.1	1786.0	512.1	66.0 / 102.0
415	41500.0	1786.0	512.9	29.0 / 32.0
420	42000.0	1786.0	515.5	10.0 / 64.0
423	42260.6	1786.0	516.3	26.0 / 84.0
427	42694.8	1786.0	517.0	66.0 / 26.0
427	42739.3	1786.0	518.1	66.0 / 26.0
430	43000.0	1786.0	518.4	67.0 / 48.0
435	43500.0	1786.0	519.6	99.0 / 58.0
440	44000.0	1786.0	521.1	36.0 / 144.0
445	44500.0	1786.0	522.2	127.0 / 113.0
450	45000.0	1786.0	523.4	210.0 / 18.0
455	45500.0	1650.0	525.3	192.0 / 38.0
460	46000.0	1650.0	526.6	208.0 / 139.0
464	46382.9	1650.0	527.4	175.0 / 91.0
470	47000.0	1650.0	529.4	150.0 / 9.0
475	47500.0	1650.0	532.8	10.0 / 144.0
480	48000.0	1650.0	534.4	212.0 / 159.0
485	48500.0	1650.0	534.8	245.0 / 28.0
492	49192.2	1650.0	536.2	151.0 / 15.0
496	49552.3	1650.0	537.4	123.0 / 30.0
499	49928.4	1352.0	538.7	56.0 / 69.0
505	50467.4	1352.0	540.6	49.0 / 127.0
509	50922.4	1352.0	541.9	96.0 / 62.0
514	51382.0	1352.0	543.0	117.0 / 31.0
<b>Little Indian Creek</b>				
120	11955.9	3043.0	251.8	64.0 / 65.0
125	12506.2	3043.0	255.2	48.0 / 20.0
128	12830.6	3043.0	258.0	20.0 / 78.0
131	13109.0	3043.0	259.7	140.0 / 144.0
138	13772.6	3043.0	261.3	30.0 / 56.0
142	14194.6	3043.0	263.5	45.0 / 20.0
147	14734.1	3043.0	266.2	140.0 / 20.0
152	15167.0	3043.0	268.3	60.0 / 22.0
155	15524.6	3043.0	272.4	95.0 / 20.0
159	15894.6	2935.0	274.0	24.0 / 20.0
162	16206.9	2935.0	276.4	30.0 / 42.0
168	16806.8	2935.0	278.1	80.0 / 35.0
176	17554.1	2935.0	279.6	46.0 / 61.0
184	18361.6	2935.0	281.6	45.0 / 113.0
187	18675.9	2935.0	282.2	84.0 / 20.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Little Indian Creek</b>				
192	19197.0	2935.0	283.8	137.0 / 84.0
195	19465.4	2935.0	284.2	131.0 / 80.0
198	19801.2	2935.0	284.7	100.0 / 83.0
199	19851.2	2935.0	284.8	100.0 / 83.0
202	20213.1	2935.0	285.7	19.0 / 205.0
206	20615.0	2935.0	286.7	24.0 / 175.0
210	21038.4	2935.0	287.9	149.0 / 93.0
216	21625.8	2759.0	290.4	19.0 / 57.0
221	22092.0	2759.0	293.3	135.0 / 220.0
225	22493.7	2759.0	293.8	19.0 / 265.0
229	22850.6	2759.0	294.6	19.0 / 143.0
235	23527.8	2759.0	297.7	144.0 / 43.0
240	24011.0	2759.0	299.1	30.0 / 30.0
241	24072.0	2759.0	301.2	30.0 / 30.0
245	24530.4	2759.0	303.0	161.0 / 54.0
257	25689.1	2546.0	305.8	148.0 / 36.0
261	26091.7	2546.0	307.1	45.0 / 120.0
266	26639.4	2546.0	309.1	21.0 / 86.0
272	27169.8	2546.0	311.2	123.0 / 20.0
278	27807.3	2546.0	314.1	18.0 / 158.0
284	28375.7	2546.0	318.1	59.0 / 38.0
289	28946.8	2546.0	321.2	103.0 / 68.0
296	29612.3	1718.0	323.6	92.0 / 16.0
303	30269.2	1718.0	326.7	20.0 / 30.0
307	30716.7	1718.0	330.0	15.0 / 49.0
314	31389.3	1718.0	336.5	152.0 / 15.0
320	32024.4	1718.0	340.3	38.0 / 44.0
323	32320.4	1718.0	342.3	24.0 / 24.0
324	32398.4	1718.0	346.2	24.0 / 24.0
328	32820.2	1718.0	346.7	27.0 / 78.0
333	33286.2	1718.0	349.4	86.0 / 15.0
337	33660.5	1718.0	351.9	37.0 / 46.0
341	34092.9	1488.0	356.3	23.0 / 63.0
347	34713.9	1488.0	363.4	44.0 / 29.0
354	35370.3	1488.0	367.3	115.0 / 48.0
359	35927.5	1488.0	369.3	26.0 / 73.0
364	36425.6	1488.0	371.6	53.0 / 35.0
367	36714.9	1488.0	373.1	20.0 / 20.0
368	36802.9	1488.0	375.8	20.0 / 20.0
371	37060.8	1488.0	376.9	100.0 / 24.0
375	37548.3	1488.0	377.6	110.0 / 18.0
<b>Long Branch</b>				
005	498.1	1267.0	448.6 <sup>1</sup>	31.0 / 32.4
009	910.8	1267.0	450.0	23.0 / 63.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Long Branch</b>				
011	1054.1	1267.0	450.7	37.0 / 43.7
011	1093.1	1267.0	452.5	37.0 / 43.7
017	1659.4	1267.0	457.7	52.0 / 8.2
021	2101.3	1267.0	463.3	20.0 / 25.2
026	2639.7	1267.0	468.3	18.0 / 48.7
032	3210.0	1267.0	470.7	22.0 / 37.9
038	3792.7	1163.0	473.0	12.0 / 77.0
044	4429.4	1163.0	475.4	111.0 / 12.0
052	5248.2	1163.0	476.9	18.0 / 19.0
053	5300.2	1163.0	479.9	18.0 / 19.0
057	5727.9	1163.0	480.5	35.0 / 131.3
062	6217.9	1163.0	481.3	69.0 / 35.5
071	7134.2	1163.0	483.3	20.0 / 75.5
078	7766.9	1163.0	484.8	20.0 / 77.9
084	8417.8	1163.0	486.4	39.0 / 78.3
091	9091.7	1163.0	487.9	131.0 / 51.9
098	9830.4	1163.0	489.7	174.0 / 17.0
106	10644.8	1163.0	491.3	135.0 / 49.9
111	11062.6	1163.0	491.9	94.0 / 97.0
116	11627.1	1163.0	492.9	147.0 / 17.0
122	12214.6	788.0	494.6	46.0 / 115.3
133	13342.6	788.0	497.1	70.0 / 14.0
<b>Loves Creek Tributary 2</b>				
002	198.5	616.0	586.7 <sup>1</sup>	40.0 / 20.0
005	453.8	616.0	586.7 <sup>1</sup>	35.0 / 35.0
013	1348.8	616.0	593.8	35.0 / 35.0
015	1456.4	616.0	595.1	80.0 / 80.0
018	1827.1	616.0	599.1	40.0 / 20.0
019	1897.1	616.0	600.6	8.0 / 8.0
020	2029.3	616.0	603.3	8.0 / 79.7
025	2456.4	616.0	605.5	152.0 / 7.5
030	2956.4	616.0	610.1	81.0 / 6.5
035	3456.4	616.0	615.5	40.0 / 25.0
040	3956.4	370.0	622.1	8.0 / 40.9
045	4456.4	370.0	630.5	21.0 / 7.3
050	4956.4	370.0	642.1	15.0 / 20.0
055	5456.4	370.0	652.8	8.0 / 39.0
060	5974.4	370.0	666.1	14.0 / 7.5
<b>Loves Creek Tributary 3</b>				
000	4.7	554.0	592.6 <sup>1</sup>	20.0 / 8.5
000	4.9	554.0	592.6 <sup>1</sup>	55.0 / 20.0
001	62.9	554.0	593.7	50.0 / 20.0
004	395.4	554.0	595.3	6.0 / 16.6
004	445.4	554.0	597.3	6.0 / 10.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Loves Creek Tributary 3</b>				
010	1019.2	554.0	601.8	23.0 / 50.0
012	1242.0	554.0	602.8	11.0 / 10.2
013	1295.0	554.0	606.7	92.0 / 18.0
016	1570.1	554.0	607.3	31.0 / 7.0
018	1799.6	554.0	610.8	53.0 / 30.2
020	2042.8	554.0	611.7	15.0 / 34.4
021	2112.8	554.0	613.6	75.0 / 75.0
023	2317.5	554.0	617.5	20.0 / 30.1
024	2377.5	554.0	618.4	20.0 / 30.1
026	2571.6	554.0	621.5	34.0 / 7.5
030	2960.1	554.0	630.3	12.0 / 14.7
032	3163.5	554.0	638.5	10.0 / 6.1
032	3220.5	554.0	647.5	35.0 / 49.7
036	3575.4	554.0	647.7	8.0 / 26.1
<b>Meadow Branch</b>				
003	274.1	1541.0	380.7 <sup>1</sup>	24.0 / 170.2
007	740.3	1541.0	380.7 <sup>1</sup>	78.0 / 124.0
013	1327.1	1541.0	382.3	200.0 / 32.8
018	1830.2	1374.0	383.6	21.0 / 161.5
024	2396.3	1374.0	385.2	14.0 / 59.9
025	2456.3	1374.0	388.6	14.0 / 59.9
028	2770.2	1374.0	388.9	188.0 / 85.6
<b>Meadow Creek</b>				
002	184.8	2194.0	436.8	36.0 / 25.7
005	500.0	2194.0	441.8	30.0 / 26.4
010	1000.0	2194.0	448.4	52.0 / 39.6
017	1650.9	2194.0	454.4	36.0 / 33.4
020	2000.0	2194.0	458.5	39.0 / 38.7
025	2500.0	2194.0	461.9	68.0 / 44.1
030	3000.0	2194.0	464.8	105.0 / 29.6
035	3500.0	2194.0	467.1	70.0 / 101.7
039	3906.4	2194.0	468.5	47.0 / 43.5
039	3945.9	2194.0	469.3	47.0 / 43.5
041	4133.5	2194.0	470.6	95.0 / 39.3
045	4500.0	2006.0	471.8	30.0 / 171.4
050	5000.0	2006.0	473.9	138.0 / 104.6
055	5500.0	2006.0	476.0	112.0 / 110.4
060	6000.0	2006.0	478.8	33.0 / 68.0
065	6500.0	2006.0	481.0	82.0 / 107.9
070	7000.0	2006.0	482.8	35.0 / 26.3
075	7500.0	2006.0	487.3	45.0 / 160.9
080	8000.0	2006.0	489.6	73.0 / 15.4
087	8691.1	2006.0	495.3	63.0 / 66.5
094	9396.0	2006.0	498.5	172.0 / 17.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Meadow Creek</b>				
100	10000.0	2006.0	500.4	59.0 / 103.7
105	10500.0	2006.0	502.8	23.0 / 90.7
111	11096.1	2006.0	505.7	32.0 / 183.1
<b>Mill Branch</b>				
054	5388.9	925.0	237.8 <sup>1</sup>	33.0 / 122.0
059	5942.5	925.0	237.8 <sup>1</sup>	62.0 / 54.0
064	6403.2	925.0	237.8 <sup>1</sup>	40.0 / 67.0
070	7000.0	925.0	240.2	76.0 / 72.0
075	7500.0	925.0	242.5	90.0 / 19.0
079	7934.1	925.0	244.3	65.0 / 27.0
<b>Morgan Creek</b>				
160	16000.0	11700.0	237.8 <sup>1</sup>	1049.5 / 987.8
176	17600.5	11700.0	237.8 <sup>1</sup>	1069.8 / 537.0
192	19194.4	11700.0	237.8 <sup>1</sup>	18.8 / 1658.3
205	20500.0	11700.0	237.8 <sup>1</sup>	655.0 / 672.2
222	22210.2	11700.0	237.8 <sup>1</sup>	670.4 / 661.9
235	23500.0	11700.0	237.8 <sup>1</sup>	664.1 / 636.0
241	24145.8	11700.0	237.8 <sup>1</sup>	218.0 / 220.0
242	24197.8	11700.0	237.8 <sup>1</sup>	218.0 / 220.0
250	25000.0	11700.0	237.8 <sup>1</sup>	713.4 / 448.5
260	26000.0	11700.0	237.8 <sup>1</sup>	735.4 / 46.9
<b>Morris Branch</b>				
002	210.0	983.0	238.4 <sup>1</sup>	245.0 / 64.0
007	719.0	983.0	238.6	52.0 / 81.0
011	1080.2	983.0	240.4	61.0 / 78.0
015	1500.0	983.0	242.0	13.0 / 143.0
020	2000.0	983.0	243.4	84.0 / 62.0
025	2500.0	983.0	245.2	54.0 / 107.0
030	2983.9	983.0	247.6	10.0 / 79.0
<b>Mud Lick Creek</b>				
002	183.7	2845.0	544.6 <sup>1</sup>	233.0 / 95.0
006	613.9	2845.0	544.6 <sup>1</sup>	302.0 / 107.0
010	1000.0	2845.0	544.6 <sup>1</sup>	89.0 / 251.0
015	1527.5	2845.0	544.6 <sup>1</sup>	51.0 / 114.0
019	1904.1	2845.0	544.6 <sup>1</sup>	34.0 / 64.0
025	2467.4	2729.0	544.6 <sup>1</sup>	169.0 / 35.0
030	3000.0	2729.0	545.9	30.0 / 83.0
031	3141.4	2729.0	546.2	40.0 / 53.0
032	3181.4	2729.0	547.0	40.0 / 53.0
035	3500.0	2729.0	548.3	66.0 / 40.0
039	3936.7	2729.0	549.4	123.0 / 24.0
045	4500.0	2729.0	551.0	43.0 / 77.0
049	4945.4	2729.0	552.2	98.0 / 35.3
055	5466.3	2729.0	553.5	283.0 / 20.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Mud Lick Creek</b>				
059	5935.3	2729.0	555.1	32.0 / 62.6
065	6480.0	2729.0	556.6	14.0 / 93.4
070	7000.0	2729.0	557.4	21.0 / 95.6
076	7556.4	2729.0	559.3	71.0 / 14.8
079	7935.6	2729.0	560.4	57.0 / 34.2
085	8495.8	2729.0	561.6	40.0 / 100.0
085	8535.8	2729.0	561.6	40.0 / 100.0
090	9000.0	1969.0	562.1	20.0 / 30.0
095	9495.7	1969.0	565.8	36.0 / 14.4
100	10000.0	1969.0	574.8	58.0 / 13.4
106	10622.0	1969.0	578.9	30.0 / 77.8
110	11000.0	1969.0	579.7	15.0 / 140.4
115	11523.3	1969.0	580.5	65.0 / 220.0
120	12000.0	1969.0	581.2	57.0 / 163.8
125	12505.5	1969.0	582.0	23.0 / 120.1
129	12875.0	1969.0	583.0	17.0 / 85.4
135	13487.9	1722.0	584.5	203.0 / 11.2
139	13863.8	1722.0	585.0	11.0 / 123.0
146	14628.2	1722.0	586.3	12.0 / 146.6
150	15000.0	1722.0	586.9	25.0 / 164.2
154	15364.3	1722.0	587.8	50.0 / 50.0
158	15755.4	1722.0	589.4	24.0 / 24.0
158	15809.4	1722.0	590.5	24.0 / 24.0
160	16028.9	1722.0	590.8	130.0 / 8.5
166	16622.3	1595.0	592.1	21.0 / 106.9
170	17000.0	1595.0	592.4	55.0 / 185.1
176	17609.5	1595.0	592.8	16.0 / 158.2
180	18000.0	1595.0	593.8	41.0 / 74.6
186	18605.1	1595.0	595.9	163.0 / 35.0
191	19065.7	1317.0	596.8	26.0 / 63.9
<b>Nancy Branch</b>				
005	500.0	1173.0	235.8 <sup>1</sup>	281.0 / 73.0
010	1000.0	1173.0	235.8 <sup>1</sup>	217.0 / 179.0
016	1578.5	1100.0	235.8 <sup>1</sup>	51.0 / 393.0
021	2130.7	1100.0	239.0	197.0/78.0
021	2131.0	1390.0	239.0	197.0 / 78.0
024	2445.0	1390.0	239.9	50.0 / 187.0
027	2690.0	1320.0	240.5	40.0 / 261.0
031	3147.0	1320.0	245.2	45.0 / 65.0
034	3436.0	1320.0	246.4	87.0 / 225.0
038	3791.0	1290.0	246.5	36.0 / 118.0
041	4073.0	1290.0	246.7	14.0 / 262.0
045	4527.0	1290.0	247.0	14.0 / 267.0
050	5007.0	1290.0	247.8	90.0 / 30.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Nancy Branch</b>				
056	5551.0	1120.0	250.9	137.0 / 14.0
060	6018.0	1120.0	251.8	63.0 / 14.0
063	6346.0	1120.0	252.9	106.0 / 75.0
067	6733.0	1040.0	253.6	101.0 / 48.0
070	7050.0	1040.0	254.4	24.0 / 20.0
072	7174.0	1040.0	257.1	24.0 / 24.0
075	7457.0	1040.0	257.5	155.0/10.0
<b>New Hope River Tributary 1</b>				
040	4000.0	154.0	237.8 <sup>1</sup>	30.0 / 7.0
045	4500.0	154.0	237.8 <sup>1</sup>	8.0 / 8.0
050	5000.0	154.0	237.8 <sup>1</sup>	7.0 / 8.0
055	5500.0	154.0	247.0	7.0 / 13.0
<b>North Prong Rocky River</b>				
005	500.0	3676.0	587.2 <sup>1</sup>	179.0 / 142.2
010	1000.0	3676.0	587.2 <sup>1</sup>	130.0 / 91.3
015	1500.0	3676.0	587.2 <sup>1</sup>	185.0 / 50.7
020	2000.0	3676.0	587.2 <sup>1</sup>	127.0 / 86.6
025	2500.0	3676.0	587.2 <sup>1</sup>	50.0 / 50.6
030	3000.0	3676.0	587.2 <sup>1</sup>	57.0 / 134.9
035	3500.0	3676.0	587.2 <sup>1</sup>	34.0 / 71.4
040	3969.9	3676.0	588.5	45.0 / 53.4
045	4548.1	3676.0	590.7	18.0 / 69.3
051	5050.4	3676.0	592.8	66.0 / 21.0
056	5636.4	3676.0	594.8	25.0 / 23.0
065	6453.6	3676.0	597.6	55.0 / 24.7
070	7000.0	3545.0	598.9	50.0 / 27.2
075	7500.0	3545.0	600.1	20.0 / 69.3
083	8309.9	3545.0	601.9	94.0 / 34.4
090	9000.0	3545.0	603.5	31.0 / 28.6
095	9500.0	3545.0	606.3	193.0 / 25.0
100	10000.0	3545.0	607.1	30.0 / 308.1
105	10500.0	3545.0	607.4	23.0 / 141.4
112	11184.8	3545.0	608.5	43.0 / 38.9
119	11921.3	3545.0	610.0	56.0 / 35.1
125	12500.0	3363.0	610.9	23.0 / 72.3
130	13000.0	3363.0	612.1	63.0 / 24.1
135	13500.0	3174.0	613.2	140.0 / 21.0
140	14000.0	3174.0	613.8	68.0 / 16.0
143	14296.5	3174.0	614.6	45.0 / 45.0
143	14340.5	3174.0	614.7	45.0 / 45.0
145	14500.0	3174.0	614.8	159.0 / 34.4
150	15000.0	3174.0	617.1	18.0 / 18.3
155	15500.0	3174.0	620.3	84.0 / 93.8
160	16000.0	3174.0	620.9	73.0 / 79.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>North Prong Rocky River</b>				
165	16500.0	3174.0	621.4	198.0 / 19.0
170	17004.6	3061.0	621.8	56.0 / 364.6
175	17500.0	3061.0	622.1	25.0 / 379.1
180	18000.0	3061.0	622.6	85.0 / 82.7
185	18500.0	3061.0	623.3	25.0 / 44.5
190	19004.3	3061.0	625.1	28.0 / 25.4
195	19500.0	3061.0	627.1	37.0 / 26.4
200	20000.0	3061.0	628.4	23.0 / 39.1
207	20661.4	3061.0	630.9	97.0 / 34.0
211	21057.8	3061.0	632.1	56.0 / 28.5
213	21349.9	3061.0	632.9	50.0 / 50.0
214	21399.9	3061.0	633.4	50.0 / 50.0
218	21778.8	3061.0	634.3	156.0 / 152.5
227	22674.3	2862.0	634.8	250.0 / 25.0
231	23111.3	2862.0	635.1	147.0 / 65.7
235	23500.0	2862.0	635.4	105.0 / 35.3
240	24000.0	2862.0	636.4	92.0 / 75.0
245	24500.0	2862.0	637.1	79.0 / 26.8
250	25000.0	2862.0	638.2	64.0 / 90.7
255	25500.0	2862.0	639.0	57.0 / 104.7
260	26000.0	2651.0	639.8	24.0 / 197.1
266	26644.0	2651.0	640.5	22.0 / 98.7
273	27316.5	2651.0	642.1	52.0 / 20.6
280	28000.0	2651.0	644.3	122.0 / 14.0
285	28500.0	2651.0	645.1	26.0 / 193.6
290	29000.0	2651.0	645.6	60.0 / 91.8
293	29323.0	2651.0	645.8	50.0 / 50.0
294	29369.0	2651.0	646.9	50.0 / 50.0
296	29550.0	2651.0	647.4	123.0 / 211.6
301	30052.5	2651.0	647.6	46.0 / 90.3
<b>Northeast Creek</b>				
001	149.3	10600.0	237.8 <sup>1</sup>	382.0 / 993.0
015	1549.3	10600.0	237.8 <sup>1</sup>	744.0 / 790.0
025	2511.5	10600.0	237.8 <sup>1</sup>	1008.0 / 444.0
039	3929.4	10000.0	237.8 <sup>1</sup>	624.0 / 463.0
054	5409.3	10000.0	237.8 <sup>1</sup>	234.0 / 1125.0
066	6637.5	10000.0	237.8 <sup>1</sup>	473.0 / 674.0
078	7774.5	10000.0	237.8 <sup>1</sup>	314.0 / 792.0
089	8917.1	10000.0	237.8 <sup>1</sup>	525.0 / 500.0
099	9871.8	10000.0	237.8 <sup>1</sup>	353.0 / 883.0
111	11123.7	10000.0	237.8 <sup>1</sup>	427.0 / 664.0
124	12435.4	9940.0	237.8 <sup>1</sup>	113.0 / 125.0
125	12486.4	9940.0	237.8 <sup>1</sup>	113.0 / 125.0
141	14133.4	9880.0	237.8 <sup>1</sup>	700.0 / 150.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Northeast Creek</b>				
151	15141.8	9880.0	237.8 <sup>1</sup>	1400.0 / 500.0
151	15141.8	9880.0	238.0 <sup>1</sup>	1400.0 / 500.0
163	16288.8	9880.0	237.8 <sup>1</sup>	1300.0 / 700.0
180	17990.3	9880.0	237.8 <sup>1</sup>	170.0 / 167.0
180	18041.3	9880.0	238.2	170.0 / 167.0
195	19512.3	9060.0	238.9	1500.0 / 700.0
209	20874.5	9060.0	239.0	1100.0 / 1000.0
216	21574.2	9060.0	239.0	957.0 / 30.0
225	22518.2	9060.0	239.3	462.0 / 568.0
233	23320.0	9060.0	239.5	850.0 / 287.0
241	24074.2	8840.0	239.6	1050.0/378.0
<b>Overcup Creek</b>				
120	11965.9	696.0	237.8 <sup>1</sup>	70.0 / 50.0
125	12500.0	696.0	237.8 <sup>1</sup>	35.0 / 55.0
130	13000.0	696.0	237.8 <sup>1</sup>	14.0 / 60.0
135	13500.0	696.0	237.8 <sup>1</sup>	17.0 / 80.0
141	14050.8	696.0	237.8 <sup>1</sup>	30.0 / 50.0
146	14635.8	696.0	237.8 <sup>1</sup>	16.0 / 45.0
150	15032.7	696.0	237.8 <sup>1</sup>	40.0 / 41.0
155	15500.0	696.0	237.8 <sup>1</sup>	50.0 / 30.0
159	15891.4	696.0	237.8 <sup>1</sup>	30.0 / 22.0
165	16514.6	696.0	240.0	10.0 / 50.0
170	17000.0	696.0	242.6	25.0 / 12.0
174	17446.1	696.0	245.7	10.0 / 15.0
180	18000.0	435.0	252.8	5.0 / 4.0
<b>Overcup Creek Tributary</b>				
005	500.0	755.0	237.8 <sup>1</sup>	108.0 / 80.0
010	1000.0	755.0	237.8 <sup>1</sup>	8.0 / 179.0
013	1344.9	755.0	237.8 <sup>1</sup>	22.0 / 46.0
014	1404.9	755.0	237.8 <sup>1</sup>	22.0 / 46.0
019	1867.1	755.0	237.8 <sup>1</sup>	75.0 / 70.0
025	2500.0	755.0	237.8 <sup>1</sup>	93.0 / 6.0
030	3000.0	755.0	237.8 <sup>1</sup>	26.0 / 123.0
035	3519.4	755.0	237.8 <sup>1</sup>	32.0 / 78.0
041	4098.1	755.0	237.9	6.0 / 149.0
046	4570.2	755.0	240.8	93.0 / 8.0
052	5198.7	755.0	245.3	78.0 / 27.0
<b>Panther Creek</b>				
065	6521.8	3270.0	238.0 <sup>1</sup>	73.0 / 260.0
070	7000.0	3270.0	238.0 <sup>1</sup>	156.0 / 19.0
074	7384.7	3270.0	238.0 <sup>1</sup>	30.0 / 30.0
074	7424.7	3270.0	238.0 <sup>1</sup>	30.0 / 30.0
078	7844.7	2580.0	238.3	292.0 / 346.0
085	8500.0	2580.0	238.4	551.0 / 331.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Panther Creek</b>				
090	9000.0	2030.0	238.4	186.0 / 343.0
095	9500.0	2030.0	238.5	15.0 / 146.0
100	10000.0	2030.0	239.7	21.0 / 106.0
105	10457.3	2030.0	239.9	21.0 / 21.0
110	11000.0	2030.0	241.3	21.0 / 21.0
115	11500.0	2030.0	242.0	21.0 / 21.0
119	11947.8	2030.0	243.2	20.0 / 20.0
<b>Parkers Creek</b>				
135	13500.0	1121.0	237.8 <sup>1</sup>	376.0 / 11.0
140	14000.0	1121.0	237.8 <sup>1</sup>	204.0 / 153.0
145	14500.0	1121.0	237.8 <sup>1</sup>	121.0 / 14.0
150	15000.0	1121.0	237.8 <sup>1</sup>	105.0 / 13.0
155	15500.0	1121.0	237.8 <sup>1</sup>	23.0 / 62.0
160	16000.0	1121.0	240.9	45.0 / 25.0
164	16428.9	1121.0	246.1	13.0 / 11.0
166	16584.9	1121.0	259.4	30.0 / 30.0
170	17000.0	1121.0	259.1	35.0 / 35.0
175	17500.0	1121.0	268.1	30.0 / 10.0
180	18000.0	1121.0	277.1	10.0 / 20.0
185	18500.0	1121.0	286.9	36.0 / 8.0
<b>Persimmons Nursery Branch</b>				
004	418.6	1320.0	448.2 <sup>1</sup>	125.0 / 59.3
009	948.7	1320.0	448.2 <sup>1</sup>	8.0 / 136.8
013	1289.3	1320.0	448.2 <sup>1</sup>	16.0 / 190.2
014	1389.3	1320.0	448.2 <sup>1</sup>	16.0 / 190.2
019	1930.2	1320.0	450.4	8.0 / 192.6
<b>Pokeberry Creek</b>				
004	359.0	3661.0	302.7 <sup>1</sup>	28.0 / 53.0
008	793.9	3661.0	302.7 <sup>1</sup>	100.0 / 230.0
014	1449.9	3661.0	302.7 <sup>1</sup>	73.0 / 55.1
020	1958.6	3529.0	302.7	162.0 / 20.0
025	2524.1	3529.0	305.6	132.0 / 167.9
032	3174.5	3529.0	308.4	102.0 / 48.8
037	3695.8	3529.0	311.1	208.0 / 141.6
043	4322.1	3529.0	313.8	145.0 / 126.3
048	4799.2	3437.0	316.8	145.0 / 107.5
056	5582.1	3437.0	321.2	90.0 / 147.0
061	6117.1	3437.0	324.3	55.0 / 51.0
062	6164.1	3437.0	326.0	55.0 / 51.0
065	6508.1	3437.0	328.4	300.0 / 92.3
070	7024.1	3437.0	329.3	215.0 / 26.0
076	7568.4	3437.0	332.3	45.0 / 105.8
080	8003.6	3437.0	334.0	199.0 / 22.2
085	8474.4	3437.0	335.1	35.0 / 63.7

