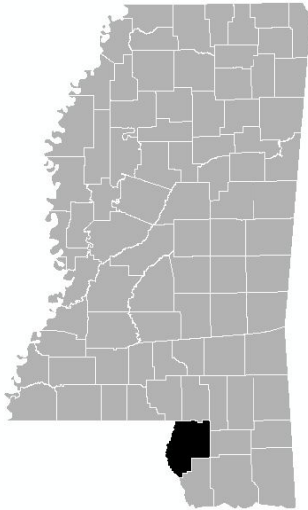


# FLOOD INSURANCE STUDY

## FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 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  
**28109CV002B**

Version Number 2.3.3.3

# TABLE OF CONTENTS

## Volume 1

	<u>Page</u>
<b>SECTION 1.0 – INTRODUCTION</b>	<b>1</b>
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	1
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	5
<b>SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS</b>	<b>15</b>
2.1 Floodplain Boundaries	15
2.2 Floodways	20
2.3 Base Flood Elevations	21
2.4 Non-Encroachment Zones	21
2.5 Coastal Flood Hazard Areas	21
2.5.1 Water Elevations and the Effects of Waves	21
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	21
2.5.3 Coastal High Hazard Areas	22
2.5.4 Limit of Moderate Wave Action	22
<b>SECTION 3.0 – INSURANCE APPLICATIONS</b>	<b>22</b>
3.1 National Flood Insurance Program Insurance Zones	22
3.2 Coastal Barrier Resources System	22
<b>SECTION 4.0 – AREA STUDIED</b>	<b>23</b>
4.1 Basin Description	23
4.2 Principal Flood Problems	23
4.3 Non-Levee Flood Protection Measures	24
4.4 Levees	24
<b>SECTION 5.0 – ENGINEERING METHODS</b>	<b>25</b>
5.1 Hydrologic Analyses	25
5.2 Hydraulic Analyses	33
5.3 Coastal Analyses	37
5.3.1 Total Stillwater Elevations	37
5.3.2 Waves	38
5.3.3 Coastal Erosion	38
5.3.4 Wave Hazard Analyses	38
5.4 Alluvial Fan Analyses	38
<b>SECTION 6.0 – MAPPING METHODS</b>	<b>38</b>
6.1 Vertical and Horizontal Control	38
6.2 Base Map	39
6.3 Floodplain and Floodway Delineation	40
6.4 Coastal Flood Hazard Mapping	50
6.5 FIRM Revisions	50

6.5.1	Letters of Map Amendment	50
6.5.2	Letters of Map Revision Based on Fill	50
6.5.3	Letters of Map Revision	51
6.5.4	Physical Map Revisions	51
6.5.5	Contracted Restudies	51
6.5.6	Community Map History	52
<b>SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION</b>		<b>53</b>
7.1	Contracted Studies	53
7.2	Community Meetings	55
<b>SECTION 8.0 – ADDITIONAL INFORMATION</b>		<b>57</b>
<b>SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES</b>		<b>58</b>

### Figures

	<u>Page</u>
Figure 1: FIRM Panel Index	7
Figure 2: FIRM Notes to Users	8
Figure 3: Map Legend for FIRM	11
Figure 4: Floodway Schematic	20
Figure 5: Wave Runup Transect Schematic	21
Figure 6: Coastal Transect Schematic	22
Figure 7: Frequency Discharge-Drainage Area Curves	33
Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	38
Figure 9: Transect Location Map	38

### Tables

	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	2
Table 2: Flooding Sources Included in this FIS Report	16
Table 3: Flood Zone Designations by Community	22
Table 4: Coastal Barrier Resources System Information	22
Table 5: Basin Characteristics	23
Table 6: Principal Flood Problems	23
Table 7: Historic Flooding Elevations	24
Table 8: Non-Levee Flood Protection Measures	24
Table 9: Levees	24
Table 10: Summary of Discharges	26
Table 11: Summary of Non-Coastal Stillwater Elevations	33
Table 12: Stream Gage Information used to Determine Discharges	33
Table 13: Summary of Hydrologic and Hydraulic Analyses	34
Table 14: Roughness Coefficients	37
Table 15: Summary of Coastal Analyses	37

Table 16: Tide Gage Analysis Specifics	38
Table 17: Coastal Transect Parameters	38
Table 18: Summary of Alluvial Fan Analyses	38
Table 19: Results of Alluvial Fan Analyses	38
Table 20: Countywide Vertical Datum Conversion	39
Table 21: Stream-by-Stream Vertical Datum Conversion	39
Table 22: Base Map Sources	40
Table 23: Summary of Topographic Elevation Data used in Mapping	41
Table 24: Floodway Data	42
Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams	50
Table 26: Summary of Coastal Transect Mapping Considerations	50
Table 27: Incorporated Letters of Map Change	51
Table 28: Community Map History	53
Table 29: Summary of Contracted Studies Included in this FIS Report	53
Table 30: Community Meetings	56
Table 31: Map Repositories	57
Table 32: Additional Information	57
Table 33: Bibliography and References	59

## Volume 1

### Exhibits

Flood Profiles	<u>Panel</u>
Alligator Branch	01-02 P
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
Mill Creek No. 1	30-33 P
Mill Creek No. 3	34-38 P
Mill Creek No. 4	39-41 P
Pearl River	42-42i P
Poplar Springs Branch	42j-42l P
Second Alligator Branch	43-44 P
Second Alligator Branch Tributary	45 P
Thigpen Creek	46 P
West Hobolochitto Creek	47-52 P

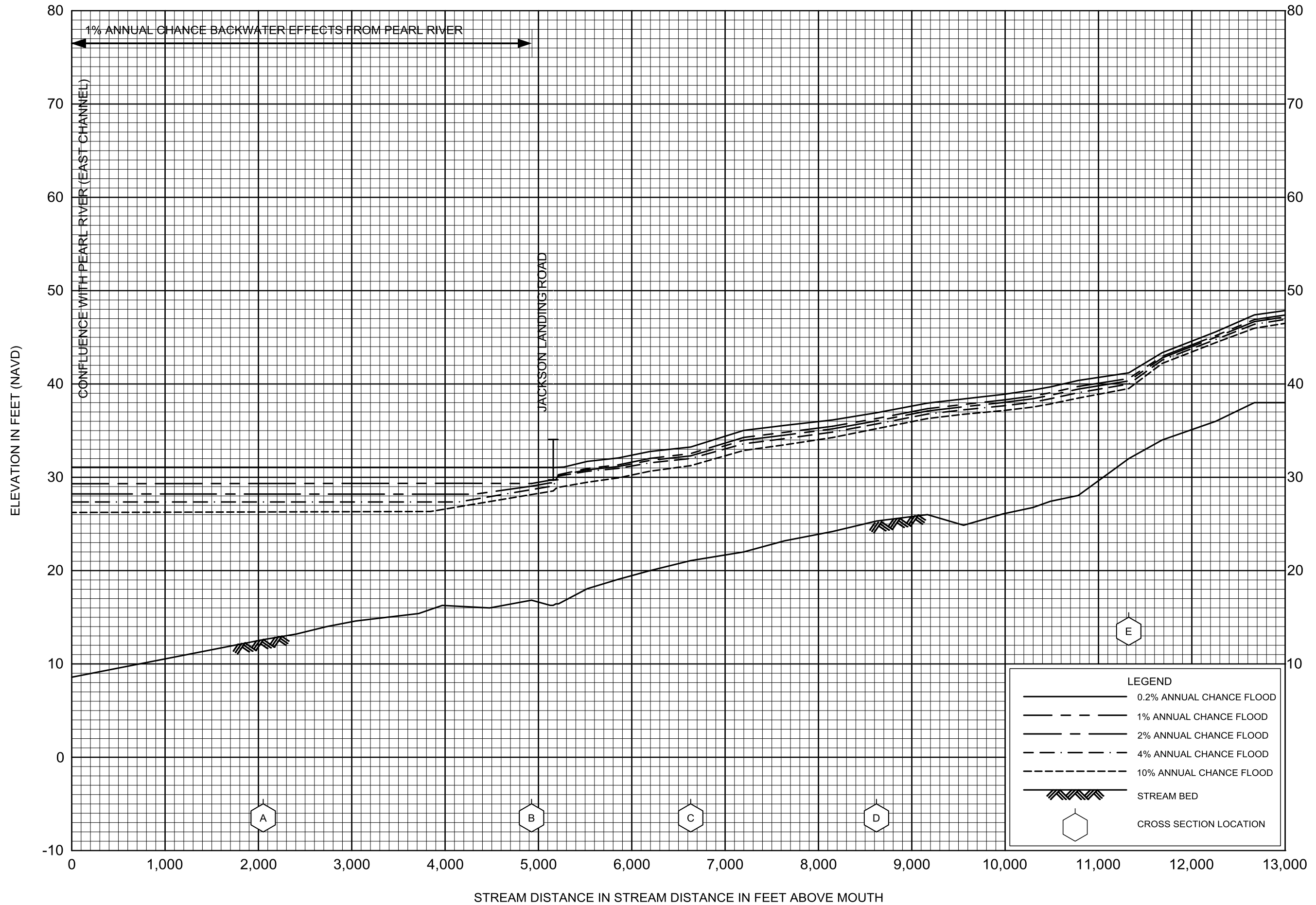


White Sand Creek  
Wolf River

53-57 P  
58-70 P

**Published Separately**

Flood Insurance Rate Map (FIRM)

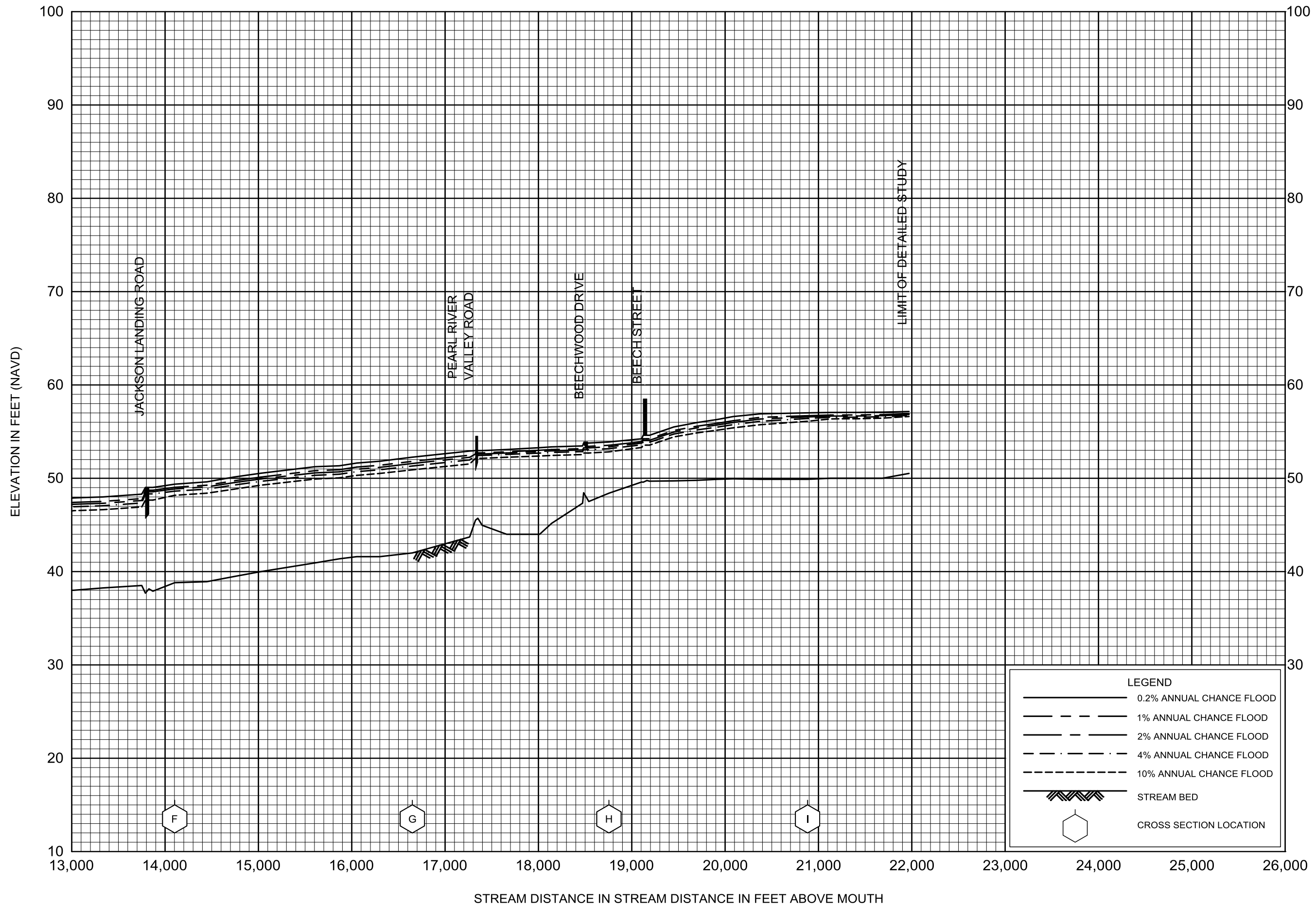


FLOOD PROFILES

MILL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS



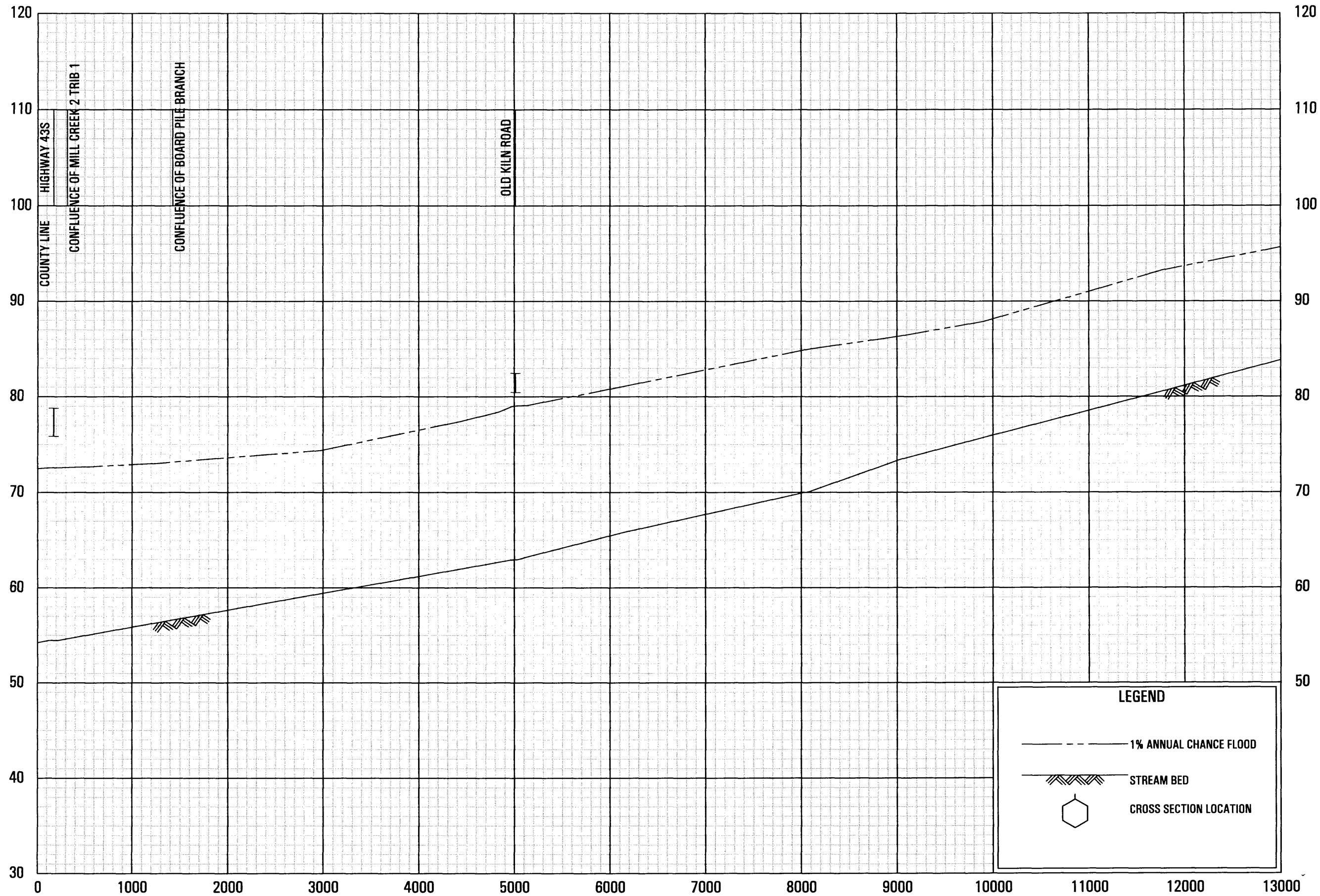
FLOOD PROFILES

MILL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE COUNTY LINE (IMMEDIATELY DOWNSTREAM OF HIGHWAY 43S)

