

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 4 OF 4



MENDOCINO COUNTY, CALIFORNIA

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
FORT BRAGG, CITY OF	060184
MENDOCINO COUNTY UNINCORPORATED AREAS	060183
POINT ARENA, CITY OF	060185
UKIAH, CITY OF	060186
WILLITS, CITY OF	060187

*No Special Flood Hazard Areas

TRIBAL NATION**	TRIBAL NATION**
CAHTO TRIBE OF LAYTONVILLE RANCHERIA	PINOLEVILLE POMO NATION (060058)
COYOTE VALLEY BAND OF POMO INDIANS	POTTER VALLEY TRIBE
GUIDIVILLE RANCHERIA	REDWOOD VALLEY LITTLE RIVER BAND OF POMO INDIANS
HOPLAND BAND OF POMO INDIANS	ROUND VALLEY INDIAN TRIBES
MANCHESTER BAND OF POMO INDIANS	SHERWOOD VALLEY RANCHERIA OF POMO INDIANS

**Federally Recognized Tribal Nations

REVISED: September 19, 2025

FLOOD INSURANCE STUDY NUMBER

06045CV004D

Version Number 2.6.4.6



FEMA

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
SECTION 1.0 – INTRODUCTION	1
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	2
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	7
 SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	 19
2.1 Floodplain Boundaries	19
2.2 Floodways	29
2.3 Base Flood Elevations	30
2.4 Non-Encroachment Zones	31
2.5 Coastal Flood Hazard Areas	31
2.5.1 Water Elevations and the Effects of Waves	32
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	33
2.5.3 Coastal High Hazard Areas	34
2.5.4 Limit of Moderate Wave Action	35
 SECTION 3.0 – INSURANCE APPLICATIONS	 35
3.1 National Flood Insurance Program Insurance Zones	35
 SECTION 4.0 – AREA STUDIED	 36
4.1 Basin Description	36
4.2 Principal Flood Problems	37
4.3 Dams and Other Flood Hazard Reduction Measures	41
4.4 Levee Systems	42
 SECTION 5.0 – ENGINEERING METHODS	 44
5.1 Hydrologic Analyses	44
5.2 Hydraulic Analyses	52
5.3 Coastal Analyses	68
5.3.1 Total Stillwater Elevations	68
5.3.2 Waves	70
5.3.3 Coastal Erosion	70
5.3.4 Wave Hazard Analyses	70

Figures

	<u>Page</u>
Figure 1: FIRM Index	10
Figure 2: FIRM Notes to Users	12
Figure 3: Map Legend for FIRM	15

Volume 1 (*continued*)

Figures (*continued*)

	<u>Page</u>
Figure 4: Floodway Schematic	30
Figure 5: Wave Runup Transect Schematic	33
Figure 6: Coastal Transect Schematic	35
Figure 7: Frequency Discharge-Drainage Area Curves	52
Figure 8: 1-Percent-Annual-Chance Total Stillwater Elevations for Coastal Areas	68
Figure 9: Transect Location Map	75

Tables

	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	3
Table 2: Flooding Sources Included in this FIS Report	20
Table 3: Flood Zone Designations by Community	36
Table 4: Basin Characteristics	36
Table 5: Principal Flood Problems	38
Table 6: Historic Flooding Elevations	40
Table 7: Dams and Other Flood Hazard Reduction Measures	41
Table 8: Levee Systems	43
Table 9: Summary of Discharges	45
Table 10: Summary of Non-Coastal Stillwater Elevations	52
Table 11: Stream Gage Information used to Determine Discharges	52
Table 12: Summary of Hydrologic and Hydraulic Analyses	54
Table 13: Roughness Coefficients	66
Table 14: Summary of Coastal Analyses	68
Table 15: Tide Gage Analysis Specifics	69
Table 16: Coastal Transect Parameters	71

Volume 2

	<u>Page</u>
SECTION 5.0 – ENGINEERING METHODS (<i>CONTINUED</i>)	
5.4 Alluvial Fan Analysis	80
SECTION 6.0 – MAPPING METHODS	80
6.1 Vertical and Horizontal Control	80
6.2 Base Map	82
6.3 Floodplain and Floodway Delineation	84
6.4 Coastal Flood Hazard Mapping	112
6.5 FIRM Revisions	115
6.5.1 Letters of Map Amendment	115
6.5.2 Letters of Map Revision Based on Fill	116
6.5.3 Letters of Map Revision	116
6.5.4 Physical Map Revisions	116
6.5.5 Contracted Restudies	117
6.5.6 Community Map History	117
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION	119
7.1 Contracted Studies	119
7.2 Community Meetings	126

Volume 2 (continued)

	<u>Page</u>
SECTION 8.0 – ADDITIONAL INFORMATION	128

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	129
--	------------

Tables

Table 17: Summary of Alluvial Fan Analyses	80
Table 18: Results of Alluvial Fan Analyses	80
Table 19: Countywide Vertical Datum Conversion	81
Table 20: Stream-Based Vertical Datum Conversion	81
Table 21: Base Map Sources	82
Table 22: Summary of Topographic Elevation Data used in Mapping	85
Table 23: Floodway Data	87
Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	112
Table 25: Summary of Coastal Transect Mapping Considerations	113
Table 26: Incorporated Letters of Map Change	116
Table 27: Community Map History	118
Table 28: Summary of Contracted Studies Included in this FIS Report	119
Table 29: Community Meetings	127
Table 30: Map Repositories	128
Table 31: Additional Information	129
Table 32: Bibliography and References	130

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
Ackerman Creek	01-02 P
Anderson Creek	03-04 P
Baechtel Creek	05-12 P
Baechtel Creek East Overflow 1	13 P
Baechtel Creek East Overflow 2	14-15 P
Baechtel Creek East Overflow 3	16-17 P
Baechtel Creek East Overflow 4	18 P
Baechtel Creek East Overflow 5	19-20 P
Baechtel Creek East Overflow 6	21-22 P
Baechtel Creek East Overflow 7	23 P
Baechtel Creek East Overflow 8	24 P
Baechtel Creek East Overflow 9	25 P
Baechtel Creek West Overflow 1	26 P
Baechtel Creek West Overflow 2	27 P
Baechtel Creek West Overflow 3	28 P
Baechtel Creek West Overflow 4	29 P

Volume 3

Exhibits (continued)

Baechtel Creek West Overflow 5	30 P
Baechtel Creek West Overflow 6	31 P
Baechtel Creek West Overflow 7	32 P
Baechtel Creek West Overflow 8	33 P

Volume 3

Exhibits (continued)

