

PRELIMINARY FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

A Report of Flood Hazards in
**SAMPSON COUNTY, NORTH
CAROLINA AND
INCORPORATED AREAS**



Community Name	Community Number
CITY OF CLINTON	370263
SAMPSON COUNTY	370220
TOWN OF AUTRYVILLE	370358
TOWN OF GARLAND	370221
TOWN OF HARRELLS	370573
TOWN OF NEWTON GROVE	370524
TOWN OF ROSEBORO	370637
TOWN OF SALEMBURG	370609
TOWN OF TURKEY	370628



PRELIMINARY: 4/30/2014

REVISED: 8/29/2014

Federal Emergency Management Agency

State of North Carolina

Flood Insurance Study Number

37163CV000

www.fema.gov and 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.

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 repository. It is advisable to 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
1/5/2007	Initial Countywide FIS Report Effective Date

This FIS has been produced as part of the North Carolina Floodplain Mapping Program. Sampson 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, 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
3003 Chamblee Tucker Road
Atlanta, Georgia 30341
(770) 220-5400

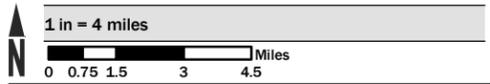
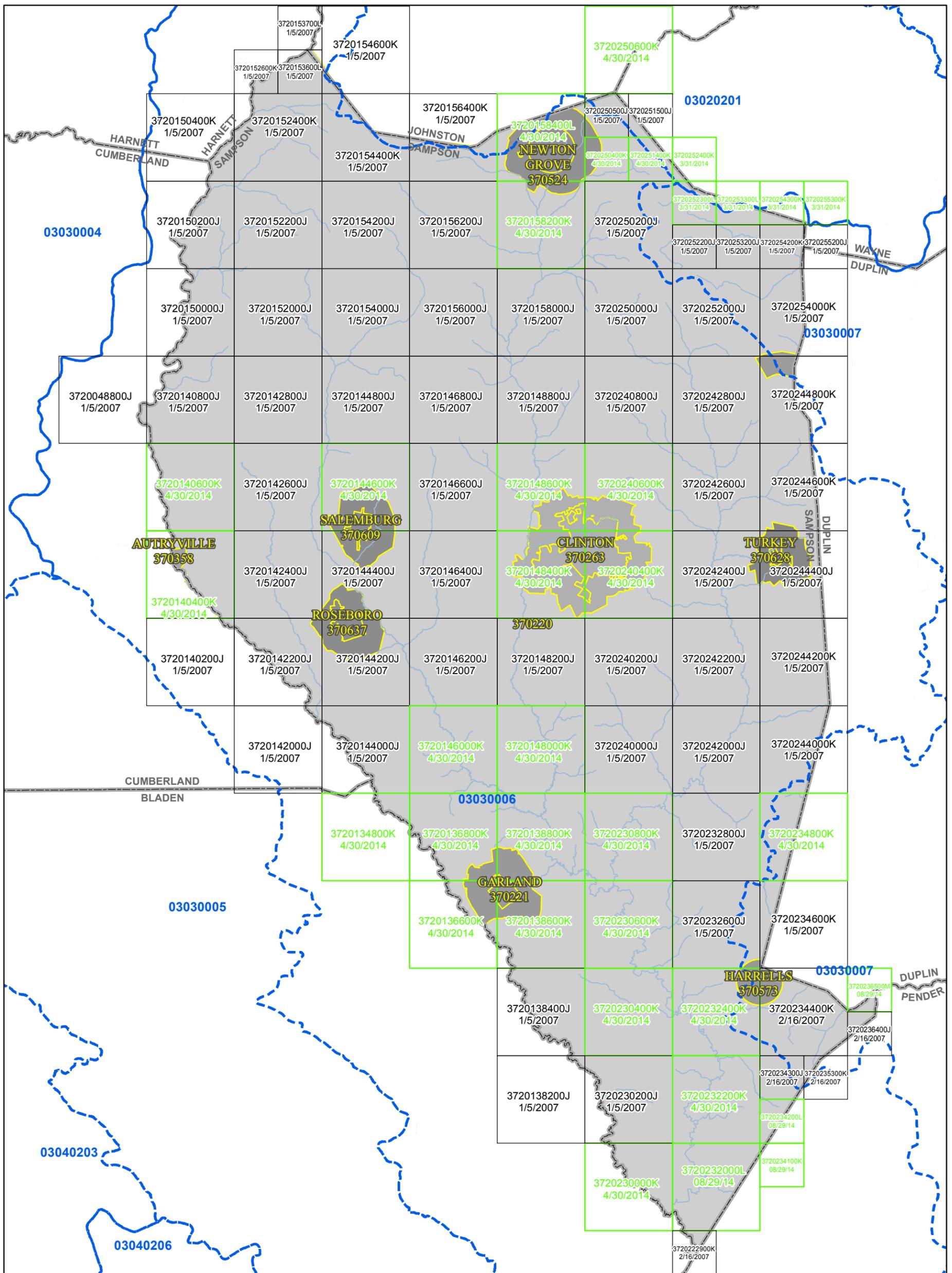
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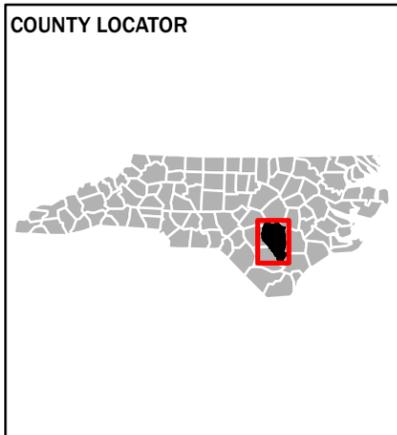


Map Projection:
Lambert Conformal Conic
North American Datum 1983

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

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

PRELIMINARY
08/29/2014



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

SAMPSON COUNTY, NORTH CAROLINA And Incorporated Areas

PANELS PRINTED:
2300, 2320, 2341, 1537, 1546, 2506, 1526, 1536, 1504, 1524, 1544, 1564, 1584, 2505, 2515, 2504, 2514, 2524, 1406, 1426, 1446, 1466, 1486, 2406, 2426, 2446, 1366, 1386, 2306, 2326, 2346, 2229, 1502, 1522, 1542, 1562, 1582, 2502, 2523, 2533, 2543, 2553, 2522, 2532, 2542, 2552, 1500, 1520, 1540, 1560, 1580, 2500, 2520, 2540, 0488, 1408, 1428, 1448, 1468, 1488, 2408, 2428, 2448, 1404, 1424, 1444, 1464, 1484, 2404, 2424, 2444, 1402, 1422, 1442, 1462, 1482, 2402, 2422, 2442, 1420, 1440, 1460, 1480, 2400, 2420, 2440, 1348, 1368, 1388, 2308, 2328, 2348, 1384, 2304, 2324, 2344, 2365, 2364, 1382, 2302, 2322, 2343, 2353, 2342

FEMA
MAP NUMBER
37163CINDOC

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 Sampson County and the jurisdictions therein (hereinafter referred to collectively as Sampson 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 Sampson County, North Carolina, including the jurisdictions listed in Table 1.

Table 1 - Jurisdictions in Sampson County

Community	Included in this FIS	If Not Included, Location of Flood Hazard/Flood Insurance Rate Data
CITY OF CLINTON	Yes	*
SAMPSON COUNTY	Yes	*
TOWN OF AUTRYVILLE	Yes	*
TOWN OF GARLAND	Yes	*
TOWN OF HARRELLS	Yes	*
TOWN OF NEWTON GROVE	Yes	*
TOWN OF ROSEBORO	Yes	*
TOWN OF SALEMBURG	Yes	*
TOWN OF TURKEY	Yes	*

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 27, "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 Sampson became Effective on 1/5/2007. Refer to Table XX 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 9 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>.

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 1, "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.

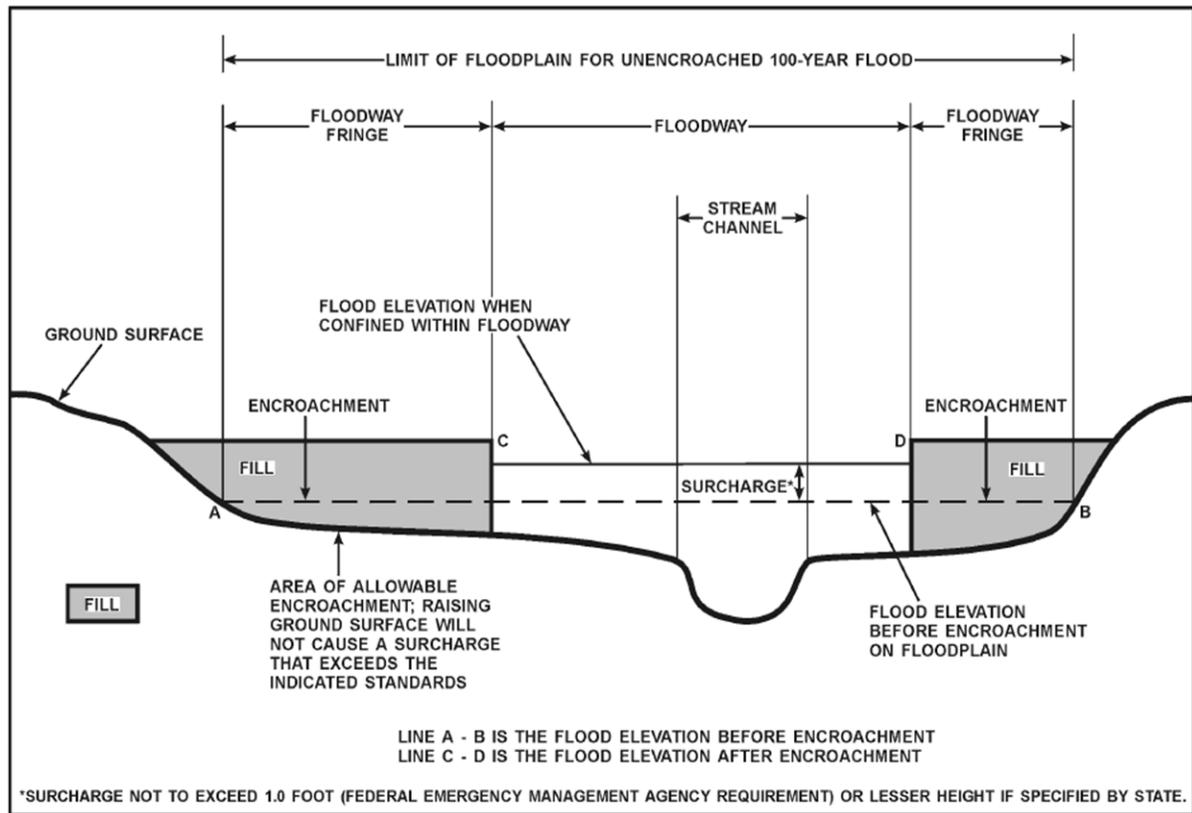


Figure 1- Floodway Schematic

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 U.S. Geological Survey (USGS) or other agencies do not maintain gages on the flooding sources of interest, partnerships with the USGS may be pursued, or local gages may be installed. 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 exceedence) 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.

3.2 Coastal Barrier Resources System

This section is not applicable to this FIS project.

4.0 Area Studied

Sampson County is found in the Coastal Plain region of North Carolina. It is surrounded by Johnston County to the north, Duplin County to the east, Bladen County to the south, and Cumberland 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)
Black	03030006	Black River	The Black River Basin begins in the northeastern region of Harnett County, North Carolina. The basin then drains southeast through significant portions of Bladen, Cumberland, and Sampson Counties, ending at the Cape Fear River in Pender County.	1,574
Northeast Cape Fear	03030007	Northeast Cape Fear River	The Northeast Cape Fear River Basin begins in the northeastern region of Sampson County and along the Wayne/Duplin County boundary. The basin then drains south through Pender County, ending at the Cape Fear River in New Hanover County.	1,741
Upper Neuse	03020201	Neuse River	The Upper Neuse Basin is initially drained by the Eno and Flat Rivers in Orange County. Once they confluence near Falls Lake, the basin is then drained by the Neuse River which flows through Durham, Wake, and Johnston Counties.	2,406

4.2 Principal Flood Problems

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

Table 4 - Principal Flood Problems

Flooding Source	Problem
All Sources	Past flooding on the streams within Sampson County indicates that flooding may occur 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 along the Atlantic coastline.

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 Sampson 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)
Black River / Hurricane Floyd	At Beattys Bridge Road	175997	25.4	9/1/1999	*
Doctors Creek / Hurricane Floyd	At NC Highway 41 - Trailer	36931	59.6	9/1/1999	*
Goshen Swamp / Hurricane Floyd	NC Highway 11 and NC Highway 903	3944	63.9	9/1/1999	500
Goshen Swamp / Hurricane Floyd	Summerlins Crossroads	40853	79.7	9/1/1999	500
Goshen Swamp / Hurricane Floyd	At NC Highway 403	100681	104.2	9/1/1999	500
Turkey Creek / Hurricane Floyd	Approximately 1.5 miles upstream of NC Highway 133	28572	23.2	9/1/1999	*

* 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" is not applicable in Sampson County.

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

4.5 Scope of Study

For this map maintenance revision, a scoping meeting was held in Sampson 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 Sampson County and posted to the State's website at 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 Sampson 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	
Beaverdam Swamp 3	Approximately 1,010 feet downstream of Bryan Road	Approximately 610 feet upstream of Rose Road	Sampson County Town Of Newton Grove
Bills Swamp	The confluence with Great Coharie Creek	Approximately 1.3 miles upstream of Norris Road	Sampson County
Black River	Approximately 1.5 miles downstream of NC Highway 41	Approximately 1.0 mile downstream of Lisbon Bridge Road	Sampson County
Black River	The confluence of South River	Approximately 1,400 feet upstream of Dr Kerr Road	Sampson County
Cat Tail Branch	The confluence with Williams Old Mill Branch	Approximately 830 feet upstream of College Street	City Of Clinton
Dollar Branch	The confluence with Williams Old Mill Branch	Approximately 1,200 feet upstream of Morisey Boulevard	City Of Clinton
Great Coharie Creek	Approximately 1.0 mile downstream of Lisbon Bridge Road	Approximately 0.4 mile upstream of U.S. Highway 701	Sampson County

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

Source	Riverine Sources		Affected Communities
	From	To	
Great Coharie Creek	Approximately 2.5 miles downstream of Roseboro Highway	Approximately 1.0 mile upstream of Five Bridge Road	City Of Clinton Sampson County
Kill Swamp	Approximately 1,180 feet downstream of U.S. Highway 701	Approximately 720 feet upstream of Emmet Thorton Road	Sampson County Town Of Newton Grove
South River	Approximately 1.3 miles downstream of U.S. Highway 701	Approximately 0.5 mile upstream of Greens Bridge Road	Sampson County Town Of Garland
South River	Approximately 2.0 miles downstream of S. Gray Street	Approximately 1.8 miles upstream of W. William Street	Sampson County Town Of Autryville
Williams Old Mill Branch	The confluence with Great Coharie Creek	Approximately 1,560 feet upstream of Pineview Road	City Of Clinton
Williams Old Mill Branch Tributary	The confluence with Williams Old Mill Branch	Approximately 0.5 mile upstream of North Boulevard	City Of Clinton

Table 9P, "Scope of Revisions: Redelineated - Preliminary" is not applicable in Sampson 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	
Beaverdam Swamp 3 Tributary 2 ¹	Confluence with Beaverdam Swamp 3	Approximately 305 feet downstream of Goldboro Street	Town Of Newton Grove
Big Branch ¹	Confluence with Black River	Approximately 0.7 mile upstream of Black River	Sampson County
Black River	Approximately 1,400 feet upstream of Dr Kerr Road	Approximately 1.4 miles downstream of Wildcat Road	Sampson County
Black River Tributary 1 ¹	Confluence with Black River	Approximately 530 feet upstream of the confluence with Black River	Sampson County
Canty Mill Branch ¹	Confluence with Black River	Tomahawk Highway	Sampson County
Clear Run ¹	Confluence with Black River	Approximately 1,340 feet upstream of Lundy Road	Sampson County
Cobb Branch ¹	Confluence with Canty Mill Branch	Approximately 0.2 mile upstream of the confluence with Canty Mill Branch	Sampson County
Devane Branch ¹	Confluence with Black River	Approximately 1,850 feet downstream of Firetower Road	Sampson County
Gaddy Branch	The confluence with Six Runs Creek	Approximately 0.6 mile upstream of Edmond Matthis Road	Sampson County
Great Coharie Creek Tributary 4	Approximately 0.9 mile upstream of the confluence with Great Coharie Creek	Approximately 1.5 miles upstream of the confluence with Great Coharie Creek	Sampson County
Great Coharie Creek Tributary 5	The confluence with Great Coharie Creek	Approximately 1.0 mile upstream of Lamb Road	Sampson County Town Of Garland
Great Coharie Creek Tributary 6	The confluence with Great Coharie Creek	Approximately 0.8 mile upstream of the confluence with Great Coharie Creek	Sampson County
Horsepen Branch	The confluence with Little Coharie Creek	Approximately 550 feet upstream of NC Highway 411	Sampson County
Kill Swamp	Approximately 720 feet upstream of Emmet Thorton Road	Approximately 700 feet downstream of William R King Road	Sampson County
Little Coharie Creek Tributary 2	Approximately 1,730 feet upstream of the confluence with Little Coharie Creek	Approximately 1.1 miles upstream of the confluence with Little Coharie Creek	Sampson County
Mill Creek 2 Tributary 1	The confluence with Mill Creek 2	Approximately 0.6 mile upstream of the confluence with Mill Creek 2	Sampson County
Mill Swamp	Approximately 810 feet upstream of the confluence with Mill Swamp	Approximately 1.0 mile upstream of the confluence with Mill Swamp	Sampson County
Rattlesnake Branch	The confluence with Little Coharie Creek	Approximately 0.8 mile upstream of Norris Road	Sampson County
Six Runs Creek ¹	Confluence with Black River	Approximately 0.9 mile upstream of Moores Bridge Road	Sampson County
Tarkill Branch ¹	Confluence with Six Runs Creek	Approximately 0.4 mile downstream of Smith Road	Sampson County

¹Revised 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: Revised or Newly Studied

Source	Riverine Sources		Affected Communities
	From	To	
Beaverdam Swamp 3	Approximately 1,010 feet downstream of Bryan Road	Approximately 610 feet upstream of Rose Road	Sampson County Town Of Newton Grove
Bills Swamp	The confluence with Great Coharie Creek	Approximately 1.3 miles upstream of Norris Road	Sampson County
Black River	Approximately 1.5 miles downstream of NC Highway 41	Approximately 1.0 mile downstream of Lisbon Bridge Road	Sampson County
Black River	Approximately 3.7 miles downstream of Beattys Bridge Road	At the confluence of South River	Sampson County
Black River	The confluence of South River	Approximately 1,400 feet upstream of Dr Kerr Road	Sampson County
Cat Tail Branch	The confluence with Williams Old Mill Branch	Approximately 830 feet upstream of College Street	City Of Clinton
Dollar Branch	The confluence with Williams Old Mill Branch	Approximately 1,200 feet upstream of Morisey Boulevard	City Of Clinton
Great Coharie Creek	Approximately 1.0 mile downstream of Lisbon Bridge Road	Approximately 0.4 mile upstream of U.S. Highway 701	Sampson County
Great Coharie Creek	Approximately 2.5 miles downstream of Roseboro Highway	Approximately 1.0 mile upstream of Five Bridge Road	City Of Clinton Sampson County
Kill Swamp	Approximately 1,180 feet downstream of U.S. Highway 701	Approximately 720 feet upstream of Emmit Thorton Road	Sampson County Town Of Newton Grove
South River	Approximately 1.3 miles downstream of U.S. Highway 701	Approximately 0.5 mile upstream of Greens Bridge Road	Sampson County Town Of Garland
South River	Approximately 2.0 miles downstream of S. Gray Street	Approximately 1.8 miles upstream of W. William Street	Sampson County Town Of Autryville
Williams Old Mill Branch	The confluence with Great Coharie Creek	Approximately 1,560 feet upstream of Pineview Road	City Of Clinton
Williams Old Mill Branch Tributary	The confluence with Williams Old Mill Branch	Approximately 0.5 mile upstream of North Boulevard	City Of Clinton

Table 9, "Flooding Sources Studied by Detailed Methods: Redelineated", lists all flooding sources that were studied by detailed methods for the pre- statewide FIS and redelineated for previous FISs. These flooding sources were not part of this revision and their effective analyses remain valid.

Table 9 - Flooding Sources Studied by Detailed Methods: Redelineated

Source	Riverine Sources		Affected Communities
	From	To	
Beaverdam Swamp 3	Approximately 1,000 feet downstream of Bryan Road	Old Goldsboro Road	Sampson County Town Of Newton Grove
Stony Run	Harnett/Sampson County Boundary	Hobson Road	Sampson 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 Detailed Methods: Limited Detailed

Source	Riverine Sources		Affected Communities
	From	To	
Bearskin Swamp	Confluence with Little Coharie Creek	Approximately 1.3 miles upstream of Bearskin Road	Sampson County
Beaverdam Creek	Confluence with Clear Run	Approximately 2.4 miles upstream of the confluence with Clear Run	Sampson County
Beaverdam Run	Confluence with Great Coharie Creek	Approximately 0.6 mile upstream of High House Road	Sampson County
Beaverdam Run Tributary 1	Confluence with Beaverdam Run	Approximately 160 feet downstream of High House Road	Sampson County
Beaverdam Swamp	Confluence with Mingo Swamp	Approximately 1.3 miles upstream of US Hwy 421	Sampson County
Beaverdam Swamp 1	Confluence with Beaverdam Run	Approximately 160 feet downstream of High House Road	Sampson County
Beaverdam Swamp 2	Confluence with Great Coharie Creek	Approximately 260 feet downstream of Keener Road	Sampson County

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

Source	Riverine Sources		Affected Communities
	From	To	
Beaverdam Swamp 2 Tributary 1	Confluence with Beaverdam Swamp 2	Approximately 0.4 mile upstream of Wiggins Road	Sampson County
Beaverdam Swamp 3	Confluence with Great Coharie Creek	Approximately 1,000 feet downstream of Bryan Road	Sampson County
Beaverdam Swamp 3 Tributary 2	Confluence with Beaverdam Swamp 3	Approximately 800 feet upstream of Old Goldsboro Road	Town Of Newton Grove
Big Branch	Confluence with Black River	Approximately 0.7 mile upstream of Harrells Highway (NC Hwy 411)	Sampson County
Big Juniper Run	Confluence with Mingo Swamp	Approximately 1,200 feet upstream of Lee Chapel Church Road	Sampson County
Big Swamp	Confluence with South River	Approximately 1.2 miles upstream of Minnie Hall Road	Sampson County
Black River	Approximately 1,400 feet upstream of Dr Kerr Road	Approximately 1.4 miles downstream of Wildcat Road	Sampson County
Black River	Confluence of South River	Approximately 3.6 miles upstream of the confluence of Big Branch	Sampson County
Black River Tributary 1	Confluence with Black River	Approximately 1,300 feet upstream of G Shaw Road	Sampson County
Buckhorn Creek	Confluence with Crane Creek	Approximately 1.9 miles upstream of Boney Mill Road	Sampson County
Caesar Swamp	Confluence with Little Coharie Creek	Approximately 1.2 miles upstream of Straw Pond School Road	Sampson County
Canty Mill Branch	Confluence with Black River	Approximately 0.5 mile upstream of Melvin Road	Sampson County
Cat Creek	Confluence with Black River	Approximately 1.0 mile upstream of Private Road	Sampson County
Clear Run	Confluence with Black River	Approximately 1.5 miles upstream of the confluence with Beaverdam Creek	Sampson County
Clifton Branch	Confluence with Six Runs Creek	Approximately 2.1 miles upstream of the confluence with Six Runs Creek	Sampson County
Cobb Branch	Confluence with Canty Mill Branch	Approximately 0.8 mile upstream of confluence with Canty Mill Branch	Sampson County
Craddock Swamp	Confluence with Ward Swamp	Approximately 275 feet downstream of William R. King Road	Sampson County
Crane Creek	Confluence with Six Runs Creek	Approximately 1.9 miles upstream of West Mount Gilead Church Road	Sampson County
Cypress Lake	Confluence with Black River	Approximately 1.2 miles upstream of Ivanhoe Road	Sampson County
Devane Branch	Confluence with Black River	Approximately 0.8 mile upstream of Tomahawk Highway (NC Hwy 41)	Sampson County
Doctors Creek	Approximately 85 feet downstream of Alderman Road	Sampson-Duplin County boundary	Sampson County
Encoh Mill Creek	Confluence with South River	Approximately 1.4 miles upstream of dam	Sampson County
Gaddy Branch	The confluence with Six Runs Creek	Approximately 0.6 mile upstream of Edmond Matthis Road	Sampson County
Gilmore Swamp	Confluence with Six Runs Creek	Approximately 0.5 mile upstream of King Road	Sampson County
Gilmore Swamp Tributary	Confluence with Gilmore Swamp	Approximately 1.6 miles upstream of King Road	Sampson County
Goshen Swamp	Confluence with Northeast Cape Fear River	Approximately 228 feet upstream of Preacher Henrys Road	Sampson County
Great Coharie Creek	Approximately 700 feet upstream of Five Bridge Road	Approximately 1.0 mile upstream of Oak Grove Church Road	City Of Clinton Sampson County Town Of Newton Grove
Great Coharie Creek	Confluence with Six Runs Creek and Black River	Approximately 1.9 miles downstream of Roseboro Highway	Sampson County Town Of Garland
Great Coharie Creek Tributary 1	Confluence with Great Coharie Creek	Approximately 1.2 miles upstream of Confluence with Great Coharie Creek	Sampson County
Great Coharie Creek Tributary 2	Confluence with Great Coharie Creek	Approximately 1.3 miles upstream of Confluence with Great Coharie Creek	Sampson County
Great Coharie Creek Tributary 3	Confluence with Great Coharie Creek	Approximately 1.2 miles upstream of Keener Road	Sampson County
Great Coharie Creek Tributary 4	Approximately 0.9 mile upstream of the confluence with Great Coharie Creek	Approximately 1.5 miles upstream of the confluence with Great Coharie Creek	Sampson County
Great Coharie Creek Tributary 5	The confluence with Great Coharie Creek	Approximately 1.0 mile upstream of Lamb Road	Sampson County Town Of Garland
Great Coharie Creek Tributary 6	The confluence with Great Coharie Creek	Approximately 0.8 mile upstream of the confluence with Great Coharie Creek	Sampson County
Hoe Swamp	Confluence with Six Runs Creek	Approximately 1.0 mile upstream of Hunter Road	Sampson County
Hornet Swamp	Confluence with Little Coharie Creek	Approximately 0.8 mile upstream of N. Salemburg Highway	Sampson County
Horsepen Branch	The confluence with Little Coharie Creek	Approximately 550 feet upstream of NC Highway 411	Sampson County

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

Source	Riverine Sources		Affected Communities
	From	To	
Johnson Mill Branch	Confluence with Little Coharie Creek	Approximately 1,240 feet upstream of Greens Bridge Road	Sampson County
Jones Swamp	Confluence with South River	Approximately 810 feet upstream of Welcome School Road	Sampson County
Keith Branch	Confluence with Black River	Approximately 1,430 feet upstream of Firetower Road	Sampson County
Kill Swamp	Approximately 720 feet upstream of Emmit Thorton Road	Approximately 700 feet downstream of William R King Road	Sampson County
Kill Swamp	Confluence with Great Coharie Creek	Approximately 1.0 mile upstream of confluence with Great Coharie Creek	Sampson County
Kill Swamp Tributary 1	Confluence with Kill Swamp	Approximately 0.5 mile upstream of confluence with Kill Swamp	Sampson County
Little Beaverdam Swamp	Confluence with South River	Approximately 1.0 mile upstream of Phillips Road	Sampson County
Little Beaverdam Swamp Tributary 1	Confluence with Little Beaverdam Swamp	Approximately 1.3 miles upstream confluence with Little Beaverdam Swamp Tributary 2	Sampson County
Little Beaverdam Swamp Tributary 2	Confluence with Little Beaverdam Swamp Tributary 1	Approximately 0.7 mile upstream of Charles Newland Road	Sampson County
Little Coharie Creek	Confluence with Great Coharie Creek	Approximately 1.1 miles upstream of Newton Grove Highway	Sampson County Town Of Roseboro
Little Coharie Creek Tributary	Confluence with Little Coharie Creek	Approximately 0.3 miles upstream of Andrews Chapel Road (Hwy 13)	Sampson County Town Of Roseboro
Little Coharie Creek Tributary 2	Approximately 1,730 feet upstream of the confluence with Little Coharie Creek	Approximately 1.1 miles upstream of the confluence with Little Coharie Creek	Sampson County
Little Juniper Run	Confluence with Big Juniper Run	Approximately 1,580 feet upstream of Little Juniper Dam	Sampson County
Lockamy Mill	Confluence with Little Coharie Creek	Approximately 0.9 mile upstream of Old Mintz Highway (US Hwy 411)	Sampson County
Marsh Swamp	Confluence with Great Coharie Creek	Approximately 1,020 feet of Odom Road	Sampson County
McPhail Branch	Confluence with Merkle Swamp	Approximately 1.1 mile upstream of Confluence with Merkle Swamp	Sampson County
Meetinghouse Branch	Confluence with Great Coharie Creek	Approximately 0.6 mile upstream of Basstown Road	Sampson County
Merkle Swamp	Confluence with Great Coharie Creek	Approximately 0.7 mile upstream of Joel Jones Lane	Sampson County
Mill Creek	Confluence with Doctors Creek	Approximately 800 ft upstream of Matthews Road	Sampson County
Mill Creek 2	Confluence with Great Coharie Creek	Approximately 1.4 miles upstream of Garland Highway (Hwy 701)	Sampson County
Mill Creek 2 Tributary 1	The confluence with Mill Creek 2	Approximately 0.6 mile upstream of the confluence with Mill Creek 2	Sampson County
Mill Creek Tributary	Approximately 0.2 mile upstream of confluence with Muddy Creek	Approximately 3.2 miles upstream of Lyman Road	Sampson County
Mill Run	Confluence with Six Runs Creek	Approximately 1.9 miles upstream of Rowan Road	Sampson County Town Of Turkey
Mill Swamp	Approximately 810 feet upstream of the confluence with Mill Swamp	Approximately 1.0 mile upstream of the confluence with Mill Swamp	Sampson County
Mill Swamp	Confluence with Six Runs Creek	Approximately 2.5 miles upstream of Lake Artesia Road	Sampson County
Mill Swamp Tributary	Confluence with Mill Swamp	Approximately 0.4 mile upstream of confluence with Mill Swamp	Sampson County
Mingo Swamp	Sampson/Cumberland/ Harnett County boundaries	Approximately 0.7 mile upstream of Red Hill Church Road	Sampson County
NP	Confluence with Doctors Creek	Approximately 0.5 mile upstream of Bull Tail Road	Sampson County
Old Mill Swamp	Confluence with Great Coharie Creek	Approximately 1.0 mile upstream of Church Road	Sampson County
Peters Branch	Confluence with Buckhorn Creek	Approximately 0.8 mile upstream of the confluence with Buckhorn Creek	Sampson County
Pharisee Creek	Sampson/Duplin County boundary	Approximately 0.5 mile upstream of Wilmington Highway	Sampson County
Quewiffle Swamp	Confluence with Six Runs Creek	Approximately 2.2 miles upstream of Trinity Church Road	Sampson County
Railer Branch	Confluence with Goshen Swamp	Approximately 0.5 mile upstream of Hollingsworth Road	Sampson County
Rattlesnake Branch	The confluence with Little Coharie Creek	Approximately 0.8 mile upstream of Norris Road	Sampson County
Rice Swamp	Confluence with Little Coharie Creek	Approximately 0.4 mile upstream of Zoar Church Road	Sampson County Town Of Salemburg
Robinson Mill Branch	Confluence with Six Runs Creek	Approximately 1,100 feet upstream of Private Road	Sampson County
Rocky Marsh Creek	Confluence with Great Coharie Creek	Approximately 0.6 mile upstream of Peterson Road	Sampson County

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

Source	Riverine Sources		Affected Communities
	From	To	
Rocky Marsh Creek Tributary	Confluence with Rocky Marsh Creek	Approximately 1.2 miles upstream of Confluence with Rocky Marsh Creek	Sampson County
Rowan Branch	Confluence with Six Runs Creek	Approximately 1.3 miles upstream of Rowan Road	City Of Clinton Sampson County
Sevenmile Swamp	Confluence with Great Coharie Creek	Approximately 0.9 mile upstream of Easy Street	Sampson County
Shade Branch	Confluence with Quewiffle Swamp	Approximately 1,900 feet upstream of Rogers Mill Road	Sampson County
Six Runs Creek	Confluence with Black River	Approximately 0.9 mile upstream of N. McCullen Road	Sampson County
South River	Approximately 1.7 miles upstream of Clinton Road	Approximately 0.7 mile upstream of confluence of Black River	Sampson County
South River	Approximately 630 feet upstream of Greens Bridge Road	Approximately 1,500 feet upstream of the confluence of Gum Swamp	Sampson County
South River	Confluence with Black River and Great Coharie Creek	Approximately 0.9 mile downstream of Garland Highway	Sampson County
Spearmans Mill Branch	Confluence with Six Runs Creek	Approximately 0.6 mile upstream of Hayes Chapel Road	Sampson County
Starlins Swamp	Confluence with Beaverdam Swamp	Approximately 0.4 mile upstream of Stanley Hall Road	Sampson County
Stewarts Creek	Confluence with Six Runs Creek	Approximately 1.7 miles upstream of Highway 17 road crossing	Sampson County
Tarkill Branch	Confluence with Six Runs Creek	Approximately 0.8 mile upstream of Edmond Matthis Road	Sampson County
Tenmile Swamp	Confluence with Six Runs Creek	Approximately 1.0 mile upstream of McGowan Road	Sampson County
Tenmile Swamp Tributary	Confluence with Tenmile Swamp	Approximately 320 feet upstream of Thompson Avenue	Sampson County
Turkey Creek	Confluence with Six Runs Creek	Approximately 0.8 mile upstream of Blackmore Road crossing	Sampson County Town Of Turkey
Twomile Swamp	Confluence with Caesar Swamp	Approximately 1.0 mile upstream of Bynum Road	Sampson County
Ward Swamp	Confluence with Great Coharie Creek	Approximately 1.3 miles upstream of Confluence with Craddock Creek	Sampson County
Ward Swamp Tributary 1	Confluence with Ward Swamp Tributary 1	Approximately 0.8 mile upstream of Hobbton Highway (US Hwy 701)	Sampson County
Ward Swamp Tributary 2	Confluence with Ward Swamp Tributary 1	Approximately 1.0 mile upstream of Share Cake Road	Sampson County
Ward Swamp Tributary 3	Confluence with Ward Swamp	Approximately 2.1 mile upstream of Hobbton Highway (US Hwy 701)	Sampson County
Ward Swamp Tributary 4	Confluence with Ward Swamp Tributary 3	Approximately 0.8 mile upstream of Confluence with Ward Swamp Tributary 3	Sampson County
Williamson Swamp	Confluence with Little Beaverdam Swamp	Approximately 340 feet upstream of Stanley Hall Road	Sampson County
Wolf Pit Branch	Confluence with Buckhorn Creek	Approximately 1,640 feet upstream of Ozzie Road	Sampson County
Youngs Swamp	At the Sampson/Duplin County Boundary	Approximately 1.9 miles upstream of Suttontown Road	Sampson County

Additional Flooding Sources included in this FIS Report studied by Other Methods

Source	Riverine Sources		Affected Communities	Study Type
	From	To		
NP	NP	NP	Sampson County	NP

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

Table 12, "Letters of Map Revision" is not applicable in Sampson 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 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	1% Annual Future Annual Chance	0.2% Annual Chance
Bearskin Swamp						
Confluence with Little Coharie Creek	26.60	*	*	3000	*	*
Approximately 1.8 miles upstream of confluence with Little Coharie Creek	24.00	*	*	2830	*	*
Approximately 1,200 feet downstream of Roseboro Highway	21.50	*	*	2650	*	*
Approximately 1.0 mile upstream of Roseboro Highway	20.70	*	*	2600	*	*
Approximately 1.4 miles upstream of Roseboro Highway	17.80	*	*	2390	*	*
Approximately 2.2 miles upstream of Roseboro Highway	16.50	*	*	2280	*	*
Approximately 2.7 miles upstream of Roseboro Highway	15.80	*	*	2230	*	*
Approximately 1.0 mile downstream of Bonnetsville Road	14.80	*	*	2150	*	*
Approximately 0.6 mile downstream of Bonnetsville Road	13.90	*	*	2080	*	*
Approximately 130 feet downstream of Bonnetsville Road	12.60	*	*	1970	*	*
Approximately 0.8 mile upstream of Bonnetsville Road	11.30	*	*	1850	*	*
Approximately 1.5 miles upstream of Bonnetsville Road	8.10	*	*	1530	*	*
Approximately 900 feet downstream of Bearskin Road	7.20	*	*	1430	*	*
Approximately 0.7 mile upstream of Bearskin Road	6.00	*	*	1290	*	*
Approximately 1.1 miles upstream of Bearskin Road	4.60	*	*	1120	*	*
Beaverdam Creek						
At mouth	3.60	*	*	966	*	*
Approximately 0.9 mile upstream of the confluence with Clear Run	3.20	*	*	908	*	*
Approximately 1.7 miles upstream of the confluence with Clear Run	2.30	*	*	754	*	*
Approximately 2.2 miles upstream of the confluence with Clear Run	1.70	*	*	640	*	*
Beaverdam Run						
At mouth	8.50	*	*	1580	*	*
Approximately 1.2 miles downstream of Belvoir School Road	7.80	*	*	1500	*	*
Approximately 460 feet downstream of Belvoir School Road	6.40	*	*	1340	*	*
Approximately 10 feet upstream of confluence of Beaverdam Run Tributary 1	2.50	*	*	794	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 250 feet downstream of Elwood Road	1.10	*	*	488	*	*
Beaverdam Run Tributary 1						
At mouth	2.70	*	*	818	*	*
Approximately 0.6 mile upstream of confluence with Beaverdam Run	1.20	*	*	528	*	*
Beaverdam Swamp						
At mouth	18.30	*	*	2423	*	*
Approximately 1.6 miles upstream of confluence with Mingo Swamp	16.80	*	*	2312	*	*
At mouth	9.50	*	*	1680	*	*
Approximately 200 feet downstream of Basstown Road	8.30	*	*	1550	*	*
Approximately 1,700 feet upstream of Basstown Road	6.90	*	*	1400	*	*
Approximately 10 feet upstream of confluence of Starlins Swamp	6.80	*	*	1381	*	*
Approximately 1,100 feet downstream of North Spring Branch Road	5.90	*	*	1282	*	*
Approximately 0.7 mile upstream of North Spring Branch Road	5.00	*	*	1161	*	*
Approximately 20 feet upstream of confluence of Beaverdam Swamp 2 Tributary 1	4.70	*	*	1130	*	*
Approximately 0.4 mile upstream of confluence of Beaverdam Swamp 2 Tributary 1	3.90	*	*	1010	*	*
Approximately 240 feet upstream of Plain View Highway	3.70	*	*	976	*	*
Approximately 0.7 miles of Plain View Highway	3.00	*	*	868	*	*
Approximately 1.0 mile upstream of confluence of Beaverdam Swamp 2 Tributary 1	2.70	*	*	828	*	*
Beaverdam Swamp 1						
At mouth	13.60	*	*	2048	*	*
Approximately 0.4 mile upstream of Old Warsaw Road crossing	12.80	*	*	1979	*	*
Approximately 1,850 feet downstream of Matthis Road crossing	12.10	*	*	1917	*	*
Approximately 0.5 mile upstream of Matthis Road crossing	9.00	*	*	1619	*	*
Approximately 200 feet upstream of Faison Highway road crossing	8.50	*	*	1570	*	*
Approximately 1,950 feet upstream of Faison Highway road crossing	7.70	*	*	1490	*	*
Approximately 0.8 mile downstream of Governor Moore Road crossing	6.90	*	*	1398	*	*
Approximately 1,740 feet upstream of Governor Moore Road crossing	6.00	*	*	1284	*	*
Approximately 0.4 mile upstream of Governor Moore Road crossing	3.10	*	*	883	*	*
Approximately 0.6 mile upstream of Governor Moore Road crossing	2.70	*	*	829	*	*
Approximately 1,530 feet downstream of Isaac Weeks Road crossing	1.80	*	*	645	*	*
Beaverdam Swamp 2 Tributary 1						
At mouth	1.60	*	*	609	*	*
Beaverdam Swamp 3						
Approximately 725 feet upstream of confluence with Great Coharie Creek	10.82	755	1290	1564	*	2202
Approximately 840 feet downstream of Bryan Road	10.38	736	1258	1526	*	2150
Approximately 375 feet downstream of Clinton Street	9.04	676	1158	1406	*	1983
Approximately 2,455 feet upstream of Mt Olive Drive	4.27	425	738	900	*	1280
Approximately 1,700 feet downstream of Goldsboro Highway	1.71	242	426	523	*	751
Beaverdam Swamp 3 Tributary 2						
At mouth	3.00	*	*	868	*	*
Approximately 370 feet downstream of Old Goldsboro Road	2.00	*	*	685	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Big Branch						
At mouth	2.30	*	*	718	*	*
Approximately 1,600 feet upstream of Harrells Highway crossing	1.30	*	*	537	*	*
Approximately 0.7 mile upstream of Harrells Highway crossing	0.50	*	*	302	*	*
Big Juniper Run						
At mouth	8.10	*	*	1529	*	*
Approximately 280 feet downstream of Timothy Road	6.70	*	*	1378	*	*
Approximately 10 feet upstream of confluence of Little Juniper Creek	4.10	*	*	1039	*	*
Approximately 800 feet upstream of Lee Chapel Church Road	2.80	*	*	839	*	*
Big Swamp						
Approximately 1,400 feet upstream of confluence with South River	50.80	*	*	4351	*	*
Approximately 1.6 miles upstream of confluence with South River	43.30	*	*	4241	*	*
Approximately 0.8 mile downstream of Butler Island Road	43.00	*	*	4235	*	*
Approximately 1,470 feet upstream of Butler Island Road	42.10	*	*	4217	*	*
Approximately 1.2 miles upstream of Butler Island Road	41.30	*	*	4198	*	*
Approximately 2.0 miles upstream of Butler Island Road	40.30	*	*	4175	*	*
Approximately 1.6 miles downstream of Autry Highway	39.50	*	*	4153	*	*
Approximately 1.6 miles downstream of Autry Highway	37.50	*	*	4098	*	*
Approximately 0.5 mile downstream of Autry Highway	35.30	*	*	4030	*	*
Approximately 250 feet upstream of Autry Highway	34.40	*	*	3999	*	*
Approximately 0.5 mile upstream of Autry Highway	33.60	*	*	3925	*	*
Approximately 0.6 mile downstream of Carry Bridge Road	32.60	*	*	3832	*	*
Approximately 220 feet upstream of Carry Bridge Road	32.00	*	*	3773	*	*
Approximately 430 feet upstream of Carry Bridge Road	21.90	*	*	2799	*	*
Approximately 1.2 miles downstream of Autryville Road	21.00	*	*	2707	*	*
Approximately 0.4 mile downstream of Autryville Road	20.00	*	*	2612	*	*
Approximately 10 feet upstream of Autryville Road	19.30	*	*	2544	*	*
Approximately 0.7 mile upstream of Autryville Road	18.70	*	*	2489	*	*
Approximately 1.3 miles downstream of Minnie Hall Road	17.80	*	*	2397	*	*
Approximately 0.6 mile downstream of Minnie Hall Road	16.80	*	*	2312	*	*
Approximately 0.5 mile downstream of Minnie Hall Road	14.10	*	*	2090	*	*
Approximately 1,800 feet downstream of Minnie Hall Road	13.20	*	*	2015	*	*
Approximately 10 feet upstream of Minnie Hall Road	12.90	*	*	1987	*	*
Approximately 0.6 mile upstream of Minnie Hall Road	12.00	*	*	1907	*	*
Approximately 1.1 miles upstream of Minnie Hall Road	11.40	*	*	1859	*	*
Bills Swamp						
Approximately 160 feet upstream of confluence with Great Coharie Creek	5.71	509	879	1071	*	1518
Approximately 2,180 feet upstream of confluence with Great Coharie Creek	3.17	354	617	754	*	1077
Just downstream of Norris Road	2.72	322	564	689	*	985
Approximately 1,350 feet upstream of Norris Road	2.23	285	500	612	*	877
Approximately 0.9 mile upstream of Norris Road	1.96	263	463	567	*	814
Approximately 1.14 miles upstream of Norris Road	1.63	235	415	509	*	731
Black River						