**LEGEND**

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

FLOOD PROFILES

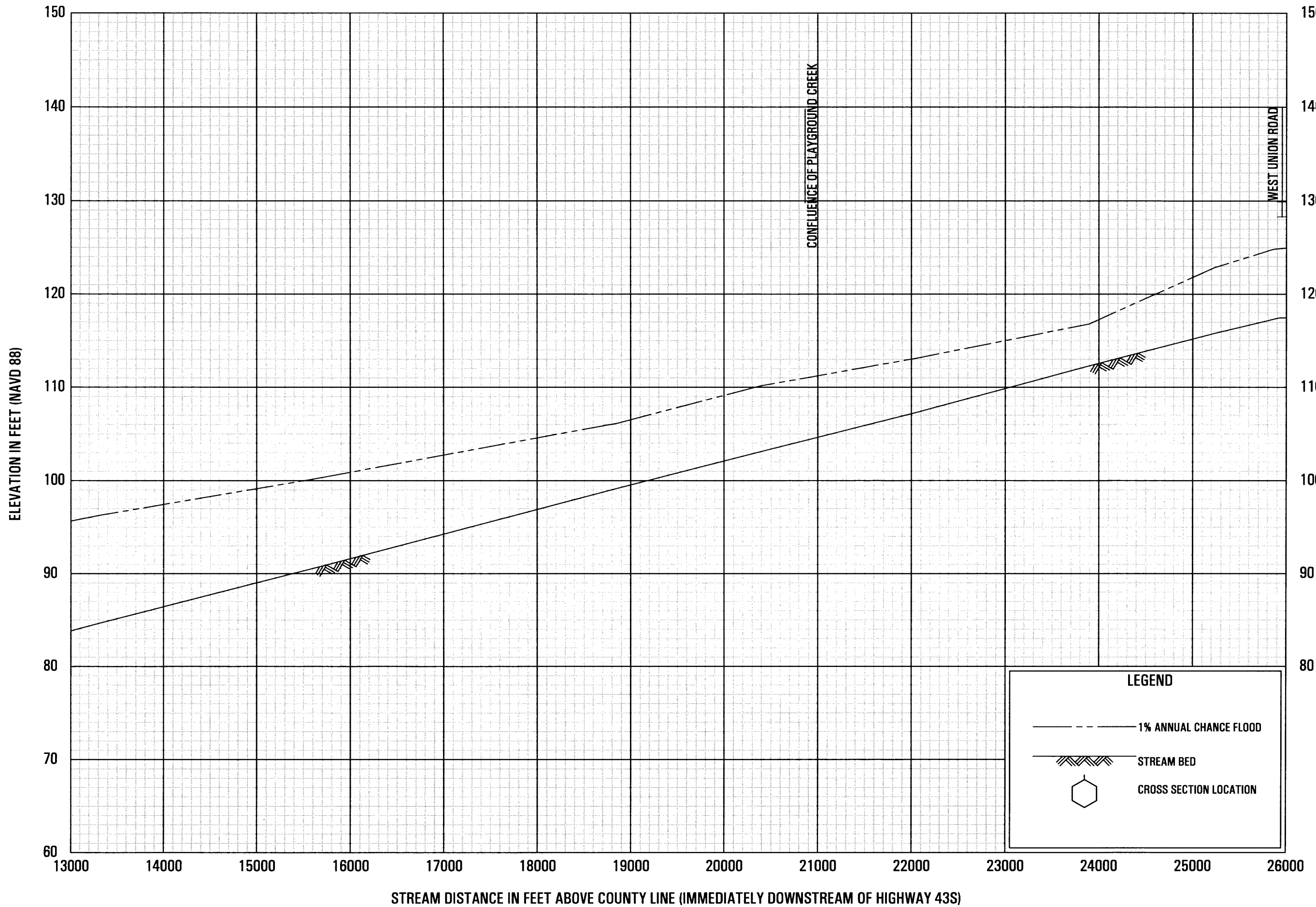
MILL CREEK NO.1

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

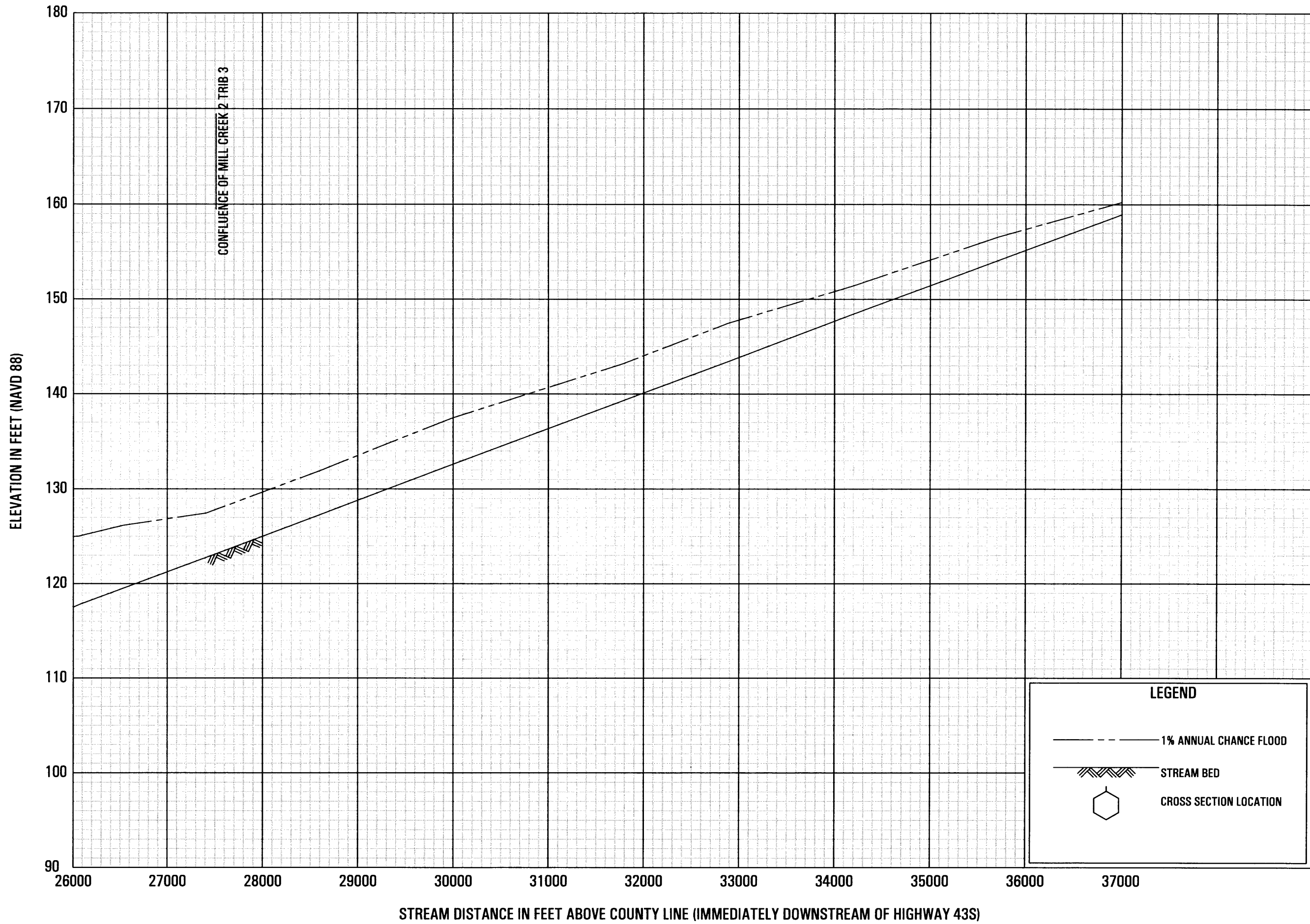
30P



**FLOOD PROFILES**

**MILL CREEK NO.1**

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

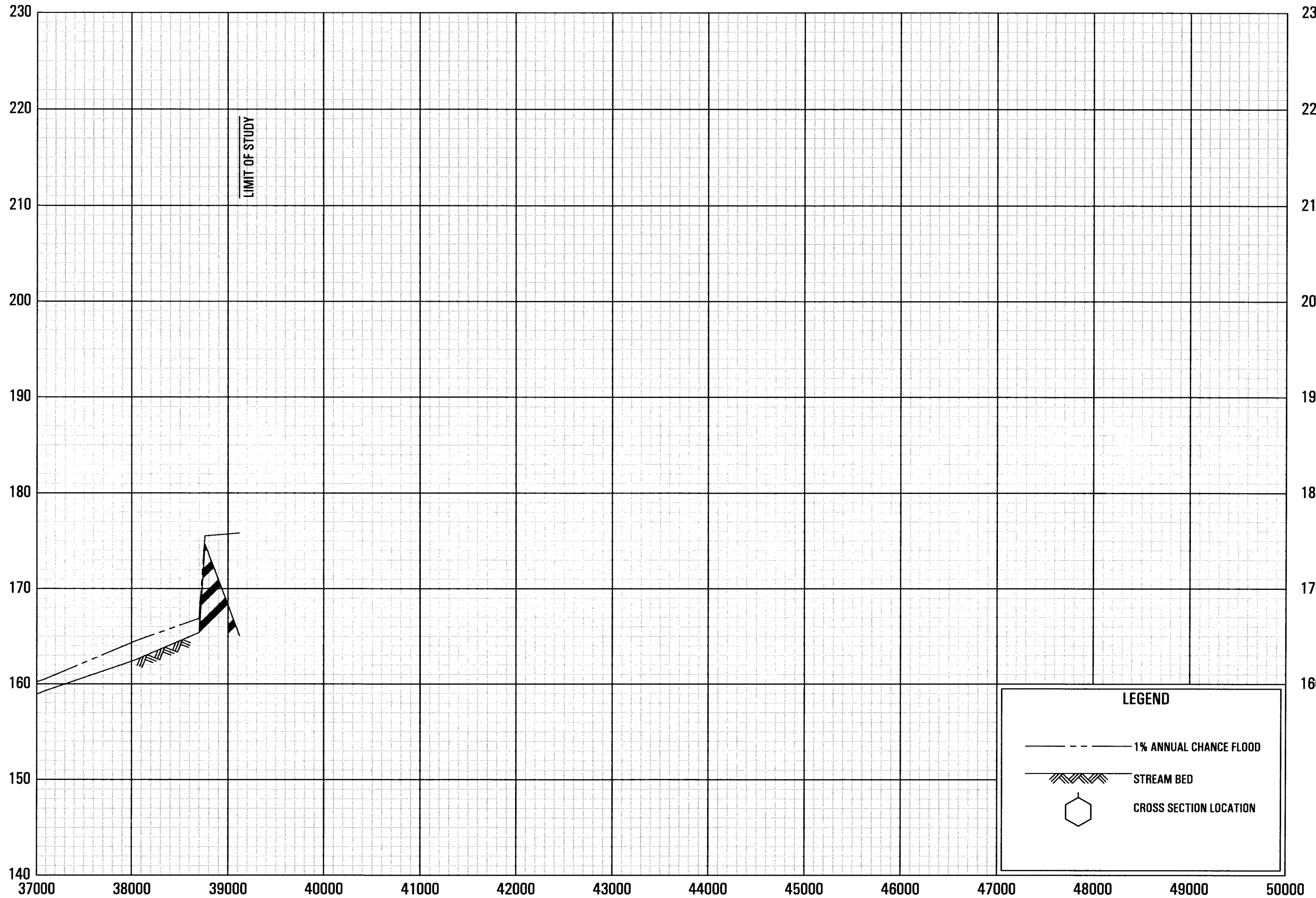


**FLOOD PROFILES**

**MILL CREEK NO.1**

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

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE COUNTY LINE (IMMEDIATELY DOWNSTREAM OF HIGHWAY 43S)

FLOOD PROFILES

MILL CREEK NO.1

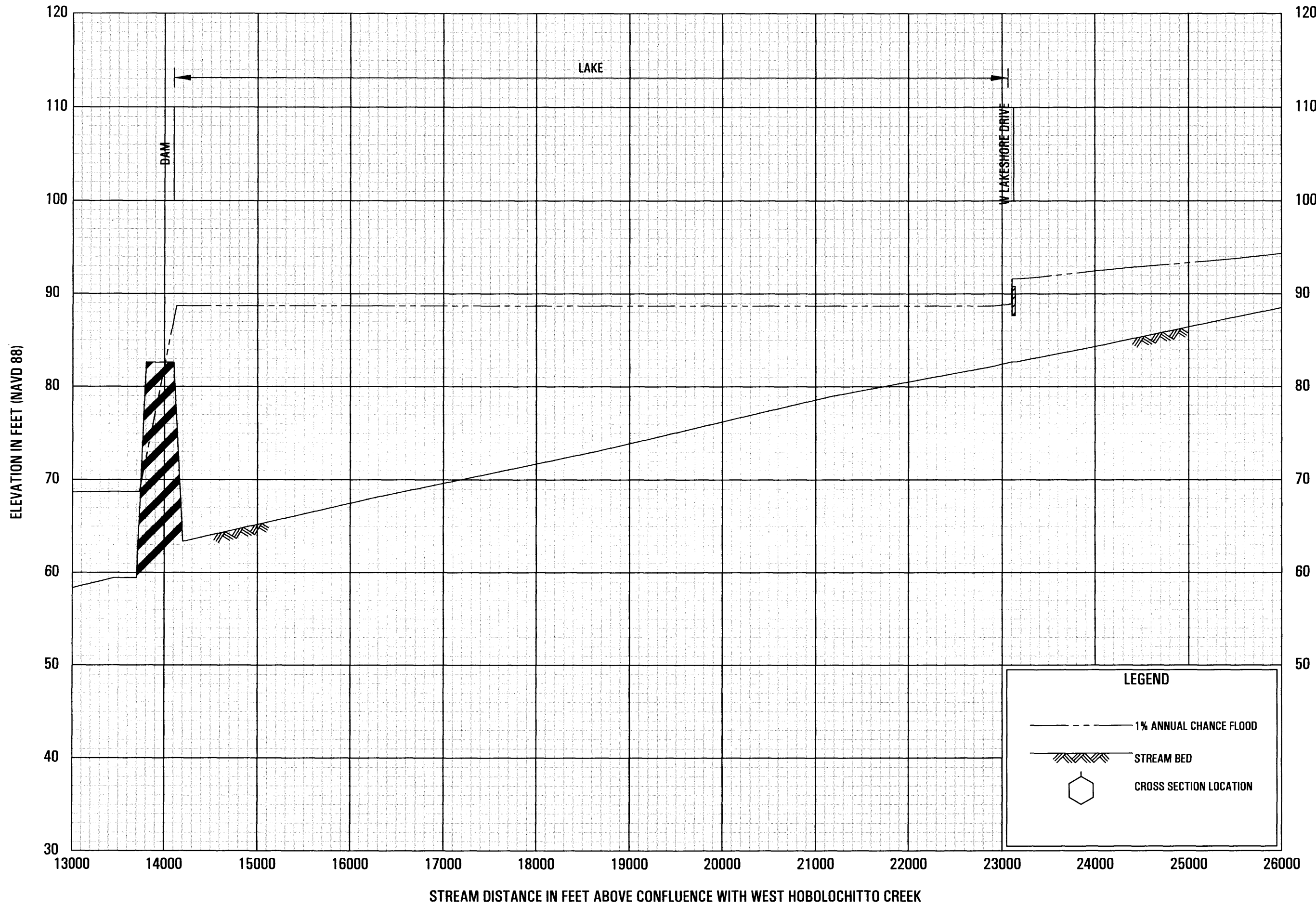
FEDERAL EMERGENCY MANAGEMENT AGENCY  
PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

33P





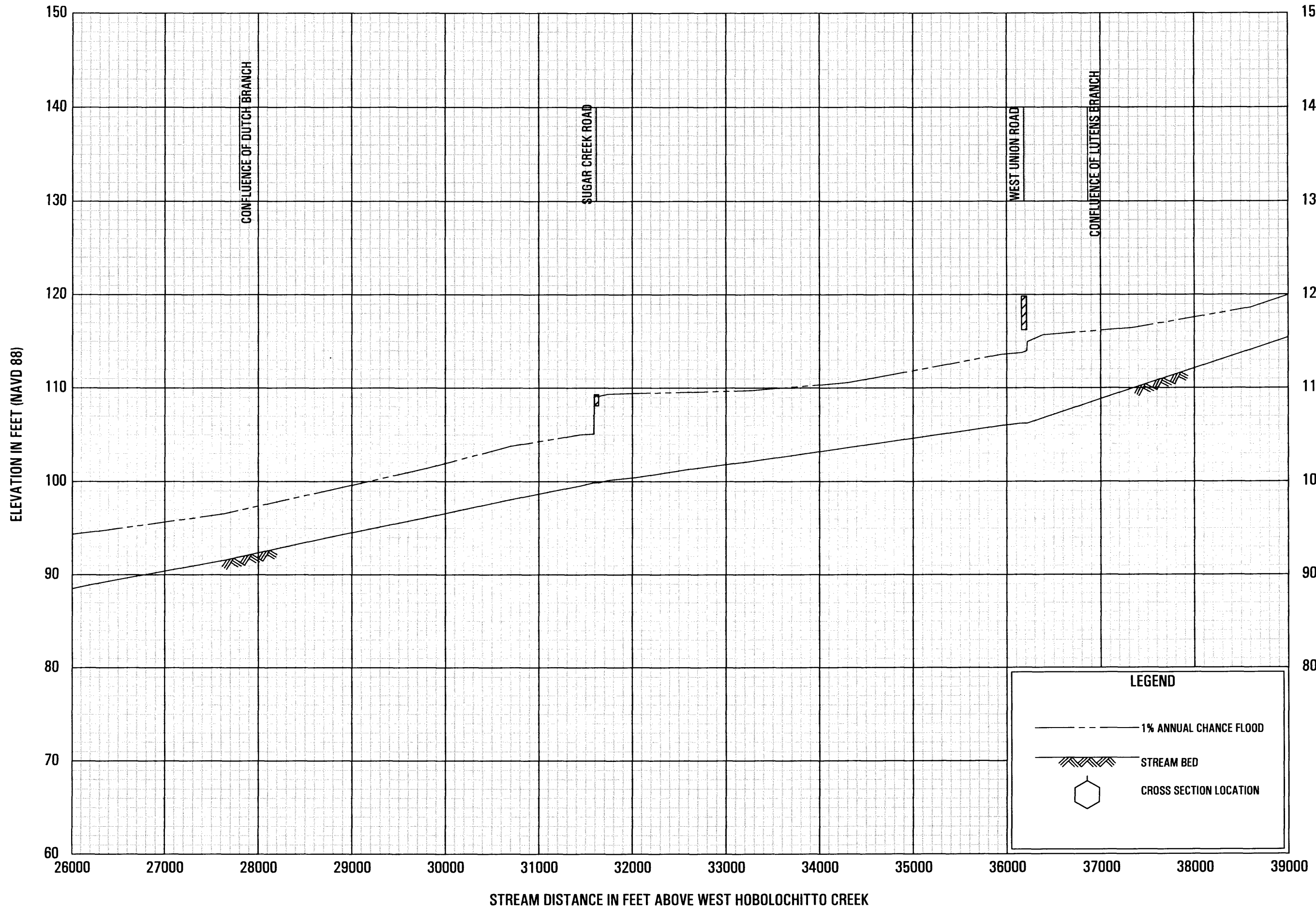




**FLOOD PROFILES**

**MILL CREEK NO.3**

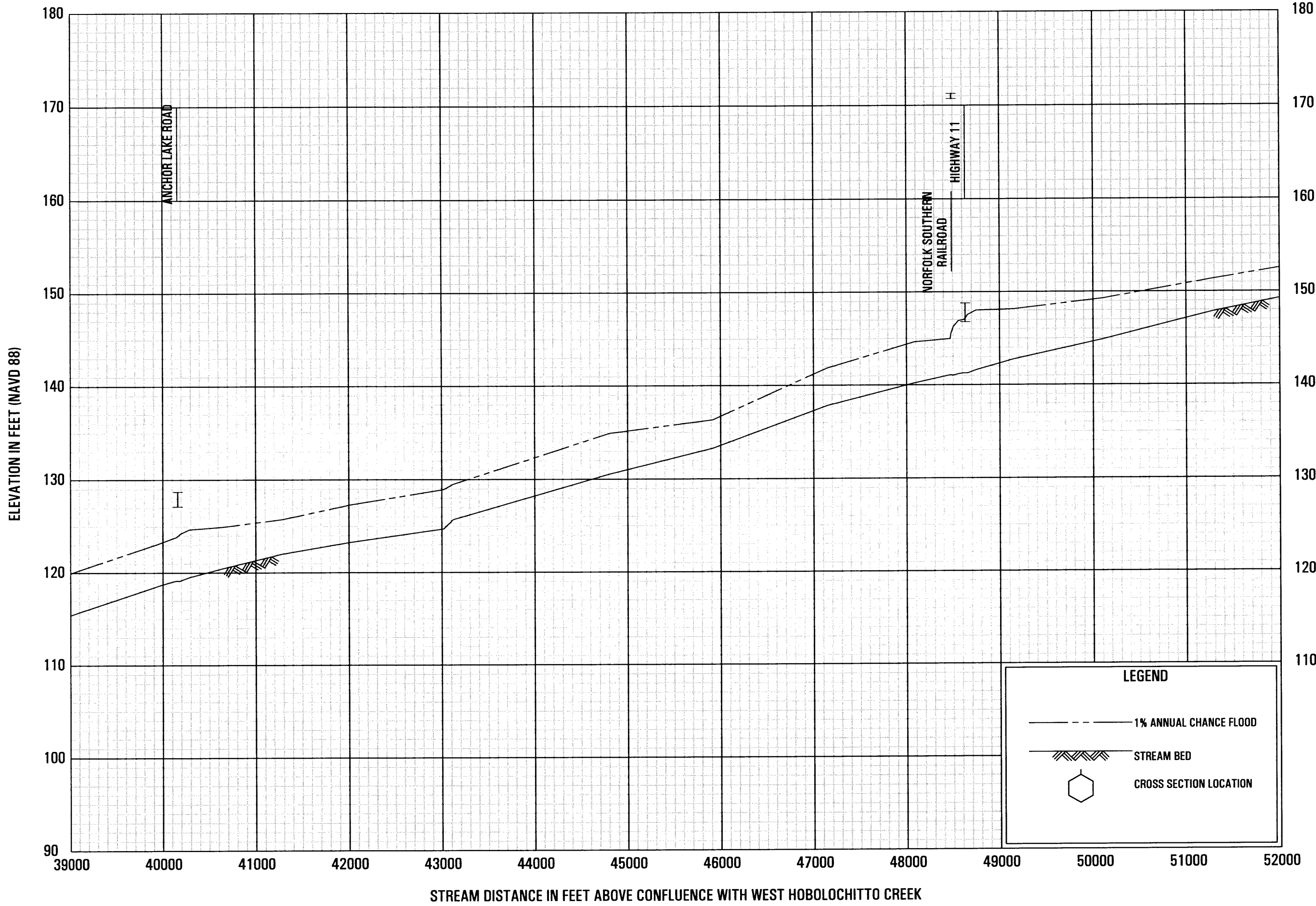
FEDERAL EMERGENCY MANAGEMENT AGENCY  
**PEARL RIVER COUNTY, MS**  
 AND INCORPORATED AREAS



**FLOOD PROFILES**

**MILL CREEK NO.3**

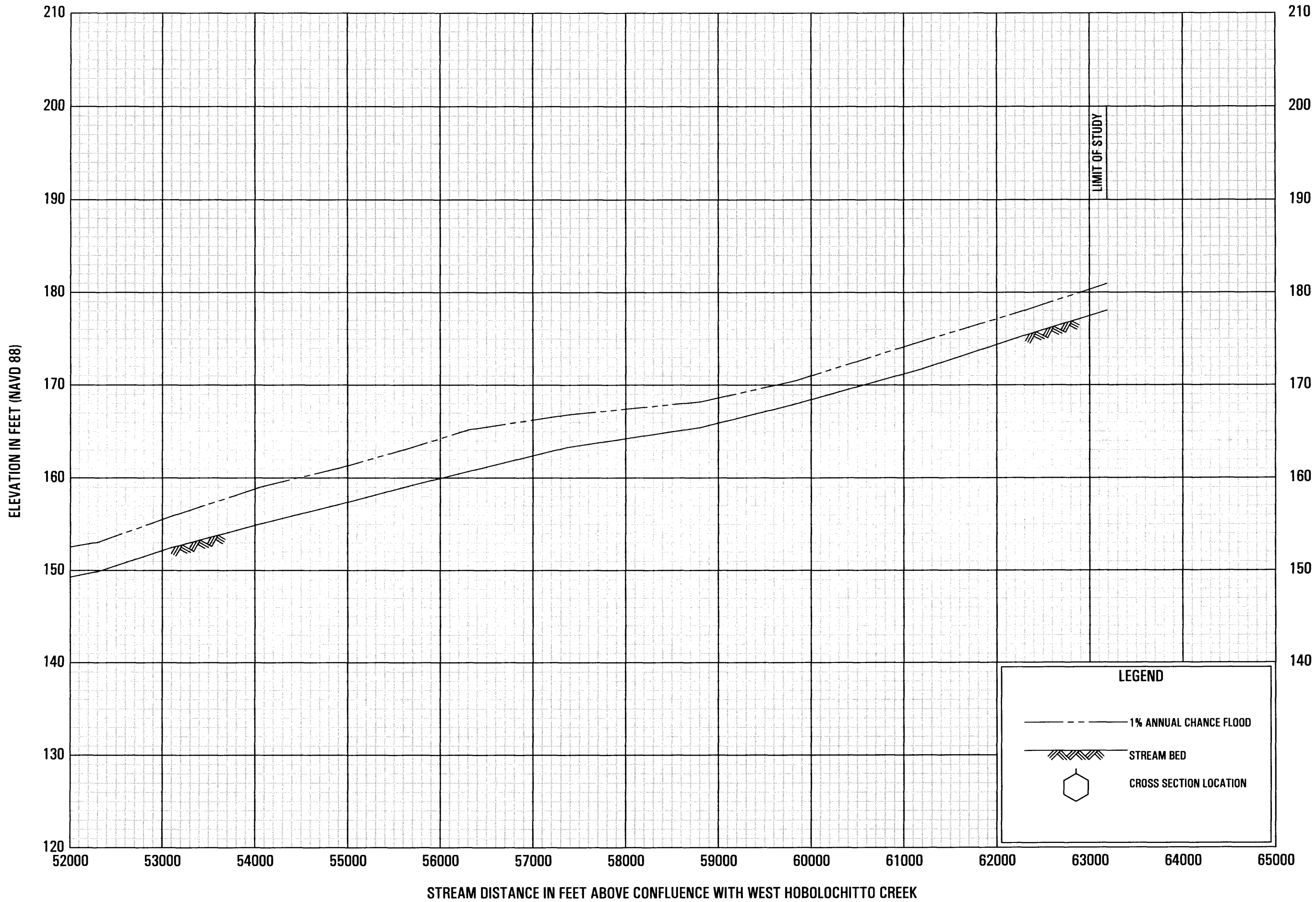
**FEDERAL EMERGENCY MANAGEMENT AGENCY  
PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS**



**FLOOD PROFILES**

**MILL CREEK NO.3**

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



**FLOOD PROFILES**

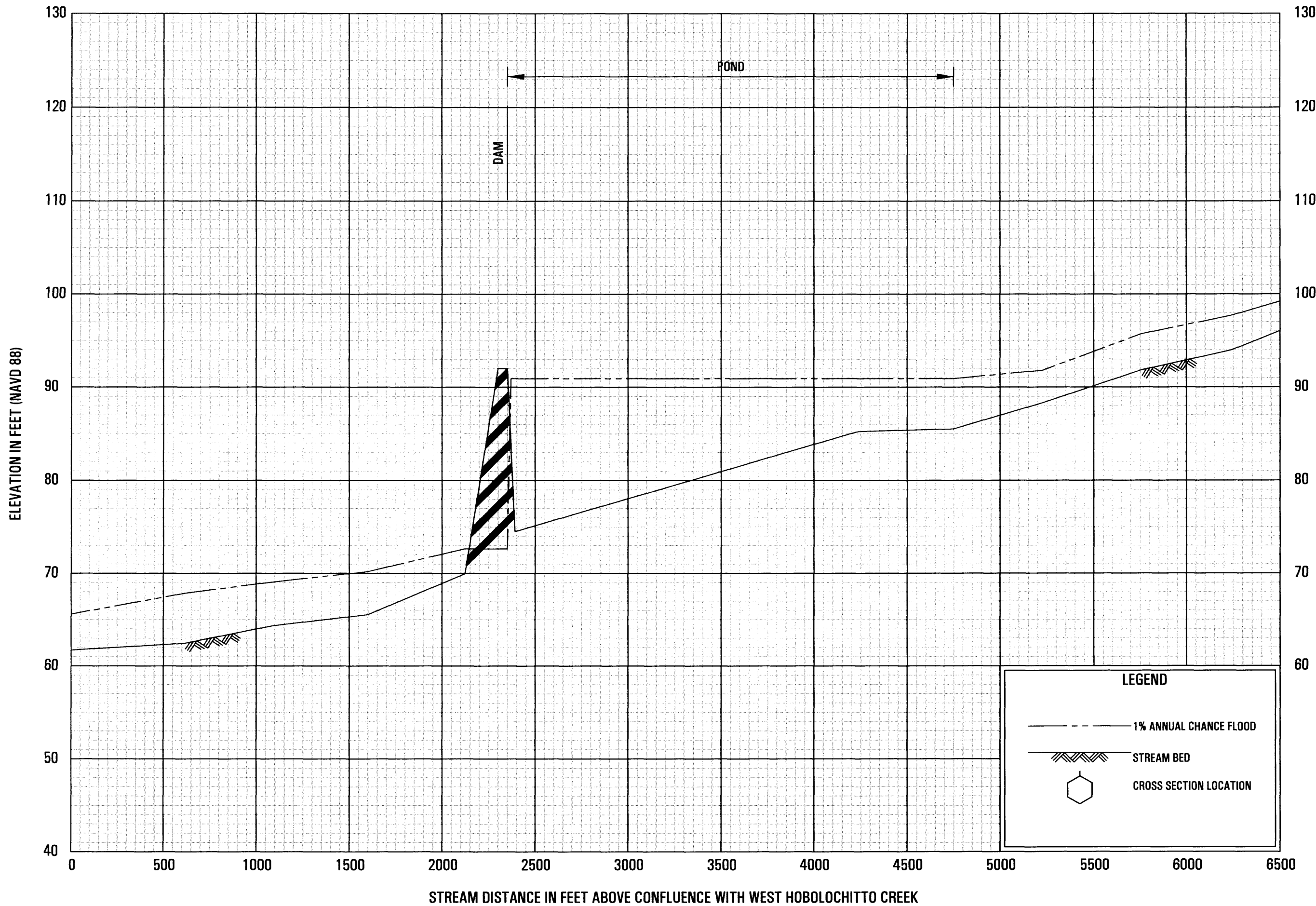
**MILL CREEK NO.3**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**PEARL RIVER COUNTY, MS**