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Pokeberry Creek</b>				
092	9228.4	3437.0	338.7	90.0 / 38.0
101	10108.8	3437.0	340.9	46.0 / 64.0
102	10155.8	3437.0	342.8	46.0 / 64.0
106	10638.3	3437.0	343.1	41.0 / 113.5
114	11367.9	3437.0	345.5	40.0 / 21.6
<b>Reedy Fork</b>				
024	2376.8	1038.0	499.2	45.0 / 32.0
030	3000.0	1038.0	502.1	63.0 / 40.0
034	3364.6	1038.0	503.2	59.0 / 50.0
038	3793.1	1038.0	504.3	78.0 / 32.0
044	4402.9	1038.0	505.8	52.0 / 34.0
050	5000.0	1038.0	508.5	41.0 / 25.0
054	5406.9	1038.0	510.2	32.0 / 70.0
059	5878.4	1038.0	511.7	21.0 / 98.0
059	5948.4	1038.0	514.9	21.0 / 98.0
064	6392.7	832.0	515.1	105.0 / 33.0
067	6727.1	832.0	516.3	83.0 / 14.0
068	6797.1	832.0	525.9	83.0 / 24.0
072	7174.8	832.0	526.1	73.0 / 38.0
079	7936.0	832.0	526.6	55.0 / 36.0
<b>Robeson Creek Tributary 1</b>				
003	293.4	1193.0	296.8 <sup>1</sup>	27.0 / 40.2
010	1029.3	1141.0	299.2	12.0 / 12.0
011	1129.3	1141.0	302.5	12.0 / 12.0
015	1475.4	1141.0	308.0	19.0 / 22.9
020	1987.7	1141.0	313.7	37.0 / 35.2
026	2564.7	1141.0	318.0	25.0 / 10.6
032	3171.6	1141.0	327.7	22.0 / 30.9
034	3447.9	1141.0	331.1	33.0 / 9.7
040	3958.3	1141.0	335.5	18.0 / 17.0
041	4058.3	1141.0	338.8	18.0 / 20.0
043	4308.1	1141.0	342.3	55.0 / 21.0
044	4419.5	1141.0	343.8	50.0 / 30.0
045	4519.5	1141.0	345.2	50.0 / 30.0
048	4838.3	1141.0	346.2	12.0 / 78.2
051	5069.2	1141.0	347.3	15.0 / 15.0
052	5169.2	1141.0	348.9	15.0 / 15.0
056	5573.4	555.0	350.7	4.0 / 7.9
060	6049.6	555.0	357.8	146.0 / 17.4
066	6639.1	555.0	365.5	60.0 / 53.8
073	7277.2	555.0	373.0	80.0 / 15.0
078	7767.9	555.0	379.4	4.0 / 15.0
079	7903.2	555.0	381.4	10.0 / 8.5
082	8189.2	555.0	383.1	10.0 / 8.5

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Robeson Creek Tributary 1</b>				
084	8353.2	555.0	390.8	35.0 / 13.1
087	8708.5	289.0	395.7	22.0 / 12.2
092	9179.5	289.0	404.2	65.0 / 10.0
093	9328.2	289.0	406.5	9.0 / 9.0
094	9377.2	289.0	407.9	25.0 / 19.0
098	9827.2	289.0	420.3	25.0 / 10.0
103	10299.8	289.0	437.2	25.0 / 15.0
107	10688.1	289.0	456.4	19.0 / 10.0
111	11124.6	289.0	485.8	7.0 / 10.0
<b>Robeson Creek Tributary 2</b>				
002	158.0	755.0	349.2	41.0 / 6.0
008	826.6	755.0	354.4	145.0 / 12.5
014	1354.1	755.0	359.1	74.0 / 15.0
019	1875.5	755.0	364.7	27.0 / 15.0
019	1936.5	755.0	366.3	27.0 / 15.0
024	2363.8	755.0	371.9	66.0 / 15.0
024	2413.8	755.0	372.6	66.0 / 15.0
036	3556.2	755.0	384.0	85.0 / 64.2
042	4231.9	755.0	393.6	30.0 / 25.2
049	4853.9	755.0	405.8	27.0 / 15.8
054	5436.8	378.0	416.7	24.0 / 10.7
061	6146.6	378.0	427.8	37.0 / 32.4
065	6505.0	378.0	434.8	21.0 / 7.5
071	7135.4	378.0	446.9	26.0 / 12.4
078	7848.4	378.0	468.6	15.0 / 20.0
082	8201.0	378.0	477.9	8.0 / 10.3
083	8251.0	378.0	482.7	15.0 / 21.0
087	8724.5	378.0	501.5	5.0 / 8.0
<b>Robeson Creek Tributary 3A</b>				
001	135.0	919.0	395.2	240.0 / 3.0
003	283.0	716.0	396.1	50.0 / 45.0
004	401.0	716.0	396.5	25.0 / 35.0
006	580.0	716.0	399.1	25.0 / 30.0
007	665.0	716.0	400.8	20.0 / 20.0
007	729.0	716.0	402.7	40.0 / 30.0
008	808.0	716.0	403.0	40.0 / 18.0
008	847.0	427.0	403.4	40.0 / 20.0
009	877.0	427.0	403.5	40.0 / 20.0
009	933.0	427.0	404.8	40.0 / 20.0
010	959.0	427.0	404.9	50.0 / 20.0
010	989.0	427.0	405.1	30.0 / 20.0
010	1017.0	427.0	405.4	30.0 / 20.0
011	1073.0	427.0	408.1	35.0 / 25.0
011	1095.0	427.0	408.1	30.0 / 50.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Robeson Creek Tributary 3A</b>				
011	1119.0	427.0	408.1	20.0 / 25.0
012	1150.0	427.0	408.1	20.0 / 25.0
012	1195.0	427.0	410.5	25.0 / 30.0
012	1228.0	427.0	410.5	30.0 / 55.0
013	1276.0	427.0	410.5	30.0 / 55.0
013	1319.0	427.0	410.6	30.0 / 30.0
014	1366.0	427.0	410.6	23.0 / 23.0
015	1494.0	427.0	411.5	10.0 / 10.0
016	1634.0	427.0	413.7	10.0 / 10.0
018	1792.0	427.0	415.6	10.0 / 10.0
020	1950.0	358.0	417.6	10.0 / 10.0
021	2058.0	358.0	418.6	16.0 / 16.0
021	2118.0	358.0	423.1	20.0 / 20.0
022	2163.0	358.0	423.1	10.0 / 10.0
022	2228.0	358.0	423.1	10.0 / 10.0
023	2289.0	358.0	423.3	14.0 / 14.0
024	2373.0	358.0	429.7	22.0 / 25.0
024	2390.0	358.0	429.7	50.0 / 35.0
024	2428.0	358.0	429.7	75.0 / 35.0
025	2466.0	358.0	429.7	100.0 / 45.0
026	2578.0	358.0	429.9	75.0 / 100.0
027	2654.0	358.0	429.9	48.0 / 48.0
028	2788.0	358.0	430.0	25.0 / 25.0
<b>Robeson Creek Tributary 4</b>				
002	153.2	1916.0	376.8	130.0 / 50.0
005	470.8	1916.0	377.6	130.0 / 16.5
012	1168.8	1916.0	380.8	28.0 / 22.9
020	1982.7	1916.0	383.3	269.0 / 54.2
028	2803.4	1916.0	384.5	284.0 / 39.2
034	3419.5	1916.0	385.7	32.0 / 118.8
040	3981.5	1916.0	387.4	225.0 / 12.6
045	4535.0	1916.0	388.9	340.0 / 17.0
051	5144.6	1916.0	390.5	228.0 / 91.4
057	5708.7	1175.0	391.4	177.0 / 159.0
063	6332.9	1175.0	392.2	114.0 / 135.1
068	6801.9	1175.0	393.3	12.0 / 11.5
069	6861.9	1175.0	395.0	12.0 / 11.5
071	7117.3	1175.0	396.0	13.0 / 166.9
073	7312.5	1175.0	397.0	112.0 / 122.5
074	7350.5	1175.0	399.7	112.0 / 122.5
077	7734.1	1175.0	400.0	13.0 / 175.3
084	8387.0	1175.0	401.8	73.0 / 29.0
090	9009.5	1175.0	405.9	3.0 / 137.6
095	9546.6	1175.0	408.4	17.0 / 24.7