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 2.6 miles downstream of the confluence of Cypress Lake	742.40	*	*	22300	*	*
Approximately 0.4 mile upstream of the confluence of Cypress Lake	737.50	*	*	22200	*	*
Just upstream of confluence with South River	736.94	10485	17679	21341	*	30715
Approximately 1.6 miles upstream of the confluence of Black River Tributary 1	724.20	*	*	22100	*	*
Approximately 10 feet upstream of confluence of Wildcat Creek	706.70	*	*	22000	*	*
Approximately 10 feet upstream of confluence of Canty Mill Branch	696.10	*	*	21900	*	*
Approximately 10 feet upstream of confluence of Devane Branch	689.00	*	*	21800	*	*
Approximately 3,500 feet downstream of Tomahawk Highway	684.63	10068	17175	20814	*	30311
Approximately 1.15 miles upstream of Tomahawk Highway	683.73	10061	17166	20804	*	30303
Approximately 0.57 mile downstream of confluence with Big Branch	682.70	10052	17156	20793	*	30293
Approximately 600 feet downstream of confluence with Big Branch	681.85	10045	17147	20784	*	30286
At confluence with Big Branch	679.30	10024	17121	20756	*	30263
Approximately 2,400 feet upstream of confluence with Big Branch	679.02	10022	17119	20753	*	30260
Approximately 2 miles downstream of Harrells Highway	678.13	10015	17109	20744	*	30252
Approximately 1.3 miles downstream of Harrells Highway	677.14	10007	17099	20733	*	30243
Approximately 0.92 mile downstream of Harrells Highway	676.44	10001	17092	20725	*	30236
Approximately 10 feet downstream of State Road 411	676.00	7466	12528	15258	*	23280
Approximately 545 feet upstream of Harrells Highway	661.94	9855	16801	20355	*	29616
Black River Tributary 1						
At mouth and Six Runs Creek	2.60	*	*	796	*	*
Approximately 0.5 mile downstream of SR 1100 road crossing	1.50	*	*	588	*	*
Approximately 0.5 mile downstream of G Shaw Road crossing	1.00	*	*	475	*	*
Buckhorn Creek						
At mouth	11.10	*	*	1826	*	*
Approximately 950 feet upstream of the confluence of Six Runs Creek	10.20	*	*	1741	*	*
Approximately 0.8 mile upstream of the confluence of Six Runs Creek	9.90	*	*	1716	*	*
Approximately 0.9 mile upstream of the confluence of Six Runs Creek	8.40	*	*	1566	*	*
Approximately 630 feet downstream of Boney Mill Road crossing	6.00	*	*	1293	*	*
Approximately 0.8 mile upstream of Boney Mill Road crossing	5.20	*	*	1193	*	*
Approximately 1.5 miles upstream of Boney Mill Road crossing	4.20	*	*	1058	*	*
Approximately 1.9 miles upstream of Boney Mill Road crossing	3.80	*	*	997	*	*
Bulltail Creek						
At Sampson/Duplin County boundary	7.20	*	*	1920	*	*
Approximately 0.5 mile downstream of Marshburn Road (Break location in Duplin County)	6.30	*	*	1790	*	*
Approximately 0.2 mile upstream of Bull Tail Road	4.40	*	*	1450	*	*
Caesar Swamp						
At mouth	12.90	*	*	1990	*	*
Approximately 380 feet downstream of Payton Daniels Road	12.60	*	*	1960	*	*
Approximately 0.6 mile downstream of Dunn Road	11.50	*	*	1860	*	*
Approximately 400 feet downstream of Dunn Road	10.90	*	*	1810	*	*
Approximately 0.4 mile upstream of Dunn Road	9.60	*	*	1680	*	*
Approximately 800 feet downstream of Bynum Road	4.90	*	*	1150	*	*
Approximately 10 feet downstream of Bynum Road	3.90	*	*	1010	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 230 feet downstream of Straw Pond School Road	2.60	*	*	809	*	*
Approximately 0.7 mile upstream of Straw Pond School Road	2.10	*	*	712	*	*
Canty Mill Branch						
At mouth	5.40	*	*	1215	*	*
Approximately 420 feet upstream of Tomahawk Highway crossing	4.40	*	*	1088	*	*
Approximately 0.5 mile downstream of Melvin Road crossing	3.60	*	*	971	*	*
Approximately 1,420 feet upstream of Melvin Road crossing	3.00	*	*	871	*	*
Cat Creek						
At mouth	6.40	*	*	1333	*	*
Approximately 0.5 mile upstream of Wildcat Road crossing	5.70	*	*	1254	*	*
Approximately 0.5 mile downstream of Alpine Church Road crossing	5.30	*	*	1206	*	*
Approximately 0.4 mile downstream of Alpine Church Road crossing	3.30	*	*	920	*	*
Approximately 100 feet downstream of Alpine Church Road crossing	3.00	*	*	874	*	*
Approximately 1,480 feet downstream of Unnamed Road crossing	2.00	*	*	698	*	*
Approximately 0.7 mile upstream of Unnamed Road crossing	1.20	*	*	524	*	*
Approximately 0.9 mile upstream of Unnamed Road crossing	0.70	*	*	380	*	*
Cat Tail Branch						
Approximately 490 feet upstream of confluence with Williams Old Mill Branch	0.99	547	966	1112	*	1535
Approximately 210 feet upstream of E Johnson Street	0.63	453	807	927	*	1274
Clear Run						
At mouth	14.30	*	*	2107	*	*
Approximately 370 feet downstream of Lundy Road crossing	13.60	*	*	2046	*	*
Approximately 10 feet upstream of confluence of Beaverdam Creek	9.00	*	*	1619	*	*
Approximately 0.5 mile upstream of the confluence of Beaverdam Creek	8.40	*	*	1557	*	*
Approximately 1.1 miles upstream of the confluence of Beaverdam Creek	7.50	*	*	1463	*	*
Approximately 1.3 miles upstream of the confluence of Beaverdam Creek	5.10	*	*	1180	*	*
Clifton Branch						
At mouth	7.60	*	*	1474	*	*
Approximately 1,420 feet upstream of the confluence with Six Runs Creek	5.90	*	*	1283	*	*
Approximately 1.3 miles upstream of the confluence with Six Runs Creek	5.40	*	*	1210	*	*
Approximately 1.4 miles upstream of the confluence with Six Runs Creek	4.00	*	*	1022	*	*
Approximately 2.0 miles upstream of the confluence with Six Runs Creek	3.50	*	*	956	*	*
Approximately 2.1 miles upstream of the confluence with Six Runs Creek	3.50	*	*	951	*	*
Cobb Branch						
At mouth	0.60	*	*	358	*	*
Craddock Swamp						
At mouth	2.90	*	*	847	*	*
Approximately 1.0 mile upstream of confluence with Ward Swamp	1.90	*	*	683	*	*
Approximately 1.8 miles upstream of confluence with Ward Swamp	1.20	*	*	527	*	*
Crane Creek						
At mouth	26.00	*	*	2960	*	*
Approximately 1,320 feet upstream of Edmund Mathis Road crossing	25.50	*	*	2924	*	*
Approximately 0.5 mile downstream of the confluence of Buckhorn Creek	24.50	*	*	2860	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 10 feet upstream of confluence of Buckhorn Creek	12.50	*	*	1957	*	*
Approximately 1,200 feet downstream of Moseley Road crossing	12.30	*	*	1940	*	*
Approximately 0.5 mile upstream of Moseley Road crossing	11.40	*	*	1852	*	*
Approximately 1.1 miles upstream of Moseley Road crossing	10.60	*	*	1781	*	*
Approximately 1.3 miles upstream of Moseley Road crossing	9.50	*	*	1671	*	*
Approximately 0.6 mile downstream of W. Mt. Gilead Church Road crossing	8.50	*	*	1569	*	*
Approximately 420 feet downstream of W. Mt. Gilead Church Road crossing	7.20	*	*	1434	*	*
Approximately 480 feet upstream of W. Mt. Gilead Church Road crossing	5.60	*	*	1242	*	*
Approximately 0.7 mile upstream of W. Mt. Gilead Church Road crossing	5.30	*	*	1202	*	*
Approximately 1.2 miles upstream of W. Mt. Gilead Church Road crossing	4.30	*	*	1070	*	*
Approximately 1.7 miles upstream of W. Mt. Gilead Church Road crossing	3.70	*	*	976	*	*
Approximately 1.9 miles upstream of W. Mt. Gilead Church Road crossing	2.90	*	*	859	*	*
Cypress Lake						
At mouth	2.70	*	*	824	*	*
Approximately 1,530 feet upstream of Ivanhoe Road crossing	1.90	*	*	668	*	*
Devane Branch						
At mouth	7.00	*	*	1411	*	*
Approximately 480 feet downstream of Firetower Road crossing	5.70	*	*	1254	*	*
Approximately 1.0 mile upstream of Firetower Road crossing	4.70	*	*	1124	*	*
Approximately 1,270 feet upstream of Tomahawk Highway road crossing	3.70	*	*	982	*	*
Approximately 0.5 mile upstream of Tomahawk Highway road crossing	2.80	*	*	835	*	*
Doctors Creek						
Approximately 0.3 mile upstream of Leighton Hall Road	2.20	*	*	980	*	*
Dollar Branch						
Approximately 120 feet upstream of confluence with Williams Old Mill Branch	2.23	735	1293	1497	*	2099
Approximately 330 feet downstream of Sunset Avenue	1.53	547	1000	1169	*	1671
Approximately 1,025 feet upstream of Sunset Avenue	1.01	462	850	991	*	1410
Encoh Mill Creek						
At Mouth	4.50	*	*	1093	*	*
Approximately 1.8 miles upstream of confluence with South River	2.20	*	*	730	*	*
Gaddy Branch						
Approximately 100 feet upstream of confluence with Six Runs Creek	1.02	176	313	385	*	556
Approximately 3,075 feet downstream of Edmond Matthis Road	0.89	162	288	354	*	513
Approximately 135 feet upstream of Edmond Matthis Road	0.69	139	248	306	*	444
Gilmore Swamp						
At mouth	13.60	*	*	3805	*	*
Approximately 0.7 mile upstream of the confluence with Six Runs Creek	13.10	*	*	3720	*	*
Approximately 0.8 mile upstream of the confluence with Six Runs Creek	11.70	*	*	3465	*	*
Approximately 0.7 mile downstream of Faison Highway road crossing	11.40	*	*	3408	*	*
Approximately 0.6 mile downstream of Faison Highway road crossing	10.20	*	*	3179	*	*
Approximately 10 feet upstream of confluence of Gilmore Swamp Tributary	6.00	*	*	2274	*	*
Approximately 0.6 mile upstream of the confluence of Gilmore Swamp Tributary	5.30	*	*	2106	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 0.7 mile downstream of Governor Moore Road crossing	4.30	*	*	1853	*	*
Approximately 840 feet downstream of King Road crossing	3.70	*	*	1679	*	*
Approximately 200 feet downstream of King Road crossing	2.10	*	*	1169	*	*
Gilmore Swamp Tributary						
At mouth	3.60	*	*	966	*	*
Approximately 0.6 mile upstream of King Road crossing	3.10	*	*	895	*	*
Approximately 1.3 miles upstream of King Road crossing	2.60	*	*	800	*	*
Approximately 1.6 miles upstream of King Road crossing	2.40	*	*	762	*	*
Goshen Swamp						
Sampson/Duplin County boundary	21.40	*	*	2650	*	*
Approximately 0.8 mile upstream of Sampson/Duplin County boundary	16.90	*	*	2320	*	*
Approximately 1.1 miles downstream of Grimes Road	14.60	*	*	2130	*	*
Approximately 30 feet upstream of confluence of Railer Branch	7.50	*	*	1460	*	*
Approximately 800 feet downstream of Dallie Road	5.70	*	*	1250	*	*
Approximately 0.9 mile downstream of Preacher Henry Road	4.00	*	*	1020	*	*
Great Coharie Creek						
At confluence with Black River/ Six Runs Creek	378.79	6774	10890	12929	*	17507
Approximately 0.9 mile upstream of Lisbon Bridge Road	376.48	6749	10850	12882	*	17445
Just downstream of confluence with Great Coharie Creek Tributary 4	374.70	6729	10820	12846	*	17396
Approximately 0.27 mile upstream of confluence with Great Coharie Creek Tributary 4	373.56	6717	10800	12823	*	17365
Approximately 35 feet upstream of confluence with Great Coharie Creek Tributary 5	368.93	6665	10719	12728	*	17240
Approximately 140 feet upstream of confluence with Bills Swamp	362.62	6595	10609	12598	*	17067
Approximately 10 feet upstream of confluence of Little Coharie Creek	206.70	*	*	9494	*	*
Approximately 1.5 miles upstream of confluence of Little Coharie Creek	205.00	*	*	9448	*	*
Approximately 25 feet upstream of confluence with Little Coharie Creek	202.56	4604	7480	8914	*	12154
Approximately 62 feet upstream of confluence with Mill Creek 2	199.13	4556	7404	8824	*	12033
Approximately 0.8 mile upstream of Ebenezer Forest Road	198.20	*	*	9268	*	*
Approximately 10 feet upstream of confluence of Great Coharie Creek Tributary 2	194.60	*	*	9169	*	*
Approximately 10 feet upstream of confluence of Rocky Marsh Creek	190.00	*	*	9045	*	*
Approximately 1.3 miles upstream of confluence of Rocky Marsh Creek	187.50	*	*	8977	*	*
Approximately 1.1 miles downstream of Boykin Bridge Road	185.50	*	*	8921	*	*
Approximately 300 feet downstream of Boykin Bridge Road	182.30	*	*	8833	*	*
Approximately 0.5 mile upstream of Boykin Bridge Road	179.00	*	*	8739	*	*
Approximately 1.4 miles upstream of Boykin Bridge Road	176.70	*	*	8675	*	*
Approximately 2.7 miles upstream of Boykin Bridge Road	174.80	*	*	8621	*	*
Approximately 3.8 miles upstream of Boykin Bridge Road	172.80	*	*	8565	*	*
Approximately 2.3 miles downstream of Roseboro Highway	171.55	4155	6771	8076	*	11032
Approximately 1.3 miles downstream of Roseboro Highway	162.01	4011	6542	7807	*	10670
Approximately 800 feet downstream of confluence with Williams Old Mill Branch	149.93	3824	6245	7456	*	10199
Approximately 35 feet downstream of confluence with Williams Old Mill Branch	137.67	3628	5933	7087	*	9704

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 45 feet downstream of confluence with Great Coharie Creek Tributary 6	124.54	3410	5587	6678	*	9153
Approximately 20 feet downstream of US 421	124.20	*	*	7170	*	*
Approximately 1.0 mile upstream of US 421	121.20	*	*	7070	*	*
Approximately 10 feet upstream of confluence of Beaverdam Swamp 2	110.00	*	*	6690	*	*
Approximately 1.0 mile upstream of confluence of Beaverdam Swamp 2	108.10	*	*	6630	*	*
Approximately 1.9 miles upstream of confluence of Beaverdam Swamp 2	107.10	*	*	6590	*	*
Approximately 1,800 feet downstream of confluence of Marsh Swamp	103.80	*	*	6480	*	*
Approximately 10 feet upstream of confluence of Marsh Swamp	97.50	*	*	6250	*	*
Approximately 10 feet upstream of confluence of Great Coharie Creek Tributary 3	92.60	*	*	6070	*	*
Approximately 10 feet upstream of confluence of Old Mill Swamp	89.50	*	*	5960	*	*
Approximately 10 feet upstream of confluence of Merkle Swamp	80.30	*	*	5600	*	*
Approximately 450 feet downstream of Keener Road	78.70	*	*	5540	*	*
Approximately 1,900 feet upstream of Keener Road	77.20	*	*	5480	*	*
Approximately 1.0 mile upstream of Keener Road	76.00	*	*	5430	*	*
Approximately 10 feet upstream of confluence of Ward Swamp	56.60	*	*	4590	*	*
Approximately 40 feet downstream of Roanoke Road	55.60	*	*	4550	*	*
Approximately 10 feet upstream of confluence of Sevenmile Swamp	39.90	*	*	3770	*	*
Approximately 960 feet downstream of Rosin Hill Road	39.00	*	*	3720	*	*
Approximately 1,700 feet upstream of Rosin Hill Road	37.90	*	*	3660	*	*
Just upstream of confluence with Kill Swamp	25.17	1272	2141	2583	*	3603
Approximately 10 feet upstream of confluence of Beaverdam Swamp 3	15.20	*	*	2180	*	*
Approximately 1,700 feet upstream of McLamb Road	12.60	*	*	1960	*	*
Approximately 900 feet upstream of Newton Grove Highway	10.40	*	*	1770	*	*
Approximately 1,800 feet downstream of Old Crow Road	7.30	*	*	1440	*	*
Approximately 1,100 feet upstream of Oak Grove Church Road	6.40	*	*	1340	*	*
Great Coharie Creek Tributary 1						
At mouth	1.50	*	*	597	*	*
Approximately 0.8 mile upstream of confluence with Great Coharie Creek	1.10	*	*	488	*	*
Great Coharie Creek Tributary 2						
At mouth	1.20	*	*	513	*	*
Approximately 0.5 mile upstream of confluence with Great Coharie Creek	1.10	*	*	497	*	*
Great Coharie Creek Tributary 3						
At mouth	4.40	*	*	1090	*	*
Approximately 300 feet downstream of Keener Road	3.40	*	*	937	*	*
Approximately 0.5 mile downstream of Simmons Road	1.80	*	*	645	*	*
Approximately 50 feet downstream of Simmons Road	1.20	*	*	524	*	*
Great Coharie Creek Tributary 4						
Just upstream of confluence with Great Coharie Creek	0.67	135	242	299	*	434
Approximately 0.42 mile upstream of confluence with Great Coharie Creek	0.58	124	223	275	*	400
Great Coharie Creek Tributary 5						
Just upstream of confluence with Great Coharie Creek	3.44	373	649	792	*	1130
Approximately 0.46 mile upstream of confluence with Great Coharie Creek	2.56	310	543	664	*	950

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 1,070 feet upstream of Lamb Road	2.06	271	476	583	*	836
Great Coharie Creek Tributary 6						
Approximately 75 feet upstream of confluence with Great Coharie Creek	1.94	261	460	563	*	808
Approximately 0.15 mile upstream of confluence with Great Coharie Creek	1.79	248	438	536	*	770
Gum Swamp						
At mouth	10.10	*	*	1736	*	*
Hoe Swamp						
At mouth	10.10	*	*	1733	*	*
Approximately 1,740 feet upstream of the confluence with Six Runs Creek	9.80	*	*	1707	*	*
Approximately 0.8 mile upstream of the confluence with Six Runs Creek	8.90	*	*	1611	*	*
Approximately 1.1 miles upstream of the confluence with Six Runs Creek	8.30	*	*	1550	*	*
Approximately 160 feet upstream of North McCullen Road crossing	7.40	*	*	1453	*	*
Approximately 0.9 mile upstream of North McCullen Road crossing	6.50	*	*	1354	*	*
Approximately 1.0 mile upstream of North McCullen Road crossing	4.70	*	*	1126	*	*
Approximately 0.2 mile downstream of Wilson Road crossing	4.20	*	*	1053	*	*
Approximately 200 feet downstream of Wilson Road crossing	2.90	*	*	857	*	*
Approximately 1,210 feet upstream of Hunter Road crossing	2.60	*	*	800	*	*
Approximately 0.4 mile upstream of Hunter Road crossing	1.30	*	*	542	*	*
Approximately 0.8 mile upstream of Hunter Road crossing	1.10	*	*	498	*	*
Hornet Swamp						
At mouth	5.30	*	*	1200	*	*
Approximately 100 feet downstream of Harnett Church Road	4.50	*	*	1100	*	*
Approximately 15 feet downstream of Penny Tew Mill Road	3.60	*	*	966	*	*
Approximately 20 feet downstream of North Salemburg Highway	2.70	*	*	828	*	*
Approximately 1,800 feet upstream of North Salemburg Highway	1.80	*	*	658	*	*
Approximately 0.6 mile upstream of North Salemburg Highway	1.00	*	*	480	*	*
Horsepen Branch						
Approximately 50 feet upstream of confluence with Little Coharie Creek	1.02	176	313	385	*	556
Approximately 2,600 feet downstream of old Mintz Highway	0.73	144	257	316	*	459
Approximately 315 feet downstream of old Mintz Highway	0.50	113	204	252	*	367
Johnson Mill Branch						
Confluence with Little Coharie Creek	4.10	*	*	1040	*	*
Approximately 360 feet downstream of Old Mintz Highway	3.50	*	*	948	*	*
Approximately 0.6 mile downstream of Old Mintz Highway	2.10	*	*	710	*	*
Jones Swamp						
Approximately 0.9 mile upstream of the confluence with South River	11.30	*	*	1845	*	*
Approximately 0.5 mile downstream of Autry Mill Road	10.30	*	*	1754	*	*
Approximately 0.5 mile upstream of Autry Mill Road	9.30	*	*	1657	*	*
Approximately 0.6 mile upstream of Autry Mill Road	5.30	*	*	1208	*	*
Approximately 10 feet downstream of Hayes Mill Road	4.60	*	*	1117	*	*
Approximately 10 feet upstream of Welcome School Road	3.70	*	*	975	*	*
Approximately 100 feet upstream of Welcome School Road	2.40	*	*	764	*	*
Keith Branch						

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
At mouth	7.20	*	*	1430	*	*
Approximately 800 feet downstream of Wildcat Road crossing	6.30	*	*	1332	*	*
Kill Swamp						
Just upstream of confluence with Great Coharie Creek	9.89	714	1222	1483	*	2090
Approximately 1,015 feet downstream of Hobbtton Highway	9.00	674	1155	1402	*	1979
Approximately 560 feet downstream of Interstate 40	8.47	649	1113	1352	*	1909
Approximately 1,040 feet upstream of Kornegay Town Road	7.50	602	1035	1258	*	1779
Approximately 4,110 feet upstream of Kornegay Town Road	6.64	559	962	1170	*	1657
Approximately 4,010 feet downstream of Emmet Thorton Road	6.34	543	936	1139	*	1613
Approximately 270 feet downstream of Emmet Thorton Road	5.00	469	812	989	*	1405
Approximately 4,140 feet upstream of Emmet Thorton Road	0.68	137	245	302	*	439
Little Beaverdam Swamp						
At Mouth	15.60	*	*	2218	*	*
Approximately 10 feet upstream of Little Beaverdam Swamp Tributary 1	7.80	*	*	1513	*	*
Approximately 10 feet upstream of confluence with Williamson Swamp	1.40	*	*	561	*	*
Approximately 0.4 mile upstream of Phillips Road	1.00	*	*	469	*	*
Approximately 0.8 mile upstream of Phillips Road	0.50	*	*	303	*	*
Little Beaverdam Swamp Tributary 1						
Approximately 10 feet upstream of confluence of Little Beaverdam Swamp	6.80	*	*	1386	*	*
Approximately 10 feet upstream of confluence of Little Beaverdam Swamp Tributary 2	3.90	*	*	1014	*	*
Approximately 0.7 mile upstream of confluence of Little Beaverdam Swamp Tributary 2	3.50	*	*	943	*	*
Approximately 1.0 mile upstream of confluence of Little Beaverdam Swamp Tributary 2	2.60	*	*	797	*	*
Little Beaverdam Swamp Tributary 2						
At mouth	2.80	*	*	845	*	*
Approximately 1,950 feet downstream of Charles Newland Road	2.40	*	*	767	*	*
Approximately 0.6 mile upstream of Charles Newland Road	1.60	*	*	614	*	*
Little Coharie Creek						
Approximately 65 feet upstream of confluence with Great Coharie Creek	158.76	3961	6463	7713	*	10545
At mouth	158.60	*	*	7480	*	*
Approximately 1.5 miles upstream of Riley Town Road	156.70	*	*	7390	*	*
Approximately 125 feet upstream of confluence with Rattlesnake Branch	155.97	3918	6395	7633	*	10436
Approximately 3.1 miles upstream of Riley Town Road	154.80	*	*	7390	*	*
Approximately 4.4 miles upstream of Riley Town Road	153.90	*	*	7250	*	*
Approximately 0.4 mile downstream of Johnson Mill Branch	151.70	*	*	7140	*	*
Approximately 10 feet upstream of Johnson Mill Branch	147.20	*	*	6920	*	*
Approximately 0.9 mile upstream of Johnson Mill Branch	145.50	*	*	6840	*	*
Approximately 135 feet upstream of confluence with Horsepen Branch	144.40	3736	6106	7291	*	9978
Approximately 95 feet downstream of confluence with Little Coharie Creek Tributary 2	142.55	3707	6059	7235	*	9903
Approximately 10 feet upstream of Lockamy Mill Branch	140.50	*	*	6600	*	*
Approximately 760 feet downstream of Boykin Bridge Road	139.10	*	*	6540	*	*
Approximately 0.7 mile upstream of Boykin Bridge Road	136.60	*	*	6410	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 1.6 miles upstream of Boykin Bridge Road	134.60	*	*	6320	*	*
Approximately 2.4 miles upstream of Boykin Bridge Road	133.40	*	*	6260	*	*
Approximately 1.4 miles downstream of Fleet Cooper Road	130.20	*	*	6110	*	*
Approximately 430 feet downstream of Fleet Cooper Road	127.80	*	*	6000	*	*
Approximately 0.4 mile upstream of Fleet Cooper Road	126.90	*	*	5960	*	*
Approximately 10 feet upstream of confluence of Bearskin Swamp	99.40	*	*	4700	*	*
Approximately 10 feet upstream of confluence of Little Coharie Creek Tributary	97.50	*	*	4620	*	*
Approximately 1.0 mile downstream of Roseboro Highway	96.40	*	*	4570	*	*
Approximately 30 feet downstream of Roseboro Highway	95.60	*	*	4540	*	*
Approximately 0.8 mile upstream of Roseboro Highway	93.30	*	*	4510	*	*
Approximately 0.8 mile downstream of South Salemburg Highway	90.80	*	*	4480	*	*
Approximately 660 feet downstream of South Salemburg Highway	88.60	*	*	4460	*	*
Approximately 30 feet upstream of confluence of Rice Swamp	78.20	*	*	4310	*	*
Approximately 320 feet downstream of Old Salemburg Road	77.00	*	*	4300	*	*
Approximately 0.5 mile upstream of Old Salemburg Road	75.90	*	*	4280	*	*
Approximately 0.9 mile upstream of Old Salemburg Road	74.60	*	*	4260	*	*
Approximately 0.5 mile downstream of Autryville Road	73.60	*	*	4240	*	*
Approximately 161 feet downstream of Autryville Road	72.80	*	*	4220	*	*
Approximately 0.8 mile upstream of Autryville Road	69.50	*	*	4160	*	*
Approximately 1.3 miles downstream of Ernest Williams Road	67.30	*	*	4120	*	*
Approximately 230 feet downstream of Ernest Williams Road	65.70	*	*	4080	*	*
Just upstream of confluence with Mill Swamp	59.87	2170	3600	4322	*	5972
Approximately 1.1 miles upstream of Ernest Williams Road	58.20	*	*	3910	*	*
Approximately 280 feet downstream of Tyndall Bridge Road	57.30	*	*	3890	*	*
Approximately 1.1 miles upstream of Tyndall Bridge Road	49.00	*	*	3660	*	*
Approximately 1,800 feet downstream of High House Road	46.80	*	*	3590	*	*
Approximately 940 feet upstream of High House Road	33.50	*	*	3100	*	*
Approximately 0.8 mile upstream of High House Road	27.60	*	*	2830	*	*
Approximately 1.6 miles upstream of High House Road	26.00	*	*	2740	*	*
Approximately 300 feet downstream of Penny Tew Mill Road	25.30	*	*	2710	*	*
Approximately 1,800 feet upstream of Penny Tew Mill Road	21.10	*	*	2470	*	*
Approximately 0.6 mile upstream of Penny Tew Mill Road	18.90	*	*	2340	*	*
Approximately 250 feet downstream of Old Cotton Gin Road	17.70	*	*	2260	*	*
Approximately 1,700 feet downstream of Spiveys Corner Highway	14.30	*	*	2020	*	*
Approximately 15 feet downstream of Spiveys Corner Highway	13.50	*	*	1960	*	*
Approximately 380 feet downstream of Sinclair Lake Road	12.80	*	*	1910	*	*
Approximately 1,800 feet downstream of Straw Pond School Road	11.30	*	*	1790	*	*
Approximately 290 feet downstream of Straw Pond School Road	8.30	*	*	1510	*	*
Approximately 0.7 mile upstream of J.B. Wilson Road	7.50	*	*	1430	*	*
Approximately 0.7 mile downstream of Newton Grove Highway	4.80	*	*	1120	*	*
Approximately 350 feet downstream of Newton Grove Highway	4.50	*	*	1080	*	*
Approximately 0.7 mile upstream of Newton Grove Highway	3.70	*	*	973	*	*
Little Coharie Creek Tributary						
At mouth	1.90	*	*	663	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 590 feet downstream of Andrews Chapel Road	1.50	*	*	591	*	*
Little Coharie Creek Tributary 2						
Approximately 85 feet upstream of confluence with Little Coharie Creek	1.02	175	312	384	*	555
Approximately 0.75 mile upstream of confluence with Little Coharie Creek	0.78	150	267	329	*	477
Little Juniper Run						
At mouth	1.00	*	*	464	*	*
Approximately 0.6 mile upstream of Green Path Road	0.60	*	*	336	*	*
Lockamy Mill						
At mouth	1.90	*	*	680	*	*
Approximately 130 feet downstream of Old Mintz Highway	1.70	*	*	641	*	*
Approximately 0.6 mile upstream of Old Mintz Highway	1.40	*	*	560	*	*
Marsh Swamp						
At mouth	6.10	*	*	1310	*	*
Approximately 0.6 mile upstream of US Highway 421	4.00	*	*	1020	*	*
Approximately 260 feet downstream of Odom Road	2.60	*	*	811	*	*
McPhail Branch						
At mouth	3.00	*	*	869	*	*
Approximately 0.9 mile upstream of confluence with Merkle Swamp	1.70	*	*	623	*	*
Meetinghouse Branch						
At mouth	2.10	*	*	719	*	*
Approximately 150 feet downstream of Basstown Road	1.20	*	*	510	*	*
Merkle Swamp						
At mouth	8.70	*	*	1600	*	*
Approximately 800 feet upstream of Church Road	7.80	*	*	1500	*	*
Approximately 20 feet upstream of McPhail Branch	4.10	*	*	1030	*	*
Approximately 300 feet downstream of Joel Jones Lane	3.60	*	*	963	*	*
Approximately 900 feet upstream of Joel Jones Lane	2.30	*	*	751	*	*
Mill Creek						
Just above confluence with Doctors Creek	9.20	*	*	2210	*	*
Approximately 0.4 mile downstream of Newkirk-Highsmith Road	8.40	*	*	2090	*	*
Approximately 1,950 feet downstream of confluence of Mill Creek Tributary	6.80	*	*	1860	*	*
At mouth	3.70	*	*	981	*	*
Approximately 200 feet downstream of Garland Highway	3.20	*	*	898	*	*
Approximately 340 feet upstream of confluence of Mill Creek Tributary	2.60	*	*	1090	*	*
Approximately 0.6 mile upstream of Garland Highway	1.90	*	*	671	*	*
Approximately 1.3 miles upstream of Garland Highway	1.40	*	*	562	*	*
Mill Creek 2						
Approximately 75 feet upstream of confluence with Great Coharie Creek	3.73	392	681	832	*	1185
Approximately 140 feet upstream of confluence with Mill Creek 2 Tributary 1	1.89	257	453	555	*	796
Mill Creek 2 Tributary 1						
Approximately 100 feet upstream of confluence with Mill Creek 2	0.98	171	305	375	*	543
Approximately 0.35 mile upstream of confluence with Mill Creek 2	0.51	115	206	255	*	371