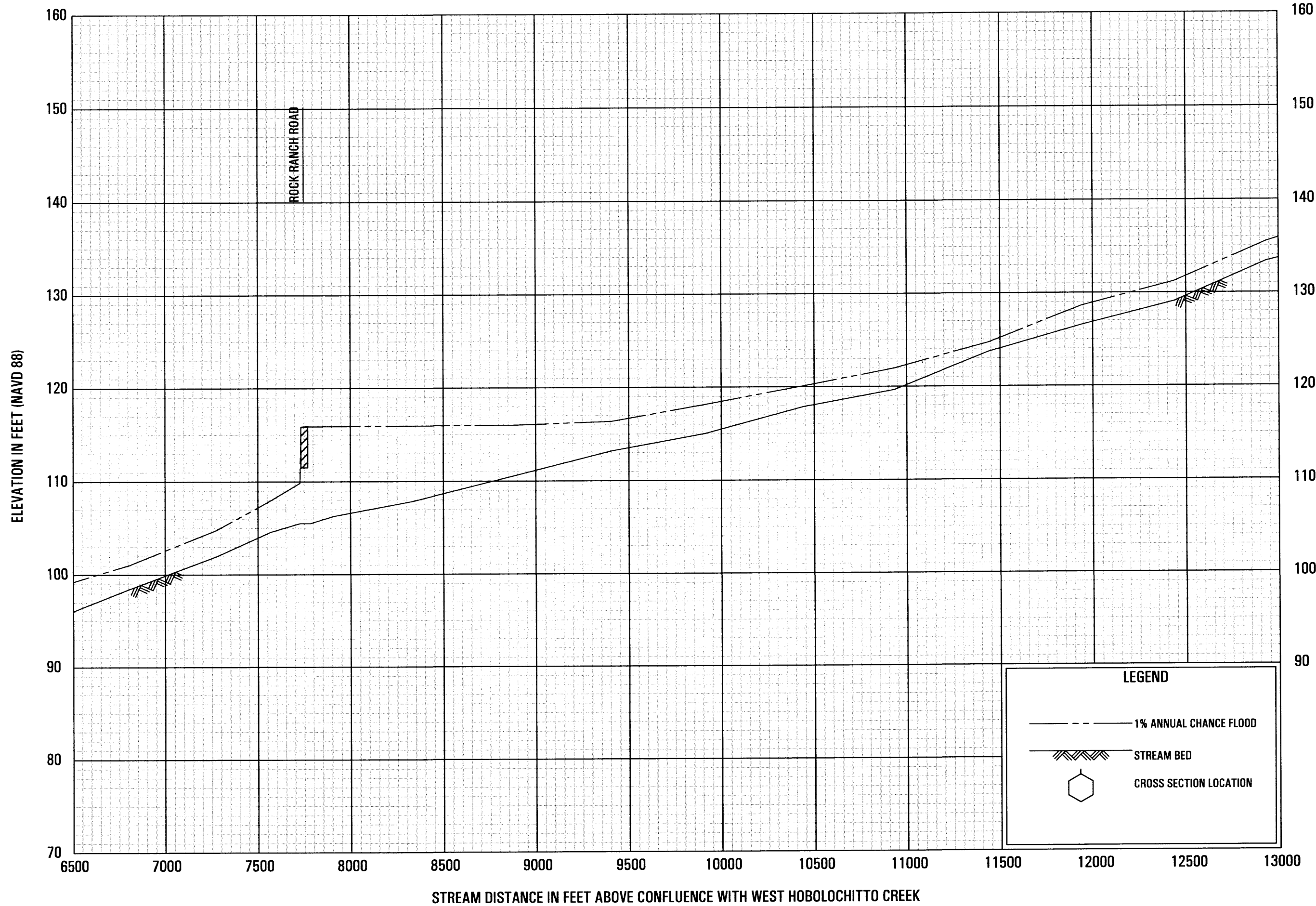
AND INCORPORATED AREAS





**FLOOD PROFILES**  
**MILL CREEK NO.4**

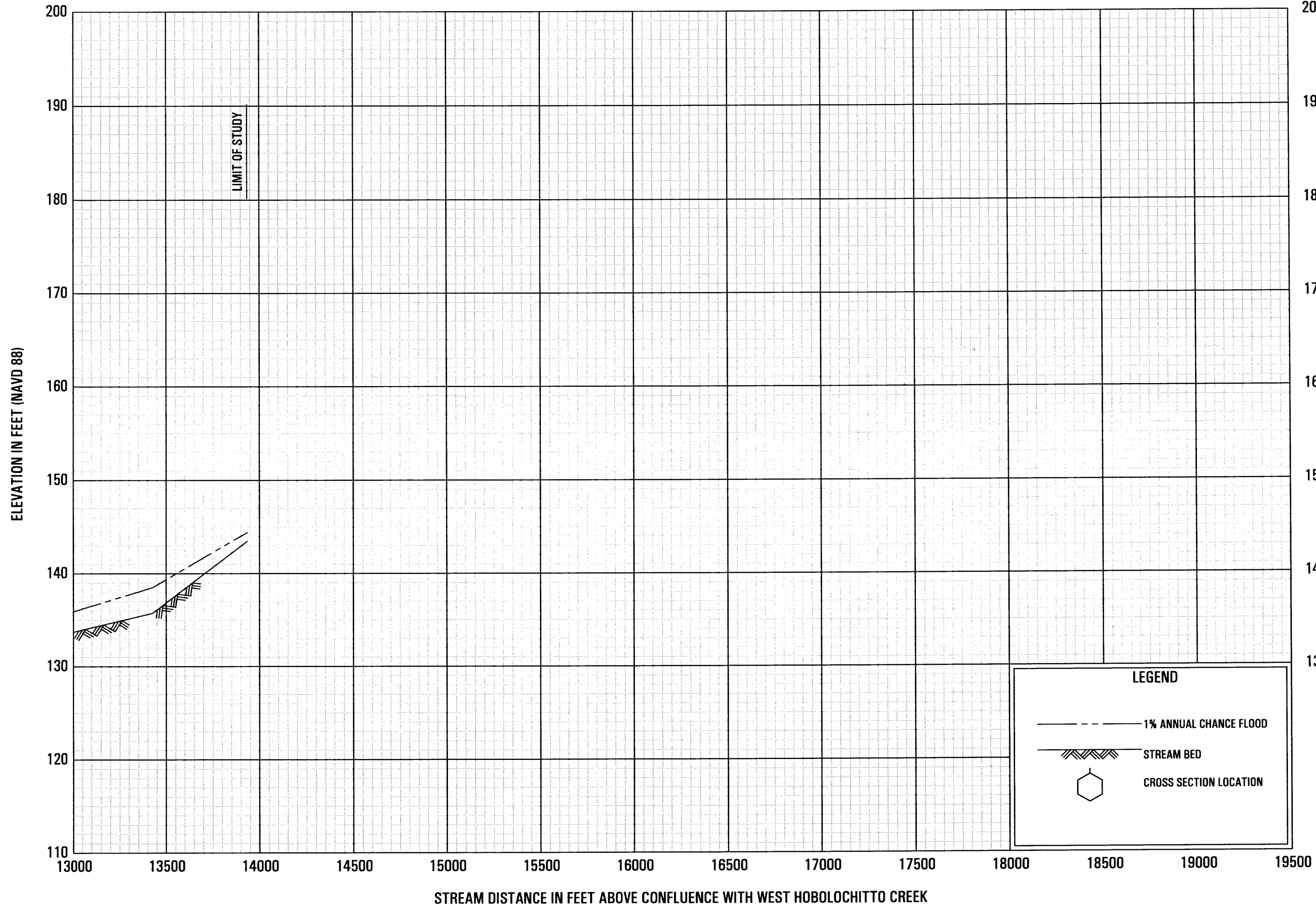
FEDERAL EMERGENCY MANAGEMENT AGENCY  
**PEARL RIVER COUNTY, MS**  
AND INCORPORATED AREAS



**FLOOD PROFILES**

**MILL CREEK NO.4**

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

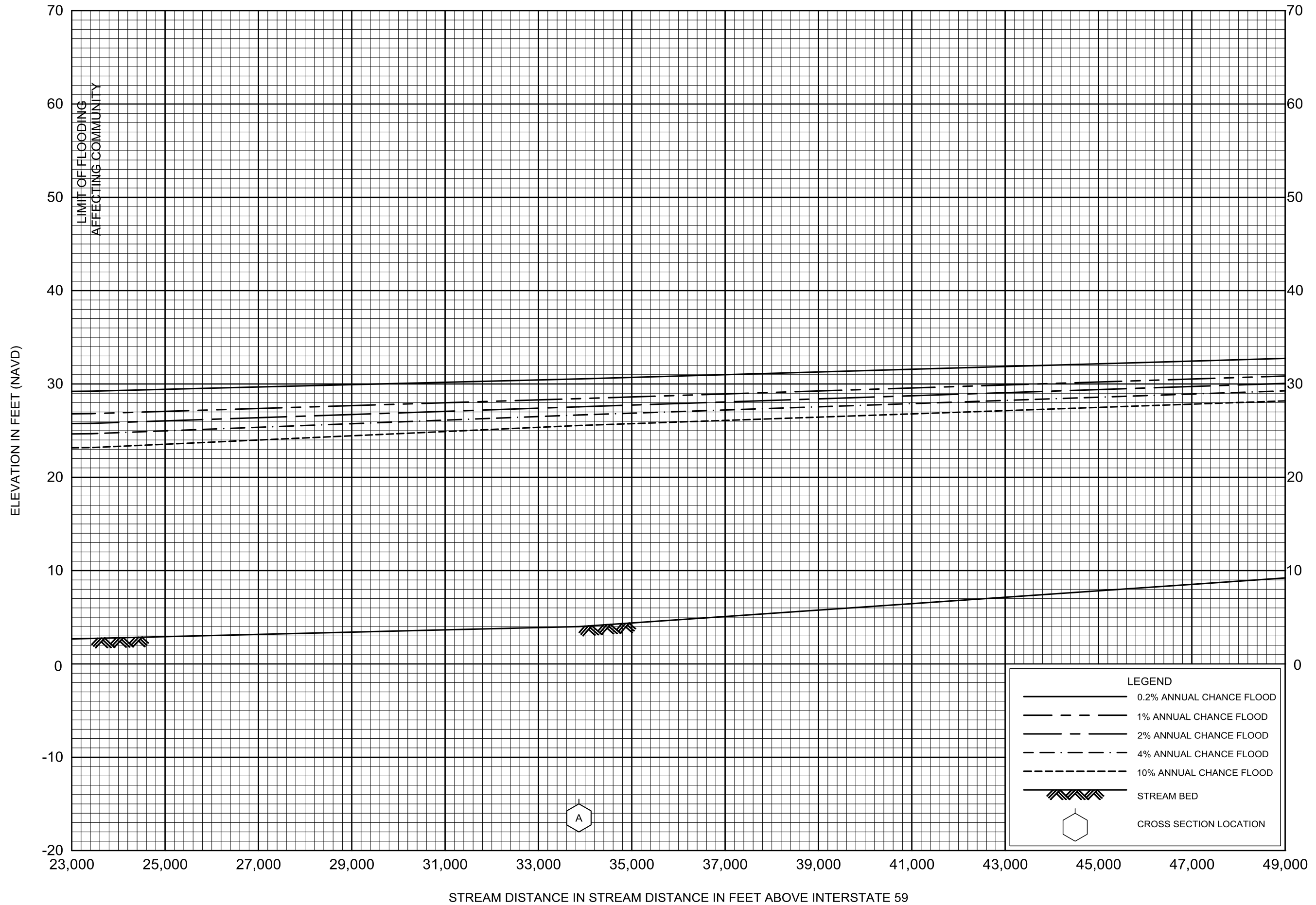


FLOOD PROFILES

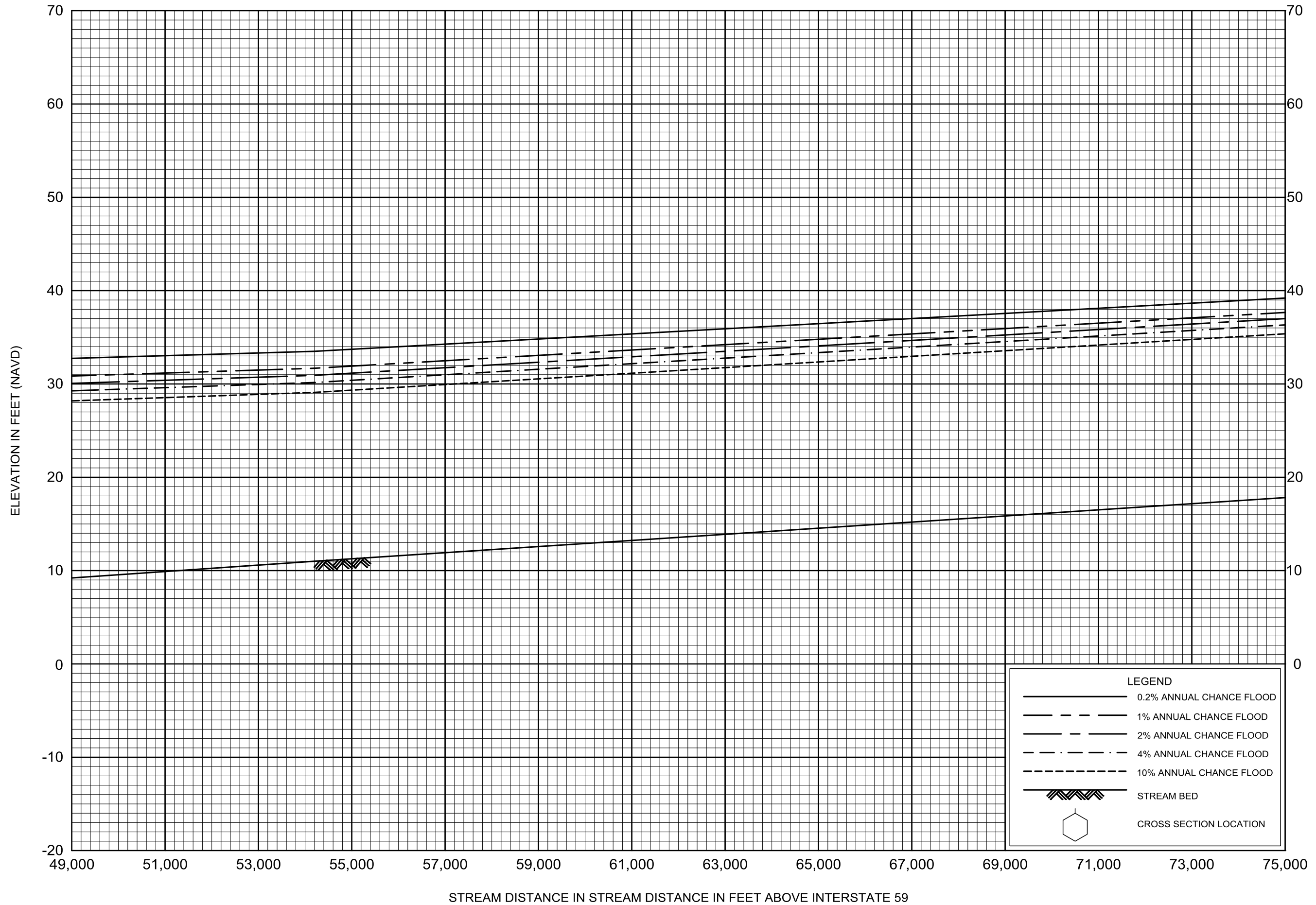
MILL CREEK NO.4

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

41P







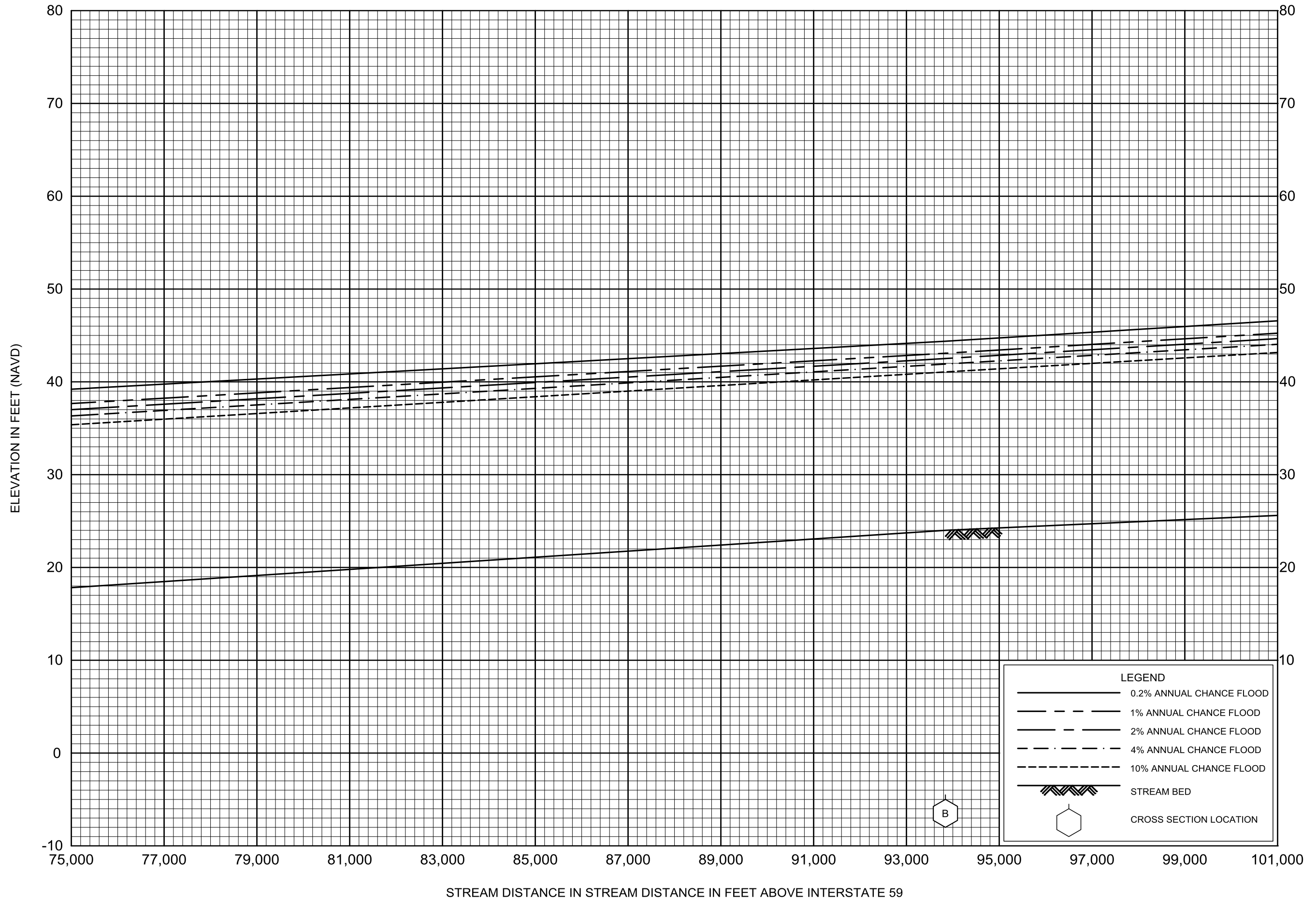
FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