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Robeson Creek Tributary 4</b>				
100	9984.4	1175.0	414.2	42.0 / 20.6
105	10465.0	1175.0	416.8	17.0 / 27.9
110	11011.8	1175.0	419.1	58.0 / 66.4
119	11938.5	1175.0	421.6	170.0 / 33.0
120	12047.3	1175.0	421.7	20.0 / 19.7
122	12223.3	1175.0	423.7	20.0 / 19.7
129	12903.9	1175.0	425.6	45.0 / 80.0
132	13228.5	1175.0	428.1	60.0 / 70.0
133	13266.5	1175.0	430.0	60.0 / 70.0
135	13532.5	1175.0	430.3	45.0 / 67.4
143	14318.7	877.0	434.9	57.0 / 22.4
148	14836.9	877.0	439.3	74.0 / 34.7
153	15338.9	877.0	441.5	10.0 / 107.0
163	16343.3	877.0	445.9	108.0 / 24.0
169	16923.3	877.0	448.1	89.0 / 41.8
174	17353.8	877.0	450.5	73.0 / 4.9
183	18294.0	393.0	457.0	26.0 / 77.0
188	18823.9	393.0	459.7	34.0 / 32.2
195	19462.7	393.0	465.2	62.0 / 4.5
201	20088.6	393.0	471.4	0.0 / 34.1
206	20597.1	393.0	475.7	24.0 / 35.0
210	21034.0	393.0	478.8	6.0 / 30.0
212	21194.2	393.0	482.5	30.0 / 40.0
213	21274.2	393.0	485.8	30.0 / 40.0
216	21619.9	393.0	492.3	30.0 / 79.0
217	21695.9	393.0	493.5	30.0 / 79.0
220	21994.5	393.0	496.6	5.0 / 5.0
<b>Robeson Creek Tributary 5</b>				
006	585.6	1096.0	391.4	76.0 / 44.4
011	1095.8	1096.0	394.9	27.0 / 78.5
019	1891.8	1096.0	398.8	31.0 / 86.0
026	2613.2	1096.0	401.4	79.0 / 6.6
031	3064.3	1096.0	403.2	70.0 / 22.2
039	3886.2	1096.0	406.7	20.0 / 20.0
040	3956.2	1096.0	410.5	20.0 / 20.0
050	4963.5	1096.0	411.8	100.0 / 18.0
056	5582.6	1096.0	414.4	25.0 / 222.2
063	6308.3	1096.0	416.3	86.0 / 37.5
068	6801.6	1096.0	417.4	16.0 / 15.0
069	6861.6	1096.0	418.9	16.0 / 15.0
076	7588.9	1096.0	420.8	62.0 / 18.0
082	8169.5	1096.0	424.0	70.0 / 40.0
082	8209.5	1096.0	424.3	70.0 / 40.0
084	8426.7	746.0	424.9	166.0 / 23.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Robeson Creek Tributary 5</b>				
091	9098.4	746.0	427.9	30.0 / 62.1
098	9755.8	746.0	431.0	12.0 / 12.0
100	10036.8	746.0	433.3	12.0 / 12.0
106	10639.1	746.0	435.1	60.0 / 27.6
115	11477.9	746.0	437.9	159.0 / 6.4
121	12057.4	746.0	439.3	34.0 / 30.5
125	12486.1	746.0	441.6	9.0 / 78.9
125	12524.1	746.0	442.2	9.0 / 78.9
132	13171.3	746.0	444.6	24.0 / 68.3
137	13701.5	746.0	446.7	10.0 / 42.5
142	14220.1	386.0	449.1	33.0 / 42.6
148	14848.3	386.0	451.4	24.0 / 13.8
155	15472.0	386.0	455.7	36.0 / 26.5
161	16120.0	386.0	459.5	0.0 / 36.5
169	16906.3	386.0	464.3	52.0 / 9.5
179	17907.3	386.0	470.8	8.0 / 12.3
<b>Rocky Branch (into Deep River)</b>				
005	508.7	2036.0	204.2 <sup>1</sup>	47.0 / 51.4
012	1198.5	2036.0	205.1	18.0 / 47.8
015	1459.6	2036.0	207.4	26.0 / 15.4
020	2023.1	2036.0	214.1	24.0 / 34.8
027	2701.9	2036.0	222.4	79.0 / 12.0
<b>Rocky Branch (into Georges Creek)</b>				
006	554.0	1796.0	232.1 <sup>1</sup>	163.0 / 206.5
011	1146.5	1796.0	232.1 <sup>1</sup>	102.0 / 321.0
017	1662.4	1796.0	232.4	276.0 / 44.8
019	1892.3	1796.0	233.0	306.0 / 42.7
020	1962.3	1796.0	234.9	306.0 / 42.7
025	2526.1	1636.0	235.2	132.0 / 237.2
032	3150.9	1636.0	235.8	6.0 / 307.0
040	4028.4	1636.0	237.3	191.0 / 297.1
046	4560.7	1636.0	238.7	225.0 / 93.9
047	4706.4	1636.0	239.8	69.0 / 47.4
049	4852.4	1636.0	242.1	29.0 / 21.2
051	5149.9	1636.0	245.3	29.0 / 26.5
052	5224.0	1636.0	245.6	27.0 / 14.3
054	5371.4	1636.0	246.9	73.0 / 24.0
056	5634.5	1636.0	247.7	129.0 / 176.7
057	5699.0	1636.0	247.7	14.0 / 152.5
058	5798.0	1333.0	248.4	14.0 / 152.5
065	6470.3	1333.0	249.1	49.0 / 170.8
070	6985.8	1333.0	250.5	4.0 / 193.7
076	7580.0	1333.0	252.4	4.0 / 150.5
086	8631.2	990.0	255.3	75.0 / 133.8
091	9070.2	990.0	256.3	102.0 / 83.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky Ford Branch</b>				
005	527.9	1600.0	237.81	52.0 / 700.0
010	1000.0	1600.0	237.81	10.0 / 269.0
015	1500.0	1600.0	237.81	39.0 / 118.0
020	2000.0	1600.0	237.81	256.0 / 35.0
027	2695.0	1600.0	237.81	210.0 / 10.0
030	3000.0	1600.0	237.81	340.0 / 19.0
035	3542.0	1600.0	237.81	78.0 / 121.0
036	3614.5	1600.0	237.81	20.0 / 21.0
037	3722.5	1600.0	237.81	20.0 / 21.0
039	3943.8	1600.0	237.81	62.0 / 234.0
044	4354.6	1470.0	237.81	9.0 / 266.0
050	5000.0	1470.0	237.81	10.0 / 207.0
055	5500.0	1470.0	238.6	61.0 / 109.0
060	6000.0	1470.0	239.7	18.0 / 132.0
065	6500.0	1470.0	241.3	65.0 / 102.0
070	7000.0	1470.0	242.7	16.0 / 72.0
075	7500.0	1470.0	244.3	30.0 / 58.0
<b>Rocky River</b>				
010	1000.0	23096.0	208.8 <sup>1</sup>	75.0 / 140.0
020	2000.0	23096.0	210.8	131.0 / 180.0
030	3000.0	23046.0	212.5	115.0 / 62.0
040	4045.1	23046.0	215.1	198.0 / 72.0
050	5000.0	23046.0	219.6	109.0 / 73.0
061	6066.8	23001.0	224.5	131.0 / 65.0
070	7000.0	23001.0	229.5	69.0 / 85.0
081	8051.1	23001.0	237.8	65.0 / 268.0
090	9000.0	23001.0	241.6	61.0 / 77.0
100	10000.0	23001.0	251.2	64.0 / 107.0
110	11000.0	22807.0	256.2	118.0 / 144.0
120	12000.0	22807.0	258.0	101.0 / 83.0
130	13000.0	22807.0	259.6	78.0 / 115.0
141	14087.4	22807.0	261.1	131.0 / 101.0
150	15000.0	22807.0	261.9	103.0 / 62.0
160	16000.0	22807.0	264.1	133.0 / 62.0
171	17148.6	22773.0	267.2	122.0 / 148.0
179	17908.4	22773.0	269.2	232.0 / 83.0
182	18196.6	22773.0	270.4	112.0 / 112.0
183	18255.6	22773.0	270.9	112.0 / 112.0
185	18514.8	22773.0	270.9	66.0 / 154.0
196	19557.0	22773.0	274.4	61.0 / 154.0
210	21000.0	22615.0	280.0	276.0 / 76.0
220	22000.0	22615.0	284.1	398.0 / 208.0
230	23000.0	22615.0	285.7	319.0 / 87.0
240	24000.0	22615.0	287.3	159.0 / 74.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky River</b>				
246	24562.7	22615.0	288.2	120.0 / 74.0
246	24594.7	22615.0	288.7	120.0 / 74.0
250	25000.0	22615.0	289.1	210.0 / 89.0
260	26000.0	22579.0	290.2	105.0 / 174.0
271	27090.9	22520.0	291.1	78.0 / 148.0
280	28000.0	22520.0	291.9	134.0 / 120.0
287	28702.7	19251.0	292.7	88.0 / 220.0
295	29500.0	19251.0	293.2	90.0 / 133.0
305	30500.0	19251.0	294.1	96.0 / 73.0
308	30802.4	19251.0	303.9	92.0 / 142.0
308	30842.4	19251.0	317.4	280.0 / 150.0
315	31500.0	19251.0	318.1	175.0 / 535.0
325	32500.0	19251.0	318.4	156.0 / 197.0
335	33500.0	19251.0	319.0	273.0 / 125.0
345	34500.0	19251.0	319.4	121.0 / 177.0
355	35500.0	19251.0	319.9	132.0 / 155.0
365	36500.0	19251.0	320.5	133.0 / 248.0
375	37500.0	19251.0	320.9	63.0 / 427.0
385	38500.0	19202.0	321.2	171.0 / 235.0
395	39500.0	19037.0	321.6	245.0 / 146.0
405	40500.0	19037.0	322.0	101.0 / 232.0
415	41500.0	19037.0	322.5	176.0 / 193.0
425	42500.0	19037.0	322.8	186.0 / 76.0
435	43500.0	18981.0	323.3	98.0 / 108.0
445	44500.0	18981.0	323.8	119.0 / 130.0
455	45500.0	18981.0	324.4	365.0 / 55.0
465	46500.0	18939.0	324.7	243.0 / 56.0
475	47500.0	18701.0	325.1	68.0 / 173.0
479	47891.4	18701.0	325.3	74.0 / 106.0
479	47945.4	18701.0	325.6	74.0 / 106.0
482	48212.6	18701.0	325.8	62.0 / 126.0
495	49500.0	18701.0	326.5	125.0 / 177.0
505	50500.0	18701.0	327.1	81.0 / 137.0
515	51500.0	18701.0	327.8	172.0 / 80.0
525	52500.0	18658.0	328.6	116.0 / 87.0
535	53500.0	18658.0	329.9	89.0 / 143.0
545	54500.0	18658.0	330.7	61.0 / 107.0
551	55112.2	17505.0	331.5	62.0 / 155.0
560	56000.0	17505.0	332.2	51.0 / 100.0
570	57000.0	17505.0	333.0	74.0 / 85.0
580	58000.0	17505.0	333.9	61.0 / 149.0
591	59129.2	17371.0	334.7	87.0 / 97.0
600	60000.0	17371.0	335.6	116.0 / 77.0
610	61000.0	17371.0	336.6	91.0 / 144.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky River</b>				
620	62000.0	16097.0	337.9	48.0 / 82.0
630	63000.0	16097.0	339.4	147.0 / 49.0
640	64000.0	16097.0	340.9	134.0 / 70.0
650	65000.0	16097.0	342.2	90.0 / 49.0
660	66000.0	16097.0	343.5	68.0 / 105.0
670	67000.0	16097.0	344.7	48.0 / 205.0
680	68000.0	16097.0	345.2	49.0 / 103.0
690	69000.0	15950.0	346.0	45.0 / 90.0
700	70000.0	15950.0	346.9	73.0 / 118.0
710	71000.0	15950.0	347.5	295.0 / 79.0
714	71388.7	15950.0	348.0	125.0 / 105.0
714	71438.2	15950.0	348.4	125.0 / 105.0
715	71507.5	15950.0	348.3	106.0 / 75.0
720	72000.0	15950.0	348.6	149.0 / 85.0
730	73000.0	15950.0	351.0	60.0 / 60.0
740	74000.0	15697.0	359.4	340.0 / 54.0
750	75000.0	15697.0	362.0	78.0 / 60.0
760	76000.0	15680.0	365.0	73.0 / 63.0
770	77000.0	15680.0	367.1	165.0 / 68.0
780	78000.0	15680.0	368.5	48.0 / 83.0
790	79000.0	15680.0	371.0	63.0 / 168.0
800	80000.0	15680.0	372.8	173.0 / 89.0
810	81000.0	15680.0	375.5	78.0 / 124.0
820	82000.0	15433.0	378.2	52.0 / 175.0
830	83000.0	15433.0	380.1	50.0 / 181.0
845	84500.0	15433.0	382.3	64.0 / 342.0
855	85500.0	15433.0	383.4	70.0 / 47.0
866	86582.2	15309.0	386.3	351.0 / 66.0
875	87500.0	15309.0	387.4	128.0 / 93.0
885	88500.0	15309.0	395.1	65.0 / 127.0
895	89500.0	15309.0	403.4	74.0 / 109.0
905	90500.0	15309.0	405.5	223.0 / 63.0
915	91500.0	15309.0	407.0	165.0 / 47.0
925	92500.0	13580.0	408.4	142.0 / 63.0
937	93682.2	13580.0	411.2	44.0 / 454.0
950	95000.0	13580.0	413.2	46.0 / 163.0
960	95955.3	13580.0	416.3	43.0 / 77.0
969	96923.7	13580.0	419.6	138.0 / 66.0
980	98000.0	13540.0	422.1	272.0 / 48.0
990	99000.0	13540.0	428.5	44.0 / 108.0
1000	100000.0	13540.0	433.7	43.0 / 78.0
1010	101000.0	12991.0	441.1	42.0 / 58.0
1020	102000.0	12957.0	448.0	95.0 / 86.0
1030	103000.0	12957.0	450.4	123.0 / 51.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky River</b>				
1041	104087.0	12874.0	453.5	42.0 / 57.0
1050	105000.0	12874.0	455.6	76.0 / 50.0
1061	106050.7	12856.0	457.4	74.0 / 88.0
1062	106161.7	12856.0	457.8	60.0 / 60.0
1062	106202.2	12856.0	458.1	60.0 / 60.0
1065	106500.0	12856.0	458.2	42.0 / 43.0
1075	107500.0	12856.0	459.5	42.0 / 45.0
1085	108500.0	12856.0	460.9	42.0 / 67.0
1095	109500.0	12856.0	462.2	42.0 / 73.0
1107	110731.3	12780.0	463.8	40.0 / 137.0
1115	111500.0	12696.0	464.6	42.0 / 70.0
1125	112500.0	12696.0	465.9	40.0 / 83.0
1136	113563.3	12696.0	467.6	69.0 / 108.0
1145	114500.0	12696.0	468.7	42.0 / 102.0
1155	115500.0	12503.0	470.3	84.0 / 117.0
1165	116500.0	12503.0	472.2	50.0 / 63.0
1175	117500.0	12475.0	476.2	50.0 / 63.0
1185	118500.0	12475.0	479.5	56.0 / 63.0
1195	119500.0	12475.0	482.0	84.0 / 82.0
1205	120500.0	12475.0	484.0	58.0 / 77.0
1215	121500.0	11517.0	485.8	75.0 / 42.0
1225	122500.0	11517.0	487.9	40.0 / 40.0
1235	123500.0	11434.0	491.2	40.0 / 52.0
1245	124500.0	11434.0	493.3	74.0 / 44.0
1255	125500.0	11391.0	495.7	73.0 / 225.0
1265	126500.0	11391.0	497.0	179.0 / 40.0
1275	127531.1	11391.0	498.5	66.0 / 48.0
1286	128569.2	11391.0	500.2	47.0 / 53.0
1475	147500.0	9272.0	522.7	36.0 / 76.0
1485	148500.0	9161.0	523.8	36.0 / 59.0
1495	149500.0	9161.0	525.4	44.0 / 36.0
1505	150500.0	9161.0	526.9	50.0 / 107.0
1515	151500.0	9161.0	527.9	59.0 / 37.0
1520	152035.1	9161.0	528.5	75.0 / 60.0
1523	152295.2	9161.0	529.4	215.0 / 85.0
1524	152400.9	9161.0	544.0	161.0 / 144.0
1524	152440.9	9161.0	544.0	140.0 / 158.0
1525	152460.0	9161.0	544.0	148.0 / 188.0
1535	153500.0	9052.0	544.1	126.0 / 216.0
1545	154500.0	9052.0	544.1	182.0 / 151.0
1554	155422.7	9052.0	544.1	151.0 / 176.0
1565	156500.0	9052.0	544.2	93.0 / 208.0
1575	157500.0	9052.0	544.2	172.0 / 125.0
1585	158458.5	9052.0	544.3	105.0 / 479.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky River</b>				
1598	159820.3	9052.0	544.3	315.0 / 174.0
1600	160040.4	9052.0	544.3	293.0 / 96.0
1601	160092.4	9052.0	544.3	293.0 / 96.0
1605	160500.0	9052.0	544.5	207.0 / 116.0
1614	161426.8	8297.0	544.5	391.0 / 97.0
1626	162615.8	8297.0	544.6	170.0 / 219.0
1635	163500.0	8297.0	544.6	195.0 / 144.0
1645	164500.0	8297.0	544.6	159.0 / 61.0
1655	165500.0	7211.0	544.7	101.0 / 91.0
1665	166500.0	7211.0	544.7	78.0 / 50.0
1675	167500.0	7211.0	545.0	73.0 / 26.0
1685	168500.0	7211.0	549.1	31.0 / 40.0
1696	169556.6	7211.0	575.2	45.0 / 89.0
1696	169596.6	7211.0	579.5	67.0 / 133.0
1698	169834.1	7211.0	580.9	33.0 / 118.0
1710	171000.0	7211.0	583.9	92.0 / 136.0
1720	172000.0	7211.0	585.2	72.0 / 150.0
1730	172950.8	7211.0	586.0	125.0 / 228.0
1735	173500.0	5940.0	586.3	162.0 / 58.0
1746	174553.7	5940.0	587.0	96.0 / 120.0
1755	175500.0	4010.0	587.6	35.0 / 152.0
1764	176429.0	4010.0	588.1	171.0 / 157.0
1775	177500.0	4010.0	588.4	125.0 / 48.0
1777	177705.7	4010.0	588.6	145.0 / 44.0
1778	177751.7	4010.0	589.0	145.0 / 44.0
1780	177968.3	3974.0	589.0	111.0 / 36.0
1788	178762.5	3635.0	589.5	71.0 / 90.0
1800	180000.0	3635.0	590.7	17.0 / 213.0
1810	181000.0	3635.0	592.3	32.0 / 68.0
1820	182000.0	3635.0	594.2	95.0 / 35.0
1830	183000.0	3635.0	595.5	66.0 / 32.0
1840	184000.0	3635.0	597.3	128.0 / 38.0
1850	185000.0	3635.0	598.8	65.0 / 23.0
1860	186000.0	3635.0	601.0	60.0 / 17.0
1870	187000.0	3455.0	603.3	184.0 / 85.0
1885	188455.2	3455.0	604.6	37.0 / 502.0
1895	189500.0	3455.0	605.3	28.0 / 160.0
1907	190679.0	3455.0	607.6	271.0 / 16.0
1914	191351.8	3455.0	609.0	159.0 / 25.0
1924	192411.4	3374.0	611.2	61.0 / 112.0
1934	193446.9	2891.0	612.6	33.0 / 68.0
1945	194500.0	2891.0	615.5	24.0 / 32.0
1955	195500.0	2891.0	619.5	39.0 / 28.0
1965	196500.0	2891.0	622.1	172.0 / 14.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Rocky River</b>				
1975	197468.1	2612.0	623.4	34.0 / 82.0
1976	197590.2	2612.0	623.5	26.0 / 26.0
1976	197646.2	2612.0	624.0	26.0 / 26.0
1979	197863.8	2612.0	624.4	56.0 / 89.0
1985	198500.0	2612.0	625.1	40.0 / 116.0
1995	199500.0	2501.0	626.9	13.0 / 72.0
2006	200553.0	2501.0	631.0	44.0 / 29.0
2015	201500.0	2501.0	634.3	49.0 / 19.0
2025	202500.0	2501.0	638.4	61.0 / 17.0
2035	203465.1	2501.0	641.0	74.0 / 52.0
2036	203600.4	2501.0	641.2	29.0 / 30.0
2036	203640.9	2501.0	641.9	29.0 / 30.0
2040	204000.0	2501.0	642.2	43.0 / 32.0
2051	205074.7	2501.0	643.3	336.0 / 187.0
2058	205809.1	2501.0	644.0	399.0 / 42.0
<b>Rocky River Tributary 1</b>				
120	12000.0	854.0	576.2	60.0 / 57.9
124	12394.9	854.0	579.0	33.0 / 49.1
129	12948.2	854.0	581.9	146.0 / 66.1
135	13531.3	854.0	586.4	71.0 / 47.0
140	14000.0	854.0	591.2	155.0 / 21.1
144	14423.7	854.0	597.4	23.0 / 52.9
149	14919.9	854.0	606.1	34.0 / 22.5
153	15307.4	380.0	608.9	28.0 / 32.2
158	15830.3	380.0	617.9	15.0 / 30.0
166	16560.7	380.0	629.5	10.0 / 45.0
<b>Sandy Branch</b>				
002	233.4	1866.0	409.5 <sup>1</sup>	31.0 / 65.6
009	880.8	1866.0	409.5 <sup>1</sup>	160.0 / 89.1
015	1479.0	1866.0	409.5 <sup>1</sup>	14.0 / 27.6
021	2084.9	1866.0	410.5	14.0 / 176.5
025	2500.0	1866.0	411.6	31.0 / 20.0
030	3000.0	1866.0	416.2	60.0 / 40.0
035	3500.0	1866.0	417.7	14.0 / 89.4
040	4000.0	1774.0	418.5	189.0 / 53.0
045	4500.0	1774.0	419.0	60.0 / 100.0
051	5125.8	1774.0	419.8	6.0 / 275.0
055	5500.0	1774.0	419.6	7.0 / 30.0
060	6000.0	1774.0	423.0	21.0 / 250.0
063	6289.3	1774.0	423.3	38.0 / 38.0
063	6329.8	1774.0	423.8	38.0 / 38.0
065	6500.0	1774.0	424.5	36.0 / 40.8
<b>Shaddox Creek</b>				
006	556.4	4223.0	176.5 <sup>1</sup>	40.0 / 170.3
012	1187.8	4223.0	176.5 <sup>1</sup>	83.0 / 77.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Shaddox Creek</b>				
020	2034.0	4223.0	176.5 <sup>1</sup>	97.0 / 204.2
021	2076.0	4223.0	176.5 <sup>1</sup>	97.0 / 204.2
029	2867.5	4048.0	176.5 <sup>1</sup>	582.0 / 62.0
032	3158.5	4048.0	176.5 <sup>1</sup>	730.0 / 120.7
034	3362.9	4048.0	176.5 <sup>1</sup>	1081.0 / 124.0
034	3404.9	4048.0	176.5 <sup>1</sup>	1081.0 / 124.0
045	4522.6	4048.0	176.5 <sup>1</sup>	866.0 / 342.6
053	5310.5	3987.0	176.5 <sup>1</sup>	685.0 / 579.7
060	5969.8	3987.0	176.5 <sup>1</sup>	963.0 / 551.8
063	6265.2	3987.0	176.5 <sup>1</sup>	709.0 / 881.3
076	7648.4	3987.0	176.5 <sup>1</sup>	19.0 / 1228.2
087	8714.6	3858.0	176.5 <sup>1</sup>	924.0 / 671.7
093	9304.7	3858.0	176.5 <sup>1</sup>	461.0 / 867.5
101	10110.1	3858.0	176.5 <sup>1</sup>	568.0 / 721.3
112	11206.9	3858.0	176.5 <sup>1</sup>	809.0 / 361.3
122	12191.7	3858.0	176.5 <sup>1</sup>	451.0 / 530.6
131	13131.5	3858.0	176.5 <sup>1</sup>	393.0 / 875.5
142	14241.4	3858.0	176.5 <sup>1</sup>	307.0 / 605.0
154	15370.7	2650.0	176.5 <sup>1</sup>	562.0 / 121.1
162	16221.0	2650.0	176.5 <sup>1</sup>	939.0 / 16.7
170	16973.3	2650.0	176.5 <sup>1</sup>	333.0 / 231.6
178	17776.9	2607.0	180.0	573.0 / 416.0
186	18555.7	2607.0	180.0	484.0 / 303.8
196	19612.3	2607.0	180.1	85.0 / 453.1
201	20069.0	2607.0	180.2	36.0 / 578.2
213	21257.2	2607.0	180.7	31.0 / 377.5
220	21996.6	2607.0	181.2	23.0 / 487.1
225	22507.8	2607.0	181.4	207.0 / 280.5
235	23480.5	2607.0	181.8	43.0 / 143.2
240	23958.3	2607.0	182.7	40.0 / 499.7
251	25132.9	2607.0	183.8	91.0 / 379.2
257	25677.0	2607.0	184.3	82.0 / 412.0
265	26483.8	2396.0	185.1	44.0 / 215.1
273	27281.1	2396.0	186.6	149.0 / 217.3
287	28664.0	1694.0	188.1	249.0 / 111.6
292	29247.7	1694.0	188.5	153.0 / 390.5
300	29986.8	1694.0	189.7	56.0 / 375.7
307	30662.5	1694.0	190.5	38.0 / 240.8
313	31319.7	1694.0	192.2	16.0 / 192.0
321	32125.0	1694.0	194.2	36.0 / 288.3
329	32887.1	1694.0	195.4	55.0 / 143.9
337	33694.2	1694.0	196.5	204.0 / 49.0
341	34135.9	1694.0	197.0	189.0 / 34.0
349	34882.3	1694.0	198.5	24.0 / 250.3