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Mill Creek Tributary						
At mouth	2.20	*	*	980	*	*
Approximately 100 feet upstream of US 421	1.00	*	*	627	*	*
Mill Run						
At mouth	4.70	*	*	1123	*	*
Approximately 1,100 feet upstream of the confluence with Six Runs Creek	3.80	*	*	997	*	*
Approximately 1.2 miles upstream of the confluence with Six Runs Creek	3.00	*	*	875	*	*
Approximately 1.3 miles upstream of the confluence with Six Runs Creek	2.00	*	*	702	*	*
Approximately 1.9 miles upstream of the confluence with Six Runs Creek	1.60	*	*	618	*	*
Mill Swamp						
At mouth	8.30	*	*	1553	*	*
Approximately 0.5 mile upstream of Lake Artesia Road crossing	7.60	*	*	1477	*	*
Approximately 0.9 mile upstream of Lake Artesia Road crossing	6.60	*	*	1367	*	*
Approximately 1.5 miles upstream of Lake Artesia Road crossing	6.30	*	*	1330	*	*
Approximately 25 feet upstream of confluence with Little Coharie Creek	5.28	485	839	1022	*	1450
Approximately 1.6 miles upstream of Lake Artesia Road crossing	5.00	*	*	1166	*	*
Approximately 2.3 miles upstream of Lake Artesia Road crossing	2.00	*	*	689	*	*
Mill Swamp Tributary						
At mouth	2.40	*	*	764	*	*
Approximately 1,850 feet upstream of the confluence with Mill Swamp	2.30	*	*	742	*	*
Mingo Swamp						
At mouth	76.10	*	*	5206	*	*
Approximately 10 feet upstream of confluence of Beaverdam Swamp	57.70	*	*	4441	*	*
Approximately 1.6 miles upstream of the mouth	57.00	*	*	4610	*	*
Approximately 2.6 miles upstream of the mouth	55.90	*	*	4560	*	*
Approximately 3.3 miles upstream of the mouth	54.80	*	*	4510	*	*
Approximately 3.5 miles upstream of the mouth	54.40	*	*	4490	*	*
Approximately 130 feet downstream of North Spring Branch Road	53.30	*	*	4440	*	*
Approximately 420 feet upstream of North Spring Branch Road	52.80	*	*	4420	*	*
Approximately 1.4 miles upstream of North Spring Branch Road	51.40	*	*	4350	*	*
Approximately 500 feet upstream of the confluence of Big Juniper Run	42.50	*	*	3910	*	*
Approximately 0.9 mile upstream of the confluence of Big Juniper Run	42.10	*	*	3890	*	*
Approximately 1.0 mile upstream of the confluence of Big Juniper Run	41.00	*	*	3830	*	*
Approximately 1.3 miles upstream of the confluence of Big Juniper Run	39.80	*	*	3770	*	*
Approximately 345 feet upstream of Stony Run	30.00	*	*	3210	*	*
Approximately 1,000 feet upstream of State Route 55	29.60	*	*	3180	*	*
Approximately 1.1 miles upstream of State Route 55	28.70	*	*	3130	*	*
Approximately 2.0 miles upstream of State Route 55	27.50	*	*	3050	*	*
Approximately 2.6 miles upstream of State Route 55	25.70	*	*	2940	*	*
Approximately 3.0 miles upstream of State Route 55	24.90	*	*	2890	*	*
Approximately 3.6 miles upstream of State Route 55	24.00	*	*	2830	*	*
Approximately 360 feet downstream of the confluence of Mingo Swamp Tributary 1	23.20	*	*	2770	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 400 feet upstream of the confluence of Mingo Swamp Tributary 1	19.30	*	*	2500	*	*
Approximately 750 feet downstream of Hayner Lake Dam	18.90	*	*	2470	*	*
Approximately 0.82 mile upstream of Jonesboro Road	15.20	*	*	2180	*	*
Approximately 0.29 mile downstream of Farmview Road	14.30	*	*	2110	*	*
Approximately 0.05 mile upstream of Interstate 95	13.50	*	*	2040	*	*
Approximately 0.16 mile downstream of U.S. Route 301	12.80	*	*	1980	*	*
Approximately 0.15 mile upstream of U.S. Route 301	8.30	*	*	1560	*	*
Confluence of East Mingo Creek	3.40	*	*	928	*	*
Approximately 0.26 mile downstream of Red Hill Church Road	2.20	*	*	738	*	*
Approximately 0.41 mile upstream of Red Hill Church Road	1.80	*	*	655	*	*
Old Mill Swamp						
At mouth	3.00	*	*	874	*	*
Approximately 1,300 feet downstream of Church Road	2.10	*	*	718	*	*
Approximately 0.5 mile upstream of Church Road	1.70	*	*	624	*	*
Peters Creek						
At mouth	0.80	*	*	417	*	*
Pharisee Creek						
Just upstream of the confluence with Bulltail Creek	4.80	*	*	1520	*	*
Approximately 1,560 feet upstream of Wallace Highway	4.10	*	*	1390	*	*
Approximately 510 feet downstream of Wilmington Highway	3.50	*	*	1270	*	*
Approximately 0.5 mile upstream of Wilmington Highway	2.80	*	*	1130	*	*
Quewiffle Swamp						
At mouth	9.00	*	*	1620	*	*
Approximately 1,370 feet downstream of Trinity Church Road crossing	8.70	*	*	1592	*	*
Approximately 0.6 mile upstream of Trinity Church Road crossing	7.70	*	*	1486	*	*
Approximately 1.3 mile upstream of Trinity Church Road crossing	6.80	*	*	1387	*	*
Approximately 1.9 mile upstream of Trinity Church Road crossing	3.40	*	*	939	*	*
Railer Branch						
At mouth	4.80	*	*	1140	*	*
Approximately 2,000 feet downstream of Julius Sutton Highway	3.80	*	*	994	*	*
Approximately 1,900 feet downstream of Hollingsworth Road	2.40	*	*	776	*	*
Approximately 1,200 feet upstream of Hollingsworth Road	1.70	*	*	642	*	*
Rattlesnake Branch						
Approximately 240 feet upstream of confluence with Little Coharie Creek	0.62	129	232	286	*	416
Rice Swamp						
At mouth	9.10	*	*	1630	*	*
Approximately 750 feet upstream of South Salemburg Highway	7.40	*	*	1450	*	*
Approximately 0.7 mile upstream of South Salemburg Highway	6.70	*	*	1370	*	*
Approximately 180 feet downstream of Laurel Lake Road	6.20	*	*	1310	*	*
Approximately 1,400 feet upstream of Laurel Lake Road	4.50	*	*	1100	*	*
Approximately 220 feet upstream of Bonnetsville Road	3.40	*	*	932	*	*
Approximately 150 feet downstream of Bearskin Road	2.50	*	*	792	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Robinson Mill Branch						
At mouth	3.40	*	*	937	*	*
Approximately 1,640 feet upstream of Register-Sutton Road crossing	2.50	*	*	793	*	*
Approximately 1.0 mile upstream of Register-Sutton Road crossing	1.70	*	*	633	*	*
Approximately 1.3 miles upstream of Register-Sutton Road crossing	1.00	*	*	472	*	*
Rocky Marsh Creek						
At mouth	4.50	*	*	1100	*	*
Approximately 0.6 mile downstream of Peterson Road	4.30	*	*	1070	*	*
Approximately 1,100 feet downstream of Peterson Road	3.50	*	*	947	*	*
Rocky Marsh Creek Tributary						
At mouth	0.50	*	*	327	*	*
Rowan Branch						
At mouth	14.00	*	*	2083	*	*
Approximately 1,160 feet upstream of Beamon Woods Road crossing	13.00	*	*	2001	*	*
Approximately 1,740 feet upstream of Beamon Woods Road crossing	10.40	*	*	1766	*	*
Approximately 1.2 miles upstream of Beamon Woods Road crossing	9.90	*	*	1708	*	*
Approximately 1.4 miles upstream of Beamon Woods Road crossing	8.70	*	*	1590	*	*
Approximately 1,420 feet downstream of unnamed dam crossing	7.90	*	*	1506	*	*
Approximately 0.4 mile downstream of unnamed dam crossing	3.30	*	*	917	*	*
Approximately 1,320 feet upstream of Rowan Road crossing	2.60	*	*	812	*	*
Approximately 0.5 mile upstream of Rowan Road crossing	1.50	*	*	582	*	*
Approximately 1.2 miles upstream of Rowan Road crossing	1.00	*	*	468	*	*
Sevenmile Swamp						
At mouth	15.60	*	*	2215	*	*
Approximately 1.1 miles upstream of Houses Mill Road	14.00	*	*	2084	*	*
Approximately 0.7 mile upstream of Church Road	12.40	*	*	1946	*	*
Approximately 1.3 miles upstream of Church Road	9.00	*	*	1628	*	*
Approximately 480 feet downstream of Newton Grove Highway	7.70	*	*	1487	*	*
Approximately 0.9 mile upstream of Newton Grove Highway	6.60	*	*	1361	*	*
Approximately 1.4 mile upstream of Newton Grove Highway	5.90	*	*	1282	*	*
Approximately 0.7 mile downstream of Easy Street	4.10	*	*	1043	*	*
Approximately 1,100 feet downstream of Easy Street	3.60	*	*	965	*	*
Approximately 0.7 mile upstream of Easy Street	2.80	*	*	836	*	*
Shade Branch						
At mouth	2.80	*	*	836	*	*
Approximately 1,900 feet downstream of Rogers Mill Road crossing	2.60	*	*	802	*	*
Approximately 530 feet upstream of Rogers Mill Road crossing	2.00	*	*	688	*	*
Six Runs Creek						
At mouth	273.00	*	*	11198	*	*
Approximately 1,900 feet upstream of West Magnolia-Lisbon Road crossing	272.70	*	*	11191	*	*
Approximately 0.7 mile upstream of West Magnolia-Lisbon Road crossing	271.90	*	*	11172	*	*
Approximately 1.0 mile upstream of West Magnolia-Lisbon Road crossing	271.40	*	*	11160	*	*
At mouth	268.80	*	*	11099	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 1,000 feet upstream of the confluence of Tarkill Branch	267.40	*	*	11067	*	*
Approximately 0.5 mile upstream of the confluence of Tarkill Branch	266.50	*	*	11045	*	*
Approximately 0.4 mile upstream of Moores Bridge Road crossing	265.70	*	*	11027	*	*
Approximately 0.9 mile upstream of Moores Bridge Road crossing	264.70	*	*	11004	*	*
Approximately 10 feet upstream of confluence of Spearmans Mill Branch	261.40	*	*	10926	*	*
Approximately 1.4 miles upstream of the confluence of Spearmans Mill Branch	259.20	*	*	10873	*	*
Approximately 1.5 miles upstream of the confluence of Spearmans Mill Branch	258.60	*	*	10859	*	*
Approximately 10 feet upstream of confluence of Robinson Mill Branch	254.60	*	*	10763	*	*
Approximately 10 feet upstream of confluence of Crane Creek	228.00	*	*	10112	*	*
Approximately 580 feet downstream of Taylors Bridge Highway road crossing	227.70	*	*	10104	*	*
Approximately 0.4 mile upstream of Taylors Bridge Highway road crossing	226.50	*	*	10074	*	*
Approximately 100 feet upstream of River Road crossing	216.60	*	*	9822	*	*
Approximately 1.0 mile upstream of River Road crossing	213.70	*	*	9749	*	*
Approximately 1.9 miles upstream of River Road crossing	213.20	*	*	9734	*	*
Approximately 2.0 miles upstream of River Road crossing	211.90	*	*	9701	*	*
Approximately 2.3 miles upstream of River Road crossing	209.80	*	*	9646	*	*
Approximately 1.2 miles downstream of the confluence of Stewarts Creek	204.10	*	*	9499	*	*
Approximately 0.8 mile downstream of the confluence of Stewarts Creek	203.60	*	*	9484	*	*
Approximately 0.6 mile downstream of the confluence of Stewarts Creek	202.90	*	*	9466	*	*
Approximately 10 feet upstream of confluence of Stewarts Creek	146.90	*	*	7884	*	*
Approximately 0.4 mile upstream of the confluence of Stewarts Creek	146.00	*	*	7856	*	*
Approximately 1.3 miles downstream of Needmore Road crossing	143.80	*	*	7790	*	*
Approximately 0.8 mile downstream of Needmore Road crossing	141.60	*	*	7724	*	*
Approximately 0.4 mile downstream of Needmore Road crossing	140.90	*	*	7701	*	*
Approximately 160 feet downstream of Needmore Road crossing	139.90	*	*	7670	*	*
Approximately 1,000 feet upstream of Needmore Road crossing	139.50	*	*	7658	*	*
Approximately 0.7 mile upstream of Needmore Road crossing	138.50	*	*	7627	*	*
Approximately 1.4 miles upstream of Needmore Road crossing	137.60	*	*	7597	*	*
Approximately 1.8 miles upstream of Needmore Road crossing	133.10	*	*	7457	*	*
Approximately 1.2 miles downstream of the confluence of Rowan Branch	132.10	*	*	7425	*	*
Approximately 1.0 mile downstream of the confluence of Rowan Branch	131.40	*	*	7403	*	*
Approximately 0.8 mile downstream of the confluence of Rowan Branch	130.30	*	*	7366	*	*
Approximately 10 feet upstream of confluence of Rowan Branch	115.20	*	*	6872	*	*
Approximately 1,000 feet upstream of the confluence of Rowan Branch	109.40	*	*	6673	*	*
Approximately 580 feet downstream of Turkey Highway road crossing	108.40	*	*	6640	*	*
Approximately 630 feet upstream of Turkey Highway road crossing	106.20	*	*	6563	*	*
Approximately 10 feet upstream of confluence of Turkey Creek	87.60	*	*	5883	*	*
Approximately 0.5 mile upstream of the confluence of Turkey Creek	86.80	*	*	5852	*	*
Approximately 10 feet upstream of confluence of Beaverdam Swamp 1	72.20	*	*	5275	*	*
Approximately 370 feet upstream of Old Warsaw Road crossing	71.60	*	*	5251	*	*
Approximately 10 feet upstream of confluence of Tenmile Swamp	57.20	*	*	4621	*	*
Approximately 0.7 mile downstream of Pine Ridge Road crossing	56.70	*	*	4599	*	*
Approximately 10 feet upstream of confluence of Gilmore Swamp	42.20	*	*	3890	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 10 feet upstream of confluence of Mill Swamp	33.70	*	*	3427	*	*
Approximately 0.4 mile upstream of the confluence of Mill Swamp	33.40	*	*	3412	*	*
Approximately 1.3 miles upstream of the confluence of Mill Swamp	32.50	*	*	3356	*	*
Approximately 1.4 miles upstream of the confluence of Mill Swamp	30.00	*	*	3206	*	*
Approximately 1.1 miles downstream of Faison Highway road crossing	29.60	*	*	3184	*	*
Approximately 800 feet downstream of Faison Highway road crossing	28.60	*	*	3123	*	*
Approximately 480 feet upstream of Faison Highway road crossing	27.60	*	*	3063	*	*
Approximately 0.6 mile upstream of Faison Highway road crossing	26.30	*	*	2980	*	*
Approximately 0.9 mile upstream of Faison Highway road crossing	25.90	*	*	2952	*	*
Approximately 10 feet upstream of confluence of Hoe Swamp	15.00	*	*	2168	*	*
Approximately 10 feet upstream of confluence of Kings Branch	6.90	*	*	1399	*	*
Approximately 0.6 mile upstream of the confluence of Kings Branch	6.70	*	*	1372	*	*
Approximately 160 feet downstream of North McCullen Road crossing	5.70	*	*	1256	*	*
Approximately 630 feet upstream of North McCullen Road crossing	3.00	*	*	880	*	*
Approximately 0.7 mile upstream of North McCullen Road crossing	2.40	*	*	776	*	*
South River						
At mouth	488.20	*	*	9848	*	*
Approximately 0.7 mile upstream of the confluence with Black River	486.10	*	*	9806	*	*
Approximately 1.2 miles upstream of the confluence with Black River	485.20	*	*	9787	*	*
Approximately 1.5 miles upstream of the confluence with Black River	484.60	*	*	9776	*	*
Approximately 2.6 miles upstream of the confluence with Black River	468.40	*	*	9453	*	*
Approximately 3.7 miles upstream of the confluence with Black River	467.40	*	*	9433	*	*
Approximately 4.8 miles upstream of the confluence with Black River	467.40	*	*	9433	*	*
Approximately 4.7 miles downstream of Ennis Bridge Road	466.50	*	*	9414	*	*
Approximately 4.4 miles downstream of Ennis Bridge Road	465.80	*	*	9401	*	*
Approximately 3.0 miles downstream of Ennis Bridge Road	465.30	*	*	9390	*	*
Approximately 2.6 miles downstream of Ennis Bridge Road	462.00	*	*	9324	*	*
Approximately 1.4 miles downstream of Ennis Bridge Road	461.00	*	*	9305	*	*
Approximately 1.1 miles downstream of Ennis Bridge Road	460.20	*	*	9289	*	*
Approximately 1.1 miles downstream of Ennis Bridge Road	459.70	*	*	9280	*	*
Approximately 15.3 miles upstream of the Bladen/Pender County boundary	456.40	*	*	9215	*	*
Approximately 15.9 miles upstream of the Bladen/Pender County boundary	451.70	*	*	9122	*	*
Approximately 16.2 miles upstream of the Bladen/Pender County boundary	450.40	*	*	9096	*	*
Approximately 17.0 miles upstream of the Bladen/Pender County boundary	450.00	*	*	9088	*	*
Approximately 17.8 miles upstream of the Bladen/Pender County boundary	449.00	*	*	9069	*	*
Approximately 17.9 miles upstream of the Bladen/Pender County boundary	447.90	*	*	9047	*	*
Approximately 18.3 miles upstream of the Bladen/Pender County boundary	447.20	*	*	9034	*	*
Approximately 18.7 miles upstream of the Bladen/Pender County boundary	446.40	*	*	9017	*	*
Approximately 19.9 miles upstream of the Bladen/Pender County boundary	444.30	*	*	8976	*	*
Approximately 21.2 miles upstream of the Bladen/Pender County boundary	443.60	*	*	8962	*	*
Approximately 1.8 miles downstream of NC 41	439.00	*	*	8872	*	*
Approximately 0.4 mile upstream of NC 41	436.10	*	*	8816	*	*
Approximately 1.2 miles upstream of NC 41	435.10	*	*	8797	*	*
Approximately 1.4 miles upstream of NC 41	434.40	*	*	8782	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 2.1 miles upstream of NC 41	433.70	*	*	8768	*	*
Approximately 2.7 miles upstream of NC 41	433.40	*	*	8762	*	*
Approximately 3.0 miles upstream of NC 41	431.60	*	*	8727	*	*
Approximately 3.4 miles upstream of NC 41	430.60	*	*	8707	*	*
Approximately 3.9 miles upstream of NC 41	430.30	*	*	8702	*	*
Approximately 4.6 miles upstream of NC 41	429.30	*	*	8684	*	*
Approximately 4.8 miles upstream of NC 41	428.70	*	*	8670	*	*
Approximately 5.4 miles upstream of NC 41	427.90	*	*	8656	*	*
Approximately 6.7 miles upstream of NC 41	422.50	*	*	8551	*	*
Approximately 1 mile downstream of Garland Highway	419.09	4512	7052	8326	*	11376
Approximately 7.4 miles upstream of NC 41	416.90	*	*	8442	*	*
Approximately 2.3 miles downstream of Greens Bridge Road	386.19	4290	6643	7833	*	10755
At Greens Bridge Road	383.03	4226	6538	7707	*	10588
Approximately 2.2 miles downstream of Melvins Bridge Road	380.90	*	*	7778	*	*
Approximately 2.8 miles downstream of Melvins Bridge Road	380.20	*	*	7776	*	*
Approximately 2.0 miles downstream of Melvins Bridge Road	379.50	*	*	7773	*	*
Approximately 1.4 miles downstream of Melvins Bridge Road	377.50	*	*	7764	*	*
Approximately 0.6 miles downstream of Melvins Bridge Road	376.80	*	*	7762	*	*
Approximately 1,440 feet downstream of Melvins Bridge Road	375.00	*	*	7754	*	*
Approximately 1,700 upstream of Melvins Bridge Road	374.10	*	*	7750	*	*
Approximately 0.4 mile upstream of Melvins Bridge Road	372.70	*	*	7744	*	*
Approximately 1.3 miles upstream of Melvins Bridge Road	370.50	*	*	7735	*	*
Approximately 0.6 mile upstream of the Bladen/Cumberland County boundary	363.70	*	*	7704	*	*
Approximately 1,000 feet upstream of the Bladen/Cumberland County boundary	363.70	*	*	7704	*	*
Approximately 1.0 mile upstream of the Bladen/Cumberland County boundary	362.80	*	*	7699	*	*
Approximately 575 feet upstream of the confluence of Beaver Dam Creek	362.00	*	*	7696	*	*
Approximately 0.5 mile upstream of the confluence of Beaver Dam Creek	334.20	*	*	7549	*	*
Approximately 125 feet downstream of State Route 242	330.70	*	*	7529	*	*
Approximately 0.5 mile upstream of State Route 242	329.50	*	*	7522	*	*
Approximately 775 feet downstream of the confluence of Big Swamp	328.90	*	*	7518	*	*
Approximately 1,230 feet upstream of the confluence of Big Swamp	327.90	*	*	7512	*	*
Approximately 1.0 mile upstream of the confluence of Big Swamp	275.70	*	*	7137	*	*
Approximately 1.9 miles upstream of the confluence of Big Swamp	274.50	*	*	7127	*	*
Approximately 0.7 mile upstream of Butler Island Bridge Road	273.60	*	*	7119	*	*
Approximately 1.0 mile upstream of Butler Island Bridge Road	272.70	*	*	7111	*	*
Approximately 1.3 miles upstream of Butler Island Bridge Road	270.80	*	*	7095	*	*
Approximately 2.8 miles upstream of Butler Island Bridge Road	269.80	*	*	7087	*	*
Approximately 3.6 miles upstream of Butler Island Bridge Road	269.20	*	*	7081	*	*
Approximately 4.0 miles upstream of Butler Island Bridge Road	267.40	*	*	7066	*	*
Approximately 4.7 miles upstream of Butler Island Bridge Road	266.60	*	*	7058	*	*
Approximately 5.1 miles upstream of Butler Island Bridge Road	265.70	*	*	7050	*	*
Approximately 5.9 miles upstream of Butler Island Bridge Road	264.40	*	*	7039	*	*
Approximately 6.6 miles upstream of Butler Island Bridge Road	263.60	*	*	7031	*	*
Approximately 0.6 mile downstream of the confluence of Gum Swamp	262.80	*	*	7025	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 1,110 feet downstream of the confluence of Gum Swamp	262.30	*	*	7019	*	*
Approximately 1.05 miles downstream of S Gray Street	249.08	3604	5789	6880	*	9387
Approximately 0.63 mile downstream of S Gray Street	233.47	3547	5718	6801	*	9278
Approximately 1.5 miles upstream of W Williams Street	230.63	3496	5639	6708	*	9151
Approximately 0.6 mile downstream of the confluence of Big Creek	227.60	*	*	6673	*	*
Approximately 915 feet upstream of the confluence of Big Creek	206.30	*	*	6426	*	*
Approximately 0.6 mile upstream of the confluence of Big Creek	205.90	*	*	6421	*	*
Approximately 0.9 mile upstream of the confluence of Big Creek	205.00	*	*	6410	*	*
Approximately 1,520 feet upstream of Faircloth Road	202.00	*	*	6372	*	*
Approximately 0.7 mile upstream of Faircloth Road	201.40	*	*	6364	*	*
Approximately 1.0 mile upstream of Faircloth Road	200.70	*	*	6356	*	*
Approximately 1.4 miles upstream of Faircloth Road	199.20	*	*	6336	*	*
Approximately 1.8 miles upstream of Faircloth Road	197.40	*	*	6313	*	*
Approximately 0.4 mile upstream of Maxwell Road	194.70	*	*	6277	*	*
Approximately 0.9 mile upstream of Maxwell Road	193.70	*	*	6264	*	*
Approximately 1.3 miles upstream of Maxwell Road	193.10	*	*	6257	*	*
Approximately 990 feet upstream of the confluence of Jones Swamp	179.90	*	*	6076	*	*
Approximately 1,860 feet upstream of the confluence of Browns Swamp	173.30	*	*	5981	*	*
Approximately 1.5 miles upstream of the confluence of Browns Swamp	172.50	*	*	5968	*	*
Approximately 1,560 feet upstream of Hayes Mill Road	170.50	*	*	5938	*	*
Approximately 1.1 miles upstream of Hayes Mill Road	170.30	*	*	5935	*	*
Approximately 1.4 miles upstream of Hayes Mill Road	168.00	*	*	5901	*	*
Approximately 0.4 mile upstream of the confluence of South River Tributary 1	162.60	*	*	5818	*	*
Approximately 0.5 mile upstream of Highway 13	162.30	*	*	5813	*	*
Approximately 0.9 mile upstream of Highway 13	161.30	*	*	5798	*	*
Approximately 385 feet downstream of the confluence of Little Beaverdam Swamp	160.30	*	*	5782	*	*
Approximately 1,800 feet upstream of the confluence of Little Beaverdam Swamp	143.90	*	*	5510	*	*
Approximately 1.4 miles upstream of the confluence of Little Beaverdam Swamp	142.70	*	*	5490	*	*
Approximately 300 feet downstream of Green Path Road	141.70	*	*	5473	*	*
Approximately 500 feet upstream of the confluence of South River Tributary 3	138.80	*	*	5422	*	*
Approximately 1.2 miles upstream of the confluence of South River Tributary 3	138.40	*	*	5414	*	*
Approximately 1.4 miles upstream of the confluence of South River Tributary 3	80.70	*	*	5414	*	*
South River Tributary 4						
At mouth	3.50	*	*	953	*	*
Spearmans Mill Branch						
Approximately 1,060 feet upstream of Register-Sutton Road crossing	2.00	*	*	694	*	*
Approximately 0.4 mile upstream of Hayes Chapel Road crossing	1.60	*	*	620	*	*
Starlins Swamp						
At mouth	9.40	*	*	1660	*	*
Approximately 540 feet upstream of North Spring Branch Road	8.80	*	*	1600	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 0.5 mile upstream of North Spring Branch Road	6.50	*	*	1353	*	*
Approximately 1.0 mile upstream of North Spring Branch Road	6.10	*	*	1298	*	*
Approximately 0.8 mile downstream of Stanley Hall Road	4.40	*	*	1085	*	*
Approximately 960 feet downstream of Stanley Hall Road	4.00	*	*	1021	*	*
Stewarts Creek						
Approximately 1,950 feet downstream of Waycross Road crossing	55.20	*	*	4533	*	*
Approximately 0.7 mile upstream of Waycross Road crossing	54.30	*	*	4490	*	*
Approximately 1.1 miles upstream of Waycross Road crossing	53.50	*	*	4449	*	*
Approximately 1.3 miles upstream of Waycross Road crossing	52.70	*	*	4411	*	*
Approximately 1.8 miles downstream of Cornwallis Road crossing	50.60	*	*	4315	*	*
Approximately 1.1 miles downstream of Cornwallis Road crossing	48.70	*	*	4218	*	*
Approximately 320 feet downstream of Cornwallis Road crossing	47.90	*	*	4184	*	*
Approximately 0.2 mile downstream of the confluence of Miller's Creek	46.20	*	*	4096	*	*
Just upstream of the confluence of Miller's Creek	33.00	*	*	3384	*	*
Approximately 1.2 miles upstream of the confluence of Miller's Creek	30.10	*	*	3216	*	*
Approximately 1.5 miles upstream of the confluence of Miller's Creek	29.30	*	*	3169	*	*
Stony Run						
At mouth	8.21	663	1398	1823	*	3375
Tarkill Branch						
Approximately 0.4 mile downstream of Edmond Matthis Road crossing	1.00	*	*	470	*	*
Approximately 0.5 mile upstream of Edmond Matthis Road crossing	0.60	*	*	338	*	*
Tenmile Swamp						
At mouth	13.60	*	*	2051	*	*
Approximately 0.5 mile upstream of the confluence with Six Runs Creek	12.80	*	*	1985	*	*
Approximately 530 feet downstream of Beulah Church Road crossing	12.10	*	*	1917	*	*
Approximately 740 feet upstream of Beulah Church Road crossing	11.20	*	*	1836	*	*
Approximately 1,160 feet upstream of Beulah Church Road crossing	10.70	*	*	1786	*	*
Approximately 10 feet upstream of confluence of Tenmile Swamp Tributary	6.80	*	*	1385	*	*
Approximately 0.5 mile upstream of the confluence of Tenmile Swamp Tributary	6.50	*	*	1345	*	*
Approximately 1.0 mile upstream of the confluence of Tenmile Swamp Tributary	5.50	*	*	1223	*	*
Approximately 0.6 mile downstream of McGowan Road crossing	4.20	*	*	1060	*	*
Approximately 0.5 mile upstream of McGowan Road crossing	3.20	*	*	911	*	*
Approximately 1.0 mile upstream of McGowan Road crossing	2.90	*	*	851	*	*
Tenmile Swamp Tributary						
Approximately 0.5 mile downstream of Thompson Avenue road crossing	2.30	*	*	754	*	*
Turkey Creek						
At mouth	18.50	*	*	2590	*	*
Approximately 0.4 mile downstream of Summerhill Road crossing	17.90	*	*	2560	*	*
Approximately 0.4 mile upstream of Summerhill Road crossing	16.90	*	*	2520	*	*
Approximately 0.9 mile downstream of Faison Road crossing	16.00	*	*	2470	*	*
Approximately 50 feet upstream of Faison Road crossing	15.00	*	*	2410	*	*
Approximately 1,270 feet upstream of Faison Road crossing	14.30	*	*	2320	*	*

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Approximately 0.5 mile upstream of Faison Road crossing	13.40	*	*	2220	*	*
Approximately 1.1 miles upstream of Faison Road crossing	13.00	*	*	2160	*	*
Approximately 1.2 miles upstream of Faison Road crossing	11.60	*	*	1990	*	*
Approximately 0.8 mile downstream of Old Courthouse Road	10.20	*	*	1820	*	*
Approximately 530 feet upstream of Old Courthouse Road	9.60	*	*	1740	*	*
Twomile Swamp						
At mouth	3.80	*	*	1000	*	*
Approximately 1.0 mile upstream of confluence with Caesar Swamp	2.90	*	*	859	*	*
Ward Swamp						
At mouth	18.50	*	*	2444	*	*
Approximately 1,600 feet downstream of Bradshaw Road	17.50	*	*	2362	*	*
Approximately 140 feet upstream of Bradshaw Road	12.60	*	*	1961	*	*
Approximately 10 feet upstream of confluence of Ward Swamp Tributary 3	7.50	*	*	1465	*	*
Approximately 600 feet downstream of Hobbton Highway	6.40	*	*	1338	*	*
Approximately 10 feet upstream of confluence of Craddock Swamp	3.20	*	*	899	*	*
Ward Swamp Tributary 1						
At mouth	4.60	*	*	1100	*	*
Approximately 10 feet upstream of confluence of Ward Swamp Tributary 2	1.90	*	*	678	*	*
Approximately 220 feet downstream of Hobbton Highway	1.60	*	*	605	*	*
Ward Swamp Tributary 2						
At mouth	2.50	*	*	782	*	*
Approximately 640 feet downstream of Share Cake Road	2.00	*	*	701	*	*
Approximately 0.5 mile upstream of Share Cake Road	1.20	*	*	519	*	*
Ward Swamp Tributary 3						
At mouth	4.20	*	*	1050	*	*
Approximately 10 feet upstream of confluence of Ward Swamp Tributary 4	2.70	*	*	814	*	*
Approximately 1.1 miles upstream of confluence of Ward Swamp Tributary 4	2.00	*	*	684	*	*
Ward Swamp Tributary 4						
Confluence with Ward Swamp Tributary 3	1.30	*	*	550	*	*
Williams Old Mill Branch						
Approximately 2,185 feet upstream of confluence with Great Coharie Creek	12.25	1684	2790	3227	*	4511
Approximately 0.4 mile upstream of confluence with Great Coharie Creek	11.26	1654	2734	3158	*	4397
Approximately 0.25 mile downstream of confluence with Dollar Branch	9.59	1532	2546	2940	*	4094
Approximately 45 feet upstream of confluence with Dollar Branch	7.31	1212	2081	2422	*	3434
Just downstream of US Highway 701	5.69	1038	1812	2115	*	3016
Approximately 30 feet upstream of confluence with Williams Old Mill Branch Tributary	5.13	953	1684	1971	*	2828
Approximately 440 feet upstream of confluence with Cat Tail Branch	4.06	412	716	873	*	1243
Approximately 150 feet upstream of Beaman Street	3.48	375	653	797	*	1136
Approximately 1,295 feet downstream of Raleigh Road	2.46	303	530	649	*	929
Approximately 2,250 feet upstream of Raleigh Road	1.61	233	411	504	*	725
Williams Old Mill Branch Tributary						
Approximately 50 feet upstream of confluence with Williams Old Mill Branch	0.51	278	546	645	*	947

Table 13 - Summary of Discharges

Flooding Source		Discharges (cfs)				
Location	Drainage Area (square miles)	10% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Future Annual Chance	0.2% Annual Chance
Williamson Swamp						
At Mouth	6.30	*	*	1324	*	*
Approximately 830 feet downstream of Charles Newland Road	5.70	*	*	1255	*	*
Approximately 1,140 feet upstream of Aman Dairy Road	4.90	*	*	1147	*	*
Approximately 0.4 mile upstream of North Spring Branch Road	4.00	*	*	1032	*	*
Approximately 0.7 mile downstream of Stanley Hall Road	3.20	*	*	903	*	*
Approximately 0.6 mile downstream of Stanley Hall Road	1.30	*	*	539	*	*
Wolf Pit Branch						
At the confluence with Buckhorn Creek	1.80	*	*	651	*	*
Approximately 690 feet downstream of Ozzie Road crossing	1.30	*	*	534	*	*
Approximately 1,100 feet upstream of Ozzie Road crossing	0.70	*	*	388	*	*
Youngs Swamp						
At mouth	9.40	*	*	1660	*	*
Approximately 860 feet downstream of Suttontown Road	8.80	*	*	1600	*	*
Approximately 0.5 mile upstream of Suttontown Road	7.20	*	*	1430	*	*
Approximately 1.0 mile upstream of Suttontown Road	6.20	*	*	1310	*	*
Approximately 1.3 miles upstream of Suttontown Road	4.30	*	*	1070	*	*

Table 14, "Summary of Stillwater Elevations" is not applicable in Sampson County.

Table 15, "Gage Information", lists the stream gages located in Sampson 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
02106910	Big Swamp	BIG SWAMP NEAR ROSEBORO, NC	32.30	1952	1973
02106500	Black River	BLACK RIVER NEAR TOMAHAWK, N C	676.00	1951	2013
02106000	Little Coharie Creek	LITTLE COHARIE CREEK NEAR ROSEBORO, NC	92.80	1924	1991
02107000	South River	SOUTH RIVER NEAR PARKERSBURG, NC	379.00	1952	1986
02106240	Turkey Creek	TURKEY CREEK NEAR TURKEY, NC	15.70	1953	1973

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"
Bearskin Swamp	0.035 to 0.052	0.140 to 0.150
Beaverdam Creek	0.045 to 0.050	0.110 to 0.150
Beaverdam Run	0.050 to 0.051	0.140 to 0.150
Beaverdam Run Tributary 1	0.035 to 0.051	0.140 to 0.150
Beaverdam Swamp	0.025 to 0.050	0.130 to 0.150
Beaverdam Swamp 1	0.040 to 0.050	0.120 to 0.150
Beaverdam Swamp 2	0.051	0.140 to 0.150
Beaverdam Swamp 2 Tributary 1	0.050	0.100 to 0.150
Beaverdam Swamp 3	0.050 to 0.080	0.080 to 0.525
Beaverdam Swamp 3 Tributary 2	0.050	0.100 to 0.150
Big Beaverdam Creek	0.045 to 0.050	0.130 to 0.150
Big Branch	0.045 to 0.050	0.120 to 0.150
Big Juniper Run	0.041 to 0.042	0.130 to 0.140
Big Swamp	0.040 to 0.050	0.110 to 0.150
Bills Swamp	0.050 to 0.055	0.080 to 0.150
Black River	0.038 to 0.072	0.070 to 0.280
Buckhorn Creek	0.045 to 0.050	0.110 to 0.150
Caesar Swamp	0.050	0.100 to 0.350
Canty Mill Branch	0.045 to 0.050	0.110 to 0.150
Cat Creek	0.045 to 0.050	0.110 to 0.150
Cat Tail Branch	0.050 to 0.055	0.030 to 0.150
Clear Run	0.045 to 0.050	0.110 to 0.150
Cobb Branch	0.045 to 0.050	0.140
Craddock Swamp	0.053	0.140 to 0.154
Crane Creek	0.040 to 0.050	0.110 to 0.150
Cypress Lake	0.045 to 0.050	0.140 to 0.150
Devane Branch	0.045 to 0.050	0.120 to 0.150
Doctors Creek	0.025 to 0.090	0.060 to 0.200
Dollar Branch	0.042 to 0.055	0.080 to 0.150
Encoh Mill Creek	0.040 to 0.045	0.110 to 0.150
Gaddy Branch	0.055	0.035 to 0.150
Gilmore Swamp	0.040 to 0.050	0.100 to 0.200
Gilmore Swamp Tributary	0.040 to 0.045	0.100 to 0.150
Goshen Swamp	0.054 to 0.060	0.180
Great Coharie Creek	0.035 to 0.090	0.042 to 0.150
Great Coharie Creek Tributary 1	0.051	0.140 to 0.150
Great Coharie Creek Tributary 2	0.055	0.100 to 0.130
Great Coharie Creek Tributary 3	0.051	0.130 to 0.150
Great Coharie Creek Tributary 4	0.051	0.050 to 0.140

Table 16 - Roughness Coefficients

Stream	Channel "n"	Overbank "n"
Great Coharie Creek Tributary 5	0.048	0.050 to 0.140
Great Coharie Creek Tributary 6	0.050	0.030 to 0.140
Hoe Swamp	0.045 to 0.050	0.110 to 0.150
Hornet Swamp	0.050	0.150
Horsepen Branch	0.050	0.080 to 0.140
Johnson Mill Branch	0.054	0.100 to 0.150
Jones Swamp	0.040 to 0.045	0.120 to 0.150
Keith Branch	0.045 to 0.050	0.110 to 0.150
Kill Swamp	0.050 to 0.087	0.035 to 0.403
Kill Swamp Tributary 1	0.050	0.150
Little Beaverdam Swamp	0.045 to 0.050	0.110 to 0.150
Little Beaverdam Swamp Tributary 1	0.045 to 0.050	0.140 to 0.150
Little Beaverdam Swamp Tributary 2	0.045 to 0.050	0.120 to 0.150
Little Coharie Creek	0.050	0.130 to 0.150
Little Coharie Creek Tributary	0.050	0.100 to 0.150
Little Coharie Creek Tributary 2	0.050	0.080 to 0.140
Little Juniper Run	0.035 to 0.042	0.140 to 0.150
Lockamy Mill	0.050	0.100 to 0.150
Marsh Swamp	0.051	0.130 to 0.150
McPhail Branch	0.050	0.150
Meetinghouse Branch	0.050	0.100 to 0.160
Merkle Swamp	0.050	0.040 to 0.150
Mill Creek	0.045	0.140
Mill Creek 2	0.040 to 0.051	0.100 to 0.150
Mill Creek 2 Tributary 1	0.050	0.080 to 0.140
Mill Creek Tributary	0.045	0.140
Mill Run	0.045 to 0.050	0.150
Mill Swamp	0.040 to 0.050	0.080 to 0.140
Mill Swamp Tributary	0.045 to 0.050	0.140
Mingo Swamp	0.043 to 0.050	0.130 to 0.160
Old Mill Swamp	0.050	0.150
Panther Branch (near Faison)	0.012 to 0.045	0.130
Peters Creek	0.045 to 0.050	0.120 to 0.150
Pharisee Creek	0.035	0.120 to 0.160
Quewiffle Swamp	0.045 to 0.050	0.100 to 0.150
Railer Branch	0.060	0.180
Rattlesnake Branch	0.049	0.050 to 0.140
Rice Swamp	0.035 to 0.050	0.100 to 0.150
Robinson Mill Branch	0.045 to 0.050	0.110 to 0.150
Rocky Marsh Creek	0.035 to 0.052	0.130 to 0.150
Rocky Marsh Creek Tributary	0.051	0.100 to 0.150
Rowan Branch	0.045 to 0.050	0.100 to 0.150
Sevenmile Swamp	0.035 to 0.050	0.140 to 0.150
Shade Branch	0.040 to 0.050	0.110 to 0.140
Six Runs Creek	0.040	0.100 to 0.150
South River	0.040 to 0.060	0.080 to 0.620
Spearman's Mill Branch	0.045 to 0.050	0.110 to 0.150
Starlins Swamp	0.042 to 0.045	0.140 to 0.160
Stewarts Creek	0.040 to 0.050	0.060 to 0.150
Stony Run	0.048 to 0.078	0.120 to 0.500
Tarkill Branch	0.040 to 0.050	0.100 to 0.150
Tenmile Swamp	0.040 to 0.050	0.100 to 0.150
Tenmile Swamp Tributary	0.045 to 0.050	0.140
Turkey Creek	0.045 to 0.050	0.120 to 0.140
Twomile Swamp	0.050	0.100 to 0.150
Ward Swamp	0.050	0.100 to 0.150
Ward Swamp Tributary 1	0.049	0.140
Ward Swamp Tributary 2	0.047 to 0.050	0.150
Ward Swamp Tributary 3	0.055	0.150
Ward Swamp Tributary 4	0.050	0.150
Williams Old Mill Branch	0.045 to 0.080	0.013 to 0.567

Table 16 - Roughness Coefficients

Stream	Channel "n"	Overbank "n"
Williams Old Mill Branch Tributary	0.035 to 0.055	0.060 to 0.160
Williamson Swamp	0.045 to 0.050	0.100 to 0.150
Wolf Pit Branch	0.045 to 0.050	0.110 to 0.150
Youngs Swamp	0.041 to 0.045	0.120 to 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
Bearskin Swamp				
010	1,022	2,999	86.9	504 / 259
015	1,500	2,999	87.1	336 / 268
020	1,997	2,999	87.4	228 / 328
025	2,513	2,999	87.7	448 / 130
030	2,978	2,999	88.0	510 / 30
035	3,500	2,999	88.4	358 / 118
039	3,924	2,999	88.7	429 / 141
045	4,506	2,999	89.0	546 / 137
050	5,000	2,999	89.3	223 / 366
055	5,500	2,999	89.6	93 / 453
061	6,066	2,999	89.9	64 / 614

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
067	6,685	2,999	90.1	555 / 55
075	7,500	2,999	90.6	162 / 214
080	8,000	2,999	91.3	33 / 325
085	8,496	2,999	91.9	90 / 322
095	9,511	2,826	93.3	251 / 167
100	10,011	2,826	94.0	217 / 51
105	10,535	2,826	94.7	175 / 183
110	10,955	2,826	95.0	225 / 200
116	11,552	2,826	95.4	447 / 139
120	12,000	2,826	95.7	236 / 222
125	12,503	2,826	96.1	195 / 184
130	13,000	2,826	96.6	369 / 81
142	14,151	2,654	97.7	48 / 141
145	14,482	2,654	98.6	48 / 136
150	14,981	2,654	98.9	235 / 51
154	15,394	2,654	99.4	128 / 72
160	16,002	2,654	100.5	27 / 237
164	16,393	2,654	101.0	112 / 381
170	17,000	2,654	101.5	119 / 195
180	18,000	2,654	102.2	210 / 233
185	18,500	2,654	102.6	64 / 151
190	19,000	2,654	103.3	27 / 174
199	19,878	2,600	104.2	280 / 94
206	20,582	2,600	104.7	34 / 289
212	21,211	2,600	105.3	215 / 171
215	21,525	2,600	105.5	60 / 282
219	21,900	2,387	105.9	31 / 229
225	22,500	2,387	106.4	25 / 356
230	23,006	2,387	106.8	32 / 466
235	23,500	2,387	107.4	44 / 268
240	24,000	2,387	108.0	25 / 265
245	24,500	2,387	108.7	156 / 183
250	24,994	2,387	109.2	25 / 378
255	25,496	2,387	109.7	25 / 362
260	25,987	2,284	110.2	47 / 318
265	26,500	2,284	110.8	151 / 63
270	26,969	2,284	111.5	166 / 279
275	27,500	2,284	111.9	69 / 357
280	28,000	2,284	112.3	67 / 294
285	28,500	2,230	113.1	62 / 266
290	29,015	2,230	113.7	38 / 528
295	29,535	2,230	114.1	109 / 277
300	30,000	2,230	114.6	278 / 201
304	30,421	2,230	115.1	172 / 314
310	31,006	2,153	115.8	26 / 457

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
315	31,457	2,153	116.1	102 / 421
320	32,000	2,153	116.5	96 / 310
325	32,500	2,153	117.1	63 / 274
330	33,000	2,076	117.6	22 / 251
335	33,500	2,076	118.2	56 / 335
340	34,000	2,076	118.6	22 / 253
345	34,500	2,076	119.2	52 / 250
352	35,167	2,076	119.9	233 / 158
356	35,588	2,076	120.2	250 / 38
361	36,116	2,076	120.6	45 / 45
362	36,217	2,076	121.8	45 / 45
362	36,245	2,076	122.0	132 / 26
363	36,341	2,076	124.1	367 / 202
370	37,012	1,966	124.1	214 / 219
374	37,447	1,966	124.1	208 / 210
380	38,015	1,966	124.2	205 / 205
386	38,563	1,966	124.2	112 / 112
391	39,107	1,966	124.2	139 / 59
395	39,549	1,966	125.2	100 / 72
401	40,077	1,848	126.6	92 / 153
405	40,500	1,848	127.1	89 / 139
410	41,012	1,848	127.5	379 / 27
416	41,565	1,848	128.0	194 / 109
421	42,050	1,848	128.6	156 / 143
427	42,657	1,848	129.4	180 / 108
431	43,143	1,848	130.1	210 / 73
435	43,548	1,848	130.7	21 / 202
440	44,039	1,532	131.5	69 / 308
446	44,644	1,532	132.1	23 / 252
451	45,065	1,532	132.5	114 / 184
455	45,503	1,532	133.0	96 / 123
460	46,000	1,532	133.9	215 / 19
465	46,500	1,532	134.9	199 / 19
470	47,000	1,532	135.6	133 / 109
475	47,482	1,532	136.1	47 / 141
480	47,996	1,532	136.9	76 / 93
485	48,531	1,532	137.6	100 / 153
490	49,000	1,433	138.1	98 / 86
495	49,501	1,433	138.6	35 / 45
500	50,000	1,433	140.8	35 / 45
507	50,683	1,433	141.1	20 / 142
512	51,164	1,433	142.5	141 / 37
516	51,584	1,433	143.1	134 / 103
520	52,000	1,433	143.5	83 / 100
526	52,613	1,433	144.4	148 / 60

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
531	53,111	1,433	145.1	66 / 115
535	53,500	1,433	145.7	93 / 39
540	54,000	1,290	147.0	18 / 22
545	54,484	1,290	150.2	18 / 18
550	55,000	1,290	151.3	200 / 21
554	55,423	1,290	151.4	18 / 69
560	55,969	1,117	152.6	148 / 184
563	56,347	1,117	152.9	156 / 96
Beaverdam Creek				
004	434	966	57.0	158 / 68
013	1,266	966	59.2	28 / 65
018	1,798	966	60.7	41 / 164
025	2,500	966	62.3	10 / 104
032	3,185	966	65.9	68 / 42
041	4,149	966	69.1	146 / 65
047	4,733	966	70.8	44 / 120
054	5,402	908	73.2	55 / 50
059	5,888	908	74.3	96 / 50
065	6,534	908	75.6	12 / 155
070	7,034	908	77.5	8 / 93
075	7,534	908	80.3	18 / 143
080	7,951	908	82.1	46 / 79
087	8,653	908	84.5	24 / 84
093	9,338	754	85.7	147 / 20
101	10,118	754	86.5	52 / 105
107	10,663	754	88.0	107 / 20
111	11,116	754	89.4	168 / 20
115	11,486	754	90.2	45 / 45
115	11,531	754	93.8	45 / 45
122	12,157	640	94.2	55 / 115
125	12,500	640	97.0	10 / 100
Beaverdam Run				
005	472	1,576	99.0 ¹	19 / 1,581
011	1,081	1,576	99.0 ¹	19 / 1,252
016	1,619	1,576	99.0 ¹	364 / 368
022	2,181	1,576	99.0 ¹	248 / 139
026	2,615	1,576	99.0 ¹	23 / 250
032	3,208	1,496	100.3	85 / 98
037	3,706	1,496	102.1	74 / 121
044	4,352	1,496	103.9	36 / 227
049	4,878	1,496	104.3	248 / 77
054	5,362	1,496	104.7	167 / 67
059	5,882	1,496	105.3	26 / 281
062	6,189	1,496	105.5	28 / 259
067	6,706	1,496	106.2	29 / 245

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
073	7,283	1,496	107.2	198 / 30
077	7,747	1,496	107.8	246 / 32
082	8,178	1,496	108.2	118 / 33
087	8,726	1,496	109.3	65 / 55
090	9,042	1,496	110.2	51 / 111
094	9,447	1,337	110.9	60 / 60
096	9,600	1,337	112.6	60 / 60
102	10,213	1,337	113.4	36 / 147
108	10,759	1,337	113.7	79 / 162
113	11,270	1,337	114.1	44 / 122
118	11,780	1,337	114.9	72 / 31
120	11,983	1,337	115.4	61 / 29
125	12,451	1,337	116.8	34 / 28
130	13,002	1,337	118.7	26 / 26
135	13,459	794	120.4	22 / 18
139	13,890	794	121.7	13 / 19
144	14,428	794	123.2	22 / 34
148	14,837	794	123.6	23 / 33
152	15,226	794	124.0	21 / 37
155	15,461	794	124.8	20 / 20
156	15,597	794	126.4	18 / 21
158	15,771	794	127.2	20 / 41
163	16,262	794	128.0	24 / 81
167	16,728	794	128.8	39 / 71
174	17,379	794	131.3	49 / 51
178	17,783	794	133.0	29 / 52
182	18,181	794	134.7	34 / 30
185	18,498	794	136.2	28 / 20
187	18,731	794	137.6	16 / 14
188	18,776	794	137.7	10 / 10
189	18,912	794	139.2	11 / 11
191	19,051	794	141.7	19 / 19
192	19,214	794	142.3	20 / 20
199	19,855	794	148.5	11 / 11
199	19,912	794	149.9	75 / 75
201	20,104	794	151.0	78 / 53
204	20,422	488	152.5	61 / 31
205	20,549	488	159.5	61 / 31
207	20,713	488	159.5	22 / 41
208	20,829	488	159.5	14 / 17
211	21,075	488	159.8	20 / 20
214	21,426	488	160.3	39 / 74
216	21,581	488	163.5	39 / 74
218	21,810	488	163.6	18 / 80
220	22,018	488	163.6	18 / 18

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
225	22,462	488	165.3	18 / 150
231	23,070	488	166.4	17 / 97
235	23,514	488	167.9	34 / 60
Beaverdam Run Tributary 1				
005	520	818	120.9	20 / 20
007	713	818	122.1	19 / 19
008	817	818	123.4	36 / 34
010	1,005	818	123.7	39 / 20
013	1,260	818	125.0	18 / 11
014	1,362	818	132.7	300 / 185
018	1,766	818	132.7	178 / 122
020	2,049	818	132.7	185 / 123
025	2,546	818	132.7	209 / 60
030	2,972	818	132.7	90 / 94
033	3,297	528	132.9	60 / 34
038	3,837	528	133.4	28 / 32
042	4,240	528	135.3	18 / 20
Beaverdam Swamp				
064	6,361	2,423	128.6	25 / 451
070	6,951	2,423	129.4	25 / 402
077	7,682	2,423	130.7	209 / 39
083	8,309	2,423	132.2	125 / 220
090	8,994	2,312	133.4	115 / 140
098	9,771	2,312	134.9	100 / 400
103	10,294	2,312	135.3	300 / 85
108	10,771	2,312	135.8	55 / 55
108	10,817	2,312	136.4	55 / 55
111	11,131	2,312	137.1	250 / 100
116	11,641	2,312	137.7	270 / 24
126	12,613	1,381	139.7	131 / 60
134	13,421	1,381	141.1	81 / 149
144	14,431	1,381	143.0	94 / 146
152	15,151	1,381	144.8	207 / 32
159	15,943	1,381	147.0	22 / 129
167	16,686	1,381	149.6	18 / 112
174	17,396	1,381	152.6	65 / 110
181	18,136	1,282	154.0	175 / 75
187	18,688	1,282	154.3	30 / 30
187	18,734	1,282	155.6	30 / 30
194	19,410	1,282	157.1	100 / 145
200	20,021	1,282	157.7	90 / 50
206	20,646	1,282	161.1	80 / 168
212	21,212	1,282	161.7	390 / 18
221	22,088	1,282	162.4	310 / 90
229	22,947	1,161	164.0	14 / 170

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
238	23,768	1,161	167.4	80 / 40
243	24,337	1,161	168.2	175 / 50
250	25,039	1,161	169.0	110 / 30
257	25,699	1,161	172.0	75 / 20
266	26,565	1,161	174.6	130 / 17
272	27,172	1,161	176.4	45 / 70
275	27,537	1,161	177.3	135 / 70
276	27,621	1,161	178.8	135 / 70
280	28,047	1,161	179.0	70 / 90
283	28,293	1,161	179.0	25 / 25
284	28,365	1,161	180.2	25 / 25
287	28,748	976	181.1	100 / 65
293	29,337	976	181.7	160 / 130
298	29,794	976	182.1	110 / 78
305	30,470	976	183.5	55 / 199
313	31,311	976	184.8	90 / 200
319	31,904	976	186.0	60 / 190
326	32,588	868	187.8	14 / 197
332	33,232	868	189.2	146 / 107
340	34,040	868	189.8	270 / 145
351	35,124	868	190.7	161 / 55
Beaverdam Swamp 1				
011	1,059	2,048	91.9	200 / 400
015	1,476	2,048	92.4	100 / 300
025	2,451	2,048	93.4	40 / 265
031	3,068	2,048	93.7	60 / 60
031	3,116	2,048	94.3	60 / 60
034	3,431	2,048	94.7	45 / 104
040	4,000	2,048	95.7	74 / 159
045	4,500	2,048	96.2	312 / 53
050	5,000	2,048	96.8	193 / 38
055	5,500	1,979	97.2	345 / 50
059	5,880	1,979	97.4	417 / 162
066	6,573	1,979	98.3	79 / 248
070	7,000	1,979	98.8	56 / 253
075	7,500	1,979	99.3	111 / 188
080	8,000	1,979	99.9	108 / 129
085	8,500	1,979	100.5	229 / 185
090	9,000	1,979	100.8	62 / 196
094	9,434	1,979	101.1	108 / 149
100	9,955	1,917	101.5	93 / 137
105	10,500	1,917	102.0	81 / 200
110	11,000	1,917	102.4	44 / 142
118	11,756	1,917	103.2	50 / 50
118	11,806	1,917	103.5	50 / 50