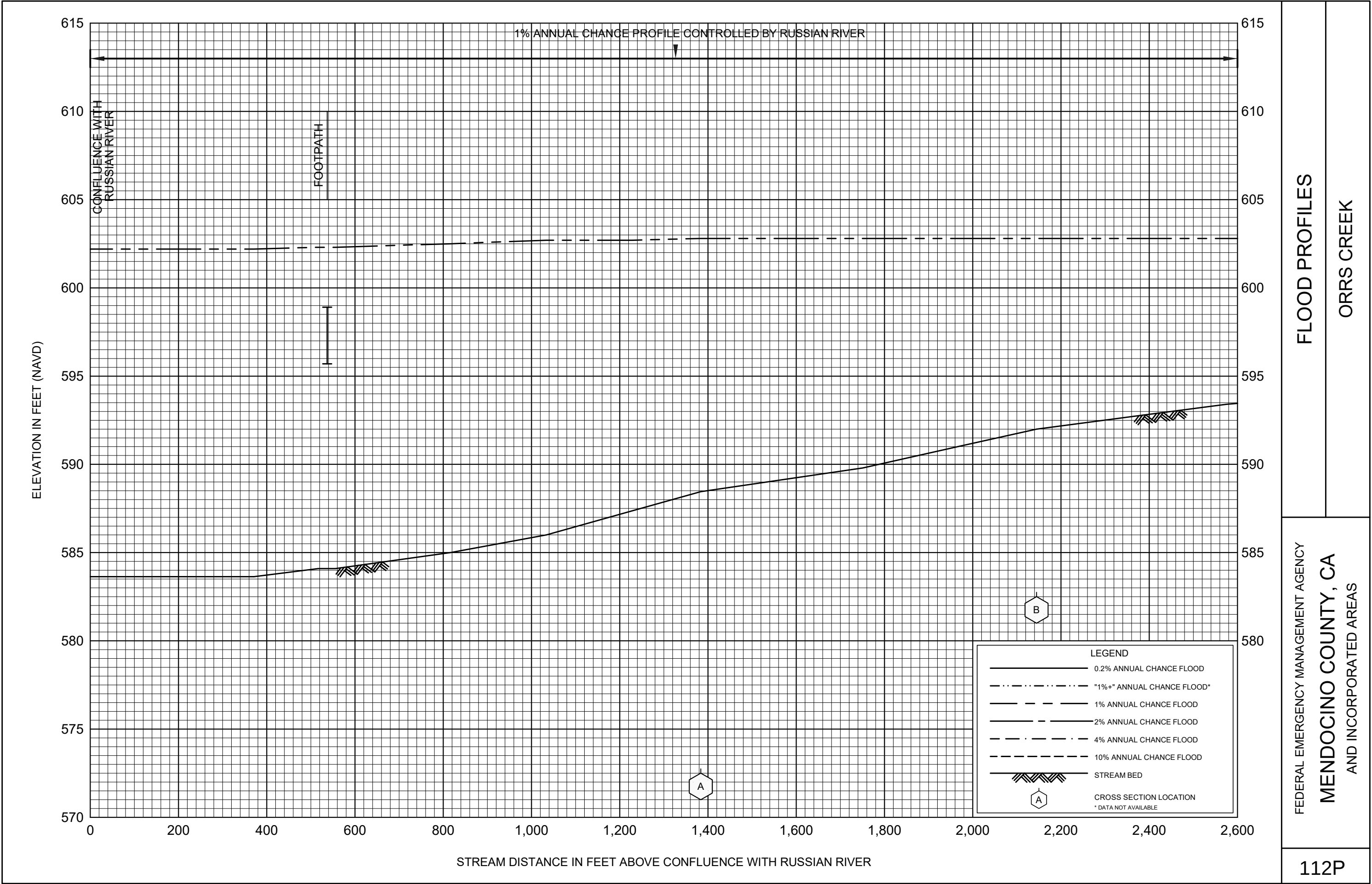
<u>Flood Profiles</u>	<u>Panel</u>
Berry Creek	34-39 P
Broadus Creek	40-43 P
Broadus Creek East Overflow 1	44 P
Broadus Creek East Overflow 2	45 P
Davis Creek	46-51 P
Doolin Creek	52-57 P
East Fork Russian River	58 P
Eel River	59-60 P
Feliz Creek	61-62 P
Forsythe Creek	63-64 P
Gibson Creek	65-78 P
Haehl Creek	79-83 P
Hensley Creek	84-85 P
Mill Creek (At Redwood Valley)	86-87 P
Mill Creek (Near Talmage)	88-89 P
Mill Creek (At Willits)	90-95 P
Mill Creek (At Willits) East Overflow 1	96-97 P
Mill Creek (At Willits) East Overflow 2	98 P
Mill Creek (At Willits) East Overflow 3	99 P
Mill Creek (At Willits) East Overflow 4	100 P
Mill Creek (At Willits) East Overflow 5	101 P
Mill Creek (At Willits) East Overflow 6	102 P
Mill Creek (At Willits) East Overflow 7	103 P
Mill Creek (At Willits) East Overflow 8	104 P
Mill Creek (At Willits) West Overflow 1	105 P
Mill Creek (At Willits) West Overflow 2	106 P
Mill Creek (At Willits) West Overflow 3	107 P
Mill Creek (At Willits) West Overflow 4	108 P
Mill Creek (At Willits) West Overflow 5	109 P
North Fork Mill Creek	110 P
Noyo River	111 P

Volume 4

<u>Flood Profiles</u>	<u>Panel</u>
Orrs Creek	112-118 P
Robinson Creek	119-124 P
Russian River	125-135 P
Scout Lake Creek	136-141 P
Sulphur Creek	142-144 P
Tenmile Creek	145 P
Town Creek	146 P
Unnamed Tributary to Berry Creek	147-150 P
Upp Creek	151 P
York Creek	152-153 P

Published Separately

Flood Insurance Rate Map (FIRM)