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Shaddox Creek</b>				
360	35972.5	1441.0	200.1	28.0 / 267.2
367	36727.1	1441.0	201.3	33.0 / 190.0
375	37488.5	1441.0	203.1	197.0 / 21.0
383	38260.9	1441.0	204.9	203.0 / 19.0
394	39350.0	1441.0	207.4	248.0 / 44.0
401	40149.5	1441.0	209.0	28.0 / 298.5
411	41090.1	1441.0	211.0	110.0 / 34.6
420	41958.6	1293.0	212.8	129.0 / 55.7
424	42433.0	1270.0	213.5	101.0 / 133.0
424	42433.2	1293.0	213.5	101.0 / 132.9
427	42733.0	1270.0	213.6	35.0 / 265.0
430	42978.0	1270.0	213.8	12.0 / 200.0
430	43049.0	1270.0	217.5	50.0 / 150.0
432	43190.0	1270.0	217.6	54.0 / 147.0
434	43441.0	1270.0	217.7	31.0 / 37.0
437	43746.0	1130.0	218.0	57.0 / 110.0
440	43987.0	1130.0	218.2	113.0 / 59.0
441	44060.0	1130.0	219.0	113.0 / 59.0
442	44232.0	1130.0	219.0	65.0 / 158.0
445	44457.0	1130.0	219.1	68.0 / 33.0
448	44770.0	1130.0	219.5	65.0 / 115.0
451	45056.0	1130.0	219.9	101.0 / 43.0
454	45368.0	1130.0	220.5	107.0 / 36.0
458	45804.0	992.0	221.5	84.0 / 20.0
462	46231.0	992.0	222.9	82.0 / 76.0
465	46546.0	758.0	223.6	12.0 / 74.0
469	46890.0	758.0	224.9	30.0 / 18.0
472	47170.0	758.0	226.7	55.0 / 36.0
474	47444.0	758.0	228.3	27.0 / 19.0
477	47716.0	758.0	230.4	80.0 / 19.0
479	47947.0	758.0	231.2	18.0 / 62.0
482	48209.0	758.0	232.9	30.0 / 72.0
485	48497.0	758.0	235.1	31.0 / 70.0
487	48684.0	758.0	236.0	38.0 / 23.0
<b>South Fork</b>				
310	31019.3	3140.0	525.5	142.0 / 23.0
315	31543.9	3140.0	526.2	48.0 / 211.0
325	32509.3	3140.0	527.0	203.0 / 69.0
332	33163.4	3140.0	527.6	77.0 / 48.0
335	33517.8	3140.0	528.4	50.0 / 18.0
341	34117.2	3140.0	530.2	63.0 / 23.0
346	34647.0	2590.0	531.1	132.0 / 60.0
352	35157.2	2590.0	531.6	78.0 / 120.0
357	35729.5	2590.0	532.4	18.0 / 50.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>South Fork</b>				
364	36379.4	2590.0	536.3	62.0 / 23.0
371	37137.5	2590.0	538.5	41.0 / 45.0
377	37657.9	2590.0	539.7	33.0 / 92.0
384	38376.6	2590.0	540.9	100.0 / 24.0
390	39028.1	2590.0	542.3	92.0 / 20.0
393	39316.1	2590.0	543.4	143.0 / 81.0
394	39364.1	2420.0	543.7	143.0 / 81.0
399	39902.7	2110.0	543.9	121.0 / 102.0
406	40579.5	2110.0	544.8	115.0 / 44.0
412	41211.2	2110.0	547.0	104.0 / 38.0
417	41738.7	2070.0	549.6	18.0 / 130.0
421	42066.2	2070.0	550.4	100.0 / 60.0
<b>Stinking Creek</b>				
007	661.0	2813.0	237.8 <sup>1</sup>	344.0 / 529.4
011	1128.9	2813.0	237.8 <sup>1</sup>	265.0 / 321.9
017	1711.8	2813.0	237.8 <sup>1</sup>	417.0 / 244.0
022	2156.2	2813.0	237.8 <sup>1</sup>	258.0 / 241.8
026	2621.7	2813.0	237.8 <sup>1</sup>	515.0 / 176.6
031	3090.9	2813.0	237.8 <sup>1</sup>	172.0 / 243.7
036	3632.8	2704.0	237.8 <sup>1</sup>	670.0 / 289.7
041	4118.0	2704.0	237.8 <sup>1</sup>	493.0 / 271.2
045	4514.5	2704.0	237.8 <sup>1</sup>	390.0 / 530.6
051	5128.1	2704.0	237.8 <sup>1</sup>	262.0 / 484.6
059	5916.7	2497.0	237.8 <sup>1</sup>	110.0 / 106.0
060	5968.7	2497.0	237.8 <sup>1</sup>	110.0 / 106.0
062	6246.7	2497.0	237.8 <sup>1</sup>	304.0 / 61.1
068	6796.8	2497.0	237.8 <sup>1</sup>	70.0 / 58.1
074	7382.9	2497.0	237.8 <sup>1</sup>	68.0 / 22.9
081	8091.1	2497.0	237.8 <sup>1</sup>	30.0 / 179.1
086	8639.7	2497.0	237.8 <sup>1</sup>	36.0 / 29.7
092	9221.2	832.0	245.4	12.0 / 17.5
099	9883.5	832.0	255.1	20.0 / 84.5
103	10347.8	819.0	262.1	10.0 / 38.7
108	10812.4	819.0	271.0	79.0 / 76.0
109	10860.4	819.0	273.4	79.0 / 76.0
113	11319.3	819.0	279.3	14.0 / 61.5
<b>Terrells Creek</b>				
004	412.5	4204.0	374.4 <sup>1</sup>	29.0 / 28.0
009	949.4	4204.0	374.4 <sup>1</sup>	27.0 / 32.7
019	1877.4	4204.0	374.4 <sup>1</sup>	40.0 / 80.0
024	2366.4	4204.0	374.4 <sup>1</sup>	29.0 / 63.0
024	2406.4	4204.0	374.4 <sup>1</sup>	29.0 / 63.0
026	2565.1	4204.0	374.4 <sup>1</sup>	29.0 / 91.5
033	3265.8	3722.0	374.4 <sup>1</sup>	119.0 / 23.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Terrells Creek</b>				
035	3498.2	3722.0	374.4 <sup>1</sup>	133.0 / 62.8
043	4295.7	3722.0	374.4 <sup>1</sup>	135.0 / 37.7
048	4753.7	3722.0	374.4 <sup>1</sup>	91.0 / 37.0
051	5127.4	3722.0	374.4 <sup>1</sup>	27.0 / 272.9
057	5715.2	3722.0	374.4 <sup>1</sup>	166.0 / 74.9
060	5979.1	3722.0	374.6	270.0 / 31.7
070	7035.5	3654.0	375.1	285.0 / 33.0
076	7596.2	3654.0	375.5	214.0 / 63.0
090	9000.5	3654.0	376.8	290.0 / 200.2
097	9680.8	3654.0	377.3	92.0 / 19.8
103	10272.5	3654.0	378.8	34.0 / 243.8
115	11459.3	3484.0	379.9	108.0 / 247.2
121	12146.5	3484.0	380.6	11.0 / 602.7
130	12998.6	2615.0	381.4	100.0 / 291.9
140	14015.6	2615.0	382.5	200.0 / 45.0
147	14683.0	2615.0	383.2	39.0 / 32.0
147	14732.0	2615.0	383.5	39.0 / 32.0
151	15068.5	2615.0	384.2	116.0 / 23.6
158	15809.9	2615.0	385.8	241.0 / 56.5
173	17340.9	2615.0	387.4	108.0 / 23.5
180	18036.8	2615.0	389.1	259.0 / 39.2
189	18932.2	2405.0	390.4	53.0 / 32.6
194	19415.8	2405.0	392.2	29.0 / 43.9
205	20456.0	2405.0	395.8	44.0 / 97.0
211	21058.6	2405.0	398.4	80.0 / 10.0
217	21699.1	2405.0	404.0	42.0 / 30.0
223	22333.8	2193.0	411.0	17.0 / 106.0
230	22966.2	2193.0	416.7	76.0 / 22.4
<b>Terrells Creek (West)</b>				
003	289.9	6130.0	394.4 <sup>1</sup>	60.0 / 40.0
008	798.0	6130.0	394.4 <sup>1</sup>	50.0 / 30.0
013	1296.0	6100.0	394.4 <sup>1</sup>	60.0 / 30.0
018	1822.8	6100.0	394.4 <sup>1</sup>	55.0 / 25.0
024	2359.2	6100.0	394.4 <sup>1</sup>	40.0 / 30.0
031	3089.6	6100.0	394.4 <sup>1</sup>	45.0 / 24.0
039	3907.5	6100.0	394.4 <sup>1</sup>	50.0 / 37.0
039	3947.0	6100.0	394.4 <sup>1</sup>	50.0 / 37.0
043	4320.1	6100.0	394.4 <sup>1</sup>	100.0 / 65.0
044	4360.1	6100.0	400.6	100.0 / 65.0
048	4795.3	6100.0	401.5	56.0 / 54.0
048	4841.8	6100.0	401.9	56.0 / 54.0
054	5408.6	6100.0	402.7	70.0 / 40.0
059	5878.2	6100.0	403.8	67.0 / 30.0
065	6535.4	6100.0	406.1	40.0 / 103.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Terrells Creek (West)</b>				
070	6953.5	6100.0	407.1	27.0 / 89.7
075	7455.5	6100.0	408.2	28.0 / 42.0
080	7975.3	6100.0	409.7	33.0 / 38.1
084	8421.9	6100.0	411.6	53.0 / 33.3
090	8958.0	6100.0	413.1	133.0 / 32.0
096	9579.3	6100.0	414.9	28.0 / 36.5
100	10022.7	6100.0	416.7	55.0 / 28.0
106	10595.5	6100.0	418.6	260.0 / 30.0
112	11187.6	6100.0	420.2	64.0 / 34.1
117	11703.8	6100.0	421.6	32.0 / 90.1
122	12230.2	6100.0	422.5	40.0 / 54.1
128	12815.8	6100.0	423.6	75.0 / 61.7
135	13485.3	4997.0	424.3	40.0 / 126.1
143	14256.2	4997.0	425.3	50.0 / 27.1
149	14873.7	4997.0	426.1	28.0 / 27.0
149	14939.7	4997.0	427.7	28.0 / 27.0
154	15401.8	4997.0	428.4	60.0 / 31.4
159	15933.6	4997.0	428.9	48.0 / 22.0
164	16409.6	4997.0	429.8	25.0 / 53.4
170	16971.2	4997.0	431.9	30.0 / 35.9
174	17449.9	4997.0	434.1	19.0 / 48.4
180	18004.6	4954.0	435.6	25.0 / 25.1
186	18580.7	4954.0	437.1	86.0 / 23.0
194	19362.3	4954.0	438.4	30.0 / 86.7
199	19902.7	4954.0	439.3	220.0 / 30.0
205	20534.6	4954.0	440.1	81.0 / 48.0
211	21063.8	4804.0	440.7	28.0 / 189.0
216	21570.0	4804.0	441.3	27.0 / 172.8
221	22091.3	4804.0	442.0	159.0 / 20.0
226	22643.1	4804.0	442.6	30.0 / 67.1
230	22984.8	4804.0	443.1	25.0 / 32.1
236	23582.0	4125.0	444.5	65.0 / 28.7
241	24125.2	4125.0	445.5	142.0 / 31.0
245	24487.0	4125.0	446.1	46.0 / 22.8
249	24927.6	4125.0	447.5	360.0 / 30.0
254	25429.3	4125.0	448.4	16.0 / 141.1
260	26039.5	4125.0	448.8	20.0 / 20.0
266	26588.4	4125.0	452.5	20.0 / 20.0
271	27112.6	4125.0	457.4	59.0 / 17.3
276	27640.4	4049.0	461.2	25.0 / 31.4
283	28301.4	4049.0	465.2	18.0 / 25.0
289	28905.1	4049.0	467.9	53.0 / 21.6
296	29633.1	4049.0	469.8	117.0 / 25.0
302	30166.9	4049.0	470.5	164.0 / 26.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Terrells Creek (West)</b>				
307	30737.7	4049.0	471.2	40.0 / 40.0
308	30777.7	4049.0	471.6	40.0 / 40.0
313	31337.9	4049.0	472.6	132.0 / 25.0
320	31962.0	4049.0	473.3	64.0 / 125.9
326	32593.9	4049.0	473.7	121.0 / 30.0
332	33228.9	3914.0	474.3	244.0 / 27.0
339	33934.1	3914.0	474.7	62.0 / 89.8
345	34548.1	3914.0	476.2	30.0 / 205.1
352	35225.4	3625.0	477.8	262.0 / 33.2
360	35964.5	3625.0	478.9	82.0 / 195.3
366	36641.2	3442.0	479.8	74.0 / 122.0
373	37331.3	3442.0	480.9	40.0 / 123.3
379	37933.4	3442.0	482.3	104.0 / 101.5
386	38578.7	3442.0	483.6	186.0 / 25.0
392	39150.4	3442.0	484.8	104.0 / 42.9
398	39838.4	3442.0	486.2	43.0 / 30.1
405	40469.6	3442.0	487.8	20.0 / 70.5
413	41266.7	3442.0	490.1	55.0 / 55.0
413	41319.2	3442.0	490.4	55.0 / 55.0
420	42005.0	3442.0	491.7	28.0 / 72.8
426	42626.3	3442.0	492.9	241.0 / 75.6
432	43180.6	3442.0	493.4	151.0 / 25.0
439	43885.0	3442.0	494.7	23.0 / 30.1
445	44465.9	3442.0	497.2	25.0 / 114.4
451	45072.9	2452.0	498.2	119.0 / 194.7
457	45661.6	2452.0	498.5	292.0 / 20.0
462	46163.9	2452.0	498.7	277.0 / 40.0
469	46886.4	2452.0	499.5	20.0 / 411.6
475	47494.4	2452.0	500.8	20.0 / 240.7
482	48193.9	2418.0	503.4	30.0 / 39.6
488	48750.1	2418.0	505.5	22.0 / 22.0
488	48800.1	2418.0	506.0	22.0 / 22.0
494	49403.4	2418.0	507.4	106.0 / 114.0
501	50061.4	2418.0	508.1	15.0 / 213.0
506	50608.6	2418.0	508.9	22.0 / 123.0
514	51352.5	2418.0	510.9	60.0 / 14.1
520	52011.6	2418.0	514.3	14.0 / 55.5
528	52767.7	2418.0	516.1	25.0 / 110.7
535	53527.9	1499.0	517.0	34.0 / 46.1
541	54112.5	1448.0	519.2	41.0 / 47.1
546	54633.9	1448.0	521.2	44.0 / 60.9
552	55217.9	1448.0	523.5	127.0 / 12.1
558	55846.6	1448.0	527.2	29.0 / 30.2
564	56410.5	1394.0	529.5	44.0 / 182.1

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Tick Creek</b>				
005	500.0	5850.0	407.4 <sup>1</sup>	92.0 / 30.0
010	1000.0	5850.0	409.1	74.0 / 51.7
015	1500.0	5850.0	411.2	26.0 / 92.4
020	2000.0	5850.0	412.7	130.0 / 56.0
025	2500.0	5850.0	413.4	35.0 / 224.1
028	2842.7	5850.0	413.8	92.0 / 159.0
035	3500.0	5850.0	414.5	327.0 / 36.4
040	4000.0	5850.0	414.9	157.0 / 92.7
045	4500.0	5850.0	415.4	34.0 / 337.4
052	5233.3	5850.0	416.1	404.0 / 79.0
055	5500.0	5850.0	416.3	378.0 / 40.0
060	6000.0	5840.0	416.9	228.0 / 22.0
064	6355.1	5840.0	417.5	282.0 / 133.9
072	7185.4	5840.0	418.3	339.0 / 49.8
075	7500.0	5840.0	418.7	373.0 / 25.9
079	7902.0	5840.0	419.4	110.0 / 318.7
087	8697.6	5840.0	420.7	549.0 / 21.0
090	9000.0	5840.0	421.1	511.0 / 63.0
095	9500.0	5840.0	421.9	414.0 / 43.0
100	10000.0	5840.0	422.9	364.0 / 22.0
105	10500.0	5840.0	423.8	262.0 / 57.2
108	10812.9	5840.0	424.4	334.0 / 61.0
109	10858.9	5840.0	425.8	334.0 / 61.0
110	11000.0	5810.0	425.9	274.0 / 132.2
115	11500.0	5780.0	426.5	301.0 / 26.0
120	12000.0	5780.0	427.3	172.0 / 60.7
125	12500.0	5780.0	428.2	92.0 / 203.6
130	13000.0	5780.0	429.0	67.0 / 188.4
135	13500.0	5780.0	430.0	42.0 / 222.4
140	14000.0	5780.0	431.3	93.0 / 119.4
145	14500.0	5780.0	432.4	296.0 / 28.0
150	15000.0	5780.0	433.1	38.0 / 283.8
155	15500.0	5730.0	434.1	142.0 / 200.8
160	16000.0	5730.0	434.4	452.0 / 127.4
165	16500.0	5730.0	434.5	86.0 / 277.9
170	16963.4	5730.0	434.9	44.0 / 310.7
177	17665.0	5680.0	438.2	21.0 / 335.2
180	18000.0	5680.0	439.3	45.0 / 376.8
181	18082.6	5680.0	439.1	75.0 / 75.0
181	18122.1	5680.0	441.6	75.0 / 75.0
185	18500.0	5680.0	443.4	80.0 / 72.0
190	19000.0	5680.0	446.1	36.0 / 94.8
195	19500.0	5680.0	448.6	125.0 / 57.9
200	20000.0	5680.0	450.6	76.0 / 39.5