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
122	12,184	1,917	103.8	91 / 55
125	12,500	1,917	104.5	124 / 38
130	13,000	1,917	105.3	53 / 201
135	13,540	1,917	106.2	113 / 298
145	14,463	1,619	107.0	176 / 155
150	15,000	1,619	107.2	40 / 153
157	15,740	1,619	108.3	50 / 50
158	15,802	1,619	108.5	50 / 50
161	16,112	1,570	108.7	96 / 45
165	16,492	1,570	109.5	263 / 23
169	16,892	1,570	109.9	226 / 20
175	17,500	1,570	110.4	44 / 258
179	17,910	1,490	110.9	121 / 135
185	18,545	1,490	111.7	87 / 63
189	18,918	1,490	112.1	110 / 105
194	19,424	1,398	112.5	101 / 107
201	20,074	1,398	113.3	20 / 100
205	20,500	1,398	113.7	102 / 121
211	21,090	1,398	114.2	144 / 85
215	21,500	1,398	114.6	117 / 141
219	21,941	1,398	115.4	87 / 95
225	22,500	1,398	116.0	182 / 70
232	23,244	1,398	116.7	72 / 99
238	23,795	1,398	117.7	50 / 50
238	23,841	1,398	118.2	50 / 50
242	24,205	1,398	119.1	30 / 239
246	24,570	1,398	119.9	112 / 169
252	25,187	1,398	121.0	116 / 133
258	25,777	1,284	121.7	159 / 183
266	26,558	883	122.6	20 / 166
271	27,101	829	123.9	27 / 155
275	27,500	829	124.7	20 / 93
280	28,000	829	126.0	18 / 132
286	28,599	829	126.9	54 / 106
290	29,000	829	127.5	36 / 147
295	29,500	829	128.7	26 / 34
301	30,130	645	130.7	20 / 111
307	30,652	645	131.2	21 / 21
307	30,727	645	136.8	21 / 21
311	31,071	645	136.9	102 / 118
Beaverdam Swamp 2				
004	373	1,676	102.6	1,044 / 39
009	937	1,676	103.1	37 / 688
014	1,420	1,676	103.7	34 / 657
021	2,050	1,676	104.7	134 / 215

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
027	2,668	1,676	106.6	58 / 82
032	3,182	1,676	107.9	164 / 118
038	3,842	1,546	109.0	38 / 38
040	4,036	1,546	110.9	38 / 38
045	4,526	1,546	111.2	115 / 237
050	5,010	1,546	111.4	208 / 325
054	5,353	1,546	111.5	161 / 189
056	5,631	1,398	111.6	286 / 84
061	6,138	1,398	112.0	122 / 194
067	6,712	1,398	112.4	96 / 160
072	7,211	1,398	112.9	85 / 150
077	7,719	1,398	113.4	33 / 123
083	8,274	1,398	114.3	31 / 99
087	8,738	1,398	115.4	74 / 38
091	9,104	1,398	116.4	32 / 154
095	9,467	1,398	117.1	120 / 34
099	9,855	1,398	117.6	65 / 125
103	10,336	1,398	118.1	142 / 103
108	10,764	1,398	118.6	131 / 31
112	11,243	1,128	119.6	71 / 92
117	11,727	1,128	120.5	26 / 165
122	12,160	1,128	121.0	26 / 176
126	12,616	1,128	121.6	125 / 25
131	13,104	1,009	122.6	67 / 48
137	13,691	1,009	123.8	22 / 90
142	14,238	1,009	124.7	77 / 166
148	14,795	1,009	125.4	45 / 73
153	15,302	1,009	126.3	120 / 42
159	15,883	1,009	127.5	21 / 56
164	16,382	828	129.7	17 / 86
169	16,930	828	130.8	102 / 78
174	17,385	828	131.6	66 / 56
178	17,811	828	132.6	105 / 16
Beaverdam Swamp 2 Tributary 1				
003	294	609	119.6	41 / 78
006	625	609	121.1	56 / 36
010	982	609	122.7	19 / 55
013	1,313	609	124.1	54 / 47
019	1,874	609	125.6	33 / 56
022	2,237	609	126.9	67 / 48
026	2,581	609	128.5	4 / 102
027	2,737	609	129.5	6 / 61
029	2,922	609	135.6	6 / 61
032	3,222	609	135.7	60 / 113
035	3,510	609	135.8	36 / 72

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
040	4,002	609	136.3	76 / 28
044	4,447	609	137.3	42 / 64
048	4,834	609	138.8	49 / 17
Beaverdam Swamp 3				
006	576	1,792	134.4 ¹	83 / 203
012	1,246	1,792	135.2	153 / 187
020	1,968	1,792	136.3	289 / 20
025	2,483	1,792	137.2	325 / 25
029	2,936	1,792	137.7	242 / 61
036	3,564	1,792	138.4	203 / 170
040	4,033	1,792	139.0	170 / 29
Beaverdam Swamp 3 Tributary 2				
002	187	868	150.7	31 / 54
007	710	868	151.7	41 / 46
011	1,142	868	152.4	25 / 132
014	1,401	868	152.6	23 / 118
018	1,752	868	153.2	23 / 50
020	1,978	868	153.7	52 / 52
021	2,129	868	157.0	52 / 52
026	2,647	868	157.3	29 / 122
029	2,894	868	157.4	21 / 140
031	3,050	868	157.4	31 / 81
035	3,497	868	159.5	58 / 58
042	4,208	685	160.5	25 / 25
044	4,426	685	161.5	25 / 25
050	5,030	685	162.4	21 / 21
Big Branch				
026	2,623	718	44.7 ¹	15 / 27
033	3,328	718	44.7 ¹	32 / 14
041	4,132	718	45.6	25 / 300
050	5,026	718	47.6	25 / 270
057	5,715	718	51.0	20 / 250
065	6,500	718	55.9	30 / 60
072	7,175	718	59.3	156 / 30
076	7,589	718	60.9	100 / 30
077	7,659	718	64.7	100 / 30
081	8,116	718	64.8	76 / 38
085	8,468	718	65.7	200 / 20
090	9,000	718	66.5	120 / 25
094	9,430	537	67.6	100 / 25
099	9,932	537	72.6	30 / 20
105	10,500	537	77.2	100 / 25
110	11,038	537	80.2	30 / 20
115	11,454	302	83.6	15 / 20
Big Juniper Run				
019	1,852	1,529	151.0 ¹	474 / 14

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
027	2,689	1,529	151.6	35 / 212
032	3,247	1,529	153.5	162 / 65
040	3,992	1,529	155.5	153 / 36
044	4,409	1,529	156.4	176 / 110
049	4,933	1,529	157.0	21 / 57
054	5,370	1,529	158.8	107 / 93
058	5,791	1,529	159.4	179 / 151
060	6,041	1,529	159.8	206 / 14
067	6,667	1,529	161.4	22 / 38
068	6,784	1,529	162.6	111 / 33
072	7,240	1,529	163.8	90 / 14
076	7,618	1,529	165.7	192 / 64
080	8,044	1,378	166.1	71 / 26
083	8,343	1,378	168.0	71 / 26
088	8,765	1,378	168.1	13 / 34
091	9,058	1,378	169.6	162 / 13
094	9,391	1,378	170.7	167 / 111
098	9,808	1,378	171.1	137 / 94
101	10,091	1,378	171.4	70 / 210
108	10,812	1,039	172.9	116 / 88
116	11,610	1,039	174.4	226 / 11
124	12,350	1,039	176.0	22 / 22
125	12,549	1,039	176.6	22 / 22
129	12,946	1,039	177.1	13 / 32
135	13,484	1,039	179.0	91 / 82
141	14,120	1,039	180.0	18 / 11
148	14,828	1,039	182.3	144 / 77
157	15,686	1,039	183.3	104 / 19
163	16,340	1,039	185.0	82 / 54
170	17,023	1,039	185.9	225 / 11
176	17,643	1,039	187.0	250 / 43
182	18,210	1,039	187.6	18 / 18
185	18,505	1,039	190.7	18 / 18
189	18,933	1,039	191.1	287 / 11
195	19,528	839	191.4	16 / 83
Big Swamp				
015	1,500	4,351	76.8	685 / 793
022	2,165	4,351	77.2	1,200 / 263
030	3,000	4,351	77.9	845 / 270
040	4,000	4,351	78.7	1,030 / 297
050	5,000	4,351	79.1	828 / 993
059	5,891	4,351	79.7	849 / 50
065	6,500	4,351	80.4	1,043 / 50
070	7,000	4,351	80.7	1,155 / 64
075	7,500	4,351	81.2	976 / 91

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
085	8,500	4,241	82.0	1,090 / 100
092	9,170	4,241	82.4	1,638 / 122
100	10,000	4,241	82.7	1,809 / 80
105	10,500	4,235	82.9	1,823 / 80
109	10,901	4,235	83.0	1,955 / 80
115	11,500	4,235	83.2	374 / 564
120	12,000	4,235	83.6	401 / 607
125	12,500	4,235	83.9	539 / 222
130	13,000	4,235	84.2	362 / 550
135	13,500	4,235	84.6	437 / 207
140	14,006	4,235	84.9	267 / 545
141	14,052	4,235	85.5	267 / 545
150	15,000	4,235	85.8	272 / 760
155	15,500	4,217	86.0	744 / 634
160	16,000	4,217	86.2	1,021 / 670
169	16,872	4,217	86.5	396 / 536
175	17,500	4,217	86.8	694 / 627
180	18,000	4,217	87.1	576 / 802
185	18,500	4,217	87.4	266 / 991
190	19,000	4,217	87.7	100 / 1,144
195	19,500	4,217	88.0	70 / 864
200	20,000	4,217	88.3	70 / 1,168
205	20,500	4,198	88.7	359 / 585
210	21,000	4,198	89.1	496 / 381
215	21,500	4,198	89.6	560 / 192
221	22,065	4,198	90.1	542 / 174
225	22,500	4,198	90.5	540 / 74
230	23,000	4,198	91.0	735 / 50
235	23,500	4,198	91.5	620 / 90
241	24,101	4,198	91.9	922 / 167
249	24,865	4,175	92.3	1,067 / 119
255	25,500	4,175	92.6	989 / 63
260	26,000	4,175	92.8	830 / 276
265	26,500	4,175	93.0	444 / 199
270	27,000	4,175	93.4	342 / 183
275	27,500	4,175	93.9	511 / 240
280	28,000	4,175	94.3	89 / 781
286	28,627	4,153	94.6	568 / 588
293	29,301	4,098	94.8	365 / 729
300	30,000	4,098	95.1	407 / 828
305	30,500	4,098	95.4	208 / 741
310	31,000	4,098	95.8	368 / 493
315	31,500	4,098	96.2	313 / 552
320	32,000	4,098	96.6	70 / 1,261
325	32,500	4,098	96.8	50 / 1,263

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
330	33,000	4,098	96.9	157 / 1,346
335	33,500	4,098	97.0	167 / 1,112
341	34,141	4,030	97.3	60 / 933
348	34,801	4,030	97.6	421 / 843
355	35,500	4,030	97.8	559 / 650
357	35,689	4,030	97.4	55 / 55
357	35,736	4,030	98.5	55 / 55
363	36,327	4,030	100.2	244 / 434
369	36,902	4,030	100.3	55 / 55
369	36,949	4,030	101.3	55 / 55
377	37,672	3,999	102.3	563 / 328
385	38,500	3,999	102.5	915 / 110
390	39,020	3,999	102.6	1,070 / 49
394	39,438	3,999	102.6	993 / 182
400	40,000	3,925	102.7	744 / 150
405	40,500	3,925	102.8	505 / 392
414	41,414	3,925	103.0	1,160 / 87
420	42,000	3,925	103.0	1,260 / 50
425	42,500	3,832	103.1	955 / 149
431	43,146	3,832	103.2	1,406 / 81
438	43,795	3,832	103.4	984 / 90
445	44,500	3,832	103.5	1,353 / 120
449	44,942	3,832	103.6	1,320 / 162
456	45,641	3,832	103.5	55 / 55
457	45,687	3,832	104.1	55 / 55
460	46,000	3,773	105.0	1,116 / 89
465	46,500	2,799	105.1	898 / 185
470	47,000	2,799	105.2	609 / 160
475	47,500	2,799	105.4	557 / 242
480	48,000	2,799	105.6	464 / 112
485	48,500	2,799	105.8	759 / 50
490	49,000	2,799	105.9	758 / 44
494	49,425	2,799	106.1	709 / 50
500	50,000	2,707	106.3	486 / 282
505	50,500	2,707	106.5	363 / 316
510	51,040	2,707	106.7	150 / 689
515	51,500	2,707	106.8	87 / 528
520	52,000	2,707	107.0	118 / 569
524	52,421	2,707	107.3	216 / 390
530	53,000	2,707	107.6	402 / 275
535	53,500	2,707	108.1	212 / 110
540	54,000	2,707	108.8	211 / 214
545	54,500	2,612	109.4	300 / 200
550	55,000	2,612	109.8	550 / 112
555	55,500	2,612	110.2	600 / 50

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
561	56,094	2,612	110.6	300 / 100
561	56,140	2,612	111.6	300 / 100
570	56,954	2,544	112.0	252 / 250
577	57,736	2,544	112.4	484 / 314
584	58,373	2,544	112.8	85 / 328
589	58,946	2,544	113.5	216 / 192
594	59,400	2,544	114.0	110 / 307
600	60,000	2,489	114.4	50 / 621
604	60,417	2,489	114.5	50 / 617
610	61,000	2,489	114.9	154 / 356
615	61,500	2,489	115.2	256 / 300
620	62,000	2,489	115.5	314 / 210
624	62,393	2,489	115.7	236 / 286
632	63,214	2,489	116.4	221 / 30
640	64,000	2,489	117.2	109 / 526
645	64,500	2,397	117.4	35 / 618
650	65,000	2,397	117.8	60 / 295
655	65,500	2,397	118.5	348 / 50
660	66,000	2,397	119.0	106 / 527
665	66,500	2,397	119.3	184 / 266
670	67,000	2,397	119.8	196 / 136
674	67,442	2,312	120.3	187 / 256
680	68,000	2,090	120.9	50 / 490
685	68,500	2,090	121.3	203 / 276
690	69,000	2,015	121.6	363 / 71
695	69,500	2,015	122.0	370 / 161
699	69,907	2,015	122.2	96 / 310
704	70,432	2,015	122.7	241 / 214
707	70,729	2,015	122.9	250 / 200
708	70,775	2,015	123.5	250 / 200
710	71,000	1,987	123.6	395 / 176
715	71,469	1,987	123.7	156 / 151
720	72,000	1,987	124.1	163 / 85
724	72,418	1,987	124.4	99 / 165
730	73,000	1,987	125.0	41 / 307
735	73,500	1,987	125.4	375 / 38
741	74,092	1,907	125.8	81 / 369
745	74,500	1,907	126.0	227 / 187
751	75,059	1,907	126.4	227 / 157
754	75,435	1,907	126.7	125 / 268
760	75,952	1,907	127.0	312 / 112
764	76,443	1,907	127.3	231 / 163
772	77,214	1,859	127.9	271 / 143
Black River				
2262	226,211	21,341	29.3	891 / 100

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
2279	227,863	21,341	29.6	938 / 898
2293	229,313	21,341	29.8	733 / 1,841
2320	231,957	21,341	30.0	1,421 / 1,296
2331	233,146	21,341	30.0	1,491 / 1,558
2344	234,389	21,341	30.1	1,968 / 1,228
2366	236,562	21,341	30.3	285 / 1,557
2376	237,552	21,341	30.4	333 / 1,513
2396	239,640	21,341	30.8	140 / 1,033
2446	244,642	21,341	31.5	1,037 / 748
2461	246,107	21,341	31.7	1,255 / 199
2478	247,826	21,341	32.0	1,434 / 283
2494	249,437	21,341	32.3	919 / 267
2519	251,854	21,341	32.8	409 / 628
2544	254,386	21,341	33.3	433 / 547
2556	255,632	21,341	33.5	565 / 601
2574	257,432	21,341	33.8	692 / 669
2588	258,772	21,341	34.1	1,050 / 750
2591	259,103	22,100	34.4	1,206 / 985
2617	261,686	22,100	34.5	350 / 1,700
2632	263,171	22,100	34.6	142 / 1,989
2652	265,167	22,100	34.7	277 / 892
2652	265,222	22,100	35.1	277 / 892
2662	266,156	22,100	35.2	808 / 820
2673	267,285	22,000	35.3	1,550 / 450
2695	269,477	22,000	35.4	1,800 / 400
2714	271,444	22,000	35.6	1,458 / 170
2733	273,269	22,000	35.7	1,150 / 500
2750	275,000	22,000	35.9	1,150 / 900
2767	276,672	22,000	36.0	1,051 / 1,100
2795	279,488	22,000	36.3	575 / 1,200
2820	281,977	22,000	36.6	1,217 / 350
2840	283,977	22,000	36.9	787 / 1,004
2855	285,477	22,000	37.1	900 / 350
2876	287,626	22,000	37.5	550 / 1,800
Black River Tributary 1				
001	90	796	31.2 ¹	48 / 18
002	236	796	31.2 ¹	260 / 18
003	266	796	32.9	260 / 18
008	828	796	33.5	594 / 41
016	1,550	796	33.6	695 / 84
028	2,814	796	34.0	300 / 100
049	4,884	588	36.5	200 / 370
059	5,878	588	37.1	30 / 120
059	5,946	588	39.4	30 / 120
068	6,823	588	40.7	25 / 107

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
077	7,700	588	43.2	24 / 120
083	8,281	475	47.7	43 / 10
087	8,739	475	49.6	201 / 20
092	9,219	475	53.5	71 / 23
096	9,556	475	56.1	33 / 25
101	10,059	475	58.8	37 / 28
103	10,256	475	59.4	60 / 70
103	10,324	475	63.5	60 / 70
107	10,730	475	63.6	50 / 80
111	11,131	475	65.1	20 / 90
116	11,631	475	68.0	12 / 79
Buckhorn Creek				
003	340	1,826	69.2	103 / 135
012	1,205	1,741	70.0	126 / 133
017	1,733	1,741	70.8	115 / 16
022	2,204	1,741	71.8	129 / 20
025	2,500	1,741	72.4	152 / 78
030	3,000	1,741	73.4	211 / 16
035	3,500	1,741	74.5	98 / 75
039	3,858	1,741	75.2	247 / 35
044	4,425	1,716	75.9	23 / 172
051	5,123	1,566	77.0	194 / 15
057	5,690	1,566	77.7	206 / 90
062	6,202	1,566	78.4	165 / 62
068	6,755	1,566	79.3	234 / 15
073	7,326	1,566	80.6	19 / 141
079	7,893	1,566	81.8	51 / 167
086	8,556	1,566	83.0	51 / 31
090	9,000	1,566	84.3	66 / 117
096	9,562	1,293	85.1	38 / 144
100	10,005	1,293	85.6	81 / 194
104	10,446	1,293	85.9	20 / 23
105	10,492	1,293	87.5	20 / 23
110	11,001	1,293	88.5	59 / 196
115	11,500	1,293	88.8	65 / 115
119	11,942	1,293	89.3	73 / 142
125	12,500	1,293	89.9	92 / 146
131	13,058	1,293	90.6	110 / 31
135	13,500	1,293	91.4	160 / 42
140	13,965	1,293	91.9	113 / 39
145	14,478	1,293	93.1	19 / 106
150	15,000	1,193	94.2	46 / 106
156	15,582	1,193	95.2	75 / 70
160	16,000	1,193	96.0	33 / 192
166	16,598	1,193	96.8	56 / 101

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
170	17,000	1,193	97.8	71 / 88
175	17,500	1,193	98.6	66 / 72
181	18,070	1,193	99.1	180 / 186
186	18,573	1,058	99.6	96 / 160
190	18,965	1,058	100.4	74 / 151
193	19,336	1,058	101.1	127 / 12
199	19,888	1,058	102.0	103 / 130
205	20,500	997	102.8	58 / 131
Bulltail Creek				
006	570	1,920	57.6 ¹	770 / 166
011	1,113	1,920	57.6 ¹	491 / 450
017	1,675	1,920	57.6 ¹	639 / 536
024	2,411	1,790	57.8	633 / 149
030	3,024	1,790	58.0	1,000 / 300
035	3,530	1,790	58.4	395 / 210
040	4,005	1,790	59.0	250 / 394
047	4,737	1,790	59.8	400 / 350
048	4,783	1,790	59.8	400 / 350
053	5,283	1,790	60.4	300 / 200
059	5,896	1,450	61.4	297 / 200
065	6,460	1,450	61.9	429 / 60
070	7,025	1,450	62.2	514 / 63
074	7,447	1,450	62.5	56 / 182
Caesar Swamp				
003	341	1,990	132.0 ¹	228 / 237
006	580	1,990	132.0 ¹	300 / 87
011	1,085	1,990	132.0 ¹	12 / 286
015	1,519	1,990	132.0 ¹	204 / 261
018	1,844	1,990	132.0 ¹	311 / 224
021	2,103	1,990	132.1	306 / 250
025	2,485	1,990	132.5	72 / 220
027	2,735	1,990	132.9	83 / 285
030	3,038	1,990	133.3	51 / 300
033	3,303	1,990	133.7	16 / 250
038	3,755	1,990	134.4	100 / 200
039	3,947	1,990	135.1	36 / 49
044	4,432	1,960	135.8	56 / 187
048	4,830	1,960	136.2	12 / 300
052	5,209	1,960	136.8	112 / 124
057	5,697	1,960	137.5	42 / 12
060	5,959	1,960	138.4	42 / 229
064	6,408	1,960	138.9	152 / 233
066	6,632	1,960	139.0	308 / 200
071	7,100	1,960	139.3	185 / 132
076	7,579	1,860	139.8	344 / 85

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
080	8,001	1,860	140.1	304 / 79
083	8,317	1,860	140.4	168 / 70
088	8,807	1,860	141.4	169 / 112
093	9,275	1,860	142.0	245 / 93
098	9,750	1,860	142.6	199 / 19
103	10,315	1,810	143.4	70 / 78
105	10,491	1,810	144.0	70 / 78
108	10,796	1,810	144.4	63 / 301
112	11,245	1,810	144.7	90 / 198
117	11,747	1,810	145.2	428 / 55
122	12,236	1,810	145.4	540 / 391
125	12,537	1,680	145.5	535 / 250
128	12,830	1,680	145.7	550 / 373
133	13,314	1,680	146.1	300 / 360
137	13,693	1,680	146.3	550 / 460
141	14,144	1,150	146.5	480 / 350
143	14,334	1,150	146.6	250 / 350
146	14,566	1,150	146.8	300 / 200
148	14,754	1,010	147.4	23 / 22
151	15,131	1,010	147.8	146 / 61
156	15,589	1,010	148.8	210 / 30
161	16,098	1,010	151.1	18 / 6
166	16,615	1,010	154.1	72 / 83
171	17,140	1,010	155.1	30 / 136
177	17,709	1,010	156.4	335 / 49
183	18,251	1,010	158.2	22 / 84
188	18,801	1,010	160.6	400 / 39
193	19,253	1,010	161.7	13 / 299
197	19,733	1,010	162.0	212 / 37
202	20,167	1,010	162.3	158 / 157
206	20,648	1,010	162.8	150 / 449
211	21,130	1,010	164.0	60 / 80
216	21,605	1,010	167.0	248 / 6
221	22,144	1,010	167.9	235 / 6
227	22,697	1,010	168.4	109 / 206
231	23,134	809	168.7	13 / 56
233	23,315	809	169.3	13 / 56
237	23,688	809	169.8	8 / 124
242	24,186	809	172.3	4 / 471
247	24,658	809	173.5	4 / 293
248	24,848	809	173.7	10 / 172
252	25,176	809	174.0	238 / 38
256	25,599	809	174.4	120 / 97
261	26,081	809	175.1	137 / 50
263	26,348	809	175.5	9 / 141

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
269	26,857	712	176.2	3 / 237
273	27,314	712	176.8	53 / 206
276	27,642	712	177.2	128 / 125
280	27,966	712	177.6	84 / 171
284	28,361	712	178.3	69 / 59
288	28,798	712	179.5	178 / 78
Canty Mill Branch				
048	4,835	1,215	39.5 ¹	30 / 100
050	5,034	1,215	39.5 ¹	80 / 75
051	5,087	1,215	39.5	80 / 75
054	5,400	1,215	39.8	225 / 70
060	6,000	1,088	40.1	260 / 65
065	6,500	1,088	40.4	300 / 45
074	7,403	1,088	41.8	250 / 30
081	8,083	1,088	44.0	200 / 60
087	8,730	1,088	45.5	80 / 80
088	8,784	1,088	47.8	80 / 80
093	9,260	1,088	47.9	98 / 100
098	9,783	971	48.1	124 / 100
105	10,500	971	48.6	50 / 81
110	11,000	971	49.4	86 / 83
114	11,442	971	50.1	69 / 99
118	11,831	971	50.8	114 / 86
121	12,126	971	51.2	35 / 35
122	12,172	971	51.9	35 / 35
127	12,668	971	53.0	85 / 78
130	13,000	971	53.4	66 / 48
134	13,376	971	54.3	47 / 42
140	14,042	871	56.0	65 / 57
146	14,640	871	57.1	52 / 96
Cat Creek				
020	2,000	1,333	35.5 ¹	13 / 284
025	2,500	1,333	35.5 ¹	76 / 96
029	2,861	1,333	35.5 ¹	13 / 192
033	3,261	1,333	35.5 ¹	20 / 20
033	3,307	1,333	35.5 ¹	20 / 20
039	3,854	1,333	35.5 ¹	20 / 107
045	4,500	1,333	35.5 ¹	54 / 153
050	5,020	1,333	36.0	108 / 50
056	5,572	1,333	37.0	147 / 55
061	6,064	1,254	37.8	181 / 117
065	6,469	1,254	38.5	104 / 28
070	7,000	1,254	40.3	39 / 72
075	7,456	1,254	41.4	94 / 61
080	8,045	1,254	42.3	46 / 117

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
085	8,500	1,254	43.2	62 / 104
089	8,925	1,254	44.1	117 / 81
095	9,500	1,254	45.0	31 / 188
102	10,172	1,206	46.4	103 / 78
106	10,577	1,206	47.1	177 / 90
110	11,000	920	47.7	106 / 53
114	11,421	920	48.5	79 / 51
119	11,858	920	49.5	47 / 64
124	12,431	874	50.6	170 / 11
129	12,862	874	51.2	20 / 19
129	12,937	874	52.0	20 / 19
136	13,562	874	53.2	136 / 10
140	14,000	874	54.1	126 / 41
146	14,550	874	55.5	32 / 86
150	15,041	874	56.8	99 / 10
158	15,844	698	58.8	165 / 9
164	16,442	698	60.2	121 / 16
169	16,871	698	61.6	108 / 37
172	17,209	698	62.6	35 / 35
173	17,269	698	63.5	35 / 35
180	18,000	698	65.5	64 / 40
185	18,500	698	66.8	48 / 60
191	19,075	698	67.8	102 / 74
193	19,338	698	68.2	59 / 55
199	19,944	698	69.5	39 / 80
205	20,500	698	70.7	36 / 70
210	21,000	524	71.7	107 / 61
215	21,500	524	73.9	8 / 32
220	22,000	380	78.3	10 / 33
225	22,500	380	79.2	24 / 87
Clear Run				
018	1,839	2,107	46.8 ¹	50 / 125
027	2,676	2,107	46.8 ¹	154 / 30
032	3,191	2,107	46.8 ¹	117 / 25
033	3,265	2,107	46.8 ¹	117 / 25
038	3,785	2,046	46.8 ¹	97 / 89
045	4,455	2,046	46.8 ¹	56 / 141
050	5,000	2,046	47.4	94 / 27
055	5,500	2,046	48.2	129 / 104
060	6,000	2,046	48.5	114 / 143
066	6,580	2,046	49.0	117 / 110
071	7,112	2,046	49.6	80 / 122
083	8,311	2,046	52.3	44 / 30
091	9,089	2,046	54.6	162 / 93
098	9,782	2,046	55.4	216 / 85

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
104	10,437	2,046	56.4	104 / 23
111	11,100	1,619	57.6	20 / 393
120	12,000	1,619	58.3	147 / 20
125	12,500	1,619	59.2	144 / 20
131	13,051	1,557	60.4	220 / 22
137	13,699	1,557	61.6	92 / 100
149	14,877	1,557	64.2	126 / 37
156	15,551	1,557	65.9	53 / 89
160	16,000	1,557	66.7	135 / 45
165	16,500	1,557	67.4	45 / 155
170	17,000	1,463	67.8	112 / 171
178	17,845	1,180	68.6	154 / 12
185	18,500	1,180	70.1	141 / 12
Clifton Branch				
006	573	1,474	121.4	116 / 342
015	1,473	1,283	122.3	157 / 168
020	2,000	1,283	122.9	181 / 82
025	2,500	1,283	123.8	100 / 95
030	3,014	1,283	124.5	85 / 202
035	3,466	1,283	125.0	154 / 123
041	4,082	1,283	125.6	272 / 72
049	4,932	1,283	126.6	111 / 69
058	5,837	1,283	127.8	142 / 124
066	6,605	1,210	128.6	30 / 226
071	7,136	1,210	129.6	27 / 227
078	7,802	1,022	130.9	127 / 83
083	8,330	1,022	131.7	98 / 85
090	8,950	1,022	132.8	117 / 70
095	9,500	1,022	133.8	148 / 92
100	9,980	1,022	134.6	117 / 69
105	10,519	956	135.5	159 / 38
112	11,203	951	137.0	120 / 71
Cobb Branch				
002	227	358	40.4 ¹	65 / 96
017	1,749	358	41.9	62 / 163
025	2,500	358	44.7	102 / 156
033	3,287	358	46.5	121 / 55
041	4,142	358	48.3	60 / 41
Craddock Swamp				
005	499	847	140.5 ¹	98 / 21
010	988	847	141.4	34 / 29
011	1,149	847	143.4	34 / 29
016	1,583	847	144.2	35 / 96
021	2,096	847	144.7	35 / 124
026	2,621	847	145.3	119 / 25
032	3,218	847	146.3	88 / 37

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
037	3,654	847	148.1	71 / 26
043	4,251	847	149.4	26 / 26
049	4,858	847	151.1	50 / 27
055	5,457	683	152.0	39 / 27
059	5,863	683	152.6	48 / 32
062	6,193	683	155.2	46 / 46
066	6,585	683	155.8	191 / 26
068	6,765	683	157.3	83 / 16
069	6,941	683	158.5	18 / 19
073	7,256	683	161.0	24 / 24
078	7,780	683	162.3	30 / 23
083	8,341	683	163.5	22 / 51
089	8,896	683	164.8	21 / 42
091	9,137	527	165.6	12 / 21
093	9,284	527	166.2	50 / 21
096	9,583	527	167.0	12 / 16
Crane Creek				
005	500	2,960	56.6 ¹	453 / 140
010	1,000	2,960	57.1	126 / 104
015	1,500	2,960	58.0	194 / 404
020	2,000	2,960	58.4	28 / 160
025	2,500	2,960	59.0	227 / 97
028	2,838	2,960	59.2	111 / 382
033	3,276	2,960	59.2	67 / 277
036	3,649	2,960	59.4	130 / 123
037	3,695	2,960	59.8	130 / 123
043	4,283	2,960	60.4	165 / 168
050	5,000	2,924	60.9	425 / 224
054	5,381	2,924	61.1	128 / 116
059	5,890	2,924	61.6	24 / 153
065	6,500	2,924	62.3	76 / 100
070	7,000	2,924	62.8	215 / 83
076	7,610	2,924	63.1	317 / 75
084	8,411	2,924	64.0	162 / 39
091	9,085	2,924	64.6	191 / 192
095	9,500	2,924	64.8	236 / 117
100	10,000	2,924	65.0	62 / 179
105	10,500	2,924	65.3	295 / 153
110	11,000	2,924	65.5	24 / 145
115	11,500	2,924	66.2	197 / 123
120	11,970	2,860	66.4	135 / 257
125	12,500	2,860	66.7	293 / 73
132	13,170	2,860	67.3	137 / 102
137	13,713	2,860	68.0	129 / 86
148	14,770	1,957	69.6	179 / 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
154	15,354	1,957	70.6	207 / 23
160	15,964	1,957	71.5	17 / 98
165	16,500	1,940	72.2	207 / 239
170	17,000	1,940	72.4	126 / 159
175	17,451	1,940	72.8	32 / 30
175	17,497	1,940	73.0	32 / 30
180	17,976	1,940	74.1	146 / 148
185	18,484	1,940	74.3	196 / 91
189	18,923	1,940	74.5	209 / 179
194	19,391	1,940	74.8	46 / 215
200	20,000	1,852	75.2	139 / 357
205	20,500	1,852	75.6	148 / 261
210	21,000	1,852	75.9	94 / 270
215	21,500	1,852	76.5	113 / 126
219	21,887	1,852	77.2	191 / 72
224	22,395	1,852	78.3	40 / 282
230	23,000	1,852	78.9	117 / 263
235	23,500	1,781	79.4	100 / 139
240	24,000	1,781	80.2	27 / 324
244	24,435	1,671	80.8	286 / 68
250	25,000	1,671	82.3	15 / 118
255	25,500	1,671	83.6	137 / 101
260	26,000	1,671	84.1	151 / 143
265	26,546	1,671	84.7	15 / 256
270	27,021	1,671	85.2	77 / 255
275	27,538	1,671	85.9	61 / 155
280	28,000	1,671	86.4	165 / 258
285	28,500	1,671	86.7	26 / 211
290	29,026	1,569	87.3	108 / 208
295	29,500	1,569	87.7	129 / 139
300	30,000	1,569	88.2	97 / 159
305	30,500	1,569	89.0	72 / 171
309	30,940	1,569	89.7	215 / 140
314	31,447	1,434	90.5	186 / 80
318	31,846	1,434	91.2	30 / 30
319	31,892	1,434	92.5	30 / 30
327	32,718	1,242	93.3	399 / 163
334	33,418	1,242	93.6	175 / 65
339	33,934	1,242	94.5	85 / 95
343	34,281	1,242	95.0	12 / 222
349	34,909	1,242	95.6	322 / 102
355	35,500	1,242	96.0	153 / 250
360	36,000	1,202	96.5	95 / 103
365	36,500	1,202	97.6	109 / 123
370	37,000	1,202	98.3	47 / 190

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
375	37,545	1,202	99.1	214 / 37
381	38,124	1,070	100.1	86 / 121
389	38,865	1,070	101.2	124 / 166
395	39,477	1,070	102.2	105 / 117
400	40,000	1,070	103.1	110 / 124
405	40,500	1,070	103.8	123 / 174
410	41,000	976	104.3	128 / 138
415	41,500	976	104.8	222 / 58
420	42,000	859	105.5	29 / 128
Cypress Lake				
015	1,500	824	27.3 ¹	60 / 35
018	1,759	824	27.3 ¹	25 / 25
018	1,834	824	27.3 ¹	25 / 25
021	2,096	824	27.4	30 / 40
026	2,553	824	27.7	31 / 13
030	3,002	824	28.1	22 / 87
035	3,520	668	28.7	15 / 15
039	3,932	668	31.4	25 / 20
045	4,549	668	34.0	12 / 9
051	5,064	668	38.6	11 / 40
056	5,579	668	40.6	8 / 8
061	6,131	668	47.8	8 / 7
066	6,647	668	53.7	25 / 25
067	6,697	668	58.2	25 / 25
071	7,058	668	58.4	15 / 11
076	7,607	668	62.0	15 / 11
079	7,942	668	64.9	15 / 13
Devane Branch				
004	352	1,411	38.2 ¹	54 / 17
009	923	1,411	38.2 ¹	51 / 40
015	1,500	1,411	38.2 ¹	30 / 77
019	1,947	1,411	38.2 ¹	62 / 45
024	2,418	1,411	39.0	44 / 95
031	3,112	1,411	40.3	100 / 110
036	3,566	1,411	41.2	110 / 100
041	4,126	1,411	42.8	24 / 24
042	4,198	1,254	44.5	24 / 24
045	4,486	1,254	45.0	60 / 35
052	5,174	1,254	46.5	118 / 40
057	5,706	1,254	48.0	153 / 76
067	6,659	1,254	50.3	62 / 75
073	7,301	1,254	52.6	91 / 99
081	8,088	1,254	54.8	118 / 51
088	8,820	1,254	56.5	86 / 66
093	9,327	1,254	57.4	96 / 133

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
102	10,210	1,124	59.4	17 / 130
110	11,035	1,124	61.8	51 / 91
114	11,400	1,124	62.7	103 / 19
121	12,100	1,124	64.4	54 / 147
126	12,576	1,124	65.2	133 / 90
130	12,987	1,124	66.0	25 / 61
130	13,041	1,124	67.8	25 / 61
134	13,432	1,124	68.1	60 / 76
140	14,046	1,124	69.6	89 / 67
145	14,545	982	71.7	23 / 96
151	15,054	982	74.2	59 / 94
155	15,545	982	74.7	122 / 102
161	16,069	835	75.1	163 / 15
168	16,779	835	77.0	38 / 47
174	17,361	835	79.5	38 / 123
Doctors Creek				
399	39,875	3,510	57.6	901 / 769
405	40,493	3,510	57.6	1,382 / 441
Encoh Mill Creek				
002	154	1,093	30.8 ¹	40 / 40
005	536	1,093	31.3	40 / 40
014	1,370	1,093	34.5	300 / 30
022	2,152	1,093	35.2	250 / 80
022	2,197	1,093	36.3	250 / 80
028	2,827	1,093	36.5	100 / 200
035	3,500	1,093	38.3	60 / 250
040	4,000	1,093	40.0	60 / 300
044	4,432	1,093	41.1	70 / 150
049	4,906	1,093	44.4	20 / 20
050	5,046	1,093	64.6	70 / 200
085	8,500	1,093	65.1	186 / 217
091	9,077	1,093	65.3	219 / 178
096	9,649	730	65.4	178 / 87
101	10,110	730	65.6	30 / 108
106	10,600	730	65.9	103 / 87
110	11,000	730	66.0	127 / 92
114	11,449	730	66.2	48 / 100
119	11,938	730	66.5	44 / 112
124	12,441	730	67.2	13 / 139
Gaddy Branch				
020	1,996	385	49.7 ¹	85 / 14
030	3,036	385	52.6	113 / 70
035	3,500	354	54.6	72 / 35
040	4,000	354	57.3	11 / 84
046	4,600	354	61.6	38 / 35
050	5,000	354	63.6	16 / 88

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
055	5,500	354	65.3	35 / 26
059	5,855	354	67.8	39 / 30
063	6,295	354	71.4	34 / 64
064	6,402	354	77.1	34 / 64
064	6,444	354	77.1	80 / 98
065	6,492	354	77.1	115 / 160
066	6,604	354	84.2	310 / 408
069	6,869	306	84.2	254 / 186
073	7,289	306	84.2	200 / 193
075	7,499	306	84.2	180 / 177
080	7,985	306	84.2	42 / 55
085	8,499	306	84.2	19 / 19
090	9,000	306	88.1	8 / 31
094	9,392	306	95.1	28 / 7
Gilmore Swamp				
010	1,041	3,805	100.3 ¹	436 / 158
016	1,585	3,805	100.9	409 / 172
016	1,645	3,805	100.9	409 / 172
026	2,612	3,805	102.7	301 / 274
031	3,077	3,805	103.6	300 / 191
038	3,772	3,805	104.8	206 / 258
038	3,832	3,805	105.4	206 / 258
047	4,727	3,720	106.4	97 / 315
055	5,543	3,465	107.3	362 / 98
061	6,145	3,465	107.8	240 / 211
068	6,848	3,465	108.4	416 / 130
075	7,500	3,408	108.8	385 / 136
080	8,000	3,179	109.2	386 / 128
086	8,562	3,179	109.7	378 / 180
096	9,563	3,179	110.8	343 / 182
100	10,021	3,179	111.4	312 / 196
106	10,614	3,179	112.5	144 / 150
109	10,923	3,179	112.7	50 / 40
110	10,985	3,179	113.1	50 / 40
115	11,463	3,179	114.3	126 / 183
120	12,000	3,179	114.6	133 / 340
125	12,500	3,179	114.9	328 / 198
129	12,859	3,179	115.1	282 / 253
136	13,588	2,274	115.5	163 / 261
143	14,345	2,274	116.1	173 / 225
151	15,104	2,274	116.8	189 / 104
154	15,449	2,274	117.2	314 / 36
159	15,852	2,274	117.7	183 / 237
165	16,500	2,106	118.4	281 / 88
170	17,000	2,106	119.0	264 / 32

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
175	17,500	2,106	120.0	193 / 105
180	18,000	2,106	121.1	238 / 68
184	18,419	2,106	121.8	366 / 38
190	19,000	2,106	122.6	155 / 200
195	19,500	1,853	123.8	114 / 149
200	20,000	1,853	124.9	143 / 143
205	20,500	1,853	125.8	184 / 70
210	21,000	1,853	126.9	259 / 31
215	21,529	1,853	128.0	205 / 119
221	22,063	1,853	129.0	92 / 128
226	22,600	1,853	130.2	59 / 78
227	22,682	1,853	130.2	59 / 78
231	23,064	1,853	131.9	129 / 78
238	23,774	1,853	133.6	213 / 65
244	24,445	1,679	134.4	123 / 62
252	25,162	1,679	134.8	66 / 77
252	25,236	1,679	139.1	66 / 77
256	25,585	1,169	139.2	52 / 86
260	26,000	1,169	139.4	88 / 107
266	26,602	1,169	140.2	102 / 115
271	27,053	1,169	140.7	68 / 148
275	27,535	1,169	141.3	95 / 67
280	28,000	1,169	142.3	43 / 76
Gilmore Swamp Tributary				
003	322	966	115.1 ¹	100 / 200
010	968	966	115.1 ¹	80 / 200
015	1,500	966	115.1 ¹	55 / 207
020	2,000	966	115.1 ¹	67 / 185
025	2,486	966	115.1 ¹	22 / 22
026	2,568	966	115.1 ¹	22 / 22
031	3,056	966	118.2	188 / 91
035	3,533	966	118.7	179 / 61
040	4,000	966	119.6	108 / 51
045	4,500	966	121.0	217 / 51
050	5,000	966	121.7	71 / 110
055	5,500	966	122.8	124 / 103
060	6,000	895	124.0	169 / 34
065	6,500	895	125.0	211 / 29
070	6,969	895	125.7	150 / 35
075	7,457	895	126.6	156 / 21
079	7,923	895	127.9	79 / 65
083	8,262	895	128.7	50 / 50
083	8,307	895	133.0	50 / 50
090	9,000	895	133.0	86 / 69
095	9,500	800	133.2	44 / 109