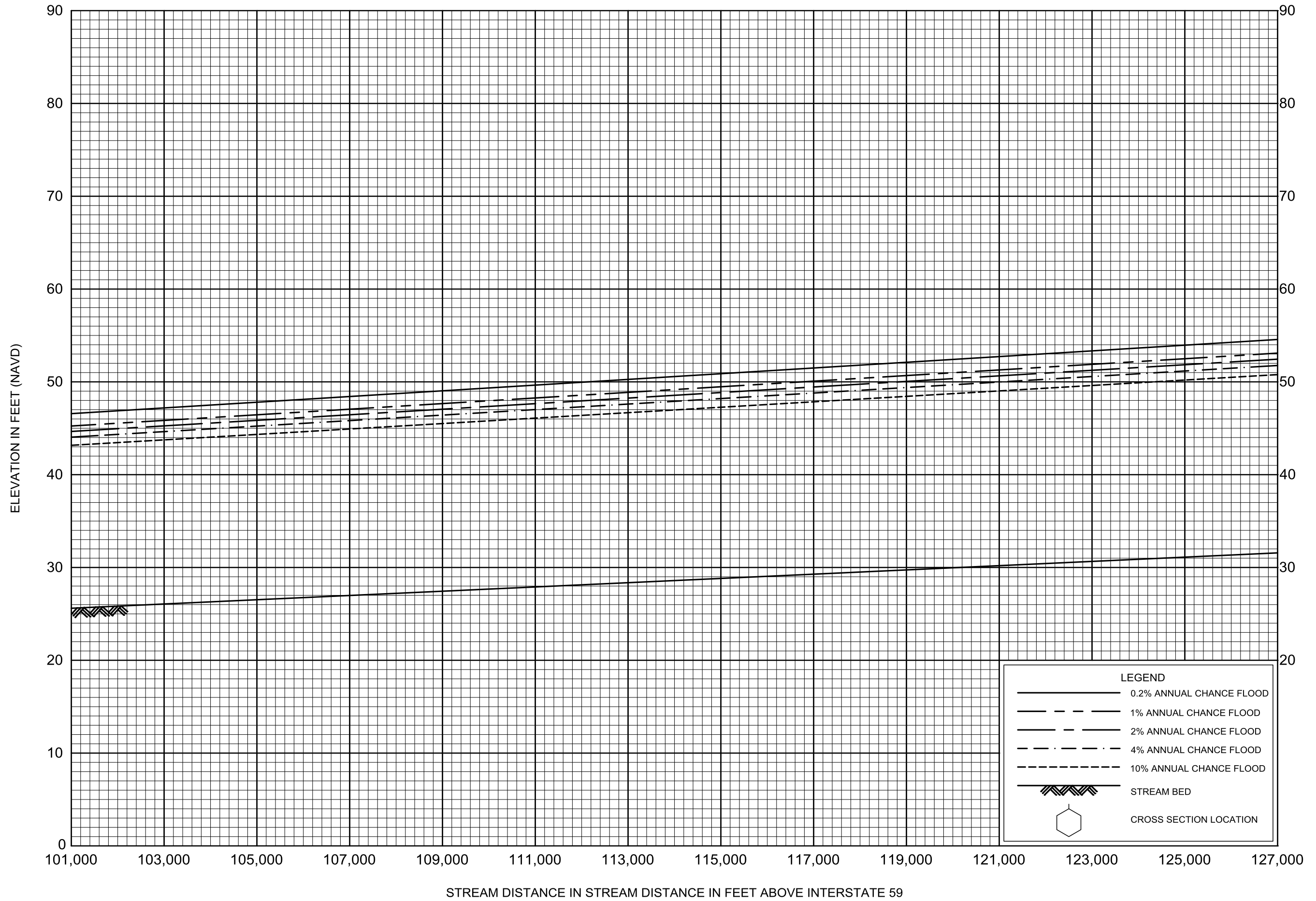


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

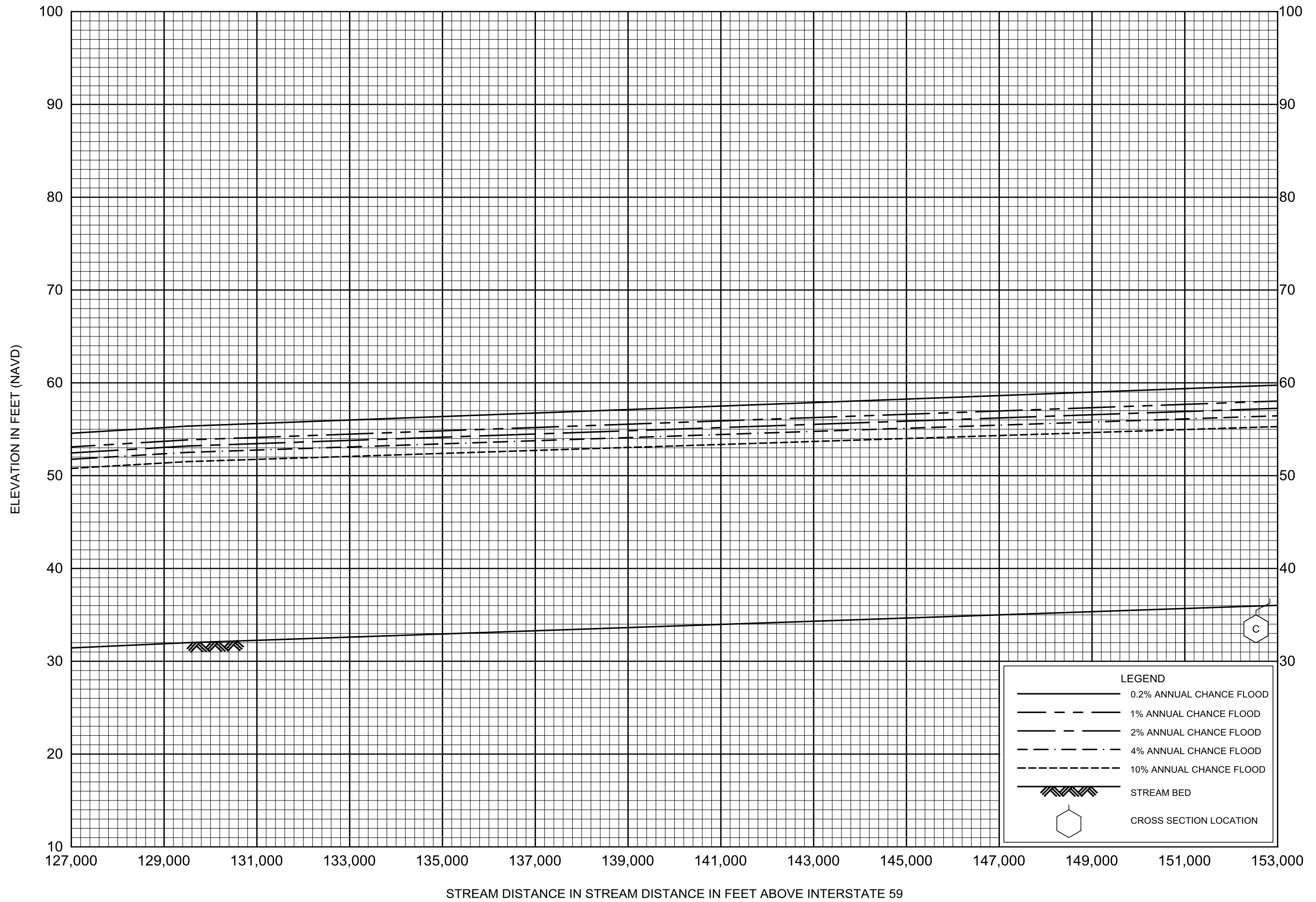


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

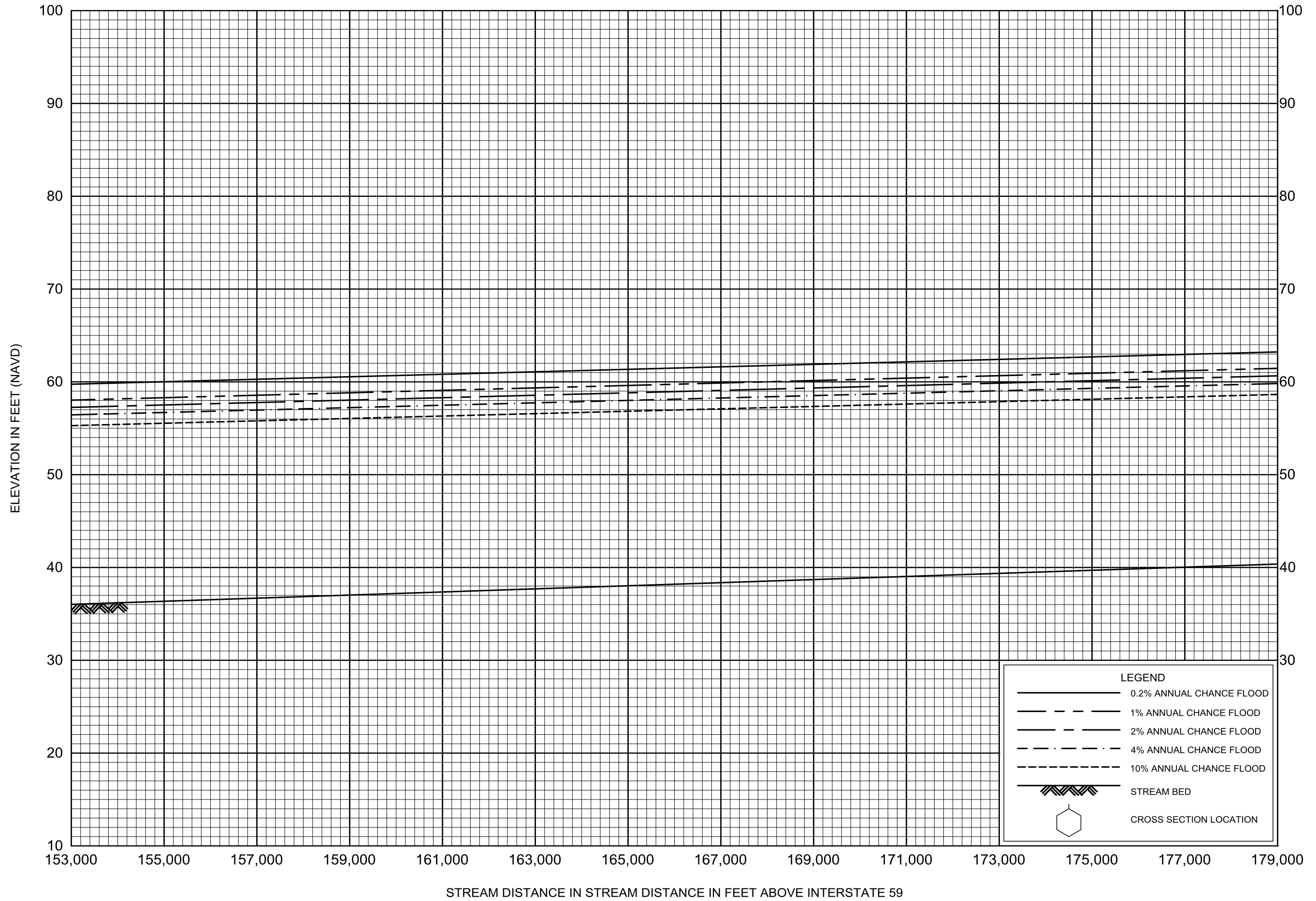


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

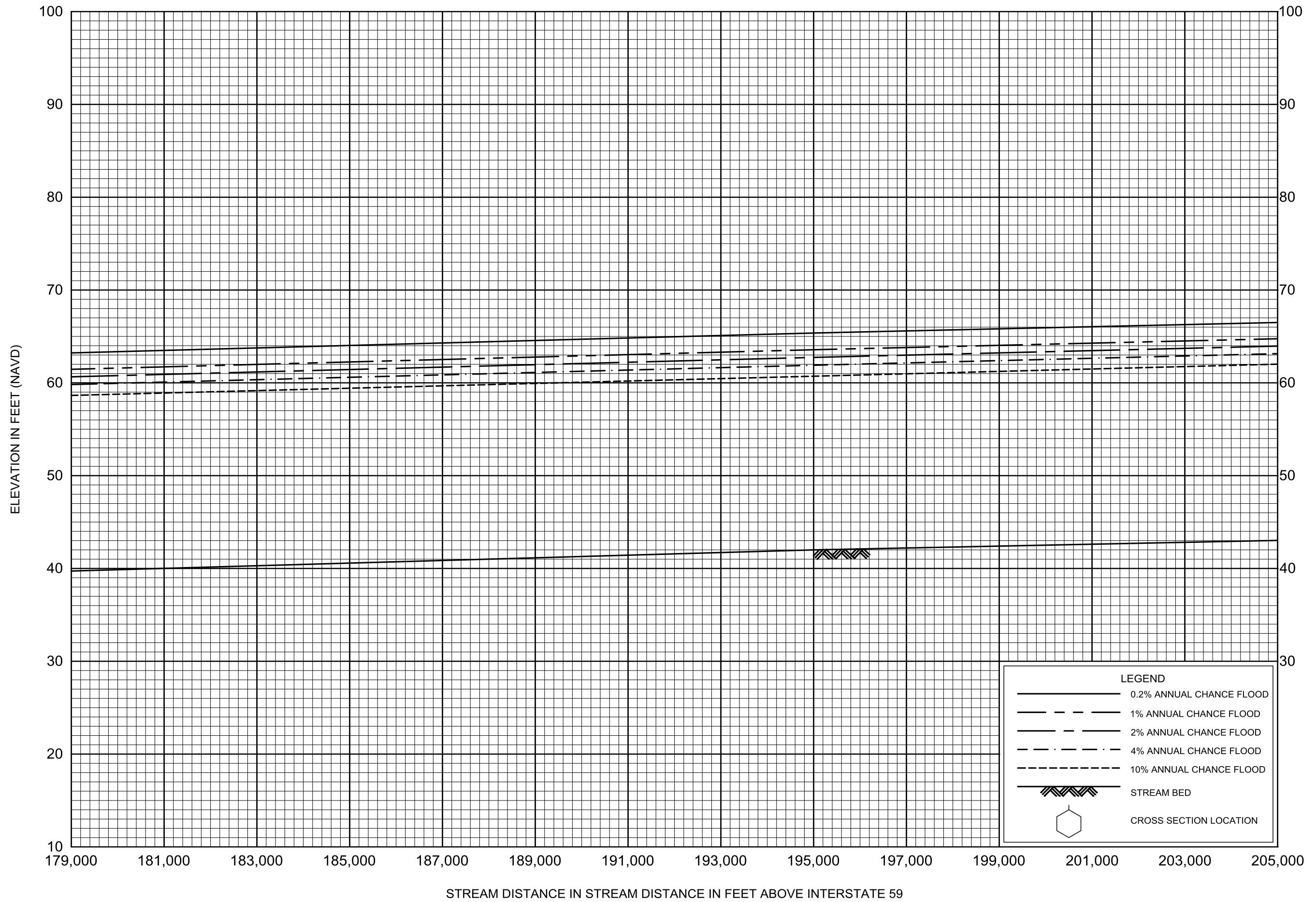


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS



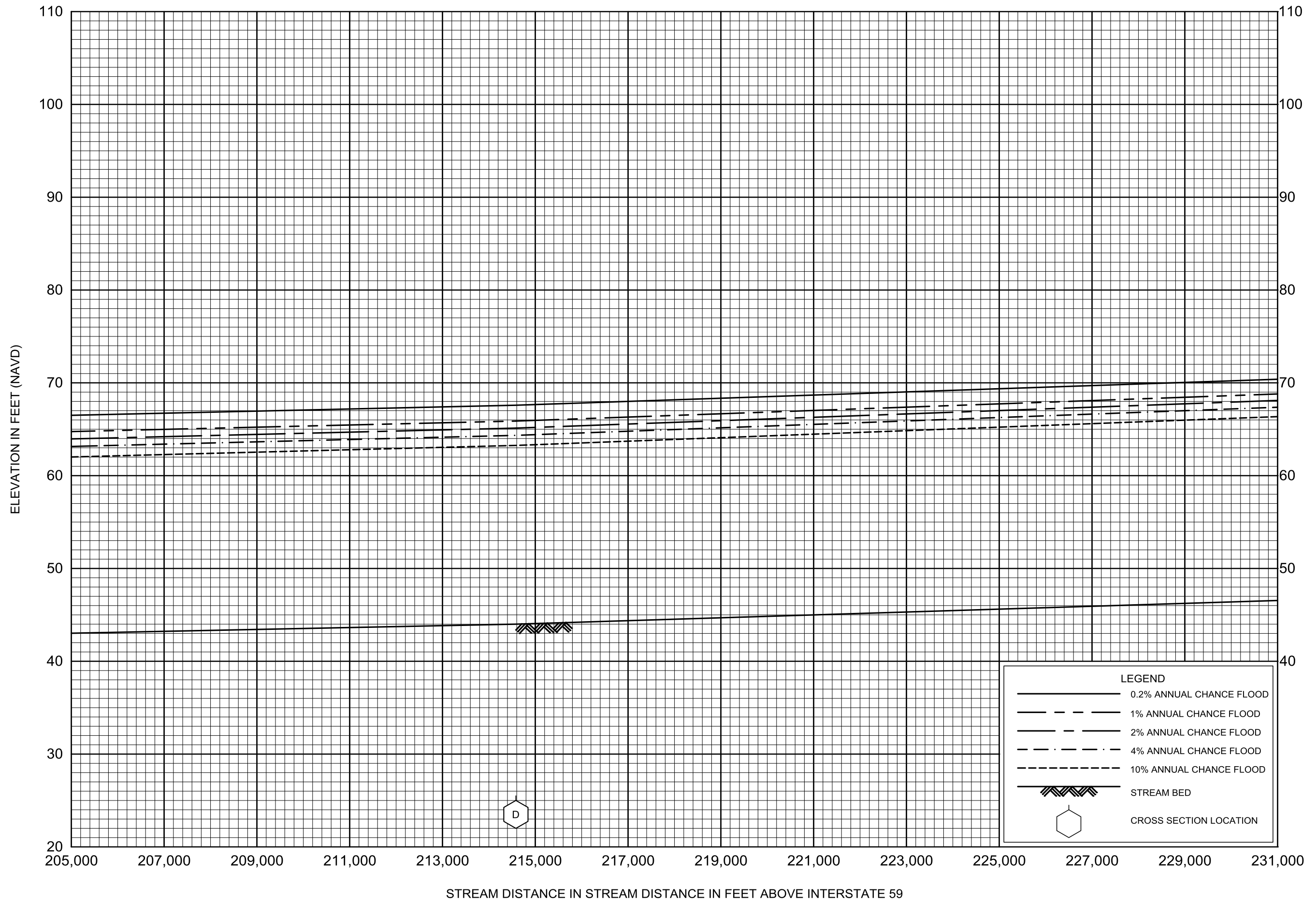
FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

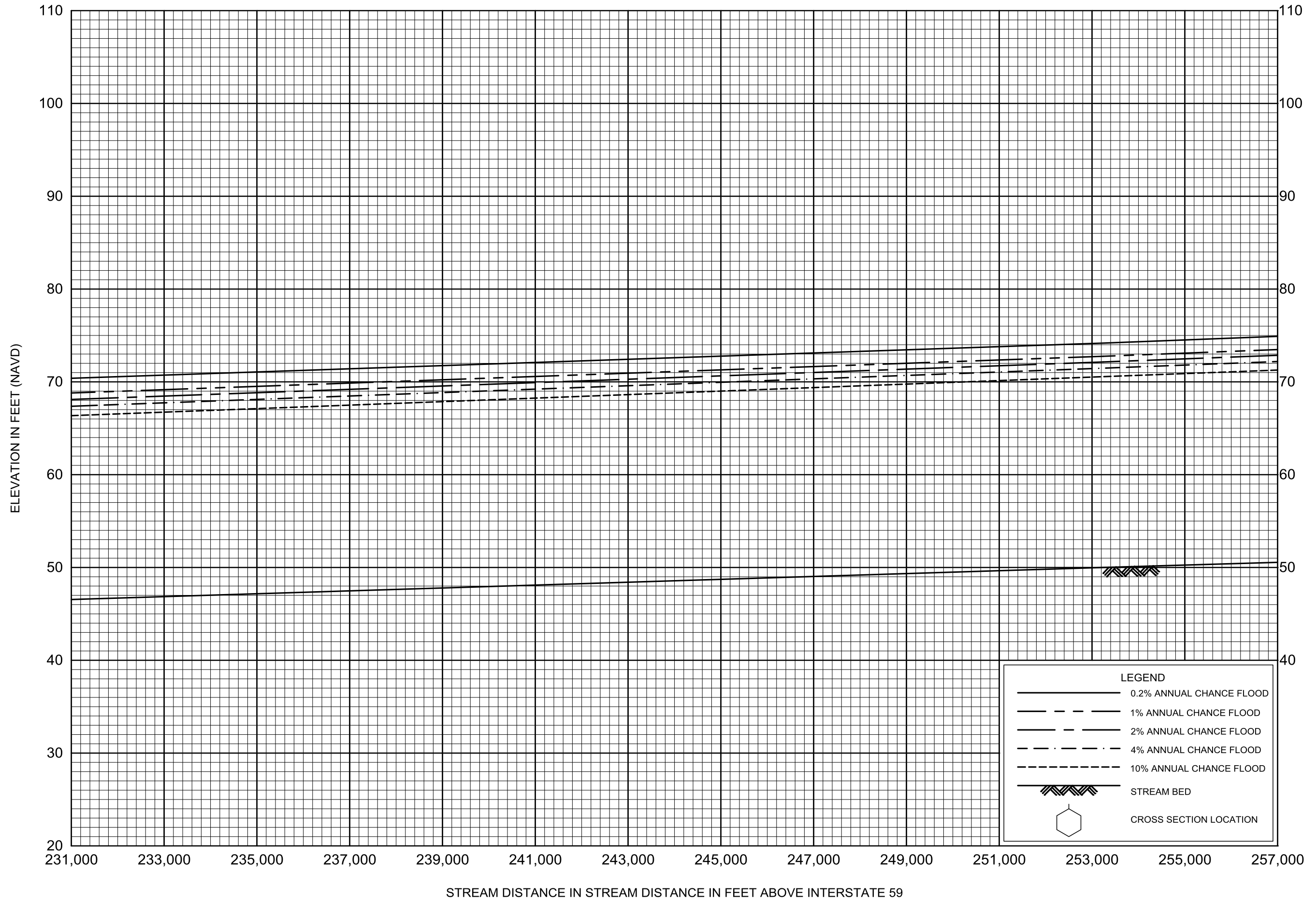


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS



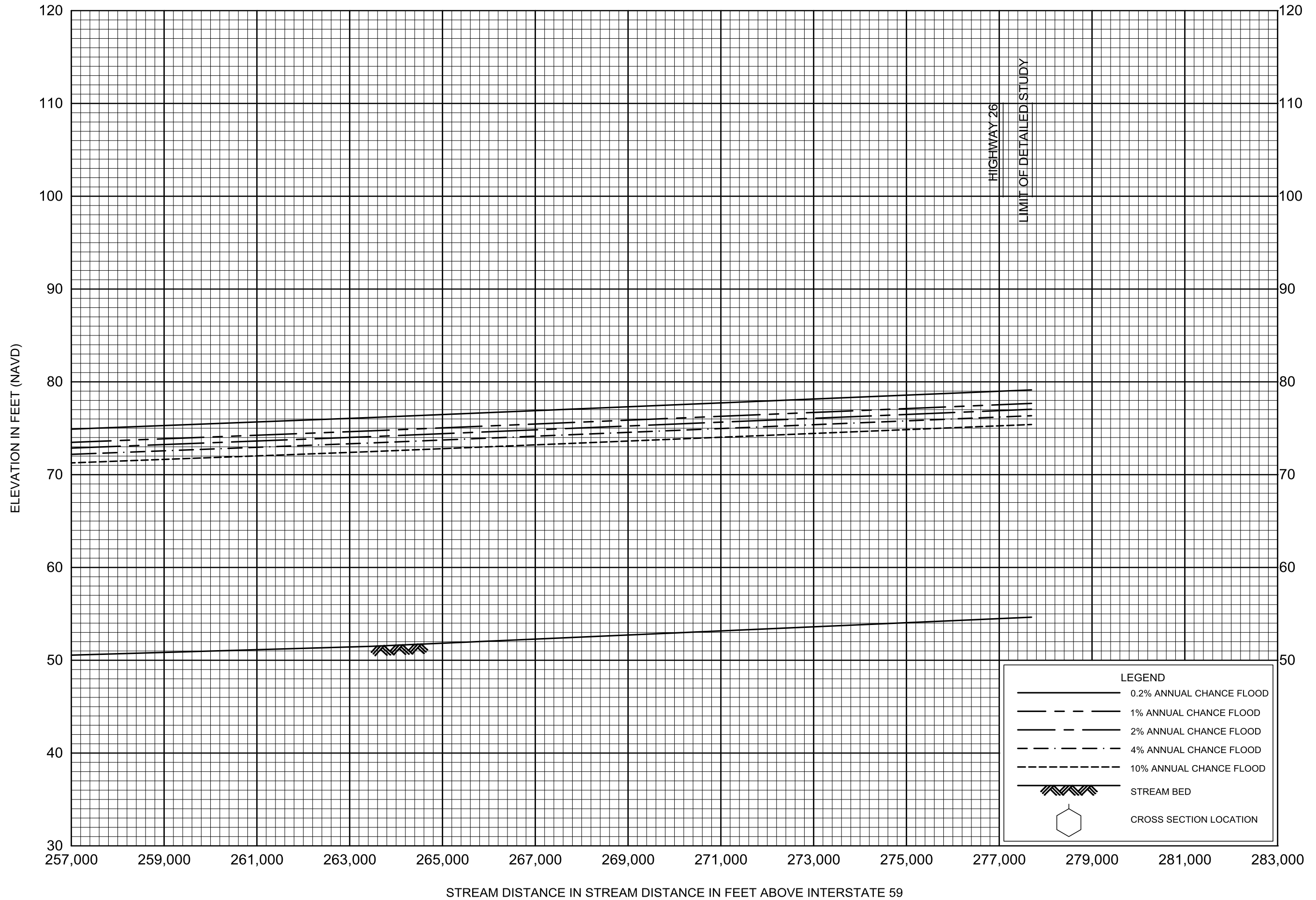
FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS