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Tick Creek</b>				
204	20428.8	5680.0	452.4	69.0 / 57.6
210	21000.0	5680.0	454.0	84.0 / 61.7
215	21500.0	5680.0	455.1	112.0 / 78.7
219	21893.2	5680.0	455.5	52.0 / 90.0
225	22500.0	5680.0	456.5	137.0 / 141.7
230	23000.0	5600.0	457.0	318.0 / 25.9
235	23500.0	5600.0	457.3	219.0 / 199.3
240	24000.0	5600.0	457.5	30.0 / 466.4
242	24162.8	5600.0	456.9	70.0 / 47.0
242	24220.8	5600.0	457.7	70.0 / 47.0
245	24500.0	5600.0	459.6	92.0 / 79.9
250	25000.0	5600.0	460.9	40.0 / 335.3
255	25500.0	5600.0	462.1	107.0 / 114.0
260	26000.0	5600.0	463.5	61.0 / 180.6
265	26500.0	5600.0	464.4	143.0 / 315.0
270	27000.0	5600.0	464.9	240.0 / 191.0
272	27150.9	5600.0	465.1	198.0 / 259.0
285	28500.0	4620.0	466.5	73.0 / 205.9
290	29000.0	4620.0	467.1	33.0 / 242.0
295	29500.0	4620.0	467.6	95.0 / 73.7
296	29553.7	4620.0	467.6	73.0 / 68.0
296	29609.7	4620.0	468.0	73.0 / 68.0
300	30000.0	3520.0	468.8	61.0 / 360.4
305	30500.0	3520.0	469.0	181.0 / 215.7
310	30962.3	3520.0	469.3	304.0 / 22.0
316	31624.3	3520.0	470.1	70.0 / 72.9
320	32000.0	3520.0	470.9	91.0 / 171.2
325	32500.0	3520.0	471.9	90.0 / 73.0
330	33000.0	3520.0	473.9	24.0 / 190.1
335	33500.0	3520.0	475.6	221.0 / 34.0
340	34014.5	3520.0	476.9	227.0 / 155.7
345	34500.0	3520.0	477.7	100.0 / 440.8
350	35000.0	3520.0	478.6	49.0 / 63.5
355	35500.0	3520.0	483.2	20.0 / 55.3
360	36000.0	3520.0	486.3	71.0 / 87.2
365	36500.0	3240.0	487.8	121.0 / 110.0
370	37000.0	3240.0	488.6	65.0 / 377.8
375	37500.0	3240.0	489.3	33.0 / 333.1
380	38000.0	3240.0	490.3	65.0 / 187.5
385	38500.0	3240.0	491.6	20.0 / 66.4
390	39000.0	3240.0	493.8	53.0 / 125.7
395	39500.0	3240.0	494.8	105.0 / 59.5
400	40000.0	3240.0	496.1	24.0 / 188.6
405	40500.0	3240.0	497.2	49.0 / 209.6

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Tick Creek</b>				
407	40652.5	3240.0	497.6	66.0 / 298.4
415	41500.0	1720.0	499.7	103.0 / 151.9
421	42100.3	1720.0	501.3	87.0 / 45.0
422	42150.3	1720.0	503.5	87.0 / 45.0
424	42358.5	1720.0	503.8	38.0 / 106.2
431	43053.3	1720.0	505.0	50.0 / 401.3
435	43500.0	1720.0	505.9	17.0 / 178.0
440	44000.0	1720.0	509.0	19.0 / 110.3
442	44184.5	1720.0	509.0	18.0 / 18.5
443	44252.5	1720.0	512.5	18.0 / 18.5
446	44598.4	1720.0	514.5	57.0 / 54.4
450	45000.0	1720.0	515.3	52.0 / 49.8
455	45500.0	1720.0	516.5	130.0 / 60.0
460	46000.0	1482.0	517.3	92.0 / 113.6
465	46500.0	1482.0	518.4	41.0 / 134.8
470	47000.0	1482.0	520.0	135.0 / 105.1
475	47500.0	1482.0	522.2	49.0 / 71.7
481	48067.2	1482.0	525.9	175.0 / 20.0
485	48500.0	1482.0	527.6	76.0 / 97.6
490	49000.0	1482.0	529.6	34.0 / 131.3
495	49500.0	1482.0	532.0	130.0 / 58.8
500	50000.0	1482.0	534.5	82.0 / 85.9
505	50500.0	1482.0	536.2	147.0 / 16.0
510	51000.0	1482.0	538.1	110.0 / 30.0
515	51500.0	1482.0	540.5	172.0 / 30.0
520	52000.0	1482.0	542.4	150.0 / 20.0
525	52500.0	1482.0	544.3	57.0 / 109.0
530	53000.0	1482.0	546.4	139.0 / 26.5
535	53500.0	1482.0	548.9	58.0 / 73.6
537	53715.3	1482.0	550.2	31.0 / 111.4
538	53779.3	1482.0	554.6	31.0 / 111.4
540	54000.0	1078.0	554.7	169.0 / 169.9
<b>Tick Creek Tributary</b>				
004	424.5	1490.0	468.1 <sup>1</sup>	52.0 / 73.8
009	930.2	1490.0	468.1 <sup>1</sup>	23.0 / 148.0
014	1449.4	1490.0	469.0	20.0 / 99.8
020	1983.7	1490.0	473.4	31.0 / 44.4
025	2500.0	1490.0	477.2	32.0 / 59.9
030	3000.0	1490.0	479.8	20.0 / 131.6
<b>Tick Creek Tributary 1</b>				
004	407.0	1807.0	498.4 <sup>1</sup>	318.0 / 11.3
951	951.0	1807.0	499.7	150.0 / 68.0
014	1408.0	1807.0	500.6	99.0 / 116.6
020	1985.0	1807.0	501.9	97.0 / 68.5

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Tick Creek Tributary 1</b>				
025	2502.0	1807.0	503.4	25.0 / 71.9
028	2766.0	1743.0	504.7	28.0 / 32.9
031	3143.0	1743.0	507.4	18.0 / 73.7
036	3573.0	1743.0	508.7	8.0 / 79.5
040	3978.0	1743.0	510.7	30.0 / 49.5
045	4482.0	1743.0	514.0	73.0 / 60.9
048	4770.0	1743.0	515.3	103.0 / 107.9
049	4899.0	1743.0	519.8	103.0 / 107.9
055	5465.0	1574.0	519.9	54.0 / 275.6
061	6090.0	1574.0	520.0	291.0 / 6.6
065	6531.0	1417.0	520.3	220.0 / 30.7
070	7029.0	1417.0	521.1	142.0 / 7.7
075	7457.0	1417.0	522.8	227.0 / 5.9
080	7987.0	1417.0	524.2	217.0 / 5.9
085	8469.0	1417.0	526.5	192.0 / 5.9
089	8931.0	1417.0	529.1	130.0 / 5.9
094	9414.0	1417.0	531.1	6.0 / 164.1
<b>Tributary A</b>				
019	1862.6	793.0	240.4 <sup>1</sup>	36.0 / 41.5
025	2500.0	793.0	240.4 <sup>1</sup>	107.0 / 12.3
030	3000.0	793.0	240.4 <sup>1</sup>	69.0 / 29.4
036	3573.0	793.0	240.4 <sup>1</sup>	27.0 / 95.5
039	3880.7	793.0	240.4 <sup>1</sup>	48.0 / 59.8
045	4500.0	793.0	240.4 <sup>1</sup>	50.0 / 146.5
050	5018.0	793.0	240.4 <sup>1</sup>	52.0 / 35.5
055	5540.7	793.0	240.4 <sup>1</sup>	12.0 / 169.1
060	6031.8	793.0	241.8	80.0 / 12.4
066	6612.0	793.0	245.1	42.0 / 52.7
071	7146.6	793.0	247.0	79.0 / 20.1
076	7618.3	793.0	250.6	39.0 / 11.6
077	7740.7	793.0	252.5	50.0 / 30.0
078	7820.7	793.0	257.9	50.0 / 30.0
081	8110.4	793.0	258.1	100.0 / 80.0
<b>Turkey Creek</b>				
004	364.5	1909.0	324.3	32.0 / 22.2
009	870.0	1909.0	327.7	47.0 / 22.2
014	1402.3	1909.0	330.3	30.0 / 27.6
019	1902.0	1909.0	331.8	52.0 / 53.8
019	1944.0	1909.0	332.0	52.0 / 53.8
025	2493.0	1909.0	334.2	30.0 / 26.0
031	3109.3	1909.0	340.2	34.0 / 67.0
037	3681.2	1909.0	343.0	37.0 / 28.6
042	4231.6	1909.0	345.9	23.0 / 58.5
048	4815.0	1909.0	348.6	18.0 / 26.7

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Turkey Creek</b>				
049	4881.0	1909.0	349.7	18.0 / 26.7
054	5420.9	1909.0	352.5	20.0 / 38.5
061	6074.8	1732.0	357.1	69.0 / 87.7
067	6727.0	1732.0	359.1	30.0 / 69.6
073	7256.1	1732.0	361.1	21.0 / 46.6
077	7742.2	1732.0	363.8	64.0 / 33.8
078	7831.1	1732.0	364.5	35.0 / 26.3
079	7893.6	1732.0	366.8	35.0 / 26.3
083	8267.5	1732.0	367.3	57.0 / 101.4
088	8834.1	1732.0	367.8	120.0 / 29.0
093	9294.6	1732.0	368.8	38.0 / 91.0
099	9888.4	1732.0	370.5	13.0 / 164.1
104	10408.0	1732.0	372.6	20.0 / 113.8
109	10882.3	1732.0	374.7	34.0 / 140.3
118	11780.3	959.0	376.9	76.0 / 71.2
125	12490.1	959.0	379.0	25.0 / 21.1
131	13108.6	959.0	384.3	26.0 / 41.2
138	13843.1	857.0	387.6	21.0 / 21.8
139	13905.6	857.0	389.0	21.0 / 21.8
145	14481.7	857.0	392.3	70.0 / 22.8
151	15099.9	857.0	395.3	60.0 / 38.4
158	15770.0	857.0	398.0	23.0 / 50.4
166	16622.1	857.0	401.7	50.0 / 63.3
170	16954.2	857.0	403.0	57.0 / 32.4
176	17628.1	857.0	407.6	16.0 / 15.5
182	18156.5	857.0	412.2	40.0 / 30.1
190	19007.0	857.0	416.7	31.0 / 24.8
197	19684.9	348.0	420.3	18.0 / 36.8
201	20082.8	348.0	422.2	19.0 / 12.3
209	20863.5	348.0	428.5	17.0 / 16.6
209	20926.0	348.0	428.8	17.0 / 16.6
213	21345.1	348.0	430.7	20.0 / 19.4
219	21939.9	348.0	436.6	19.0 / 19.1
221	22064.5	348.0	437.0	21.0 / 20.7
221	22127.0	348.0	437.4	21.0 / 20.7
225	22496.9	348.0	440.5	98.0 / 51.0
230	22962.2	348.0	445.2	13.0 / 19.4
235	23477.4	348.0	451.5	11.0 / 10.0
<b>Tysons Creek</b>				
163	16283.0	3100.0	319.5	47.0 / 61.0
168	16846.0	3100.0	322.3	67.0 / 31.0
176	17580.0	2630.0	324.8	29.0 / 72.0
183	18294.0	2630.0	327.4	95.0 / 32.0
188	18845.0	2630.0	330.9	19.0 / 128.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Tysons Creek</b>				
195	19536.0	2630.0	333.8	132.0 / 26.0
205	20540.0	2630.0	338.4	17.0 / 93.0
212	21229.0	1890.0	342.3	100.0 / 17.0
214	21360.0	1890.0	343.3	26.0 / 27.0
215	21460.0	1890.0	349.2	27.0 / 27.0
216	21562.0	1890.0	349.6	63.0 / 57.0
222	22239.0	1890.0	349.7	27.0 / 96.0
232	23214.0	1860.0	354.4	17.0 / 53.0
240	23973.0	1860.0	361.5	17.0 / 79.0
250	24950.0	1860.0	367.3	98.0 / 18.0
257	25740.0	1860.0	372.9	41.0 / 53.0
264	26427.0	1860.0	376.9	148.0 / 17.0
272	27175.0	1580.0	380.6	52.0 / 58.0
279	27893.0	1580.0	385.4	71.0 / 74.0
286	28637.0	1580.0	390.2	60.0 / 67.0
292	29204.0	1580.0	393.3	75.0 / 21.0
298	29776.0	1580.0	395.6	72.0 / 70.0
304	30442.0	1580.0	398.0	23.0 / 69.0
312	31192.0	1580.0	402.4	18.0 / 63.0
313	31280.0	1580.0	404.1	114.0 / 63.0
313	31324.0	1580.0	406.3	114.0 / 63.0
314	31389.0	1580.0	406.4	84.0 / 66.0
319	31908.0	1580.0	406.9	51.0 / 74.0
325	32454.0	1580.0	409.3	53.0 / 75.0
330	33017.0	1580.0	412.7	43.0 / 32.0
335	33462.0	1580.0	414.1	122.0 / 109.0
<b>Tysons Creek Tributary</b>				
001	133.0	1350.0	341.3 <sup>1</sup>	28.0 / 71.0
005	519.0	1350.0	346.1	50.0 / 32.0
010	1000.0	1350.0	349.3	21.0 / 59.0
016	1595.0	1320.0	353.2	46.0 / 54.0
021	2142.0	1320.0	355.6	88.0 / 31.0
026	2565.0	1320.0	359.2	76.0 / 39.0
031	3062.0	1290.0	359.3	71.0 / 41.0
040	3965.0	1260.0	362.2	93.0 / 63.0
047	4749.0	1260.0	366.5	27.0 / 41.0
053	5297.0	1230.0	371.3	32.0 / 42.0
059	5949.0	1230.0	377.9	34.0 / 40.0
066	6563.0	731.0	385.9	72.0 / 21.0
<b>Varnell Creek</b>				
005	500.0	3158.0	484.6 <sup>1</sup>	46.0 / 26.7
011	1068.9	3158.0	486.6	32.0 / 56.6
017	1718.3	3158.0	489.2	69.0 / 60.7
022	2197.6	3158.0	490.0	45.0 / 46.1

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Varnell Creek</b>				
022	2236.6	3158.0	490.4	45.0 / 46.1
029	2935.0	3158.0	491.6	175.0 / 232.5
035	3473.3	3158.0	492.2	30.0 / 35.0
036	3619.3	3158.0	494.2	30.0 / 35.0
042	4153.7	3073.0	496.7	136.0 / 50.1
048	4808.1	3073.0	498.1	68.0 / 128.0
054	5381.2	3073.0	499.9	29.0 / 117.7
060	6000.0	3073.0	501.7	252.0 / 33.9
066	6621.6	2900.0	503.3	32.0 / 113.6
071	7083.3	2689.0	505.0	81.0 / 39.0
075	7500.0	2689.0	506.2	51.0 / 43.6
080	8000.0	2689.0	507.6	23.0 / 124.5
086	8635.7	2689.0	508.4	32.0 / 217.6
092	9172.6	2689.0	508.9	209.0 / 63.3
100	10000.1	2631.0	510.5	25.0 / 169.6
105	10500.0	2631.0	513.0	20.0 / 86.6
110	11000.0	2631.0	517.1	82.0 / 17.3
115	11542.3	2631.0	519.6	43.0 / 34.8
121	12146.2	2631.0	521.6	146.0 / 41.7
128	12757.1	2631.0	522.7	23.0 / 180.4
134	13393.7	2631.0	523.9	129.0 / 34.2
140	14000.0	2418.0	525.0	175.0 / 60.1
146	14639.4	2418.0	525.9	18.0 / 265.8
151	15142.1	2418.0	526.7	49.0 / 156.4
157	15654.3	2418.0	528.4	27.0 / 157.3
<b>Weaver Creek</b>				
155	15500.0	851.0	237.8 <sup>1</sup>	116.0 / 119.0
160	16000.0	750.0	237.8 <sup>1</sup>	48.0 / 166.0
165	16500.0	750.0	237.8 <sup>1</sup>	22.0 / 103.0
170	17000.0	750.0	237.8 <sup>1</sup>	136.0 / 8.0
175	17500.0	750.0	237.8 <sup>1</sup>	44.0 / 8.0
180	18000.0	750.0	237.8 <sup>1</sup>	100.0 / 9.0
183	18349.6	750.0	237.8 <sup>1</sup>	17.0 / 24.0
190	19000.0	750.0	237.8 <sup>1</sup>	10.0 / 17.0
195	19500.0	750.0	237.8 <sup>1</sup>	13.0 / 52.0
200	20048.8	750.0	237.8 <sup>1</sup>	14.0 / 18.0
205	20500.0	750.0	238.1	4.0 / 73.0
211	21081.5	750.0	240.2	13.0 / 28.0
215	21500.0	750.0	242.4	22.0 / 13.0
222	22158.2	750.0	247.4	49.0 / 10.0
225	22500.0	431.0	249.2	12.0 / 119.0
232	23189.0	431.0	250.5	8.0 / 4.0
236	23633.7	431.0	256.3	15.0 / 16.0
242	24202.6	431.0	260.4	13.0 / 8.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Weaver Creek</b>				
246	24568.7	431.0	267.6	23.0 / 23.0
250	25000.0	431.0	272.3	31.0 / 20.0
254	25377.9	431.0	276.8	13.0 / 23.0
260	26000.0	431.0	285.1	11.0 / 19.0
266	26631.0	431.0	296.6	9.0 / 12.0
<b>Weaver Creek Tributary</b>				
010	1000.0	742.0	237.8 <sup>1</sup>	84.0 / 153.0
016	1584.5	742.0	237.8 <sup>1</sup>	30.0 / 84.0
020	2000.0	742.0	237.8 <sup>1</sup>	29.0 / 62.0
025	2500.0	742.0	237.8 <sup>1</sup>	26.0 / 40.0
030	3000.0	742.0	237.8 <sup>1</sup>	21.0 / 22.0
036	3581.6	742.0	237.8 <sup>1</sup>	13.0 / 27.0
043	4325.4	742.0	237.8 <sup>1</sup>	10.0 / 78.0
046	4618.4	742.0	237.8 <sup>1</sup>	50.0 / 30.0
050	5000.0	742.0	237.8 <sup>1</sup>	20.0 / 30.0
053	5333.5	742.0	237.9	20.0 / 53.0
060	6000.0	742.0	241.0	20.0 / 34.0
065	6500.0	496.0	242.6	10.0 / 44.0
070	7000.0	496.0	245.0	10.0 / 45.0
<b>Welch Creek</b>				
006	562.6	1077.0	465.6 <sup>1</sup>	95.0 / 119.6
010	1000.0	1077.0	465.6 <sup>1</sup>	137.0 / 11.7
015	1500.0	1077.0	466.2	205.0 / 7.5
020	2000.0	1077.0	469.5	119.0 / 7.6
026	2598.4	1077.0	474.4	22.0 / 103.7
031	3086.4	1077.0	478.2	20.0 / 23.3
<b>West Price Creek</b>				
075	7494.0	671.0	468.9	29.0 / 54.0
079	7942.0	628.0	470.9	37.0 / 24.0
081	8145.0	628.0	473.6	70.0 / 16.0
085	8478.0	570.0	476.7	49.0 / 12.0
090	8969.0	570.0	479.8	9.0 / 29.0
<b>White Oak Creek Tributary 1</b>				
020	2000.0	351.0	237.8 <sup>1</sup>	44.0 / 71.0
025	2500.0	351.0	237.8 <sup>1</sup>	8.0 / 13.0
030	3000.0	351.0	237.8 <sup>1</sup>	17.0 / 31.0
035	3500.0	351.0	237.8 <sup>1</sup>	6.0 / 13.0
040	4000.0	351.0	237.8 <sup>1</sup>	9.0 / 8.0
045	4500.0	351.0	243.1	30.0 / 33.0
050	5000.0	351.0	252.6	5.0 / 11.0
<b>Wilkinson Creek</b>				
006	558.7	2976.0	337.0 <sup>1</sup>	25.0 / 12.0
019	1862.7	2976.0	337.0 <sup>1</sup>	53.0 / 20.0
024	2427.6	2976.0	337.0 <sup>1</sup>	48.0 / 15.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Wilkinson Creek</b>				
030	3027.3	2976.0	338.7	35.0 / 44.0
035	3546.4	2976.0	342.2	15.0 / 49.0
040	4034.8	2976.0	346.6	43.0 / 48.0
054	5449.6	2876.0	357.0	13.0 / 24.0
061	6058.8	2876.0	363.4	52.0 / 13.0
067	6656.6	2876.0	368.8	13.0 / 13.0
071	7128.4	2876.0	373.7	51.0 / 15.0
076	7595.5	2876.0	376.0	27.0 / 19.0
081	8144.9	2876.0	380.1	24.0 / 23.0
088	8803.9	2876.0	383.7	26.0 / 15.0
093	9319.5	2876.0	387.0	22.0 / 67.0
098	9836.6	2876.0	388.5	30.0 / 52.0
103	10270.2	2710.0	389.7	43.0 / 14.0
117	11670.8	2536.0	393.6	28.0 / 44.0
127	12667.1	2536.0	395.4	154.0 / 59.0
129	12878.0	2536.0	395.6	217.0 / 30.0
130	12964.0	2536.0	395.9	217.0 / 30.0
134	13407.3	2536.0	395.7	15.0 / 29.0
139	13931.8	2536.0	398.1	43.0 / 107.0
151	15139.1	2320.0	400.6	71.0 / 77.0
156	15591.9	2320.0	402.3	12.0 / 54.0
162	16209.8	2320.0	404.6	57.0 / 69.0
167	16708.8	2320.0	405.4	15.0 / 216.0
175	17548.4	2320.0	406.5	124.0 / 102.0
185	18516.9	2320.0	409.4	38.0 / 50.0
191	19062.3	2320.0	412.1	51.0 / 90.0
197	19682.3	2320.0	413.1	136.0 / 163.0
203	20259.3	2088.0	413.5	39.0 / 318.0
207	20729.2	2088.0	413.8	15.0 / 338.0
209	20936.0	2088.0	414.0	20.0 / 100.0
210	21018.0	2088.0	416.6	20.0 / 100.0
216	21635.2	2088.0	417.3	170.0 / 45.0
223	22269.2	1908.0	417.9	212.0 / 125.0
373	37258.8	1097.0	501.2	19.0 / 25.0
377	37740.4	1097.0	508.7	7.0 / 7.0
378	37823.4	1097.0	511.8	20.0 / 40.0
385	38459.0	745.0	513.2	40.0 / 20.0
386	38649.3	745.0	513.5	19.0 / 14.0
387	38729.3	745.0	514.3	12.0 / 13.0
390	38958.9	745.0	515.8	9.0 / 21.0
394	39405.9	745.0	521.1	23.0 / 46.0
405	40518.5	745.0	531.1	26.0 / 22.0
414	41386.3	745.0	543.6	19.0 / 19.0
419	41934.3	745.0	551.6	22.0 / 25.0

**Table 17 - Limited Detailed Flood Hazard Data**

Cross Section	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width (feet) Left/Right from Stream Centerline
<b>Wilkinson Creek</b>				
424	42390.2	745.0	557.9	20.0 / 28.0
431	43057.3	745.0	566.2	22.0 / 25.0
436	43608.2	745.0	574.5	35.0 / 20.0
<b>Windfall Branch</b>				
017	1653.8	782.0	237.8 <sup>1</sup>	54.0 / 56.0
020	2000.0	782.0	237.8 <sup>1</sup>	24.0 / 10.0
025	2500.0	760.0	237.8 <sup>1</sup>	7.0 / 6.0
030	3031.0	760.0	248.4	35.0 / 25.0

<sup>1</sup>Elevation includes backwater effects

### 5.3 Coastal Analyses

This section is not applicable to this FIS project.

