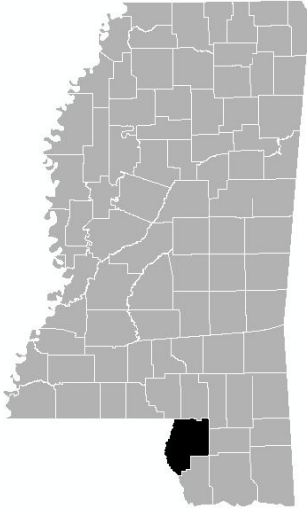


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 2



PEARL RIVER COUNTY, MISSISSIPPI AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
LUMBERTON, CITY OF*	280337
PEARL RIVER COUNTY, UNINCORPORATED AREAS	280129
PICAYUNE, CITY OF	208130
POPLARVILLE, CITY OF	280365

*No Special Flood Hazard Areas Identified



FEMA

PRELIMINARY

02/29/2016

EFFECTIVE:

TBD

FLOOD INSURANCE STUDY NUMBER
28109CV001B

Version Number 2.3.3.3

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Volume 1

Exhibits

Flood Profiles	<u>Panel</u>
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Bay Branch	03 P
East Hobolochitto Creek	04-10 P
Hobolochitto Creek	11-11b P
Holley Creek	12-13 P
Jumpoff Creek	14-17 P
Juniper Creek	18-22 P
Long Branch	23-27 P

Volume 2

Exhibits

Flood Profiles	<u>Panel</u>
Mill Creek	28-29 P
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Mill Creek No. 3	34-38 P
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Thigpen Creek	46 P
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53-57 P
58-70 P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT PEARL RIVER COUNTY, MISSISSIPPI

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

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

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

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

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

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

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

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

1.2 Purpose of this Flood Insurance Study Report

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

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

1.3 Jurisdictions Included in the Flood Insurance Study Project

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

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

Jurisdictions that have no identified SFHAs as of the effective date of this study are indicated in the table. Changed conditions in these communities (such as urbanization or annexation) or the availability of new scientific or technical data about flood hazards could make it necessary to determine SFHAs in these jurisdictions in the future.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Lumberton, City of ¹	280337	03170007	28109C0070F 28109C0185F	

¹ No Special Flood Hazard Areas Identified

Table 1: Listing of NFIP Jurisdictions continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Pearl River County Unincorporated Areas	280129	03170007 03170009 03180004	28109C0015F 28109C0020F ² 28109C0040F ² 28109C0045F 28109C0065F ² 28109C0070F 28109C0090F 28109C0095F ² 28109C0110F 28109C0120F 28109C0130F 28109C0135F 28109C0140F 28109C0145F 28109C0155F 28109C0160F 28109C0165F 28109C0170F 28109C0180F 28109C0185F 28109C0190F 28109C0195F 28109C0205F 28109C0215F 28109C0235F 28109C0240G 28109C0245G 28109C0255F 28109C0260F 28109C0265F 28109C0270F 28109C0280F 28109C0284G 28109C0285G 28109C0290F 28109C0295F 28109C0301G 28109C0303G 28109C0305G	

² Panel Not Printed

Table 1: Listing of NFIP Jurisdictions continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Pearl River County Unincorporated Areas	280129	03170007 03170009 03180004	28109C0310F 28109C0315F 28109C0320F 28109C0330F 28109C0340F 28109C0355G 28109C0360G 28109C0365G 28109C0370G 28109C0380F 28109C0385F 28109C0390F 28109C0395F 28109C0405F 28109C0410F 28109C0415F 28109C0420F 28109C0430F 28109C0435F 28109C0440F 28109C0445F 28109C0455F 28109C0465F 28109C0480G 28109C0485G 28109C0495G 28109C0505F 28109C0510F 28109C0515G 28109C0520F 28109C0530F 28109C0535F 28109C0540F 28109C0545F 28109C0560G 28109C0580G 28109C0585G	
Picayune, City of	280130	03180004	28109C0510F 28109C0515G 28109C0520F 28109C0585G	

Table 1: Listing of NFIP Jurisdictions continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Poplarville, City of	208365	03170009 03180004	28109C0284G 28109C0285G	

1.4 Considerations for using this Flood Insurance Study Report

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

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

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

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

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

The initial Countywide FIS Report for Pearl River County became effective on May 17, 1990. Refer to Table 28 for information about subsequent revisions to the FIRMs.

- 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.

- 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.
- 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 www.fema.gov/online-tutorials.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Pearl River County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and United States Geological Survey (USGS) Hydrologic Unit Code – 8 (HUC-8) codes.

Figure 1: FIRM Panel Index



ATTENTION: The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before MONTH DAY, YEAR.

PRELIMINARY
FEB 29 2016

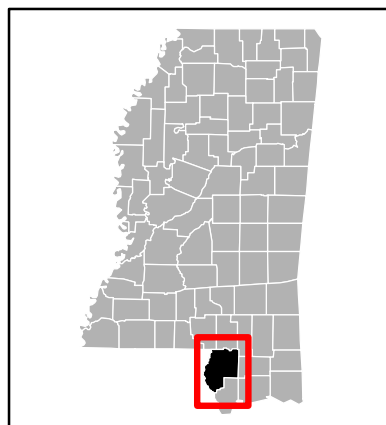


Map Projection:
State Plane Mississippi East Zone;
North American Datum 1983

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

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

*PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS
**PANEL NOT PRINTED - OUTSIDE COUNTY BOUNDARY



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP INDEX

PEARL RIVER COUNTY, MISSISSIPPI and Incorporated Areas

PANELS PRINTED:

0045, 0070, 0090, 0110, 0120, 0130, 0135, 0140, 0145, 0155, 0160, 0165, 0170, 0180, 0185, 0190, 0195, 0205, 0215, 0235, 0240, 0245, 0255, 0260, 0265, 0270, 0280, 0284, 0285, 0290, 0295, 0301, 0303, 0305, 0310, 0315, 0320, 0330, 0340, 0355, 0360, 0365, 0370, 0380, 0385, 0390, 0395, 0405, 0410, 0415, 0420, 0430, 0435, 0440, 0445, 0455, 0465, 0480, 0485, 0495, 0505, 0510, 0515, 0520, 0530, 0535, 0540, 0545, 0560, 0580, 0585



FEMA

MAP NUMBER
28109CIND08
MAP REVISED

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

Figure 2: FIRM Notes to Users

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 28 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

PRELIMINARY FIS REPORT: FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

FLOODWAY INFORMATION: Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.

Figure 2. FIRM Notes to Users

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

PROJECTION INFORMATION: The projection used in the preparation of the map was State Plane Coordinate System, Mississippi East, FIPS ZONE 2301. The horizontal datum was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

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

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

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

BASE MAP INFORMATION: Base map information shown on the FIRM was provided by Mississippi Department of Environmental Quality, Mississippi Automated Resource Information System, and the United States Census Bureau. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

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

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

Figure 2. FIRM Notes to Users

NOTES FOR FIRM INDEX

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

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

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

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

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

Figure 3: Map Legend for FIRM


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

Figure 3: Map Legend for FIRM

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

Figure 3: Map Legend for FIRM


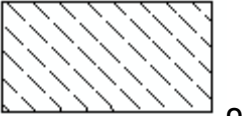

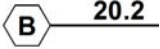

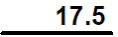
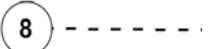


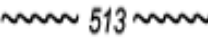








<p>COASTAL BARRIER RESOURCES SYSTEM (CBRS) AND OTHERWISE PROTECTED AREAS (OPA): <i>CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. See Notes to Users for important information.</i></p>	
 CBRS AREA 09/30/2009	Coastal Barrier Resources System Area: Labels are shown to clarify where this area shares a boundary with an incorporated area or overlaps with the floodway.
 OTHERWISE PROTECTED AREA 09/30/2009	Otherwise Protected Area
<p>REFERENCE MARKERS</p>	
 22.0	River mile Markers
<p>CROSS SECTION & TRANSECT INFORMATION</p>	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
 	<p>Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.</p> <p>Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.</p>
	Base Flood Elevation Line (shown for flooding sources for which no cross sections or profile are available)
<p>ZONE AE (EL 16)</p>	Static Base Flood Elevation value (shown under zone label)
<p>ZONE AO (DEPTH 2)</p>	Zone designation with Depth
<p>ZONE AO (DEPTH 2) (VEL 15 FPS)</p>	Zone designation with Depth and Velocity

Figure 3: Map Legend for FIRM

BASE MAP FEATURES	
<u>Missouri Creek</u>	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
<u>MAPLE LANE</u>	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
4276^{000m}E	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

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

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

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

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

Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data. The procedures to remove these areas from the SFHA are described in Section 6.4 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
All Zone A Streams studied in the 2008 FIS	Pearl River County and Incorporated Areas	Various	Various	03170007 03170009 03180004	Various	n/a	N	A	2006 or earlier
Alligator Branch	Pearl River County Unincorporated Areas	Pearl River County Boundary	1,170 feet upstream of Ravenwood Drive	03180004	3.9	n/a	N	AE	2013
Bay Branch	Picayune, City of	Confluence with East Hobolochitto Creek	2,900 feet upstream of Interstate 59	03180004	1.1	n/a	Y	AE	1978
East Hobolochitto Creek	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with Hobolochitto Creek	West Union Road	03180004	12.2	n/a	Y	AE	1987
East Hobolochitto Creek	Pearl River County (Unincorporated Areas)	West Union Road	Savannah Millard Road	03180004	16.7	n/a	N	AE	2006
Hobolochitto Creek	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with Pearl River (East Channel)	Approximately 150 feet downstream of Beech Street	03180004	5.5	n/a	Y	AE	2013

Table 2: Flooding Sources Included in this FIS Report continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Hobolochitto Creek	Pearl River County Unincorporated Areas; Picayune, City of	Approximately 150 feet downstream of Beech Street	Confluence of East and West Hobolochitto Creeks	03180004	0.5	n/a	Y	AE	1987
Holley Creek	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with East Hobolochitto Creek	East Sycamore Road	03180004	1.3	n/a	Y	AE	1978
Jumpoff Creek	Pearl River County Unincorporated Areas	Confluence with Juniper Creek	Approximately 0.7 miles upstream of Garrett & McGill Drive	03180004	9.6	n/a	N	AE	2006
Juniper Creek	Pearl River County Unincorporated Areas	Confluence with Jumpoff Creek	Just upstream of Dupont-Harts Road	03180004	10.0	n/a	N	AE	2006
Long Branch	Pearl River County Unincorporated Areas	Confluence with West Hobolochitto Creek	Approximately 1 mile upstream of Nellie Burks Road	03180004	11.2	n/a	N	AE	2006
Mill Creek	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with Pearl River	Just downstream of Rosa Street	03180004	4.2	n/a	Y	AE	2013

Table 2: Flooding Sources Included in this FIS Report continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Mill Creek No. 1	Pearl River County Unincorporated Areas	Highway 43 South	Approximately 1.0 miles upstream of West Union Road	03180004	7.4	n/a	N	AE	2006
Mill Creek No. 3	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with West Hobolochitto Creek	Approximately 2.0 miles upstream of Highway 11	03180004	12.0	n/a	N	AE	2006
Mill Creek No. 4	Pearl River County Unincorporated Areas	Confluence with West Hobolochitto Creek	1.7 miles upstream of Rock Ranch Road	03180004	2.6	n/a	N	AE	2006
Pearl River	Pearl River County Unincorporated Areas	Approximately 4 miles upstream of Interstate 59	Approximately 700 feet upstream of State Highway 26	03180004	48.2	n/a	N	AE	2013
Poplar Springs Branch	Pearl River County Unincorporated Areas; Poplarville, City of	From the confluence with Wolf River	Approximately 7200ft upstream of I-59	03170009	3.2	n/a	Y	AE	2014
Second Alligator Branch	Pearl River County Unincorporated Areas; Picayune, City of	Pearl River County Boundary	At Interstate 59	03180004	2.7	n/a	N	AE	1987

Table 2: Flooding Sources Included in this FIS Report continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Second Alligator Branch Tributary	Pearl River County Unincorporated Areas; Picayune, City of	Confluence with Second Alligator Branch	Approximately 2,400 feet upstream of Shorty Burgess Road	03180004	1.5	n/a	N	AE	1987
Thigpen Creek	Picayune, City of	Confluence with East Hobolochitto Creek	500 feet upstream of Stemwood Drive	03180004	1.3	n/a	Y	AE	1978
West Hobolochitto Creek	Pearl River County Unincorporated Areas	Confluence with Hobolochitto Creek	Henleyfield-McNeil Road	03180004	9.5	n/a	Y	AE	1987
West Hobolochitto Creek	Pearl River County Unincorporated Areas	Henleyfield-McNeil Road	State Highway 26	03180004	19.7	n/a	N	AE	2006
White Sand Creek	Pearl River County Unincorporated Areas	Confluence with West Hobolochitto Creek	1.4 miles upstream of Hoadley Road	03180004	12.0	n/a	N	AE	2006
Wolf River	Pearl River County Unincorporated Areas	Stone County and Pearl River County Boundary	Approximately 2,500 feet upstream of Highway 11	03170009	31.7	n/a	N	AE	2006

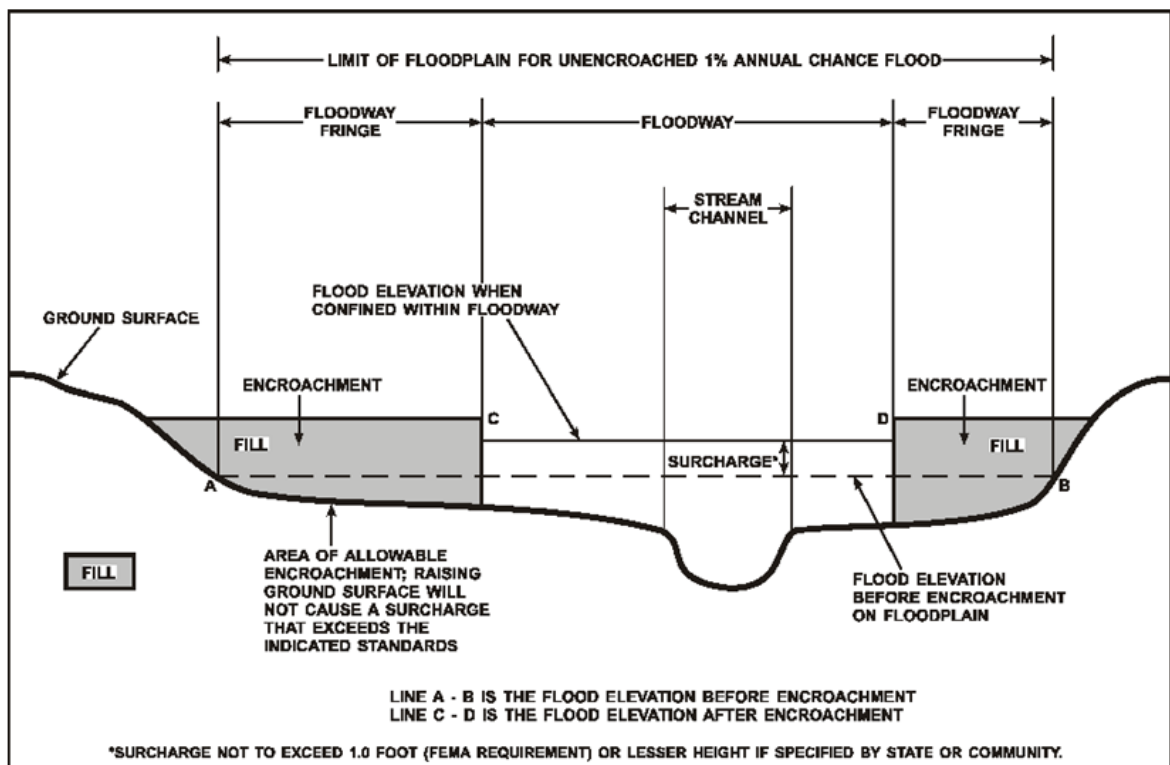
2.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1% annual chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1% annual chance flood. The floodway fringe is the area between the floodway and the 1% annual chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1% annual chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 4.

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

Figure 4: Floodway Schematic



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

All floodways that were developed for this FIS project are shown on the FIRM using the symbology described in Figure 3. In cases where the floodway and 1% annual chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

2.3 Base Flood Elevations

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

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. BFEs are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM.

2.4 Non-Encroachment Zones

This section is not applicable to this FIS Project.

2.5 Coastal Flood Hazard Areas

This section is not applicable to this FIS project.

2.5.1 Water Elevations and the Effects of Waves

This section is not applicable to this FIS project.

Figure 5: Wave Runup Transect Schematic

[Not applicable to this FIS project]

2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

This section is not applicable to this FIS project.

2.5.3 Coastal High Hazard Areas

This section is not applicable to this FIS project.

Figure 6: Coastal Transect Schematic

[Not applicable to this FIS project]

2.5.4 Limit of Moderate Wave Action

This section is not applicable to this FIS project

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

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

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

Table 3 lists the flood insurance zones in Pearl River County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Lumberton, City of	X
Pearl River County Unincorporated Areas	A, AE, X
Picayune, City of	A, AE, X
Poplarville, City of	A, AE, X

3.2 Coastal Barrier Resources System

This section is not applicable to this FIS project.