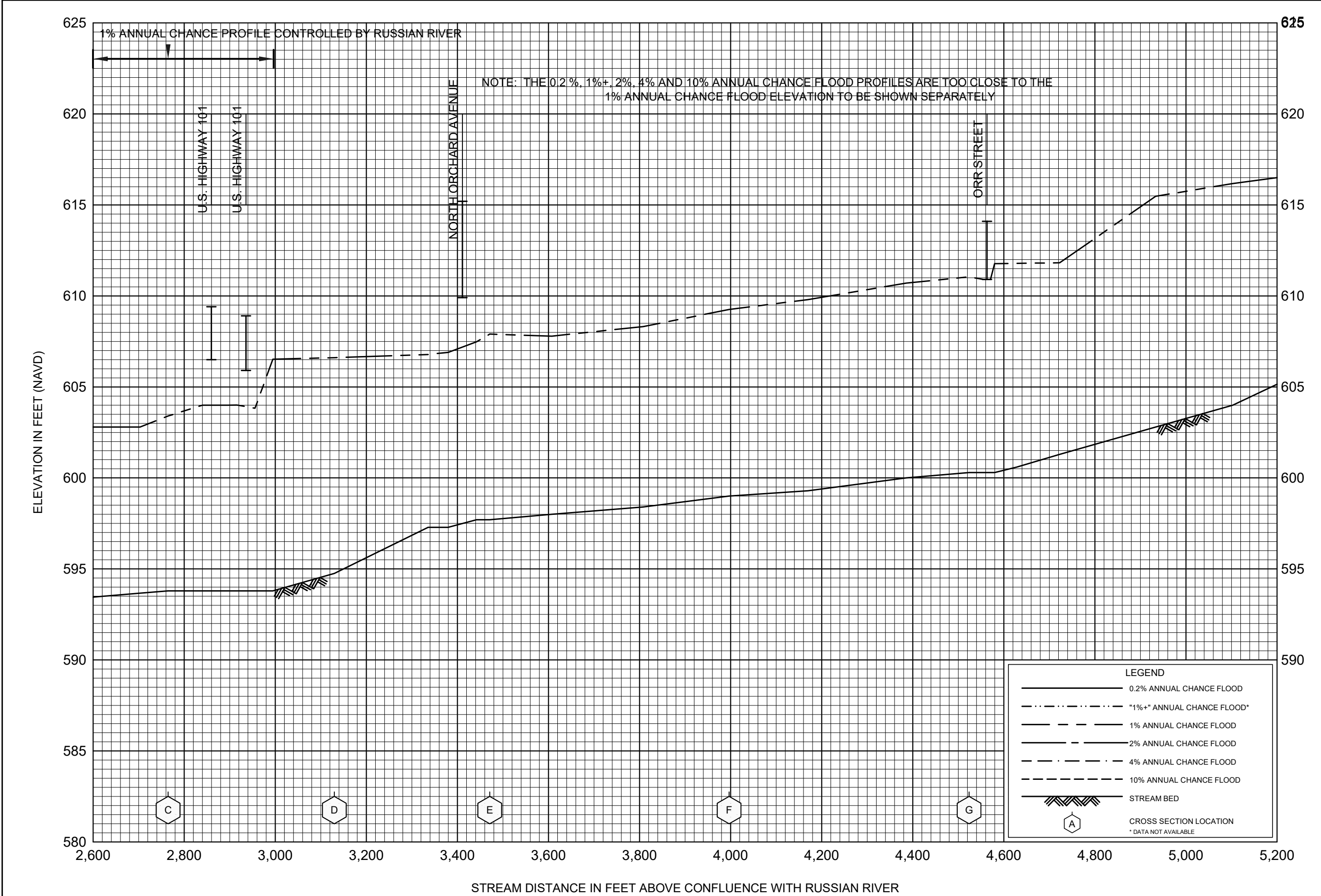


FLOOD PROFILES

ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

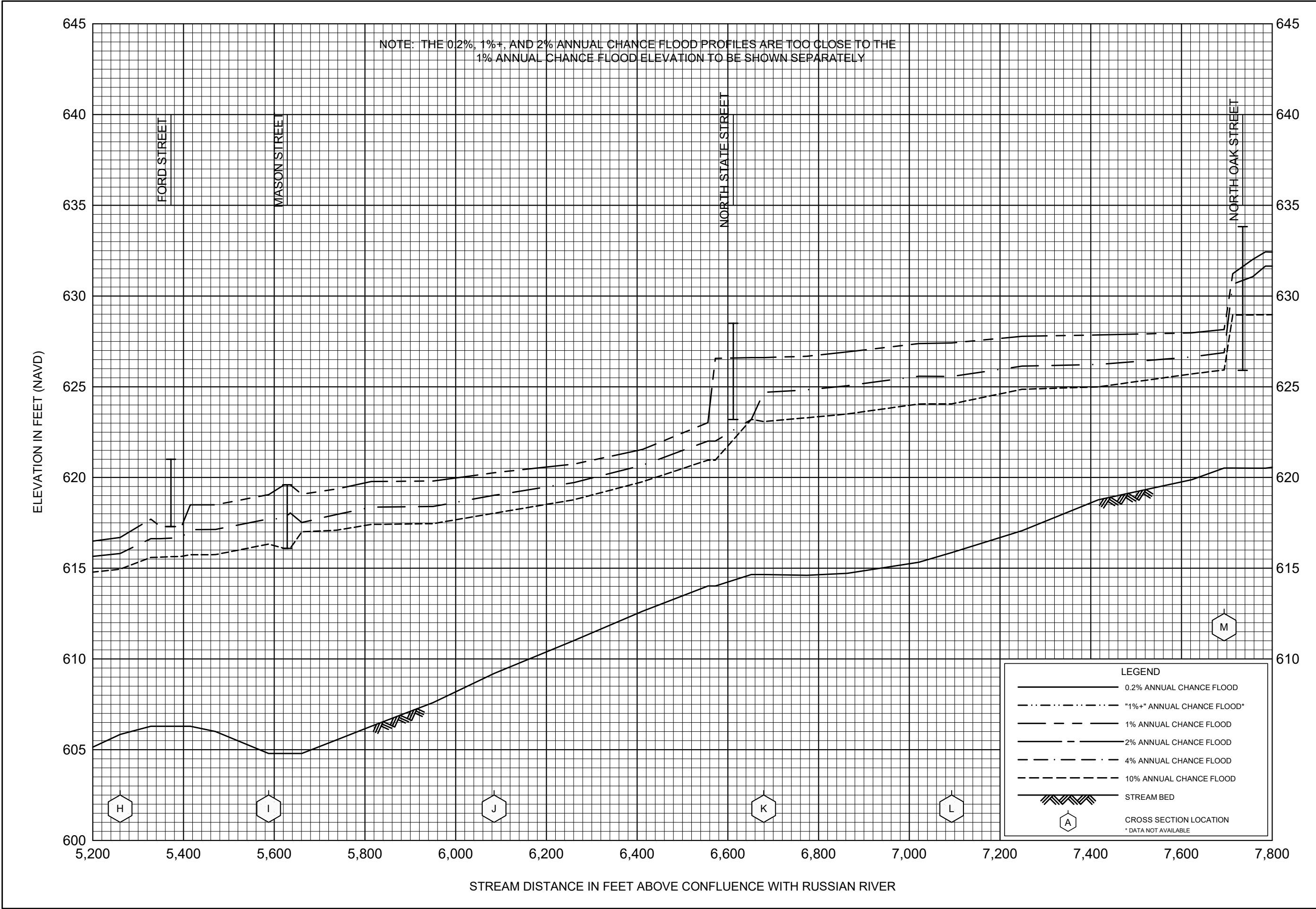


FLOOD PROFILES

ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