Table 18 “Summary of Coastal Analyses”, Table 19, “Tide Gage Analysis Specifics”, and Table 20, “Coastal Transect Parameters” do not apply to Chatham County.

# 6.0 Mapping Methods

## 6.1 Vertical and Horizontal Control

### Vertical Datum

All FISs 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. With the finalization of the North American Vertical Datum of 1988 (NAVD 88), all North Carolina FISs have been prepared using NAVD 88 as the referenced vertical datum.

All flood elevations shown on the FIRM for Chatham County are referenced to NAVD 88. Structure and ground elevations in the county must, therefore, be referenced to NAVD 88. It is important to note that FISs for adjacent communities in neighboring states may be referenced to NGVD 29. This may result in BFE differences across political boundaries between the communities.

As noted above, the elevations shown in this FIS are referenced to NAVD 88. Ground, structure, and flood elevations may be compared and/or referenced to NGVD 29 by applying a standard conversion factor. The conversion factor for Chatham County is -0.74 feet. The locations used to establish the conversion factor were USGS quadrangle corners that fell within the county, as well as those that were within 2.5 miles outside the county. The benchmarks are referenced to NAVD 88. Table 21, "Datum Conversion Locations and Values," is shown below.

Table 21, "Datum Conversion Locations and Values."

**Table 21 - Datum Conversion Locations and Values**

Latitude	Longitude	Conversion from NGVD29 to NAVD88 (feet)
35.75	-79.50	-0.59
35.75	-79.50	-0.59
35.75	-79.38	-0.64
35.75	-79.38	-0.64
35.75	-79.25	-0.80
35.75	-79.25	-0.80
35.75	-79.12	-0.78
35.75	-79.12	-0.78
35.75	-79.00	-0.80
35.75	-79.00	-0.80
35.62	-79.50	-0.70
35.62	-79.50	-0.70
35.63	-79.37	-0.76
35.63	-79.37	-0.76
35.63	-79.25	-0.75
35.63	-79.25	-0.75
35.63	-79.12	-0.75
35.63	-79.12	-0.75
35.62	-79.00	-0.79
35.62	-79.00	-0.79
Average conversion in Chatham County from NGVD 29 to NAVD 88 = -0.74 feet		

The vertical datum conversion factor for all flooding sources which run along a county boundary are in accordance with the conversion factor used in those contiguous counties.

BFEs shown on the FIRM represent whole-foot rounded values. For example, a 1% annual chance water-surface elevation of 102.4 feet will appear as 102 on the FIRM and 102.6 feet will appear as 103. Therefore, users who wish to convert the elevations in this FIS to NGVD 29 should apply the stated conversion factor(s) to elevations shown on the Flood Profiles and/or Water-surface elevation rasters and supporting data tables in the FIS Report, which are shown, at a minimum, to the nearest 0.1 foot.

For more information on NAVD 88, see Converting the National Flood Insurance Program to the North American Vertical Datum of 1988, or contact the Vertical Network Branch, National Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Rockville, Maryland 20910 (<http://www.ngs.noaa.gov>).

### **Vertical Control Monuments**

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

The National Geodetic Survey establishes precisely located monuments on the North Carolina Grid System and Bench Marks referenced to a vertical datum (NGVD 1929 and NAVD 1988).

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

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

Monuments with a Stability D classification may be used as Elevation Reference Marks (ERMs) when a Stability C or better monument is not an option. These ERMs must be approved by NCGS and can be set and used as elevation bench marks to establish vertical control and produce NC DFIRMs. Including such ERMs will greatly augment North Carolina's useable vertical control network.

In addition, when local jurisdictions have established their own vertical monument network, these monuments may also be shown on the FIRM with the appropriate designations. Local monuments will be placed on the FIRM if the community has requested that they be included and if the monuments meet the aforementioned criteria.

North Carolina Geodetic Survey (NCGS) and contractor surveyed vertical control monuments will be shown on the FIRM panels. Those cataloged by NCGS meet similar requirements to the NGS monuments as described above. Most monuments that have been cataloged by NCGS have been established to NGS standards, but have not been submitted to NGS for inclusion into the NSRS. The qualifying criteria for depicting bench marks established by the State's contractors on the new digital FIRM panels include:

- GPS surveying of permanent 3-D survey monuments to 5-centimeter or better local network accuracy guidelines, in accordance with NOAA Technical Memorandum NOS NGS-58 "Guidelines for Establishing GPS-Derived Ellipsoid Heights (Standards: 2 cm and 5 cm)," and conversion to NAVD 88 orthometric heights using NGS' latest geoid mode;
- Requiring a stability classification of "C" or better; and
- Submitting GPS files and station descriptions to NCGS.

To obtain current information for cataloging local bench marks in the NSRS, please visit the Data Sheet page of the NGS website at <https://geodesy.noaa.gov/datasheets/>, or contact the NGS Information Services Branch at:

### **Communications and Outreach Branch**

**NOAA, N/NGS12**

**National Geodetic Survey**

**SSMC3 #8716**

**1315 East-West Highway**

**Silver Spring, MD 20910-3282**

**(301) 713-3242**

Information regarding the NCGS or State contractor bench marks can be obtained through the NCGS website at [www.ncgs.state.nc.us](http://www.ncgs.state.nc.us), or by phone at (919) 733-3836.

It is important to note that temporary vertical monuments, sometimes called Elevation Reference Marks, 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, interested individuals may contact FEMA to access this information.

### **Horizontal Datum and Control**

The digital files that comprise the FIRM are georeferenced to an established coordinate system. The coordinate system used for the production of this FIRM is North Carolina State Plane (FIPSZONE 3200) referenced to the North American Datum of 1983 (NAD83), GRS80 ellipsoid.

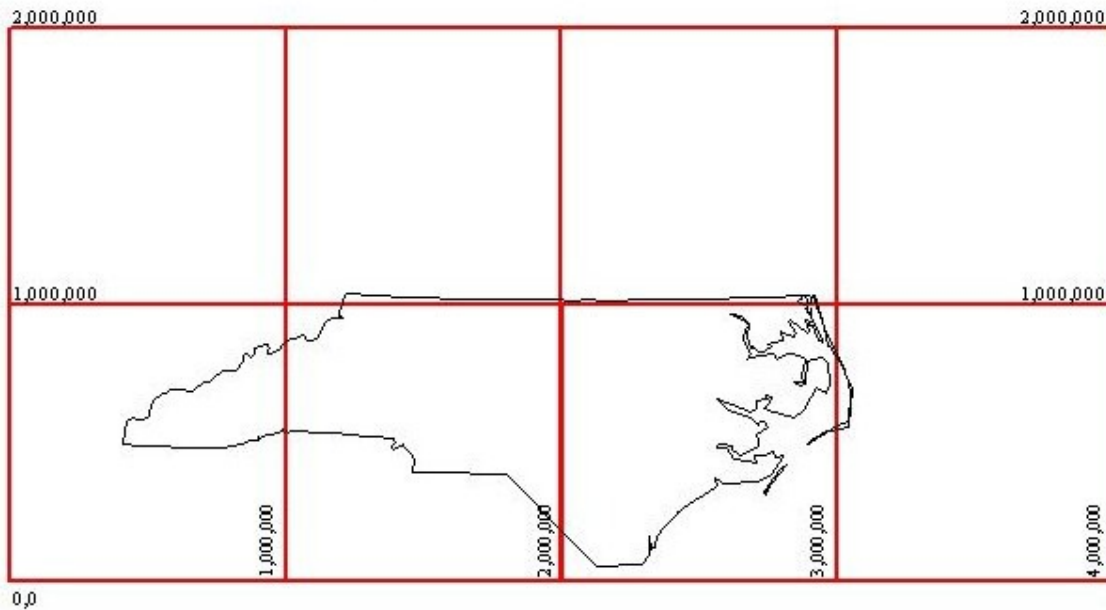
## **6.2 Base Map**

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features.

The projection used in the preparation of this map was the North Carolina State Plane Coordinate System. The horizontal datum was NAD83, GRS80 spheroid. Differences in datum, spheroid, or projection used in the production of FIRMs for adjacent states may result in slight positional differences in map features across the state boundary. These differences do not affect the accuracy of this FIRM.

As part of the North Carolina CTS Initiative, North Carolina digital FIRM panel numbers are consistent with the North Carolina Land Records Management Program (LRMP).

The 11-digit digital FIRM panel numbering system for North Carolina is: SS MM LLLL PP X, where SS = State Federal Information Processing Code (37); MM = Easting-Northing (EN) 1,000,000-foot coordinates; LLLL = LRMP map numbers to include the EN 100,000-foot coordinates, and the EN 10,000-foot coordinates; PP = place holders for additional EN 1,000-foot coordinates; and X = suffix ("J" for the initial edition). North Carolina's State Plane Coordinate System origin is outside the State boundary to the southwest (in Georgia), the eastings range from approximately 0,404,000 (Tennessee border) to 3,040,000 (Atlantic Ocean); and the northings range from approximately 0,045,000 (South Carolina border) to 1,043,000 (Virginia border). Digital FIRM panels were compiled at either 1"=1,000', covering an area of 20,000 feet x 20,000 feet (20" x 20" panels); or at 1"=500', covering an area of 10,000 feet x 10,000 feet (20" x 20" panels). An additional 2 digits (both zeros) are held in reserve as a "place holder" in the event that future FIRMs are printed at a larger scale; e.g., 1"=250', covering an area of 5,000 feet x 5,000 feet for which the 1,000-foot coordinates would either be 0 or 5.



**Figure 3 - North Carolina's State Plane Coordinate System**

## 6.3 Floodplain and Floodway Delineation

### Floodplain Boundaries

For streams restudied by detailed and limited detailed methods, the 1% and 0.2% annual chance floodplains were delineated using flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic data acquired using airborne Light Detection and Ranging (LIDAR).

The topographic data satisfies a vertical root-mean-square error (RMSE) accuracy standard of 20 cm (1.3 feet accuracy at the 95% confidence limit) for the Outer Banks and 25 cm (1.6 feet accuracy at the 95% confidence limit) for those portions of the basin lying west of the Outer Banks. These data could be contoured at roughly a 2-foot vertical contour interval. All elevations were referenced to the NAVD 88 and reflect orthometric heights. Variably spaced, bare-earth digital topographic data in ASCII point file format were combined with imagery (either flown concurrently with the LIDAR data or using existing digital orthophotos) to establish a Triangulated Irregular Network (TIN) of digital elevation points, which include selected breaklines to be used for hydraulic modeling. Furthermore, a uniformly spaced sampling of the TIN resulted in uniformly spaced Digital Elevation Models (DEMs), with 20 ft x 20 ft post spacing, which was generated in multiple file formats.

The 1% annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones VE, AO, AH, A99, AR, A, and AE), and the 0.2% annual chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1% and 0.2% annual chance floodplain boundaries are close together, only the 1% annual chance floodplain boundaries have been shown.

### Floodway Delineation

The floodways presented in this FIS were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (Table 22, "Floodway Data"). The computed floodway is shown on the FIRM. In cases where the floodway and 1% annual chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown. In areas where the top of the bridge or road is higher than the 1.0-percent annual chance (100-year) flood, the FIRM will show the flood discharge as contained within the structure for emergency management purposes. It is important to note that FEMA and community floodway regulations still apply in and around those areas.

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Beaver Creek</b>								
035	3,478	1105.0	7933.0	0.7	238.0 <sup>1</sup>	228.3	229.2	0.9
044	4,422	960.0	5437.0	1.1	238.0 <sup>1</sup>	228.6	229.6	1.0
051	5,058	800.0	5449.0	1.1	238.0 <sup>1</sup>	228.9	229.9	1.0
054	5,445	660.0	3248.0	1.8	238.0 <sup>1</sup>	229.1	230.1	1.0
<b>Cape Fear River</b>								
9805	980,544	1160.0	13001.0	7.2	153.7	153.7	154.7	1.0
9814	984,070	1284.0	12181.0	7.3	156.1	156.1	156.8	0.7
9865	986,497	1249.0	7781.0	11.5	160.6	160.6	161.2	0.6
9885	988,485	1382.0	8919.0	9.0	163.9	163.9	164.8	0.9
<b>Dry Creek</b>								
012	1,195	77.0	588.0	8.0	347.9 <sup>1</sup>	343.5	344.1	0.6
022	2,221	132.0	657.0	6.8	355.0	355.0	355.7	0.7
034	3,442	113.0	680.0	6.6	363.3	363.3	364.0	0.7
058	5,761	124.0	828.0	5.4	376.0	376.0	376.7	0.7
075	7,469	161.0	1009.0	4.5	385.2	385.2	385.9	0.7
089	8,880	104.0	873.0	5.0	395.8	395.8	396.8	1.0
102	10,198	89.0	584.0	7.5	406.2	406.2	406.9	0.7
115	11,530	263.0	1182.0	3.7	415.4	415.4	416.2	0.8
131	13,096	123.0	575.0	7.6	423.6	423.6	424.2	0.6
141	14,081	148.0	1496.0	2.9	432.9	432.9	432.9	0.0
155	15,508	160.0	1566.0	2.7	434.2	434.2	434.5	0.3
171	17,125	222.0	1628.0	2.6	435.8	435.8	436.3	0.5
194	19,420	283.0	1657.0	2.4	438.6	438.6	439.3	0.7
208	20,812	100.0	969.0	4.2	441.4	441.4	442.2	0.8
225	22,538	229.0	1292.0	3.1	444.0	444.0	444.9	0.9
249	24,941	230.0	1462.0	2.8	448.1	448.1	448.9	0.8
259	25,901	169.0	944.0	3.6	450.0	450.0	450.8	0.8
281	28,076	280.0	1276.0	2.7	453.8	453.8	454.2	0.4
297	29,713	237.0	1643.0	2.0	458.9	458.9	459.3	0.4
<b>East Price Creek</b>								
070	6,954	85.0	436.0	2.4	406.2	406.2	407.2	1.0
<b>Haw River</b>								
006	606	259.0	3216.0	5.6	176.5 <sup>1</sup>	160.5	160.5	0.0
021	2,071	259.0	3408.0	5.3	176.5 <sup>1</sup>	161.9	161.9	0.0
035	3,491	264.0	3658.0	4.9	176.5 <sup>1</sup>	163.0	163.0	0.0
060	5,965	260.0	4042.0	4.5	176.5 <sup>1</sup>	164.5	164.5	0.0
082	8,191	279.0	4226.0	4.3	176.5 <sup>1</sup>	166.5	166.5	0.0
096	9,605	270.0	4427.0	4.1	176.5 <sup>1</sup>	167.2	167.2	0.0
109	10,919	283.0	4626.0	3.9	176.5 <sup>1</sup>	167.8	167.8	0.0
127	12,689	224.0	3507.0	5.1	176.5 <sup>1</sup>	169.3	169.3	0.0
142	14,238	236.0	4450.0	4.1	176.5 <sup>1</sup>	171.0	171.0	0.0
158	15,762	236.0	4581.0	3.9	176.5 <sup>1</sup>	171.8	171.8	0.0
170	17,020	236.0	4662.0	3.9	176.5 <sup>1</sup>	172.4	172.4	0.0
187	18,705	297.0	5775.0	3.1	176.5 <sup>1</sup>	172.9	173.0	0.1
203	20,289	303.0	5623.0	3.2	176.5 <sup>1</sup>	173.3	173.3	0.0
215	21,527	288.0	5409.0	3.3	176.5 <sup>1</sup>	173.6	173.6	0.0
222	22,165	229.0	4128.0	4.4	176.5 <sup>1</sup>	173.7	173.7	0.0
451	45,146	849.0	13999.0	5.1	237.8 <sup>1</sup>	229.9	229.9	0.0
492	49,203	1114.0	15315.0	4.6	237.8 <sup>1</sup>	234.9	235.1	0.2
519	51,933	486.0	7630.0	9.3	255.2	255.2	255.7	0.5

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Haw River</b>								
539	53,898	635.0	9775.0	7.3	268.5	268.5	268.8	0.3
564	56,356	1101.0	16666.0	4.3	275.3	275.3	275.8	0.5
593	59,314	568.0	11352.0	6.3	286.8	286.8	287.5	0.7
613	61,316	438.0	10062.0	7.1	291.7	291.7	292.5	0.8
640	63,962	793.0	16088.0	4.4	296.4	296.4	297.3	0.9
664	66,392	510.0	9980.0	7.1	299.4	299.4	300.1	0.7
688	68,806	626.0	10697.0	6.7	305.9	305.9	306.8	0.9
716	71,572	687.0	12893.0	5.5	311.2	311.2	312.1	0.9
733	73,282	540.0	10224.0	6.9	315.5	315.5	316.3	0.8
744	74,370	832.0	12185.0	5.8	318.3	318.3	319.0	0.7
755	75,464	905.0	12141.0	5.8	326.0	326.0	326.1	0.1
780	77,964	627.0	10311.0	6.8	330.5	330.5	330.7	0.2
794	79,431	433.0	8861.0	7.9	333.9	333.9	334.3	0.4
814	81,413	470.0	9737.0	7.2	339.2	339.2	339.8	0.6
839	83,913	545.0	12167.0	5.8	343.8	343.8	344.6	0.8
866	86,626	752.0	16873.0	4.2	347.2	347.2	348.1	0.9
917	91,705	660.0	11160.0	6.1	353.4	353.4	353.8	0.4
946	94,583	476.0	6796.0	10.1	364.0	364.0	364.1	0.1
969	96,938	954.0	12348.0	5.5	373.8	373.8	374.2	0.4
1000	100,042	805.0	13989.0	4.8	379.1	379.1	379.9	0.8
1035	103,486	935.0	14254.0	4.7	384.7	384.7	385.4	0.7
1069	106,917	1185.0	16028.0	4.2	388.1	388.1	388.9	0.8
1087	108,718	456.0	9715.0	6.9	390.3	390.3	391.1	0.8
1099	109,854	386.0	9325.0	7.2	392.7	392.7	393.1	0.4
1132	113,184	833.0	20398.0	3.3	395.1	395.1	395.9	0.8
1163	116,313	442.0	10596.0	6.3	396.7	396.7	397.4	0.7
1203	120,349	533.0	9799.0	6.5	402.3	402.3	402.9	0.6
1237	123,667	569.0	9864.0	6.5	407.6	407.6	408.3	0.7
1258	125,756	677.0	12040.0	5.3	410.7	410.7	411.7	1.0
1286	128,579	886.0	15307.0	4.2	414.1	414.1	414.7	0.6
<b>Indian Creek (into Deep River)</b>								
001	118	84.0	1330.0	4.1	240.4 <sup>1</sup>	228.4	228.7	0.3
010	1,041	126.0	1505.0	3.6	240.4 <sup>1</sup>	229.0	229.2	0.2
052	5,220	298.0	3777.0	1.4	240.4 <sup>1</sup>	230.5	231.1	0.6
085	8,539	170.0	2037.0	2.6	240.4 <sup>1</sup>	231.7	232.5	0.8
131	13,059	663.0	3474.0	1.0	240.4 <sup>1</sup>	232.6	233.5	0.9
160	16,020	404.0	1586.0	2.3	240.4 <sup>1</sup>	237.0	237.8	0.8
190	19,040	223.0	1224.0	2.9	245.2	245.2	246.0	0.8
195	19,480	118.0	585.0	6.0	245.9	245.9	246.7	0.8
200	19,998	129.0	868.0	4.1	248.9	248.9	249.3	0.4
204	20,417	167.0	870.0	4.0	249.7	249.7	250.4	0.7
<b>Little Indian Creek</b>								
005	476	328.0	1187.0	2.7	240.4 <sup>1</sup>	226.7	227.7	1.0
038	3,816	387.0	1467.0	2.2	240.4 <sup>1</sup>	231.1	231.9	0.8
066	6,565	215.0	1256.0	2.6	240.4 <sup>1</sup>	237.9	238.6	0.7