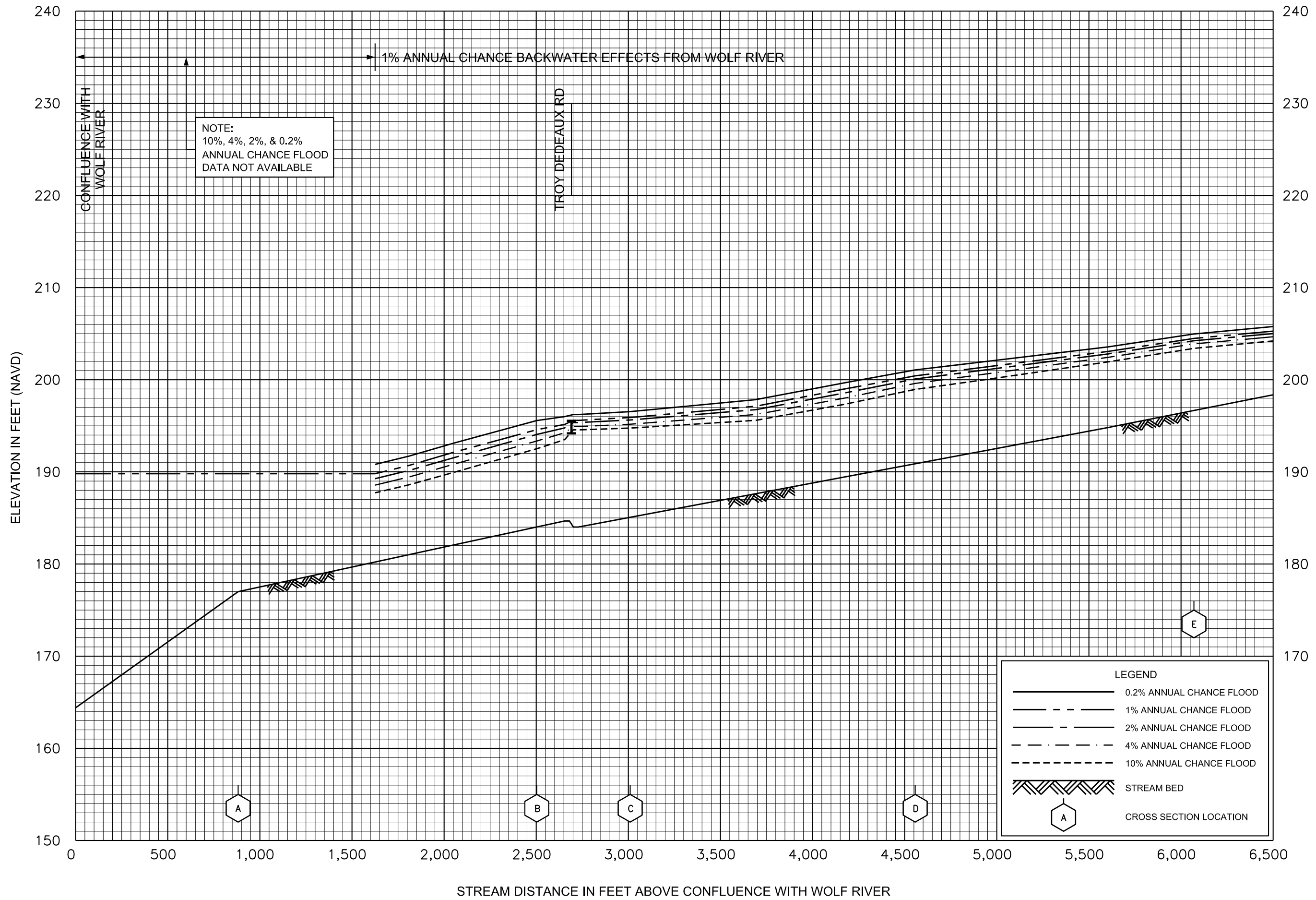


FLOOD PROFILES

PEARL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

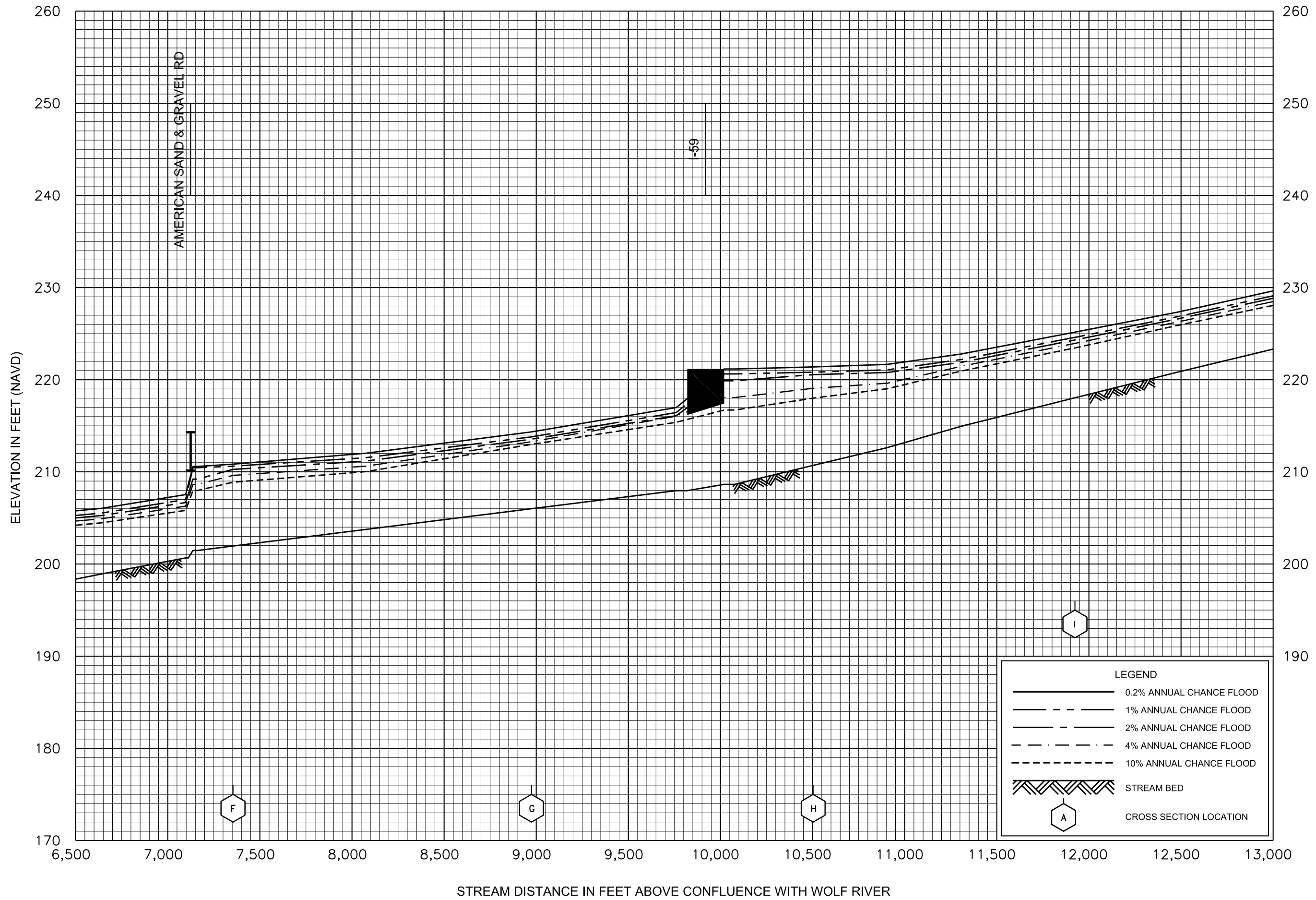


FLOOD PROFILES

POPLAR SPRINGS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

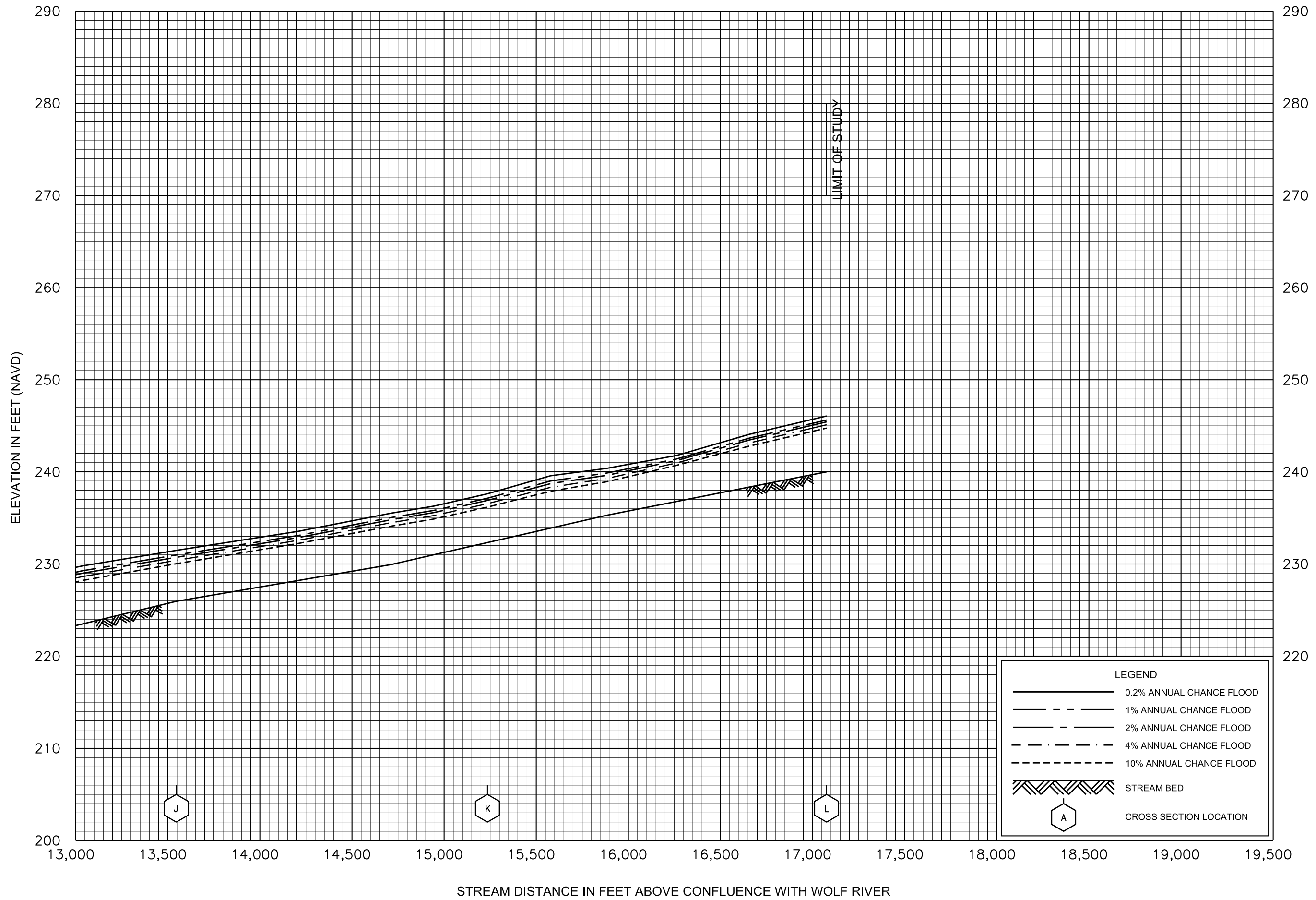


FLOOD PROFILES

POPLAR SPRINGS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS



FLOOD PROFILES

POPLAR SPRINGS BRANCH

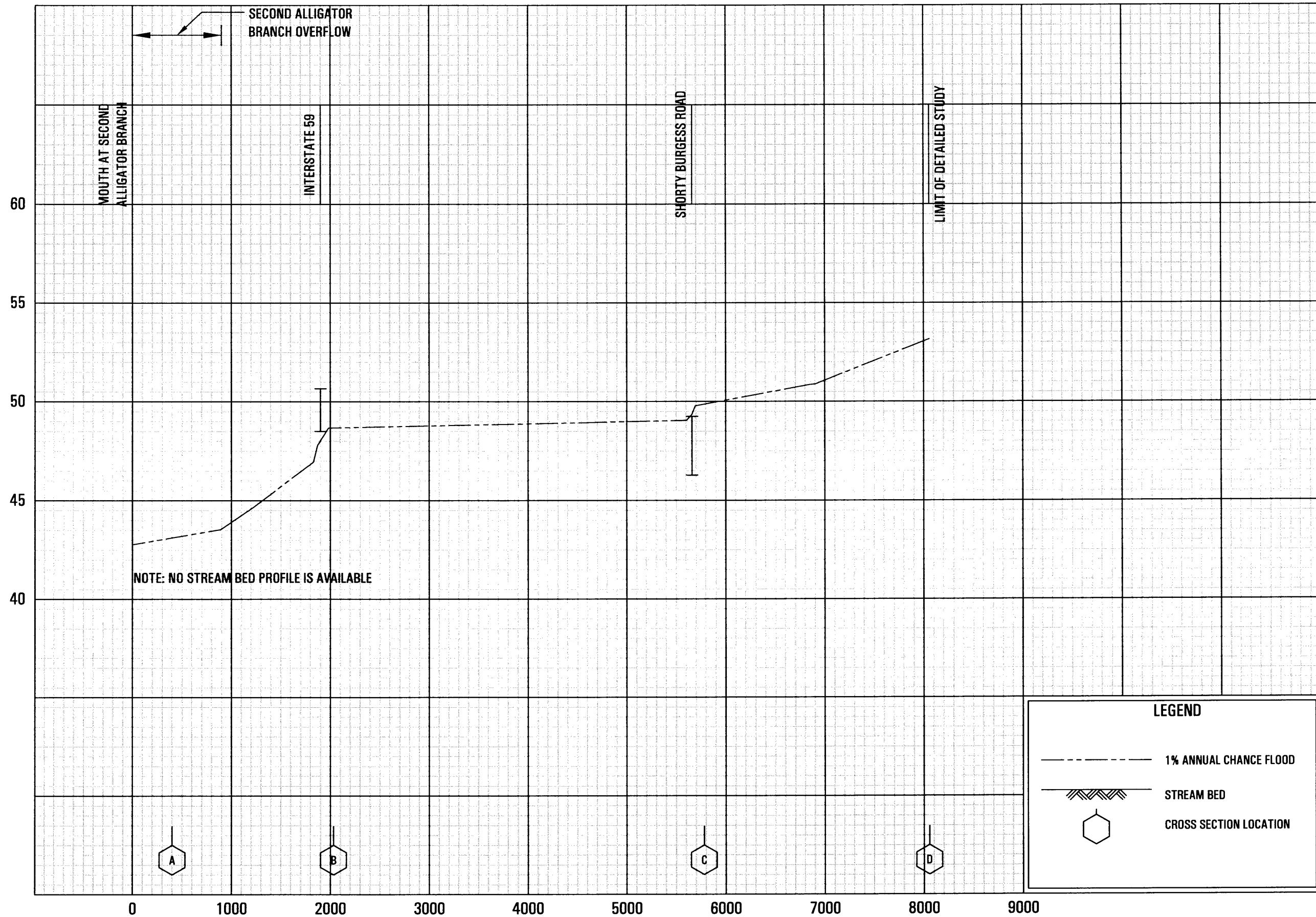
FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS








ELEVATION IN FEET (NAVD 88)



**LEGEND**

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

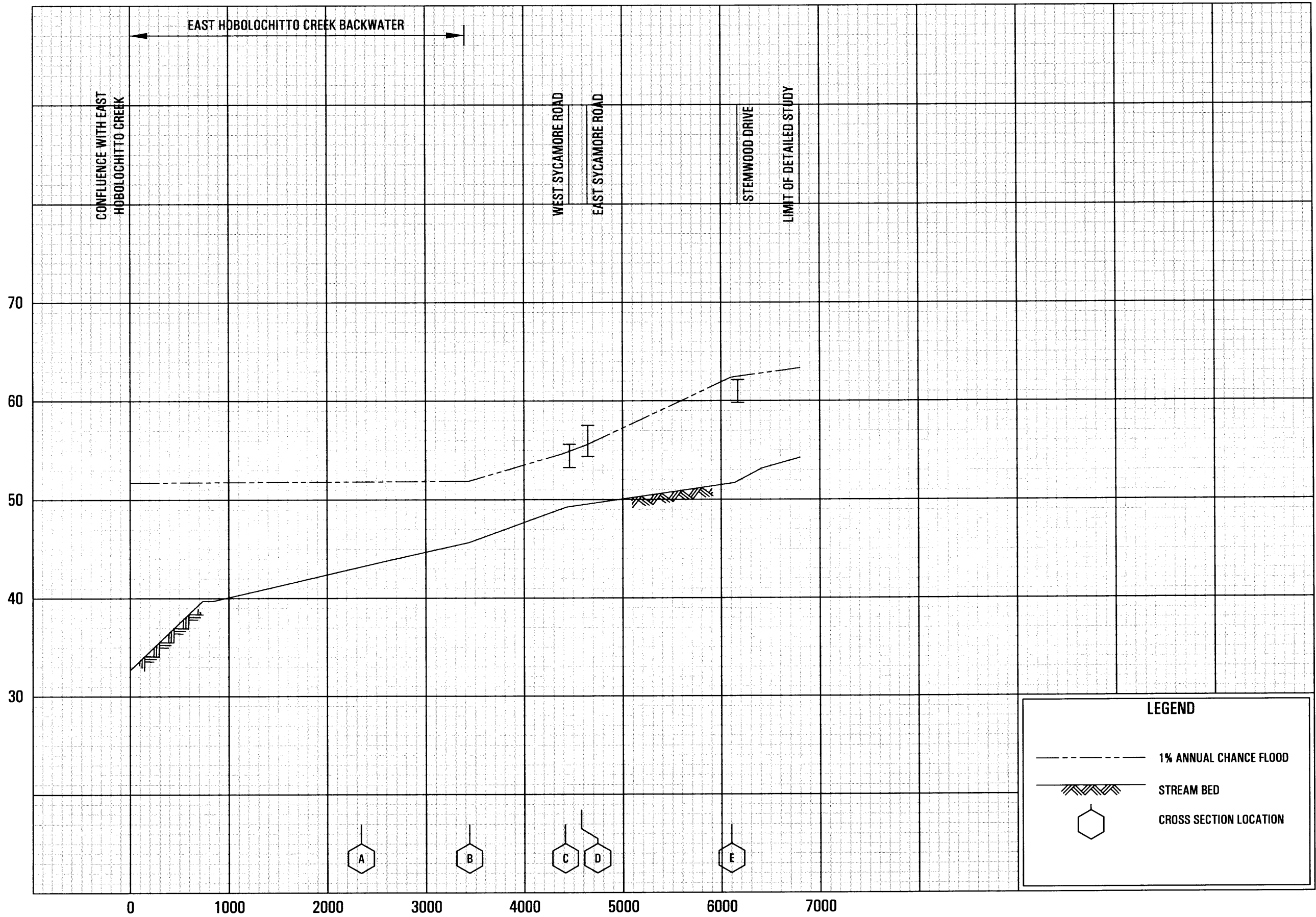
**FLOOD PROFILES**

**SECOND ALLIGATOR BRANCH TRIBUTARY**

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

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH EAST HOBLOCHITTO CREEK

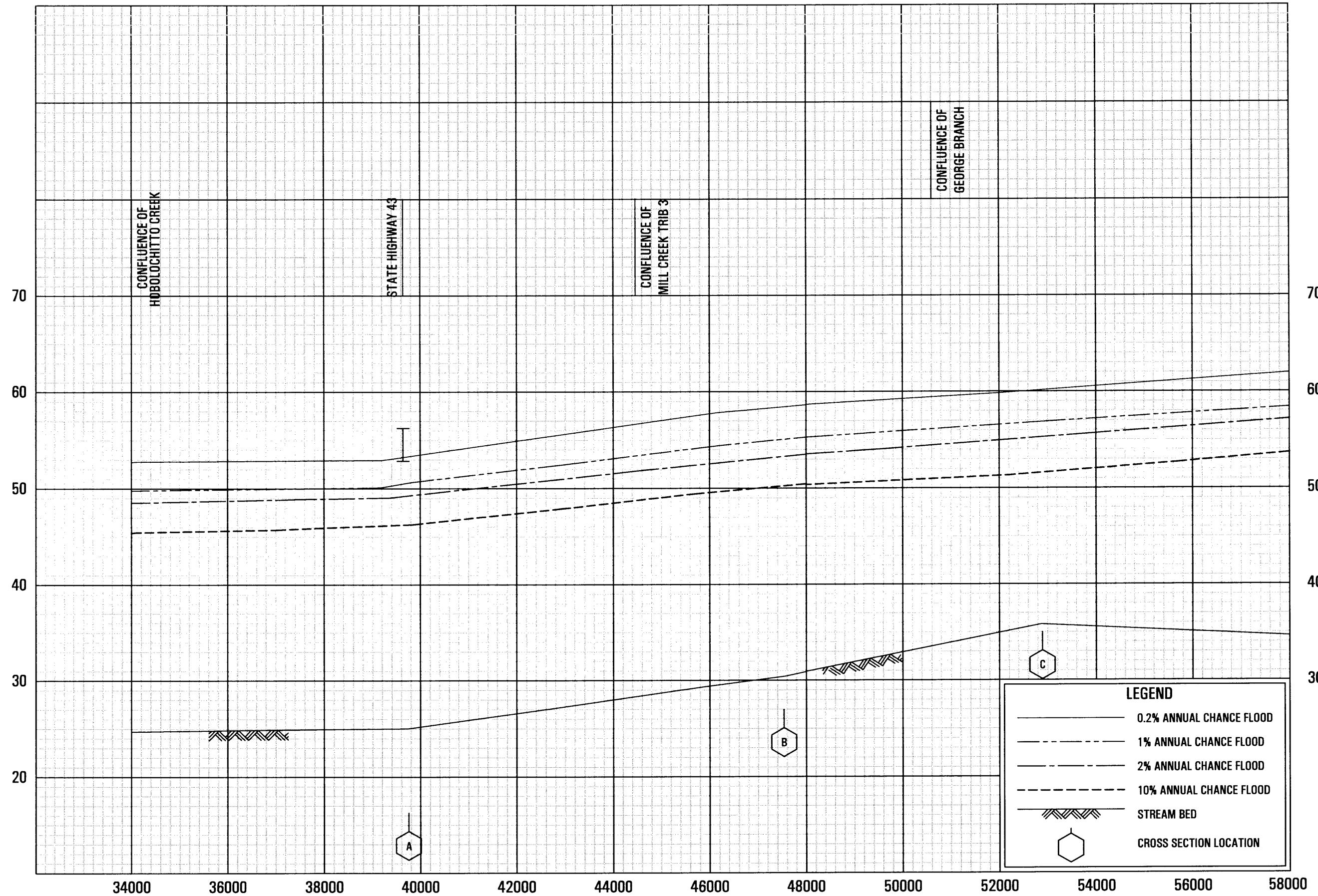
**FLOOD PROFILES**

**THIGPEN CREEK**

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



ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE MOUTH OF HOBOLOCHITTO CREEK