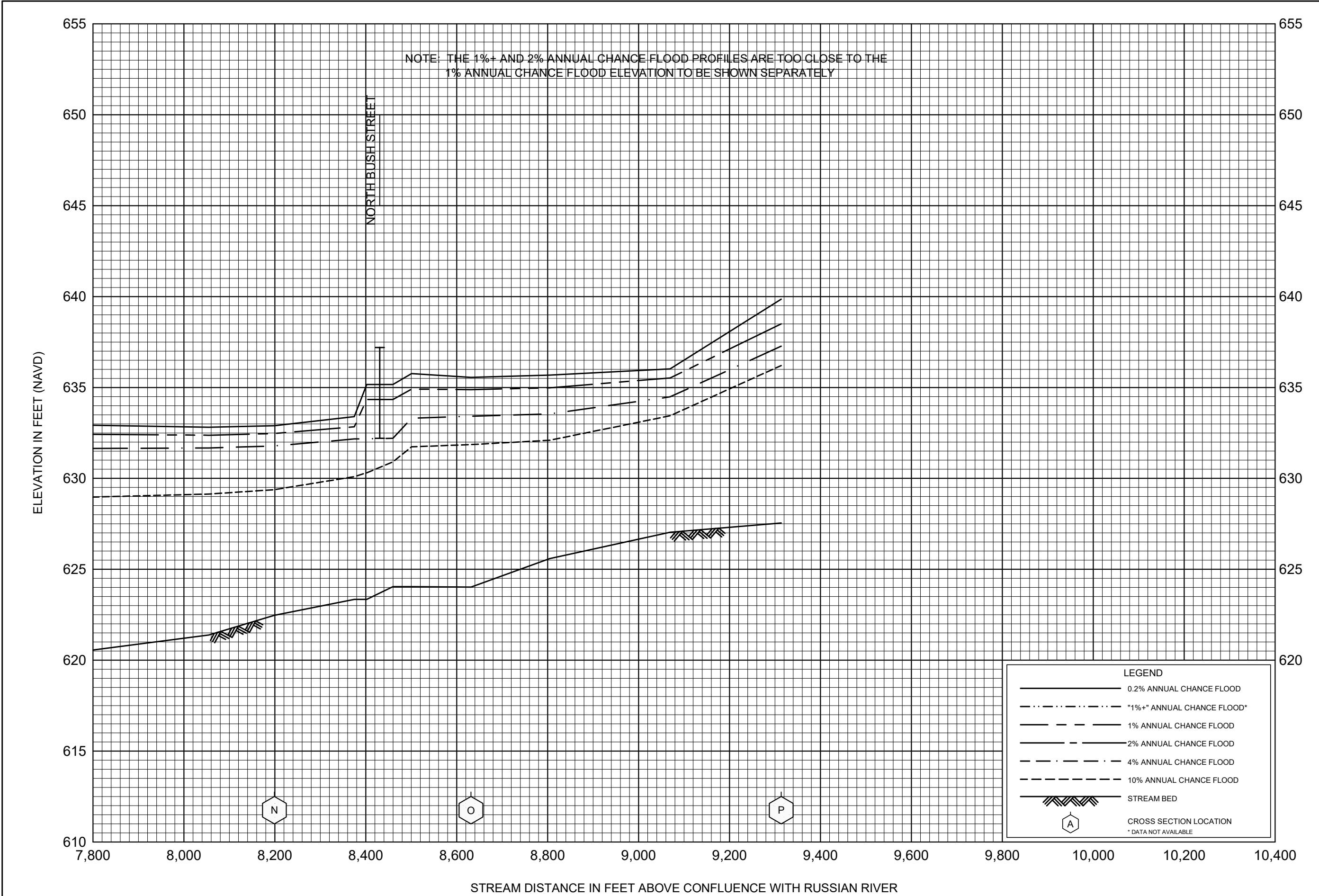


FLOOD PROFILES

ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

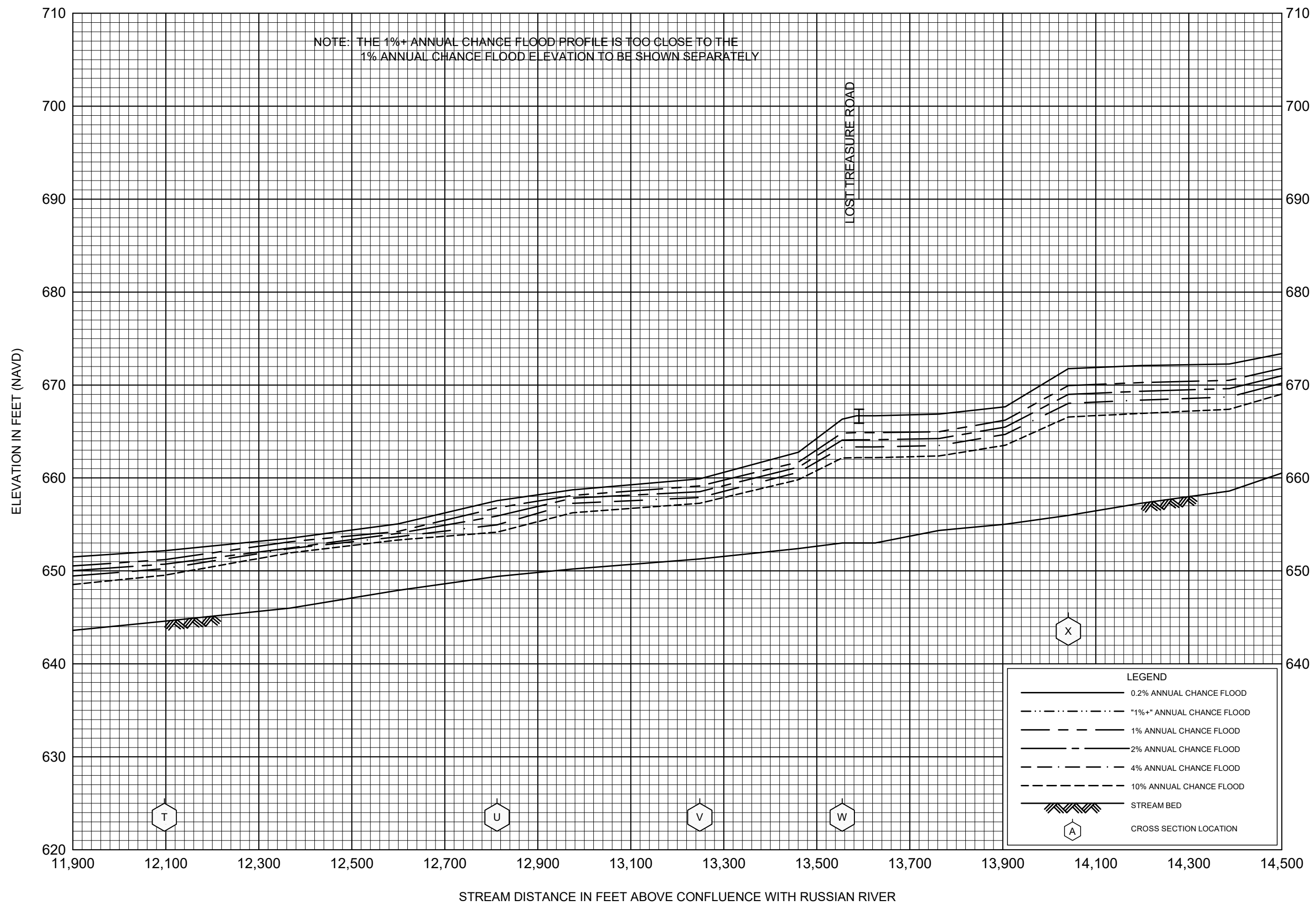


FLOOD PROFILES

ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS



NOTE: THE 1%+ ANNUAL CHANCE FLOOD PROFILE IS TOO CLOSE TO THE 1% ANNUAL CHANCE FLOOD ELEVATION TO BE SHOWN SEPARATELY

LOST TREASURE ROAD

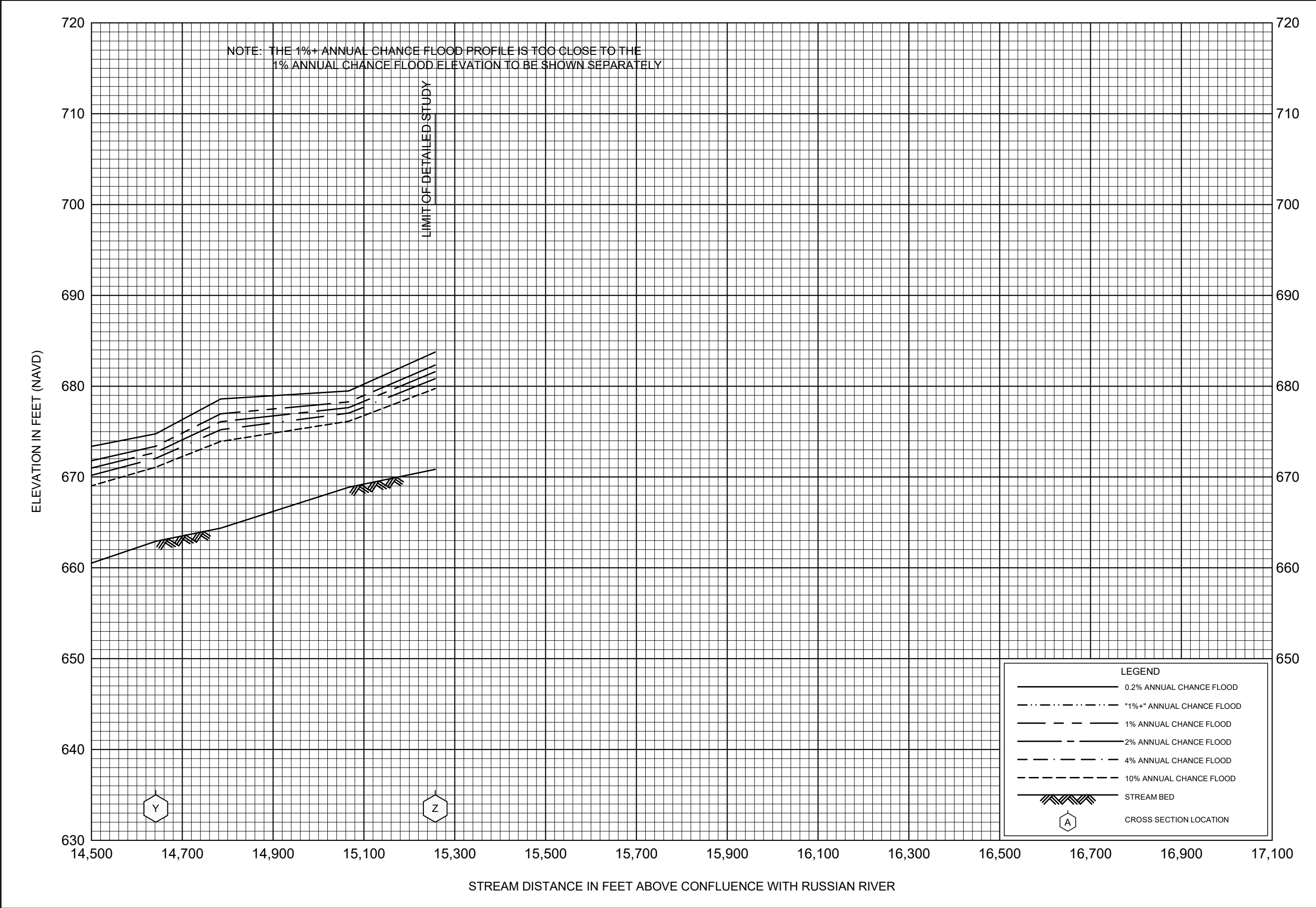
FLOOD PROFILES

ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

117P

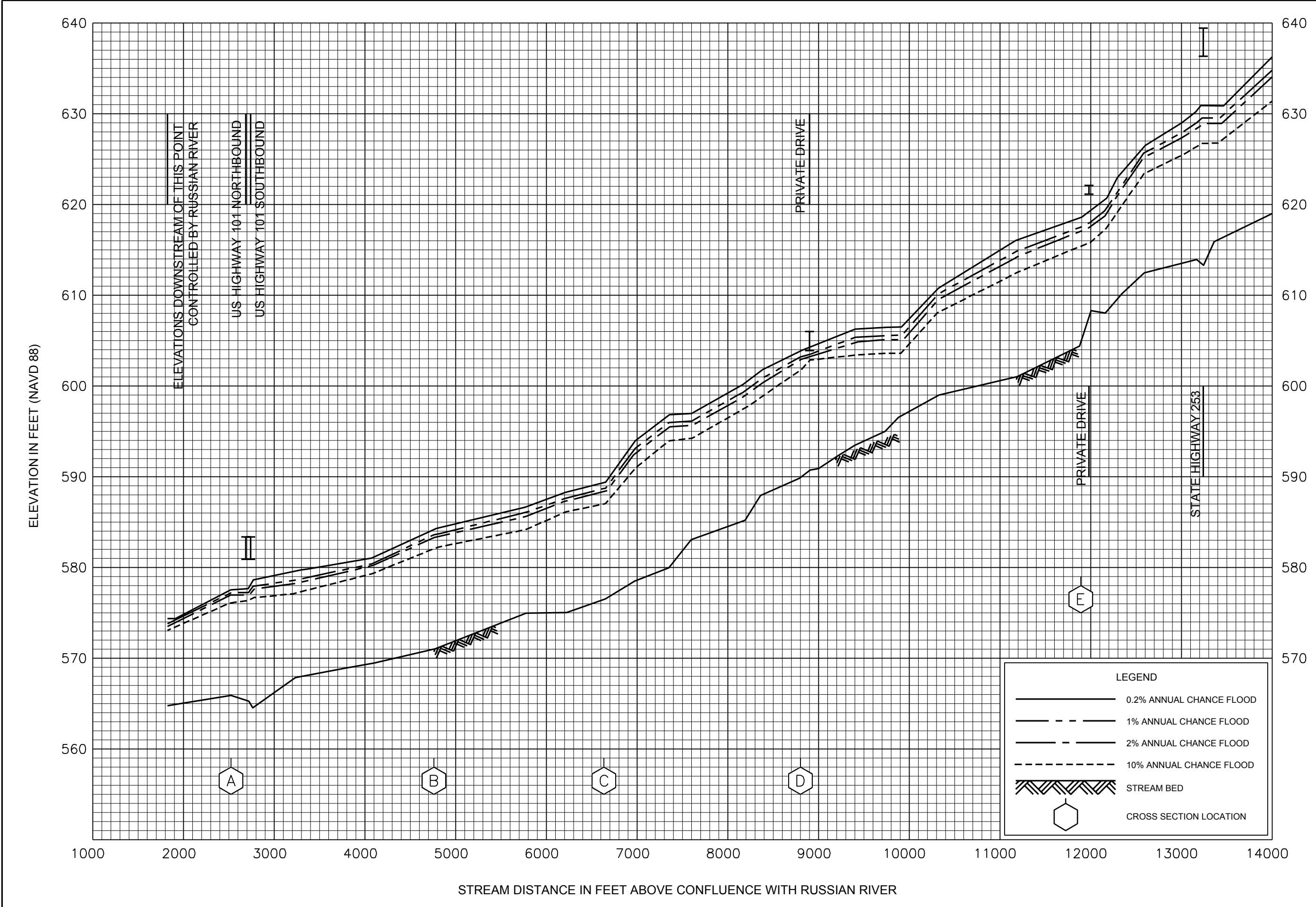