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
100	10,000	800	133.6	90 / 108
105	10,500	800	134.1	100 / 80
112	11,170	762	135.7	100 / 50
Goshen Swamp				
1350	134,962	3,730	116.9	685 / 270
1362	136,211	2,650	117.6	232 / 429
1373	137,270	2,650	118.2	159 / 522
1385	138,469	2,650	119.0	397 / 459
1394	139,426	2,650	119.7	448 / 256
1409	140,937	2,320	120.6	302 / 449
1420	142,050	2,320	121.3	19 / 489
1431	143,133	2,320	122.3	48 / 364
1444	144,429	2,320	123.4	138 / 352
1456	145,604	2,320	124.2	377 / 334
1471	147,075	2,320	125.4	57 / 340
1483	148,310	2,130	126.7	61 / 299
1497	149,690	2,130	128.0	368 / 245
1506	150,621	2,130	128.8	290 / 376
1517	151,733	2,130	129.6	516 / 104
1529	152,885	2,130	130.7	138 / 346
1540	154,010	2,130	131.6	225 / 405
1543	154,255	2,130	131.8	100 / 100
1543	154,305	2,130	131.8	100 / 100
1551	155,086	2,130	132.6	389 / 100
1561	156,083	2,130	133.6	63 / 382
1568	156,811	2,130	134.7	232 / 181
1574	157,366	1,460	135.7	155 / 112
1579	157,924	1,460	136.7	128 / 134
1586	158,560	1,460	137.6	170 / 134
1592	159,160	1,460	138.2	182 / 272
1596	159,564	1,460	138.6	87 / 230
1597	159,714	1,460	138.8	54 / 56
1598	159,765	1,460	139.5	54 / 56
1600	159,994	1,460	140.0	233 / 108
1605	160,505	1,460	140.5	188 / 158
1611	161,128	1,460	141.2	26 / 219
1617	161,697	1,460	141.8	56 / 281
1623	162,347	1,460	142.5	116 / 171
1629	162,886	1,460	143.6	40 / 140
1634	163,392	1,460	144.8	129 / 171
1640	164,039	1,460	145.5	21 / 265
1646	164,551	1,460	145.9	109 / 226
1650	165,037	1,460	146.3	161 / 115
1656	165,553	1,460	146.6	198 / 93
1662	166,162	1,250	147.1	25 / 259

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
1663	166,339	1,250	147.2	38 / 38
1664	166,386	1,250	147.5	38 / 38
1667	166,679	1,250	147.6	181 / 36
1673	167,254	1,250	148.2	159 / 66
1677	167,726	1,250	149.0	129 / 83
1682	168,215	1,250	149.6	107 / 188
1687	168,680	1,250	150.0	134 / 178
1692	169,244	1,250	151.0	87 / 102
1697	169,735	1,250	152.0	126 / 100
1704	170,363	1,250	152.4	235 / 105
1709	170,856	1,250	152.8	143 / 125
1714	171,373	1,250	153.4	59 / 154
1718	171,839	1,250	154.4	72 / 139
1724	172,368	1,250	155.4	240 / 15
1729	172,877	1,250	156.0	221 / 58
1733	173,333	1,250	156.3	143 / 89
1739	173,876	1,250	156.9	174 / 22
1743	174,332	1,020	157.3	229 / 46
1749	174,884	1,020	157.9	75 / 87
1756	175,586	1,020	159.0	172 / 21
1759	175,933	1,020	159.9	80 / 52
1763	176,255	1,020	160.9	92 / 90
1767	176,738	1,020	161.6	55 / 147
1772	177,189	1,020	161.8	50 / 75
1773	177,284	1,020	162.4	50 / 75
1778	177,813	1,020	162.6	86 / 48
1783	178,259	1,020	163.7	100 / 50
1785	178,469	1,020	163.9	75 / 100
1786	178,564	1,020	166.8	75 / 100
1787	178,744	1,020	166.9	92 / 109
Great Coharie Creek				
462	46,246	13,172	57.4	88 / 2,587
475	47,465	13,172	57.5	140 / 766
492	49,173	13,172	57.7	452 / 1,865
508	50,805	13,172	57.9	239 / 1,321
522	52,158	13,172	58.1	674 / 1,091
546	54,550	9,494	58.3	154 / 1,427
547	54,714	9,494	58.5	154 / 1,427
565	56,469	9,494	58.7	213 / 1,688
579	57,898	9,494	58.9	333 / 906
598	59,842	9,494	59.4	660 / 695
611	61,080	9,448	59.7	934 / 138
614	61,379	9,448	59.8	371 / 376
624	62,390	9,448	60.0	837 / 450
631	63,092	9,448	60.2	889 / 243

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
646	64,570	9,448	60.6	579 / 781
661	66,123	9,448	61.0	341 / 1,174
670	66,954	9,448	61.2	150 / 716
676	67,573	9,448	61.4	477 / 367
679	67,907	9,448	61.5	419 / 764
685	68,472	9,448	61.7	228 / 849
698	69,821	9,448	62.0	462 / 740
704	70,440	9,448	62.2	445 / 649
716	71,583	9,448	62.6	302 / 762
728	72,814	9,300	63.3	53 / 53
730	72,968	9,300	63.9	53 / 53
736	73,580	9,300	64.7	63 / 1,089
749	74,940	9,300	64.9	213 / 1,409
758	75,839	9,300	65.1	623 / 1,614
769	76,889	9,300	65.3	885 / 305
779	77,920	9,268	65.5	761 / 540
788	78,811	9,268	65.6	885 / 261
794	79,448	9,268	65.8	443 / 275
799	79,876	9,268	65.9	477 / 1,331
803	80,267	9,268	66.0	393 / 435
810	80,962	9,268	66.3	342 / 593
816	81,556	9,268	66.4	686 / 973
818	81,844	9,268	66.5	739 / 1,129
822	82,174	9,268	66.5	942 / 752
828	82,776	9,268	66.6	891 / 942
841	84,114	9,169	66.9	155 / 867
848	84,839	9,169	67.0	696 / 794
854	85,401	9,045	67.3	941 / 530
857	85,689	9,045	67.4	701 / 508
860	86,009	9,045	67.5	790 / 577
865	86,503	9,045	67.7	653 / 451
869	86,869	9,045	67.9	133 / 219
874	87,413	9,045	68.1	468 / 621
884	88,400	9,045	68.5	688 / 122
888	88,816	9,045	68.7	484 / 317
893	89,327	9,045	68.9	634 / 799
899	89,943	9,045	69.0	510 / 824
906	90,577	9,045	69.2	84 / 1,196
913	91,312	9,045	69.4	188 / 1,297
915	91,525	9,045	69.4	188 / 1,297
927	92,656	8,977	69.7	554 / 1,058
932	93,212	8,977	69.9	796 / 973
936	93,632	8,977	70.0	807 / 969
943	94,288	8,977	70.1	677 / 1,019
946	94,648	8,977	70.2	267 / 1,160

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
949	94,853	8,977	70.3	83 / 1,381
952	95,170	8,977	70.4	299 / 1,201
960	96,016	8,977	70.7	356 / 1,125
976	97,586	8,977	71.3	844 / 937
980	98,038	8,977	71.4	558 / 594
983	98,260	8,977	71.5	402 / 481
986	98,572	8,977	71.6	76 / 796
990	99,011	8,977	71.9	71 / 892
995	99,509	8,977	72.2	170 / 856
997	99,669	8,977	72.2	170 / 856
1006	100,604	8,921	72.7	61 / 890
1015	101,466	8,921	73.1	578 / 1,055
1020	101,991	8,921	73.2	440 / 1,025
1031	103,133	8,921	73.7	718 / 613
1035	103,545	8,921	73.8	109 / 701
1046	104,576	8,921	74.2	145 / 556
1049	104,906	8,921	74.3	120 / 583
1055	105,514	8,921	74.6	112 / 266
1059	105,868	8,921	74.7	946 / 128
1060	106,048	8,833	74.8	1,043 / 100
1062	106,244	8,833	75.8	104 / 100
1078	107,834	8,833	76.1	124 / 176
1085	108,502	8,833	76.3	882 / 287
1091	109,056	8,739	76.5	866 / 501
1100	109,998	8,739	76.8	532 / 977
1105	110,489	8,739	76.9	303 / 722
1111	111,130	8,739	77.2	653 / 1,147
1121	112,098	8,739	77.4	306 / 1,383
1126	112,597	8,739	77.6	402 / 1,182
1132	113,226	8,739	77.8	382 / 1,280
1141	114,056	8,675	78.1	397 / 1,334
1157	115,724	8,675	78.6	811 / 618
1164	116,414	8,675	78.8	931 / 843
1168	116,824	8,675	78.9	788 / 512
1175	117,544	8,675	79.2	735 / 626
1182	118,177	8,675	79.5	59 / 1,076
1188	118,797	8,675	79.8	129 / 1,084
1193	119,256	8,621	80.0	284 / 897
1201	120,132	8,621	80.4	231 / 1,108
1209	120,884	8,621	80.7	567 / 853
1220	122,019	8,621	81.2	61 / 1,305
1231	123,114	8,621	81.7	682 / 1,226
1241	124,100	8,621	82.0	671 / 960
1250	125,009	8,621	82.4	130 / 1,077
1260	125,957	8,621	82.8	84 / 1,000

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
1267	126,710	8,565	83.2	97 / 2,091
1279	127,869	8,565	83.7	154 / 1,121
1283	128,284	8,565	83.9	95 / 1,248
1290	129,005	8,565	84.4	90 / 1,231
1628	162,775	7,240	99.4	158 / 1,486
1640	163,964	7,240	99.8	347 / 1,690
1652	165,183	7,240	100.2	511 / 1,307
1658	165,790	7,240	100.5	569 / 1,113
1669	166,906	7,170	101.1	40 / 1,462
1672	167,165	7,170	102.2	40 / 1,462
1682	168,228	7,170	102.6	500 / 1,296
1692	169,223	7,170	102.8	744 / 1,389
1710	171,006	7,170	103.0	1,383 / 459
1715	171,521	7,170	103.1	1,488 / 715
1727	172,716	7,070	103.4	763 / 1,077
1735	173,540	7,070	103.6	681 / 1,491
1744	174,449	7,070	103.9	1,043 / 924
1752	175,243	7,070	104.2	955 / 420
1765	176,500	7,070	104.8	423 / 1,193
1780	178,003	7,070	105.3	813 / 1,146
1787	178,712	7,070	105.5	784 / 1,335
1800	179,973	6,690	105.9	1,061 / 339
1816	181,644	6,690	106.5	604 / 723
1827	182,673	6,690	107.0	561 / 174
1840	184,010	6,690	107.6	1,031 / 493
1849	184,910	6,630	107.9	1,339 / 523
1860	186,041	6,630	108.2	863 / 1,063
1867	186,685	6,630	108.3	508 / 1,672
1874	187,367	6,630	108.4	801 / 1,182
1883	188,327	6,630	108.7	523 / 1,084
1897	189,738	6,590	109.0	502 / 915
1910	190,989	6,590	109.4	641 / 959
1924	192,374	6,590	109.8	847 / 321
1933	193,287	6,590	110.2	419 / 820
1946	194,622	6,590	110.7	243 / 1,179
1961	196,122	6,590	111.2	705 / 941
1971	197,096	6,480	111.6	680 / 1,089
1980	197,991	6,480	111.8	502 / 1,027
1987	198,692	6,480	112.0	862 / 661
1992	199,215	6,250	112.2	884 / 562
2005	200,470	6,250	112.4	1,461 / 87
2012	201,229	6,250	112.6	709 / 484
2022	202,246	6,070	113.0	484 / 226
2051	205,109	5,960	114.2	54 / 1,084
2061	206,107	5,960	114.9	415 / 780

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
2072	207,210	5,960	115.3	146 / 830
2082	208,192	5,960	115.6	52 / 1,082
2095	209,525	5,600	116.1	649 / 283
2110	210,975	5,600	116.7	190 / 353
2124	212,355	5,600	117.2	616 / 794
2135	213,513	5,600	117.6	450 / 745
2154	215,440	5,600	118.2	1,050 / 54
2163	216,310	5,600	118.5	653 / 54
2171	217,127	5,600	118.9	343 / 197
2180	217,983	5,540	119.4	53 / 53
2183	218,267	5,540	120.0	53 / 53
2194	219,354	5,540	120.5	339 / 820
2199	219,913	5,540	120.6	56 / 1,143
2205	220,548	5,480	120.8	147 / 1,265
2215	221,500	5,480	121.0	529 / 814
2223	222,340	5,480	121.3	778 / 544
2236	223,646	5,430	121.8	197 / 172
2245	224,474	5,430	122.2	199 / 390
2253	225,298	5,430	122.6	508 / 370
2261	226,100	5,430	122.9	709 / 272
2272	227,160	5,430	123.3	682 / 317
2279	227,864	5,430	123.6	316 / 552
2286	228,638	5,430	124.0	246 / 589
2308	230,756	4,590	125.2	426 / 399
2322	232,215	4,590	126.0	274 / 606
2337	233,704	4,590	126.8	320 / 456
2340	234,013	4,590	127.0	355 / 313
2346	234,594	4,590	127.4	97 / 92
2349	234,890	4,590	128.1	97 / 91
2353	235,277	4,550	128.4	260 / 455
2362	236,203	3,770	128.6	763 / 317
2370	237,032	3,770	128.7	817 / 415
2376	237,587	3,770	128.8	785 / 401
2385	238,488	3,770	129.0	1,004 / 250
2391	239,106	3,770	129.1	836 / 149
2396	239,593	3,720	129.3	857 / 146
2401	240,130	3,720	129.6	928 / 144
2403	240,267	3,720	130.4	928 / 144
2405	240,540	3,720	130.4	778 / 700
2412	241,243	3,720	130.5	399 / 693
2419	241,863	3,720	130.6	253 / 775
2425	242,535	3,660	130.7	388 / 263
2433	243,323	3,660	131.0	585 / 331
2440	244,014	3,660	131.2	479 / 366
2447	244,651	3,660	131.5	197 / 171

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
2451	245,083	3,660	131.8	295 / 338
2465	246,497	3,010	132.5	774 / 107
2469	246,877	3,010	132.7	639 / 219
2483	248,335	3,010	133.9	131 / 364
2488	248,791	3,010	134.4	265 / 282
2498	249,768	2,180	135.2	68 / 412
2508	250,778	2,180	135.9	150 / 306
2514	251,402	2,180	136.9	21 / 21
2517	251,695	2,180	137.8	21 / 21
2522	252,152	2,180	138.6	150 / 280
2529	252,902	2,180	139.2	25 / 268
2541	254,120	1,960	140.2	23 / 255
2549	254,880	1,960	140.9	213 / 36
2559	255,881	1,960	141.9	86 / 114
2565	256,494	1,960	142.6	25 / 126
2575	257,500	1,960	144.2	25 / 25
2578	257,817	1,960	145.6	25 / 25
2582	258,163	1,960	145.9	257 / 26
2589	258,909	1,770	146.3	26 / 293
2600	260,000	1,770	147.1	53 / 106
2609	260,903	1,770	148.0	34 / 34
2616	261,600	1,770	148.7	34 / 34
2620	261,970	1,770	149.0	31 / 31
2623	262,332	1,770	149.3	31 / 30
2626	262,604	1,770	149.4	34 / 34
2628	262,806	1,770	149.6	33 / 32
2631	263,079	1,770	149.7	30 / 29
2632	263,158	1,770	149.8	33 / 33
2633	263,314	1,770	149.9	33 / 33
2635	263,450	1,770	150.0	33 / 33
2636	263,580	1,770	153.5	550 / 106
2638	263,827	1,770	153.5	400 / 69
2642	264,150	1,770	153.5	344 / 235
2645	264,455	1,770	153.5	305 / 322
2648	264,827	1,770	153.5	342 / 185
2652	265,223	1,770	153.5	245 / 119
2656	265,582	1,770	153.5	244 / 140
2658	265,829	1,770	153.5	139 / 145
2661	266,144	1,770	153.6	181 / 153
2667	266,672	1,770	155.2	25 / 22
2670	267,044	1,770	157.9	19 / 40
2673	267,335	1,770	159.6	55 / 21
2683	268,338	1,440	161.0	57 / 54
2690	268,981	1,440	161.6	30 / 72
2694	269,432	1,440	162.4	25 / 35

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
2698	269,813	1,440	168.8	25 / 35
2704	270,390	1,440	168.8	50 / 55
2710	271,018	1,440	169.0	93 / 87
2718	271,763	1,440	169.2	97 / 75
2727	272,732	1,440	169.7	93 / 111
2740	274,036	1,340	171.1	97 / 95
2747	274,686	1,340	173.0	121 / 74
2748	274,832	1,340	173.4	37 / 31
2750	274,969	1,340	179.9	265 / 317
2761	276,091	1,340	179.9	223 / 305
2775	277,481	1,340	180.1	242 / 48
2799	279,860	1,200	182.2	27 / 42
Great Coharie Creek Tributary 1				
003	344	597	66.7 ¹	115 / 43
009	878	597	66.7 ¹	211 / 134
014	1,406	597	66.7 ¹	122 / 59
019	1,897	597	68.4	47 / 18
022	2,225	597	71.1	18 / 18
027	2,688	597	73.4	18 / 116
032	3,157	597	76.0	26 / 27
036	3,567	597	79.8	17 / 48
040	4,024	488	82.2	70 / 19
045	4,543	488	85.7	17 / 17
050	5,002	488	91.2	17 / 17
055	5,517	488	94.7	44 / 26
059	5,945	488	97.6	16 / 16
064	6,414	488	103.1	40 / 16
Great Coharie Creek Tributary 2				
005	549	513	66.9 ¹	183 / 25
011	1,063	513	66.9 ¹	213 / 25
016	1,553	513	66.9 ¹	106 / 22
022	2,168	513	67.1	24 / 24
027	2,693	497	71.5	27 / 24
032	3,228	497	73.7	53 / 53
033	3,333	497	78.4	53 / 53
038	3,835	497	78.5	8 / 8
044	4,404	497	85.1	10 / 10
049	4,928	497	88.5	18 / 18
053	5,346	497	91.0	17 / 50
058	5,833	497	93.8	17 / 17
064	6,417	497	98.8	17 / 25
067	6,736	497	100.7	17 / 17
Great Coharie Creek Tributary 3				
005	496	1,086	113.0 ¹	205 / 141
010	992	1,086	113.0 ¹	255 / 147
015	1,504	1,086	113.6	22 / 58

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
020	2,025	1,086	115.3	109 / 68
026	2,568	1,086	116.8	21 / 98
032	3,177	1,086	120.1	47 / 89
036	3,610	1,086	121.2	79 / 83
041	4,127	1,086	122.4	20 / 160
046	4,594	1,086	123.7	19 / 77
050	5,028	1,086	125.0	29 / 87
056	5,611	1,086	125.7	65 / 85
061	6,055	1,086	126.0	103 / 70
066	6,567	1,086	126.7	32 / 33
071	7,130	1,086	128.0	124 / 74
077	7,664	937	128.7	38 / 28
078	7,835	937	130.5	38 / 28
083	8,257	937	130.7	41 / 149
088	8,765	937	131.2	47 / 27
092	9,230	937	132.3	57 / 25
096	9,554	937	133.0	58 / 51
100	10,012	937	133.9	21 / 21
104	10,401	937	135.4	21 / 52
109	10,891	937	136.6	20 / 20
114	11,378	937	138.1	43 / 48
117	11,718	645	138.7	18 / 21
124	12,361	645	140.2	63 / 18
126	12,631	645	140.8	44 / 18
133	13,278	645	143.5	18 / 18
138	13,809	645	146.6	17 / 48
142	14,193	645	147.8	17 / 64
Great Coharie Creek Tributary 4				
046	4,599	275	49.8	7 / 171
049	4,871	275	52.4	7 / 61
052	5,162	275	53.3	7 / 189
057	5,650	275	54.4	7 / 132
061	6,087	275	54.9	7 / 233
064	6,352	275	58.6	26 / 12
069	6,882	275	64.1	36 / 7
073	7,274	275	67.2	51 / 7
076	7,564	275	72.1	7 / 35
078	7,754	275	76.3	7 / 21
079	7,948	275	77.3	7 / 69
Great Coharie Creek Tributary 5				
014	1,413	792	54.6 ²	30 / 23
021	2,109	792	54.6 ¹	24 / 24
025	2,475	664	56.0	47 / 11
030	3,000	664	58.2	236 / 15
037	3,684	664	59.5	109 / 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
041	4,115	664	61.4	80 / 9
043	4,337	664	62.1	78 / 121
047	4,660	664	62.3	40 / 45
048	4,778	664	64.2	40 / 45
053	5,274	664	64.7	9 / 121
056	5,632	664	65.5	51 / 139
061	6,122	583	66.6	76 / 30
066	6,622	583	68.4	57 / 65
071	7,133	583	70.4	75 / 33
075	7,530	583	71.7	96 / 57
080	7,964	583	72.6	169 / 39
085	8,503	583	74.8	21 / 113
091	9,115	583	78.2	70 / 87
096	9,572	583	80.5	8 / 97
098	9,805	583	82.9	10 / 54
Great Coharie Creek Tributary 6				
011	1,093	536	100.0 ²	47 / 211
015	1,534	536	100.8	71 / 16
020	2,044	536	103.4	30 / 46
024	2,356	536	105.4	8 / 99
026	2,583	536	106.4	46 / 104
030	2,983	536	107.4	8 / 103
035	3,475	536	110.5	67 / 71
040	4,028	536	113.1	99 / 8
Hoe Swamp				
014	1,391	1,733	118.6	354 / 98
020	2,000	1,707	119.5	161 / 149
026	2,595	1,707	120.3	247 / 164
030	3,000	1,707	120.7	365 / 123
035	3,500	1,707	121.3	172 / 123
040	3,973	1,707	122.0	284 / 150
045	4,500	1,611	122.4	330 / 90
050	5,000	1,611	123.0	302 / 100
054	5,446	1,611	123.3	172 / 151
059	5,924	1,550	123.8	97 / 183
065	6,476	1,550	124.5	262 / 55
070	7,000	1,550	125.2	172 / 105
079	7,892	1,550	126.1	218 / 142
085	8,500	1,550	126.7	363 / 30
094	9,378	1,550	127.7	30 / 388
096	9,611	1,550	127.9	39 / 197
097	9,685	1,550	130.3	39 / 197
106	10,569	1,453	130.5	139 / 325
114	11,393	1,453	130.7	154 / 172
120	12,000	1,453	131.2	156 / 206

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
126	12,604	1,453	131.9	169 / 34
134	13,359	1,453	133.0	84 / 194
140	13,962	1,453	133.8	89 / 72
147	14,748	1,354	134.8	81 / 100
156	15,592	1,126	135.5	174 / 82
161	16,080	1,126	135.9	95 / 101
166	16,642	1,126	136.6	76 / 43
171	17,082	1,126	137.3	150 / 20
176	17,632	1,126	137.9	135 / 20
184	18,365	1,126	138.7	65 / 139
190	18,971	1,126	139.4	116 / 49
195	19,496	1,053	140.2	46 / 107
200	20,000	1,053	140.8	173 / 148
205	20,452	1,053	141.0	34 / 34
205	20,526	1,053	142.3	34 / 34
210	20,987	857	142.6	104 / 47
213	21,334	857	142.7	139 / 59
217	21,740	857	143.0	58 / 108
220	22,040	857	143.2	40 / 106
221	22,114	857	145.7	40 / 106
230	22,964	857	145.9	113 / 161
235	23,459	800	146.2	137 / 23
239	23,922	800	146.7	82 / 63
245	24,458	542	147.5	16 / 85
251	25,106	542	148.7	32 / 28
257	25,685	542	150.9	20 / 67
261	26,148	542	152.6	20 / 120
266	26,632	498	154.5	20 / 27
271	27,091	498	157.0	20 / 17
Hornet Swamp				
008	782	1,203	133.2	72 / 38
012	1,199	1,203	133.9	33 / 24
016	1,571	1,203	134.8	87 / 48
022	2,177	1,203	135.9	91 / 20
024	2,355	1,203	141.6	350 / 160
032	3,198	1,203	141.6	291 / 159
039	3,872	1,203	141.6	134 / 47
046	4,605	1,203	141.6	94 / 202
050	5,018	1,099	141.6	123 / 134
057	5,695	1,099	142.6	31 / 53
058	5,826	1,099	145.6	31 / 53
061	6,134	1,099	145.8	39 / 58
067	6,704	1,099	146.1	63 / 38
071	7,086	1,099	146.3	26 / 26
074	7,411	1,099	146.7	26 / 26

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
078	7,755	1,099	147.1	17 / 26
079	7,931	1,099	147.7	20 / 27
080	8,041	1,099	148.1	19 / 27
082	8,230	1,099	148.7	28 / 28
086	8,645	1,099	149.4	30 / 29
092	9,174	966	149.9	22 / 30
093	9,261	966	150.6	21 / 21
097	9,688	966	151.1	20 / 20
099	9,893	966	151.5	20 / 20
103	10,320	966	152.4	20 / 20
107	10,664	966	153.7	25 / 25
112	11,244	966	155.1	28 / 28
115	11,492	966	155.8	27 / 27
117	11,724	966	156.8	22 / 23
119	11,872	966	157.6	27 / 27
122	12,240	966	158.7	24 / 24
126	12,639	966	159.8	30 / 24
129	12,899	966	160.4	26 / 21
131	13,058	828	162.1	26 / 26
138	13,786	828	162.7	23 / 23
144	14,386	828	163.6	21 / 21
149	14,857	658	164.8	64 / 22
154	15,411	658	165.4	31 / 49
158	15,820	658	166.1	17 / 24
163	16,291	658	167.3	26 / 37
164	16,419	480	168.8	26 / 37
168	16,848	480	169.9	15 / 15
Horsepen Branch				
007	699	385	70.5 ³	8 / 99
013	1,284	385	74.5	64 / 8
018	1,805	385	78.1	23 / 40
022	2,238	385	80.9	19 / 35
026	2,588	385	83.7	30 / 45
031	3,125	316	87.4	48 / 34
035	3,493	316	90.7	40 / 25
040	3,968	316	96.1	70 / 8
045	4,538	316	99.0	100 / 30
050	4,989	316	100.9	65 / 8
053	5,281	252	102.6	8 / 55
055	5,504	252	103.5	10 / 11
056	5,610	252	105.2	11 / 11
061	6,101	252	108.0	18 / 7
Johnson Mill Branch				
014	1,399	1,041	67.9	24 / 73
020	2,000	1,041	69.8	23 / 23

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
025	2,500	1,041	71.8	22 / 22
030	3,000	1,041	73.8	20 / 20
035	3,500	1,041	75.6	126 / 31
040	4,006	1,041	77.1	18 / 35
045	4,500	1,041	79.4	80 / 116
050	4,993	1,041	81.0	38 / 99
056	5,580	1,041	83.5	94 / 41
061	6,107	1,041	84.4	104 / 19
067	6,659	948	85.4	77 / 19
069	6,946	948	85.8	20 / 20
070	7,002	948	87.3	20 / 20
074	7,416	948	87.8	19 / 19
077	7,685	948	89.3	17 / 17
079	7,857	948	90.7	59 / 238
081	8,112	948	90.8	31 / 167
085	8,500	948	91.4	32 / 56
090	9,029	948	93.1	30 / 142
095	9,508	948	94.2	20 / 40
100	9,994	948	96.4	19 / 48
106	10,649	710	100.2	16 / 19
110	11,017	710	102.3	20 / 20
116	11,591	710	104.5	21 / 20
117	11,703	710	105.1	19 / 11
118	11,759	710	106.5	19 / 20
121	12,073	710	107.2	38 / 22
125	12,500	710	108.0	18 / 18
128	12,762	710	108.7	18 / 17
130	12,967	710	109.3	23 / 16
Jones Swamp				
050	5,000	1,845	110.1 ¹	177 / 555
055	5,500	1,845	110.1	221 / 286
060	6,000	1,845	110.5	50 / 250
065	6,500	1,845	111.2	106 / 408
070	7,000	1,754	111.8	108 / 112
075	7,500	1,754	112.7	298 / 122
080	8,000	1,754	113.0	421 / 188
085	8,547	1,754	113.4	233 / 211
089	8,880	1,754	113.5	54 / 54
089	8,926	1,754	113.8	54 / 54
096	9,576	1,754	114.2	206 / 342
103	10,270	1,754	114.8	320 / 55
110	11,000	1,754	116.3	263 / 70
115	11,500	1,754	117.4	219 / 148
120	12,000	1,657	118.4	241 / 31
125	12,500	1,208	119.2	15 / 200

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
130	13,013	1,208	119.8	102 / 151
135	13,513	1,208	120.8	40 / 130
140	14,013	1,208	122.0	40 / 267
145	14,513	1,208	122.4	161 / 123
150	15,013	1,208	122.8	120 / 120
158	15,800	1,208	124.1	55 / 135
163	16,254	1,117	124.9	37 / 37
163	16,304	1,117	125.5	37 / 37
169	16,929	1,117	126.8	34 / 129
175	17,468	1,117	127.7	15 / 15
179	17,949	1,117	129.6	25 / 180
184	18,396	1,117	129.9	30 / 250
189	18,928	1,117	130.0	30 / 20
193	19,295	1,117	132.0	42 / 14
198	19,785	1,117	133.2	77 / 154
202	20,198	1,117	133.6	48 / 143
208	20,766	1,117	134.2	119 / 112
213	21,266	1,117	135.0	19 / 259
217	21,687	975	135.3	32 / 31
218	21,755	975	137.3	32 / 31
225	22,530	764	138.3	20 / 30
Keith Branch				
013	1,280	1,430	34.4 ¹	300 / 120
018	1,811	1,430	34.4 ¹	35 / 35
019	1,857	1,430	34.4 ¹	35 / 35
029	2,867	1,430	34.4 ¹	60 / 70
035	3,500	1,430	34.4 ¹	70 / 60
040	4,000	1,430	34.4 ¹	110 / 50
047	4,686	1,332	35.3	160 / 50
053	5,311	1,332	36.3	35 / 50
054	5,357	1,332	37.7	35 / 50
060	6,000	1,332	38.4	110 / 50
065	6,500	1,332	39.1	105 / 90
072	7,181	1,332	40.4	100 / 225
078	7,840	1,332	42.1	109 / 200
085	8,456	1,332	43.4	108 / 32
085	8,524	1,332	46.3	108 / 32
090	8,970	1,332	46.5	212 / 30
095	9,500	1,332	47.3	200 / 26
099	9,931	1,332	47.8	178 / 76
Kill Swamp				
007	693	1,690	131.8 ¹	86 / 103
011	1,116	1,690	132.2	46 / 266
017	1,738	1,690	133.1	81 / 179
023	2,260	1,690	134.0	169 / 47

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
028	2,811	1,690	134.7	184 / 167
033	3,319	1,690	135.2	95 / 148
040	3,955	1,690	136.0	117 / 202
044	4,406	1,690	136.6	353 / 21
049	4,867	1,690	137.2	148 / 20
052	5,168	1,690	137.9	174 / 142
234	23,423	989	159.5	12 / 159
241	24,058	989	160.2	125 / 86
246	24,602	989	160.9	25 / 150
250	25,012	989	161.5	70 / 108
256	25,624	989	162.2	84 / 160
260	26,003	989	162.6	101 / 88
265	26,545	989	163.8	123 / 12
268	26,814	989	164.8	121 / 16
273	27,283	302	165.9	27 / 12
278	27,820	302	167.2	12 / 12
284	28,357	302	170.2	12 / 12
290	29,031	302	174.2	12 / 12
Kill Swamp Tributary 1				
001	111	833	165.2 ¹	114 / 12
005	490	833	165.4	70 / 90
011	1,064	833	166.5	67 / 51
015	1,456	833	167.0	126 / 44
019	1,895	833	167.3	109 / 85
023	2,315	833	167.8	55 / 51
027	2,665	833	168.7	58 / 107
Little Beaverdam Swamp				
026	2,609	2,218	120.0 ¹	50 / 1,255
035	3,514	2,218	120.0 ¹	47 / 709
044	4,403	2,218	120.0 ¹	408 / 625
050	5,000	2,218	120.0 ¹	739 / 342
055	5,500	2,218	120.0 ¹	713 / 26
060	6,000	2,218	120.0 ¹	843 / 26
065	6,500	2,218	120.0 ¹	539 / 20
070	7,040	2,218	120.2	307 / 211
075	7,500	2,218	120.5	341 / 396
080	8,000	2,218	120.7	413 / 116
084	8,388	2,218	121.0	45 / 43
084	8,434	2,218	121.8	45 / 43
091	9,081	2,218	123.1	235 / 61
099	9,900	1,513	123.5	189 / 108
105	10,500	1,513	123.8	140 / 103
110	11,000	1,513	124.9	40 / 29
116	11,596	1,513	127.2	51 / 50
117	11,670	1,513	128.8	51 / 50

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
124	12,437	1,513	128.9	100 / 92
130	12,963	561	129.6	75 / 74
135	13,454	561	135.3	20 / 41
140	14,047	561	138.3	86 / 25
144	14,384	561	139.2	14 / 16
150	15,000	561	143.0	28 / 20
155	15,500	561	143.9	58 / 197
160	16,000	561	145.5	6 / 18
164	16,436	561	148.0	90 / 50
165	16,520	561	154.6	90 / 50
171	17,106	561	154.6	59 / 57
178	17,757	561	154.6	59 / 55
183	18,341	561	154.6	65 / 58
189	18,863	469	154.7	60 / 72
196	19,569	469	154.7	80 / 83
200	20,000	469	154.8	54 / 74
205	20,500	469	154.8	56 / 82
210	21,000	303	155.0	67 / 83
215	21,545	303	155.1	55 / 73
Little Beaverdam Swamp Tributary 1				
005	527	1,386	123.2 ¹	313 / 119
010	977	1,386	123.2 ¹	194 / 17
017	1,674	1,014	123.8	196 / 74
021	2,054	1,014	124.8	103 / 16
025	2,500	1,014	126.6	63 / 102
031	3,081	1,014	127.2	159 / 47
035	3,484	1,014	127.7	89 / 70
040	3,953	1,014	128.9	39 / 65
045	4,462	1,014	130.5	188 / 6
050	5,023	1,014	131.8	184 / 13
055	5,500	943	132.7	119 / 48
059	5,945	943	133.4	218 / 36
065	6,463	943	133.9	314 / 55
071	7,134	797	134.8	50 / 80
076	7,648	797	137.2	56 / 66
081	8,136	797	138.3	84 / 99
Little Beaverdam Swamp Tributary 2				
003	308	845	122.9	150 / 40
010	1,043	767	130.2	135 / 142
011	1,143	767	132.8	222 / 164
018	1,812	767	133.2	145 / 145
025	2,500	767	134.0	58 / 60
029	2,902	767	135.0	40 / 29
030	2,986	767	138.1	40 / 29
036	3,618	767	138.3	200 / 174

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
041	4,100	767	138.4	32 / 190
046	4,580	767	138.4	93 / 173
052	5,235	767	139.6	39 / 53
057	5,654	767	141.3	79 / 103
061	6,147	614	141.8	96 / 32
066	6,580	614	144.5	69 / 36
Little Coharie Creek				
006	583	7,480	58.3 ¹	76 / 861
022	2,227	7,480	58.3 ¹	347 / 542
023	2,275	7,480	58.3 ¹	347 / 542
041	4,067	7,480	58.3 ¹	218 / 242
058	5,849	7,480	58.3 ¹	665 / 191
072	7,195	7,480	58.4	553 / 563
075	7,500	7,480	58.6	1,107 / 350
079	7,926	7,480	58.8	543 / 376
086	8,610	7,480	59.2	1,430 / 115
090	9,000	7,480	59.4	1,021 / 152
095	9,500	7,480	59.6	1,119 / 264
100	10,000	7,390	59.9	897 / 153
105	10,500	7,390	60.1	314 / 308
112	11,181	7,390	60.5	971 / 367
120	12,000	7,390	60.8	969 / 352
125	12,500	7,390	61.0	648 / 668
130	13,000	7,390	61.2	811 / 257
136	13,568	7,390	61.5	179 / 946
140	14,000	7,390	61.6	316 / 1,060
145	14,500	7,390	61.8	221 / 1,041
155	15,500	7,390	62.4	414 / 341
160	16,000	7,390	62.7	303 / 593
165	16,500	7,390	62.9	370 / 560
170	17,000	7,390	63.1	645 / 569
177	17,716	7,390	63.4	379 / 917
180	18,000	7,390	63.4	229 / 613
185	18,500	7,300	63.7	405 / 859
192	19,186	7,300	63.9	267 / 796
195	19,500	7,300	64.0	249 / 1,179
200	20,000	7,300	64.2	325 / 607
207	20,651	7,300	64.4	151 / 450
210	21,000	7,300	64.6	128 / 349
215	21,500	7,300	65.0	196 / 1,453
225	22,500	7,300	65.4	56 / 1,057
229	22,906	7,300	65.5	56 / 1,334
234	23,434	7,300	65.6	81 / 1,269
239	23,888	7,250	65.7	56 / 1,508
260	26,000	7,250	66.2	439 / 852

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
265	26,500	7,250	66.4	584 / 713
271	27,061	7,250	66.6	219 / 723
274	27,421	7,250	66.8	213 / 1,119
279	27,934	7,250	66.9	398 / 885
285	28,500	7,250	67.1	599 / 687
292	29,156	7,140	67.3	1,141 / 209
295	29,500	7,140	67.4	858 / 473
300	30,000	7,140	67.5	1,194 / 273
315	31,500	6,920	67.9	1,498 / 440
330	33,000	6,920	68.4	1,242 / 199
335	33,500	6,920	68.6	1,251 / 355
350	35,000	6,920	69.2	55 / 1,127
355	35,532	6,920	69.5	424 / 1,030
363	36,326	6,840	69.8	465 / 410
370	36,959	6,840	70.1	256 / 553
375	37,500	6,840	70.4	478 / 448
380	37,976	6,840	70.6	843 / 112
385	38,500	6,840	70.8	1,735 / 659
395	39,500	6,840	71.1	1,912 / 495
400	40,000	6,840	71.2	1,860 / 411
420	42,000	6,840	71.7	1,324 / 55
425	42,500	6,840	71.9	1,424 / 200
435	43,500	6,840	72.2	1,461 / 489
441	44,071	6,740	72.3	857 / 611
445	44,500	6,740	72.4	936 / 526
450	45,000	6,740	72.6	1,049 / 274
455	45,500	6,740	72.8	851 / 244
470	47,000	6,600	73.3	540 / 703
477	47,746	6,600	73.5	1,253 / 296
487	48,654	6,600	73.8	775 / 451
495	49,500	6,600	74.1	1,083 / 617
500	50,000	6,600	74.2	1,127 / 312
505	50,500	6,600	74.4	709 / 689
516	51,563	6,600	74.6	583 / 795
520	52,000	6,600	74.7	87 / 895
525	52,500	6,600	74.9	218 / 747
537	53,672	6,600	75.2	1,328 / 226
548	54,839	6,600	75.6	1,019 / 56
549	54,885	6,540	76.3	1,019 / 56
560	56,000	6,540	76.7	915 / 812
570	57,000	6,540	76.8	1,461 / 645
575	57,500	6,540	76.9	1,354 / 393
580	58,000	6,410	77.0	1,174 / 888
585	58,500	6,410	77.1	1,388 / 879
595	59,500	6,410	77.4	750 / 267

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
600	60,000	6,410	77.5	1,924 / 53
608	60,817	6,410	77.8	1,589 / 536
617	61,726	6,410	78.0	687 / 769
625	62,500	6,410	78.3	778 / 701
631	63,064	6,320	78.5	692 / 1,141
640	64,000	6,320	78.9	784 / 223
645	64,500	6,320	79.2	382 / 564
652	65,197	6,320	79.4	862 / 1,197
660	65,984	6,320	79.6	925 / 647
665	66,500	6,320	79.8	988 / 238
670	67,000	6,260	80.0	801 / 840
676	67,610	6,260	80.2	1,188 / 547
686	68,587	6,260	80.5	977 / 387
691	69,117	6,260	80.7	1,025 / 460
700	70,000	6,260	81.0	499 / 465
705	70,504	6,260	81.3	614 / 529
710	71,004	6,110	81.5	248 / 565
715	71,504	6,110	81.7	52 / 1,164
720	72,005	6,110	81.9	480 / 1,118
725	72,504	6,110	82.0	739 / 717
730	73,004	6,110	82.1	634 / 1,204
735	73,504	6,110	82.2	467 / 1,050
740	74,004	6,110	82.4	92 / 1,388
745	74,504	6,110	82.6	474 / 1,165
750	75,004	6,110	82.7	246 / 966
760	76,004	6,110	83.0	1,156 / 570
766	76,630	6,110	83.1	1,295 / 291
770	77,004	6,110	83.2	1,087 / 396
777	77,719	6,000	83.5	1,175 / 386
782	78,151	6,000	83.6	78 / 78
782	78,197	6,000	84.1	78 / 78
790	78,970	6,000	85.5	1,490 / 314
800	79,970	6,000	85.7	1,450 / 235
805	80,470	5,960	85.8	1,423 / 71
815	81,470	5,960	86.0	1,098 / 441
820	81,970	5,960	86.2	715 / 923
825	82,470	5,960	86.3	640 / 790
835	83,511	5,960	86.6	820 / 364
850	85,035	4,700	86.9	677 / 1,186
854	85,415	4,700	87.0	741 / 872
875	87,470	4,620	87.3	334 / 1,422
880	87,970	4,620	87.4	838 / 674
885	88,470	4,620	87.5	521 / 246
890	88,970	4,620	87.6	790 / 515
900	89,999	4,570	87.8	496 / 473

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
905	90,470	4,570	87.9	1,347 / 86
910	90,970	4,570	88.1	946 / 59
915	91,470	4,570	88.3	822 / 81
929	92,904	4,570	88.8	550 / 47
941	94,126	4,570	89.1	522 / 503
946	94,623	4,570	89.2	59 / 59
947	94,671	4,540	89.6	59 / 59
955	95,519	4,540	90.0	396 / 1,073
959	95,877	4,540	90.0	413 / 1,058
964	96,377	4,540	90.1	441 / 848
970	96,994	4,540	90.2	331 / 801
976	97,598	4,540	90.4	642 / 506
982	98,249	4,540	90.5	47 / 533
989	98,877	4,510	90.8	573 / 636
994	99,377	4,510	90.9	520 / 954
998	99,827	4,510	91.0	587 / 650
1003	100,329	4,510	91.1	786 / 507
1009	100,877	4,510	91.3	900 / 310
1014	101,437	4,510	91.5	517 / 410
1024	102,377	4,510	92.0	778 / 429
1029	102,912	4,510	92.3	691 / 198
1041	104,135	4,510	93.5	159 / 611
1049	104,877	4,510	94.2	47 / 434
1055	105,452	4,510	94.7	47 / 545
1062	106,221	4,480	95.2	46 / 1,008
1068	106,784	4,480	95.3	344 / 967
1078	107,820	4,480	95.7	601 / 112
1085	108,477	4,480	96.0	1,353 / 115
1093	109,284	4,480	96.2	1,075 / 172
1098	109,784	4,460	96.3	959 / 177
1103	110,320	4,460	96.4	61 / 56
1104	110,384	4,460	96.8	61 / 56
1113	111,283	4,460	97.8	1,547 / 46
1122	112,216	4,460	97.9	1,432 / 288
1128	112,783	4,460	98.0	1,175 / 231
1134	113,351	4,460	98.2	1,239 / 46
1144	114,419	4,460	98.5	1,207 / 259
1153	115,283	4,310	98.8	341 / 537
1158	115,783	4,310	99.0	261 / 806
1163	116,283	4,310	99.2	84 / 515
1168	116,783	4,310	99.5	124 / 1,059
1173	117,283	4,310	99.6	44 / 1,292
1181	118,132	4,310	99.9	187 / 1,016
1193	119,283	4,300	100.6	31 / 911
1196	119,594	4,300	100.8	145 / 913