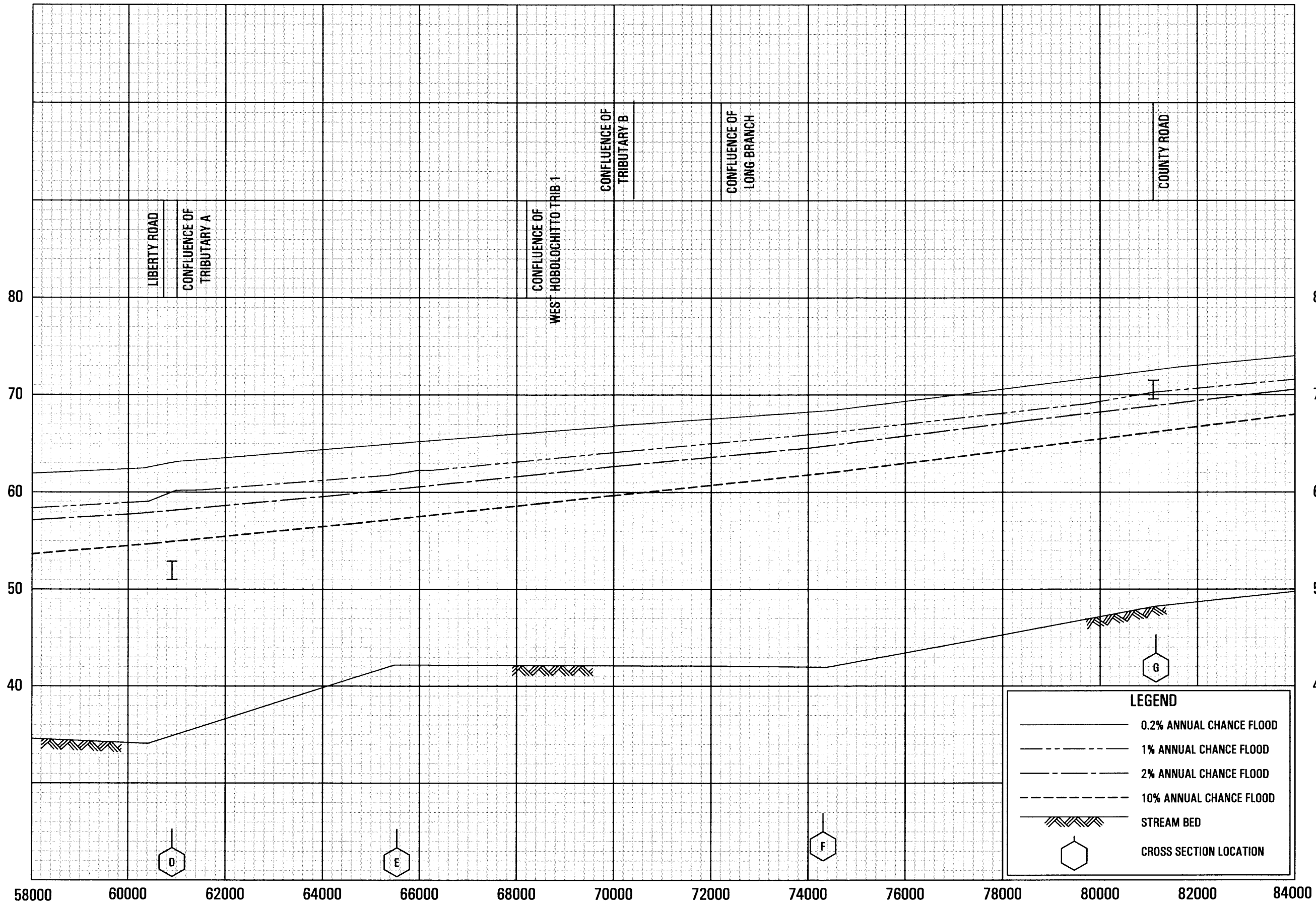
FLOOD PROFILES

WEST HOBOLOCHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



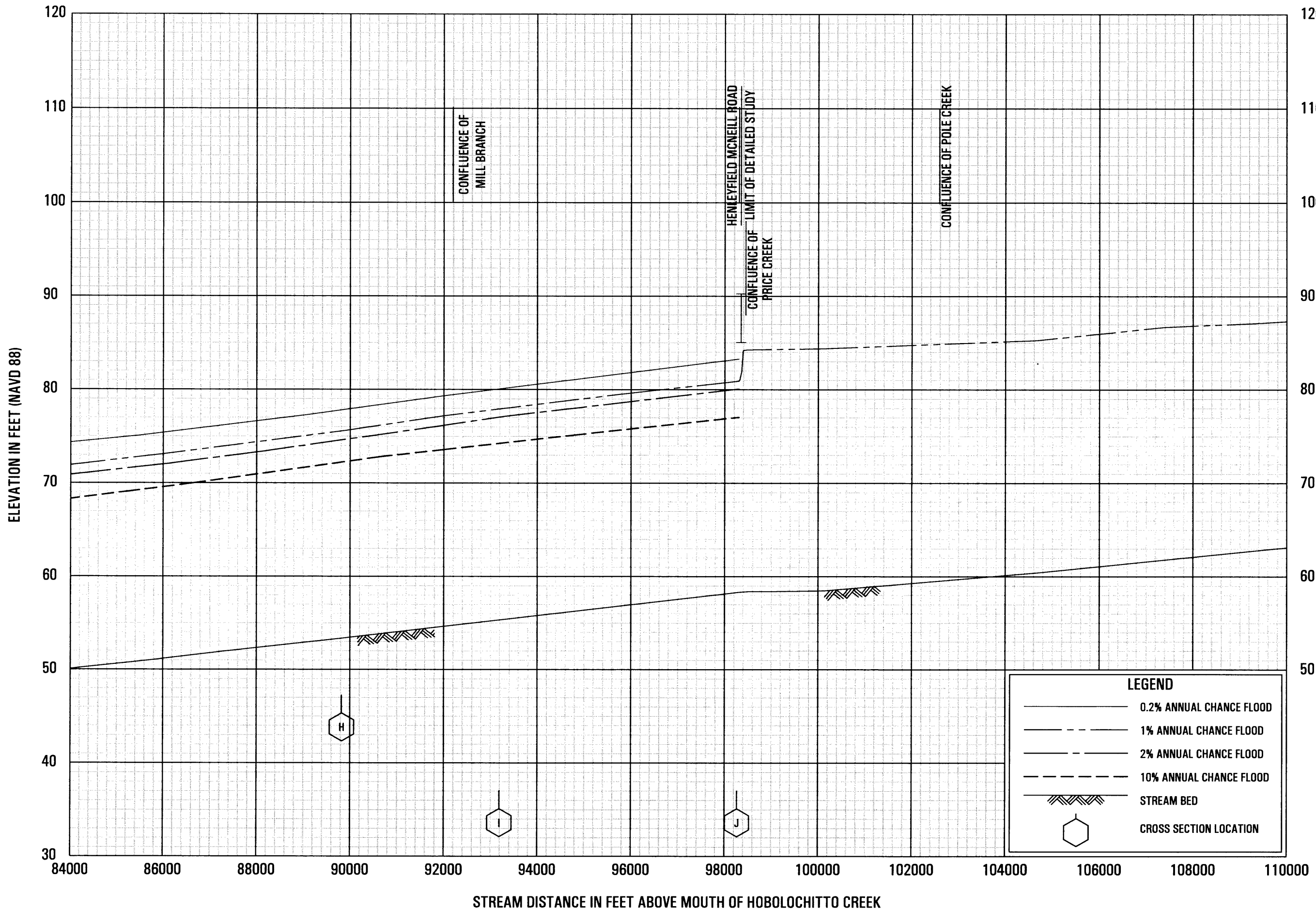
FLOOD PROFILES

WEST HOBOLOCHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

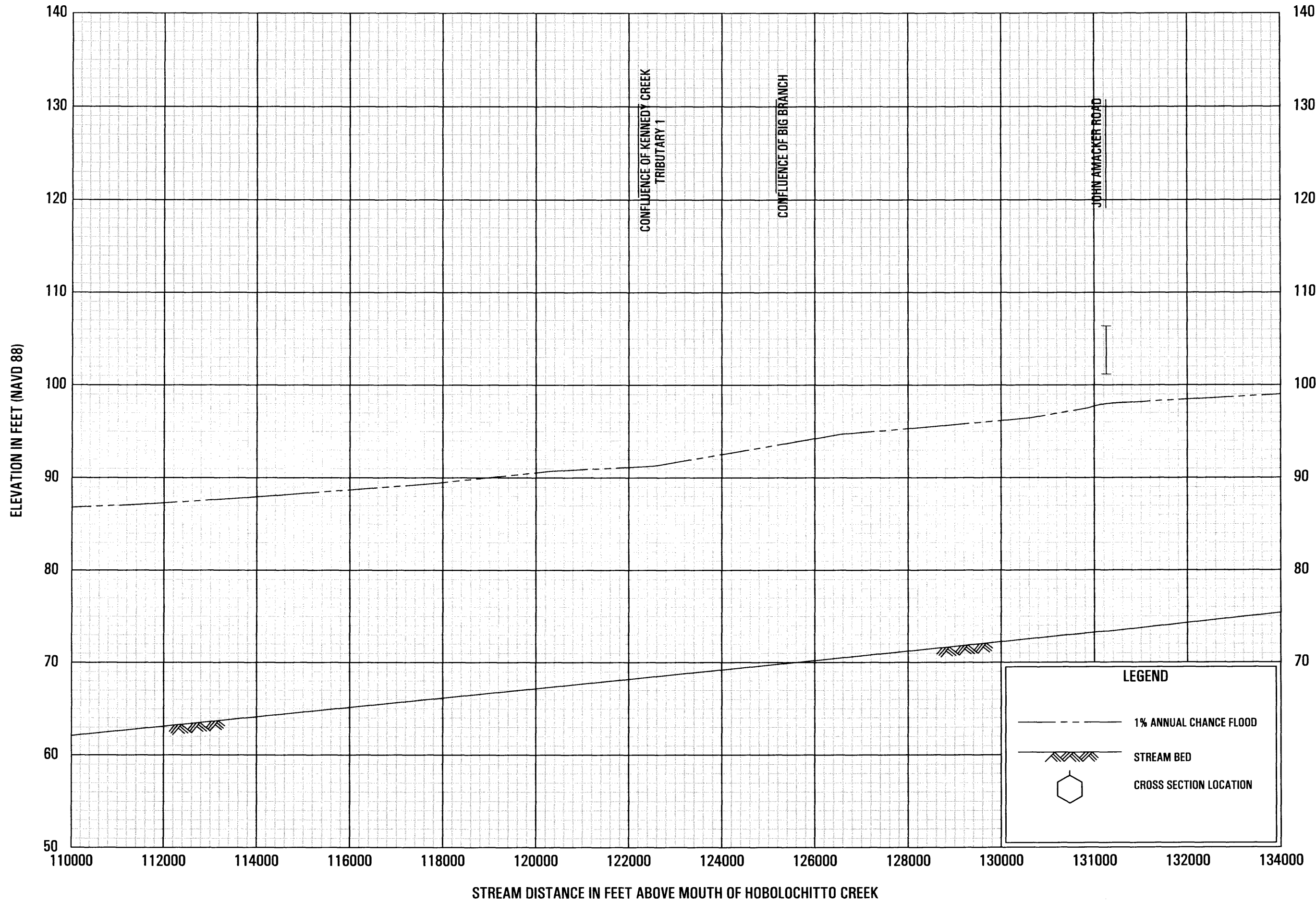
AND INCORPORATED AREAS



**FLOOD PROFILES**

**WEST HOBOLOCHITTO CREEK**

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

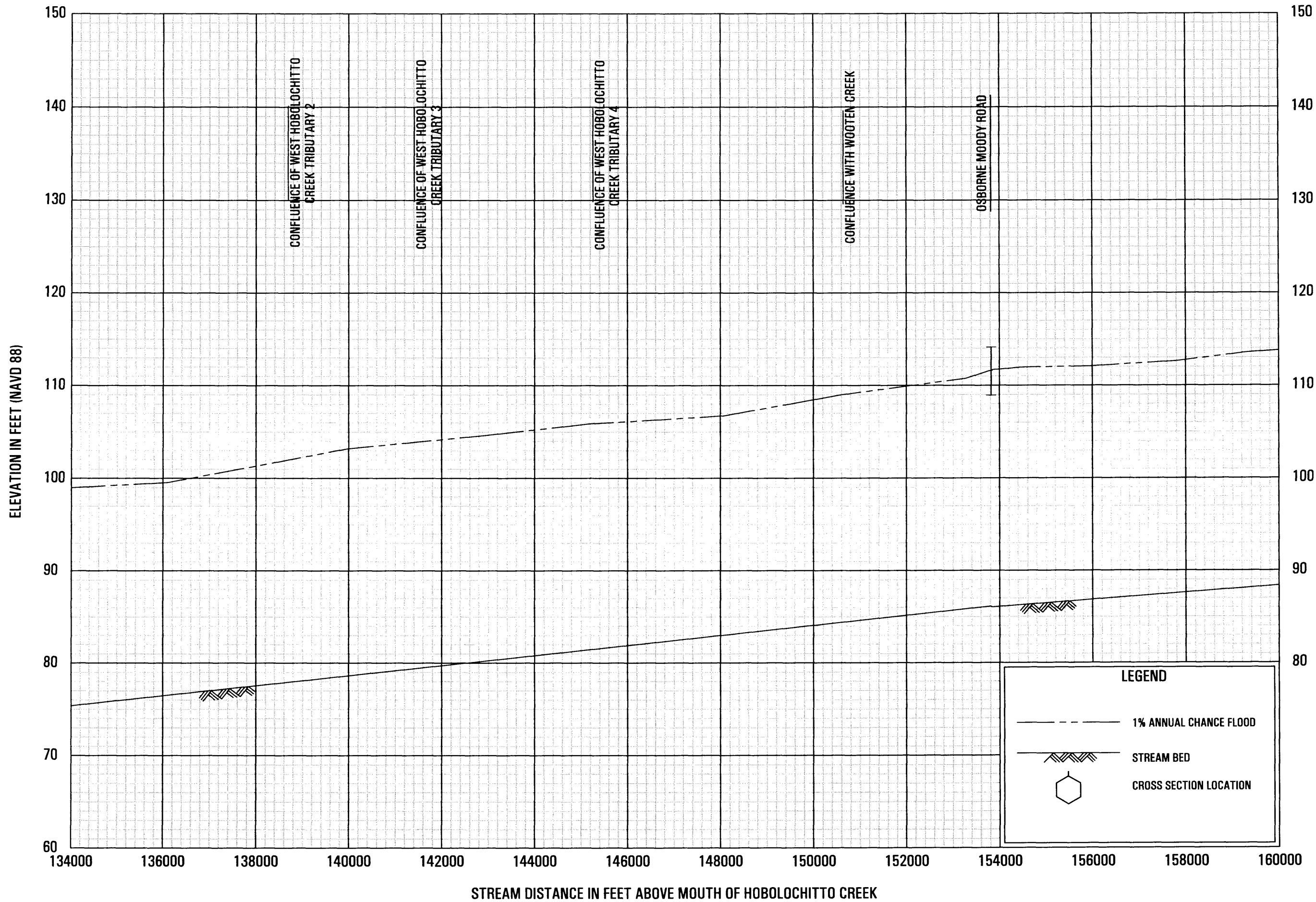


**FLOOD PROFILES**

**WEST HOBOLOCHITTO CREEK**

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

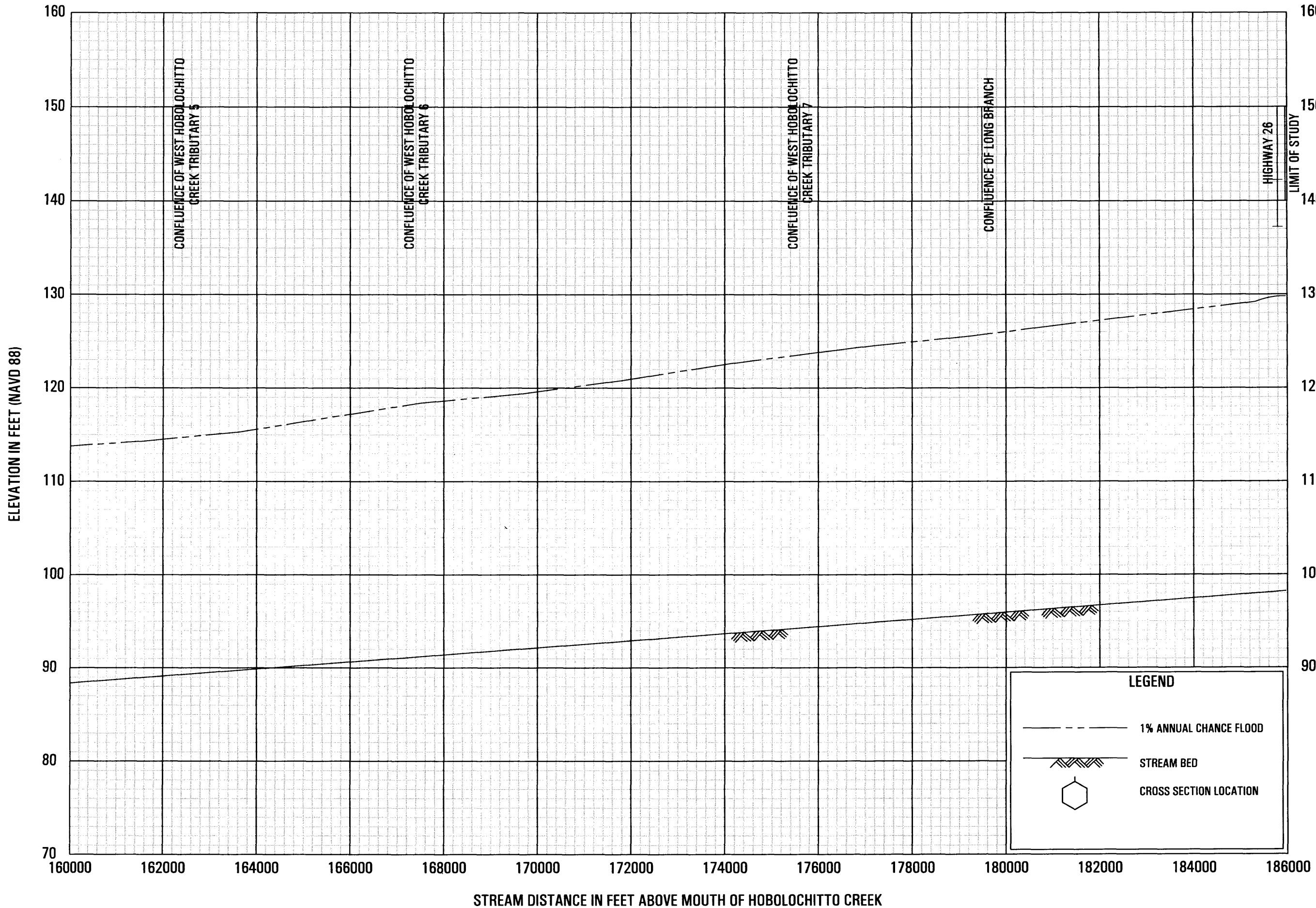




**FLOOD PROFILES**

**WEST HOBOLOCHITTO CREEK**

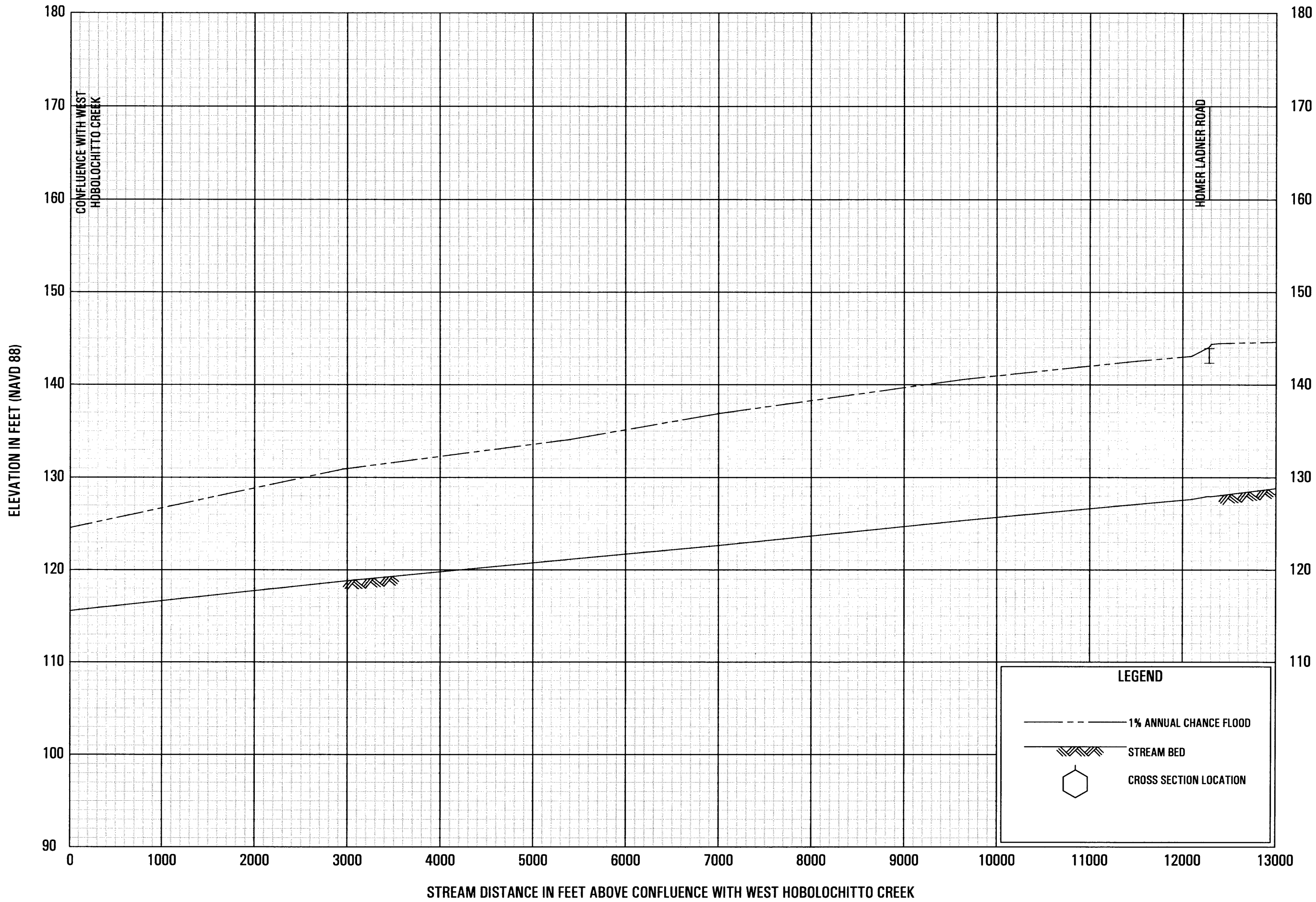
FEDERAL EMERGENCY MANAGEMENT AGENCY  
**PEARL RIVER COUNTY, MS,**  
 AND INCORPORATED AREAS



**FLOOD PROFILES**

**WEST HOBOLOCHITTO CREEK**

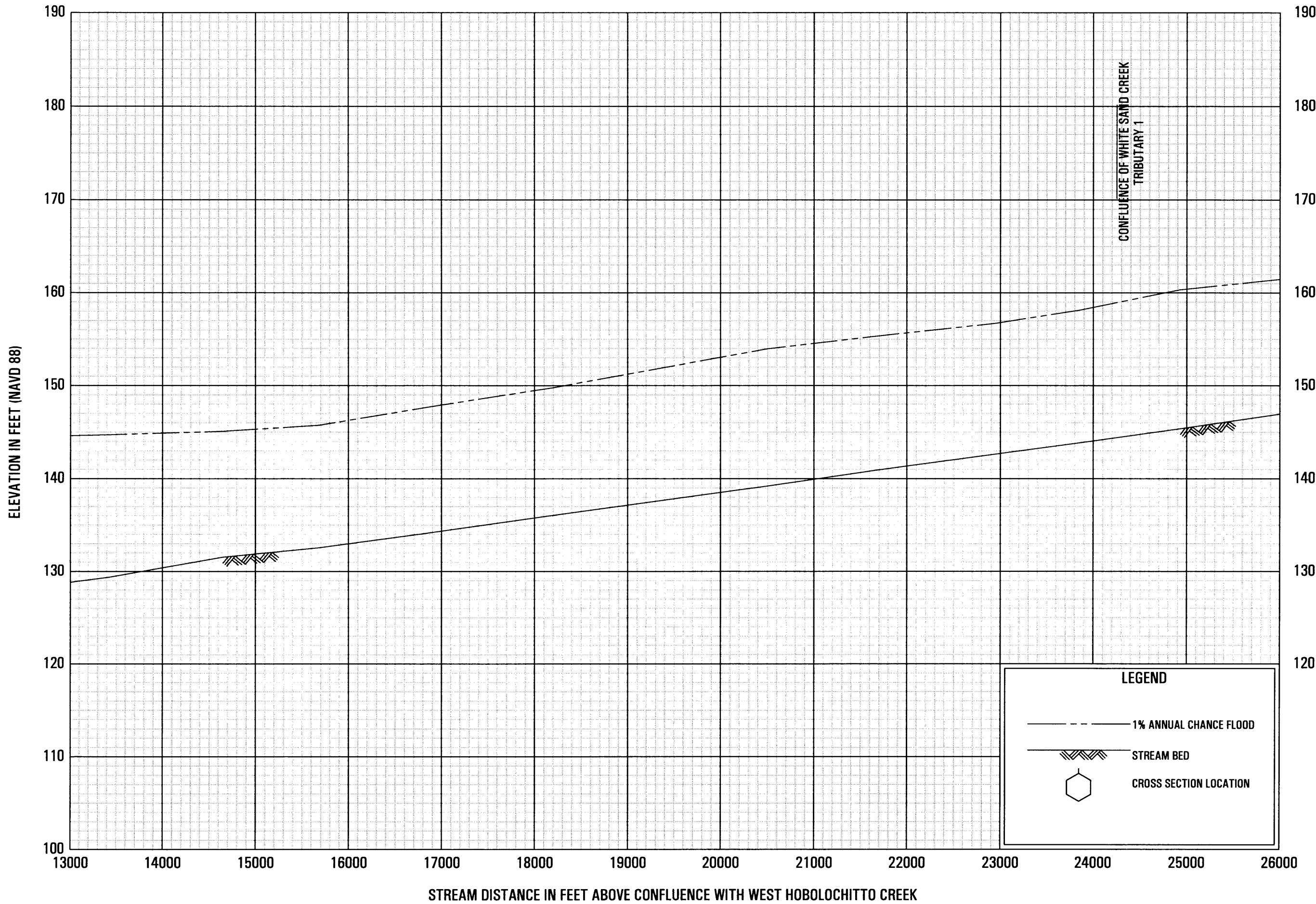
FEDERAL EMERGENCY MANAGEMENT AGENCY  
**PEARL RIVER COUNTY, MS,**  
 AND INCORPORATED AREAS