Table 4: Coastal Barrier Resources System Information

[Not applicable to this FIS project]

Table 4: Coastal Barrier Resources System Information

[Not applicable to this FIS project]

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

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

Table 5: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Black	03170007	Red Creek	Begins in Jefferson Davis County and flows through the northeastern corner of Pearl River County.	1,267
Lower Pearl	03180004	Pearl River	Largest watershed within Pearl River County, encompassing the western half of the county	1,821
Mississippi Coastal	03170009	Wolf River	Begins west of Lumberton and flows through the eastern portion of Pearl River County to Hancock County	2,448

4.2 Principal Flood Problems

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

Table 6: Principal Flood Problems

Flooding Source	Description of Flood Problems
All sources	Most flooding in Flood County occurs on the Pearl River and its tributaries. Most other rivers and streams in the county flood less frequently. Riverine flooding usually occurs from November through February when storms moving inland off the Gulf of Mexico cause heavy rainfall.
Hobolochitto Creek	Low-lying areas surrounding Hobolochitto Creek are inundated several times annually, with serious flooding occurring every 4 to 5 years. The greatest known flood on the Hobolochitto Creek occurred during July 1916 when the floodwaters were estimated to have reached an elevation of 56.7 feet (NGVD) at the U.S. Highway 11 bridge over East Hobolochitto Creek. The 1916 flood has been estimated to have a recurrence interval greater than the 0.2-percent annual chance event. Other severe floods since 1916 were the floods of June 1928, December 1961, April 1964, April 1979, February 1981 and September

Table 7: Historic Flooding Elevations

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Pearl River	At Pearl River, LA	20.2	1874	>100	USGS gage
Hobolochitto Creek	U.S. Highway 11	56.7	1916	>500	USGS gage

4.3 Non-Levee Flood Protection Measures

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

Table 8: Non-Levee Flood Protection Measures

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Jumpoff Creek Unnamed Tributary	Lake Michael Dam	Dam	Near US Highway 11	
Mill Creek 3	Hide-a-Way Lake Dam	Dam	Just upstream of Lakeshore Drive	
Mill Creek 3 Unnamed Tributary	Summers Lake Dam	Dam	Just upstream of Shore Crest Circle	
Mill Creek 9 Tributary 4	Albritton Lake Dam	Dam	Upstream of State Highway 43 on Mill Creek	
Solomon Creek Unnamed Tributary	David Lake Dam	Dam	At Lake David Drive	
Stanfield Creek	Anchor Lake Dam	Dam	Just upstream of Lakeside Drive and US Interstate 59	

4.4 Levees

This section is not applicable to this FIS project.

Table 9: Levees

[Not applicable to this FIS Project]

SECTION 5.0 – ENGINEERING METHODS

For the flooding sources in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded at least once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2% annual chance, respectively, of being equaled or exceeded during any year.

Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

The engineering analyses described here incorporate the results of previously issued Letters of Map Change (LOMCs) listed in Table 27. “Incorporated Letters of Map Change”, which include Letters of Map Revision (LOMRs). For more information about LOMRs, refer to Section 6.4, “FIRM Revisions.”

5.1 Hydrologic Analyses

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

A summary of the discharges is provided in Table 10. Stream gage information is provided in Table 12.

Table 10: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Alligator Branch	At confluence with Pearl River	3.0	1,515	1,838	2,080	2,290	2,813
Alligator Branch	Approximately 300 feet downstream of Shorty Burgess Road	2.3	1,256	1,531	1,737	1,917	2,365
Alligator Branch	Approximately 110 feet upstream of Section Line Road	1.6	888	1,016	1,110	1,189	1,377
Bay Branch	At confluence with East Hobolochitto Creek	1.9	1,770	*	2,540	2,930	4,020
Bay Branch	At State Highway 43	0.7	740	*	1,110	1,290	1,790
East Hobolochitto Creek	At confluence with Hobolochitto Creek	115.7	7,200	*	11,900	15,500	19,000
East Hobolochitto Creek	At West Union Road	93.5	*	*	*	14,106	*
East Hobolochitto Creek	At Anchor Lake Road	76.9	*	*	*	12,802	*
East Hobolochitto Creek	At U.S. Interstate 59	43.9	*	*	*	9,446	*

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
East Hobolochitto Creek	At Savannah Millard Road	35.8	*	*	*	8,723	*
Hobolochitto Creek	At confluence with the Pearl River	359.0	31,910	37,856	42,051	45,939	55,174
Hobolochitto Creek	At about 1.1 miles downstream of Beech Road	350.0	24,200	*	40,700	48,800	69,000
Holley Creek	At confluence with East Hobolochitto Creek	1.3	1,220	*	1,790	2,080	2,870
Holley Creek	At about 4,000 feet upstream of mouth	0.9	920	*	1,350	1,570	2,160
Jumpoff Creek	At confluence with East Hobolochitto Creek	18.9	*	*	*	5,199	*
Jumpoff Creek	At Duponts'Harts Chapel Road	11.0	*	*	*	3,595	*
Jumpoff Creek	At Cowart-Holliday Road	6.1	*	*	*	2,767	*
Jumpoff Creek	At Garrett and McGill Avenue	2.5	*	*	*	1,599	*
Jumpoff Creek	At about 0.7 miles upstream of Garrett & McGill Drive	1.0	*	*	*	817	*
Juniper Creek	At confluence with East Hobolochitto Creek	15.9	*	*	*	4,681	*

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Juniper Creek	At Duponts-Harts Chapel Road (downstream)	13.1	*	*	*	4,313	*
Juniper Creek	At approximately 4.3 miles upstream from Duponts-Harts Chapel Road	6.4	*	*	*	3,152	*
Juniper Creek	At Duponts-Harts Chapel Road (U/S)	0.7	*	*	*	693	*
Long Branch	At confluence with West Hobolochitto Creek	16.2	*	*	*	4,202	*
Long Branch	At Henlyfield-McNeil Road	6.6	*	*	*	2,483	*
Long Branch	Approximately 1 mile upstream of Nellie Burks Road	2.2	*	*	*	1,371	*
Mill Creek	At Confluence with the Pearl River	4.6	2,249	2,598	2,861	3,071	3,592
Mill Creek	Approximately 0.57 miles downstream of Jackson Landing Road	2.9	1,732	1,993	2,189	2,346	2,734
Mill Creek	Approximately 0.29 miles upstream of Jackson Landing Road	1.7	1,039	1,185	1,292	1,381	1,594
Mill Creek	Approximately 406 feet downstream of Abandoned Railroad	0.7	486	551	598	638	732

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Mill Creek	Approximately 428 feet downstream of Beechwood Drive	0.2	291	330	359	382	437
Mill Creek No. 1	At State Highway 43S	8.8	*	*	*	3,009	*
Mill Creek No. 1	At Old Kiln Road	6.4	*	*	*	2,412	*
Mill Creek No. 1	At about 1.9 miles upstream of West Union Road	0.3	*	*	*	311	*
Mill Creek No. 3	At confluence with West Hobolochitto Creek	16.1	*	*	*	4,230	*
Mill Creek No. 3	At State Highway 11 (downstream)	14.3	*	*	*	3,961	*
Mill Creek No. 3	At Lakeshore Drive	10.3	*	*	*	3,287	*
Mill Creek No. 3	At West Union Road	6.1	*	*	*	2,316	*
Mill Creek No. 3	At Anchor Lake Road	5.0	*	*	*	2,036	*
Mill Creek No. 3	At State Highway 11 (upstream)	3.1	*	*	*	1,488	*
Mill Creek No. 3	At about 2.0 miles upstream of State Highway 11 (U/S)	0.6	*	*	*	540	*

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Mill Creek No. 4	At confluence with West Hobolochitto Creek	1.6	*	*	*	1,002	*
Mill Creek No. 4	At Rock Ranch Road	0.8	*	*	*	900	*
Mill Creek No. 4	At about 1.7 miles upstream of Rock Ranch Road	0.1	*	*	*	173	*
Pearl River	At Pearl River, LA	8,494	115,600	145,700	169,100	193,300	253,100
Pearl River	At Bogalusa, LA	6,573	80,790	99,240	113,600	128,400	165,300
Poplar Springs Branch	At confluence with Wolf River	4.8	1,880	2,450	2,990	3,440	4,410
Poplar Springs Branch	Approximately 650 feet downstream of Troy Dedeaux Rd	4.7	1,850	2,410	2,940	3,380	4,330
Poplar Springs Branch	Approximately 1490 feet upstream of Troy Dedeaux Rd	4.3	1,840	2,380	2,900	3,340	4,260
Poplar Springs Branch	Just downstream of American Sand & Gravel Rd	4.2	1,840	2,380	2,900	3,340	4,260
Poplar Springs Branch	Just downstream of I-59	3.9	1,800	2,330	2,850	3,270	4,170

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Poplar Springs Branch	Approximately 3250 feet upstream of I-59	1.6	1,060	1,350	1,640	1,870	2,370
Poplar Springs Branch	Approximately 4370 feet upstream of I-59	1.4	997	1,260	1,540	1,750	2,220
Poplar Springs Branch	At confluence with Wolf River	1.2	933	1,170	1,430	1,620	2,050
Second Alligator Branch	Approximately 2,200 feet downstream of Asa McQueen Road	4.7	1,010	*	1,600	2,030	3,300
Second Alligator Branch	Just upstream of confluence of Second Alligator Branch Tributary	2.3	644	*	1,004	1,322	2,350
Second Alligator Branch	Just downstream of Shorty Burgess Road	1.3	412	*	618	834	1,250
Second Alligator Branch Tributary	At confluence with Second Alligator Branch	1.0	350	*	523	683	1,200
Thigpen Creek	At confluence with East Hobolochitto Creek	1.8	1,640	*	2,370	2,730	3,760
Thigpen Creek	Above Sycamore Road	1.5	1,410	*	2,050	2,360	3,250

* Not calculated for this FIS project

Table 10: Summary of Discharges continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
West Hobolochitto Creek	At State Highway 43	213.3	13,500	*	23,700	28,500	42,000
West Hobolochitto Creek	At Henelyfield-McNeil Road	174.4	*	*	*	20,734	*
West Hobolochitto Creek	At John Amacker Road	133.4	*	*	*	17,530	*
West Hobolochitto Creek	At State Highway 26W	94.8	*	*	*	14,872	*
White Sand Creek	At confluence with West Hobolochitto Creek	21.6	*	*	*	5,449	*
White Sand Creek	At Glover Road	15.2	*	*	*	4,787	*
White Sand Creek	At Beach Road	5.7	*	*	*	2,643	*
White Sand Creek	At about 1.4 miles upstream of Hoadley Road	0.4	*	*	*	461	*
Wolf River	At McNeil-McHenry Road	180.9	*	*	*	21,493	*
Wolf River	At Progress Road	102.0	*	*	*	15,022	*
Wolf River	At State Highway 26	73.2	*	*	*	12,313	*
Wolf River	At U.S. Interstate 59	58.3	*	*	*	10,624	*
Wolf River	At State Highway 11	32.6	*	*	*	7,484	*

*Not calculated for this FIS project

Figure 7: Frequency Discharge-Drainage Area Curves

[Not applicable for this FIS Project]

Table 11: Summary of Non-Coastal Stillwater Elevations

[Not applicable for this FIS Project]

Table 12: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record	
					From	To
Pearl River	02489500	USGS	Pearl River at Bogalusa, LA	6,573	04/11/1938	09/03/2012
Pearl River	02492600	USGS	Pearl River at Pearl River, LA	8,494	1874	09/04/2012

5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM. The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

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

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

Table 13: Summary of Hydrologic and Hydraulic Analyses

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
All Zone A Streams studied in the 2008 FIS	various	various	unknown	unknown	unknown	A	
Alligator Branch	Pearl River County Boundary	Approximately 1,200 feet upstream of Ravenwood Drive	1991 MS Regression Equations	HEC-RAS 4.1	10/8/2013	AE	Replaces 1987 study which was assessed as 'unverified' in CNMS database
Bay Branch	Confluence with East Hobolochitto Creek	2,900 feet upstream of U.S. Interstate 59	Bulletin 17	HEC-2	10/1978	AE w/ Floodway	
East Hobolochitto Creek	Confluence with Hobolochitto Creek	West Union Road	HEC-1	HEC-2	10/1987	AE	
East Hobolochitto Creek	West Union Road	Savannah Millard Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE w/ Floodway	
Hobolochitto Creek	Confluence with Pearl River	Approximately 150 feet downstream of Beech Street	1991 MS Regression Equations	HEC-RAS 4.1	10/8/2013	AE w/ Floodway	Tie-in to 1987 study complicated by different hydrologic methods utilized
Hobolochitto Creek	Approximately 150 feet downstream of Beech Street	Confluence of East and West Hobolochitto Creeks	HEC-1	HEC-2	10/1987	AE	
Holley Creek	Confluence with East Hobolochitto Creek	East Sycamore Road	Bulletin 17	HEC-2	10/1978	AE w/ Floodway	

Table 13: Summary of Hydrologic and Hydraulic Analyses continued

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Jumpoff Creek	Confluence with East Hobolochitto Creek	Approximately 0.7 miles upstream of Garrett & McGill Drive	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Juniper Creek	Confluence with Jumpoff Creek	Just upstream of Dupont-Harts Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Long Branch	Confluence with West Hobolochitto Creek	Approximately 1 mile upstream of Nellie Burks Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Mill Creek	Confluence with Pearl River	At Davis Street	1991 MS Regression Equations	HEC-RAS 4.1	10/8/2013	AE w/ Floodway	Replaces 1990 study which was assessed as 'unverified' in CNMS database.
Mill Creek No. 1	Highway 43 South	Approximately 1.0 miles upstream of West Union Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Mill Creek No. 3	Confluence with West Hobolochitto Creek	Approximately 2.0 miles upstream of Highway 11	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Mill Creek No. 4	Confluence with West Hobolochitto Creek	1.7 miles upstream of Rock Ranch Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Pearl River	Pearl River County Boundary	Approximately 3,600 feet upstream of State Highway 26	Gage Data	Statistical Analysis (Log Pearson Type 3)	07/2013	AE	Uses Hancock County FIS as downstream boundary condition.

Table 13: Summary of Hydrologic and Hydraulic Analyses continued

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Poplar Springs Branch	From the confluence with Wolf River	Approximately 7200ft upstream of I-59	Urban Regression Equation	HEC-RAS 4.1.0	07/2014	AE w/ Floodway	
Second Alligator Branch	Pearl River County Boundary	At U.S. Interstate 59	Regression Equations 1982	HEC-2	10/1987	AE	
Second Alligator Branch Tributary	Confluence with Second Alligator Branch	Approximately 2,400 feet upstream of Shorty Burgess Road	Regression Equations 1982	HEC-2	10/1987	AE	
Thigpen Creek	Confluence with East Hobolochitto Creek	500 feet upstream of Stemwood Drive	HEC-1	HEC-2	10/1978	AE w/ Floodway	
West Hobolochitto Creek	Confluence with Hobolochitto Creek	Henleyfield-McNeil Road	HEC-1	HEC-2	10/1987	AE	
West Hobolochitto Creek	Henleyfield-McNeil Road	State Highway 26 W	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE w/ Floodway	
White Sand Creek	Confluence with West Hobolochitto Creek	1.4 miles upstream of Hoadley Road	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	
Wolf River	Stone County and Pearl River County Boundary	Approximately 2,500 feet upstream of Highway 11	1991 MS Regression Equations	HEC-RAS 4.1	07/11/2006	AE	

Table 14: Roughness Coefficients

Flooding Source	Channel "n"	Overbank "n"
All Zone A Streams Studied in the 2009 FIS report	*	*
Alligator Branch	0.04-0.05	0.08-0.12
Bay Branch	*	*
East Hobolochitto Creek	0.045	0.055-0.15
Hobolochitto Creek	0.06	0.1-0.18
Holley Creek	0.04-0.07	0.1-0.3
Jumpoff Creek	0.045	0.055-0.15
Juniper Creek	0.045	0.07-0.15
Long Branch	0.04-0.045	0.1-0.15
Mill Creek	0.03-0.05	0.06-0.12
Mill Creek No. 1	0.035-0.065	0.15-0.18
Mill Creek No. 3	0.018-0.045	0.055-0.155
Mill Creek No. 4	0.018-0.045	0.055-0.155
Pearl River	0.035	0.04-0.11
Poplar Springs Branch	0.05-0.058	0.08-0.14
Second Alligator Branch	0.04-0.07	0.1-0.3
Second Alligator Branch Tributary	0.04-0.07	0.1-0.3
Thigpen Creek	0.04-0.07	0.1-0.3
West Hobolochitto Creek	0.035	0.035-0.150
White Sand Creek	0.045	0.055-0.150
Wolf River	0.045	0.055-0.150

* Data not available

5.3 Coastal Analyses

This section is not applicable to this FIS Project.

Table 15: Summary of Coastal Analyses

[Not applicable to this FIS Project]

5.3.1 Total Stillwater Elevations

This section is not applicable to this FIS Project.

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

[Not applicable to this FIS Project]

Table 16: Tide Gage Analysis Specifics

[Not applicable to this FIS Project]

5.3.2 Waves

This section is not applicable to this FIS Project.

5.3.3 Coastal Erosion

This section is not applicable to this FIS Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this FIS Project.

Table 17: Coastal Transect Parameters

[Not applicable to this FIS Project]

Figure 9: Transect Location Map

[Not applicable to this FIS Project]

5.4 Alluvial Fan Analyses

This section is not applicable to this FIS Project.

Table 18: Summary of Alluvial Fan Analyses

[Not applicable to this FIS Project]

Table 19: Results of Alluvial Fan Analyses

[Not applicable to this FIS Project]

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

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

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same

vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov, or contact the National Geodetic Survey at the following address:

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

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

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

The datum conversion locations and values that were calculated for Pearl River County are provided in Table 20.

Table 20: Countywide Vertical Datum Conversion

Quadrangle Name	Quadrangle Corner	Latitude	Longitude	Conversion from NGVD29 to NAVD88 (feet)
Average Conversion from NGVD29 to NAVD88 = -0.184 feet				

Table 21: Stream-by-Stream Vertical Datum Conversion

[Not applicable to this FIS Project]

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. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA’s *Guidelines and Standards for Mapping*, www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping.

Base map information shown on the FIRM was derived from the sources described in Table 22.

Base map information shown on the FIRM was derived from the sources described in Table 22.