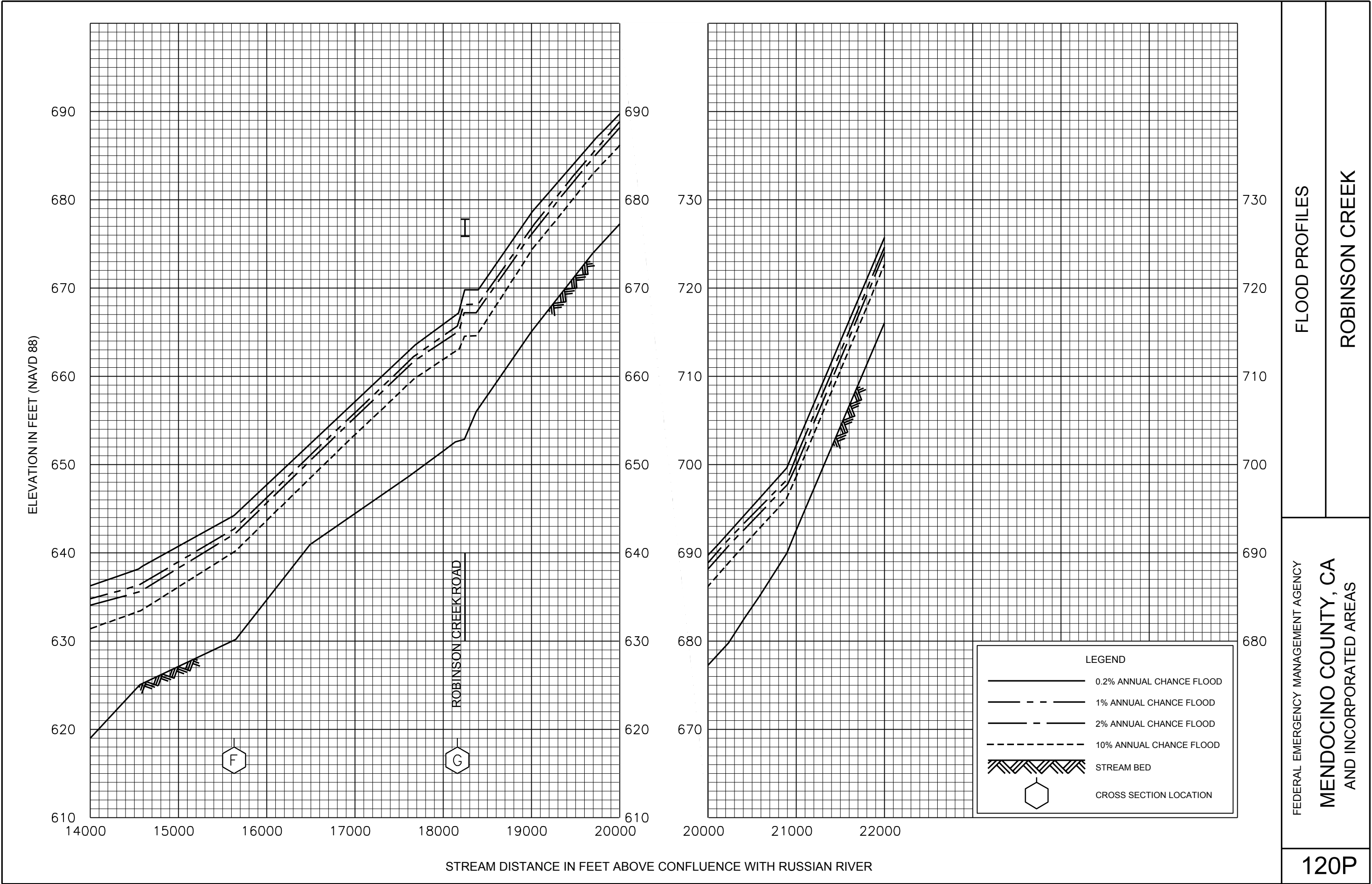
FLOOD PROFILES

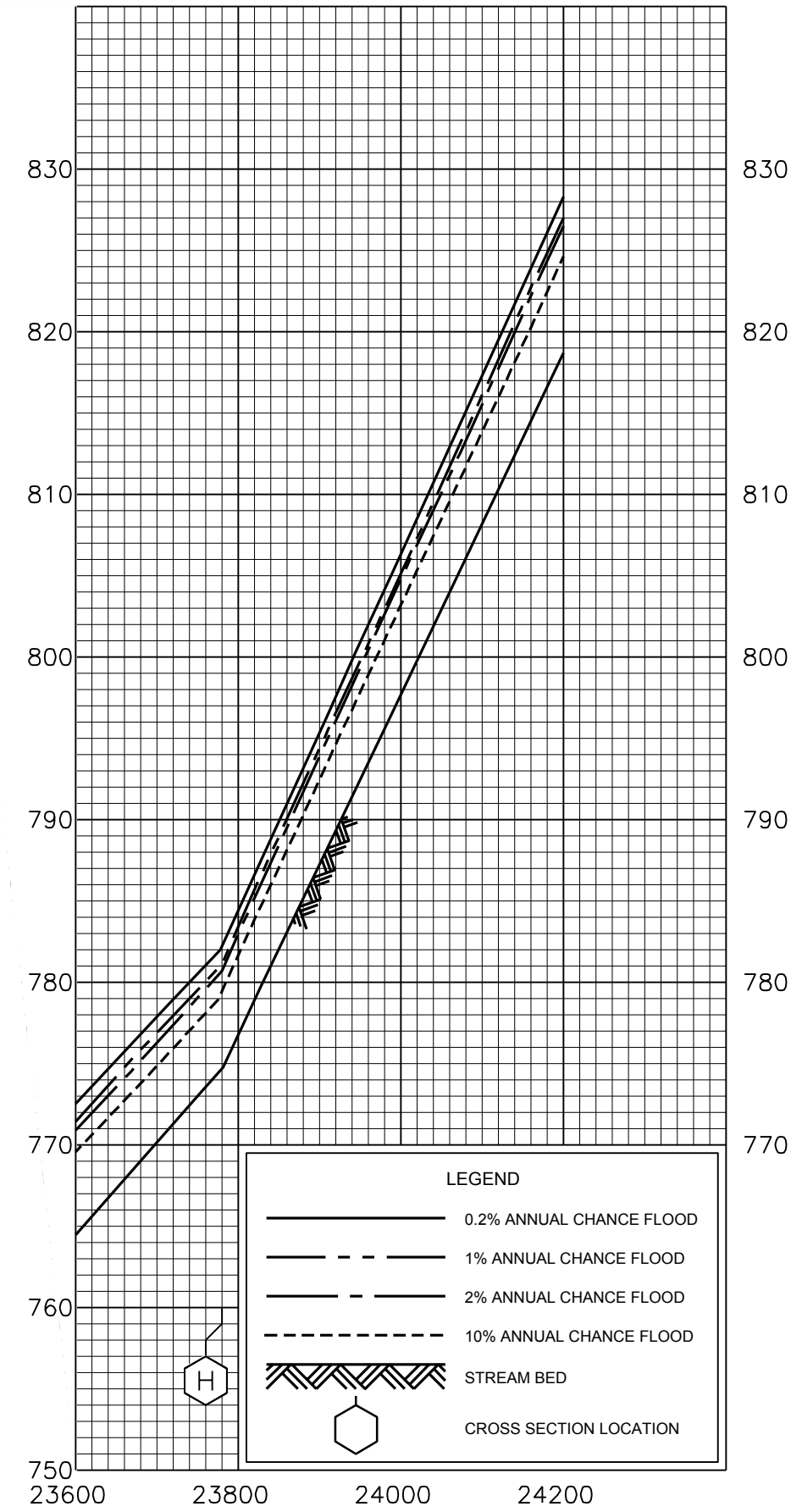
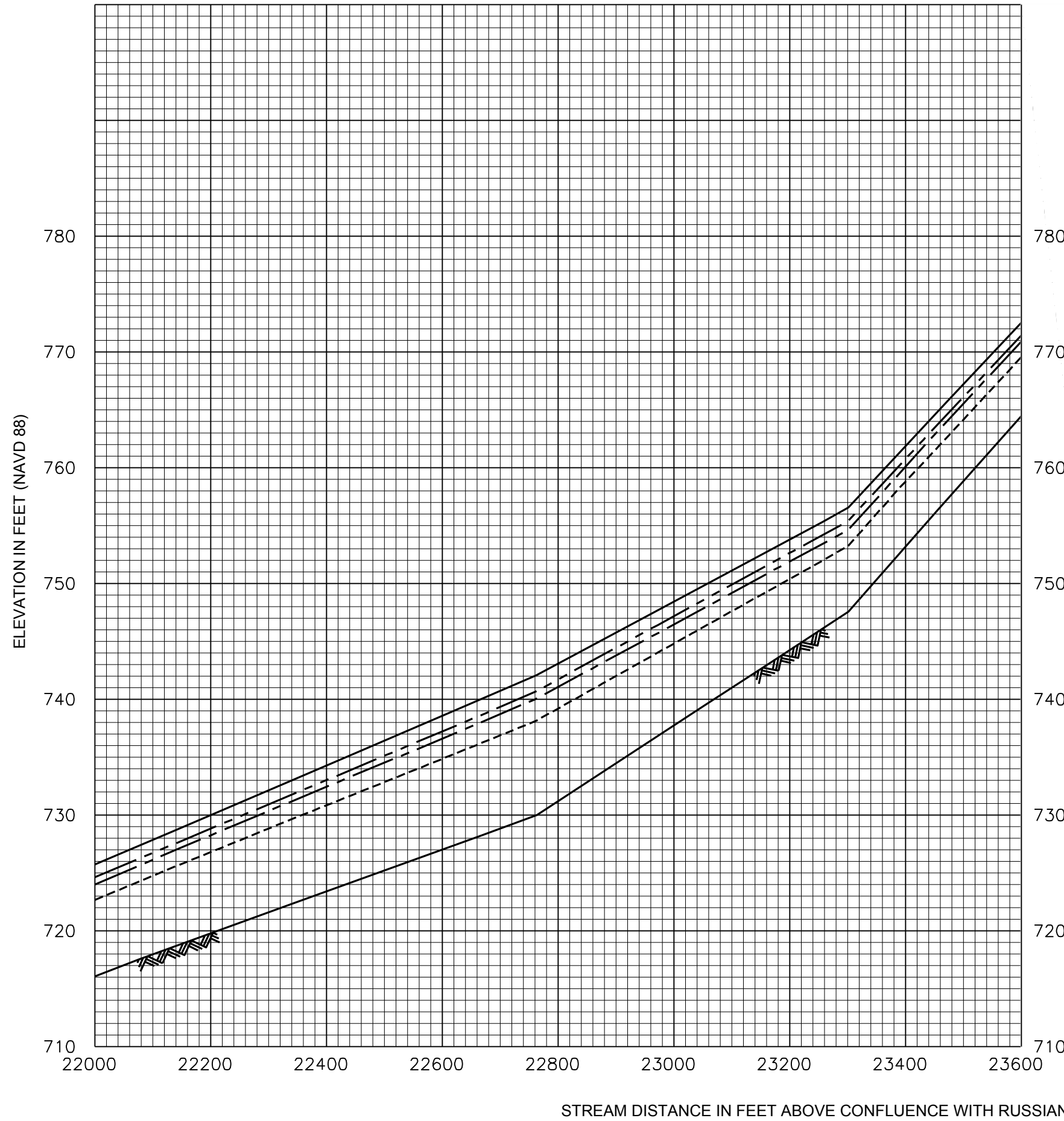
ORRS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY , CA
AND INCORPORATED AREAS