**FLOOD PROFILES**

**WHITE SAND CREEK**

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

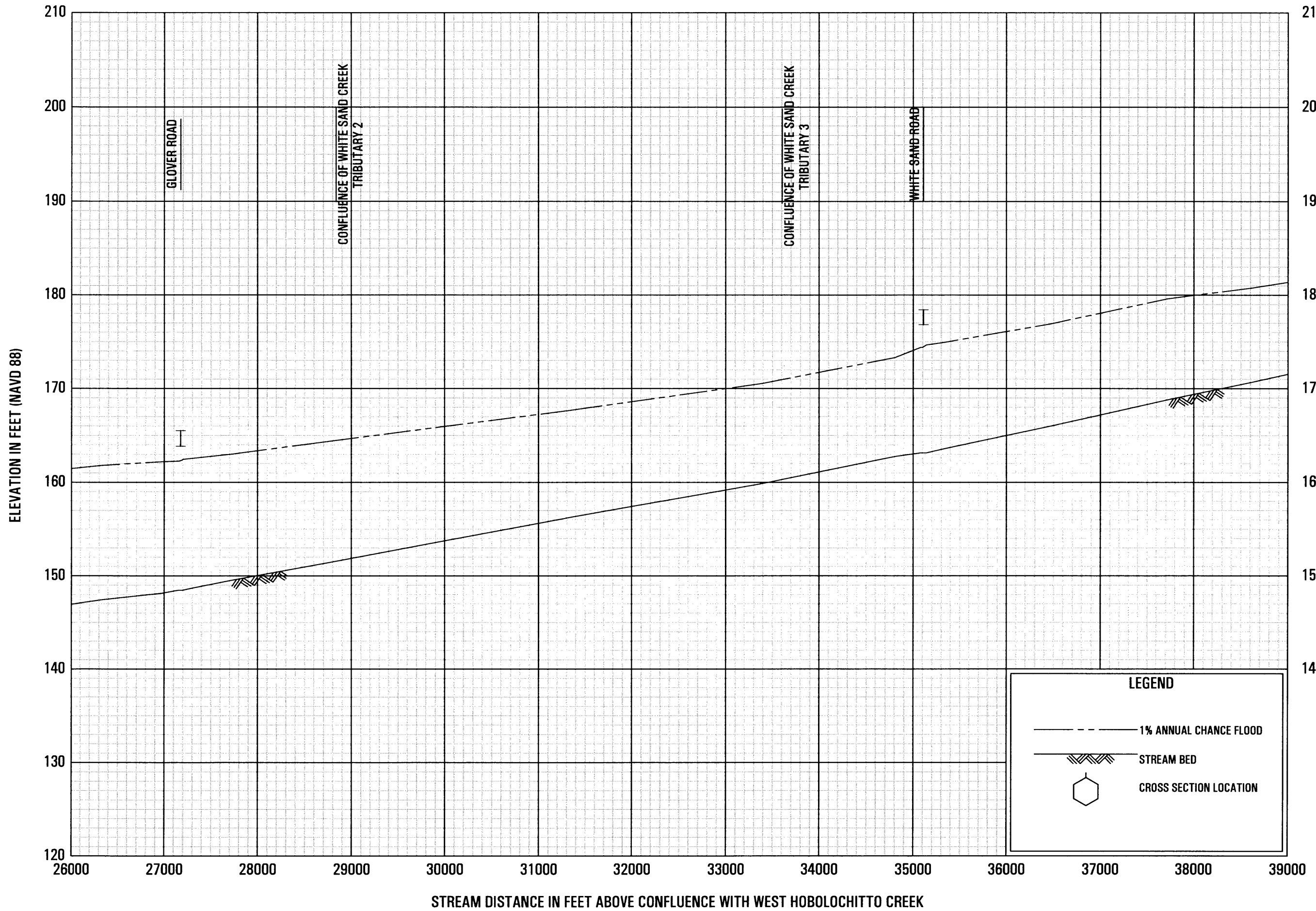


**FLOOD PROFILES**

**WHITE SAND CREEK**

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

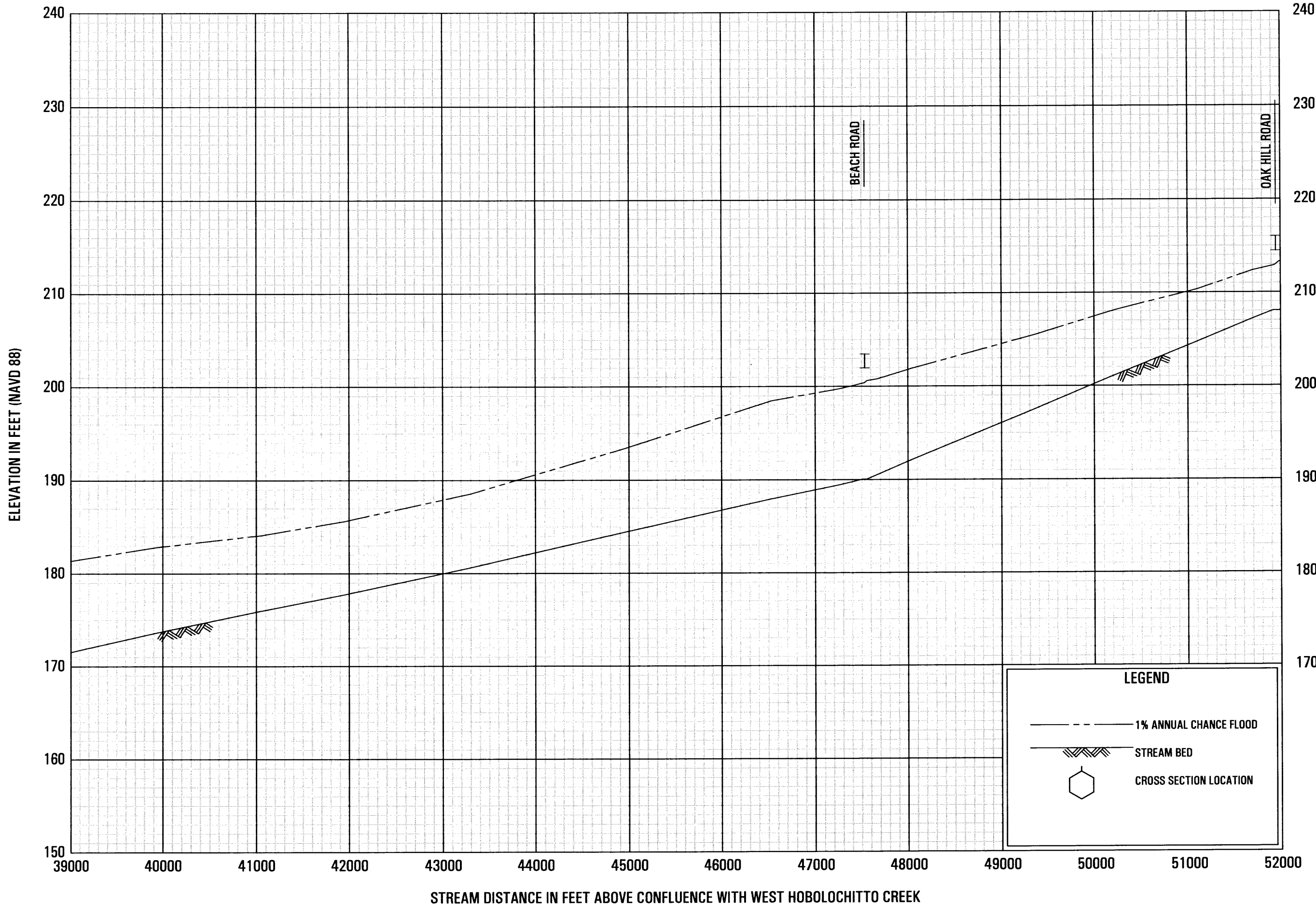




**FLOOD PROFILES**

**WHITE SAND CREEK**

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



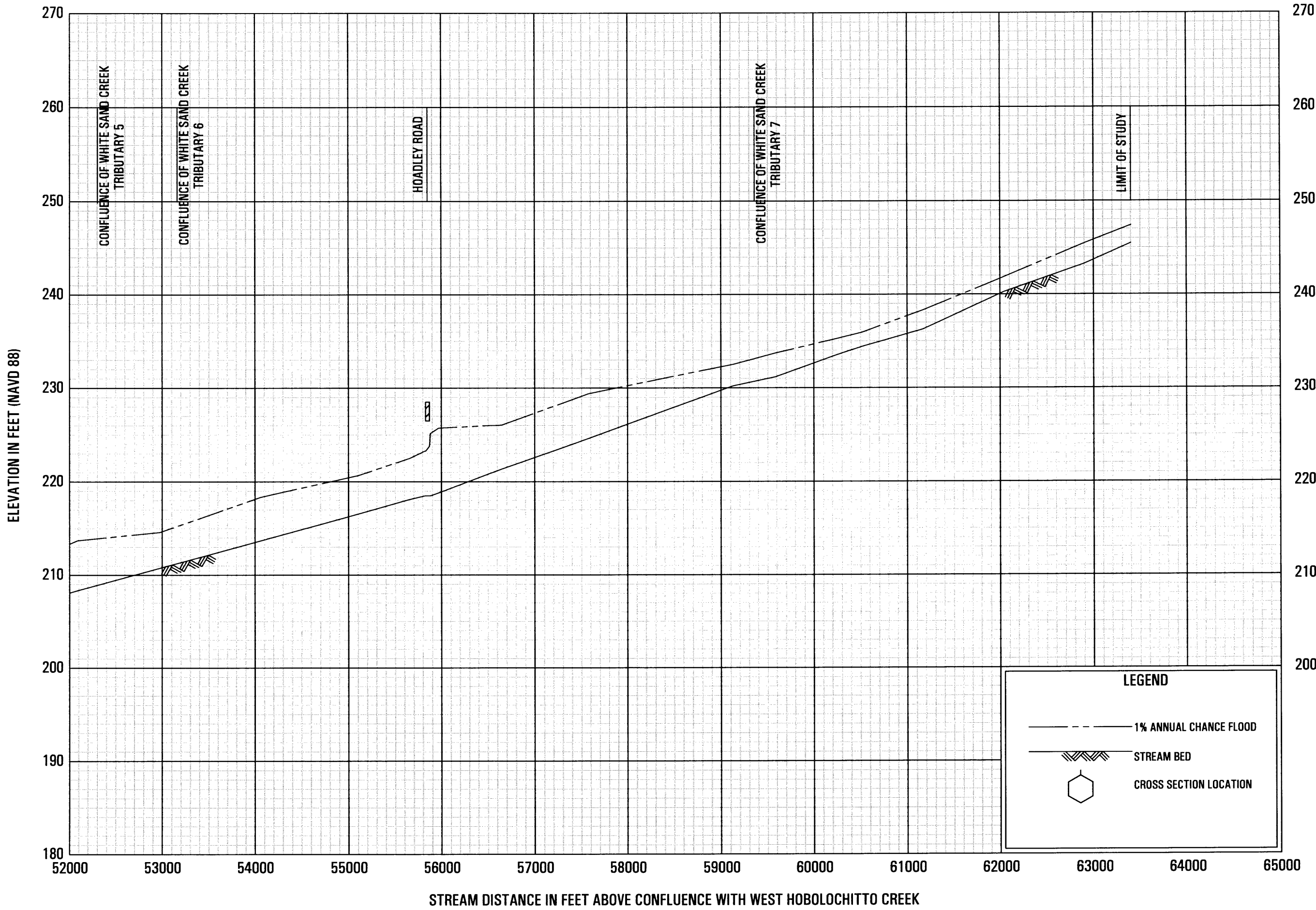
**FLOOD PROFILES**

**WHITE SAND CREEK**

---

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

**56P**



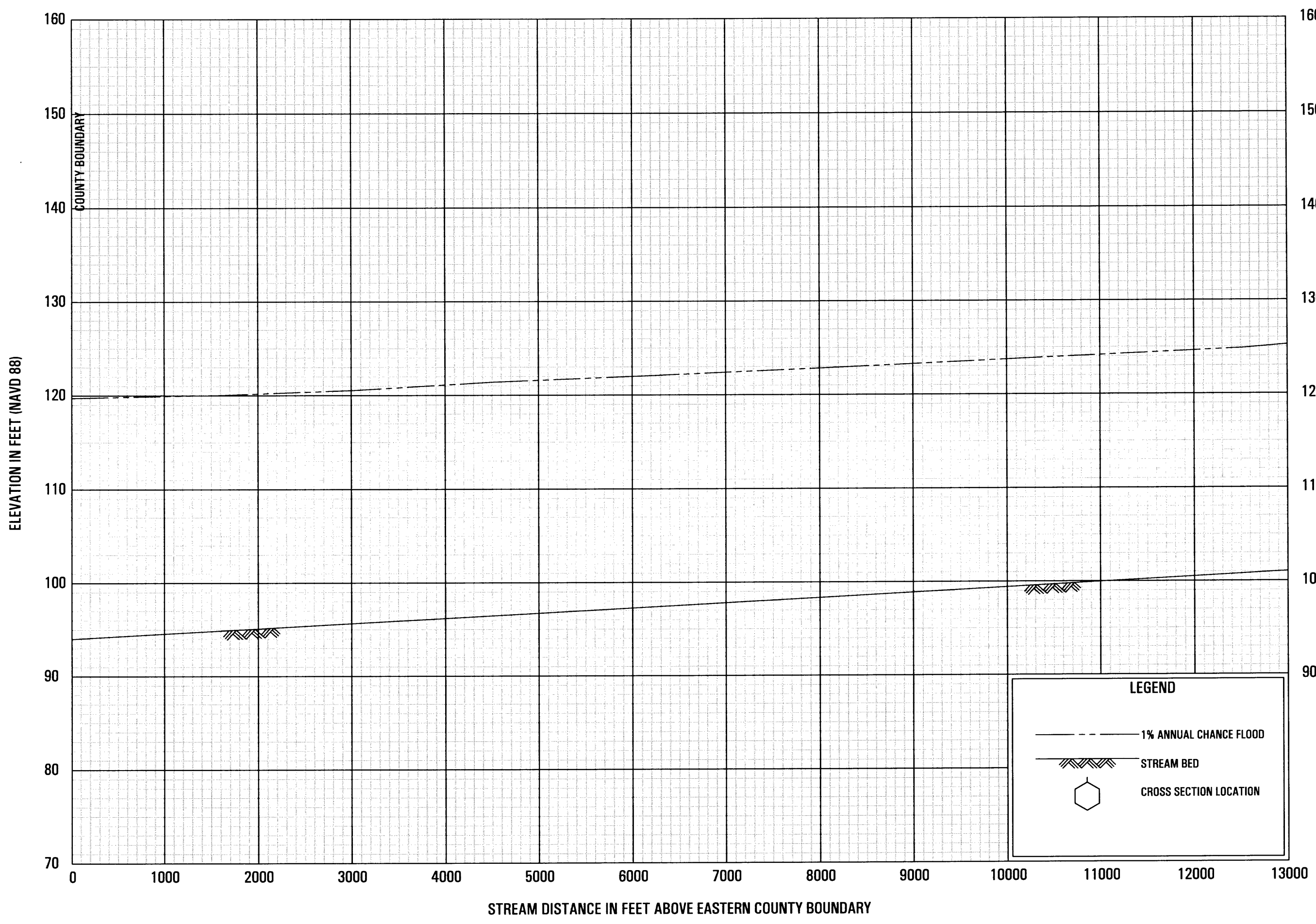
**FLOOD PROFILES**

**WHITE SAND CREEK**

---

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

**57P**






**FLOOD PROFILES**

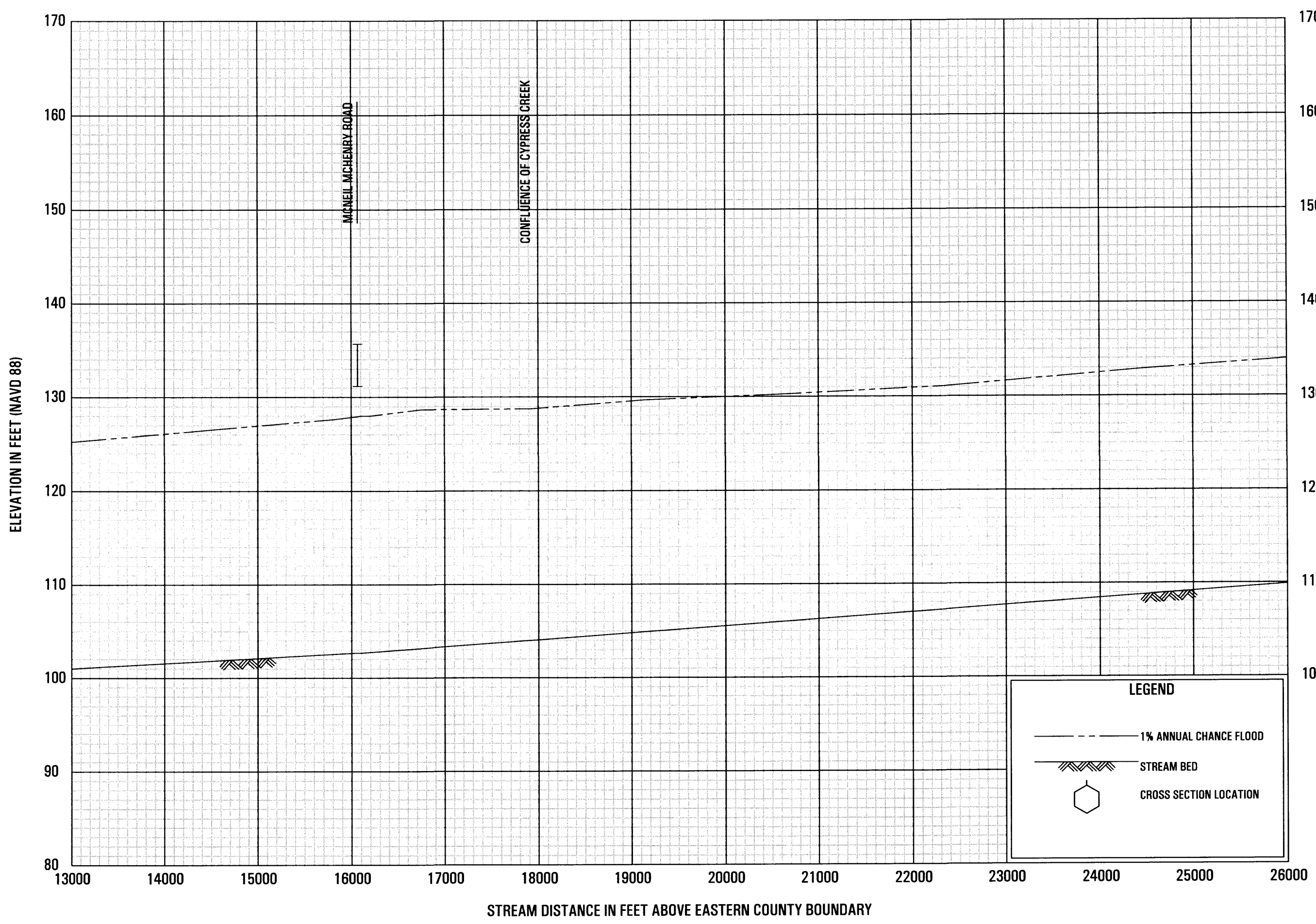
**WOLF RIVER**

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

**LEGEND**

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





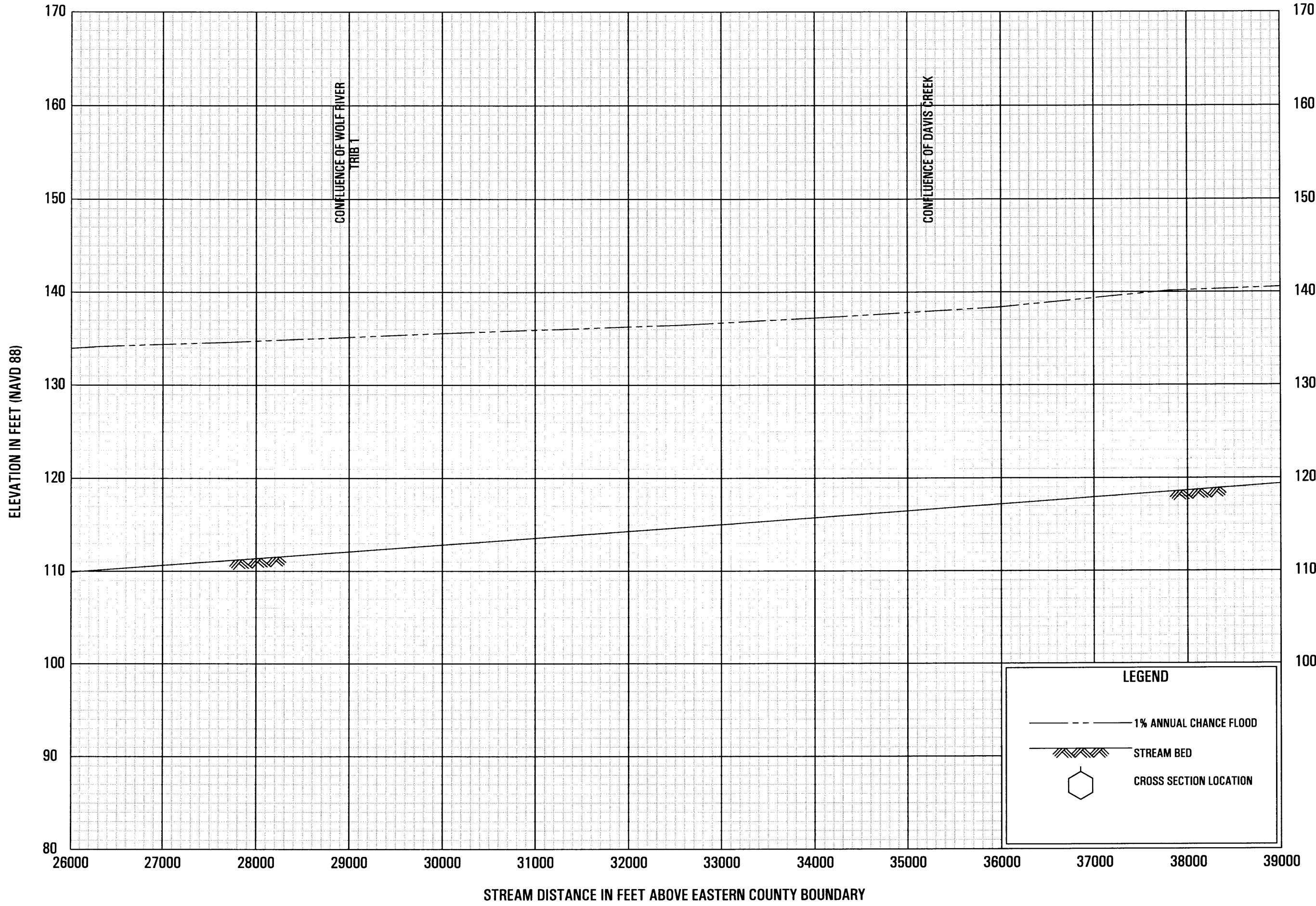
**FLOOD PROFILES**

**WOLF RIVER**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**PEARL RIVER COUNTY, MS**

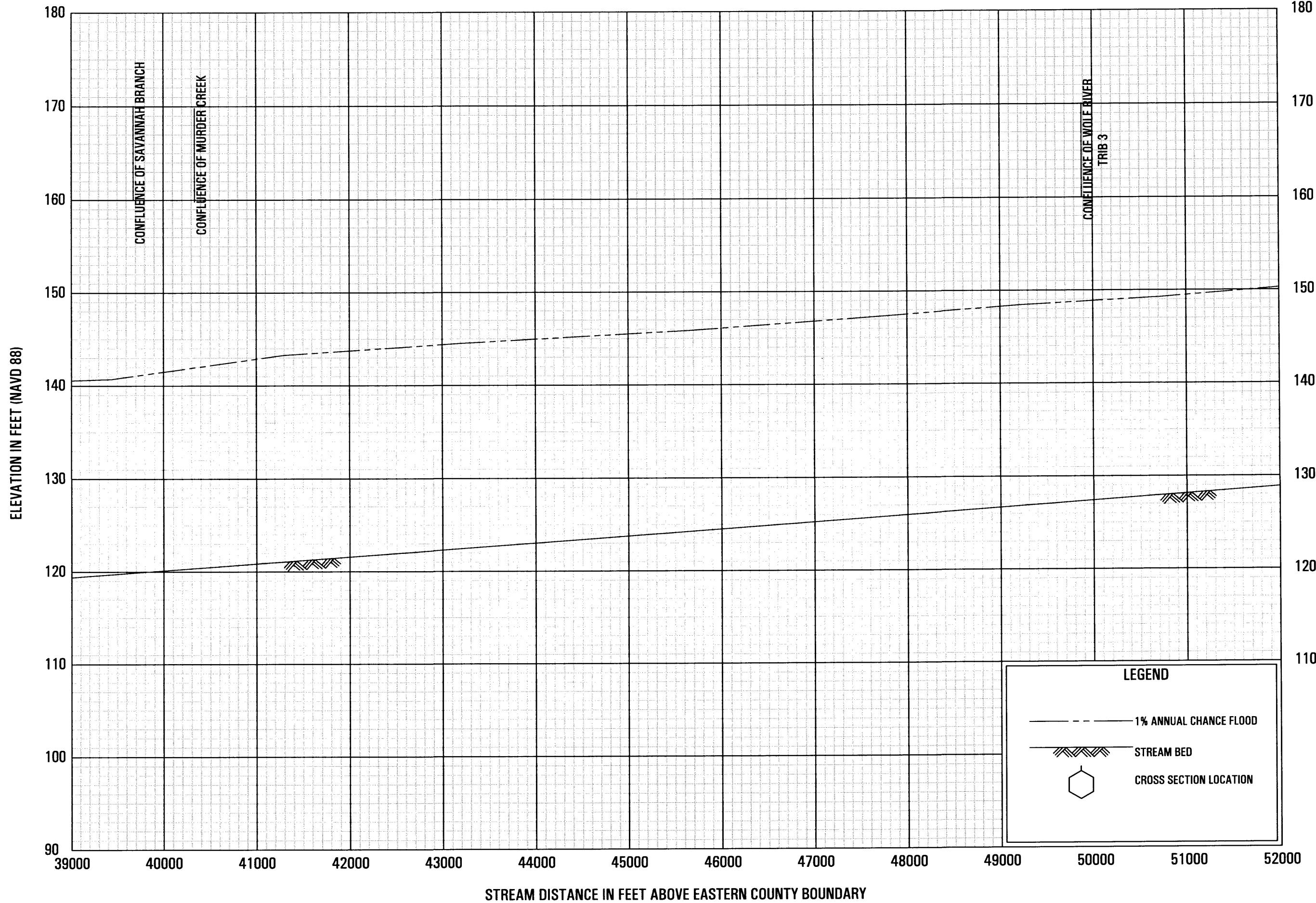
**AND INCORPORATED AREAS**



**FLOOD PROFILES**

**WOLF RIVER**

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



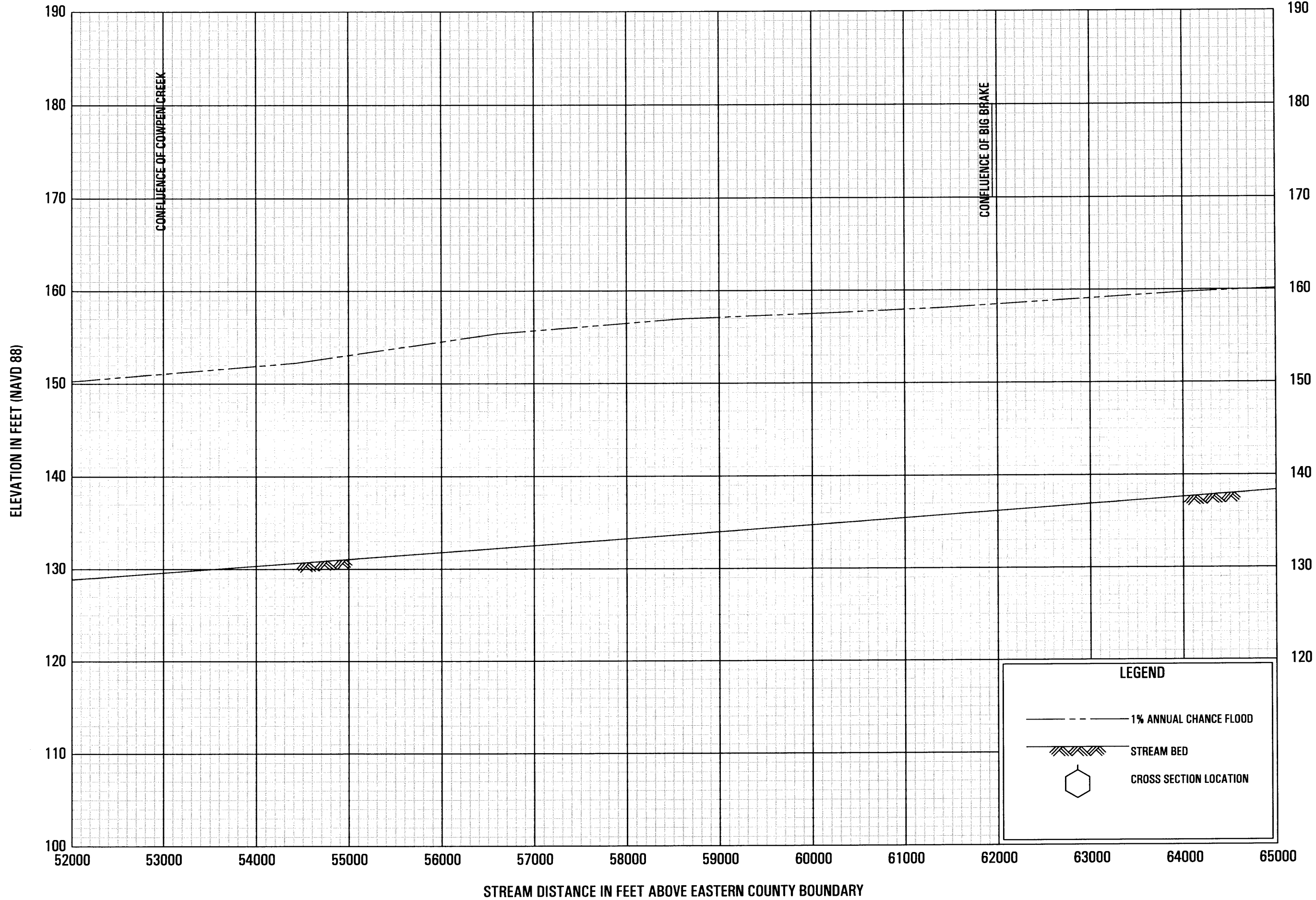
**LEGEND**

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

**FLOOD PROFILES**

**WOLF RIVER**

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