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Little Indian Creek</b>								
087	8,726	350.0	1518.0	2.0	240.4 <sup>1</sup>	240.5	241.4	0.9
101	10,069	89.0	636.0	4.7	244.1	244.1	244.9	0.8
113	11,272	66.0	422.0	7.0	248.2	248.2	248.7	0.5
121	12,125	129.0	576.0	5.2	251.8	251.8	252.3	0.5
<b>Loves Creek</b>								
005	456	73.0	474.0	6.4	500.9 <sup>1</sup>	499.6	500.6	1.0
010	1,000	82.0	706.0	4.3	501.8	501.8	502.8	1.0
020	2,000	52.0	268.0	11.3	509.0	509.0	509.2	0.2
036	3,598	91.0	527.0	5.7	520.9	520.9	521.2	0.3
045	4,500	248.0	950.0	3.2	527.3	527.3	527.9	0.6
062	6,184	45.0	297.0	10.1	533.0	533.0	534.0	1.0
076	7,649	132.0	673.0	3.9	540.5	540.5	541.2	0.7
095	9,500	200.0	1121.0	2.4	545.7	545.7	546.6	0.9
115	11,527	113.0	689.0	3.5	550.6	550.6	551.5	0.9
130	13,000	366.0	1778.0	1.4	555.4	555.4	555.8	0.4
145	14,500	297.0	1511.0	1.6	557.3	557.3	557.7	0.4
149	14,851	187.0	691.0	2.3	557.6	557.6	558.3	0.7
154	15,370	124.0	550.0	2.9	559.2	559.2	560.2	1.0
170	17,000	219.0	473.0	3.3	566.1	566.1	566.5	0.4
185	18,500	202.0	801.0	1.8	570.4	570.4	571.4	1.0
201	20,126	192.0	782.0	1.5	577.1	577.1	578.1	1.0
214	21,415	125.0	471.0	2.4	584.1	584.1	584.8	0.7
224	22,359	161.0	467.0	2.4	588.6	588.6	589.0	0.4
229	22,889	166.0	566.0	2.0	590.6	590.6	591.6	1.0
242	24,150	94.0	324.0	3.5	598.1	598.1	598.7	0.6
251	25,117	83.0	336.0	2.4	605.0	605.0	605.0	0.0
<b>Loves Creek Tributary 1</b>								
007	675	265.0	875.0	2.3	557.4	557.4	558.3	0.9
013	1,298	39.0	268.0	7.1	561.6	561.6	561.9	0.3
022	2,157	72.0	333.0	5.5	569.4	569.4	569.7	0.3
026	2,641	112.0	471.0	3.9	578.5	578.5	578.5	0.0
034	3,355	135.0	586.0	3.1	582.3	582.3	582.5	0.2
037	3,746	98.0	572.0	3.1	586.6	586.6	586.8	0.2
045	4,479	125.0	410.0	3.4	589.7	589.7	589.7	0.0
053	5,326	62.0	306.0	4.2	592.2	592.2	592.6	0.4
059	5,869	41.0	163.0	4.4	594.7	594.7	595.5	0.8
064	6,396	53.0	270.0	2.5	600.2	600.2	600.9	0.7
068	6,825	35.0	111.0	6.0	603.9	603.9	604.2	0.3
071	7,126	58.0	207.0	3.2	607.2	607.2	607.2	0.0
074	7,421	96.0	364.0	1.7	611.8	611.8	612.4	0.6
078	7,758	80.0	281.0	2.2	611.9	611.9	612.7	0.8
082	8,193	101.0	367.0	1.4	616.2	616.2	616.4	0.2
084	8,449	32.0	104.0	4.9	616.8	616.8	616.9	0.1
<b>Morris Branch</b>								
011	1,072	237.0	1015.0	1.5	240.6	240.6	241.5	0.9

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Morris Branch</b>								
020	1,999	120.0	426.0	3.5	242.8	242.8	243.6	0.8
028	2,795	101.0	472.0	3.1	245.4	245.4	246.2	0.8
033	3,252	40.0	209.0	4.4	248.8	248.8	249.4	0.6
034	3,424	40.0	275.0	5.3	248.3	248.3	248.5	0.2
<b>Panther Creek</b>								
010	991	1146.0	3727.0	1.0	237.8 <sup>1</sup>	222.8	223.8	1.0
027	2,743	399.0	2892.0	1.3	237.8 <sup>1</sup>	229.5	230.1	0.6
043	4,339	449.0	2517.0	1.4	237.8 <sup>1</sup>	230.3	231.0	0.7
062	6,214	551.0	2545.0	1.4	237.81	232.1	233.1	1.0
078	7,796	115.0	756.0	4.7	237.81	237.9	238.2	0.3
083	8,311	410.0	2401.0	1.2	238.9	238.9	239.4	0.5
099	9,863	201.0	897.0	2.6	239.6	239.6	240.6	1.0
113	11,317	205.0	1096.0	2.1	243.2	243.2	244.1	0.9
130	13,042	55.0	310.0	2.9	246.2	246.2	247.1	0.9
<b>Pokeberry Creek</b>								
114	11,368	62.0	438.0	7.2	345.5	345.5	345.8	0.3
128	12,778	166.0	1087.0	2.6	348.9	348.9	349.6	0.7
144	14,351	111.0	791.0	3.6	354.9	354.9	355.3	0.4
153	15,266	95.0	727.0	4.0	357.6	357.6	358.0	0.4
163	16,317	181.0	1204.0	2.3	359.4	359.4	360.3	0.9
171	17,064	112.0	713.0	3.8	360.6	360.6	361.4	0.8
179	17,880	108.0	652.0	4.0	364.4	364.4	364.5	0.1
185	18,504	292.0	1686.0	1.5	364.9	364.9	365.7	0.8
199	19,922	622.0	2318.0	1.1	366.5	366.5	367.0	0.5
209	20,906	161.0	777.0	3.3	370.0	370.0	370.3	0.3
223	22,263	241.0	2260.0	1.0	377.8	377.8	378.6	0.8
230	23,014	398.0	2991.0	0.7	377.9	377.9	378.7	0.8
240	24,008	305.0	1701.0	1.3	379.0	379.0	379.7	0.7
250	25,016	337.0	1785.0	1.2	380.0	380.0	380.9	0.9
267	26,656	213.0	860.0	2.2	382.7	382.7	383.7	1.0
271	27,118	116.0	842.0	2.3	388.0	388.0	388.2	0.2
280	28,049	144.0	784.0	2.4	388.3	388.3	389.0	0.7
286	28,603	104.0	534.0	3.2	389.3	389.3	389.9	0.6
292	29,231	93.0	465.0	3.6	390.9	390.9	391.3	0.4
305	30,501	102.0	322.0	5.2	395.8	395.8	396.1	0.3
320	32,026	264.0	1328.0	1.2	402.8	402.8	403.1	0.3
330	32,992	160.0	796.0	1.8	404.5	404.5	405.2	0.7
345	34,471	130.0	430.0	3.4	409.4	409.4	409.5	0.1
352	35,174	170.0	760.0	1.7	412.5	412.5	412.9	0.4
358	35,848	193.0	532.0	2.5	414.0	414.0	414.7	0.7
366	36,585	135.0	544.0	2.4	417.4	417.4	417.9	0.5
376	37,627	120.0	458.0	2.9	421.9	421.9	422.3	0.4
388	38,777	120.0	453.0	2.9	427.4	427.4	427.7	0.3
392	39,246	60.0	213.0	3.2	429.5	429.5	429.6	0.1

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Pokeberry Creek</b>								
400	40,023	20.0	90.0	7.5	434.2	434.2	434.7	0.5
410	40,990	21.0	74.0	8.5	442.8	442.8	442.8	0.0
418	41,849	28.0	86.0	7.3	452.9	452.9	453.0	0.1
425	42,542	16.0	64.0	7.9	462.0	462.0	462.2	0.2
432	43,153	16.0	62.0	6.8	472.5	472.5	472.6	0.1
438	43,821	42.0	130.0	3.2	480.7	480.7	481.1	0.4
443	44,335	46.0	115.0	1.8	487.6	487.6	487.8	0.2
449	44,865	194.0	1259.0	0.1	513.6	513.6	513.6	0.0
454	45,379	53.0	200.0	0.7	519.4	519.4	519.4	0.0
459	45,869	22.0	117.0	0.9	536.9	536.9	537.0	0.1
464	46,430	4.0	13.0	8.4	550.3	550.3	550.3	0.0
<b>Robeson Creek</b>								
007	670	330.0	4903.0	1.2	237.8 <sup>1</sup>	229.5	230.5	1.0
010	1,000	279.0	4405.0	1.4	237.8 <sup>1</sup>	229.6	230.6	1.0
015	1,500	236.0	3737.0	1.6	237.8 <sup>1</sup>	229.6	230.6	1.0
021	2,066	246.0	3887.0	1.6	237.8 <sup>1</sup>	229.7	230.7	1.0
026	2,578	287.0	4611.0	1.3	237.8 <sup>1</sup>	229.8	230.8	1.0
030	3,000	270.0	4201.0	1.4	237.8 <sup>1</sup>	229.8	230.8	1.0
035	3,473	296.0	4743.0	1.3	237.8 <sup>1</sup>	229.9	230.9	1.0
040	4,000	299.0	4793.0	1.3	237.8 <sup>1</sup>	230.0	230.9	0.9
045	4,453	240.0	3888.0	1.6	237.8 <sup>1</sup>	230.0	231.0	1.0
050	5,000	240.0	3919.0	1.5	237.8 <sup>1</sup>	230.1	231.0	0.9
055	5,500	240.0	3925.0	1.5	237.8 <sup>1</sup>	230.1	231.1	1.0
062	6,177	205.0	3113.0	1.9	237.8 <sup>1</sup>	232.0	232.8	0.8
069	6,922	270.0	3037.0	2.0	237.8 <sup>1</sup>	232.1	233.0	0.9
076	7,560	147.0	1468.0	4.1	237.8 <sup>1</sup>	232.3	233.2	0.9
084	8,424	90.0	890.0	6.8	237.8 <sup>1</sup>	233.6	234.5	0.9
088	8,845	63.0	729.0	8.3	237.8 <sup>1</sup>	235.0	235.6	0.6
094	9,446	63.0	612.0	9.8	237.8 <sup>1</sup>	236.7	237.6	0.9
099	9,929	67.0	773.0	8.8	239.4	239.4	240.0	0.6
104	10,445	54.0	578.0	10.4	240.5	240.5	241.5	1.0
109	10,928	64.0	483.0	12.5	243.1	243.1	244.1	1.0
114	11,428	64.0	649.0	9.3	248.3	248.3	248.8	0.5
119	11,928	65.0	548.0	11.0	250.4	250.4	250.9	0.5
124	12,428	69.0	686.0	8.8	255.3	255.3	256.2	0.9
129	12,878	92.0	845.0	7.1	258.6	258.6	259.5	0.9
134	13,428	100.0	724.0	8.3	262.0	262.0	263.0	1.0
139	13,928	240.0	1353.0	4.5	267.5	267.5	268.1	0.6
145	14,462	150.0	872.0	6.9	270.3	270.3	271.3	1.0
150	15,005	120.0	990.0	6.1	275.8	275.8	276.1	0.3
156	15,585	90.0	639.0	9.4	278.3	278.3	279.3	1.0
159	15,928	70.0	562.0	10.7	281.6	281.6	282.2	0.6
164	16,428	115.0	1224.0	4.9	286.0	286.0	286.7	0.7
170	16,962	115.0	837.0	7.2	287.4	287.4	288.2	0.8

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Robeson Creek</b>								
178	17,834	170.0	1695.0	3.6	291.7	291.7	292.4	0.7
187	18,683	245.0	2131.0	2.8	292.8	292.8	293.7	0.9
194	19,428	375.0	3285.0	1.7	293.6	293.6	294.6	1.0
199	19,928	126.0	1277.0	4.3	293.7	293.7	294.7	1.0
204	20,428	64.0	750.0	7.3	294.3	294.3	295.3	1.0
209	20,928	85.0	797.0	6.9	295.8	295.8	296.7	0.9
214	21,428	70.0	723.0	7.2	297.7	297.7	298.6	0.9
223	22,273	125.0	956.0	5.3	300.4	300.4	301.3	0.9
229	22,928	61.0	680.0	7.3	302.1	302.1	303.1	1.0
234	23,428	90.0	822.0	6.0	303.4	303.4	304.4	1.0
239	23,928	160.0	1207.0	4.1	305.4	305.4	306.1	0.7
244	24,428	125.0	935.0	5.3	306.4	306.4	307.3	0.9
249	24,928	105.0	1033.0	4.9	307.8	307.8	308.8	1.0
255	25,460	135.0	1408.0	3.5	308.9	308.9	309.9	1.0
261	26,105	78.0	703.0	7.1	309.9	309.9	310.9	1.0
268	26,775	145.0	1207.0	4.1	312.7	312.7	313.7	1.0
275	27,509	169.0	1199.0	4.1	314.6	314.6	315.4	0.8
281	28,130	120.0	1115.0	4.5	315.8	315.8	316.8	1.0
288	28,808	123.0	1106.0	4.5	317.2	317.2	318.2	1.0
295	29,458	197.0	1590.0	3.1	318.3	318.3	319.3	1.0
299	29,935	128.0	1178.0	4.2	318.9	318.9	319.8	0.9
304	30,428	104.0	818.0	6.1	319.7	319.7	320.5	0.8
309	30,928	76.0	734.0	6.8	321.2	321.2	322.0	0.8
314	31,428	87.0	832.0	5.1	322.6	322.6	323.5	0.9
319	31,905	89.0	846.0	5.0	323.4	323.4	324.2	0.8
324	32,428	70.0	521.0	6.6	324.4	324.4	325.1	0.7
329	32,928	66.0	585.0	5.9	326.2	326.2	327.0	0.8
334	33,410	77.0	626.0	5.5	327.5	327.5	328.3	0.8
338	33,843	54.0	490.0	7.0	328.6	328.6	329.3	0.7
345	34,456	51.0	389.0	8.9	330.8	330.8	331.5	0.7
349	34,928	64.0	528.0	7.8	333.3	333.3	333.9	0.6
354	35,428	91.0	753.0	4.6	334.7	334.7	335.4	0.7
359	35,928	143.0	1051.0	3.3	335.7	335.7	336.5	0.8
366	36,634	155.0	1000.0	7.0	337.2	337.2	337.9	0.7
373	37,346	150.0	1364.0	2.5	338.6	338.6	339.4	0.8
380	37,976	118.0	744.0	4.6	339.5	339.5	340.2	0.7
385	38,478	116.0	799.0	8.2	341.5	341.5	342.2	0.7
390	38,994	188.0	1252.0	2.8	343.1	343.1	343.9	0.8
394	39,387	110.0	769.0	4.5	343.8	343.8	344.5	0.7
399	39,928	146.0	967.0	3.6	345.3	345.3	346.0	0.7
404	40,399	121.0	834.0	4.1	346.3	346.3	347.0	0.7
409	40,863	80.0	607.0	5.7	347.5	347.5	348.2	0.7
412	41,158	94.0	742.0	4.7	348.6	348.6	349.3	0.7
424	42,413	95.0	894.0	3.1	353.1	353.1	353.2	0.1

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Robeson Creek</b>								
431	43,129	97.0	975.0	2.8	353.5	353.5	353.9	0.4
440	43,962	78.0	561.0	4.9	356.9	356.9	357.0	0.1
443	44,324	265.0	697.0	6.4	357.6	357.6	357.6	0.0
451	45,069	260.0	351.0	7.8	360.2	360.2	360.6	0.4
459	45,895	90.0	568.0	4.8	365.3	365.3	365.4	0.1
464	46,372	100.0	628.0	4.3	366.3	366.3	366.6	0.3
469	46,928	100.0	793.0	3.5	367.1	367.1	367.9	0.8
475	47,454	98.0	890.0	2.6	368.9	368.9	369.4	0.5
479	47,925	105.0	852.0	2.8	369.1	369.1	369.9	0.8
483	48,307	120.0	909.0	4.9	369.5	369.5	370.3	0.8
489	48,928	180.0	1250.0	1.9	370.1	370.1	371.0	0.9
495	49,453	200.0	1376.0	1.7	370.5	370.5	371.4	0.9
499	49,928	150.0	828.0	2.8	370.9	370.9	371.8	0.9
504	50,428	100.0	669.0	3.5	372.0	372.0	372.8	0.8
509	50,928	140.0	796.0	2.9	373.3	373.3	374.0	0.7
514	51,428	160.0	834.0	2.8	374.3	374.3	375.0	0.7
519	51,928	174.0	897.0	2.6	375.2	375.2	375.9	0.7
525	52,518	160.0	915.0	2.6	375.8	375.8	376.7	0.9
530	52,995	140.0	887.0	2.6	376.7	376.7	377.4	0.7
534	53,428	56.0	251.0	5.1	377.2	377.2	378.2	1.0
539	53,928	70.0	171.0	8.6	381.1	381.1	381.1	0.0
543	54,328	70.0	235.0	3.7	384.6	384.6	385.2	0.6
553	55,310	70.0	373.0	2.3	390.7	390.7	391.6	0.9
559	55,928	130.0	429.0	2.0	393.0	393.0	393.0	0.0
564	56,360	125.0	406.0	2.1	394.5	394.5	395.1	0.6
568	56,844	90.0	352.0	2.5	396.4	396.4	397.3	0.9
574	57,365	40.0	184.0	4.7	399.3	399.3	400.2	0.9
579	57,928	104.0	303.0	2.9	404.4	404.4	404.9	0.5
588	58,754	175.0	539.0	1.6	407.4	407.4	408.2	0.8
595	59,461	95.0	327.0	2.7	409.5	409.5	410.5	1.0
604	60,428	89.0	386.0	2.3	415.5	415.5	416.5	1.0
609	60,860	95.0	421.0	2.1	416.9	416.9	417.8	0.9
614	61,428	95.0	371.0	2.4	419.0	419.0	419.5	0.5
619	61,872	130.0	502.0	1.7	420.4	420.4	421.0	0.6
624	62,401	90.0	285.0	3.1	422.3	422.3	423.1	0.8
629	62,928	60.0	296.0	2.9	426.8	426.8	427.0	0.2
635	63,465	80.0	351.0	2.5	429.5	429.5	430.5	1.0
640	64,013	55.0	199.0	1.9	432.4	432.4	433.1	0.7
646	64,565	22.0	66.0	5.6	435.2	435.2	435.8	0.6
652	65,197	24.0	103.0	3.6	443.1	443.1	443.8	0.7
657	65,729	24.0	118.0	3.1	446.0	446.0	446.9	0.9
667	66,669	22.0	53.0	7.0	457.5	457.5	457.8	0.3
671	67,111	22.0	56.0	6.7	465.4	465.4	465.4	0.0
676	67,639	32.0	54.0	6.9	480.8	480.8	480.8	0.0