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
1196	119,640	4,300	102.7	145 / 913
1208	120,783	4,300	102.9	128 / 1,009
1213	121,283	4,300	103.0	100 / 1,048
1218	121,783	4,300	103.1	87 / 1,180
1223	122,283	4,280	103.2	74 / 1,033
1228	122,783	4,280	103.3	218 / 1,238
1238	123,783	4,280	103.4	498 / 724
1248	124,783	4,260	103.7	793 / 404
1253	125,283	4,260	103.9	730 / 588
1258	125,783	4,260	104.0	579 / 831
1263	126,283	4,260	104.2	661 / 814
1268	126,783	4,260	104.4	356 / 1,240
1273	127,283	4,260	104.6	44 / 989
1278	127,783	4,260	104.9	71 / 541
1283	128,283	4,260	105.4	639 / 296
1288	128,783	4,260	105.7	826 / 105
1293	129,283	4,260	105.9	866 / 256
1298	129,783	4,240	106.2	490 / 484
1303	130,283	4,240	106.4	240 / 648
1308	130,783	4,240	106.6	523 / 337
1313	131,283	4,240	106.8	545 / 160
1318	131,783	4,240	107.2	295 / 534
1320	131,966	4,240	107.4	239 / 601
1320	132,012	4,220	109.5	239 / 601
1328	132,777	4,220	109.7	903 / 343
1333	133,265	4,220	109.8	804 / 84
1336	133,612	4,220	109.9	1,132 / 198
1341	134,121	4,220	109.9	1,033 / 142
1345	134,474	4,220	110.0	729 / 148
1355	135,540	4,220	110.2	927 / 416
1360	136,040	4,160	110.4	695 / 561
1366	136,622	4,160	110.5	913 / 518
1370	137,046	4,160	110.6	919 / 161
1375	137,546	4,160	110.8	587 / 43
1381	138,051	4,160	111.1	666 / 47
1386	138,553	4,160	111.4	136 / 164
1391	139,053	4,160	111.9	472 / 358
1396	139,553	4,160	112.1	767 / 514
1400	140,046	4,160	112.2	734 / 328
1406	140,571	4,160	112.5	48 / 529
1415	141,457	4,160	113.1	86 / 593
1421	142,080	4,120	113.5	220 / 495
1425	142,502	4,120	113.7	513 / 389
1429	142,931	4,120	113.9	926 / 189
1434	143,432	4,120	114.0	796 / 250

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
1439	143,932	4,120	114.2	111 / 659
1444	144,434	4,120	114.5	309 / 378
1449	144,944	4,120	114.8	165 / 491
1455	145,465	4,120	115.1	693 / 235
1460	145,964	4,120	115.4	349 / 459
1465	146,464	4,120	115.6	485 / 330
1470	146,966	4,120	115.8	264 / 768
1480	147,966	4,120	116.2	227 / 557
1490	148,966	4,120	116.6	324 / 475
1496	149,565	4,120	116.8	175 / 154
1496	149,615	4,080	117.6	175 / 154
1505	150,484	4,080	117.9	702 / 543
1510	150,984	4,080	118.0	90 / 850
1515	151,484	4,080	118.1	103 / 701
1520	151,984	4,080	118.2	199 / 723
1530	152,988	3,950	118.6	642 / 98
1534	153,433	3,950	118.8	850 / 42
1540	153,986	3,950	119.0	998 / 219
1545	154,481	3,950	119.2	668 / 54
1550	154,975	3,950	119.4	472 / 382
1555	155,475	3,950	119.6	240 / 725
1566	156,558	3,950	120.1	42 / 697
1575	157,481	3,950	120.7	42 / 688
1585	158,481	3,910	121.2	127 / 785
1590	158,994	3,910	121.3	223 / 837
1595	159,494	3,910	121.5	470 / 767
1600	159,996	3,910	121.6	315 / 722
1605	160,480	3,910	121.8	52 / 714
1610	160,965	3,910	122.0	65 / 615
1615	161,465	3,910	122.2	150 / 504
1622	162,208	3,910	122.6	42 / 42
1623	162,254	3,890	123.2	42 / 42
1634	163,392	3,890	124.5	771 / 417
1645	164,474	3,890	124.7	440 / 551
1650	164,971	3,890	124.8	132 / 783
1655	165,487	3,890	125.0	41 / 996
1660	165,955	3,890	125.3	41 / 868
1665	166,474	3,890	125.6	134 / 711
1670	166,974	3,890	125.9	41 / 668
1675	167,475	3,890	126.2	69 / 820
1680	167,984	3,660	126.5	40 / 783
1685	168,484	3,660	126.7	40 / 975
1694	169,363	3,660	127.1	159 / 826
1700	169,984	3,660	127.6	98 / 693
1705	170,484	3,660	128.0	40 / 355

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
1710	170,977	3,660	128.5	97 / 520
1715	171,477	3,660	128.8	359 / 364
1720	171,977	3,660	129.0	175 / 494
1725	172,484	3,660	129.3	187 / 261
1730	172,985	3,660	129.6	219 / 212
1735	173,481	3,660	130.0	210 / 289
1740	173,978	3,590	130.2	267 / 196
1745	174,478	3,590	130.4	151 / 491
1753	175,320	3,590	130.7	51 / 51
1754	175,366	3,590	131.1	51 / 51
1760	175,975	3,590	131.7	221 / 412
1770	176,975	3,100	132.0	814 / 40
1775	177,475	3,100	132.1	311 / 579
1780	177,986	3,100	132.2	495 / 494
1785	178,486	3,100	132.5	362 / 480
1790	178,986	3,100	132.7	274 / 514
1795	179,486	3,100	133.1	291 / 439
1800	179,986	2,830	133.4	156 / 635
1805	180,486	2,830	133.7	189 / 359
1810	180,986	2,830	134.2	346 / 104
1815	181,486	2,830	134.8	249 / 356
1820	181,986	2,830	135.2	538 / 46
1825	182,510	2,830	135.6	417 / 349
1830	183,003	2,830	135.8	98 / 491
1835	183,503	2,830	136.2	246 / 307
1840	184,003	2,830	136.5	308 / 99
1845	184,503	2,740	136.9	258 / 97
1850	185,003	2,740	137.3	348 / 63
1855	185,503	2,740	137.7	304 / 278
1860	186,003	2,740	137.9	241 / 172
1865	186,503	2,740	138.3	129 / 330
1870	186,991	2,710	138.8	100 / 86
1872	187,183	2,710	139.0	320 / 333
1872	187,231	2,710	140.0	320 / 333
1880	188,038	2,710	141.0	101 / 539
1885	188,540	2,710	141.2	46 / 380
1895	189,544	2,470	141.9	161 / 270
1900	190,044	2,470	142.2	226 / 261
1905	190,545	2,340	142.6	108 / 102
1910	191,025	2,340	143.4	139 / 163
1915	191,525	2,340	144.0	122 / 127
1920	192,029	2,340	144.5	119 / 189
1925	192,527	2,340	144.8	299 / 386
1930	193,027	2,340	144.9	198 / 310
1935	193,527	2,340	145.2	136 / 107

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
1940	194,027	2,340	145.7	437 / 47
1948	194,785	2,340	146.0	58 / 256
1948	194,833	2,260	147.1	58 / 256
1955	195,526	2,260	147.3	91 / 344
1960	196,026	2,260	147.5	128 / 284
1965	196,526	2,260	147.9	98 / 245
1970	197,026	2,260	148.4	275 / 110
1975	197,526	2,260	148.8	207 / 186
1980	198,027	2,260	149.2	460 / 162
1990	199,039	2,020	150.0	103 / 246
1995	199,539	2,020	150.7	28 / 280
2000	200,039	2,020	151.3	33 / 156
2002	200,237	2,020	151.5	38 / 38
2003	200,289	1,960	151.9	38 / 38
2010	201,039	1,960	152.8	115 / 158
2015	201,539	1,960	153.2	171 / 105
2020	202,039	1,960	153.8	147 / 56
2025	202,539	1,960	154.5	120 / 165
2030	203,039	1,960	154.8	159 / 242
2035	203,539	1,960	155.0	357 / 54
2041	204,053	1,960	155.2	42 / 42
2041	204,103	1,910	155.6	42 / 42
2051	205,074	1,910	157.8	35 / 35
2056	205,577	1,910	159.1	109 / 179
2061	206,077	1,910	160.0	96 / 264
2066	206,577	1,910	160.5	204 / 271
2071	207,077	1,910	160.8	146 / 235
2076	207,577	1,910	161.1	253 / 252
2081	208,077	1,910	161.4	357 / 92
2086	208,577	1,910	161.6	292 / 239
2091	209,077	1,910	161.8	269 / 137
2096	209,577	1,790	162.1	180 / 157
2101	210,077	1,790	162.3	149 / 269
2110	210,974	1,790	162.6	38 / 38
2110	211,036	1,510	164.0	38 / 38
2116	211,581	1,510	164.2	64 / 221
2121	212,080	1,510	164.3	188 / 136
2125	212,508	1,510	164.4	86 / 381
2126	212,558	1,510	164.7	86 / 381
2131	213,058	1,510	164.8	107 / 217
2136	213,553	1,510	165.0	223 / 63
2140	214,050	1,510	165.5	212 / 165
2146	214,554	1,510	166.3	65 / 102
2151	215,054	1,510	167.9	179 / 152
2156	215,554	1,510	168.6	124 / 147

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
2161	216,054	1,510	169.7	158 / 73
2166	216,554	1,430	170.8	100 / 152
2171	217,052	1,430	171.9	108 / 130
2176	217,551	1,430	172.9	94 / 132
2180	218,047	1,430	173.6	112 / 163
2185	218,547	1,430	174.2	106 / 162
2190	219,047	1,430	174.8	302 / 178
2195	219,547	1,120	175.2	489 / 17
2201	220,053	1,120	175.8	153 / 188
2205	220,545	1,120	176.9	178 / 105
2210	221,045	1,120	177.6	185 / 224
2215	221,545	1,120	178.0	117 / 311
2220	222,045	1,120	178.6	78 / 168
2225	222,545	1,120	179.2	21 / 217
2230	223,045	1,080	179.6	26 / 182
2232	223,225	1,080	179.7	30 / 30
2233	223,282	1,080	181.7	30 / 30
2240	224,045	1,080	182.0	94 / 104
2245	224,545	1,080	182.4	21 / 66
2250	225,045	1,080	184.4	22 / 177
2255	225,545	1,080	186.1	182 / 16
2260	226,045	1,080	187.3	116 / 70
2265	226,545	1,080	188.4	153 / 34
2270	227,045	1,080	189.1	117 / 146
2275	227,545	973	189.5	126 / 120
2280	228,045	973	190.0	151 / 50
2285	228,545	973	190.8	128 / 130
2290	229,045	973	191.6	131 / 50
Little Coharie Creek Tributary				
006	584	663	87.3 ¹	84 / 20
011	1,089	663	87.3 ¹	128 / 20
016	1,567	663	87.6	19 / 49
021	2,076	663	91.4	23 / 57
025	2,549	663	93.8	85 / 29
031	3,103	663	95.4	61 / 33
035	3,469	663	96.6	67 / 19
040	3,966	663	98.4	21 / 132
044	4,434	663	99.4	70 / 32
049	4,893	663	101.1	111 / 19
051	5,135	591	102.2	101 / 28
054	5,427	591	103.7	27 / 28
055	5,537	591	108.3	36 / 36
059	5,855	591	108.3	64 / 45
061	6,083	591	109.1	144 / 17
064	6,411	591	109.4	116 / 27

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
069	6,929	591	113.8	51 / 126
074	7,377	591	116.9	113 / 13
Little Coharie Creek Tributary 2				
017	1,728	384	72.7 ³	7 / 107
022	2,174	384	75.4	7 / 88
025	2,506	384	77.7	66 / 31
030	3,000	384	80.8	26 / 42
035	3,498	384	85.5	15 / 52
040	4,042	329	90.5	7 / 29
044	4,442	329	93.1	31 / 7
049	4,934	329	96.4	18 / 12
054	5,411	329	99.5	8 / 30
059	5,931	329	102.9	10 / 12
Little Juniper Run				
005	492	464	171.8	35 / 8
009	929	464	174.3	8 / 11
014	1,383	464	177.3	8 / 8
018	1,753	464	180.6	8 / 8
022	2,241	464	183.1	101 / 8
028	2,825	464	184.8	30 / 30
029	2,895	464	186.4	30 / 30
035	3,466	464	187.2	96 / 8
039	3,868	464	188.5	86 / 8
043	4,328	464	190.0	8 / 84
048	4,847	464	192.0	26 / 42
055	5,515	464	196.3	8 / 8
059	5,855	464	198.0	87 / 18
060	5,975	464	204.0	12 / 118
060	6,027	336	204.7	12 / 118
066	6,575	336	204.8	276 / 276
072	7,208	336	204.8	303 / 213
076	7,640	336	204.8	301 / 151
084	8,424	336	204.8	82 / 341
084	8,434	336	204.8	51 / 51
085	8,489	336	207.9	51 / 51
085	8,499	336	207.9	43 / 146
090	8,978	336	208.0	36 / 99
096	9,624	336	208.5	14 / 80
106	10,567	336	209.6	145 / 134
114	11,439	336	214.3	35 / 2
Lockamy Mill				
007	675	680	73.1 ¹	320 / 38
010	1,034	680	73.1 ¹	135 / 66
015	1,499	680	74.6	79 / 69
020	1,995	680	77.0	31 / 52
025	2,492	680	81.0	34 / 38

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
030	2,968	680	82.4	62 / 19
034	3,382	641	82.9	26 / 17
035	3,493	641	84.8	26 / 17
040	3,961	641	85.7	23 / 74
045	4,452	641	89.0	99 / 16
050	4,993	641	91.5	99 / 13
055	5,488	641	93.7	36 / 75
060	5,982	641	95.5	52 / 126
065	6,455	641	97.3	85 / 50
069	6,941	560	99.9	114 / 38
074	7,420	560	101.3	115 / 70
079	7,927	560	102.9	16 / 109
Marsh Swamp				
004	434	1,308	112.2 ¹	536 / 413
009	911	1,308	112.2 ¹	249 / 200
015	1,486	1,308	112.2 ¹	200 / 221
019	1,924	1,308	112.5	268 / 64
025	2,465	1,308	113.3	264 / 68
030	3,042	1,308	114.4	62 / 105
034	3,428	1,308	116.1	29 / 29
036	3,643	1,308	118.5	29 / 29
042	4,154	1,308	119.2	126 / 102
047	4,706	1,308	119.6	155 / 118
051	5,116	1,308	119.9	113 / 225
056	5,643	1,308	120.4	223 / 23
061	6,104	1,308	121.4	22 / 68
068	6,753	1,020	123.3	92 / 210
073	7,253	1,020	124.4	23 / 162
078	7,802	1,020	126.3	114 / 22
082	8,229	1,020	127.7	142 / 18
086	8,589	1,020	129.8	21 / 35
091	9,057	1,020	132.3	287 / 17
094	9,361	1,020	132.8	73 / 77
098	9,830	1,020	133.7	201 / 27
103	10,344	1,020	134.4	253 / 19
112	11,156	811	135.9	126 / 20
113	11,341	811	142.4	126 / 20
119	11,871	811	142.4	229 / 20
123	12,284	811	142.5	290 / 19
McPhail Branch				
002	189	869	131.0	48 / 20
005	544	869	133.0	26 / 52
010	999	869	134.7	39 / 20
015	1,489	869	136.0	46 / 20
019	1,938	869	137.1	27 / 27

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
024	2,423	869	140.0	16 / 64
030	2,970	869	144.7	26 / 41
035	3,483	869	147.6	96 / 19
040	3,986	869	148.8	23 / 39
043	4,322	869	150.6	14 / 8
048	4,827	869	154.1	60 / 22
053	5,332	623	154.8	12 / 16
058	5,816	623	159.8	57 / 19
Meetinghouse Branch				
005	476	719	103.4 ¹	681 / 205
009	894	719	103.4 ¹	900 / 60
014	1,375	719	103.4 ¹	807 / 5
018	1,758	719	103.4 ¹	452 / 185
022	2,215	719	103.4 ¹	364 / 57
027	2,720	719	105.2	109 / 162
031	3,144	719	108.1	15 / 219
036	3,569	719	109.4	8 / 271
039	3,928	719	110.9	71 / 68
041	4,090	719	112.3	54 / 50
046	4,588	510	114.5	124 / 35
047	4,735	510	118.4	124 / 35
051	5,076	510	118.4	136 / 138
054	5,405	510	118.4	56 / 134
059	5,886	510	118.6	67 / 37
062	6,210	510	119.3	71 / 65
066	6,624	510	121.0	58 / 24
069	6,942	510	122.8	33 / 76
074	7,398	510	125.4	77 / 23
079	7,891	510	128.3	103 / 8
Merkle Swamp				
031	3,088	1,595	116.5	26 / 27
039	3,938	1,595	117.8	28 / 28
045	4,462	1,595	118.6	29 / 29
046	4,639	1,595	118.9	29 / 29
052	5,154	1,595	119.4	28 / 75
056	5,624	1,502	120.0	27 / 27
061	6,103	1,502	120.7	27 / 27
069	6,853	1,502	122.2	28 / 28
070	6,986	1,502	123.6	27 / 27
076	7,591	1,502	124.3	28 / 28
077	7,739	1,502	125.3	27 / 27
079	7,934	1,502	125.5	32 / 32
084	8,437	1,502	126.4	27 / 27
090	9,022	1,502	127.0	27 / 27
095	9,458	1,502	127.6	30 / 30

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
096	9,585	1,502	128.6	27 / 27
102	10,178	1,502	129.1	27 / 27
107	10,711	1,502	129.6	27 / 27
113	11,308	1,502	130.3	27 / 27
119	11,868	1,035	131.4	27 / 30
126	12,612	1,035	133.6	32 / 57
131	13,062	1,035	134.5	120 / 33
137	13,671	1,035	135.7	19 / 87
144	14,357	1,035	137.8	100 / 10
148	14,802	1,035	139.1	70 / 10
151	15,135	963	140.0	55 / 25
153	15,305	963	140.2	55 / 35
156	15,551	963	140.7	60 / 10
159	15,913	963	142.2	9 / 22
161	16,102	963	145.0	15 / 45
166	16,553	963	145.8	53 / 34
170	16,993	963	146.3	17 / 31
174	17,448	751	147.7	33 / 32
178	17,792	751	150.0	41 / 10
182	18,198	751	152.2	23 / 52
187	18,707	751	153.4	38 / 21
191	19,121	751	154.7	78 / 26
Mill Creek				
005	501	2,210	51.1 ¹	459 / 20
010	1,013	2,210	51.1 ¹	286 / 20
014	1,421	2,210	51.1 ¹	382 / 20
019	1,914	2,210	51.1 ¹	87 / 87
020	1,959	2,210	51.1 ¹	87 / 87
021	2,112	2,210	51.1	266 / 62
025	2,537	2,210	51.4	182 / 176
031	3,060	2,210	51.8	90 / 227
035	3,496	2,210	52.3	274 / 28
040	3,993	2,210	52.7	400 / 39
045	4,492	2,210	53.0	367 / 90
051	5,099	2,210	53.4	255 / 44
056	5,593	2,210	53.8	302 / 81
061	6,125	2,090	54.1	297 / 104
067	6,670	2,090	54.4	217 / 180
071	7,143	2,090	54.6	143 / 204
076	7,647	2,090	54.9	231 / 177
080	7,955	2,090	55.0	87 / 87
080	8,000	2,090	55.2	87 / 87
083	8,320	2,090	55.4	438 / 19
088	8,762	2,090	55.7	315 / 19
092	9,229	2,090	56.1	264 / 19

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
097	9,687	2,090	56.5	401 / 19
101	10,086	2,090	56.7	313 / 72
106	10,563	2,090	57.0	327 / 54
111	11,096	2,090	57.3	318 / 110
115	11,512	1,860	57.7	253 / 184
121	12,112	1,860	58.3	214 / 197
126	12,579	1,860	58.8	242 / 151
131	13,065	1,860	59.2	289 / 66
132	13,228	1,860	59.3	136 / 138
133	13,273	1,860	59.4	136 / 138
136	13,627	1,860	59.6	258 / 242
141	14,147	1,860	60.0	167 / 180
146	14,630	1,860	60.3	272 / 256
152	15,158	1,860	60.6	203 / 112
156	15,574	1,860	61.0	172 / 165
162	16,188	1,090	61.6	106 / 131
167	16,705	1,090	62.1	140 / 226
172	17,184	1,090	62.6	127 / 164
175	17,506	1,090	63.0	123 / 92
178	17,806	1,090	63.3	79 / 79
179	17,886	1,090	65.3	79 / 79
182	18,168	1,090	65.4	227 / 125
187	18,675	1,090	65.9	116 / 109
Mill Creek 2				
010	1,015	981	63.1	47 / 65
016	1,582	981	65.5	58 / 170
024	2,433	981	69.6	78 / 25
028	2,808	898	71.6	48 / 48
029	2,894	898	74.6	48 / 48
035	3,500	898	75.0	110 / 56
040	4,042	898	77.8	23 / 45
043	4,309	898	79.4	91 / 55
045	4,500	898	79.7	121 / 38
051	5,088	898	80.8	37 / 100
055	5,499	898	82.5	41 / 66
060	5,999	671	84.6	29 / 102
065	6,494	671	87.0	13 / 48
070	6,982	671	89.7	13 / 152
075	7,548	671	92.3	37 / 27
080	8,002	671	96.8	13 / 63
085	8,454	671	98.8	13 / 137
089	8,926	671	100.0	97 / 13
094	9,444	562	101.7	17 / 17
095	9,538	562	110.2	17 / 17
100	9,989	562	110.2	89 / 161

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
Mill Creek 2 Tributary 1				
001	122	375	83.5 ⁴	82 / 45
004	385	375	84.3	7 / 60
006	628	375	86.8	54 / 42
009	861	375	89.0	12 / 127
013	1,283	375	91.3	80 / 7
015	1,531	375	91.8	21 / 25
018	1,796	375	94.0	7 / 45
021	2,065	255	95.8	7 / 20
023	2,325	255	100.4	17 / 9
024	2,410	255	102.4	17 / 25
026	2,632	255	103.7	30 / 20
030	3,008	255	105.5	50 / 23
Mill Creek Tributary				
006	572	980	61.0 ¹	119 / 37
010	1,040	980	61.2	101 / 66
014	1,408	980	61.2	26 / 26
015	1,476	980	62.2	26 / 26
020	1,953	980	61.7	44 / 56
024	2,420	980	64.3	136 / 61
029	2,913	980	65.0	68 / 58
035	3,486	980	65.8	140 / 28
039	3,936	980	66.4	200 / 200
045	4,481	980	67.4	200 / 200
049	4,907	980	68.1	200 / 200
054	5,410	980	67.9	18 / 18
055	5,464	980	69.7	18 / 18
056	5,618	980	70.7	131 / 105
058	5,753	980	70.7	23 / 23
058	5,838	980	72.1	23 / 23
060	5,998	980	72.1	105 / 191
064	6,433	627	72.1	92 / 152
069	6,879	627	72.2	121 / 106
073	7,323	627	72.3	121 / 143
077	7,745	627	72.5	143 / 26
081	8,104	627	73.0	75 / 79
088	8,760	627	74.4	55 / 72
093	9,312	627	75.4	124 / 45
Mill Run				
005	500	1,123	85.5 ¹	12 / 338
012	1,165	1,123	85.5 ¹	12 / 375
015	1,514	1,123	85.5 ¹	47 / 115
020	1,974	1,123	86.8	18 / 178
026	2,599	1,123	88.3	146 / 36
030	3,000	1,123	89.4	49 / 123
035	3,500	1,123	90.5	92 / 122

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
039	3,922	1,123	91.5	25 / 25
040	4,012	1,123	92.9	25 / 25
048	4,793	1,123	93.8	24 / 279
054	5,416	997	94.4	27 / 148
058	5,826	997	95.1	151 / 85
067	6,694	997	95.9	17 / 236
070	7,000	997	96.3	11 / 226
075	7,500	997	97.2	59 / 80
079	7,855	997	98.0	40 / 217
084	8,437	997	99.0	47 / 144
090	9,000	997	100.4	11 / 182
095	9,500	997	101.8	11 / 176
101	10,132	997	103.1	95 / 85
107	10,675	875	104.2	10 / 184
112	11,245	702	105.3	33 / 162
120	12,040	702	106.7	65 / 86
125	12,545	702	107.7	79 / 64
130	13,000	702	108.8	62 / 40
135	13,482	702	109.8	157 / 29
140	14,036	618	111.0	22 / 117
Mill Swamp				
008	806	1,022	118.5 ³	12 / 319
011	1,141	1,022	118.5 ¹	67 / 206
016	1,551	1,022	119.5	95 / 93
020	2,045	1,022	120.7	167 / 76
024	2,405	1,022	121.4	154 / 12
030	2,958	1,022	122.6	185 / 22
035	3,458	1,022	123.4	78 / 124
039	3,941	1,022	124.2	105 / 62
042	4,175	1,022	124.7	149 / 12
047	4,735	1,022	126.2	113 / 28
051	5,136	1,022	127.6	59 / 73
055	5,499	1,022	128.5	142 / 19
Mill Swamp				
008	778	1,553	102.1 ¹	66 / 81
015	1,500	1,553	102.1 ¹	92 / 55
021	2,067	1,553	103.6	82 / 68
026	2,598	1,553	104.4	54 / 55
027	2,650	1,553	104.8	54 / 55
032	3,163	1,553	105.5	67 / 54
035	3,500	1,553	105.9	53 / 135
040	4,000	1,553	106.7	40 / 155
046	4,551	1,553	108.0	44 / 187
050	5,000	1,553	108.7	63 / 278
056	5,587	1,477	109.3	42 / 174

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
060	6,000	1,477	109.7	107 / 321
065	6,500	1,477	110.2	142 / 294
071	7,141	1,477	110.8	93 / 262
076	7,615	1,367	111.3	272 / 52
080	7,982	1,367	111.8	166 / 75
084	8,413	1,367	112.4	131 / 140
090	9,000	1,367	113.0	33 / 321
094	9,412	1,367	113.3	30 / 322
099	9,909	1,367	113.9	122 / 263
104	10,381	1,367	114.6	83 / 161
110	10,966	1,330	115.4	107 / 232
115	11,500	1,166	116.0	126 / 149
119	11,947	1,166	116.6	57 / 129
124	12,421	1,166	117.4	59 / 220
130	13,000	1,166	118.1	60 / 197
136	13,565	1,166	118.8	13 / 176
141	14,105	1,166	119.7	34 / 87
146	14,557	1,166	121.4	47 / 138
153	15,331	689	122.7	90 / 73
159	15,893	686	123.4	46 / 93
Mill Swamp Tributary				
002	181	764	122.0 ¹	87 / 72
008	817	764	122.6	72 / 132
015	1,500	764	123.8	101 / 84
020	2,048	742	124.9	117 / 69
Mingo Swamp				
000	0	5,206	126.5 ¹	48 / 1,617
010	1,015	5,206	126.9	832 / 1,438
019	1,942	4,441	127.2	830 / 1,500
028	2,760	4,441	127.5	174 / 1,386
041	4,124	4,441	128.5	614 / 810
048	4,791	4,441	129.2	808 / 693
055	5,488	4,441	129.6	1,139 / 1,010
063	6,334	4,441	129.9	1,436 / 510
072	7,233	4,441	130.4	1,834 / 343
082	8,226	4,412	131.1	1,319 / 406
089	8,921	4,412	131.8	769 / 684
096	9,640	4,412	132.4	109 / 1,506
104	10,361	4,412	133.2	41 / 1,243
111	11,140	4,412	133.6	952 / 1,057
119	11,942	4,412	134.0	1,742 / 41
128	12,770	4,412	134.3	453 / 41
135	13,548	4,412	136.8	1,349 / 41
142	14,177	4,361	137.3	1,756 / 109
150	14,969	4,361	137.5	1,366 / 41

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
159	15,853	4,361	137.8	1,527 / 41
166	16,634	4,361	138.0	1,161 / 217
174	17,402	4,314	138.2	1,699 / 41
181	18,139	4,314	138.6	1,558 / 41
187	18,687	4,294	139.0	1,250 / 41
192	19,240	4,294	139.8	684 / 426
201	20,090	4,294	140.6	1,006 / 86
204	20,396	4,294	141.0	645 / 32
204	20,441	4,246	142.9	645 / 32
209	20,879	4,223	143.1	1,180 / 41
213	21,288	4,223	143.3	1,118 / 403
223	22,278	4,223	143.6	375 / 338
228	22,822	4,223	144.0	1,214 / 117
234	23,413	4,223	144.3	1,131 / 41
238	23,812	4,223	144.6	973 / 41
245	24,528	4,223	145.1	630 / 341
250	24,980	4,223	145.5	856 / 277
254	25,419	4,223	145.9	660 / 540
259	25,907	4,223	146.2	489 / 1,015
265	26,527	4,223	146.8	573 / 313
270	27,017	4,223	147.5	338 / 709
276	27,622	4,223	148.1	41 / 1,112
280	27,982	4,223	148.4	59 / 59
280	28,050	4,160	148.9	59 / 59
285	28,476	4,160	149.6	40 / 1,274
288	28,786	4,160	149.7	481 / 40
299	29,928	3,731	151.0	945 / 220
306	30,563	3,731	151.5	878 / 140
311	31,114	3,731	152.1	779 / 241
317	31,689	3,731	152.7	1,026 / 180
322	32,180	3,731	153.1	866 / 751
327	32,704	3,731	153.3	956 / 392
331	33,055	3,731	153.5	1,109 / 53
337	33,690	3,731	153.9	869 / 37
341	34,098	3,708	154.3	372 / 278
345	34,493	3,708	154.9	208 / 612
352	35,190	3,655	155.5	356 / 279
358	35,845	3,655	156.0	183 / 770
365	36,476	3,592	156.4	828 / 36
372	37,244	3,592	156.9	1,063 / 85
377	37,689	3,592	157.3	1,294 / 53
380	38,005	3,592	157.5	749 / 36
383	38,339	3,592	158.0	661 / 36
389	38,919	3,056	158.8	948 / 32
394	39,432	3,056	159.2	808 / 52

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
403	40,268	3,056	160.0	554 / 357
416	41,566	3,056	161.0	32 / 933
421	42,103	3,056	161.4	33 / 1,371
421	42,148	3,056	163.5	33 / 1,371
426	42,568	3,056	163.6	32 / 1,270
432	43,173	3,029	163.7	31 / 910
436	43,606	3,029	163.9	52 / 1,025
442	44,160	3,029	164.2	31 / 698
448	44,818	3,029	164.6	59 / 252
453	45,304	3,029	165.4	166 / 219
459	45,924	3,029	165.9	267 / 462
466	46,598	3,029	166.2	115 / 572
473	47,292	3,029	166.7	31 / 814
492	49,187	2,979	167.8	510 / 453
501	50,073	2,979	168.2	518 / 566
509	50,945	2,979	168.5	835 / 126
516	51,560	2,979	168.7	908 / 89
527	52,651	2,903	169.3	431 / 166
535	53,533	2,903	170.0	669 / 692
542	54,211	2,903	170.4	596 / 522
546	54,602	2,903	170.7	291 / 621
552	55,152	2,903	170.9	55 / 523
552	55,209	2,903	171.3	55 / 523
558	55,842	2,793	171.6	47 / 779
566	56,603	2,793	172.0	68 / 934
Old Mill Swamp				
005	510	874	113.0 ¹	972 / 291
009	904	874	113.0 ¹	973 / 221
015	1,478	874	113.0 ¹	481 / 376
020	1,994	874	113.0 ¹	846 / 234
026	2,576	874	113.0 ¹	103 / 385
032	3,246	874	114.0	17 / 226
034	3,400	874	117.5	20 / 20
039	3,893	874	119.4	10 / 12
042	4,159	874	121.0	19 / 114
044	4,419	718	121.7	40 / 101
049	4,896	718	122.4	19 / 39
054	5,438	718	125.7	37 / 19
058	5,797	718	128.0	42 / 42
060	5,954	718	132.7	42 / 42
065	6,471	718	132.8	93 / 60
068	6,775	718	133.0	78 / 76
072	7,208	718	133.5	29 / 56
076	7,649	718	135.6	26 / 64
081	8,124	718	136.7	26 / 51

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
084	8,437	718	137.7	18 / 43
090	8,987	624	140.2	17 / 93
095	9,453	624	142.4	9 / 10
101	10,097	624	148.5	17 / 8
104	10,406	624	150.2	97 / 11
109	10,927	624	151.9	38 / 78
Peters Branch				
003	262	417	70.0 ¹	7 / 49
011	1,052	417	77.8	21 / 5
015	1,534	417	82.5	23 / 26
020	2,000	417	86.6	66 / 7
025	2,500	417	90.3	38 / 32
030	3,000	417	92.8	75 / 12
036	3,561	417	97.5	7 / 60
040	4,000	417	100.3	39 / 33
Pharisee Creek				
016	1,556	1,520	57.5	180 / 44
020	2,034	1,520	58.7	127 / 73
025	2,474	1,520	58.8	60 / 60
025	2,534	1,520	59.9	60 / 60
028	2,775	1,520	60.1	191 / 53
032	3,156	1,520	60.5	157 / 171
036	3,641	1,520	60.8	258 / 111
041	4,122	1,390	61.0	133 / 134
047	4,650	1,390	61.3	102 / 196
052	5,217	1,390	61.6	41 / 221
057	5,653	1,390	62.0	145 / 107
061	6,073	1,390	62.4	169 / 103
066	6,618	1,390	63.0	171 / 17
071	7,060	1,390	63.8	137 / 77
076	7,567	1,270	64.4	139 / 77
077	7,724	1,270	64.4	40 / 40
078	7,800	1,270	66.2	40 / 40
081	8,106	1,270	66.3	197 / 45
086	8,572	1,270	66.4	143 / 167
092	9,160	1,270	66.6	128 / 143
096	9,564	1,270	66.7	129 / 154
101	10,058	1,270	66.9	77 / 115
106	10,568	1,130	67.2	175 / 58
Quewiffle Swamp				
025	2,500	1,620	61.8 ¹	69 / 89
030	3,000	1,592	62.2	84 / 65
035	3,500	1,592	63.7	86 / 45
040	3,953	1,592	64.9	50 / 50
040	3,999	1,592	65.1	50 / 50
046	4,613	1,592	66.9	57 / 82

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
050	5,000	1,592	67.4	27 / 82
054	5,380	1,592	68.4	37 / 162
059	5,893	1,592	69.3	21 / 173
065	6,500	1,592	70.2	62 / 193
069	6,914	1,592	70.5	140 / 49
075	7,500	1,486	71.2	104 / 62
080	8,000	1,486	71.7	42 / 91
084	8,382	1,486	72.2	114 / 49
090	9,000	1,486	72.8	63 / 100
095	9,519	1,486	73.5	54 / 183
100	9,989	1,486	74.1	130 / 59
106	10,571	1,486	74.7	186 / 63
110	11,000	1,387	75.1	118 / 61
114	11,422	1,387	75.7	48 / 196
120	12,000	1,387	76.3	50 / 187
125	12,500	1,387	77.0	51 / 174
130	13,017	1,387	77.9	177 / 70
135	13,500	1,387	79.0	71 / 85
139	13,918	1,387	80.0	80 / 90
145	14,463	939	80.7	48 / 119
150	15,000	939	82.1	55 / 70
156	15,614	939	83.7	81 / 50
Railer Branch				
007	737	1,140	134.7 ¹	19 / 194
013	1,306	1,140	135.6	19 / 246
018	1,826	1,140	136.6	140 / 138
024	2,351	1,140	137.8	170 / 22
030	2,973	1,140	139.6	251 / 19
036	3,566	1,140	140.7	381 / 40
040	4,042	1,140	141.3	30 / 30
041	4,088	1,140	141.7	30 / 30
046	4,582	1,140	142.6	97 / 35
051	5,074	1,140	143.1	232 / 96
055	5,549	1,140	143.6	72 / 187
061	6,052	1,140	144.8	98 / 99
065	6,524	1,140	146.2	25 / 81
069	6,935	1,140	147.2	147 / 52
074	7,356	994	148.2	140 / 48
079	7,851	994	149.0	197 / 106
085	8,454	994	149.9	18 / 185
089	8,917	994	150.4	32 / 148
090	8,975	994	151.4	32 / 148
094	9,427	994	151.6	59 / 200
100	9,983	994	152.2	62 / 86
104	10,445	994	153.3	61 / 95

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
109	10,875	994	153.9	66 / 162
113	11,293	994	154.5	129 / 72
117	11,690	776	155.0	305 / 175
121	12,133	776	155.4	88 / 131
126	12,620	776	156.4	160 / 23
135	13,503	776	158.8	22 / 133
136	13,561	776	158.8	22 / 133
140	14,008	776	160.2	18 / 112
145	14,472	776	161.2	60 / 79
149	14,860	642	162.4	27 / 98
154	15,382	642	164.3	34 / 101
160	16,036	642	165.6	51 / 153
Rattlesnake Branch				
007	718	286	60.8 ³	65 / 7
011	1,108	286	64.3	7 / 9
015	1,499	286	71.3	13 / 7
019	1,947	286	73.6	10 / 22
021	2,056	286	74.3	10 / 22
026	2,623	286	75.5	13 / 7
030	2,980	286	78.5	33 / 49
035	3,497	286	81.6	7 / 44
040	3,996	286	87.0	7 / 48
043	4,337	286	89.0	7 / 34
048	4,774	286	92.5	51 / 21
052	5,151	286	95.4	92 / 10
055	5,455	286	98.4	14 / 7
060	5,988	286	103.5	34 / 7
Rice Swamp				
014	1,368	1,629	98.9 ¹	316 / 88
019	1,880	1,629	99.6	179 / 47
024	2,366	1,629	101.0	83 / 99
028	2,841	1,629	102.4	45 / 165
035	3,493	1,629	103.5	32 / 270
038	3,802	1,629	103.9	102 / 162
041	4,079	1,629	104.3	36 / 180
041	4,110	1,629	104.4	60 / 118
042	4,183	1,629	106.1	60 / 118
045	4,500	1,629	106.2	172 / 215
049	4,893	1,629	106.4	165 / 228
053	5,335	1,629	106.5	205 / 237
054	5,363	1,629	106.5	72 / 484
054	5,431	1,629	106.7	72 / 484
058	5,789	1,629	106.8	26 / 437
063	6,312	1,451	107.1	46 / 265
065	6,506	1,451	107.3	18 / 304

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
071	7,150	1,451	108.2	18 / 111
076	7,597	1,451	109.5	18 / 253
081	8,052	1,451	110.0	18 / 223
085	8,500	1,451	110.6	135 / 94
090	9,045	1,371	111.4	18 / 200
095	9,500	1,371	112.0	34 / 200
101	10,060	1,371	113.0	170 / 21
105	10,526	1,371	114.0	133 / 18
110	11,000	1,371	115.0	183 / 20
115	11,500	1,371	116.0	54 / 113
120	12,000	1,371	117.0	57 / 129
123	12,297	1,371	117.6	47 / 137
125	12,501	1,313	118.1	56 / 46
125	12,536	1,313	118.2	23 / 23
126	12,611	1,313	122.1	23 / 23
127	12,691	1,313	122.1	67 / 128
128	12,794	1,313	127.9	210 / 288
132	13,223	1,313	127.9	262 / 180
139	13,853	1,313	127.9	62 / 144
145	14,500	1,100	127.9	73 / 196
150	15,009	1,100	127.7	42 / 49
156	15,608	1,100	129.1	67 / 110
159	15,869	1,100	129.4	36 / 93
159	15,941	1,100	129.7	45 / 45
160	16,021	1,100	136.6	45 / 45
163	16,313	932	136.6	15 / 260
166	16,645	932	136.6	79 / 150
173	17,309	932	136.7	23 / 152
179	17,910	932	136.8	90 / 104
184	18,352	932	137.0	124 / 67
188	18,770	932	137.4	44 / 83
190	19,038	792	138.8	89 / 14
191	19,067	792	139.0	24 / 24
191	19,141	792	142.2	24 / 24
195	19,500	792	142.4	110 / 70
199	19,910	792	142.8	14 / 172
202	20,205	792	143.4	73 / 117
207	20,698	792	145.7	106 / 37
210	21,031	792	148.1	91 / 165
214	21,428	792	149.3	204 / 64
215	21,478	792	149.4	127 / 20
216	21,553	792	151.4	127 / 20
220	21,980	792	151.7	14 / 104
226	22,573	792	154.1	14 / 78
231	23,069	792	155.3	22 / 160

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
237	23,683	792	156.0	68 / 20
Robinson Mill Branch				
004	367	937	55.6 ¹	100 / 19
010	1,044	937	56.8	28 / 40
020	2,000	937	61.8	108 / 38
025	2,500	937	63.9	12 / 50
030	3,043	937	65.7	81 / 114
035	3,484	937	66.9	45 / 40
036	3,558	937	73.0	65 / 55
040	4,000	937	73.0	25 / 30
045	4,500	937	75.2	5 / 40
050	5,000	937	76.6	105 / 38
055	5,536	793	77.5	83 / 4
060	6,000	793	78.8	96 / 16
066	6,579	793	80.3	25 / 55
070	7,040	793	82.9	63 / 4
075	7,500	793	85.2	32 / 27
080	7,971	793	87.1	44 / 34
083	8,311	793	87.8	84 / 58
091	9,129	633	90.9	18 / 20
099	9,898	633	96.2	29 / 42
106	10,561	633	99.3	26 / 15
111	11,144	472	102.9	44 / 29
119	11,874	472	104.0	12 / 12
119	11,948	472	107.9	12 / 12
125	12,500	472	109.7	7 / 37
130	13,026	472	114.0	30 / 47
Rocky Marsh Creek				
006	555	1,095	67.1 ¹	514 / 830
011	1,061	1,095	67.0	214 / 522
017	1,673	1,095	67.3	202 / 268
023	2,265	1,095	68.4	383 / 5
027	2,698	1,095	69.4	248 / 439
033	3,256	1,095	70.4	5 / 417
038	3,845	1,095	71.7	4 / 459
044	4,389	1,068	74.2	60 / 82
049	4,900	1,068	75.6	197 / 94
054	5,429	1,068	76.3	315 / 63
059	5,927	1,068	77.4	49 / 171
066	6,582	947	79.4	296 / 54
070	6,961	947	80.8	127 / 15
071	7,127	947	88.7	127 / 15
076	7,569	947	88.7	300 / 300
082	8,202	947	88.7	300 / 500
092	9,214	947	88.7	150 / 150

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
096	9,565	947	88.7	105 / 57
099	9,869	947	88.7	40 / 104
103	10,283	947	90.9	68 / 95
Rocky Marsh Creek Tributary				
006	579	327	77.5 ¹	13 / 15
011	1,059	327	82.2	13 / 14
015	1,504	327	88.3	11 / 14
019	1,946	327	91.9	63 / 33
025	2,469	327	95.2	11 / 15
030	3,027	327	103.3	10 / 11
035	3,486	327	106.7	22 / 21
040	3,975	327	111.7	10 / 20
045	4,499	327	116.5	11 / 19
051	5,061	327	121.7	23 / 16
056	5,644	327	130.4	18 / 18
063	6,250	327	137.8	12 / 17
Rowan Branch				
010	1,000	2,083	81.8 ¹	345 / 36
015	1,500	2,083	82.1	780 / 18
021	2,110	2,083	83.0	1,032 / 33
024	2,444	2,083	83.6	276 / 147
030	3,000	2,083	85.4	349 / 28
034	3,409	2,083	86.1	496 / 32
040	4,000	2,083	86.8	23 / 164
045	4,500	2,083	87.9	51 / 182
050	5,000	2,083	88.6	148 / 215
055	5,463	2,083	89.1	235 / 18
060	6,000	2,083	89.8	272 / 74
065	6,500	2,083	90.5	22 / 203
069	6,913	2,083	91.3	42 / 331
074	7,379	2,083	92.0	39 / 32
074	7,425	2,083	92.0	39 / 32
080	8,000	2,083	93.2	182 / 153
085	8,500	2,083	93.6	193 / 203
089	8,903	2,001	93.8	406 / 17
094	9,421	1,766	94.1	177 / 69
100	10,000	1,766	94.7	87 / 329
105	10,500	1,766	95.0	75 / 148
110	11,000	1,766	95.7	16 / 178
115	11,500	1,766	96.8	93 / 232
120	12,000	1,766	97.6	63 / 291
125	12,500	1,766	98.0	152 / 297
130	13,000	1,766	98.4	68 / 119
135	13,500	1,766	99.4	66 / 196
140	14,000	1,708	100.0	210 / 255