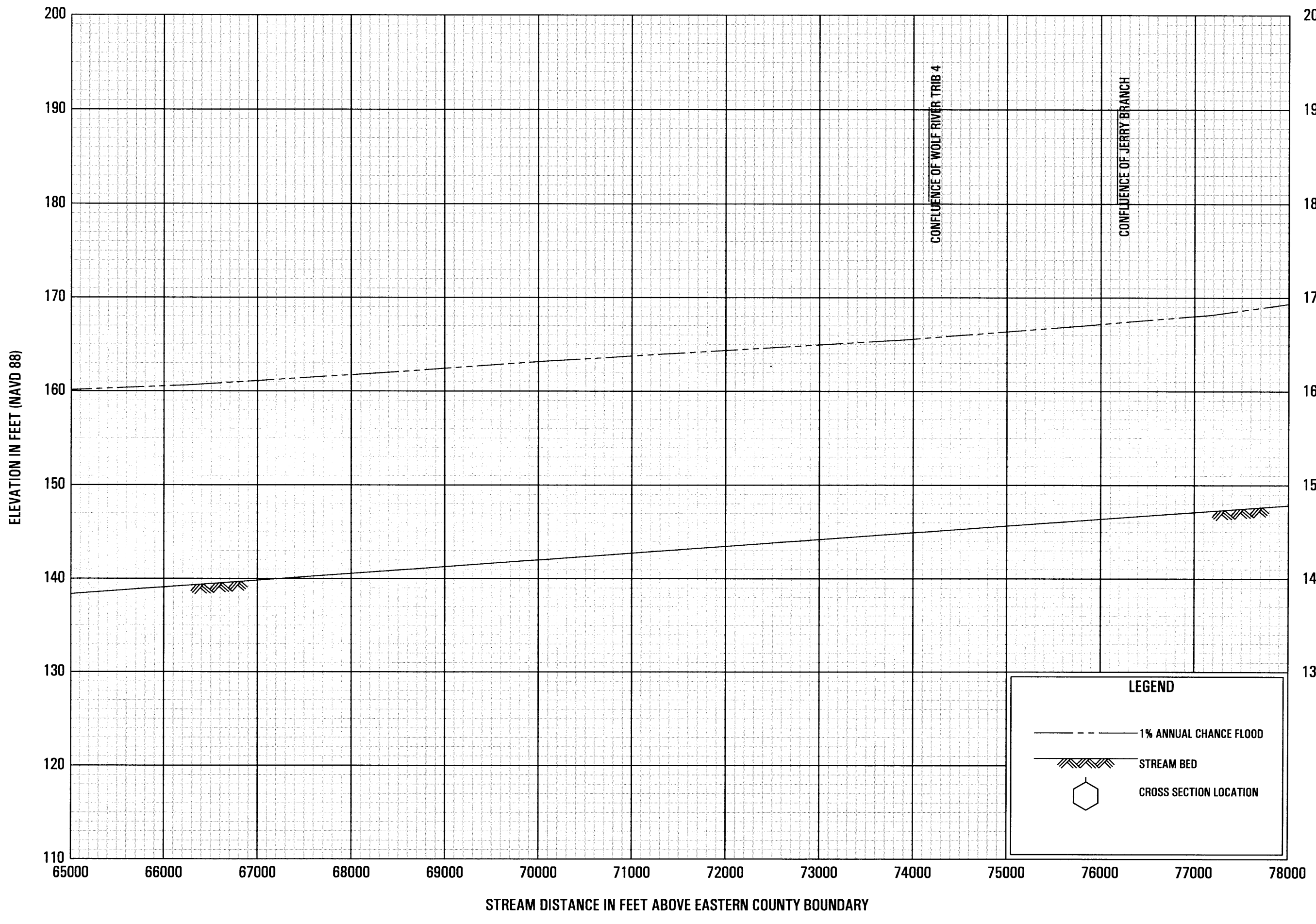


**FLOOD PROFILES**

**WOLF RIVER**

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

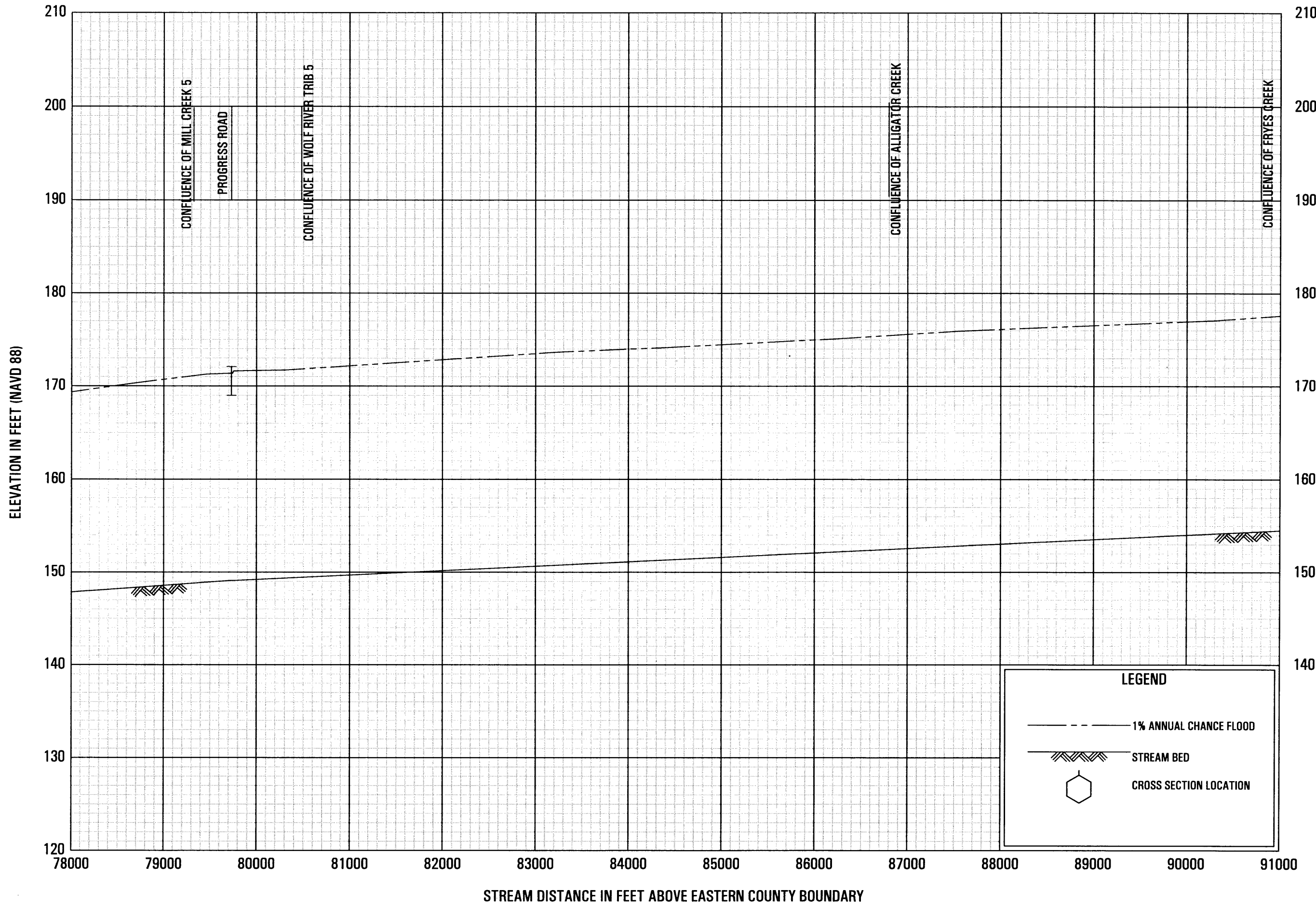




**FLOOD PROFILES**

**WOLF RIVER**

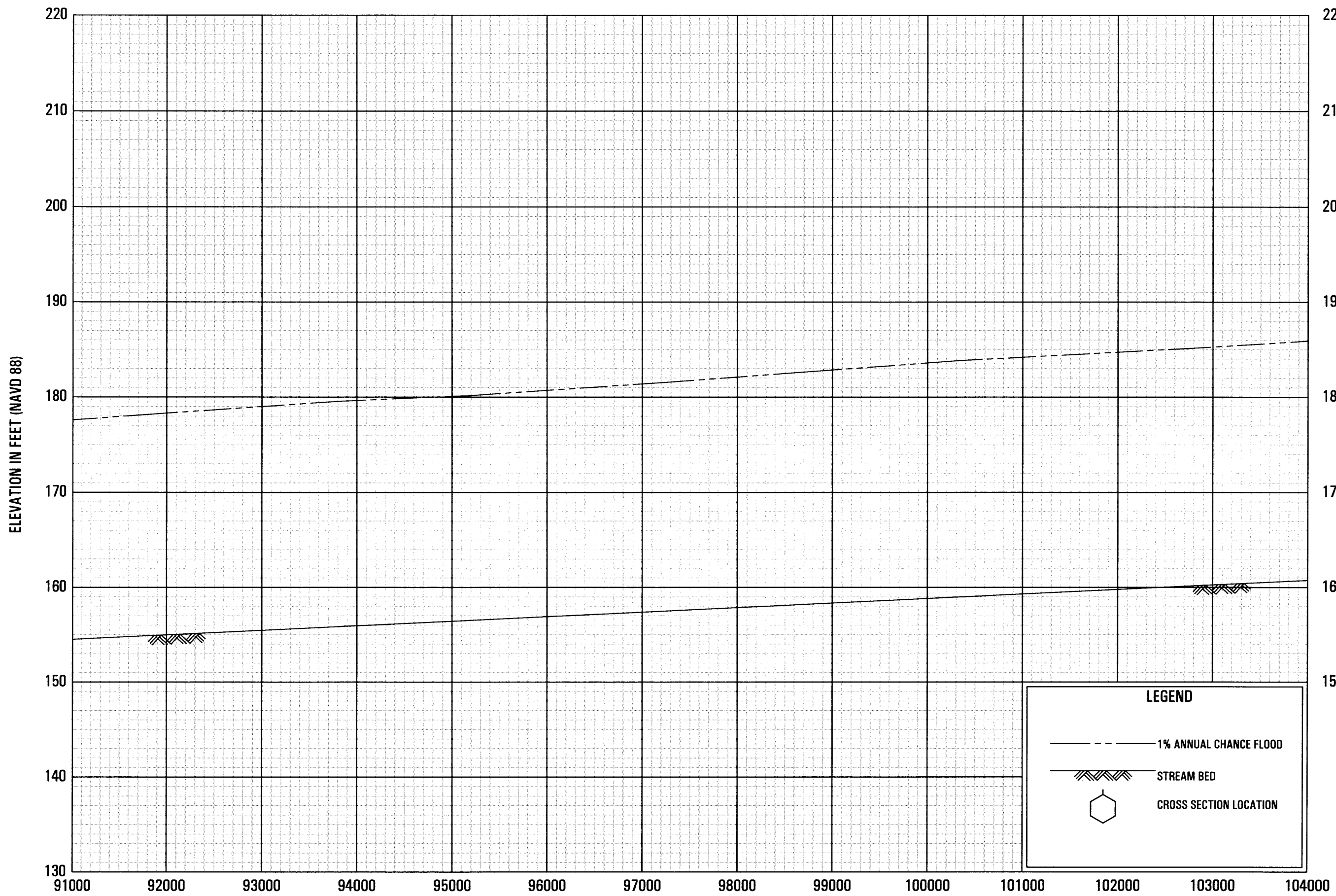
**FEDERAL EMERGENCY MANAGEMENT AGENCY  
PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS**



**FLOOD PROFILES**

**WOLF RIVER**

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



**LEGEND**

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

**FLOOD PROFILES**

**WOLF RIVER**

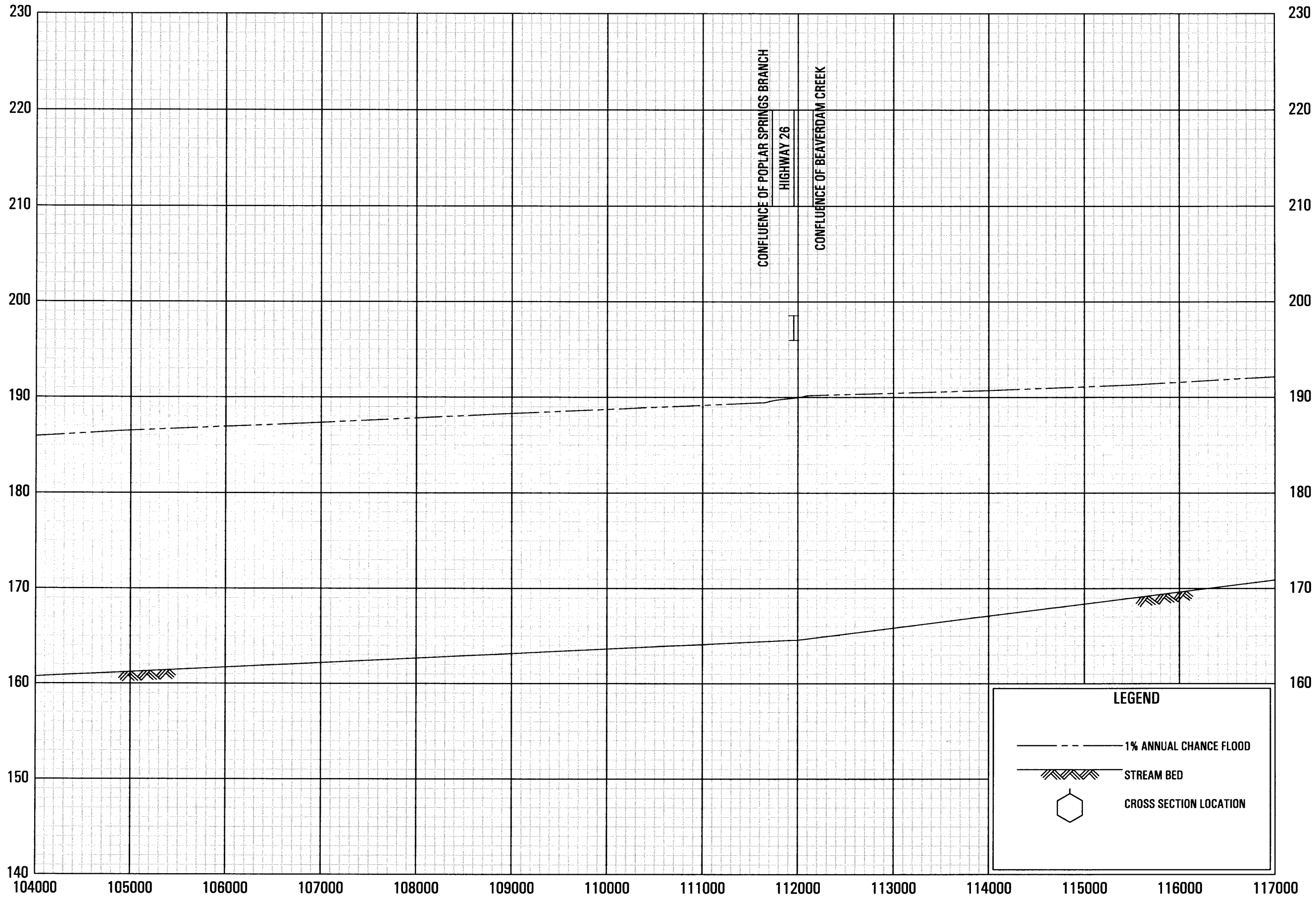
**FEDERAL EMERGENCY MANAGEMENT AGENCY  
PEARL RIVER COUNTY, MS  
AND INCORPORATED AREAS**

**65P**

**STREAM DISTANCE IN FEET ABOVE EASTERN COUNTY BOUNDARY**

**ELEVATION IN FEET (NAVD 88)**

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE EASTERN COUNTY BOUNDARY

FLOOD PROFILES

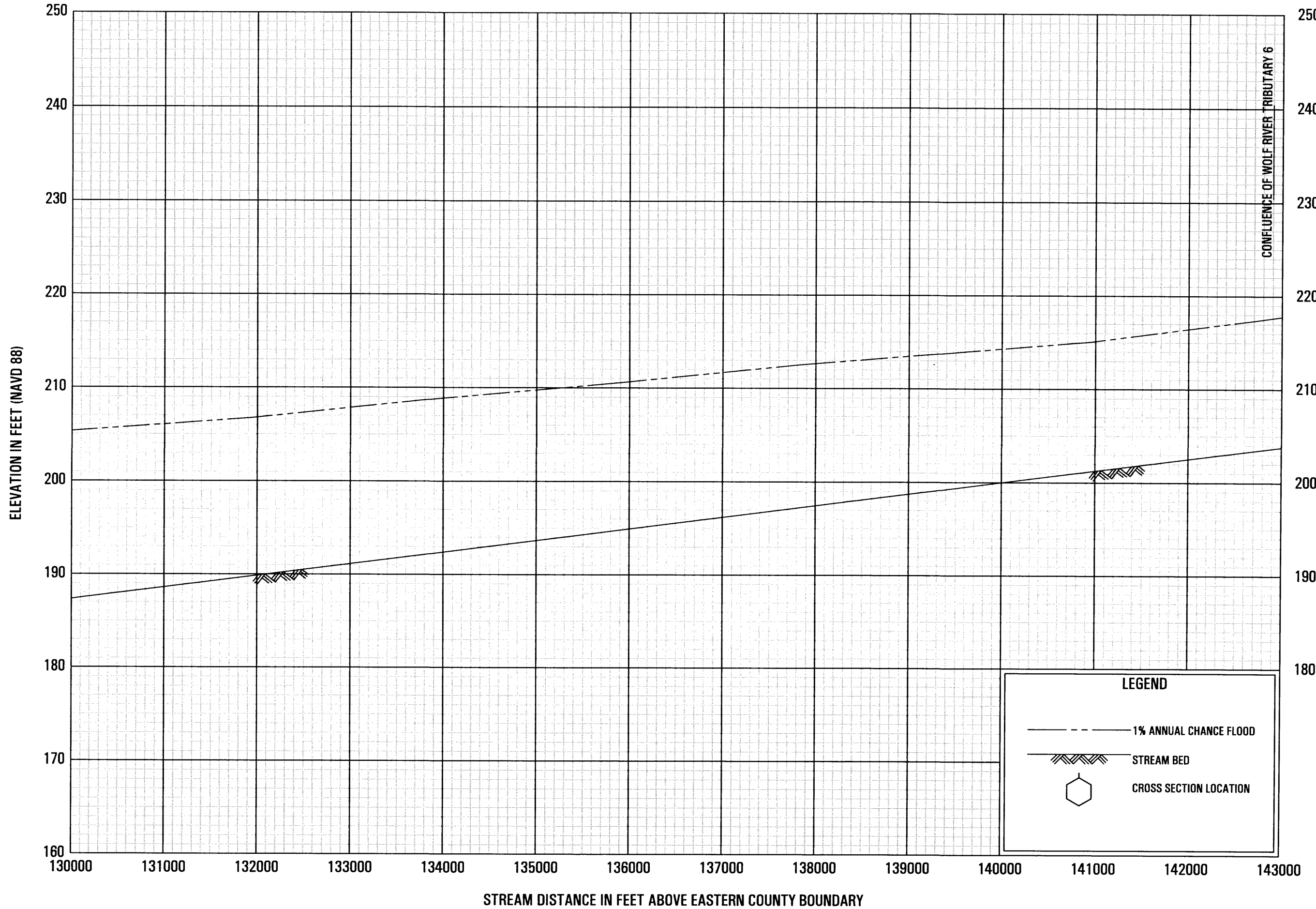
WOLF RIVER

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

66P







**FLOOD PROFILES**

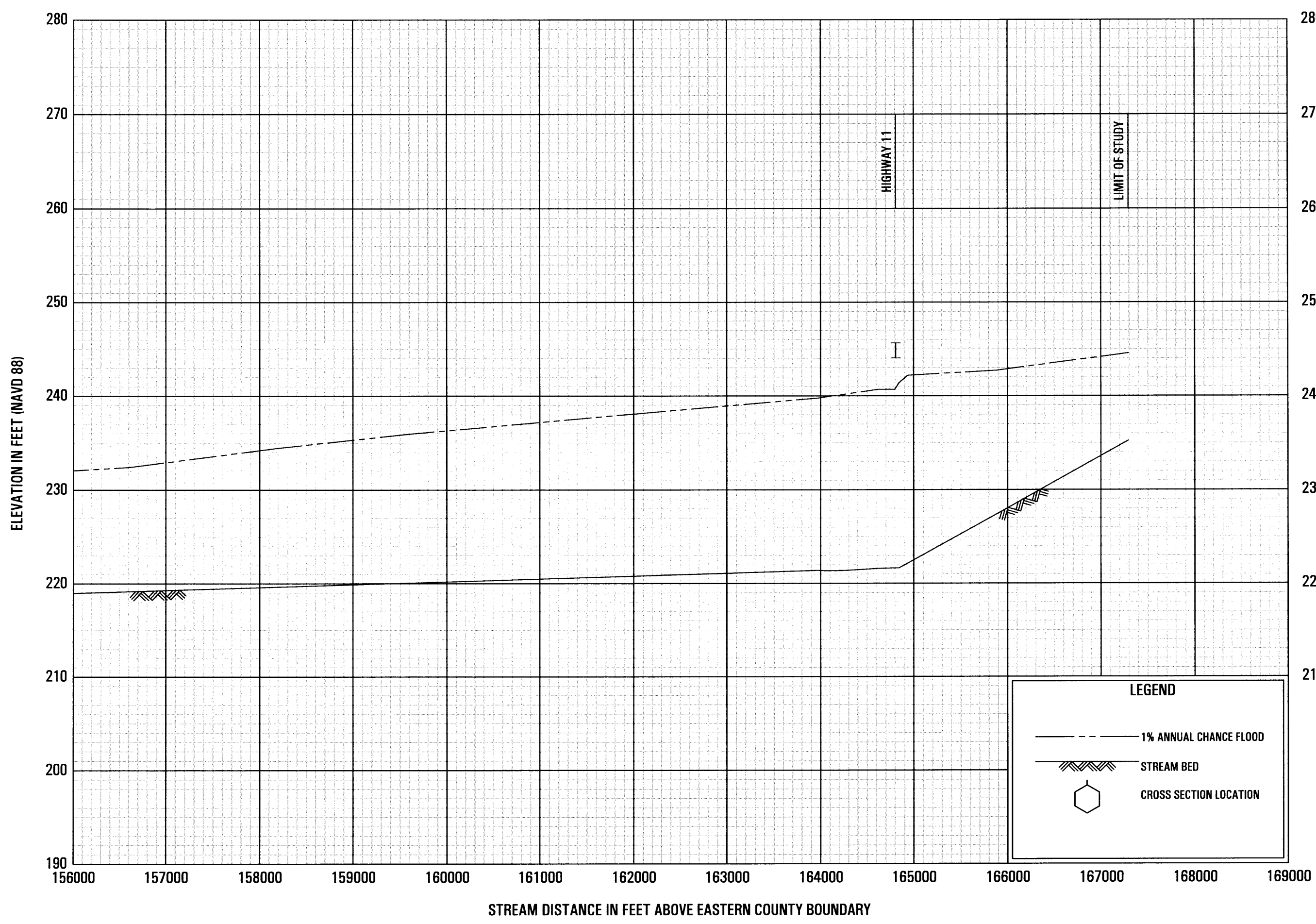
**WOLF RIVER**

FEDERAL EMERGENCY MANAGEMENT AGENCY

PEARL RIVER COUNTY, MS

AND INCORPORATED AREAS

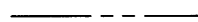






**FLOOD PROFILES**  
**WOLF RIVER**

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

**LEGEND**

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