Table 22: Base Map Sources

Data Type	Data Provider	Data Date	Data Scale	Data Description
Digital Orthophoto	MDEQ	2012	1 foot GSD	Pearl River County flown leaf off 2013 6" Pixel/Pearl River County flown leaf off 2012 1' pixel
Digital Orthophoto	USGS	2012	1:12,000	1 Meter resolution NAIP imagery acquired by the USGS
Digital Orthophoto	Pearl River County	2003	varies	Created in State Plane NAD83 Coordinates, U.S. Survey Feet
Political boundaries	MARIS	2010	1:5,000	Municipal and county boundaries
Transportation Features	MARIS and MDEQ	2011	1:4,800	Roads and railroads, were delineated from 2006 2' Pixel orthoimagery
Surface Water Features	MARIS (State NHD Steward for USGS)	2012	1:24,000	Streams, rivers, and lakes were derived from NHD data
Public Land Survey System (PLSS)	MARIS	2010	1:24,000	PLSS data were digitized from 7.5 minute USGS quadrangles (Quads dated 1960 - 1989)
Benchmarks	NGS	2013	1:24,000	Benchmarks located using NGS data sheets
Airports	MARIS	2010	1:5,000	Statewide Runways extracted from the US Census Bureau 2010 TIGER Line files

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in

Table 23: Summary of Topographic Elevation Data used in Mapping.

In cases where the 1% and 0.2% annual chance floodplain boundaries are close together, only the 1% annual chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been

tabulated for selected cross sections and are shown in Table 24, “Floodway Data.”

Table 23: Summary of Topographic Elevation Data used in Mapping

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Scale	Contour Interval	Citation
City of Picayune and parts of Pearl River County	All within HUC 03180004	Photogrametric Digital Terrain Model	1:4,800	2 ft	State of Mississippi 2007
Pearl River County	All within HUC 03180004	Photogrametric Digital Terrain Model	1:4,800	5 ft	State of Mississippi 2007

BFEs shown at cross sections on the FIRM represent the 1% annual chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

Table 24: Floodway Data

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	500	251	1,752	1.7	51.9	48.5 ²	49.5	1.0
B	1,900	196	1,105	2.7	52.4	52.4	53.4	1.0
C	3,000	125	842	1.5	54.2	54.2	55.2	1.0
D	6,650	138	1,056	2.7	56.9	56.9	57.2	0.3

¹Feet above confluence with East Hobolochitto Creek

²Elevations without considering backwater effect form East Hobolochitto Creek

TABLE 24	FEDERAL EMERGENCY MANAGEMENT AGENCY PEARL RIVER COUNTY, MS AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: BAY BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	7,000	931	11,373	1.4	51.0	51.0	52.0	1.0
B	9,140	1,471	18,538	0.8	51.4	51.4	52.4	1.0
C	12,159	1,393	13,554	1.1	51.7	51.7	52.7	1.0
D	17,653	475	6,450	2.5	54.7	54.7	55.6	0.9
E	23,090	1,992	19,673	0.8	58.4	58.4	59.3	0.9
F	33,590	1,250	10,404	1.5	62.6	62.6	63.6	1.0
G	42,090	793	10,447	1.5	69.2	69.2	69.7	0.5
H	52,890	793	8,353	1.9	76.5	76.5	77.5	1.0
I	63,690	842	9,645	1.6	85.3	85.3	86.3	1.0

¹Feet above confluence with Hobolochitto Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: EAST HOBOLOCHITTO CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	12,227	3,595	38,917	1.2	38.6	38.6	39.1	0.9
B	18,848	4,400	48,882	0.9	40.6	40.6	41.4	0.8
C	26,705	2,526	31,231	1.6	45.5	45.5	46.0	0.5

¹Feet above mouth

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: HOBOLOCHITTO CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1100	161	1056	2.0	55.0	50.3	51.3	1.0
B	2850	182	772	2.7	55.9	54.2	54.6	0.4
C	4020	105	407	3.9	57.2	57.2	57.4	0.2

¹Feet above East Hobolochitto Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: HOLLEY CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,051	131	860	3.6	28.1	24.2	24.5 ²	0.3
B	4,926	67	590	5.2	29.3	29.3	29.7	0.4
C	6,631	71	464	6.6	32.5	32.5	32.8	0.3
D	8,621	99	597	4.5	36.3	36.3	36.6	0.3
E	11,324	94	417	5.6	40.6	40.6	40.8	0.2
F	14,103	250	1,485	1.6	49.0	49.0	49.7	0.7
G	16,649	238	607	2.3	51.8	51.8	52.2	0.4
H	18,755	42	145	2.6	53.5	53.5	54.1	0.6
I	20,883	218	275	1.4	56.7	56.7	56.9	0.2

¹Feet above confluence with Pearl River (East Channel)

²Elevations without considering backwater effect from Pearl River

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: MILL CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	882	105	721	4.8	189.8	186.6 ²	187.2	0.6
B	2,503	145	760	4.5	194.6	194.6	194.8	0.2
C	3,010	165	1,157	2.9	195.9	195.9	196.9	1.0
D	4,557	240	1,254	2.7	200.4	200.4	201.1	0.7
E	6,070	370	1,514	2.2	204.5	204.5	204.9	0.4
F	7,354	395	2,061	1.6	210.6	210.6	210.9	0.3
G	8,974	409	1,496	2.2	213.8	213.8	214.8	1.0
H	10,503	360	1,960	1.7	220.8	220.8	221.2	0.4
I	11,924	305	1,149	2.9	224.6	224.6	225.0	0.4
J	13,546	240	981	1.9	231.0	231.0	231.9	0.9
K	15,235	105	459	3.8	237.1	237.1	237.9	0.8
L	17,076	120	412	3.9	245.6	245.6	246.4	0.8

¹ Feet above confluence with Wolf River

² Elevation computed without consideration of backwater effects from Wolf River

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: POPLAR SPRINGS BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,320	177	1,167	2.3	51.8	50.4 ²	51.3	0.9
B	3,420	170	957	2.9	51.9	51.9	52.8	0.9
C	4,400	151	771	3.5	54.8	54.8	55.7	0.9
D	4,580	173	992	2.8	55.4	55.4	56.4	1.0
E	6,100	206	1,399	1.7	62.4	62.4	63.3	0.9

¹Feet above confluence with East Hobolochitto Creek

²Elevations without considering backwater effect from East Hobolochitto Creek

TABLE 24	FEDERAL EMERGENCY MANAGEMENT AGENCY PEARL RIVER COUNTY, MS AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: THIGPEN CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	39,725	800	10,950	2.6	50.8	50.8	51.8	1.0
B	47,535	1,980	25,981	1.1	55.2	55.2	56.1	0.9
C	52,895	2,324	30,604	0.9	56.9	56.9	57.9	1.0
D	60,895	1,884	22,473	1.3	60.1	60.1	61.1	1.0
E	65,515	2,448	27,489	1.0	61.9	61.9	62.9	1.0
F	74,345	2,532	25,876	1.1	66.0	66.0	67.0	1.0
G	81,155	2,747	24,214	1.2	70.3	70.3	71.3	1.0
H	89,805	2,765	21,651	1.3	75.4	75.4	76.4	1.0
I	93,245	1,817	18,236	1.6	77.8	77.8	78.8	1.0
J	98,355	2,091	16,871	1.7	81.0	81.0	82.0	1.0

¹Feet above confluence with Hobolochitto Creek

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: WEST HOBOLOCHITTO CREEK

Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams

[Not applicable for this FIS Project]

6.4 Coastal Flood Hazard Mapping

This section is not applicable for this FIS Project.

Table 26: Summary of Coastal Transect Mapping Considerations

[Not applicable for this FIS Project]

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions to FIS projects may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 31, “Map Repositories”).

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit www.fema.gov/floodplain-management/letter-map-amendment-loba and download the form “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill”. Visit the “Flood Map-Related Fees” section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA’s determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/floodplain-management/letter-map-amendment-loma for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/mt-2-application-forms-and-instructions and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Pearl River County FIRM are listed in Table 27.

Table 27: Incorporated Letters of Map Change

[Not applicable for this FIS Project]

6.5.4 Physical Map Revisions

PMRs are an official republication of a community’s NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community’s chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit <http://www.fema.gov> and visit the “Flood Map Revision Processes” section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community.

FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Pearl River County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBM) and/or Flood Boundary and Floodway Maps (FBFM) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 28, “Community Map History.” A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or “pending” (for Preliminary FIS Reports) is shown. If the community is listed in Table 28 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first Flood Hazard Boundary Map (FHBM). This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community. This is the first effective date that is shown on the FIRM panel.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as Physical Map Revisions (PMR) of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Pearl River County FIRMs in countywide format was 05/17/1990.

Table 28: Community Map History

Community Name	Initial Identification Date (First NFIP Map Published)	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Lumberton, City of ¹	03/24/1989	03/24/1989	N/A	04/02/1990	06/03/2008 07/02/1991 04/02/1990
Pearl River County Unincorporated Areas	11/25/1977	11/25/1977	N/A	05/17/1990	06/03/2008 03/03/1992
Picayune, City of	06/28/1974	06/28/1974	10/31/1975	03/04/1980	06/03/2008 03/03/1992 05/17/1990 08/27/1982
Poplarville, City of	06/03/2008	06/03/2008	06/03/2008	06/03/2008	N/A

¹ No Special Flood Hazard Areas Identified

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 29 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Alligator Branch	TBD	State of Mississippi	EMA-2010-CA-5081	07/2013	Unincorporated Areas
Bay Branch	5/17/1990	USACE	I-AA-H-7-76 and I-AA-H-10-77	10/1978	City of Picayune
East Hobolochitto Creek	5/17/1990	Neel Schaffer, Inc..	EMW-86-C-2246	10/1987	Unincorporated Areas
East Hobolochitto Creek	6/3/2008	Camp, Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Hobolochitto Creek	5/17/1990	Neel Schaffer, Inc.	EMW-86-C-2246	10/1987	Unincorporated Areas
Hobolochitto Creek	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas
Hobolochitto Creek	TBD	State of Mississippi	EMA-2010-CA-5081	07/2013	Unincorporated Areas
Holley Creek	5/17/1990	USACE	I-AA-H-7-76 and I-AA-H-10-77	10/1978	City of Picayune
Jumpoff Creek	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas
Juniper Creek	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas
Long Branch	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas
Mill Creek	TBD	State of Mississippi	EMA-2010-CA-5081	07/2013	City of Picayune
Pearl River	TBD	State of Mississippi	EMA-2010-CA-5081	07/2013	Unincorporated Areas
Poplar Springs	TBD	State of Mississippi	EMA-2010-CA-5081	7/2014	City of Poplarville, Unincorporated Areas
Second Alligator Branch	5/17/1990	Neel Schaffer, Inc.	EMW-86-C-2246	10/1987	Unincorporated Areas
Second Alligator Branch Tributary	5/17/1990	Neel Schaffer, Inc.	EMW-86-C-2246	10/1987	Unincorporated Areas
Thigpen Creek	5/17/1990	USACE	I-AA-H-7-76 and I-AA-H-10-77	10/1978	City of Picayune
West Hobolochitto Creek	5/17/1990	Neel Schaffer, Inc.	EMW-86-C-2246	10/1987	Unincorporated Areas
West Hobolochitto Creek	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas
White Sand Creek	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas

Table 29: Summary of Contracted Studies Included in this FIS Report continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Wolf River	6/3/2008	Camp,Dresser, McKee, Inc.	EMA-2004-CA-5027	7/11/2006	Unincorporated Areas

7.2 Community Meetings

The dates of the community meetings held for this FIS project and any previous FIS projects are shown in Table 30. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Pearl River County and Incorporated Areas	TBD	02/07/2012	Discovery	FEMA, MEMA, MDEQ, Lower Pearl watershed communities, and the study contractor
		09/16/2015	Flood Risk Review	FEMA, MEMA, MDEQ, Lower Pearl watershed communities, and the study contractor
		TBD	CCO Open House	
		TBD	Resilience	
	06/03/2008	10/26/2004	Scoping	FEMA, this community, Pearl River County CTP, CDM, and Dungan Engineering
		04/25/2007	Final CCO	FEMA, this community, Pearl River County CTP, and CDM
	03/03/1992	*	Initial CCO	No meeting held
		*	Final CCO	FEMA, this community and the study contractor
	5/17/1990	02/11/1986	Initial CCO	FEMA, this community and the study contractor
		06/11/1989	Final CCO	FEMA, this community and the study contractor

*Data not available

SECTION 8.0 – 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>.

Table 31 is a list of the locations where FIRMs for Pearl River 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 31: Map Repositories

Community	Address	City	State	Zip Code
Lumberton, City of	County Office 144 Shelby Speights Drive	Purvis	MS	39475
Pearl River County, Unincorporated Areas	Pearl River County Building Permits and E-911 Office 402 S Main Street	Poplarville	MS	39740
Picayune, City of	City of Picayune Intermodal Center 200 Hwy 11 South	Picayune	MS	39466
Poplarville, City of	City Hall 200 Hwy 26 East	Poplarville	MS	39470

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 32.

Table 32 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the state NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of state and local GIS data in their state.

Table 32: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program

Table 32: Additional Information continued

NFHL Dataset	msc.fema.gov
FEMA Region IV	Federal Emergency Management Agency 3003 Chamblee Tucker Road Atlanta, GA 30341 (770) 220-5200
Other Federal Agencies	
USGS website	http://www.usgs.gov
Hydraulic Engineering Center website	http://www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	Stacey Ricks, CFM Mississippi Emergency Management Agency P.O. Box 5644 Pearl, MS 39288-5644 Phone: 601-933-6605 sricks@mema.ms.gov
State GIS Coordinator	Jim Steil Director, MARIS 3825 Ridgewood Road Jackson, MS 39211 Phone: 601-432-6357 jsteil@ihl.state.ms.us
Statewide Regulatory Coordinator	Stacey Ricks, CFM Mississippi Emergency Management Agency P.O. Box 5644 Pearl, MS 39288-5644 Phone: 601-933-6605 sricks@mema.ms.gov

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
FIS 1982	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , City of Picayune, Pearl River County, Mississippi		Washington, D.C	08/1982	
FIS 1984	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , St. Tammany Parish, Unincorporated Areas, Louisiana		Washington, D.C	03/1984	
FIS 1987	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , Hancock County, Unincorporated Areas, Mississippi		Washington, D.C	09/1987	
FIS 1998	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , Washington Parish, Unincorporated Areas, Louisiana		Washington, D.C	05/1988	
FIS 1990	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , Forrest County, Unincorporated Areas, Mississippi		Washington, D.C	04/1990	
FIS 1991	Federal Emergency Management Agency	<u>Flood Insurance Study</u> , Lamar County, Unincorporated Areas, Mississippi		Washington, D.C	07/1991	
MRDC	Mississippi Research and Development Center	<u>Quick Reference Summary for Pearl River County, Mississippi</u>			10/1985	

Table 33: Bibliography and References continued

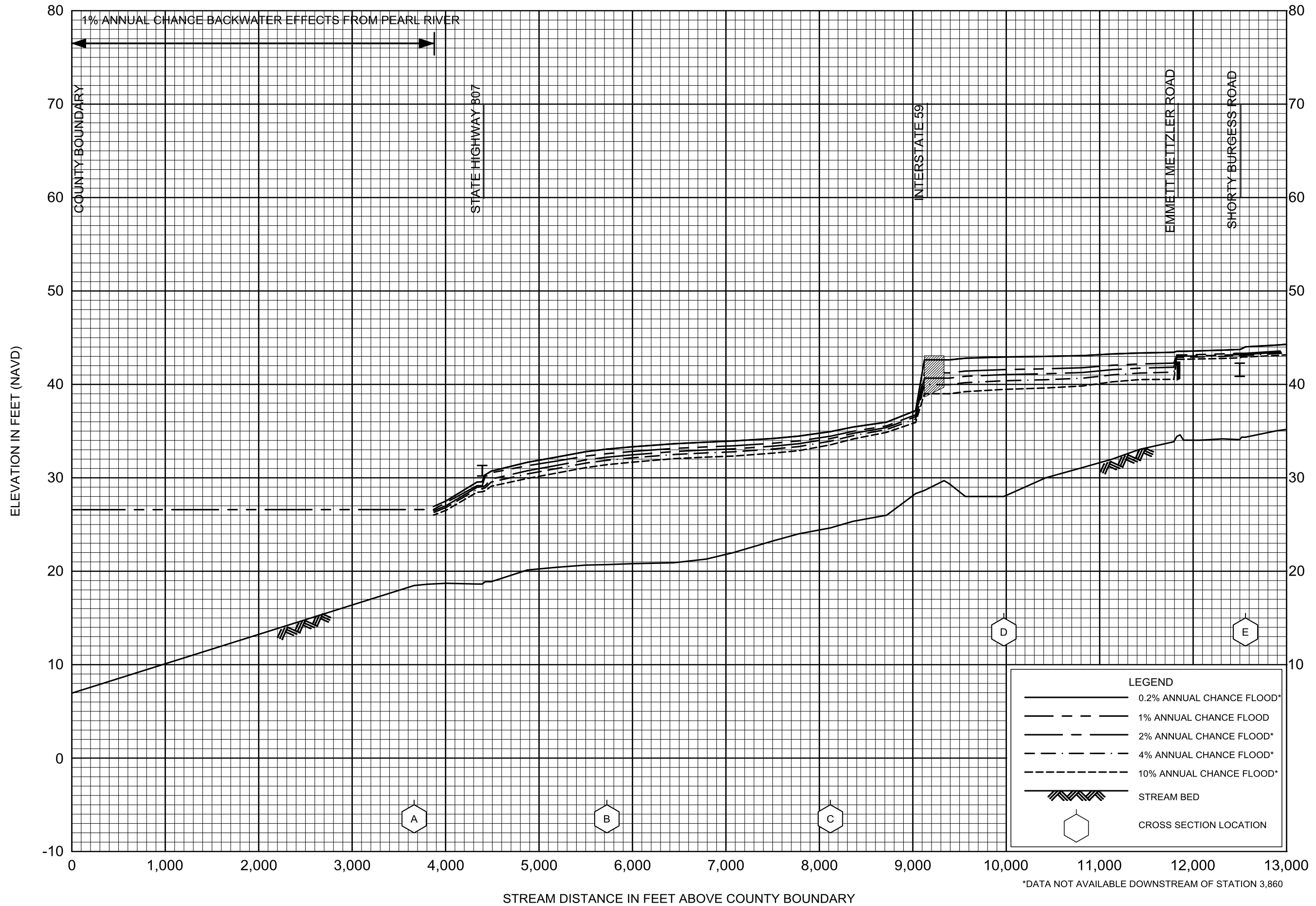
Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
S&P Associates	Sverdrup & Parcel and Associates, Inc.	<u>Comprehensive Drainage Plan, Picayune, Mississippi</u>		Gainesville, Florida	06/1978	
HEC-1 1970	U.S. Army Corps of Engineers, Hydrologic Engineering Center	<u>HEC-1 Flood Hydrograph Package</u>		Davis, California	10/1970	
HEC-1 1985	U.S. Army Corps of Engineers, Generalized Computer Program	<u>HEC-1 Flood Hydrograph Package, IBM-PC-XT Version</u>			01/1985	
HEC-2 1985	U.S. Army Corps of Engineers, Generalized Computer Program	<u>HEC-2 Flood Hydrograph Package, IBM-PC-XT Version</u>			04/1985	
HEC-RAS 2005	U.S. Army Corps of Engineers	<u>Hydrologic Engineering River Analysis (HEC-RAS), Version 3.1.3</u>			05/2005	
NOAA	U.S. Department of Commerce, National Oceanic and Atmospheric Administration	<u>Rainfall Intensity-Duration-Frequency Curves</u>	National Weather Service Technical Paper No. 25			
NOAA	U.S. Department of Commerce, National Oceanic and Atmospheric Administration	<u>Rainfall Frequency Atlas of the United States</u>	National Weather Service Technical Paper No. 40	Washington, D.C.	1961, Republished 1963	