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Robeson Creek Tributary 3</b>								
001	72	82.0	299.0	4.4	352.4 <sup>1</sup>	347.6	348.0	0.4
009	912	49.0	242.0	5.4	356.1	356.1	356.7	0.6
015	1,548	43.0	184.0	7.1	360.7	360.7	361.4	0.7
020	1,955	39.0	247.0	4.6	365.7	365.7	365.8	0.1
032	3,159	66.0	153.0	7.2	378.6	378.6	378.6	0.0
046	4,558	193.0	581.0	1.8	388.9	388.9	389.8	0.9
054	5,384	170.0	405.0	2.3	394.5	394.5	395.4	0.9
062	6,198	70.0	172.0	3.2	405.1	405.1	405.7	0.6
068	6,800	67.0	232.0	2.4	412.5	412.5	413.4	0.9
072	7,242	42.0	106.0	5.1	419.0	419.0	419.7	0.7
<b>Rocky River</b>								
1286	128,569	100.0	1613.0	7.1	500.2	500.2	501.0	0.8
1292	129,202	116.0	1597.0	6.0	501.3	501.3	502.0	0.7
1297	129,733	127.0	1817.0	5.3	502.1	502.1	502.8	0.7
1300	130,034	182.0	2371.0	4.1	502.7	502.7	503.4	0.7
1306	130,586	246.0	2884.0	3.3	503.1	503.1	503.8	0.7
1313	131,274	199.0	1816.0	5.3	507.2	507.2	507.3	0.1
1320	132,010	186.0	1751.0	5.4	508.1	508.1	508.2	0.1
1329	132,892	105.0	1558.0	6.1	509.1	509.1	509.3	0.2
1336	133,586	105.0	1649.0	5.7	509.7	509.7	510.2	0.5
1345	134,498	105.0	1725.0	5.5	510.6	510.6	511.1	0.5
1354	135,378	144.0	2050.0	4.6	511.4	511.4	512.0	0.6
1361	136,075	108.0	1704.0	5.5	511.9	511.9	512.6	0.7
1368	136,848	232.0	2926.0	3.2	512.8	512.8	513.4	0.6
1379	137,928	135.0	1977.0	4.7	513.3	513.3	514.1	0.8
1386	138,555	114.0	1936.0	4.8	513.8	513.8	514.5	0.7
1391	139,149	114.0	1955.0	4.8	514.1	514.1	514.9	0.8
1400	140,008	114.0	1991.0	4.7	514.5	514.5	515.3	0.8
1408	140,823	135.0	2320.0	4.0	515.0	515.0	515.8	0.8
1419	141,876	133.0	1992.0	4.7	515.6	515.6	516.4	0.8
1429	142,896	110.0	1706.0	5.0	516.3	516.3	517.1	0.8
1437	143,671	103.0	1692.0	5.1	517.0	517.0	517.8	0.8
1445	144,545	107.0	1890.0	4.5	517.8	517.8	518.7	0.9
1454	145,375	162.0	1988.0	4.3	518.6	518.6	519.4	0.8
1459	145,868	85.0	1259.0	6.8	519.6	519.6	519.9	0.3
1464	146,397	84.0	1128.0	7.6	520.2	520.2	520.9	0.7
1474	147,402	112.0	1395.0	6.1	522.5	522.5	523.1	0.6
<b>Rocky River Tributary 1</b>								
005	483	95.0	550.0	3.1	507.9 <sup>1</sup>	506.6	507.4	0.8
011	1,069	98.0	448.0	3.8	513.5	513.5	514.4	0.9
018	1,769	59.0	219.0	7.7	523.9	523.9	524.2	0.3
025	2,548	62.0	239.0	6.7	532.6	532.6	533.4	0.8
031	3,121	165.0	904.0	1.8	542.6	542.6	542.6	0.0
038	3,779	162.0	702.0	2.2	544.1	544.1	544.3	0.2
048	4,835	67.0	328.0	4.6	546.2	546.2	547.0	0.8

**Table 22 – Floodway Data**

Floodway Source		Floodway			Water Surface Elevation			
Cross Section	Distance (Feet Above Mouth)	Width (Feet)	Section Area (Square Feet)	Mean Velocity (Feet Per Second)	Regulatory	Without Floodway	With Floodway	Increase
<b>Rocky River Tributary 1</b>								
060	5,997	82.0	381.0	3.4	551.0	551.0	551.7	0.7
072	7,247	188.0	687.0	1.9	555.1	555.1	555.9	0.8
082	8,151	123.0	499.0	2.4	560.3	560.3	560.7	0.4
089	8,876	120.0	360.0	3.3	562.4	562.4	563.1	0.7
095	9,489	147.0	496.0	2.4	565.8	565.8	566.3	0.5
099	9,908	113.0	451.0	1.6	567.0	567.0	567.8	0.8
104	10,412	93.0	276.0	2.6	568.8	568.8	569.6	0.8
108	10,808	86.0	215.0	3.4	570.3	570.3	570.9	0.6
111	11,067	55.0	354.0	1.9	575.0	575.0	575.6	0.6
114	11,394	203.0	822.0	0.8	575.1	575.1	575.7	0.6
119	11,894	117.0	366.0	1.8	575.8	575.8	576.4	0.6
<b>Southwest Creek</b>								
083	8,271	50.0	304.0	7.3	237.8 <sup>1</sup>	234.2	234.4	0.2
090	8,995	142.0	660.0	3.4	237.8 <sup>1</sup>	237.7	238.6	0.9
095	9,507	190.0	949.0	2.3	238.9	238.9	239.9	1.0
<b>Wilkinson Creek</b>								
223	22,269	337.0	1969.0	1.0	417.9	417.9	418.8	0.9
230	22,972	305.0	1728.0	1.2	419.1	419.1	419.8	0.7
238	23,760	125.0	621.0	2.7	420.4	420.4	420.9	0.5
248	24,842	230.0	803.0	2.1	421.8	421.8	422.3	0.5
253	25,329	58.0	582.0	2.8	430.3	430.3	430.7	0.4
264	26,402	200.0	1145.0	1.4	430.9	430.9	431.4	0.5
276	27,578	125.0	541.0	2.8	433.4	433.4	434.2	0.8
284	28,425	55.0	297.0	5.1	436.1	436.1	436.6	0.5
295	29,485	52.0	512.0	2.7	443.9	443.9	444.4	0.5
305	30,475	160.0	938.0	1.5	444.6	444.6	445.2	0.6
316	31,600	63.0	226.0	6.1	447.2	447.2	447.6	0.4
325	32,467	80.0	311.0	4.1	453.8	453.8	453.8	0.0
334	33,416	35.0	162.0	7.9	464.4	464.4	464.5	0.1
340	33,963	46.0	170.0	6.6	472.8	472.8	473.1	0.3
349	34,944	185.0	2228.0	0.5	490.1	490.1	490.9	0.8
357	35,655	220.0	2330.0	0.4	490.1	490.1	490.9	0.8
366	36,594	62.0	247.0	4.1	491.3	491.3	491.8	0.5
376	37,627	44.0	217.0	4.7	501.2	501.2	501.2	0.0

<sup>1</sup>Elevation includes backwater effects

## 6.4 Coastal Flood Hazard Mapping

This section is not applicable to this FIS project.

Table 23, “Summary of Coastal Transect Mapping Considerations” is not applicable in Chatham County.

## 7.0 Revising the FIS

### 7.1 Letters of Map Amendment and Letters of Map Revision - Based on Fill

LOMAs and LOMR-Fs are documents issued by FEMA that officially remove a property and/or a structure from a Special Flood Hazard Area (SFHA), if data supporting the removal are submitted. LOMAs and LOMR-Fs are generally determinations regarding areas that are too small to be shown on a FIRM panel; consequently, the changes they describe become official without revising the FIRM or the FIS Report.

NFIP regulations require that the lowest adjacent grade (the lowest ground touching the structure) be at or above the 1% annual chance flood elevation for a LOMA to be issued. Currently, there is no fee for FEMA's review of a LOMA request, but the requester of a LOMA is responsible for providing all the information needed for the review, which may include structure and/or property elevations certified by a licensed land surveyor or professional engineer. Therefore, LOMA requesters may need to retain the services of a land surveyor or engineer.

A LOMA cannot be used for property on which fill has been placed. For those situations, a LOMR-F must be used. As a participant in the NFIP, a local government must adopt ordinances that meet the minimum Federal floodplain management standards, which are outlined in Section 60.3 of the NFIP regulations. For a number of reasons, these ordinances generally vary from community to community. Nonetheless, because the placement of fill within the floodplain can affect flood hazards in the surrounding area, additional information is needed before FEMA can process a LOMR-F request. Among the data required for a LOMR-F is the community acknowledgment form. This form is FEMA's assurance that all appropriate Federal, State, and local floodplain management requirements have been met. Furthermore, NFIP regulations require that the lowest adjacent grade (the lowest ground touching the structure) be at or above the 1% annual chance flood elevation for a LOMR-F to be issued removing the structure from the floodplain. Because LOMR-F requests are the result of changed physical conditions rather than limitations of scale or topographic definition, FEMA charges a fee for the review of a LOMR-F request. As with the LOMA, the requester of a LOMR-F is responsible for providing all supporting information, including structure and/or property elevation data.

In cases where property owners plan to add fill in the SFHA, NFIP regulations require plans and technical information to be submitted for review by FEMA before construction takes place. FEMA will issue a conditional LOMR-F stating how flood hazards would change and what portions of the property, if any, would remain in the SFHA if the project were built according to the submitted plans.

The issuance of a LOMA or LOMR-F ends the property owner's obligation to purchase flood insurance as a condition of Federal or federally backed financing. However, the property owner's mortgage company maintains the prerogative to require flood insurance as a condition of providing financing. Before attempting to obtain a LOMA or LOMR-F, property owners are advised to consult their mortgage companies regarding this policy. Even if the mortgage company indicates that it will require flood insurance if a LOMA or LOMR-F is issued, it may be advantageous for property owners to request a LOMA or LOMR-F because flood insurance premiums are lower for properties removed from the SFHA than for properties that remain within the SFHA.

For additional information regarding LOMAs, LOMR-Fs, conditional LOMR-Fs, or current application fees, please call the FEMA Map Information eXchange (FMIX) toll-free information line at 1-877-FEMA MAP (1-877-336-2627).

### 7.2 Letters of Map Revision

A Letter of Map Revision (LOMR) is a document issued by FEMA and the NCFMP that revises an FIS Report and/or FIRM. A LOMR is used to change flood risk zones, floodplain and/or floodway delineations, flood elevations, or planimetric features such as road systems or corporate limits. A LOMR provides FEMA and the NCFMP with a cost-effective means of revising the FIS information without physically changing and reprinting the map or report itself. A portion of the FIRM panel or FIS Report showing the revised information is issued with the LOMR. The LOMR is sent to all affected communities and is archived in the communities' NFIP map repository for public reference.

In cases where a proposed project (such as construction in the 1% annual chance floodplain) would result in a significant rise in 1%

annual chance water-surface elevations, NFIP regulations require the community to submit plans and technical information for review by FEMA and the NCFMP before construction takes place. This assures communities participating in the NFIP that proposed projects meet minimum NFIP requirements. The result of FEMA and the NCFMP reviews is documented in a conditional LOMR.

For additional information regarding LOMRs, conditional LOMRs, or current application fees, please call the FEMA Map Assistance Center toll-free information line at 1-877-FEMA MAP (1-877-336-2627) or the NCFMP at 919-715-5711.

### 7.3 Physical Map Revisions

Physical Map Revisions (PMRs) are processed to incorporate information concerning conditions present in the community that are not reflected in the FIS, and involve distributing republished FISs that supersede the most current NFIP data in the community repository.

PMRs may be initiated by a request from a community resident or agency, or FEMA may initiate a PMR to incorporate one or more LOMRs, to reflect significant changes in corporate limits, to correct errors, or to update flood hazards to match new information from an adjacent community’s FIS. Due to the costs associated with updating and distributing FISs, map revisions will be processed as LOMRs rather than PMRs whenever possible. For more information regarding PMRs, please contact the FEMA Map Information eXchange (FMIX) toll-free information line at 1-877-FEMA MAP (1-877-336-2627), the FEMA Regional Office at the address listed on the Notice to Flood Insurance Study Users page at the front of this report, or the NCFMP at 919-715-5711.

### 7.4 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards in a given community. FEMA accomplishes this through a national mapping needs assessment process that assigns priorities and allocates funds to sponsor or subsidize new flood hazard analyses used to update FIS Reports. For map maintenance restudies within the state of North Carolina, scoping will be performed by county approximately 2.5-3.5 years after the previous effective date. Scoping will focus on streams with restudy needs within those previously effective counties rather than on full countywide restudies. A restudy refers specifically to updating or reevaluating engineering analyses that were performed for a flood mapping project that directly impact BFEs and/or flood hazard boundary extents or analysis of previously unstudied flood prone areas. Restudy project evaluation triggers and prioritization values are an essential component of the map maintenance program. For more information regarding NCFMP-contracted restudies, please contact the NCFMP at 919-715-5711 or at [www.ncfloodmaps.com](http://www.ncfloodmaps.com). For more information regarding FEMA-contracted restudies, please contact the FEMA Map Information eXchange (FMIX) toll-free information line at 1-877-FEMA MAP(1-877-336-2627) or the FEMA Regional Office at the address listed on the Notice to Flood Insurance Study Users page at the front of this report.

### 7.5 Map Revision History

The current FIRM is a subset of the Statewide FIRM, showing flood hazard information for the entire geographic area of Chatham County. Previously, separate Flood Hazard Boundary Maps (FHBMs), Flood Boundary and Floodway Maps (FBFMs), and/or FIRMs were prepared for each identified flood prone jurisdiction within the county. Historical data relating to the NFIP maps prepared for each community prior to and including the 2/2/2007 North Carolina Statewide FIRM, which includes Chatham County, are presented in Table 24, “Map Revision History.”

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Chatham County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FIS Reports, FHBMs, FIRMs, and/or FBFMs for all of the incorporated and unincorporated jurisdictions within Chatham County.

**Table 24 - Map Revision History**

Community	Initial Identification Date	Initial FIRM Effective Date	FIRM Revision Date
CHATHAM COUNTY	5/19/1978	7/16/1991	2/2/2007, 11/17/2017, 10/19/2018, 7/19/2022
TOWN OF CARY*	6/28/1974	7/17/1978	5/2/2006, 2/2/2007, 04/16/2013, 7/19/2022
TOWN OF GOLDSTON**	2/2/2007	2/2/2007	11/17/2017
TOWN OF PITTSBORO	10/20/1978	2/2/2007	11/17/2017
TOWN OF SILER CITY	2/15/1974	7/2/1987	2/2/2007, 11/17/2017

\*Area Not Included

\*\*No Special Flood Hazard Areas Identified

# 8.0 Study Contracting and Community Coordination

## 8.1 Authority and Acknowledgments

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

This FIS revises and updates the previous countywide FIS for the geographic area of Chatham County and Incorporated Areas. Table 25, "Authority and Acknowledgments," includes information for the previous countywide FIS and for this revision. This table also includes information for the single-jurisdiction FISs published for each community included in this countywide FIS (if available) as compiled from their previously printed FIS Reports.

**Table 25 — Authority and Acknowledgments**

Community	FIS Dated	Study Contracted By	Data Source	Contract or IAA Number	Work Completed In
CHATHAM COUNTY	10/19/2018	NCFMP	NCFMP	EMA-2008-CA-5884	12/4/2013
CHATHAM COUNTY	7/19/2022	NCFMP	NCFMP	EMA-2008-CA-5884	12/4/2013, 12/10/2021
TOWN OF GOLDSTON	10/19/2018	NCFMP	NCFMP	EMA-2008-CA-5884	12/4/2013
TOWN OF PITTSBORO	10/19/2018	NCFMP	NCFMP	EMA-2008-CA-5884	12/4/2013
TOWN OF SILER CITY	10/19/2018	NCFMP	NCFMP	EMA-2008-CA-5884	12/4/2013

This FIS Report was produced through a unique cooperative partnership between the State of North Carolina and FEMA. The State of North Carolina, through FEMA's Cooperating Technical Partner (CTP) Initiative, has become the first Cooperating Technical State (CTS) and will assume primary ownership of the NFIP FIRM panels for all North Carolina communities. This role has traditionally been fulfilled by FEMA. The North Carolina Floodplain Mapping Program is conducting flood hazard analyses and producing updated, digital FIRM panels. The hydrologic and hydraulic analyses and the FIRM panels for the initial statewide mapping for Chatham County were produced by NCFMP under contract with the State of North Carolina and issued on effective 10/19/2018. For this revision, the hydrologic and hydraulic analyses and the FIRM panels were produced by NCFMP, under contract with the State of North Carolina.

## 8.2 Consultation Coordination Officer's Meetings/Scoping Meetings

For each FIS produced during the initial phase of statewide, an Initial Scoping Meeting was held with representatives from FEMA, the county, the incorporated communities, and the State of North Carolina. A Final Scoping meeting was held to review the Draft Basin Plan and finalize the streams to be studied by detailed methods. This information was then used to create the Final Basin Plan. For map maintenance revisions, only one scoping meeting was held to identify the streams to be newly studied by detailed methods, redelineated, or to be studied by limited detailed methods. This information was then used to create the Map Maintenance Plan.

The historical dates of the Initial and Final Scoping Meetings held during the first round of statewide mapping for Chatham County are shown in Table 26, "Scoping Meetings." Meetings held for the map maintenance revision are also included below for Chatham County.

**Table 26 — Scoping Meetings**

Community	River Basin	Initial Scoping Date	Attended By	Final Scoping Date	Attended By
CHATHAM COUNTY	CAPE FEAR	12/5/2000	Representatives of the community, FEMA, NCFMP, NCEM, and Dewberry	3/6/2001	Representatives of the community, FEMA, NCFMP, NCEM, and Dewberry
CHATHAM COUNTY	NEUSE	N/A	N/A	6/4/2008	Representatives of the community, FEMA, NCFMP, NCEM, and Dewberry

Consultation Coordination Officer's Meetings are held in each county to disseminate and review the FIS Report and FIRM panels. This meeting is required by FEMA. Public Participation Meetings are not required by FEMA, but provide an opportunity to review and discuss the FIS Report and FIRM panels for each jurisdiction in a public setting. The dates for the consultation coordination officer's and public participation meetings are shown in Table 27, "Consultation Coordination Officer's and Public Participation Meetings."

**Table 27 —Consultation Coordination Officer’s and Public Participation Meetings**

Community	For FIS Dated	Meeting Location	Preliminary Meeting Date	Attended By	Public Meeting Date	Attended By
CHATHAM COUNTY	2/2/2007	Town of Pittsboro	8/23/2005	Officials from Chatham County, Communities, NCDEM, Dewberry and Watershed Concepts	8/30/2005	The Public
CHATHAM COUNTY	11/17/2017	Town of Pittsboro	11/6/2013	Officials from Chatham County and the NCFMP	12/17/2013	The Public
CHATHAM COUNTY	10/19/2018	City of Durham	5/13/2015	Officials from Chatham County, and the NCFMP	7/28/2016	The Public
CHATHAM COUNTY	7/22/2022	Town of Pittsboro Town of Cary	11/6/2013 5/13/2015	Officials from Chatham County and the NCFMP	12/17/2013 10/15/2015	The Public

## 9.0 Guide to Additional Information

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see <http://www.fema.gov>.

The Map Repositories table below lists locations where FIRMs for Chatham County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

**Table 28 — Map Repositories**

Community	Address	City	State	Zip Code
Town of Goldston	Town Hall, 40 Coral Avenue	Goldston	NC	27527
Town of Pittsboro	Planning Department, 635 East Street	Pittsboro	NC	27312
Town of Siler City	Planning Department, 311 North Second Avenue, Room 301	Siler City	NC	27344
Chatham County	Chatham County Planning Department, 80-A East Street	Pittsboro	NC	27312

## 9.1 Additional Information

All FIRM panels created for the State of North Carolina are produced in a seamless statewide format; however, FIS Reports are produced for individual counties.

Copies of FIRM panels are available for a nominal fee. To obtain a copy of the current flood map for a specific community, contact the FEMA Map Service Center at 1-800-358-9616. To facilitate the processing of your request, please review the current flood map on file at your local community repository and obtain the panel number in which you are interested. If necessary, users may also order a FIRM Index from the Map Service Center to determine the appropriate panel numbers. The Map Service Center also accepts orders for the Community Status Book and the Flood Insurance Manual. The FIS Report, FIRM panels, and digital data used to produce the FIRM panels are available online at [www.ncfloodmaps.com](http://www.ncfloodmaps.com).

Information concerning the data used in the preparation of this FIS, contained in an Engineering Study Data Package, may be obtained by contacting the FEMA Regional Office at the address listed on the Notice to Flood Insurance Study Users page at the front of this report.

Table 29, "Additional Information" is not applicable in Chatham County.

# 10.0 Appendix

## 10.1 Bibliography

All bibliography and reference information associated within this Flood Insurance Study are maintained and accessible within the geodatabase structure and associated metadata. Users requiring more specific information should contact the North Carolina Floodplain Mapping Program (NCFMP) at [www.ncfloodmaps.com](http://www.ncfloodmaps.com) under the Contacts menu:

NC Floodplain Mapping Program

4218 Mail Service Center

Raleigh, NC 27699-4218

Phone: 919-715-5711

Fax: 919-715-0408

Email: [frishelp@ncdps.gov](mailto:frishelp@ncdps.gov)