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
145	14,500	1,708	100.3	238 / 356
150	15,000	1,590	100.7	87 / 314
154	15,420	1,590	101.0	218 / 49
159	15,884	1,590	101.3	302 / 23
163	16,342	1,590	101.6	260 / 15
168	16,765	1,590	102.1	33 / 180
175	17,500	1,590	103.3	122 / 15
180	18,000	1,590	104.9	32 / 272
185	18,456	1,590	105.4	235 / 127
191	19,086	1,590	106.0	121 / 105
195	19,500	1,506	106.4	365 / 26
202	20,188	917	106.9	76 / 132
205	20,500	917	107.2	83 / 189
211	21,056	917	107.8	15 / 109
213	21,268	917	108.4	12 / 15
213	21,294	917	116.6	60 / 75
219	21,914	917	116.6	256 / 217
225	22,473	917	116.6	138 / 81
230	22,961	917	116.7	91 / 37
230	23,037	917	119.1	91 / 37
235	23,500	917	119.1	169 / 88
240	24,000	917	119.3	129 / 115
245	24,500	812	119.5	147 / 88
250	25,000	812	120.0	10 / 203
255	25,537	812	121.2	123 / 12
260	26,000	582	122.8	85 / 16
264	26,450	582	124.7	31 / 20
270	27,045	582	132.1	10 / 14
275	27,500	582	134.9	43 / 36
279	27,906	582	135.9	21 / 74
285	28,500	582	138.6	8 / 24
290	29,028	582	139.6	81 / 70
294	29,441	468	139.8	48 / 42
301	30,063	468	140.4	93 / 31
Sevenmile Swamp				
010	1,010	2,216	128.7 ¹	170 / 398
015	1,492	2,216	128.7 ¹	315 / 300
019	1,917	2,216	128.7 ¹	239 / 300
028	2,795	2,216	129.6	170 / 230
033	3,265	2,216	130.1	64 / 56
034	3,360	2,216	131.7	62 / 64
034	3,420	2,216	132.0	360 / 140
036	3,574	2,216	135.1	470 / 418
039	3,883	2,216	135.1	696 / 226
045	4,500	2,216	135.1	613 / 80

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
050	5,000	2,216	135.1	576 / 130
055	5,487	2,216	135.1	560 / 260
060	5,977	2,216	135.1	108 / 345
066	6,610	2,216	135.1	393 / 201
070	7,040	2,216	135.7	420 / 75
075	7,509	2,216	136.3	440 / 41
080	8,011	2,216	137.0	204 / 200
085	8,511	2,216	137.6	110 / 220
089	8,930	2,216	138.1	85 / 124
098	9,755	2,084	139.0	43 / 42
102	10,201	2,084	140.3	43 / 42
110	11,014	2,084	141.2	63 / 173
115	11,464	2,084	141.8	114 / 189
120	11,984	2,084	142.5	113 / 226
125	12,481	2,084	143.1	130 / 245
130	12,987	2,084	143.8	231 / 36
135	13,503	1,946	144.6	185 / 72
140	13,974	1,946	145.5	288 / 46
144	14,419	1,946	146.0	195 / 204
150	14,961	1,946	146.6	115 / 112
154	15,360	1,946	147.8	193 / 22
161	16,063	1,946	149.8	272 / 22
165	16,460	1,946	150.2	22 / 685
169	16,912	1,628	150.5	20 / 462
177	17,727	1,628	150.7	52 / 326
183	18,319	1,628	151.4	52 / 166
190	19,023	1,628	153.8	20 / 65
196	19,568	1,628	155.7	55 / 100
200	20,037	1,628	156.0	20 / 56
205	20,528	1,628	157.9	60 / 144
210	21,017	1,628	158.4	129 / 202
215	21,512	1,628	158.7	213 / 90
220	22,005	1,628	159.4	40 / 142
225	22,493	1,628	160.4	91 / 65
234	23,401	1,487	162.0	25 / 25
236	23,633	1,487	162.5	25 / 25
240	23,987	1,487	163.6	23 / 70
245	24,487	1,487	164.9	50 / 52
250	24,987	1,487	166.3	231 / 19
255	25,452	1,487	167.1	29 / 334
260	25,997	1,487	167.5	313 / 65
265	26,497	1,487	167.7	218 / 100
269	26,902	1,487	168.0	287 / 19
278	27,793	1,487	169.3	67 / 128
285	28,491	1,361	170.4	136 / 140

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
290	28,987	1,361	171.0	139 / 134
295	29,487	1,361	171.8	151 / 109
300	29,987	1,361	172.7	74 / 112
305	30,488	1,361	173.1	97 / 201
310	30,964	1,282	173.3	28 / 244
315	31,535	1,282	173.6	136 / 152
320	32,047	1,282	173.9	61 / 318
323	32,320	1,282	174.0	38 / 369
330	32,997	1,043	175.0	44 / 88
335	33,452	1,043	177.1	21 / 26
340	33,963	1,043	180.5	85 / 17
345	34,485	1,043	181.4	46 / 57
350	34,987	1,043	182.2	73 / 142
355	35,487	965	182.4	115 / 89
360	35,987	965	182.6	20 / 65
364	36,412	965	182.8	26 / 22
368	36,778	965	183.4	26 / 22
375	37,483	965	184.4	20 / 92
378	37,764	965	184.9	15 / 120
379	37,853	965	189.2	15 / 120
381	38,061	965	189.2	43 / 172
387	38,654	965	189.2	91 / 128
392	39,188	965	189.3	95 / 82
398	39,776	965	189.9	16 / 39
401	40,097	836	191.5	75 / 125
404	40,439	836	191.9	72 / 122
409	40,920	836	192.5	55 / 158
414	41,405	836	193.2	180 / 79
Shade Branch				
002	234	836	80.0 ¹	113 / 17
010	953	836	81.8	152 / 20
015	1,500	802	83.2	96 / 24
020	2,023	802	85.0	67 / 69
026	2,572	802	86.5	119 / 14
031	3,061	802	88.2	31 / 51
031	3,136	802	92.0	31 / 51
035	3,492	802	92.2	77 / 62
040	4,008	688	92.3	88 / 93
045	4,500	688	92.7	50 / 62
050	5,000	688	94.5	58 / 52
Six Runs Creek				
006	598	11,198	49.4 ¹	438 / 471
014	1,429	11,198	49.4 ¹	91 / 91
015	1,475	11,198	49.4 ¹	91 / 91
028	2,796	11,198	49.4 ¹	164 / 611

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
047	4,746	11,191	49.4 ¹	456 / 170
060	6,000	11,172	49.4 ¹	645 / 344
072	7,161	11,160	49.4 ¹	687 / 465
100	9,991	11,160	49.4 ¹	403 / 553
117	11,698	11,160	49.4 ¹	186 / 839
136	13,579	11,160	49.4 ¹	501 / 696
157	15,672	11,099	49.4 ¹	358 / 524
167	16,700	11,067	49.6	78 / 970
182	18,246	11,045	50.1	149 / 1,076
195	19,500	11,045	50.6	648 / 105
210	20,956	11,045	51.1	152 / 152
210	21,008	11,045	51.2	152 / 152
255	25,500	11,027	52.5	163 / 919
273	27,305	11,004	53.0	367 / 1,183
286	28,565	10,926	53.2	478 / 874
306	30,584	10,926	53.6	341 / 422
315	31,500	10,926	53.8	1,203 / 423
332	33,189	10,926	54.1	879 / 480
360	36,000	10,873	54.8	1,128 / 451
373	37,321	10,859	55.2	189 / 735
389	38,912	10,859	55.4	907 / 213
406	40,620	10,859	55.6	271 / 1,117
435	43,500	10,763	55.9	450 / 462
450	45,000	10,763	56.2	493 / 375
469	46,947	10,112	56.6	398 / 200
482	48,230	10,112	56.9	409 / 266
505	50,506	10,104	57.5	103 / 100
506	50,572	10,104	57.9	103 / 100
540	54,000	10,074	59.4	425 / 845
577	57,694	10,074	60.1	689 / 457
598	59,764	10,074	60.8	422 / 501
631	63,063	10,074	61.8	193 / 192
631	63,115	10,074	61.8	193 / 192
643	64,264	9,822	62.3	906 / 802
663	66,252	9,822	62.6	885 / 694
672	67,182	9,822	62.7	511 / 472
691	69,112	9,749	63.0	678 / 599
705	70,500	9,749	63.4	658 / 410
717	71,713	9,749	63.6	515 / 224
737	73,723	9,734	64.1	330 / 826
749	74,858	9,701	64.4	597 / 492
771	77,083	9,646	64.9	873 / 750
780	78,000	9,646	65.1	1,001 / 725
798	79,777	9,499	65.5	224 / 665
810	80,953	9,484	65.9	993 / 308

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
831	83,113	9,466	66.4	358 / 504
845	84,534	9,466	66.8	154 / 223
861	86,121	7,884	67.5	162 / 880
881	88,149	7,856	68.0	305 / 770
902	90,249	7,856	68.5	145 / 734
918	91,769	7,856	69.0	145 / 702
933	93,260	7,790	69.7	144 / 611
945	94,500	7,790	70.2	144 / 393
960	96,000	7,724	71.1	213 / 282
979	97,926	7,701	72.4	873 / 49
995	99,544	7,670	73.5	595 / 210
996	99,590	7,670	74.6	595 / 210
1008	100,753	7,658	75.0	862 / 537
1022	102,248	7,658	75.5	822 / 369
1037	103,673	7,627	76.0	833 / 213
1050	105,000	7,627	76.4	60 / 583
1066	106,563	7,627	77.0	185 / 1,023
1073	107,349	7,597	77.2	244 / 1,023
1095	109,500	7,457	77.6	243 / 1,008
1110	111,000	7,457	78.0	235 / 702
1125	112,500	7,457	78.3	143 / 253
1140	114,000	7,425	79.0	587 / 253
1155	115,500	7,403	79.6	253 / 590
1171	117,097	7,366	80.2	354 / 336
1182	118,196	7,366	80.6	282 / 516
1194	119,363	7,366	81.0	241 / 519
1212	121,217	6,872	81.8	122 / 492
1234	123,449	6,872	82.8	252 / 747
1254	125,357	6,872	83.9	264 / 457
1261	126,147	6,872	84.3	67 / 79
1262	126,201	6,872	85.5	67 / 79
1276	127,594	6,673	87.0	235 / 853
1291	129,123	6,673	87.2	139 / 1,329
1308	130,834	6,673	87.6	171 / 1,039
1332	133,158	6,673	88.0	424 / 632
1342	134,162	6,673	88.4	228 / 208
1352	135,239	6,640	88.9	74 / 85
1353	135,291	6,640	89.2	74 / 85
1367	136,688	6,563	90.0	399 / 648
1378	137,839	6,563	90.1	921 / 1,124
1399	139,910	5,883	90.4	1,106 / 1,053
1413	141,276	5,852	90.7	551 / 456
1425	142,500	5,852	91.2	900 / 236
1440	144,000	5,852	91.7	941 / 325
1451	145,105	5,852	92.2	220 / 513

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
1467	146,742	5,275	93.1	550 / 609
1487	148,682	5,275	94.0	262 / 526
1500	150,000	5,251	95.6	233 / 234
1515	151,500	5,251	97.1	361 / 470
1533	153,346	4,621	97.9	682 / 876
1549	154,853	4,621	98.2	694 / 807
1561	156,106	4,621	98.3	131 / 131
1576	157,579	4,599	99.6	536 / 559
1589	158,862	4,599	99.8	358 / 242
1608	160,794	4,599	100.2	108 / 107
1608	160,841	4,599	100.3	108 / 107
1624	162,377	3,890	100.9	137 / 206
1636	163,637	3,890	101.4	233 / 112
1652	165,152	3,427	102.5	133 / 121
1667	166,670	3,412	103.5	71 / 456
1680	168,000	3,412	104.0	79 / 387
1697	169,740	3,412	104.6	172 / 375
1714	171,365	3,356	105.4	236 / 145
1729	172,948	3,206	106.3	180 / 105
1745	174,455	3,184	107.2	121 / 129
1755	175,500	3,184	107.8	170 / 101
1771	177,127	3,184	108.3	163 / 123
1781	178,110	3,184	108.7	110 / 261
1799	179,927	3,123	109.4	87 / 97
1800	179,975	3,123	110.2	87 / 97
1815	181,500	3,063	110.8	116 / 209
1829	182,899	2,980	111.7	195 / 120
1845	184,500	2,980	113.2	149 / 120
1863	186,318	2,952	114.8	261 / 232
1877	187,725	2,952	115.7	70 / 120
1887	188,699	2,952	116.8	80 / 128
1903	190,315	2,952	118.0	286 / 266
1932	193,192	2,168	119.2	179 / 179
1938	193,804	2,168	119.4	40 / 40
1939	193,850	2,168	119.8	40 / 40
1950	195,000	2,168	120.5	103 / 88
1963	196,284	1,399	121.8	201 / 66
1970	197,049	1,399	122.5	37 / 160
1977	197,671	1,399	123.2	272 / 61
1983	198,282	1,399	123.9	137 / 116
1989	198,912	1,372	124.8	225 / 52
1998	199,754	1,372	126.0	271 / 39
2004	200,365	1,372	126.4	88 / 123
2011	201,094	1,372	126.9	52 / 187
2021	202,065	1,372	128.2	12 / 150

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
2027	202,739	1,256	129.3	33 / 20
2028	202,785	1,256	129.9	33 / 20
2032	203,186	1,256	130.6	51 / 91
2041	204,068	880	131.2	125 / 123
2049	204,853	880	131.9	137 / 117
2057	205,694	880	132.9	75 / 108
2069	206,895	776	135.3	25 / 169
2077	207,692	776	137.2	76 / 112
South River				
022	2,205	9,848	26.1 ¹	97 / 895
040	4,000	9,806	26.1 ¹	77 / 586
064	6,389	9,787	26.1 ¹	463 / 911
084	8,369	9,776	26.1 ¹	153 / 1,158
103	10,339	9,776	26.1 ¹	789 / 436
128	12,766	9,776	26.1 ¹	1,423 / 524
141	14,096	9,453	26.1 ¹	690 / 585
160	16,000	9,453	26.1 ¹	1,083 / 94
177	17,654	9,453	26.1 ¹	195 / 1,136
197	19,667	9,433	26.1 ¹	666 / 94
222	22,178	9,433	26.1 ¹	626 / 94
251	25,112	9,433	26.1 ¹	244 / 542
263	26,259	9,414	26.1 ¹	382 / 941
280	28,000	9,401	26.1 ¹	94 / 454
300	30,000	9,390	26.1 ¹	94 / 159
320	32,000	9,390	26.1 ¹	1,178 / 94
342	34,241	9,390	26.1 ¹	901 / 94
362	36,217	9,324	26.1 ¹	93 / 310
377	37,727	9,324	26.1 ¹	93 / 93
398	39,780	9,305	26.1	415 / 93
424	42,396	9,305	26.7	123 / 169
440	44,000	9,289	27.0	668 / 254
460	46,000	9,280	27.3	668 / 776
480	48,000	9,280	27.6	316 / 109
498	49,840	9,280	28.0	129 / 300
516	51,638	9,280	28.5	73 / 73
517	51,686	9,280	28.8	73 / 73
542	54,162	9,280	29.6	93 / 369
571	57,071	9,241	30.0	92 / 747
580	58,000	9,241	30.0	171 / 493
603	60,297	9,241	30.4	384 / 93
622	62,176	9,215	30.7	625 / 197
640	64,000	9,122	30.9	166 / 92
660	66,000	9,096	31.3	248 / 351
682	68,195	9,096	31.7	92 / 91
705	70,508	9,088	32.1	333 / 173

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
721	72,133	9,088	32.4	91 / 103
740	74,000	9,069	32.8	289 / 773
758	75,790	9,047	33.1	577 / 422
782	78,230	9,034	33.6	450 / 91
800	80,000	9,017	34.1	109 / 253
813	81,340	9,017	34.5	91 / 571
840	84,000	9,017	35.1	208 / 91
864	86,445	8,976	35.8	105 / 90
880	88,000	8,976	36.2	90 / 90
909	90,890	8,976	36.9	90 / 90
923	92,285	8,962	37.2	94 / 90
945	94,479	8,872	37.7	821 / 275
960	96,000	8,872	37.9	106 / 90
974	97,422	8,872	38.3	234 / 90
997	99,719	8,872	38.8	90 / 90
1027	102,709	8,872	39.6	489 / 90
1035	103,532	8,872	39.8	86 / 86
1036	103,579	8,872	40.0	86 / 86
1047	104,669	8,872	40.5	160 / 89
1076	107,587	8,816	41.2	89 / 462
1105	110,474	8,797	41.9	89 / 273
1120	112,000	8,782	42.2	638 / 105
1137	113,726	8,782	42.6	591 / 89
1160	116,000	8,768	43.1	317 / 150
1180	118,000	8,762	43.6	760 / 137
1205	120,486	8,727	44.2	88 / 830
1230	123,040	8,707	44.8	200 / 92
1244	124,352	8,702	45.3	88 / 159
1262	126,197	8,702	45.8	173 / 723
1283	128,253	8,684	46.3	305 / 149
1300	130,000	8,670	46.8	88 / 416
1321	132,130	8,656	47.4	103 / 88
1340	134,000	8,656	48.1	302 / 88
1363	136,318	8,656	48.8	135 / 369
1380	138,000	8,656	49.3	88 / 664
1401	140,054	8,551	49.8	177 / 996
1427	142,695	8,442	50.3	846 / 677
1940	194,000	7,778	65.4	254 / 1,281
1957	195,698	7,776	65.6	1,300 / 1,632
1980	198,000	7,773	65.7	1,484 / 1,306
2000	200,000	7,764	66.0	80 / 2,584
2021	202,067	7,762	66.4	85 / 414
2040	204,000	7,762	66.9	80 / 2,224
2065	206,458	7,758	67.2	320 / 1,848
2076	207,603	7,754	67.4	113 / 1,126

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
2087	208,726	7,754	67.7	1,974 / 881
2088	208,771	7,754	68.8	1,974 / 881
2110	211,040	7,750	69.2	2,050 / 149
2139	213,896	7,744	69.5	239 / 1,697
2164	216,389	7,735	69.8	1,397 / 759
2180	218,000	7,735	70.0	609 / 1,479
2202	220,163	7,735	70.4	383 / 1,722
2224	222,428	7,704	70.9	78 / 1,773
2240	224,000	7,704	71.2	78 / 2,038
2260	226,000	7,699	71.6	78 / 1,033
2281	228,113	7,696	72.1	199 / 678
2300	230,000	7,696	72.6	769 / 423
2320	232,000	7,696	73.0	1,270 / 78
2343	234,304	7,696	73.6	1,010 / 780
2361	236,060	7,549	73.9	333 / 1,581
2381	238,089	7,529	74.2	73 / 1,963
2408	240,790	7,529	74.8	82 / 706
2434	243,450	7,522	75.3	154 / 153
2435	243,495	7,522	75.4	154 / 153
2460	246,000	7,518	75.8	73 / 701
2480	248,000	7,518	76.3	1,448 / 397
2502	250,225	7,512	76.7	1,297 / 300
2522	252,230	7,137	77.3	802 / 65
2540	254,000	7,137	78.0	396 / 294
2562	256,169	7,127	78.7	297 / 326
2586	258,558	7,127	79.3	110 / 1,445
2610	260,994	7,119	79.6	516 / 2,315
2624	262,445	7,119	79.7	397 / 2,122
2641	264,075	7,119	79.9	416 / 1,414
2671	267,074	7,119	80.5	116 / 116
2671	267,120	7,119	80.8	116 / 116
2705	270,532	7,111	81.7	496 / 505
2724	272,383	7,095	82.2	424 / 785
2742	274,161	7,087	82.7	703 / 1,199
2760	276,000	7,087	83.2	1,207 / 748
2780	278,000	7,087	83.8	1,634 / 64
2800	280,000	7,087	84.7	256 / 921
2820	282,000	7,081	85.4	235 / 1,503
2840	284,000	7,081	86.0	686 / 623
2860	286,000	7,066	86.5	606 / 796
2882	288,151	7,058	87.1	592 / 697
2900	290,000	7,058	87.8	100 / 888
2920	292,000	7,050	88.4	1,060 / 482
2940	294,000	7,039	88.9	443 / 819
2960	296,000	7,039	89.4	63 / 540

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
2980	298,000	7,031	90.2	463 / 449
3001	300,135	7,031	90.7	240 / 857
3021	302,115	7,025	91.2	320 / 559
3040	304,000	7,025	91.8	254 / 314
3058	305,754	7,019	92.7	584 / 103
3320	332,000	6,715	101.8	532 / 1,785
3338	333,814	6,673	101.9	577 / 1,160
3360	336,000	6,673	102.0	600 / 1,650
3380	338,000	6,426	102.0	700 / 1,200
3400	340,000	6,421	102.2	1,300 / 800
3420	342,000	6,410	102.3	1,300 / 800
3440	344,000	6,410	102.6	1,300 / 800
3465	346,458	6,410	103.0	300 / 800
3465	346,504	6,410	103.2	72 / 72
3480	348,000	6,372	103.6	769 / 188
3500	350,000	6,364	103.9	341 / 390
3520	352,000	6,356	104.4	880 / 185
3538	353,798	6,336	104.8	1,236 / 218
3560	356,000	6,313	105.3	585 / 53
3582	358,173	6,313	105.9	423 / 673
3611	361,099	6,313	106.7	52 / 52
3611	361,149	6,313	107.0	52 / 52
3634	363,399	6,277	108.0	237 / 406
3660	366,000	6,264	108.6	52 / 352
3680	368,000	6,257	109.2	533 / 257
3700	370,000	6,257	109.6	281 / 134
3720	372,000	6,257	110.1	318 / 214
3740	374,000	6,076	110.6	249 / 556
3760	376,000	6,076	111.1	94 / 680
3780	378,000	5,981	111.6	259 / 242
3800	380,000	5,981	112.1	355 / 325
3820	382,000	5,981	112.5	224 / 599
3840	384,000	5,968	113.0	175 / 111
3860	386,000	5,968	113.6	419 / 163
3880	388,000	5,968	113.9	300 / 300
3904	390,421	5,968	114.3	93 / 93
3905	390,469	5,968	114.5	93 / 93
3920	392,000	5,938	114.9	489 / 645
3940	394,000	5,938	115.1	672 / 240
3961	396,141	5,935	115.6	328 / 180
3980	398,000	5,901	116.0	232 / 318
3999	399,888	5,901	116.4	170 / 245
4020	402,000	5,818	116.9	395 / 834
4033	403,306	5,818	117.1	53 / 53
4034	403,358	5,818	117.6	53 / 53

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
4060	406,000	5,813	118.3	972 / 172
4079	407,909	5,798	118.6	278 / 684
4100	410,000	5,798	119.0	664 / 47
4120	412,000	5,782	119.5	244 / 279
4142	414,175	5,510	119.9	847 / 408
4160	416,000	5,510	120.3	125 / 900
4180	418,000	5,510	120.7	642 / 69
4200	420,000	5,490	121.2	1,350 / 44
4220	422,000	5,490	121.5	1,016 / 235
4246	424,587	5,473	121.8	126 / 126
4246	424,642	5,473	121.9	126 / 126
4260	426,000	5,473	122.0	371 / 140
4280	428,000	5,422	122.7	549 / 271
4300	430,000	5,422	123.2	93 / 412
4320	432,000	5,422	123.8	44 / 525
4338	433,770	5,410	124.4	154 / 1,114
4346	434,628	5,410	124.9	865 / 956
4359	435,925	5,410	125.4	1,337 / 349
4372	437,187	5,410	125.7	2,670 / 324
4383	438,329	5,410	126.0	2,929 / 342
4387	438,730	5,410	126.1	2,997 / 44
4390	439,039	4,770	126.1	45 / 2,489
4394	439,375	4,770	126.2	45 / 2,748
4397	439,724	4,770	126.3	45 / 2,446
4403	440,272	4,770	126.5	287 / 1,684
Spearmans Mill Branch				
006	634	869	53.2 ¹	35 / 44
010	995	869	53.2 ¹	37 / 45
011	1,069	869	53.2 ¹	45 / 50
020	2,000	869	54.2	58 / 56
025	2,540	869	55.9	93 / 31
032	3,207	869	57.6	44 / 140
037	3,656	869	59.3	12 / 216
038	3,846	869	60.2	47 / 23
039	3,920	869	63.1	50 / 60
045	4,500	869	63.5	50 / 60
050	4,958	694	66.1	23 / 44
055	5,500	694	68.7	58 / 43
060	6,000	694	70.4	63 / 50
065	6,500	694	72.1	57 / 29
069	6,905	694	73.6	29 / 17
070	6,983	694	79.1	29 / 17
074	7,393	694	79.1	149 / 88
079	7,883	694	79.3	75 / 5
085	8,500	694	80.4	5 / 156

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
090	9,000	694	81.6	99 / 5
095	9,517	620	83.0	27 / 96
096	9,595	620	87.7	27 / 96
098	9,770	620	87.7	128 / 90
100	10,021	620	87.8	189 / 48
104	10,430	620	87.9	97 / 44
Starlins Swamp				
005	454	1,660	139.2	311 / 20
010	962	1,660	140.3	128 / 78
014	1,403	1,660	141.7	37 / 146
018	1,766	1,660	142.6	79 / 201
021	2,123	1,660	143.1	75 / 210
025	2,483	1,660	143.4	83 / 120
028	2,813	1,660	144.7	10 / 90
031	3,144	1,660	147.4	64 / 47
035	3,529	1,660	148.2	169 / 28
039	3,867	1,660	148.7	99 / 36
043	4,259	1,660	149.3	50 / 100
043	4,282	1,660	150.4	50 / 100
049	4,858	1,600	150.8	32 / 246
053	5,328	1,600	151.2	19 / 167
057	5,656	1,600	151.8	19 / 104
060	6,036	1,600	153.0	19 / 248
065	6,500	1,600	153.6	175 / 108
069	6,898	1,353	154.2	75 / 90
076	7,561	1,353	155.1	165 / 130
080	8,025	1,353	155.4	49 / 184
085	8,533	1,353	156.2	50 / 128
090	8,970	1,353	157.2	128 / 87
093	9,308	1,353	157.9	106 / 60
097	9,671	1,353	158.8	196 / 50
101	10,098	1,298	159.6	83 / 154
107	10,685	1,085	161.6	61 / 87
112	11,156	1,085	163.5	16 / 157
116	11,593	1,085	164.3	66 / 134
121	12,116	1,085	165.3	16 / 122
126	12,589	1,085	167.3	38 / 113
135	13,499	1,085	170.1	106 / 20
143	14,260	1,021	171.4	60 / 90
149	14,851	1,021	171.9	36 / 36
149	14,903	1,021	173.2	36 / 36
154	15,401	1,021	173.7	130 / 75
161	16,100	1,021	175.4	280 / 100
167	16,724	1,021	176.4	379 / 16
Stewarts Creek				

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
015	1,500	4,547	66.8	300 / 100
025	2,500	4,547	68.0	394 / 224
035	3,500	4,533	69.3	250 / 100
045	4,500	4,533	70.3	400 / 125
053	5,334	4,533	70.9	400 / 80
054	5,380	4,533	71.6	400 / 80
064	6,417	4,533	72.2	420 / 70
070	7,000	4,533	72.6	165 / 465
080	8,000	4,533	73.1	230 / 175
090	9,000	4,490	73.6	100 / 800
100	10,000	4,490	73.9	281 / 431
110	11,000	4,449	74.4	447 / 218
120	12,000	4,449	74.8	100 / 410
130	13,000	4,411	75.2	230 / 656
140	14,000	4,411	75.6	300 / 120
150	15,000	4,411	76.2	149 / 446
160	16,000	4,411	76.7	453 / 278
174	17,404	4,315	77.4	452 / 255
182	18,163	4,315	77.8	481 / 217
190	19,000	4,315	78.4	304 / 265
200	20,000	4,218	78.9	417 / 460
210	21,000	4,218	79.4	557 / 284
220	22,000	4,218	79.8	642 / 233
230	23,000	4,218	80.4	110 / 800
240	24,000	4,218	80.7	169 / 922
253	25,304	4,184	81.3	390 / 248
254	25,359	4,184	82.9	390 / 248
263	26,289	4,096	83.1	350 / 400
275	27,548	3,384	83.3	600 / 295
285	28,500	3,384	83.4	350 / 350
295	29,500	3,384	83.9	80 / 500
305	30,500	3,384	84.6	261 / 508
319	31,907	3,384	85.4	53 / 465
329	32,874	3,216	86.0	97 / 572
340	34,000	3,216	86.9	150 / 400
350	35,000	3,169	87.6	258 / 265
360	36,000	3,169	88.2	675 / 88
370	37,000	2,731	88.6	278 / 360
380	38,000	2,731	89.1	80 / 400
390	39,000	2,731	89.8	258 / 373
Tarhill Branch				
003	304	621	49.4 ¹	39 / 22
010	974	621	49.4 ¹	24 / 79
018	1,820	621	49.5	54 / 99
026	2,624	621	51.1	73 / 66

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
031	3,050	621	51.9	84 / 22
035	3,525	621	52.9	242 / 82
039	3,906	621	54.4	22 / 111
046	4,579	621	55.7	40 / 225
050	5,020	621	57.0	54 / 99
051	5,095	621	59.1	54 / 99
054	5,391	621	59.3	33 / 115
057	5,668	621	62.5	13 / 40
060	5,996	621	65.6	22 / 102
066	6,569	621	67.8	52 / 67
070	6,957	621	69.2	54 / 66
075	7,455	621	71.0	29 / 84
079	7,927	621	72.6	12 / 81
085	8,462	621	75.0	41 / 16
089	8,867	470	76.3	64 / 40
094	9,438	470	77.8	21 / 60
100	9,970	470	79.9	17 / 45
104	10,403	470	81.8	17 / 22
108	10,796	470	83.6	15 / 15
109	10,868	470	85.8	15 / 15
114	11,363	470	86.2	44 / 56
119	11,855	470	87.2	39 / 48
123	12,273	470	88.9	30 / 40
129	12,871	470	90.7	21 / 37
135	13,536	338	92.2	33 / 74
140	14,008	338	93.0	24 / 80
144	14,374	338	93.8	22 / 69
152	15,168	338	96.7	21 / 77
Tenmile Swamp				
020	2,000	2,051	97.3 ¹	478 / 325
025	2,500	2,051	97.3 ¹	336 / 286
031	3,101	1,985	97.6	107 / 473
037	3,707	1,985	98.3	343 / 242
041	4,120	1,985	98.8	311 / 153
045	4,500	1,985	99.2	187 / 172
051	5,063	1,985	99.8	132 / 378
055	5,500	1,985	100.2	218 / 223
060	6,000	1,985	100.7	188 / 194
065	6,500	1,985	101.1	117 / 237
069	6,893	1,985	101.3	85 / 138
076	7,582	1,985	101.8	50 / 50
076	7,628	1,985	102.2	50 / 50
080	8,042	1,917	103.0	142 / 110
087	8,659	1,836	103.3	238 / 78
093	9,260	1,786	103.8	39 / 105

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
099	9,861	1,786	104.5	82 / 131
106	10,560	1,786	104.9	185 / 128
111	11,066	1,786	105.2	153 / 209
116	11,618	1,786	105.4	242 / 48
123	12,323	1,786	105.9	67 / 47
128	12,786	1,786	106.3	32 / 32
128	12,832	1,786	106.8	32 / 32
134	13,356	1,385	107.6	41 / 42
138	13,770	1,385	108.1	25 / 80
142	14,248	1,385	109.4	46 / 90
148	14,752	1,385	111.2	183 / 80
154	15,422	1,385	112.5	89 / 165
160	15,970	1,345	113.2	137 / 128
165	16,500	1,345	113.8	158 / 121
170	17,030	1,345	114.4	109 / 134
177	17,659	1,345	115.5	67 / 217
180	18,000	1,345	116.2	153 / 203
184	18,407	1,223	116.9	121 / 145
189	18,932	1,223	117.6	37 / 220
195	19,500	1,223	118.3	50 / 198
200	20,000	1,223	119.0	117 / 105
204	20,399	1,223	119.5	123 / 126
208	20,843	1,223	119.8	51 / 178
215	21,500	1,060	120.5	158 / 30
220	22,000	1,060	121.1	176 / 39
224	22,423	1,060	121.6	18 / 168
231	23,084	1,060	122.6	61 / 75
237	23,721	1,060	123.5	41 / 26
243	24,335	1,060	124.5	23 / 30
244	24,381	1,060	124.9	23 / 30
249	24,897	1,060	125.6	34 / 71
255	25,500	1,060	126.1	59 / 73
261	26,101	1,060	127.1	70 / 28
265	26,519	1,060	128.1	19 / 127
270	27,000	911	129.0	106 / 72
276	27,579	911	129.9	105 / 35
279	27,935	911	130.4	79 / 83
285	28,500	911	131.7	79 / 68
292	29,235	911	134.0	94 / 44
299	29,857	851	135.2	73 / 64
Tenmile Swamp Tributary				
003	258	863	106.6	56 / 144
008	829	863	108.5	63 / 108
015	1,462	863	110.5	156 / 62
020	1,967	863	112.0	204 / 34

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
025	2,467	863	114.2	94 / 189
030	2,967	863	115.3	172 / 62
034	3,396	863	116.4	148 / 24
038	3,850	754	117.4	153 / 40
044	4,415	754	118.8	53 / 124
051	5,063	754	120.2	74 / 73
056	5,643	754	121.7	18 / 18
057	5,727	754	126.8	18 / 18
060	6,023	754	126.8	83 / 58
Turkey Creek				
027	2,711	2,590	90.2 ¹	150 / 500
040	4,000	2,590	91.1	300 / 550
050	5,000	2,590	92.1	172 / 234
055	5,500	2,590	92.7	220 / 231
061	6,111	2,590	93.2	82 / 511
070	7,036	2,590	94.2	186 / 209
080	8,000	2,560	95.2	504 / 84
087	8,737	2,560	95.8	126 / 330
093	9,306	2,560	96.4	389 / 218
101	10,135	2,560	96.8	110 / 100
102	10,181	2,560	98.2	110 / 100
115	11,500	2,560	98.6	392 / 250
125	12,500	2,520	99.2	104 / 532
135	13,500	2,520	99.8	100 / 250
145	14,500	2,520	100.5	429 / 242
155	15,500	2,520	101.0	210 / 376
166	16,612	2,470	101.6	264 / 407
175	17,500	2,470	102.2	129 / 415
185	18,500	2,470	103.3	65 / 335
194	19,384	2,470	104.1	310 / 319
200	20,000	2,470	104.6	292 / 367
207	20,651	2,470	104.9	282 / 336
207	20,701	2,470	105.0	282 / 336
215	21,479	2,410	105.3	155 / 472
224	22,446	2,320	106.2	52 / 344
235	23,500	2,220	108.0	42 / 349
245	24,500	2,220	109.6	120 / 350
255	25,500	2,220	110.2	371 / 394
265	26,500	2,160	110.6	134 / 567
273	27,300	1,990	111.3	283 / 223
280	28,000	1,820	112.3	418 / 337
285	28,500	1,820	112.9	191 / 227
290	29,000	1,820	113.8	157 / 203
295	29,500	1,820	114.4	163 / 230
300	30,000	1,820	114.8	286 / 97

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
305	30,500	1,820	115.2	222 / 176
310	31,000	1,820	115.7	294 / 133
315	31,500	1,820	116.2	254 / 108
Twomile Swamp				
003	302	1,000	146.6 ¹	22 / 171
005	541	1,000	146.1	33 / 161
007	707	1,000	148.1	33 / 161
012	1,211	1,000	148.6	80 / 19
017	1,713	1,000	151.1	77 / 46
022	2,230	1,000	153.3	110 / 45
027	2,706	1,000	154.4	123 / 140
032	3,158	1,000	154.9	340 / 15
036	3,621	1,000	155.3	190 / 76
039	3,897	1,000	155.7	81 / 158
043	4,269	1,000	156.1	53 / 137
046	4,635	1,000	158.3	15 / 109
054	5,377	859	161.3	102 / 122
058	5,817	859	161.7	40 / 233
062	6,152	859	161.9	246 / 70
Ward Swamp				
013	1,277	2,444	124.0 ¹	399 / 281
022	2,167	2,444	124.0 ¹	136 / 289
024	2,437	2,444	124.0 ¹	122 / 175
031	3,102	2,444	124.0	86 / 99
035	3,528	2,444	124.5	56 / 56
042	4,176	2,362	125.6	55 / 55
045	4,511	2,362	126.2	131 / 35
048	4,829	2,362	126.5	148 / 35
053	5,277	2,362	127.0	60 / 60
054	5,412	2,362	128.8	60 / 60
055	5,534	2,362	129.0	134 / 99
068	6,831	1,961	129.6	206 / 154
074	7,404	1,961	129.8	210 / 234
082	8,184	1,961	130.0	30 / 578
085	8,465	1,961	130.1	87 / 307
092	9,177	1,961	130.4	184 / 43
096	9,569	1,961	130.9	42 / 202
100	9,964	1,961	131.3	30 / 231
104	10,416	1,961	131.8	196 / 75
108	10,790	1,961	132.2	103 / 58
112	11,210	1,961	132.6	313 / 30
116	11,622	1,961	132.9	164 / 131
130	13,042	1,465	134.2	200 / 24
135	13,466	1,465	135.0	93 / 34
138	13,816	1,465	135.9	24 / 85

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
143	14,255	1,465	136.8	27 / 70
145	14,516	1,465	137.3	18 / 31
149	14,890	1,338	138.0	20 / 20
150	15,044	1,338	139.1	20 / 20
156	15,624	1,338	139.5	33 / 77
161	16,086	1,338	139.8	43 / 156
166	16,558	1,338	140.2	134 / 172
173	17,282	899	140.9	125 / 36
180	17,989	899	141.9	47 / 60
186	18,559	899	143.6	45 / 40
192	19,194	899	146.3	18 / 62
196	19,622	899	148.6	46 / 52
201	20,145	899	150.5	73 / 111
207	20,688	899	151.4	48 / 92
214	21,385	899	153.0	26 / 68
220	22,013	899	154.3	78 / 55
227	22,686	899	155.2	105 / 33
231	23,140	899	156.5	29 / 60
237	23,661	899	158.8	60 / 33
Ward Swamp Tributary 1				
016	1,580	1,104	129.0	23 / 59
021	2,080	1,104	130.0	23 / 23
026	2,550	1,104	131.0	23 / 35
029	2,937	1,104	132.0	23 / 23
037	3,713	678	134.0	22 / 22
040	3,979	678	134.7	22 / 22
044	4,407	678	135.8	22 / 22
049	4,927	678	137.2	22 / 22
056	5,571	678	138.9	22 / 22
062	6,150	678	141.6	22 / 22
065	6,461	678	142.5	22 / 22
066	6,620	605	142.8	17 / 22
068	6,828	605	143.5	17 / 22
071	7,066	605	143.9	22 / 22
076	7,582	605	145.4	14 / 22
079	7,939	605	147.2	21 / 18
083	8,274	605	148.5	20 / 20
090	8,981	605	150.2	20 / 20
094	9,420	605	152.0	19 / 29
098	9,766	605	152.8	17 / 17
102	10,244	605	155.6	30 / 16
Ward Swamp Tributary 2				
007	659	782	132.9 ¹	22 / 18
009	909	782	132.3	20 / 20
010	972	782	139.6	20 / 20

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
013	1,276	782	139.6	81 / 66
017	1,740	782	139.7	104 / 49
021	2,114	782	139.8	22 / 88
026	2,563	782	140.0	22 / 31
030	3,042	782	140.3	22 / 22
033	3,299	782	140.5	23 / 23
036	3,615	701	140.8	23 / 23
040	3,971	701	141.0	16 / 16
041	4,127	701	150.5	16 / 16
045	4,503	701	150.5	180 / 60
049	4,882	701	150.5	180 / 35
053	5,341	701	150.5	21 / 100
056	5,604	701	150.5	50 / 62
060	5,972	701	150.6	136 / 54
066	6,576	701	150.7	136 / 19
069	6,944	519	151.0	19 / 19
074	7,411	519	151.5	19 / 19
079	7,941	519	152.4	13 / 9
084	8,447	519	153.9	18 / 18
091	9,052	519	155.6	18 / 18
096	9,552	519	157.6	17 / 17
Ward Swamp Tributary 3				
004	445	1,052	132.8	143 / 36
009	922	1,052	134.0	28 / 28
011	1,087	1,052	135.4	28 / 28
015	1,504	1,052	136.0	130 / 72
021	2,058	1,052	136.9	44 / 137
026	2,569	814	138.1	148 / 86
030	3,037	814	139.1	178 / 27
035	3,506	814	139.8	81 / 152
040	3,995	814	140.4	120 / 40
045	4,474	814	141.5	103 / 43
051	5,075	814	143.2	161 / 14
055	5,494	814	144.1	126 / 79
059	5,920	814	144.8	145 / 72
066	6,576	814	146.0	118 / 89
070	6,994	814	147.1	14 / 161
075	7,480	814	148.1	66 / 112
080	8,013	814	149.5	69 / 87
086	8,591	684	150.6	169 / 23
090	9,007	684	151.3	103 / 49
096	9,573	684	153.0	92 / 30
100	9,986	684	154.3	65 / 65
106	10,616	684	156.8	88 / 27
110	11,041	684	158.1	51 / 79

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
114	11,426	684	158.9	25 / 77
Ward Swamp Tributary 4				
003	328	550	137.9	43 / 16
006	606	550	139.5	42 / 30
008	788	550	140.1	35 / 60
011	1,112	550	142.5	32 / 9
015	1,517	550	144.2	13 / 99
018	1,815	550	144.6	9 / 122
022	2,240	550	145.3	47 / 44
029	2,879	550	147.3	37 / 9
033	3,260	550	148.2	52 / 30
037	3,686	550	150.3	13 / 27
043	4,267	550	152.2	20 / 55
Williamson Swamp				
005	500	1,324	129.3	136 / 132
010	1,028	1,324	130.6	142 / 29
015	1,500	1,324	131.5	116 / 21
020	2,000	1,324	132.2	85 / 209
025	2,500	1,324	132.8	28 / 85
030	3,000	1,324	133.5	175 / 38
035	3,500	1,255	133.8	124 / 159
039	3,904	1,255	133.9	107 / 80
043	4,313	1,255	135.5	47 / 46
044	4,359	1,255	138.4	47 / 46
049	4,945	1,255	139.5	37 / 154
052	5,244	1,255	139.6	9 / 20
058	5,842	1,255	144.1	40 / 50
064	6,406	1,255	144.8	30 / 30
069	6,887	1,255	146.9	21 / 48
074	7,351	1,255	147.5	206 / 164
074	7,397	1,255	147.7	206 / 164
075	7,514	1,255	147.6	76 / 89
076	7,564	1,255	149.1	76 / 89
082	8,203	1,255	149.5	97 / 345
094	9,388	1,147	150.4	19 / 238
099	9,852	1,147	151.0	34 / 34
099	9,898	1,147	151.4	34 / 34
103	10,328	1,147	152.4	122 / 117
109	10,929	1,147	153.3	102 / 206
115	11,500	1,147	154.7	80 / 60
121	12,083	1,147	162.1	160 / 50
130	12,998	1,032	163.9	26 / 153
140	13,955	1,032	164.1	26 / 218
145	14,548	1,032	164.3	20 / 46
150	15,000	1,032	164.8	229 / 269

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
155	15,500	1,032	165.0	292 / 105
160	16,000	1,032	165.2	294 / 111
165	16,500	1,032	165.4	243 / 89
170	17,000	1,032	165.8	237 / 240
176	17,552	903	166.4	24 / 297
184	18,400	539	170.0	51 / 30
191	19,106	539	175.6	67 / 79
196	19,629	539	178.0	69 / 25
202	20,218	539	178.6	187 / 36
207	20,682	539	178.7	181 / 26
207	20,742	539	178.7	181 / 26
211	21,107	539	178.8	188 / 39
Wolf Pit Branch				
005	500	651	85.1	21 / 69
010	1,000	651	87.3	93 / 11
014	1,387	651	89.6	8 / 51
018	1,800	651	92.3	88 / 38
021	2,070	651	93.0	40 / 25
022	2,158	651	97.4	40 / 25
029	2,920	651	97.6	30 / 103
035	3,514	651	99.5	31 / 90
040	4,000	651	101.7	92 / 31
044	4,441	651	103.9	87 / 56
049	4,944	534	106.8	10 / 40
053	5,265	534	108.6	20 / 18
054	5,353	534	113.4	20 / 18
059	5,911	534	113.5	185 / 7
066	6,576	388	116.1	87 / 7
070	7,000	388	119.5	107 / 7
Youngs Swamp				
008	837	1,660	116.9	233 / 66
013	1,335	1,660	117.2	284 / 25
018	1,795	1,660	117.5	152 / 125
021	2,128	1,660	117.8	62 / 175
027	2,716	1,660	118.2	106 / 205
033	3,259	1,660	118.6	89 / 151
037	3,714	1,660	119.1	294 / 20
042	4,232	1,660	119.8	109 / 117
048	4,765	1,660	121.1	105 / 64
053	5,252	1,660	122.3	200 / 110
058	5,780	1,600	123.0	176 / 85
061	6,114	1,600	123.3	80 / 182
065	6,504	1,600	123.5	36 / 36
066	6,552	1,600	123.6	36 / 36
070	6,997	1,600	124.0	82 / 177

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
075	7,503	1,600	124.5	110 / 55
080	8,010	1,600	125.3	168 / 79
085	8,500	1,600	125.8	284 / 19
090	9,007	1,600	126.3	31 / 282
095	9,498	1,430	126.9	194 / 37
100	9,998	1,430	127.4	159 / 101
105	10,482	1,430	127.8	275 / 39
110	11,003	1,430	128.3	140 / 74
115	11,503	1,430	128.9	174 / 51
120	12,013	1,310	129.5	122 / 142
125	12,511	1,310	130.0	44 / 184
129	12,944	1,310	130.6	33 / 264
135	13,530	1,070	131.4	62 / 119
140	13,973	1,070	132.2	112 / 107
145	14,529	1,070	133.3	55 / 169
150	15,009	1,070	134.2	124 / 69
155	15,486	1,070	135.3	26 / 79
160	16,017	1,070	136.4	119 / 107
164	16,449	1,070	137.1	42 / 111

¹Elevation includes backwater effects

²Great Coharie Creek

³Little Coharie Creek

⁴Mill Creek 2

5.3 Coastal Analyses

This section is not applicable to this FIS project. Table 18 “Summary of Coastal Analyses” does not apply to Sampson 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 Sampson 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 Sampson County is # 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)
35.12	-78.63	-0.92
35.00	-78.63	-0.92
34.88	-78.50	-0.89
34.75	-78.37	-0.83
35.25	-78.50	-0.93
35.25	-78.38	-0.96
35.13	-78.50	-0.94
35.12	-78.37	-0.96
35.13	-78.25	-0.94
35.00	-78.50	-0.93
35.00	-78.38	-0.95
35.00	-78.25	-0.95
34.87	-78.38	-0.89
34.87	-78.25	-0.89
34.75	-78.25	-0.81
34.62	-78.25	-0.80
Average conversion in Sampson County from NGVD 29 to NAVD 88 = -0.91 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 Sampson 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 witness post)

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 <http://www.ngs.noaa.gov/cgi-bin/datasheet.prl>, or contact the NGS Information Services Branch at:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-32822
(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, 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.