Table 33: Bibliography and References continued

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
HUD	U.S. Department of Housing and Urban Development, Federal Insurance Administration	<u>Flood Insurance Study</u> , City of Saraland, Mobile County, Alabama		Washington, D.C	10/1977	
HUD	U.S. Department of Housing and Urban Development, Federal Insurance Administration	<u>Flood Hazard Boundary Map</u> , Pearl River County, Mississippi		Washington, D.C	11/1977	
USGS	U.S. Department of the Interior, Geological Survey	<u>An Approach to Estimating Flood Frequency for Urban Areas in Oklahoma</u> Water Resources Investigations 23-74		Oklahoma City, Oklahoma	07/1974	
USGS	U.S. Department of the Interior, Geological Survey	7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Interval 10 feet, Supplementary Contour Interval 5 feet: Picayune, Mississippi-Louisiana, Provisional Edition 1985; Nicholson, Mississippi-Louisiana, photorevised 1970 and 1976			1970-1985	
USGS	U.S. Department of the Interior, Geological Survey	<u>Flood Characteristics of Mississippi Streams</u> Water Resources Investigations 91-4037	Mark N. Landers and K. Van Wilson, Jr.	Jackson, MS	1991	

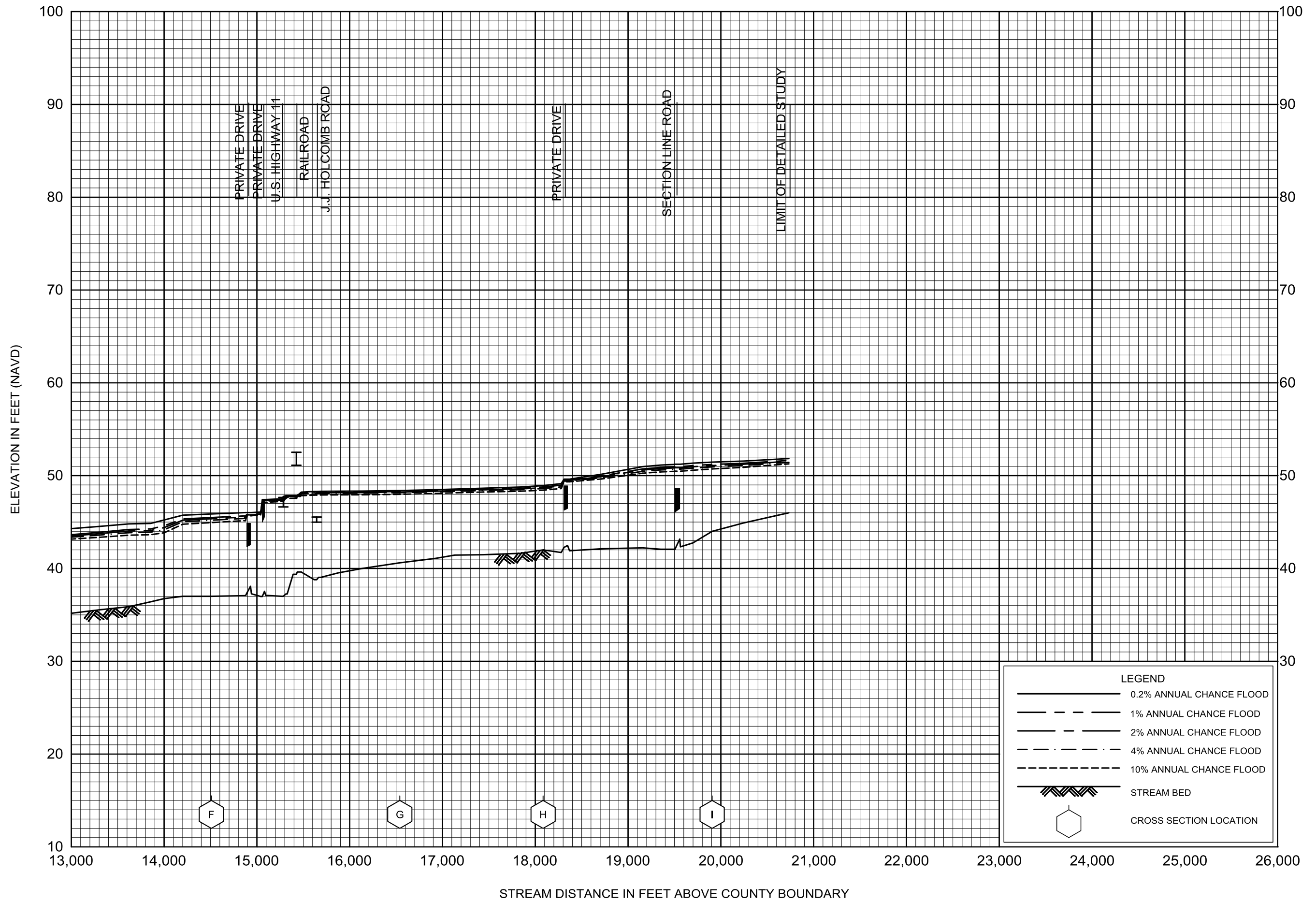
Table 33: Bibliography and References continued

Citation in this FIS	Publisher/ Issuer	<i>Publication Title,</i> "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
WRC	U.S. Water Resources Council	<u>Guidelines for Determining Flood Flow Frequency</u> , Bulletin No. 17			03/1976	



FLOOD PROFILES
ALLIGATOR BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS



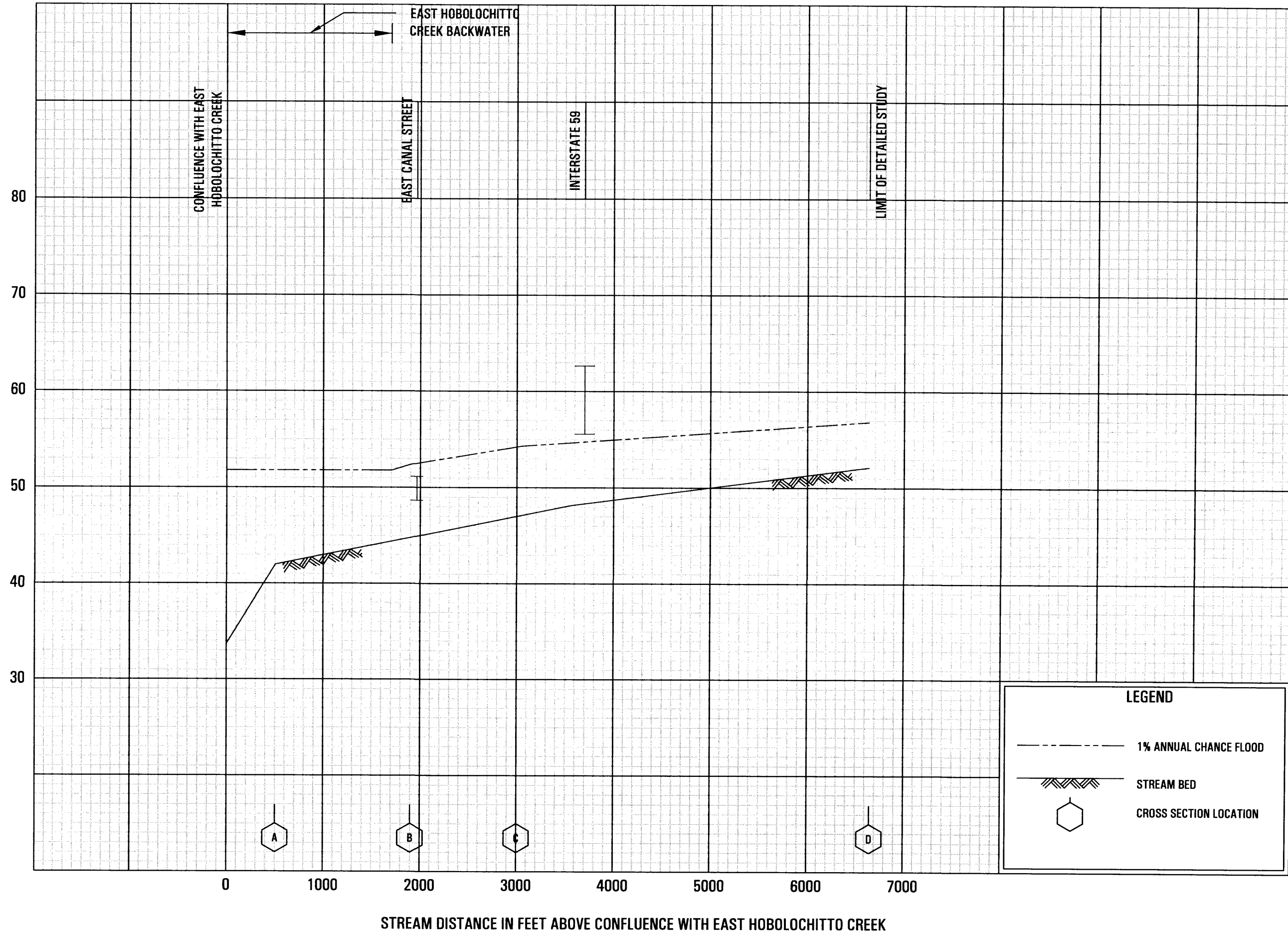
FLOOD PROFILES

ALLIGATOR BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



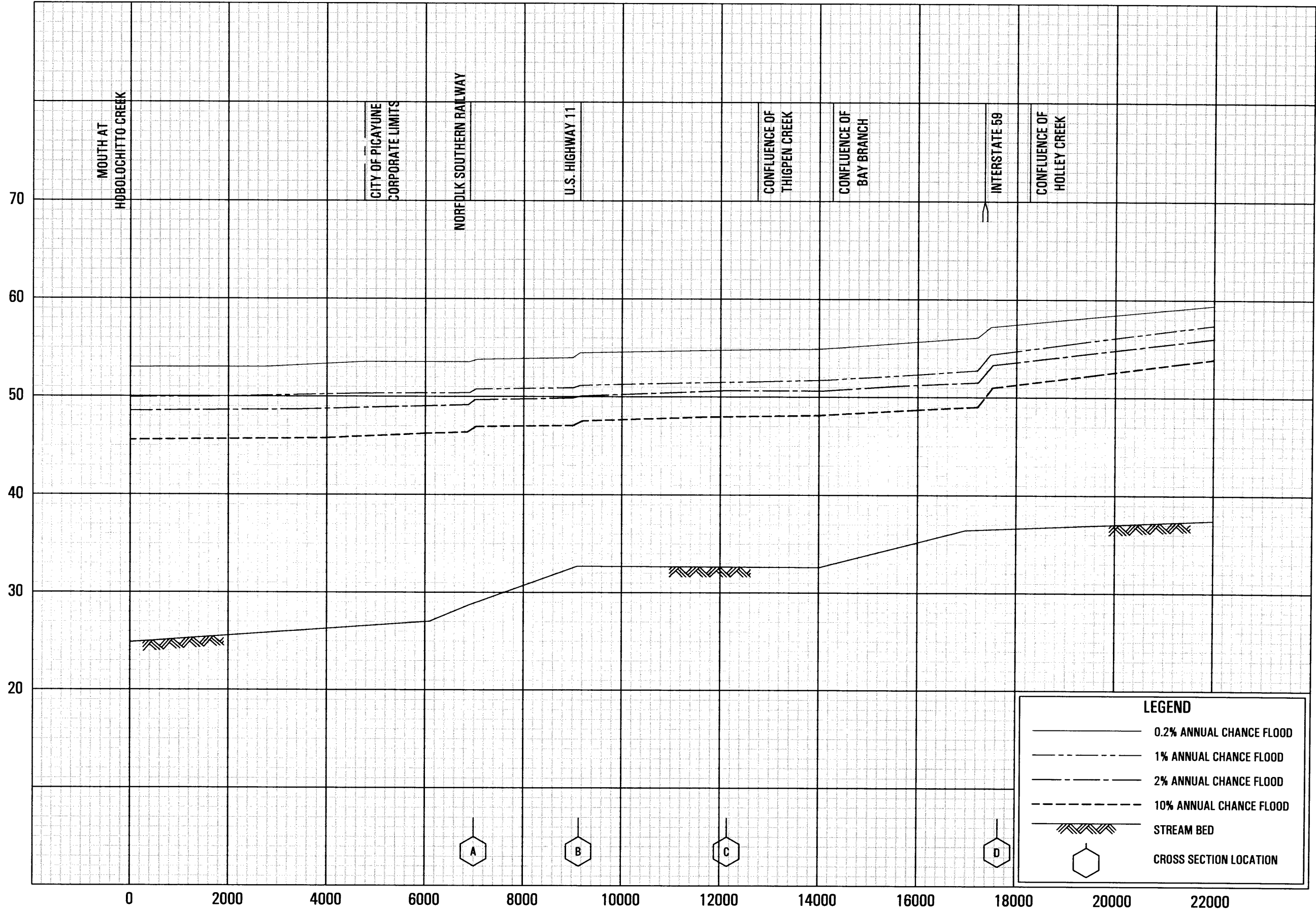
FLOOD PROFILES

BAY BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS

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ELEVATION IN FEET (NAVD 88)

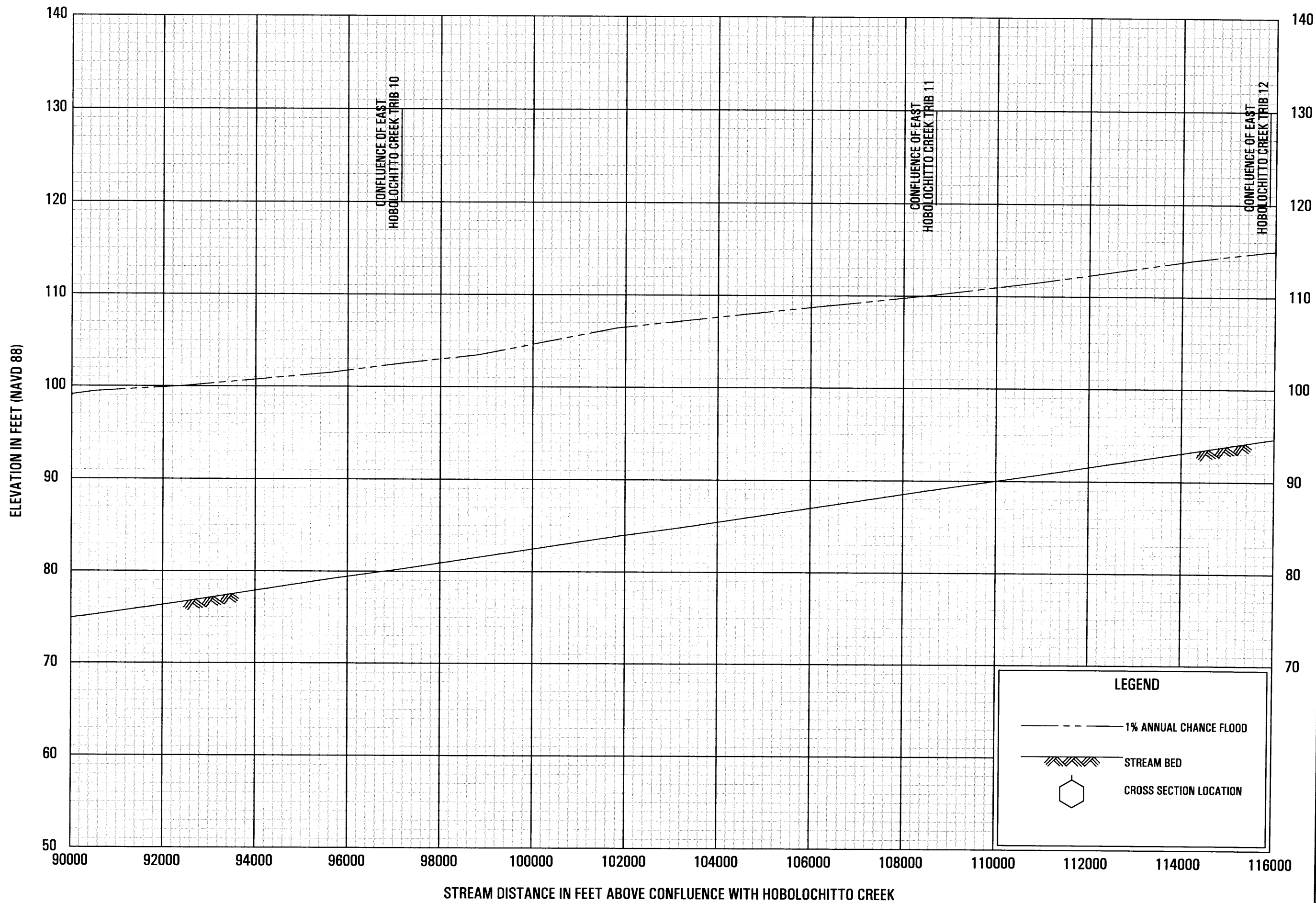


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH HOBOLOCHITTO CREEK

FLOOD PROFILES

EAST HOBOLOCHITTO CREEK

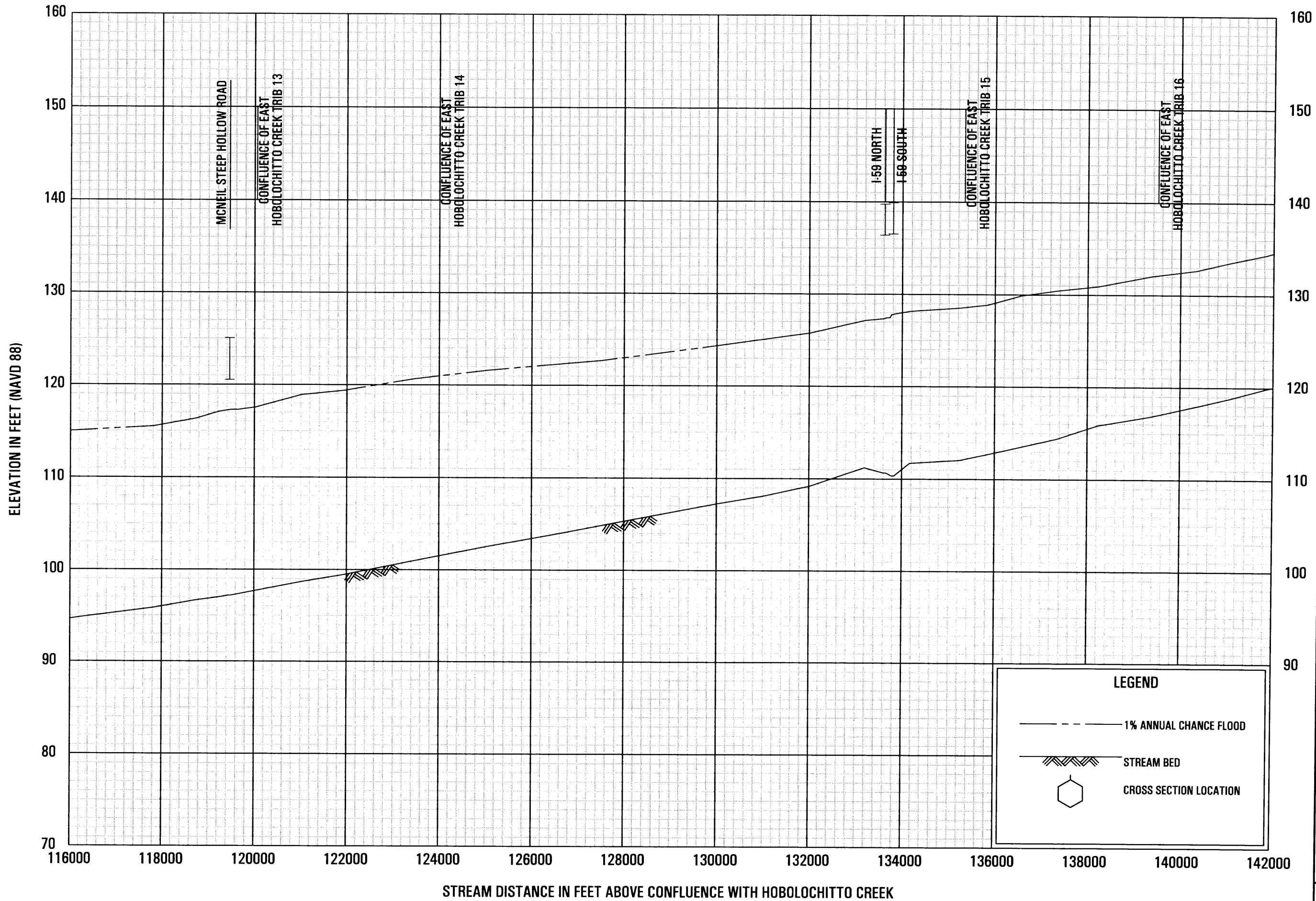
FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

EAST HOBLOCHITTO CREEK

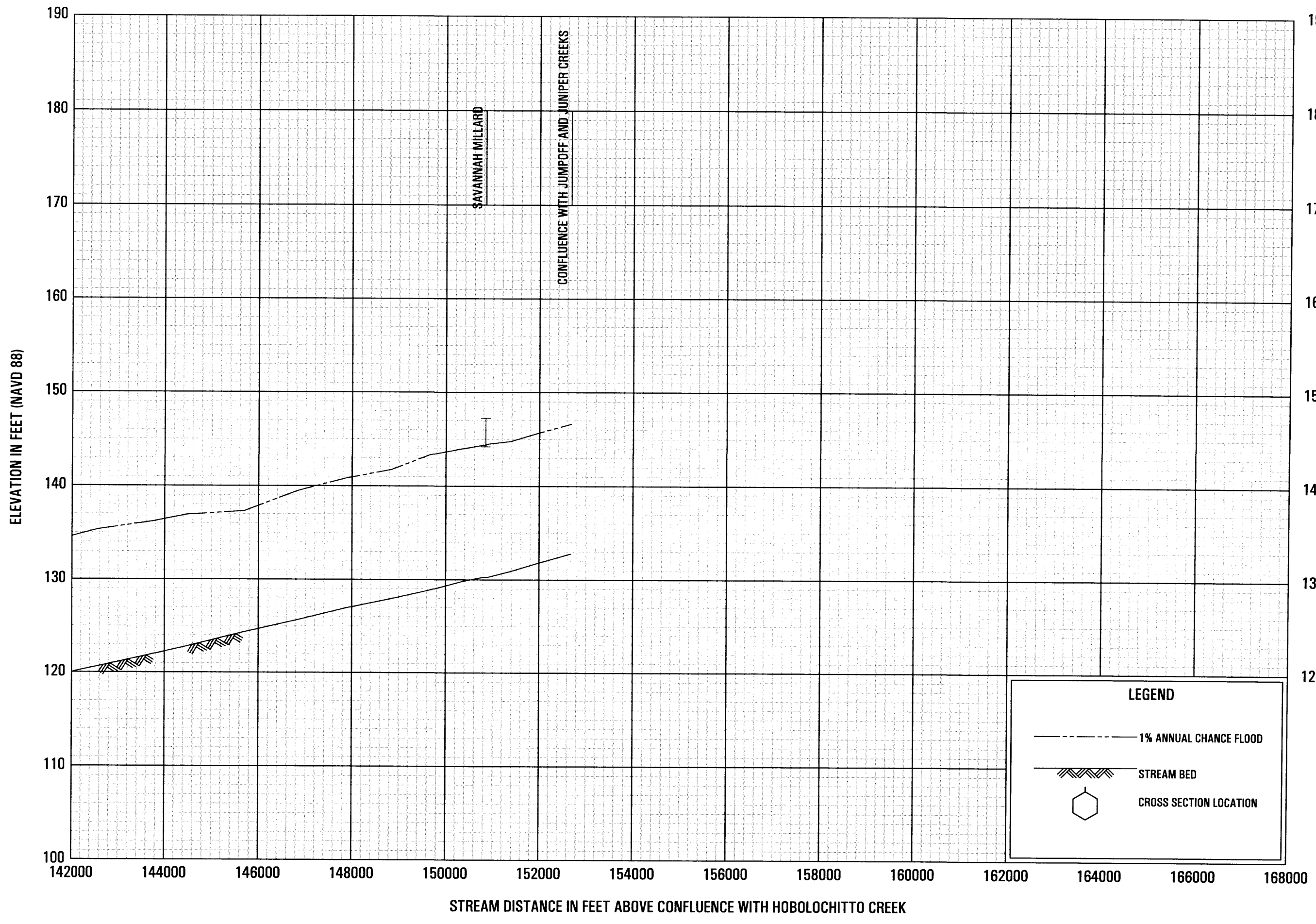
FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS,
 AND INCORPORATED AREAS



FLOOD PROFILES

EAST HOBOLOCHITTO CREEK

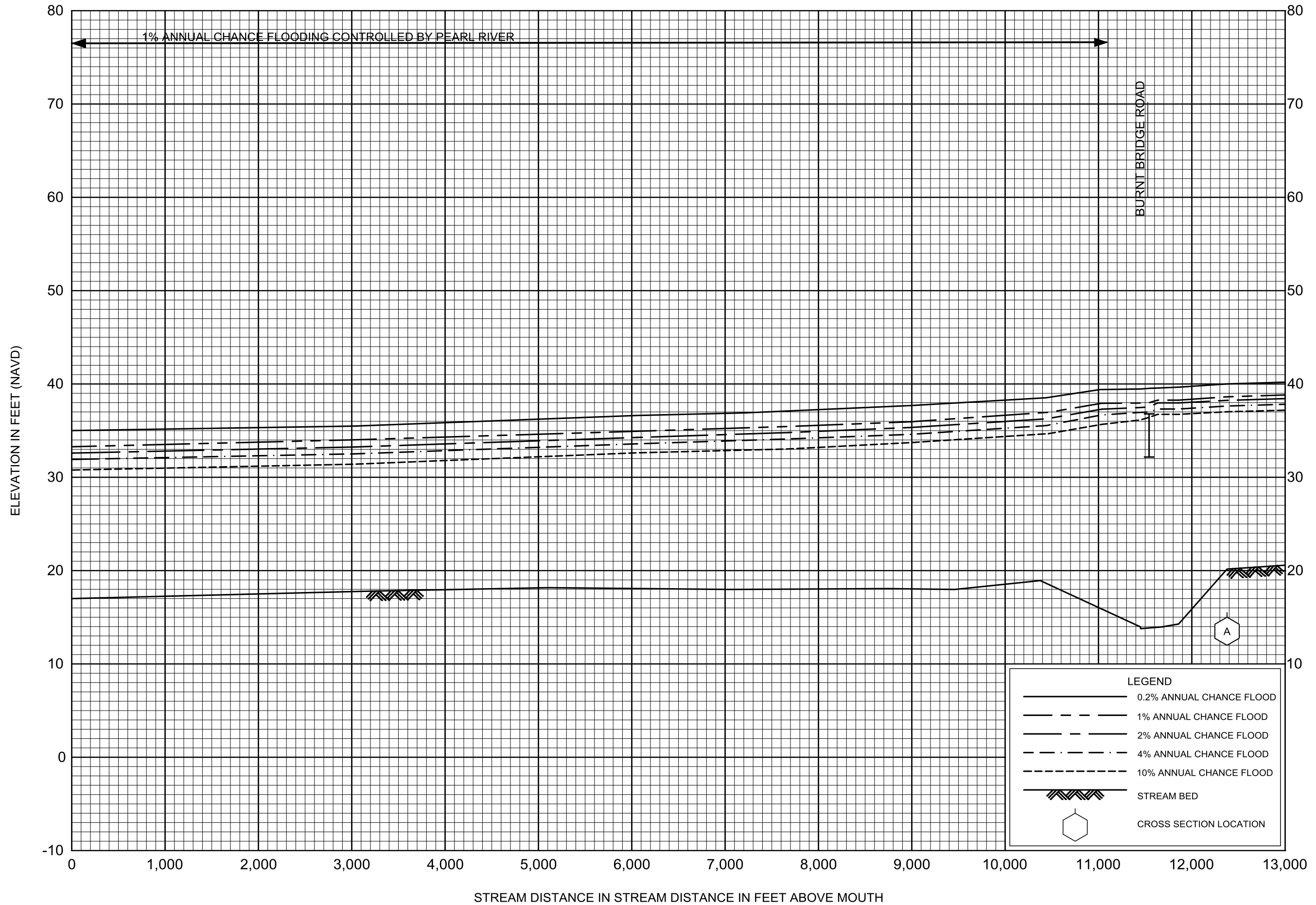
FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS,
 AND INCORPORATED AREAS