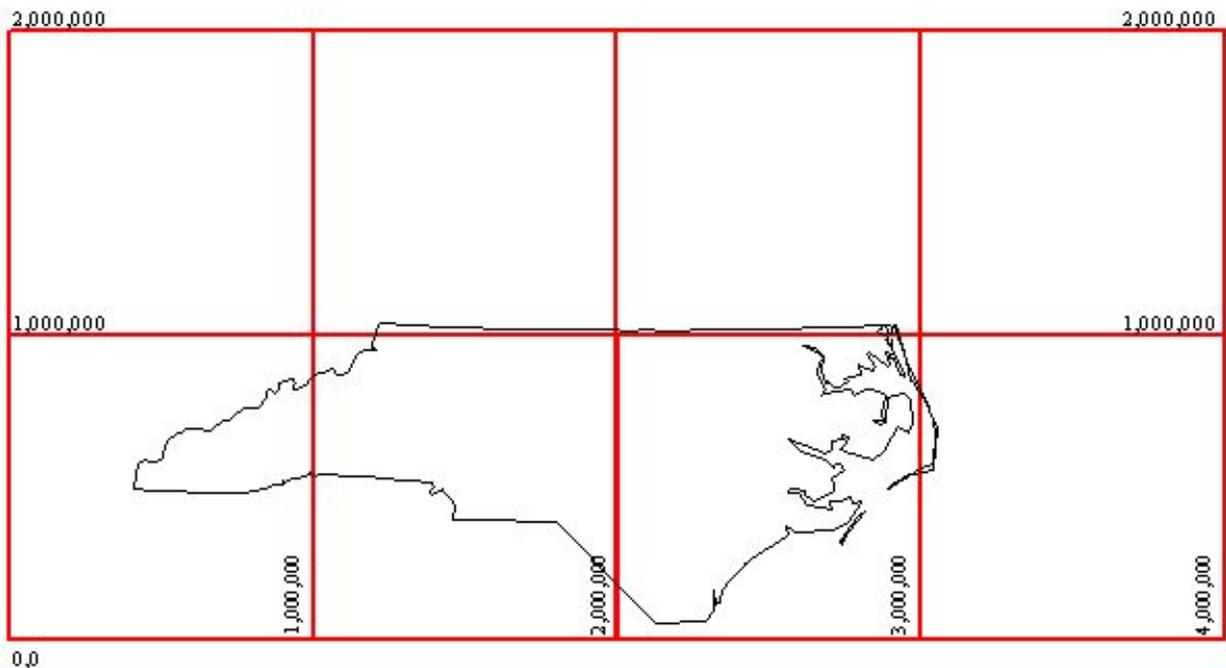


Figure 3 - North Carolina's State Plane Coordinate System

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). This LIDAR data was acquired during the (insert date from basin plan and update for map maintenance, if necessary) flying season.

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
Beaverdam Swamp 3								
045	4,540	415	2,051	0.7	139.9	139.9	140.8	1.0
050	4,982	375	1,754	0.9	139.9	139.9	140.9	1.0
060	6,048	173	700	2.2	140.9	140.9	141.6	0.7
078	7,782	248	1,382	1.1	145.0	145.0	145.7	0.8
087	8,664	315	1,768	0.9	145.5	145.5	146.3	0.8
096	9,594	195	897	1.7	146.1	146.1	146.9	0.8
114	11,417	280	1,338	1.0	147.0	147.0	147.9	0.8
124	12,446	287	1,449	1.0	147.6	147.6	148.5	0.9
131	13,079	305	1,082	1.3	147.9	147.9	148.9	1.0
142	14,162	162	769	1.8	150.0	150.0	150.9	0.8
147	14,672	243	1,819	0.8	150.1	150.1	151.1	1.0
156	15,640	198	985	1.4	150.4	150.4	151.3	1.0
163	16,252	176	857	1.0	150.6	150.6	151.6	1.0
170	17,041	207	628	1.4	151.2	151.2	152.2	1.0
179	17,886	165	512	1.8	152.6	152.6	153.6	0.9
185	18,472	143	350	2.6	154.6	154.6	155.5	0.9
191	19,087	132	414	2.2	156.4	156.4	157.4	1.0
197	19,738	132	483	1.9	157.6	157.6	158.6	1.0
202	20,215	80	295	1.8	158.2	158.2	159.2	1.0
209	20,909	45	175	3.0	160.1	160.1	160.9	0.9
211	21,147	29	119	4.4	161.4	161.4	162.2	0.8
221	22,108	59	163	3.2	166.5	166.5	167.4	0.9
232	23,198	198	1,087	0.5	172.1	172.1	172.9	0.7
238	23,752	151	575	0.9	172.2	172.2	173.0	0.7
242	24,211	36	189	2.8	172.6	172.6	173.3	0.7
249	24,934	36	224	2.3	175.7	175.7	176.3	0.6

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
253	25,276	82	350	1.5	176.0	176.0	176.6	0.6
Bills Swamp								
010	960	1,269	4,016	0.3	56.5 ¹	53.3	54.3	1.0
014	1,395	896	2,373	0.4	56.7 ¹	53.3	54.3	1.0
019	1,882	629	1,833	0.4	56.8 ¹	53.5	54.4	1.0
024	2,391	390	1,494	0.5	56.9 ¹	53.6	54.5	1.0
028	2,848	150	639	1.2	57.3 ¹	53.7	54.7	1.0
034	3,400	99	344	2.2	57.3 ¹	54.5	55.3	0.8
039	3,899	220	596	1.3	57.3 ¹	55.4	56.1	0.7
044	4,436	161	519	1.4	57.3 ¹	55.8	56.5	0.7
050	4,966	256	750	1.0	57.4 ¹	56.3	56.9	0.6
055	5,450	290	695	1.1	57.4 ¹	56.5	57.3	0.8
060	5,961	405	960	0.8	57.4 ¹	56.8	57.8	1.0
065	6,507	271	810	0.9	57.5	57.5	58.2	0.8
068	6,813	119	355	2.1	57.7	57.7	58.5	0.8
072	7,190	134	379	2.0	59.3	59.3	59.8	0.5
079	7,854	63	238	3.2	61.5	61.5	62.2	0.7
082	8,225	89	231	3.3	63.0	63.0	63.6	0.6
085	8,472	118	543	1.4	63.5	63.5	64.4	0.9
090	9,003	98	368	1.9	64.9	64.9	65.3	0.4
092	9,216	82	279	2.5	65.0	65.0	65.9	0.8
101	10,086	149	211	3.3	67.5	67.5	68.0	0.6
106	10,624	131	418	1.5	70.7	70.7	71.4	0.7
112	11,244	136	350	1.8	72.5	72.5	73.2	0.7
118	11,803	100	361	1.7	73.7	73.7	74.7	1.0
122	12,221	82	267	2.3	74.8	74.8	75.8	1.0
126	12,619	77	276	2.2	77.1	77.1	77.9	0.9
131	13,112	107	346	1.8	78.8	78.8	79.7	0.9
136	13,618	80	334	1.7	79.8	79.8	80.8	1.0
141	14,124	63	209	2.7	81.2	81.2	82.0	0.8
143	14,287	68	222	2.6	82.3	82.3	82.9	0.7
145	14,461	65	225	2.5	82.9	82.9	83.8	0.9
149	14,933	88	235	2.2	84.4	84.4	85.4	0.9
154	15,350	44	118	4.3	86.6	86.6	87.4	0.8
155	15,494	57	168	3.0	88.5	88.5	89.4	0.9
157	15,749	74	316	1.6	89.5	89.5	90.5	1.0
Black River								
1788	178,788	1,875	22,975	1.2	24.2	24.2	25.2	0.9
1797	179,674	2,050	27,779	1.0	24.4	24.4	25.4	1.0
1806	180,604	1,350	19,958	1.3	24.6	24.6	25.6	1.0
1816	181,598	1,580	21,878	1.2	24.8	24.8	25.8	1.0
1832	183,216	1,786	27,336	1.0	25.1	25.1	26.1	1.0
1841	184,096	2,080	35,407	0.8	25.3	25.3	26.2	1.0
1867	186,696	1,935	32,996	0.8	25.5	25.5	26.5	1.0
1892	189,198	2,355	40,247	0.7	25.8	25.8	26.8	1.0

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
1904	190,386	2,700	37,805	0.7	25.9	25.9	26.9	1.0
1932	193,199	5,100	75,792	0.4	26.1	26.1	27.0	1.0
1964	196,403	5,100	72,545	0.4	26.1	26.1	27.1	1.0
1992	199,220	3,789	48,262	0.4	26.2	26.2	27.2	1.0
2002	200,186	3,334	41,005	0.5	26.2	26.2	27.2	1.0
2032	203,194	2,266	25,545	0.8	26.3	26.3	27.3	1.0
2043	204,322	1,611	21,575	1.0	26.4	26.4	27.4	1.0
2056	205,610	1,071	14,464	1.5	26.6	26.6	27.6	1.0
2068	206,782	1,297	17,011	1.2	26.9	26.9	27.8	1.0
2106	210,624	2,665	37,547	0.6	27.1	27.1	28.1	1.0
2116	211,598	2,974	37,959	0.6	27.2	27.2	28.2	1.0
2127	212,663	2,965	32,370	0.7	27.2	27.2	28.2	1.0
2131	213,115	2,605	27,260	0.8	27.3	27.3	28.2	1.0
2146	214,637	1,825	22,678	0.9	27.4	27.4	28.4	1.0
2153	215,343	1,460	19,155	1.1	27.5	27.5	28.5	1.0
2175	217,452	2,473	34,527	0.6	27.6	27.6	28.6	1.0
2198	219,846	2,131	26,581	0.8	27.8	27.8	28.7	1.0
2208	220,793	1,886	26,476	0.8	27.9	27.9	28.8	1.0
2223	222,264	1,853	22,922	0.9	28.0	28.0	29.0	1.0
2231	223,058	1,537	17,211	1.2	28.2	28.2	29.1	1.0
2250	225,045	1,584	20,548	1.0	29.1	29.1	30.0	0.9
2896	289,634	2,350	25,668	0.8	37.6	37.6	38.4	0.8
2931	293,056	2,555	23,547	0.9	38.1	38.1	38.9	0.8
2964	296,418	1,850	13,949	1.5	39.1	39.1	39.8	0.6
2987	298,671	1,937	12,516	1.7	41.1	41.1	41.6	0.4
3011	301,112	1,716	17,453	1.2	41.9	41.9	42.4	0.5
3023	302,326	1,687	16,045	1.3	42.1	42.1	42.7	0.6
3036	303,575	1,079	10,858	1.9	42.5	42.5	43.1	0.6
3046	304,571	849	10,046	2.1	42.8	42.8	43.6	0.8
3056	305,638	1,141	12,196	1.7	43.3	43.3	44.2	0.9
3071	307,106	1,304	12,803	1.6	43.8	43.8	44.6	0.8
3083	308,251	1,079	14,993	1.4	44.0	44.0	44.9	0.9
3105	310,475	1,636	18,805	1.1	44.4	44.4	45.3	0.9
3125	312,548	1,643	21,857	1.0	44.7	44.7	45.7	1.0
3139	313,873	1,705	21,329	1.0	44.9	44.9	45.9	1.0
3168	316,778	2,979	28,283	0.7	45.2	45.2	46.1	1.0
3176	317,599	2,910	32,267	0.6	45.3	45.3	46.2	1.0
3184	318,424	2,443	26,281	0.8	45.3	45.3	46.3	0.9
3206	320,562	2,373	29,266	0.7	45.5	45.5	46.4	1.0
3220	321,970	3,013	22,672	0.9	45.6	45.6	46.6	1.0
3232	323,223	2,950	28,602	0.7	45.8	45.8	46.7	1.0
3244	324,446	3,165	40,053	0.5	45.9	45.9	46.8	0.9
3286	328,631	3,378	35,171	0.6	46.1	46.1	47.1	0.9
3306	330,569	3,847	34,949	0.6	46.2	46.2	47.2	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
3311	331,100	3,837	28,917	0.7	46.3	46.3	47.2	0.9
3336	333,643	3,123	18,162	1.1	47.0	47.0	47.8	0.8
3343	334,343	2,436	16,121	1.3	47.1	47.1	48.0	0.8
3353	335,289	1,615	13,479	1.5	47.4	47.4	48.2	0.9
3361	336,088	1,258	12,753	1.6	47.7	47.7	48.5	0.9
3369	336,889	1,634	15,485	1.3	47.9	47.9	48.8	0.9
3376	337,565	2,316	22,533	0.9	48.1	48.1	49.0	0.9
3397	339,709	3,416	37,666	0.5	48.3	48.3	49.2	0.9
3411	341,089	3,695	37,604	0.5	48.3	48.3	49.2	0.9
3422	342,234	4,591	47,031	0.4	48.4	48.4	49.3	0.9
3437	343,746	4,484	56,458	0.4	48.4	48.4	49.3	0.9
3483	348,318	3,171	35,249	0.6	48.5	48.5	49.4	0.9
3501	350,100	2,541	25,342	0.8	48.6	48.6	49.5	0.9
3538	353,825	2,797	36,158	0.6	48.8	48.8	49.8	0.9
3553	355,333	3,385	31,715	0.6	48.9	48.9	49.8	0.9
3574	357,431	3,757	40,927	0.5	49.1	49.1	50.0	0.9
3590	358,960	3,737	32,837	0.6	49.2	49.2	50.1	0.9
Cat Tail Branch								
003	340	128	402	2.8	120.7 ²	111.0	112.0	1.0
007	735	108	315	3.5	120.7 ²	112.9	113.7	0.8
011	1,121	67	249	4.5	120.7 ²	115.4	115.9	0.5
015	1,481	64	365	3.0	120.7 ²	117.5	118.5	1.0
018	1,787	57	296	3.8	120.7 ²	118.3	119.3	0.9
023	2,254	71	204	5.4	120.7 ²	120.6	120.9	0.3
025	2,505	57	296	3.8	122.1	122.1	123.1	1.0
032	3,198	24	153	7.3	126.1	126.1	126.8	0.7
035	3,505	120	915	1.2	134.0	134.0	135.0	1.0
041	4,079	23	184	5.0	134.1	134.1	135.0	0.9
043	4,269	26	171	5.4	134.6	134.6	135.5	0.9
046	4,585	34	170	5.4	136.5	136.5	137.2	0.7
051	5,074	37	246	3.8	141.0	141.0	141.8	0.8
056	5,632	39	175	5.3	142.0	142.0	143.0	1.0
058	5,821	39	166	5.6	144.2	144.2	145.2	1.0
061	6,147	40	158	5.8	148.5	148.5	149.4	1.0
Dollar Branch								
002	236	200	587	2.6	102.7 ³	100.7	101.6	1.0
008	809	160	691	2.2	103.7	103.7	104.6	0.9
011	1,118	138	621	2.4	104.6	104.6	105.4	0.8
015	1,547	88	425	3.5	106.5	106.5	107.4	0.9
019	1,923	86	456	3.3	108.6	108.6	109.3	0.7
023	2,331	135	799	1.9	109.7	109.7	110.3	0.7
027	2,685	177	832	1.8	110.2	110.2	111.0	0.8
031	3,117	185	582	2.6	111.3	111.3	112.2	0.8
039	3,882	165	1,363	1.1	119.2	119.2	119.9	0.7
043	4,292	170	1,040	1.4	119.4	119.4	120.1	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
046	4,599	130	758	2.0	119.6	119.6	120.4	0.8
049	4,947	90	539	2.8	119.9	119.9	120.7	0.8
053	5,298	85	460	3.2	120.3	120.3	121.0	0.7
056	5,604	78	517	2.3	120.7	120.7	121.3	0.6
063	6,275	100	894	1.3	127.7	127.7	128.3	0.6
066	6,635	83	714	1.6	127.7	127.7	128.4	0.7
069	6,939	70	647	1.8	127.7	127.7	128.5	0.7
076	7,575	79	485	2.0	127.8	127.8	128.8	1.0
078	7,824	71	473	2.1	128.0	128.0	129.0	1.0
083	8,310	81	468	2.1	128.3	128.3	129.3	1.0
086	8,559	79	376	2.6	128.6	128.6	129.6	1.0
088	8,761	65	292	3.4	129.0	129.0	130.0	1.0
089	8,923	57	267	3.7	129.3	129.3	130.2	0.9
093	9,285	50	400	2.5	133.0	133.0	134.0	1.0
095	9,532	37	289	3.4	133.1	133.1	134.1	1.0
099	9,942	50	516	1.9	139.5	139.5	140.0	0.6
102	10,227	50	485	2.0	139.5	139.5	140.1	0.6
105	10,486	50	382	2.6	139.5	139.5	140.2	0.6
107	10,700	50	344	2.9	139.6	139.6	140.3	0.7
109	10,892	50	337	2.9	139.7	139.7	140.5	0.8
Great Coharie Creek								
014	1,421	3,860	33,979	0.4	49.6	49.6	50.4	0.8
044	4,388	3,332	27,118	0.5	49.7	49.7	50.5	0.8
056	5,580	3,193	23,367	0.6	49.7	49.7	50.5	0.8
085	8,538	3,237	22,397	0.6	50.2	50.2	51.0	0.7
099	9,911	3,672	26,853	0.5	50.3	50.3	51.0	0.7
111	11,090	3,907	29,808	0.4	50.4	50.4	51.1	0.7
121	12,132	3,762	40,113	0.3	50.4	50.4	51.1	0.7
134	13,353	3,347	33,705	0.4	50.5	50.5	51.1	0.7
148	14,787	3,132	27,824	0.5	50.5	50.5	51.2	0.7
159	15,938	2,662	22,663	0.6	50.5	50.5	51.2	0.7
169	16,932	1,812	15,196	0.8	50.5	50.5	51.2	0.7
179	17,881	1,504	13,043	1.0	50.7	50.7	51.4	0.7
186	18,619	1,278	10,491	1.2	50.8	50.8	51.6	0.8
202	20,162	1,155	8,797	1.5	51.2	51.2	52.0	0.8
216	21,619	936	7,252	1.8	51.7	51.7	52.4	0.7
220	22,031	907	8,550	1.5	52.0	52.0	52.6	0.6
231	23,050	796	5,485	2.4	52.3	52.3	52.9	0.6
235	23,528	882	6,816	1.9	52.6	52.6	53.3	0.6
252	25,173	1,168	8,246	1.6	53.2	53.2	53.9	0.7
260	25,998	1,369	9,618	1.3	53.5	53.5	54.3	0.8
278	27,785	1,963	17,712	0.7	54.0	54.0	54.7	0.7
294	29,363	2,773	22,268	0.6	54.2	54.2	54.9	0.8
307	30,724	2,651	18,910	0.7	54.2	54.2	55.0	0.8
330	32,968	2,653	20,643	0.6	54.4	54.4	55.2	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
347	34,688	2,640	19,441	0.7	54.5	54.5	55.4	0.9
359	35,904	2,559	17,325	0.7	54.7	54.7	55.5	0.9
373	37,296	2,781	17,277	0.7	54.8	54.8	55.7	0.9
381	38,116	2,328	17,030	0.8	54.9	54.9	55.8	0.9
390	38,989	2,535	13,967	0.9	55.1	55.1	56.0	0.8
399	39,923	3,320	19,859	0.6	55.3	55.3	56.1	0.8
413	41,297	2,609	15,168	0.8	55.4	55.4	56.3	0.8
423	42,260	2,418	16,226	0.8	55.6	55.6	56.4	0.8
448	44,821	2,624	15,935	0.8	56.6	56.6	57.3	0.7
462	46,231	2,675	18,714	0.7	57.0	57.0	57.6	0.6
1294	129,396	1,670	8,097	1.0	84.6	84.6	84.6	0.0
1304	130,393	1,686	9,154	0.9	85.2	85.2	85.2	0.0
1314	131,361	1,921	10,566	0.8	86.0	86.0	86.0	0.0
1324	132,449	2,091	11,384	0.7	86.4	86.4	86.4	0.0
1332	133,214	2,219	11,995	0.7	86.7	86.7	86.7	0.0
1342	134,240	2,310	10,689	0.8	87.1	87.1	87.1	0.0
1353	135,277	2,246	12,266	0.6	87.7	87.7	87.7	0.0
1361	136,123	2,128	13,532	0.6	88.0	88.0	88.0	0.0
1374	137,363	1,881	12,041	0.6	88.4	88.4	88.4	0.0
1380	138,006	1,860	10,556	0.7	88.7	88.7	88.7	0.0
1395	139,502	2,036	11,769	0.7	89.3	89.3	89.3	0.0
1403	140,321	2,052	10,730	0.7	89.7	89.7	89.7	0.0
1412	141,194	1,930	11,438	0.7	90.1	90.1	90.1	0.0
1433	143,317	1,702	11,554	0.7	92.0	92.0	92.0	0.0
1443	144,347	2,049	15,015	0.5	92.3	92.3	92.3	0.0
1454	145,367	2,389	16,155	0.5	92.5	92.5	92.5	0.0
1461	146,089	2,584	14,565	0.5	92.7	92.7	92.7	0.0
1472	147,166	2,831	14,302	0.5	93.0	93.0	93.0	0.0
1483	148,323	2,591	12,733	0.6	93.4	93.4	93.4	0.0
1504	150,372	2,090	10,883	0.6	94.0	94.0	94.0	0.0
1514	151,352	2,135	13,212	0.5	94.4	94.4	94.4	0.0
1524	152,396	2,241	12,136	0.6	94.8	94.8	94.8	0.0
1534	153,402	2,143	10,737	0.7	95.1	95.1	95.1	0.0
1544	154,399	1,955	10,948	0.6	95.5	95.5	95.5	0.0
1554	155,379	1,852	10,403	0.7	95.8	95.8	95.8	0.0
1570	156,998	2,142	10,047	0.7	97.2	97.2	97.2	0.0
1582	158,222	2,124	13,330	0.5	97.5	97.5	97.5	0.0
1593	159,345	1,610	9,393	0.8	97.8	97.8	97.8	0.0
1599	159,877	1,263	7,682	0.9	98.0	98.0	98.0	0.0
1614	161,404	1,045	10,907	0.6	98.5	98.5	98.5	0.0
3632	363,193	3,860	33,730	0.4	49.6	49.6	50.4	0.8
Kill Swamp								
055	5,547	420	2,039	0.7	138.3	138.3	139.1	0.7
061	6,144	338	1,548	0.9	138.5	138.5	139.2	0.7
077	7,650	157	767	1.8	140.6	140.6	141.3	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
087	8,656	205	996	1.4	141.1	141.1	142.1	1.0
101	10,072	395	2,847	0.5	145.2	145.2	146.1	0.9
119	11,925	103	832	1.6	145.6	145.6	146.4	0.8
128	12,841	193	1,080	1.2	146.0	146.0	146.7	0.8
136	13,579	202	985	1.3	146.4	146.4	147.3	0.8
146	14,593	140	558	2.2	147.9	147.9	148.8	0.9
157	15,748	184	828	1.4	149.9	149.9	150.9	1.0
170	16,993	213	856	1.4	152.1	152.1	153.0	1.0
181	18,073	276	1,342	0.9	153.2	153.2	154.2	1.0
192	19,180	175	701	1.6	154.7	154.7	155.6	0.9
202	20,234	210	1,080	1.0	155.8	155.8	156.8	1.0
213	21,295	152	631	1.8	156.9	156.9	157.8	1.0
220	21,968	123	507	2.2	157.6	157.6	158.6	1.0
228	22,823	67	511	1.9	159.1	159.1	159.8	0.8
South River								
1442	144,150	668	3,109	2.7	50.7	50.7	51.4	0.8
1460	145,959	1,218	4,883	1.7	52.2	52.2	52.8	0.6
1476	147,558	1,500	8,464	1.0	53.0	53.0	53.7	0.7
1500	150,049	1,556	7,925	1.0	53.5	53.5	54.4	0.9
1519	151,942	1,708	10,483	0.8	55.2	55.2	56.2	1.0
1538	153,805	1,881	11,958	0.7	55.6	55.6	56.6	1.0
1558	155,769	2,004	11,006	0.8	56.1	56.1	57.0	0.9
1578	157,796	2,219	10,545	0.8	56.6	56.6	57.5	0.8
1588	158,799	1,937	10,640	0.8	56.9	56.9	57.8	0.8
1602	160,222	1,999	8,396	1.0	57.3	57.3	58.1	0.8
1620	162,017	2,269	11,884	0.7	57.6	57.6	58.6	1.0
1633	163,296	2,516	12,017	0.7	57.8	57.8	58.8	1.0
1653	165,270	1,684	8,627	1.0	58.2	58.2	59.1	1.0
1672	167,217	1,549	6,822	1.2	59.3	59.3	60.2	0.9
1691	169,063	1,939	12,739	0.6	59.8	59.8	60.7	0.9
1705	170,535	1,941	10,362	0.8	60.1	60.1	60.9	0.8
1715	171,502	1,952	12,275	0.7	60.4	60.4	61.2	0.8
1758	175,755	2,105	12,504	0.7	60.8	60.8	61.6	0.8
1772	177,203	2,114	10,488	0.8	61.0	61.0	61.8	0.9
1796	179,585	1,840	12,754	0.6	61.2	61.2	62.2	0.9
1810	181,043	1,671	9,328	0.8	61.4	61.4	62.4	0.9
1826	182,553	1,639	7,357	1.1	61.8	61.8	62.7	0.9
1834	183,441	923	6,292	1.2	62.0	62.0	62.9	0.9
1849	184,908	971	5,871	1.3	62.4	62.4	63.2	0.8
1861	186,101	1,215	8,308	0.9	62.8	62.8	63.6	0.8
1875	187,524	2,385	12,078	0.6	63.1	63.1	63.8	0.8
1895	189,501	2,200	11,113	0.7	63.5	63.5	64.1	0.6
1912	191,234	1,578	10,691	0.7	64.8	64.8	65.2	0.4
1932	193,241	3,237	14,114	0.6	65.0	65.0	65.4	0.4
3077	307,691	1,281	7,434	0.9	93.7	93.7	94.4	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
3104	310,376	853	5,517	1.2	94.9	94.9	95.8	0.9
3119	311,930	817	4,949	1.4	95.7	95.7	96.6	0.9
3129	312,862	1,060	6,707	1.0	96.2	96.2	97.1	0.9
3153	315,277	2,121	14,077	0.5	96.6	96.6	97.5	1.0
3165	316,504	2,582	16,253	0.4	96.7	96.7	97.6	1.0
3173	317,258	2,210	13,826	0.5	96.8	96.8	97.7	0.9
3188	318,798	1,068	6,976	1.0	97.2	97.2	98.2	0.9
3198	319,774	976	7,210	0.9	97.5	97.5	98.4	0.9
3210	320,952	1,171	9,804	0.7	97.8	97.8	98.6	0.9
3216	321,646	1,288	10,266	0.7	97.8	97.8	98.7	0.9
3224	322,420	840	7,013	1.0	97.9	97.9	98.8	0.9
3229	322,879	720	5,917	1.2	98.0	98.0	98.9	0.9
3245	324,521	587	4,972	1.4	99.0	99.0	99.8	0.8
3252	325,204	827	6,140	1.1	99.3	99.3	100.2	0.9
3262	326,246	1,214	9,801	0.7	99.6	99.6	100.5	0.9
3271	327,062	1,448	11,783	0.6	99.8	99.8	100.7	0.9
3285	328,508	1,301	9,685	0.7	100.0	100.0	100.9	0.9
3289	328,902	1,294	10,855	0.6	100.0	100.0	101.0	0.9
3303	330,291	1,211	11,658	0.6	100.2	100.2	101.1	0.9
3311	331,091	1,075	8,707	0.8	100.3	100.3	101.2	0.9
3319	331,884	886	6,539	1.0	100.6	100.6	101.5	0.9
3325	332,497	657	4,984	1.4	101.0	101.0	101.9	1.0
3333	333,295	663	5,483	1.2	101.3	101.3	102.3	1.0
Williams Old Mill Branch								
010	1,044	1,203	2,676	1.2	93.1 ¹	89.9	90.6	0.7
016	1,570	955	2,319	1.4	93.1 ¹	90.9	91.6	0.7
020	2,037	674	1,919	1.7	93.1 ²	92.1	92.6	0.6
026	2,600	518	1,796	1.8	93.4	93.4	93.9	0.5
033	3,297	496	1,968	1.6	94.4	94.4	95.4	0.9
038	3,779	465	1,833	1.7	95.3	95.3	96.3	0.9
041	4,065	399	1,517	2.1	95.9	95.9	96.7	0.9
045	4,487	364	1,632	1.9	96.7	96.7	97.6	0.9
050	5,003	395	2,074	1.5	97.2	97.2	98.2	1.0
055	5,545	398	2,038	1.6	97.9	97.9	98.9	1.0
060	6,004	362	1,992	1.6	98.5	98.5	99.5	1.0
065	6,543	337	1,681	1.9	99.2	99.2	100.2	1.0
070	7,009	414	2,241	1.4	99.9	99.9	100.8	0.9
075	7,541	507	2,312	1.4	100.2	100.2	101.2	1.0
080	8,035	511	1,974	1.6	100.6	100.6	101.6	1.0
085	8,533	397	1,760	1.7	101.2	101.2	102.1	0.9
093	9,285	336	1,752	1.7	101.9	101.9	102.8	1.0
097	9,732	253	1,241	2.0	103.1	103.1	103.8	0.7
104	10,355	292	1,370	1.8	104.4	104.4	105.1	0.7
109	10,875	302	1,616	1.5	105.2	105.2	106.1	0.9
114	11,437	254	1,098	2.2	106.0	106.0	106.9	1.0

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
122	12,235	301	1,464	1.6	108.5	108.5	109.4	0.9
127	12,684	151	1,326	1.8	110.9	110.9	111.9	1.0
136	13,604	278	4,932	0.4	120.7	120.7	121.6	0.9
139	13,856	340	4,527	0.5	120.7	120.7	121.6	0.9
147	14,676	371	5,713	0.4	120.7	120.7	121.7	0.9
150	15,001	389	5,784	0.3	120.7	120.7	121.7	0.9
154	15,385	523	6,507	0.1	120.7	120.7	121.7	0.9
159	15,882	357	4,835	0.2	120.7	120.7	121.7	0.9
163	16,333	277	3,693	0.2	120.7	120.7	121.7	0.9
169	16,850	263	3,409	0.3	120.7	120.7	121.7	1.0
172	17,193	232	2,869	0.3	120.7	120.7	121.7	0.9
180	17,957	155	1,792	0.4	120.8	120.8	121.7	1.0
183	18,343	136	1,464	0.5	120.8	120.8	121.7	1.0
190	18,977	105	838	1.0	121.5	121.5	122.5	1.0
194	19,406	82	610	1.3	121.5	121.5	122.5	1.0
198	19,778	135	787	1.0	121.7	121.7	122.6	1.0
203	20,270	193	1,627	0.5	121.8	121.8	122.7	1.0
206	20,558	216	1,238	0.6	121.8	121.8	122.8	1.0
210	21,044	156	609	1.3	121.8	121.8	122.8	1.0
216	21,563	137	540	1.2	122.2	122.2	123.2	1.0
227	22,661	86	552	1.2	127.9	127.9	128.6	0.7
231	23,051	94	537	1.2	128.0	128.0	128.8	0.8
235	23,506	81	458	1.4	128.1	128.1	129.0	1.0
239	23,869	93	450	1.4	128.4	128.4	129.3	0.9
246	24,614	62	283	1.8	128.8	128.8	129.8	1.0
249	24,933	32	161	3.1	129.2	129.2	130.2	1.0
251	25,136	29	138	3.6	129.9	129.9	130.6	0.7
257	25,675	44	141	3.6	131.5	131.5	132.3	0.8
Williams Old Mill Branch Tributary								
006	571	95	207	3.1	120.7 ³	106.4	107.4	1.0
015	1,526	338	2,381	0.3	123.2	123.2	123.3	0.0
020	2,000	225	1,171	0.6	123.2	123.2	123.3	0.0
031	3,073	67	859	0.8	139.0	139.0	139.0	0.0
034	3,447	107	795	0.8	139.0	139.0	139.0	0.0
037	3,690	30	343	1.9	139.0	139.0	139.0	0.0
039	3,929	110	946	0.7	139.1	139.1	139.1	0.0
040	4,046	93	456	1.4	139.1	139.1	139.1	0.0
041	4,117	120	394	1.6	139.1	139.1	139.1	0.0
042	4,195	42	213	3.0	139.2	139.2	139.2	0.0
044	4,371	38	125	5.2	139.5	139.5	139.5	0.1
045	4,548	54	88	7.4	141.5	141.5	141.5	0.0
046	4,610	20	78	8.3	142.9	142.9	142.9	0.0
047	4,701	62	133	4.8	144.5	144.5	144.5	0.0
050	5,024	24	124	5.2	146.3	146.3	146.5	0.2
055	5,461	53	283	2.3	147.5	147.5	148.1	0.6

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

¹Great Coharie Creek

²Elevation includes backwater effects

³Williams Old Mill Branch

6.4 Coastal Flood Hazard Mapping

Flood insurance zones and BFEs including the wave effects were identified on each transect based on the results from the onshore wave hazard analyses. Between transects, elevations were interpolated using topographic maps, land-use and land-cover data, and knowledge of coastal flood processes to determine the aerial extent of flooding. Sources for topographic data are shown in Table 23.

Zone VE is subdivided into elevation zones and BFEs are provided on the FIRM.

The limit of Zone VE shown on the FIRM is defined as the farthest inland extent of any of these criteria (determined for the 1% annual chance flood condition):

- *The primary frontal dune zone* is defined in 44 CFR Section 59.1 of the NFIP regulations. The primary frontal dune represents a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes that occur immediately landward and adjacent to the beach. The primary frontal dune zone is subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune zone occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.
- *The wave runup zone* occurs where the (eroded) ground profile is 3.0 feet or more below the 2-percent wave runup elevation.
- *The wave overtopping splash zone* is the area landward of the crest of an overtopped barrier, in cases where the potential 2-percent wave runup exceeds the barrier crest elevation by 3.0 feet or more.
- *The breaking wave height zone* occurs where 3-foot or greater wave heights could occur (this is the area where the wave crest profile is 2.1 feet or more above the total stillwater elevation).
- *The high-velocity flow zone* is landward of the overtopping splash zone (or area on a sloping beach or other shore type), where the product of depth of flow times the flow velocity squared (hv^2) is greater than or equal to 200 ft³/sec². This zone may only be used on the Pacific Coast.

The SFHA boundary indicates the limit of SFHAs shown on the FIRM as either “V” zones or “A” zones.

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

A LiMWA boundary has also been added in coastal areas subject to wave action for use by local communities in safe rebuilding practices. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. In areas where the Zone VE designation is based on the presence of a primary frontal dune the LiMWA was not delineated.

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. 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 Sampson 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 1/5/2007 North Carolina Statewide FIRM, which includes Sampson County, are presented in Table 22, "Community Map History."

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Sampson 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 Sampson County.

Table 24 - Map Revision History

Community	Initial Identification Date	Initial FIRM Effective Date	FIS Revision Date
CITY OF CLINTON	12/6/1974	1/1/1987	01/05/2007
SAMPSON COUNTY	12/20/1974	7/16/1991	01/05/2007
TOWN OF AUTRYVILLE	7/25/1975	2/1/1987	01/05/2007
TOWN OF GARLAND	6/5/2007	1/5/2007	01/05/2007
TOWN OF HARRELLS	1/5/2007	1/5/2007	01/05/2007
TOWN OF NEWTON GROVE	1/5/2007	1/5/2007	01/05/2007
TOWN OF ROSEBORO	1/5/2007	1/5/2007	01/05/2007

Table 24 - Map Revision History

Community	Initial Identification Date	Initial FIRM Effective Date	FIS Revision Date
TOWN OF SALEMBURG	1/5/2007	1/5/2007	01/05/2007
TOWN OF TURKEY	1/5/2007	1/5/2007	01/05/2007

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 Sampson 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
CITY OF CLINTON	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
CITY OF CLINTON	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
SAMPSON COUNTY	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
SAMPSON COUNTY	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF AUTRYVILLE	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF AUTRYVILLE	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF GARLAND	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF GARLAND	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF HARRELLS	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF HARRELLS	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF NEWTON GROVE	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF NEWTON GROVE	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF ROSEBORO	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF ROSEBORO	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF SALEMBURG	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF SALEMBURG	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888
TOWN OF TURKEY	1/5/2007	NCFMP	NCFMP	286-000022	9/3/2013
TOWN OF TURKEY	1/5/2007	NCFMP	NCFMP	286-0000-23	8/8/8888

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 Sampson County were produced by NCFMP under contract with the State of North Carolina and issued on effective 4/30/2014. 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

In general, for each FIS an initial Consultation Coordination Officer's (CCO) meeting is held with representatives from FEMA, the communities, and the study contractors to explain the nature and purpose of the FIS and to identify the streams to be studied by detailed methods. A final CCO meeting is held with representatives from FEMA, the communities, and the study contractors to review the results of the study

The dates of the initial and final CCO meetings held for Sampson County and Incorporated Areas were compiled from the previous countywide FIS Report and are shown in Table 26, "Consultation Coordination Officer's Meetings"

Table 26 — Consultation Coordination Officer's Meetings

Community	For FIS Dated	Initial CCO Date	Attended By	Final CCO Date	Attended By
SAMPSON COUNTY	7/16/1991	2/1/1987	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor	8/20/1990	Representatives of the study contractor, FEMA, and the county
SAMPSON COUNTY	7/16/1991	2/1/1987	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor	8/21/1990	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor
SAMPSON COUNTY	7/16/1991	2/1/1987	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor	8/21/1990	Representatives of the communities, FEMA, and the study contractor
SAMPSON COUNTY	7/16/1991	2/1/1987	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor	8/21/1990	Representatives of the Study Contractor, FEMA, and the community
SAMPSON COUNTY	7/16/1991	2/1/1987	Representatives of local communities, Sampson County, the State, FEMA, and the study contractor	8/21/1990	Representatives of the study contractor, FEMA, and the county

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 Sampson County are shown in Table 27, "Scoping Meetings." Meetings held for the map maintenance revision are also included below for Sampson County.

Table 27 — Scoping Meetings

Community	Riverbasin	Initial Scoping Date	Attended By	Final Scoping Date	Attended By
SAMPSON COUNTY	CAPE FEAR	12/15/2000	Representatives of Sampson County and Incorporated Communities, FEMA, NCDEM, and Dewberry	3/7/2001	Representatives of Sampson County and Incorporated Communities, FEMA, NCDEM, and Dewberry

Preliminary 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 preliminary and public participation meetings are shown in Table 28, "Preliminary and Public Participation Meetings."

Table 28 — Preliminary and Public Participation Meetings

Community	For FIS Dated	Meeting Location	Preliminary Meeting Date	Attended By	Public Meeting Date	Attended By
CITY OF CLINTON	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	2/20/2003	Members of the Public
CITY OF CLINTON	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	10/20/2005	The Public
CITY OF CLINTON	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	11/1/2005	Members of the Public
CITY OF CLINTON ETJ	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	2/20/2003	Members of the Public

Table 28 — Preliminary and Public Participation Meetings

Community	For FIS Dated	Meeting Location	Preliminary Meeting Date	Attended By	Public Meeting Date	Attended By
CITY OF CLINTON ETJ	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	10/20/2005	The Public
CITY OF CLINTON ETJ	1/5/2007	City of Clinton	9/29/2005	Officials from Sampson county, NCDEM, Dewberry and Watershed Concepts	11/1/2005	Members of 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 Sampson 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 27 — Map Repositories

Community	Address	City	State	Zip Code
Sampson County	Sampson County Inspections Department, 383 County Complex Road	Clinton	NC	28328
Town of Autryville	Autryville Town Hall, 215 South Gray Street	Autryville	NC	28318
City of Clinton	Clinton City Hall, 227 Lisbon Street	Clinton	NC	28392
Town of Garland	Garland Town Hall, 190 South Church Street	Garland	NC	28441
Town of Harrells	Harrells Town Hall, 372 Tomahawk Highway	Harrells	NC	28444
Town of Turkey	Turkey Town Hall, 51 Market Street	Turkey	NC	28393
Town of Roseboro	Roseboro Town Hall, 101 Pleasant Street	Roseboro	NC	28382
Town of Salemburg	Salemburg Town Hall, 100 Methodist Drive	Salemburg	NC	28385
Town of Newton Grove	Newton Grove Town Hall, 304 West Weeksdale Street	Newton Grove	NC	28366

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.

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 28, "Additional Information" is not applicable in Sampson 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 under the Contacts menu