FLOOD PROFILES

EAST HOBOLOCHITTO CREEK

**FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS,
AND INCORPORATED AREAS**

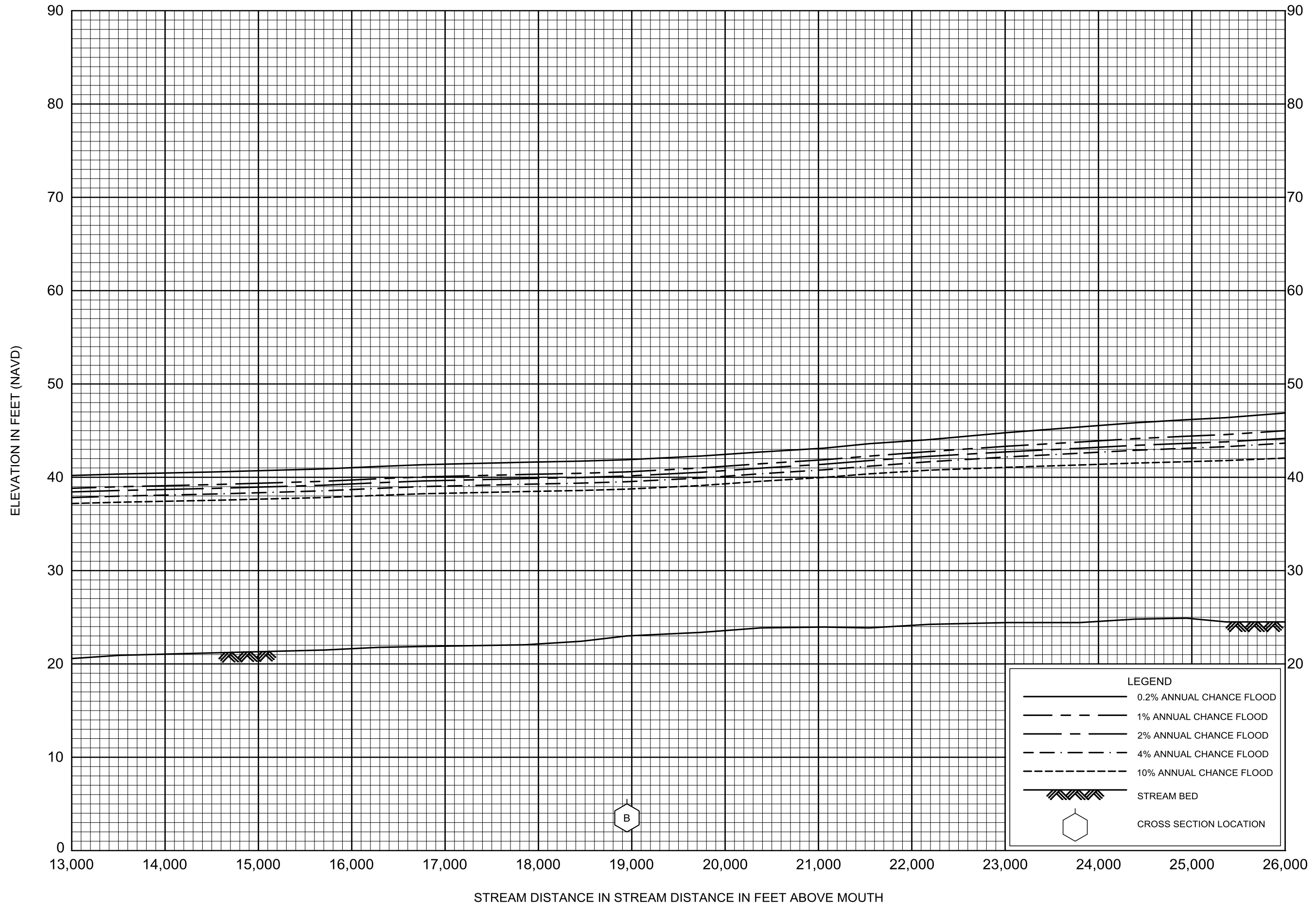


FLOOD PROFILES

HOBOLOCHITTO CREEK

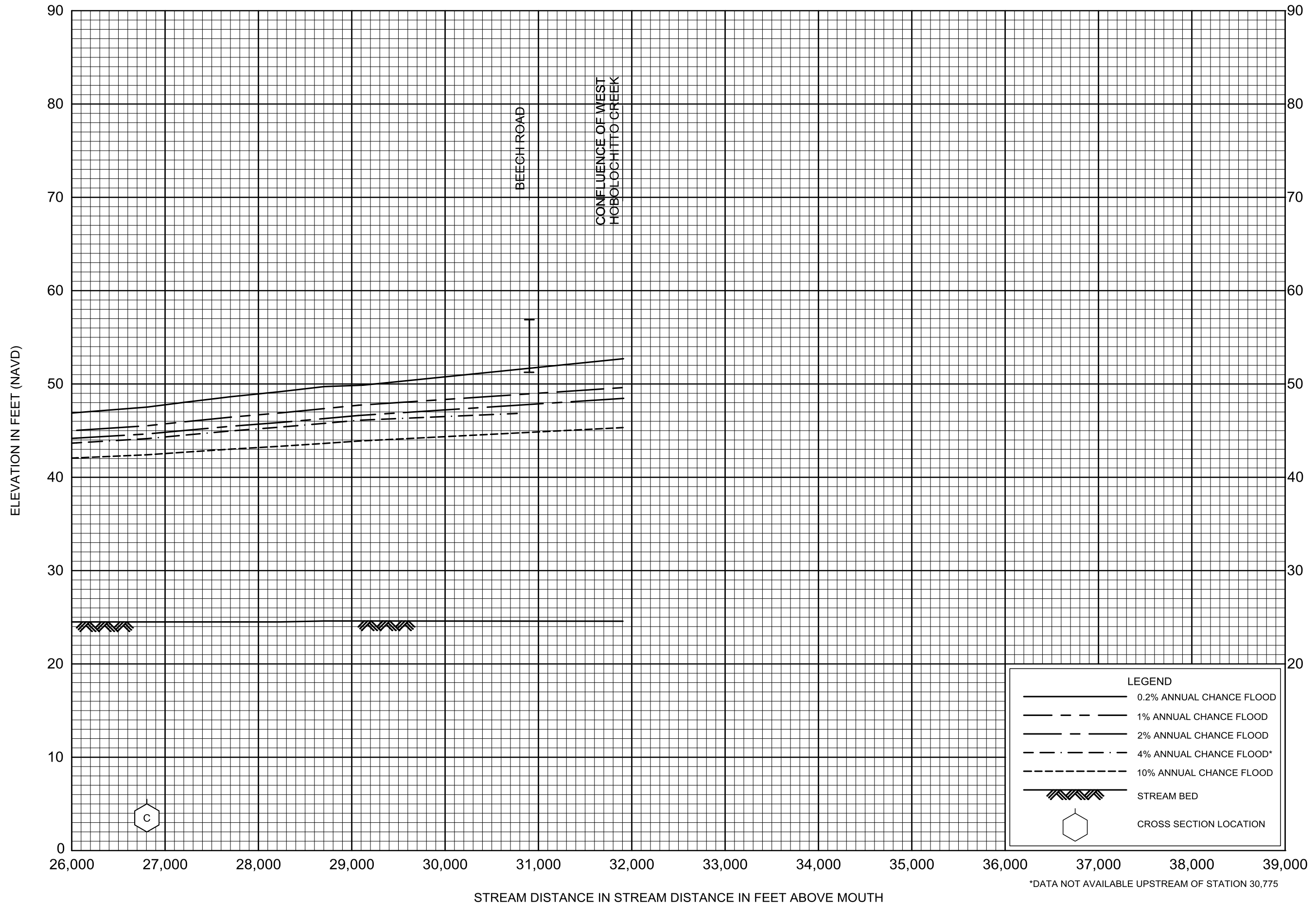
FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES
HOBLOCHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS

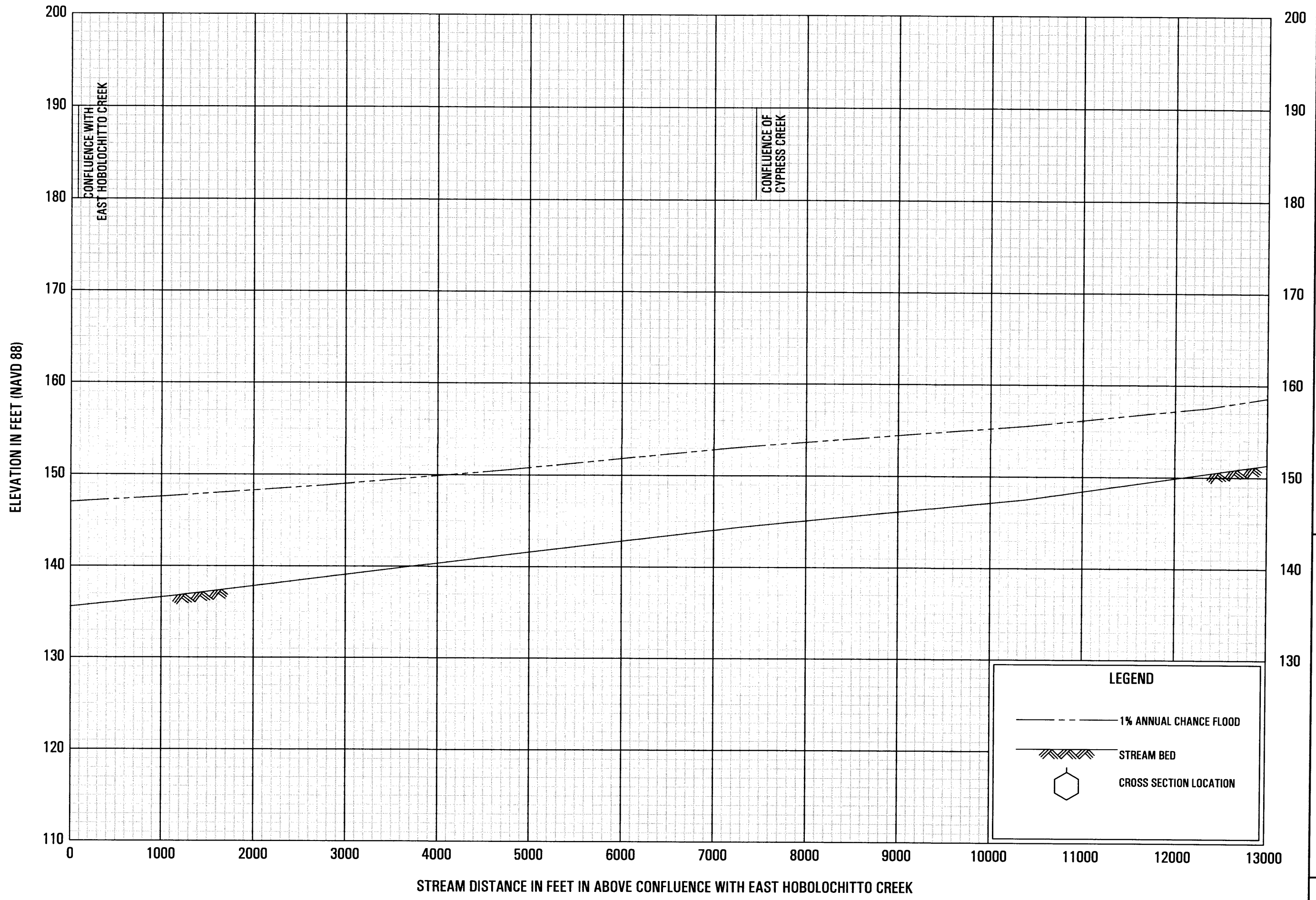


FLOOD PROFILES

HOBOLOCHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS

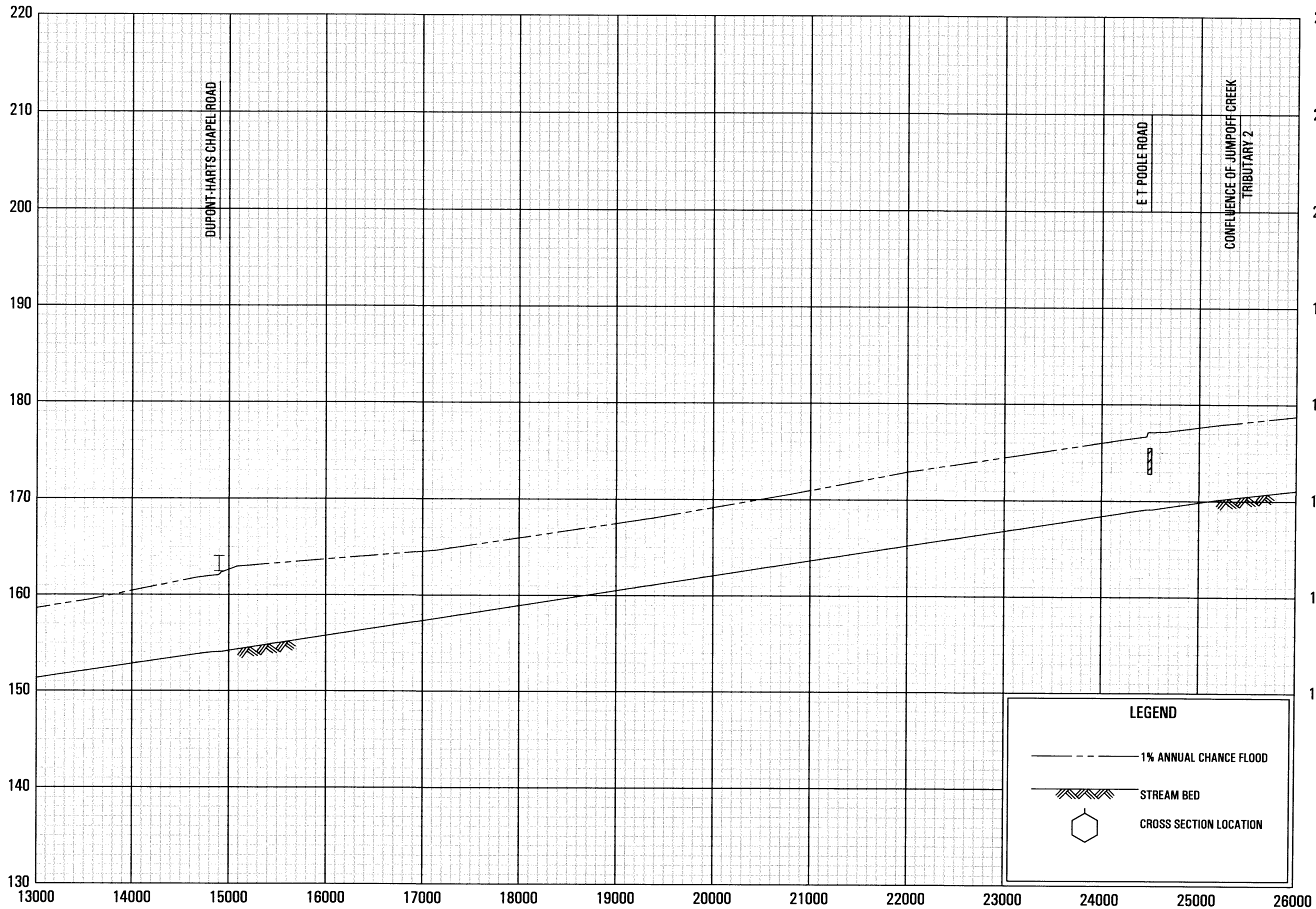


FLOOD PROFILES

JUMPOFF CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



LEGEND

- 1% ANNUAL CHANCE FLOOD
- STREAM BED
- ⬡ CROSS SECTION LOCATION

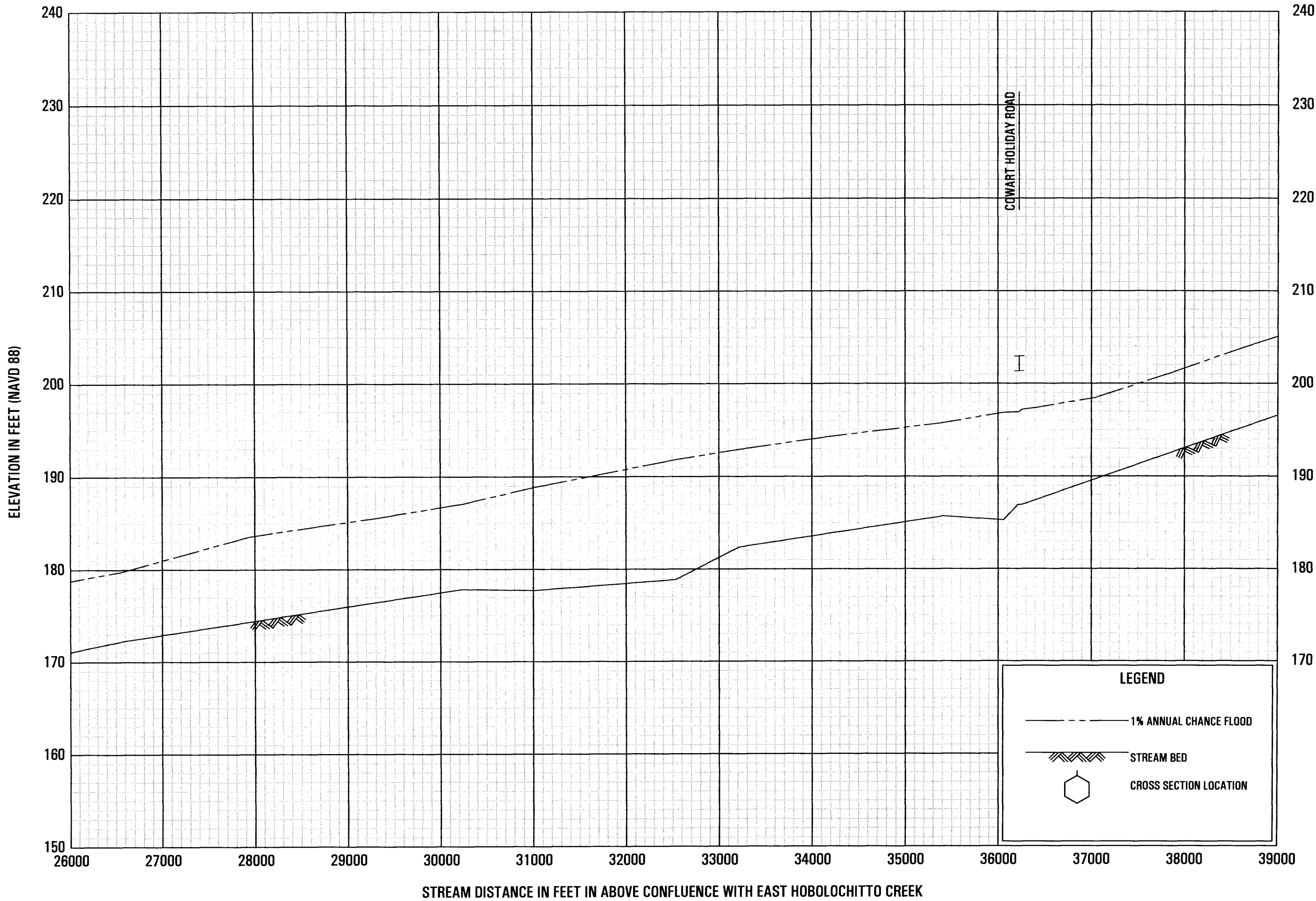
FLOOD PROFILES

JUMPOFF CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

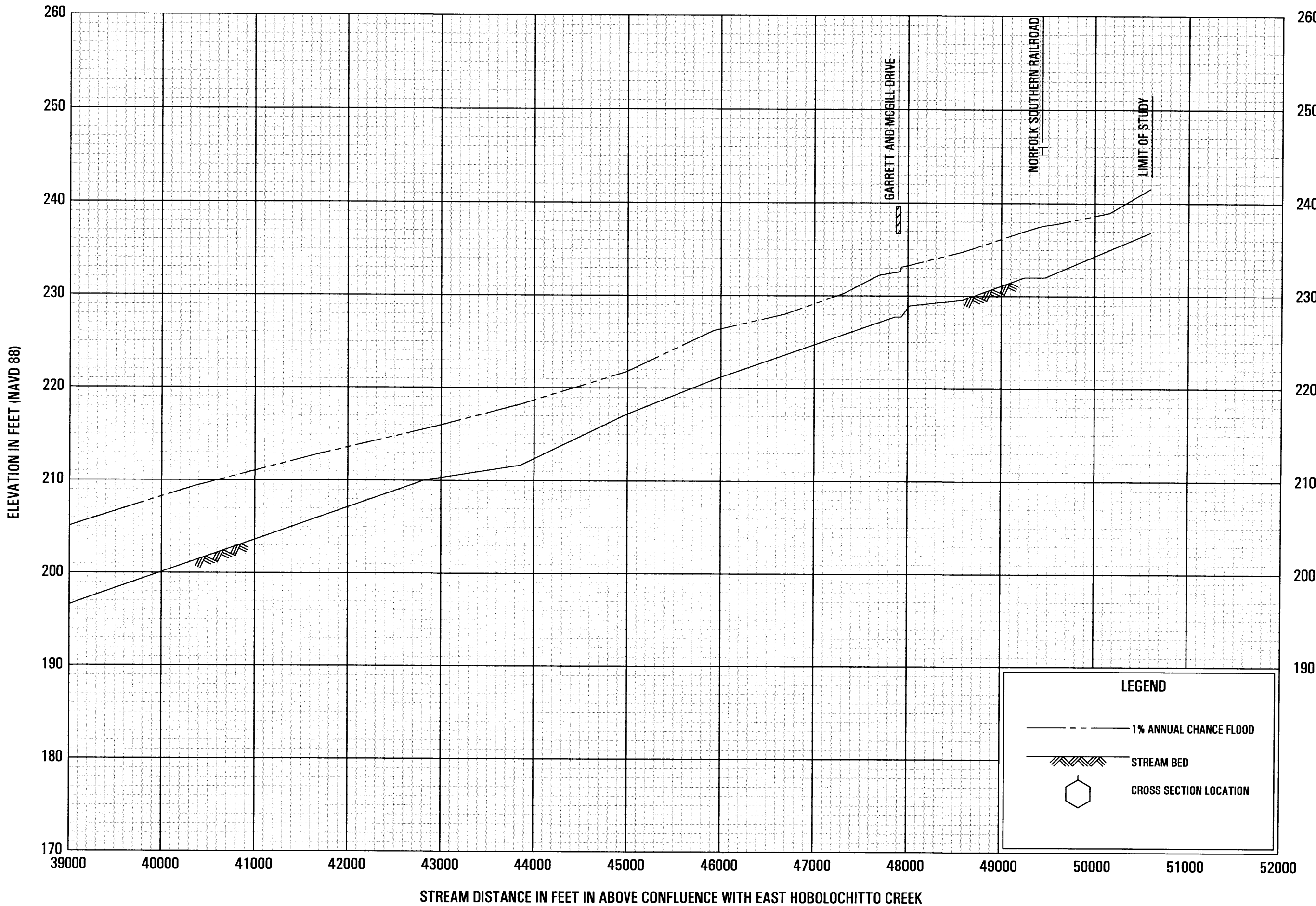
AND INCORPORATED AREAS






FLOOD PROFILES

JUMPOFF CREEK

**FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
AND INCORPORATED AREAS**

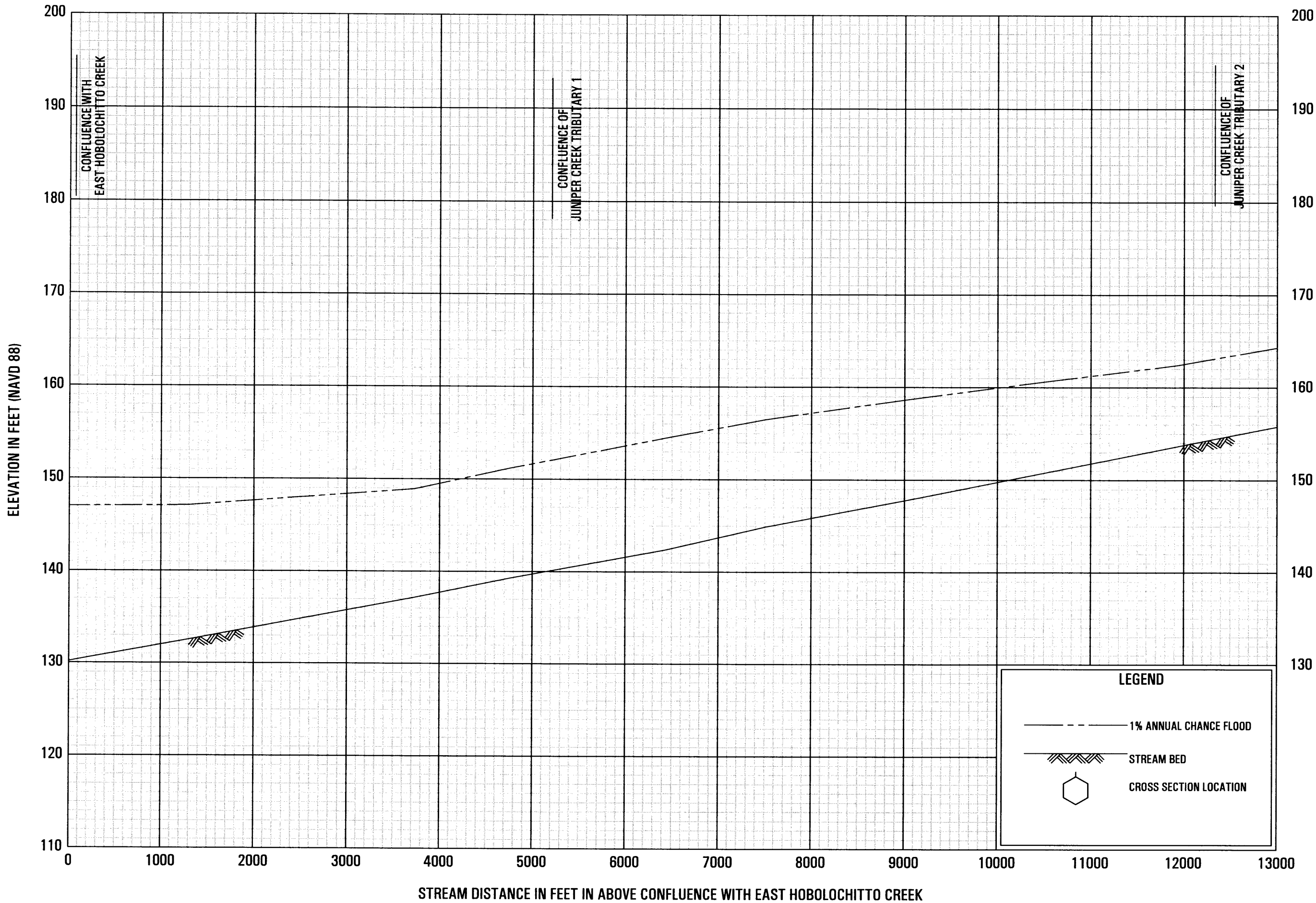


LEGEND

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FLOOD PROFILES
JUMPOFF CREEK

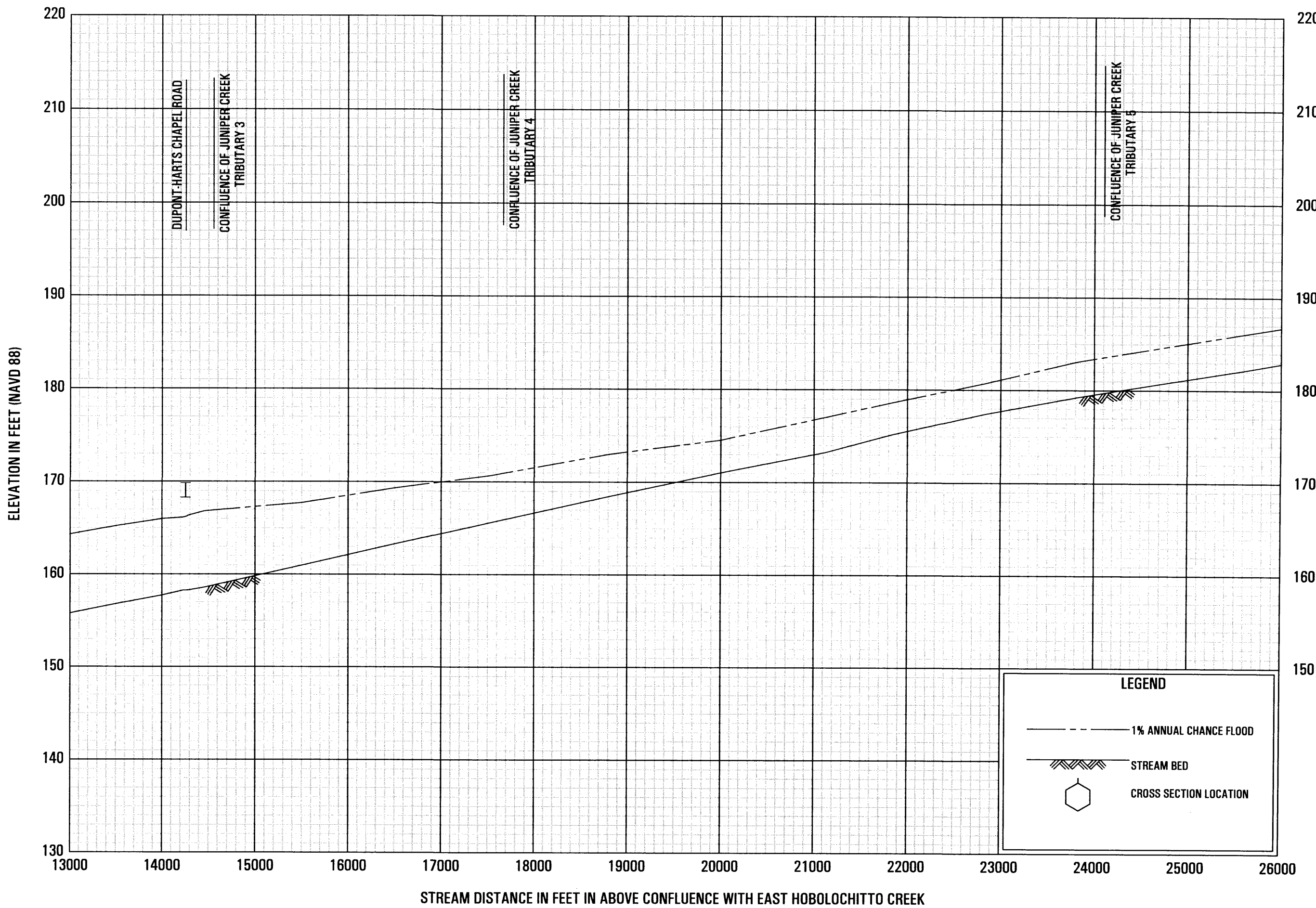
FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
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FLOOD PROFILES

JUNIPER CREEK

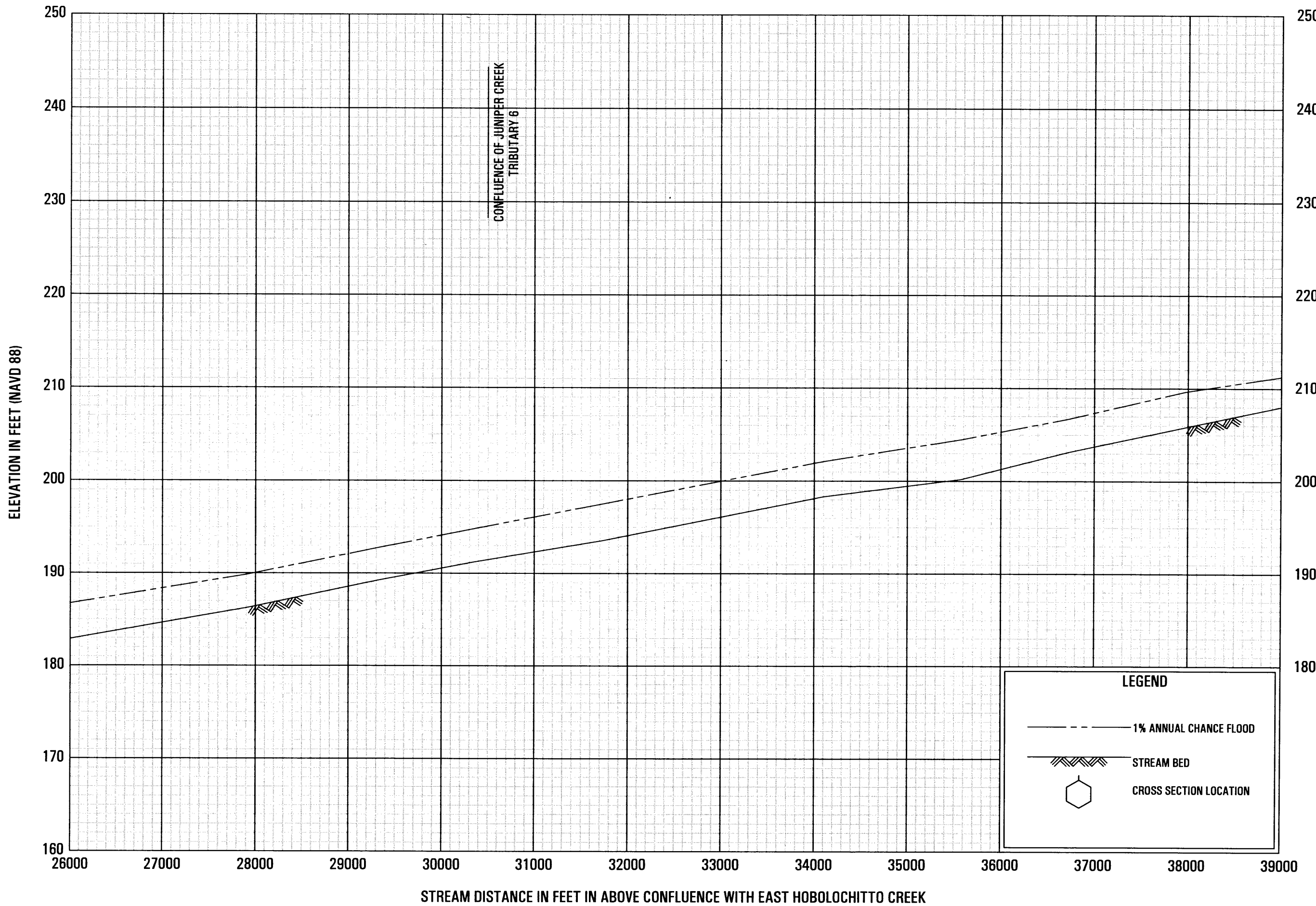
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JUNIPER CREEK

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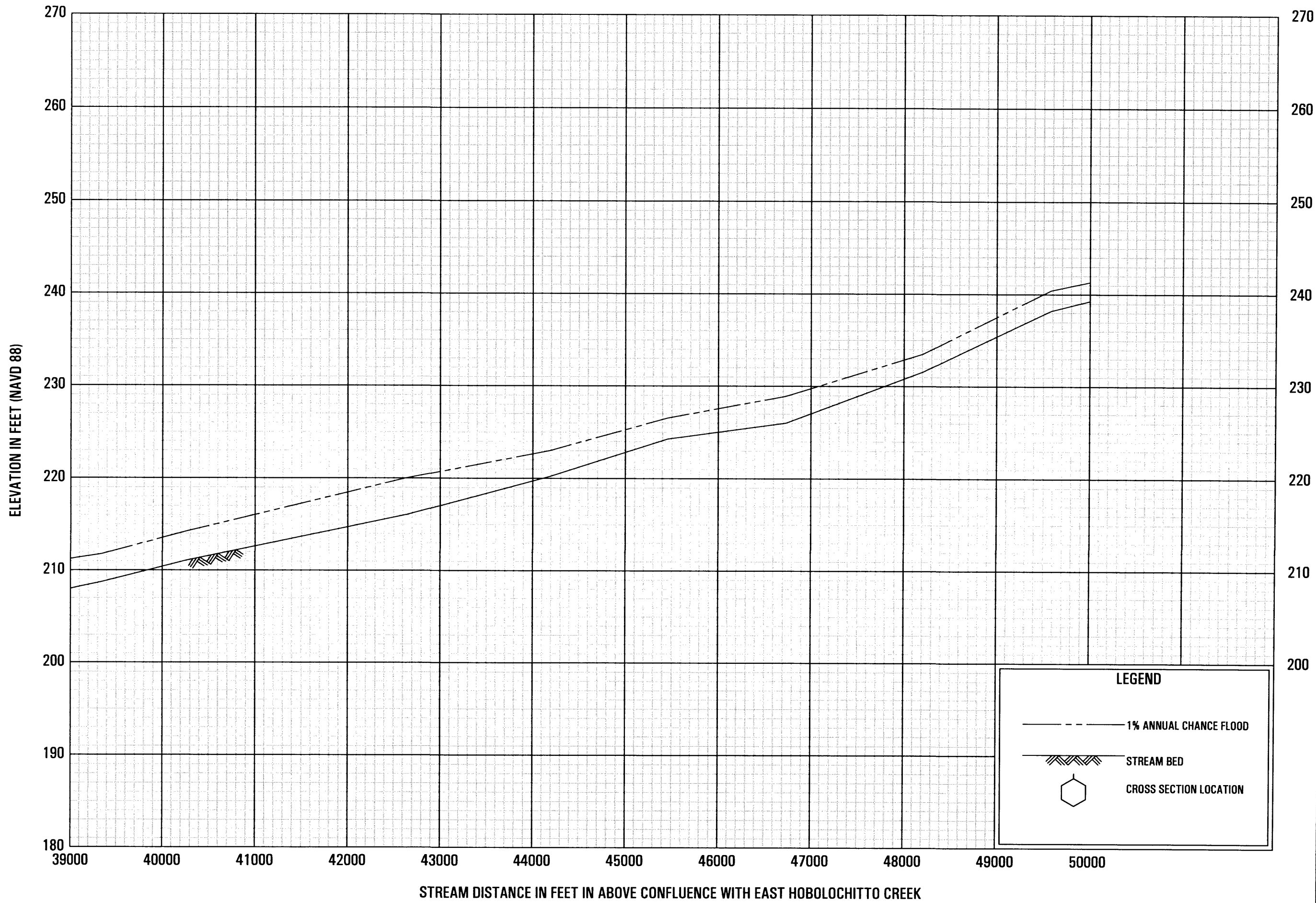
FLOOD PROFILES

JUNIPER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

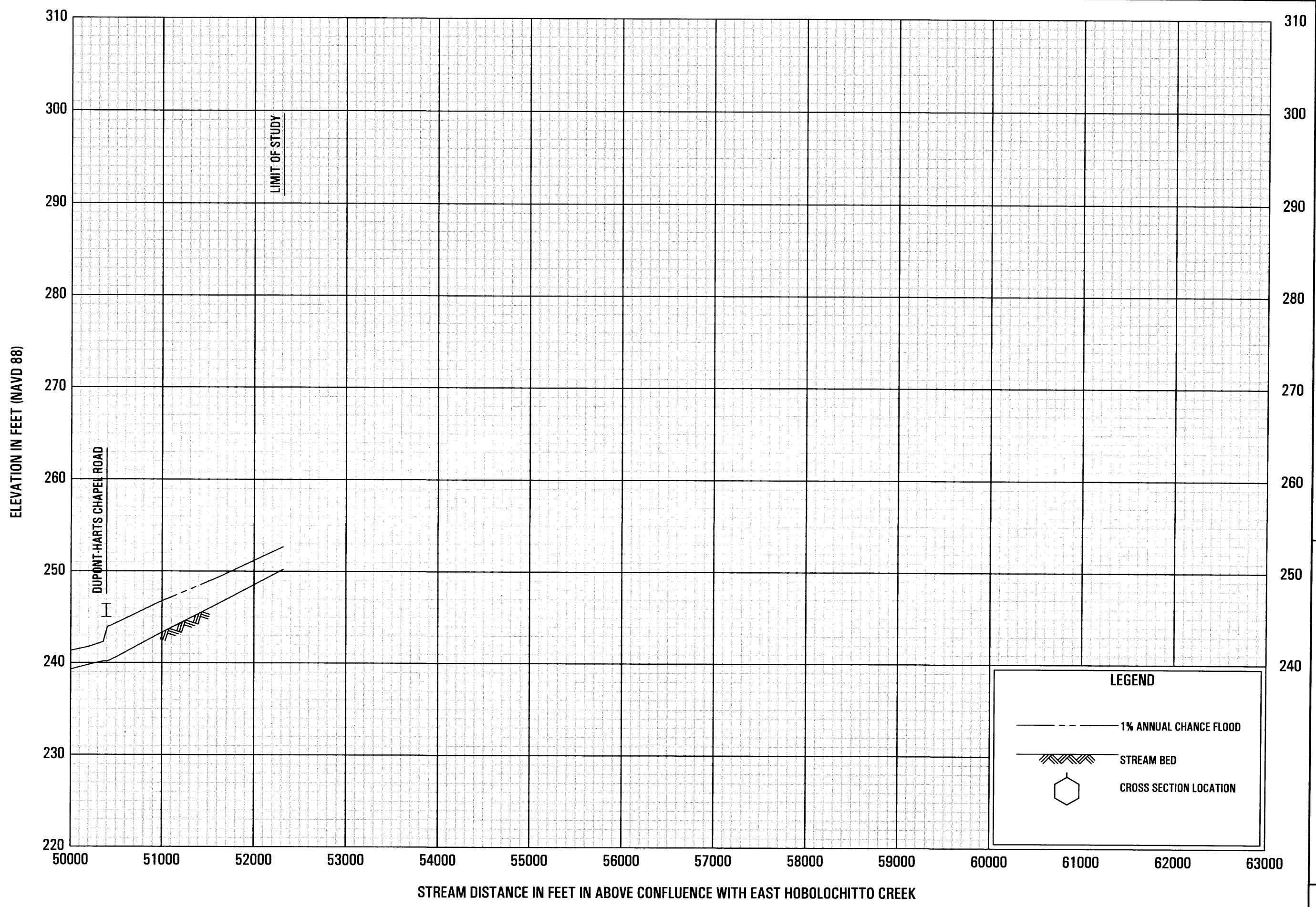
AND INCORPORATED AREAS



FLOOD PROFILES

JUNIPER CREEK

**FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
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LEGEND

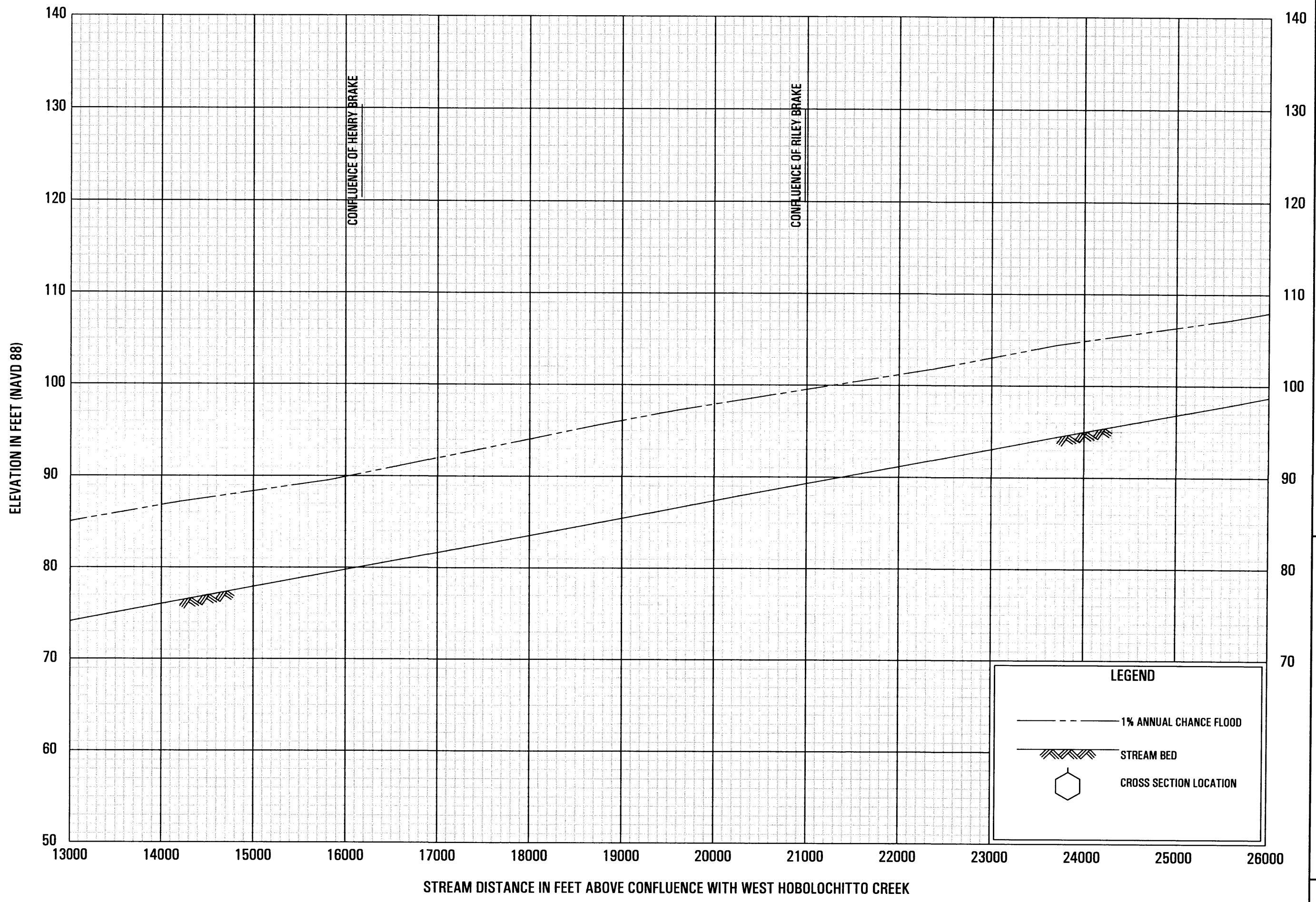
- 1% ANNUAL CHANCE FLOOD
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FLOOD PROFILES

JUNIPER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
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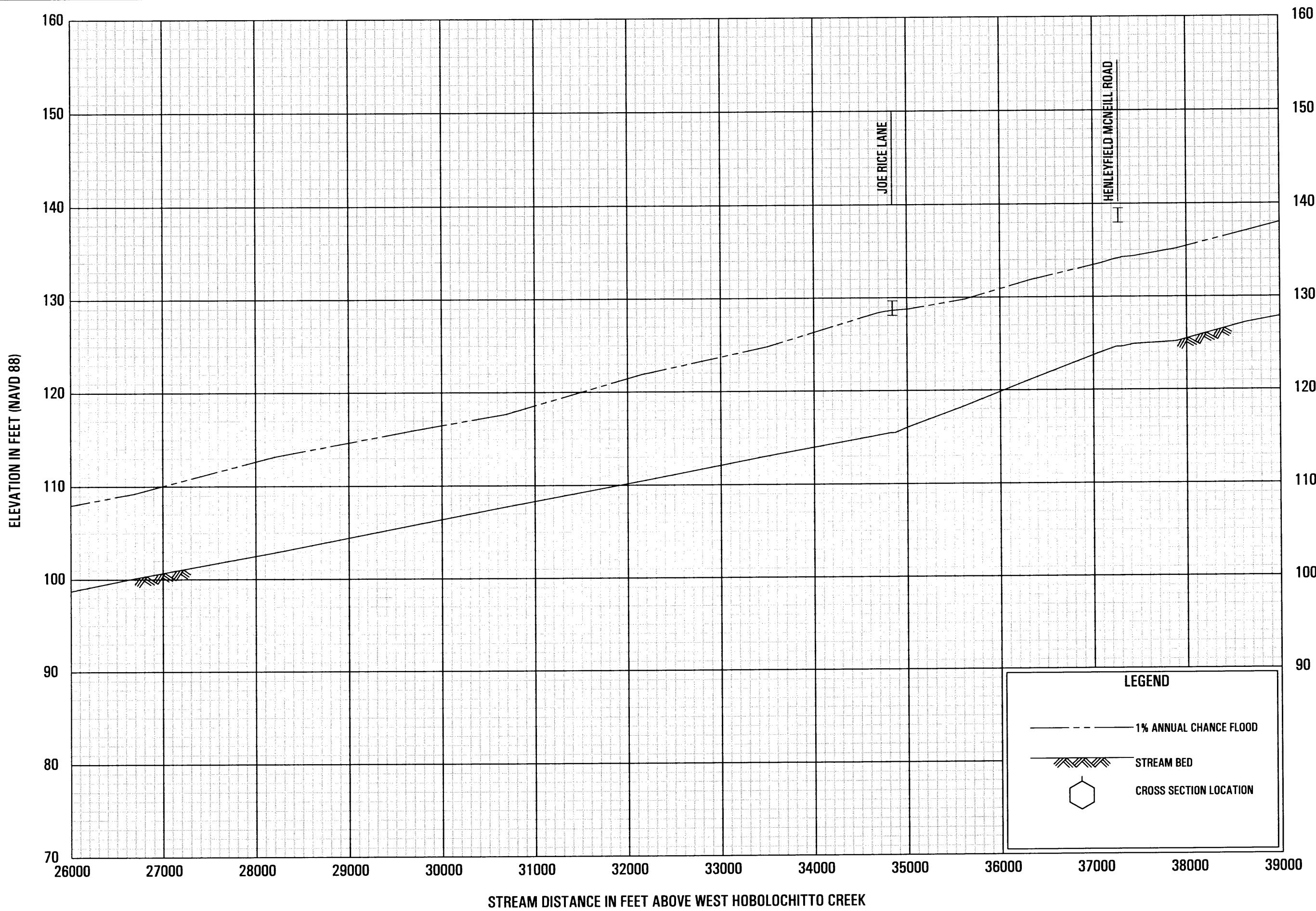
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FLOOD PROFILES

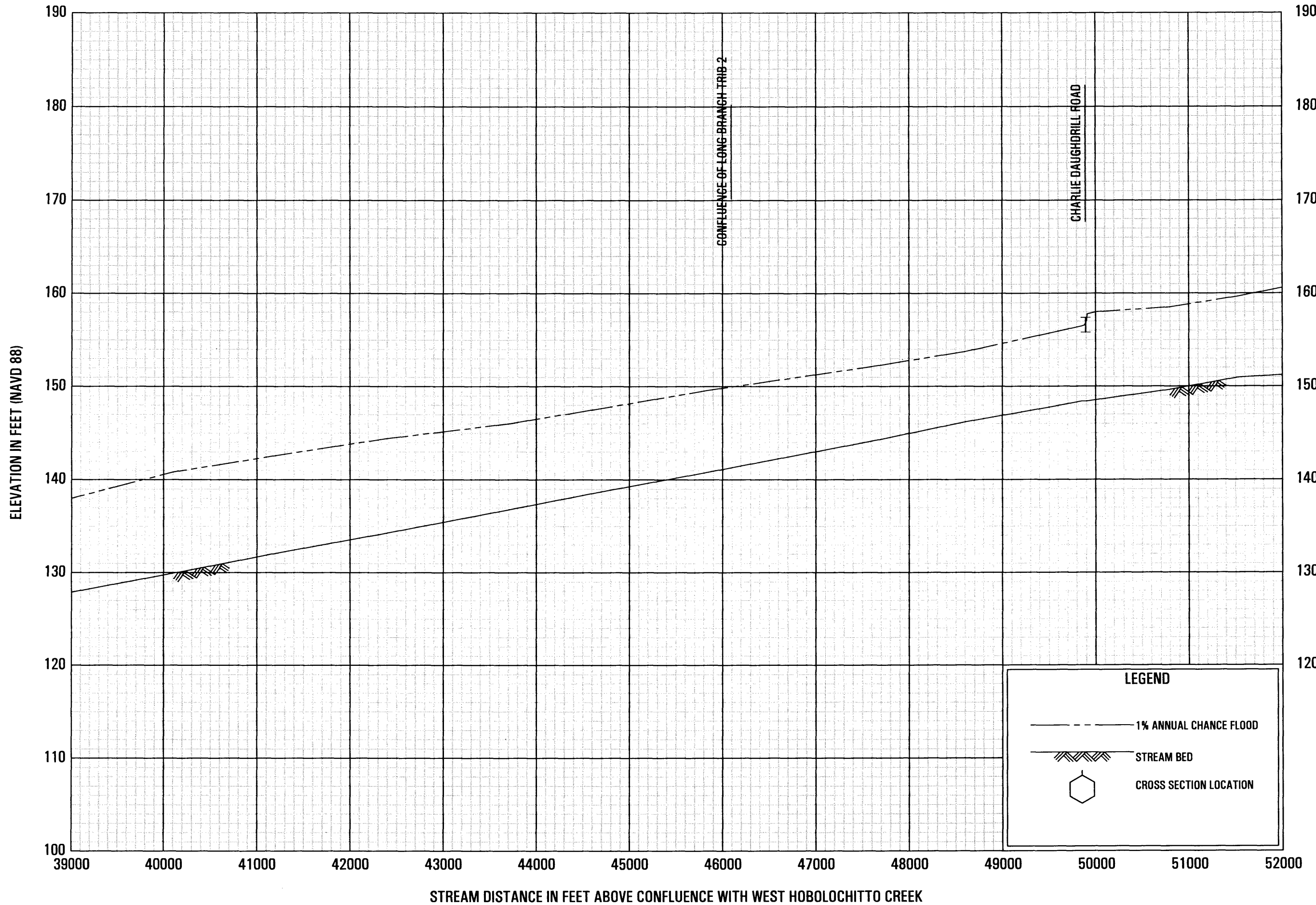
LONG BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
 AND INCORPORATED AREAS



FLOOD PROFILES
LONG BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY
PEARL RIVER COUNTY, MS
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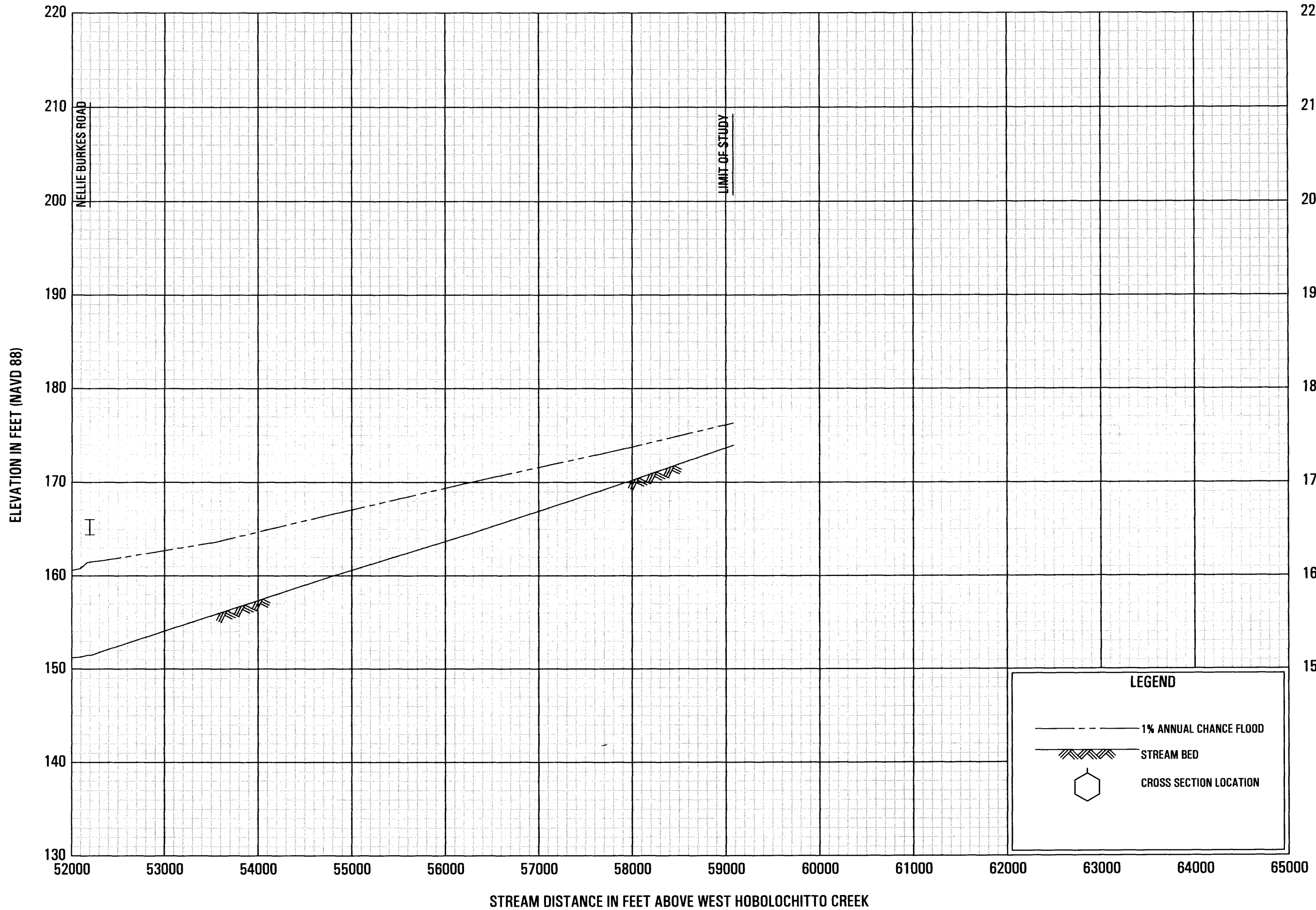
LEGEND

- 1% ANNUAL CHANCE FLOOD
- STREAM BED
- ▨ CROSS SECTION LOCATION

FLOOD PROFILES

LONG BRANCH

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