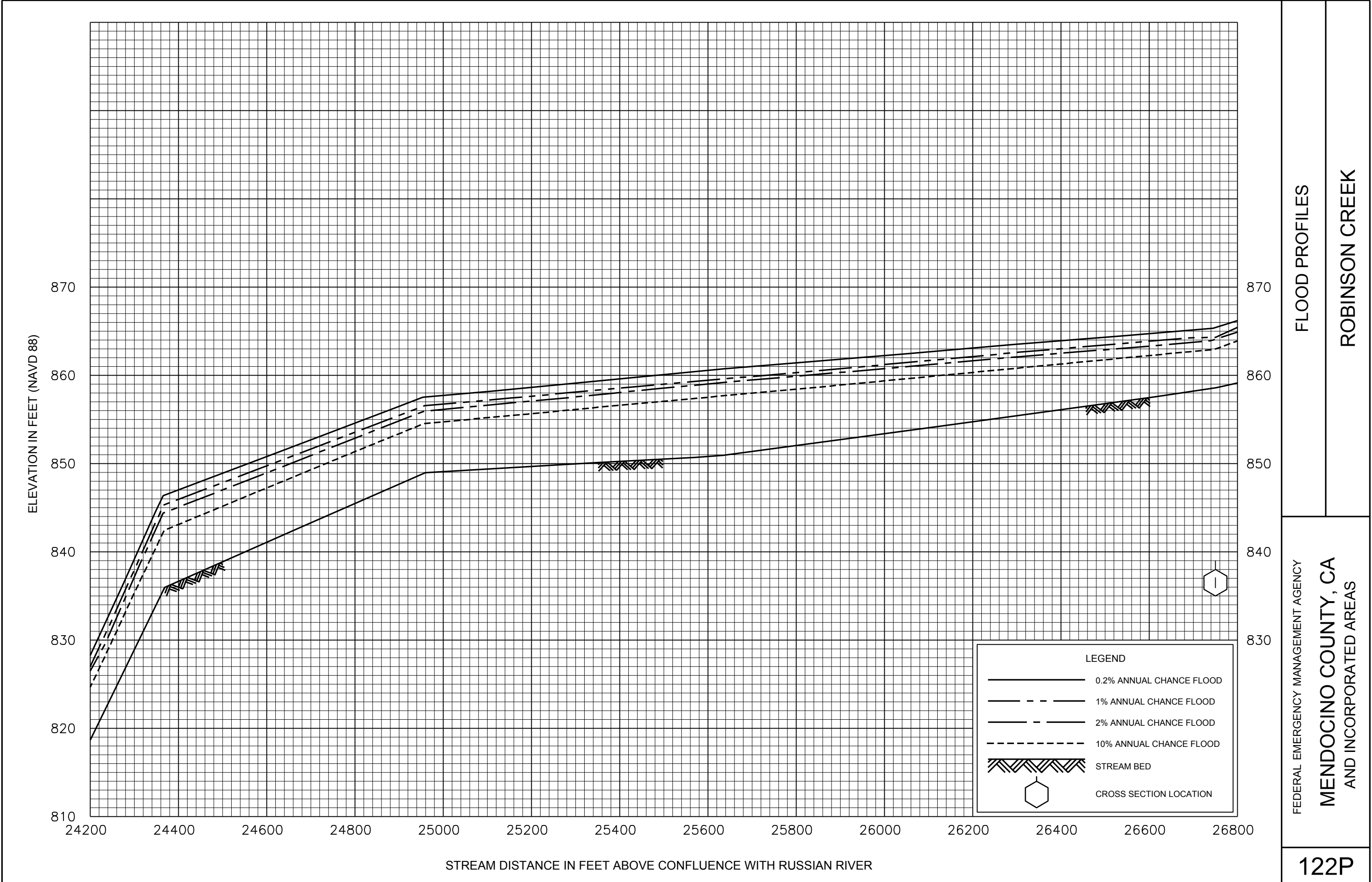






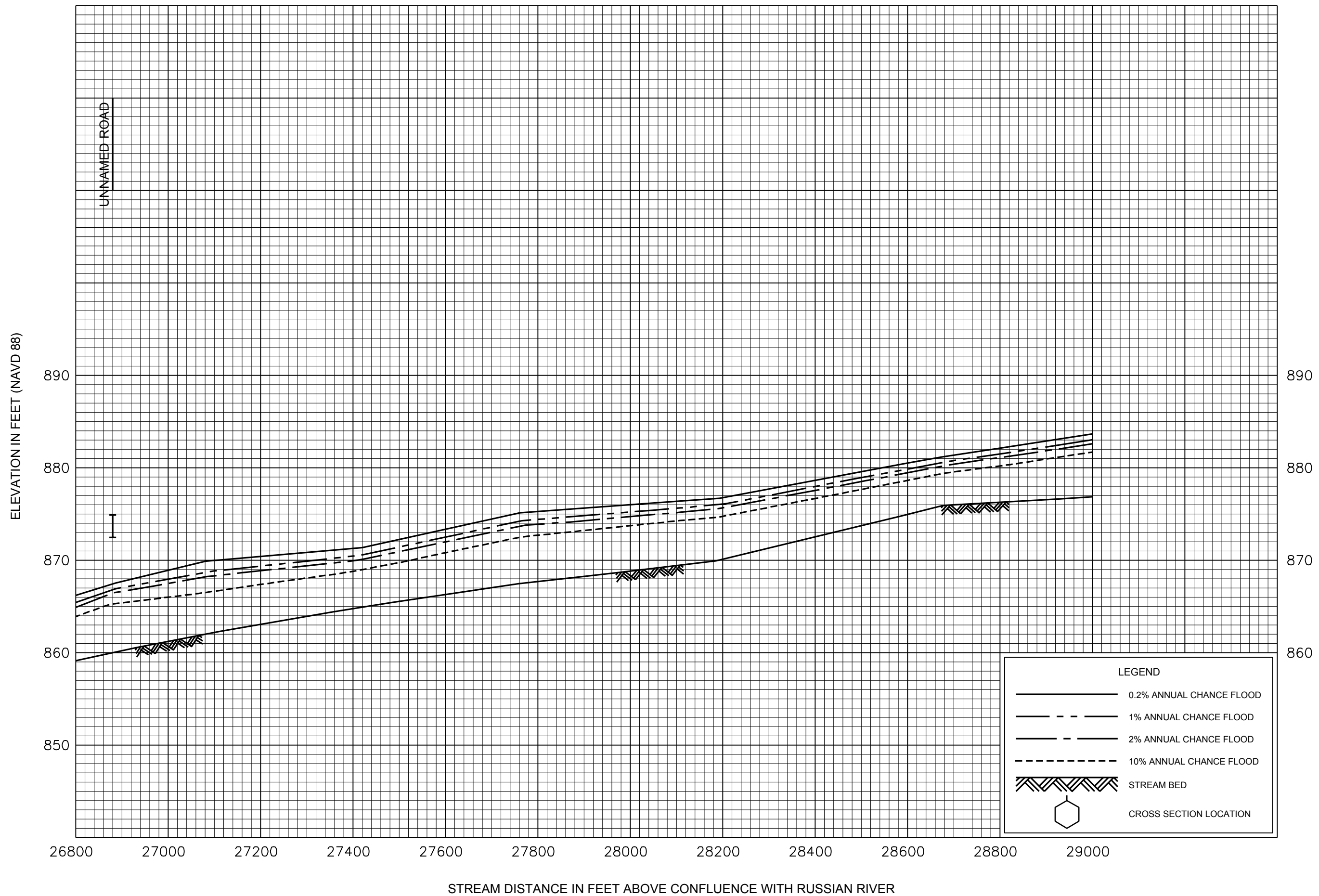
LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION



FLOOD PROFILES
ROBINSON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
MENDOCINO COUNTY, CA
AND INCORPORATED AREAS



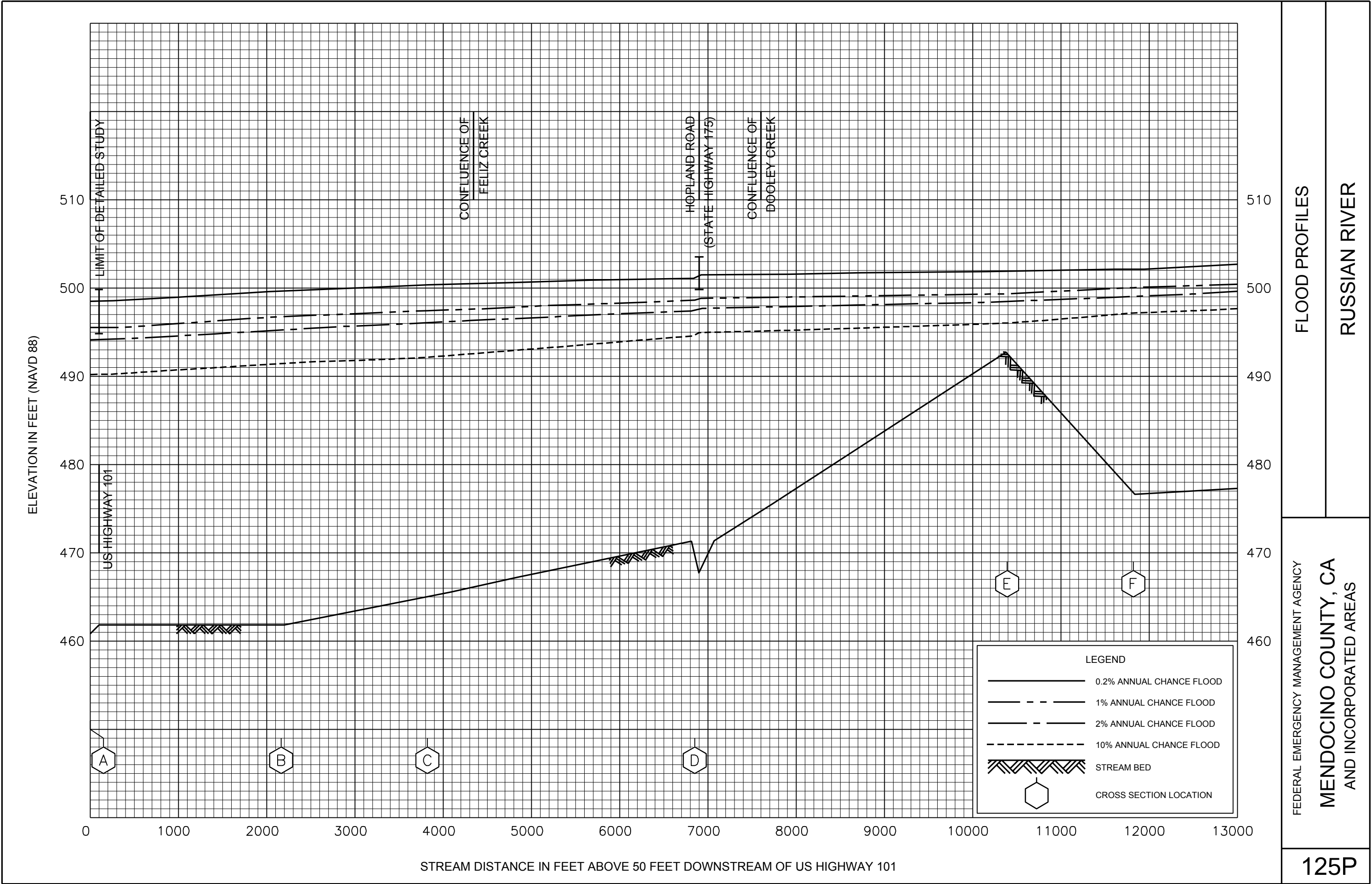
FLOOD PROFILES

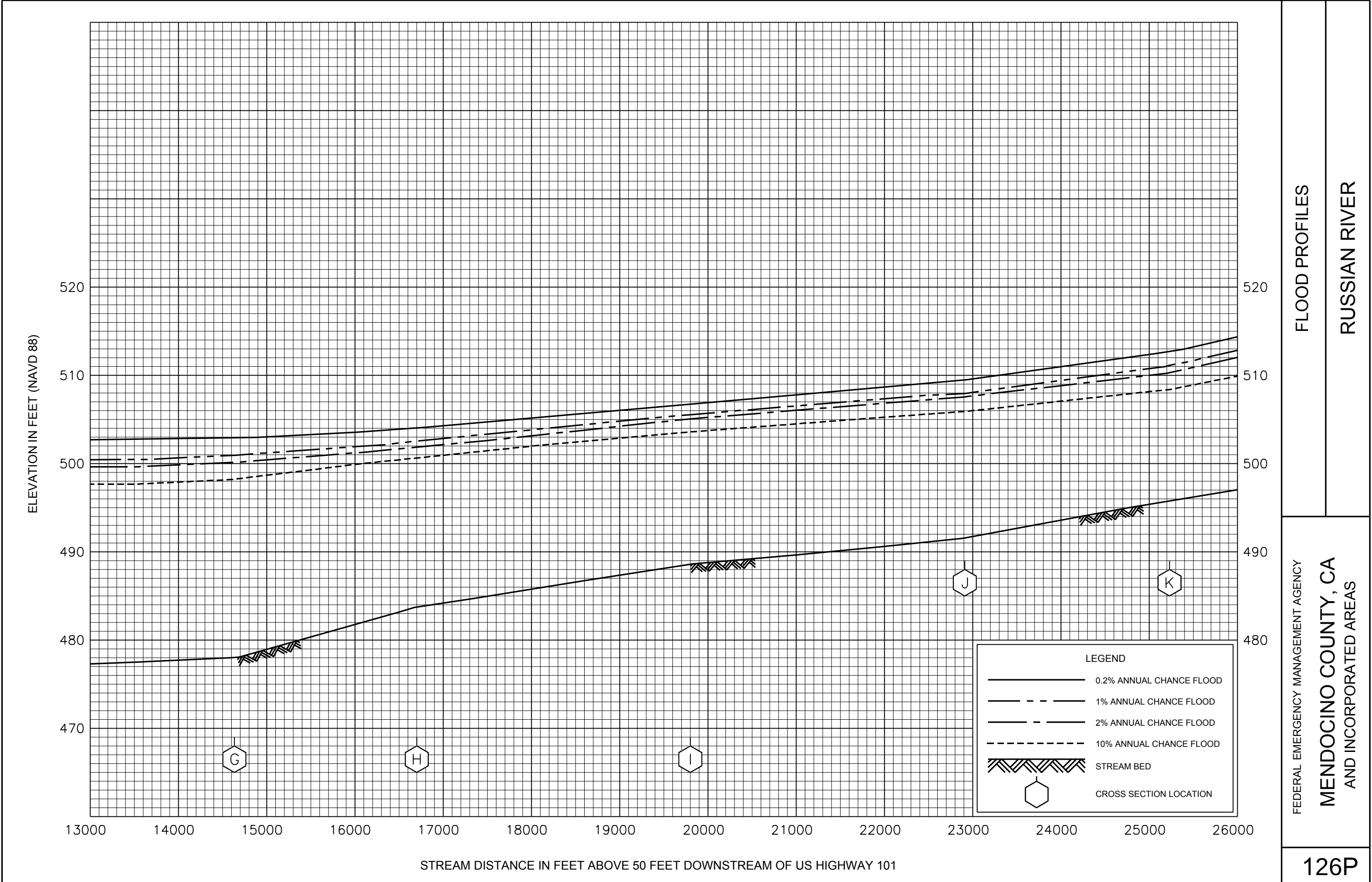
ROBINSON CREEK

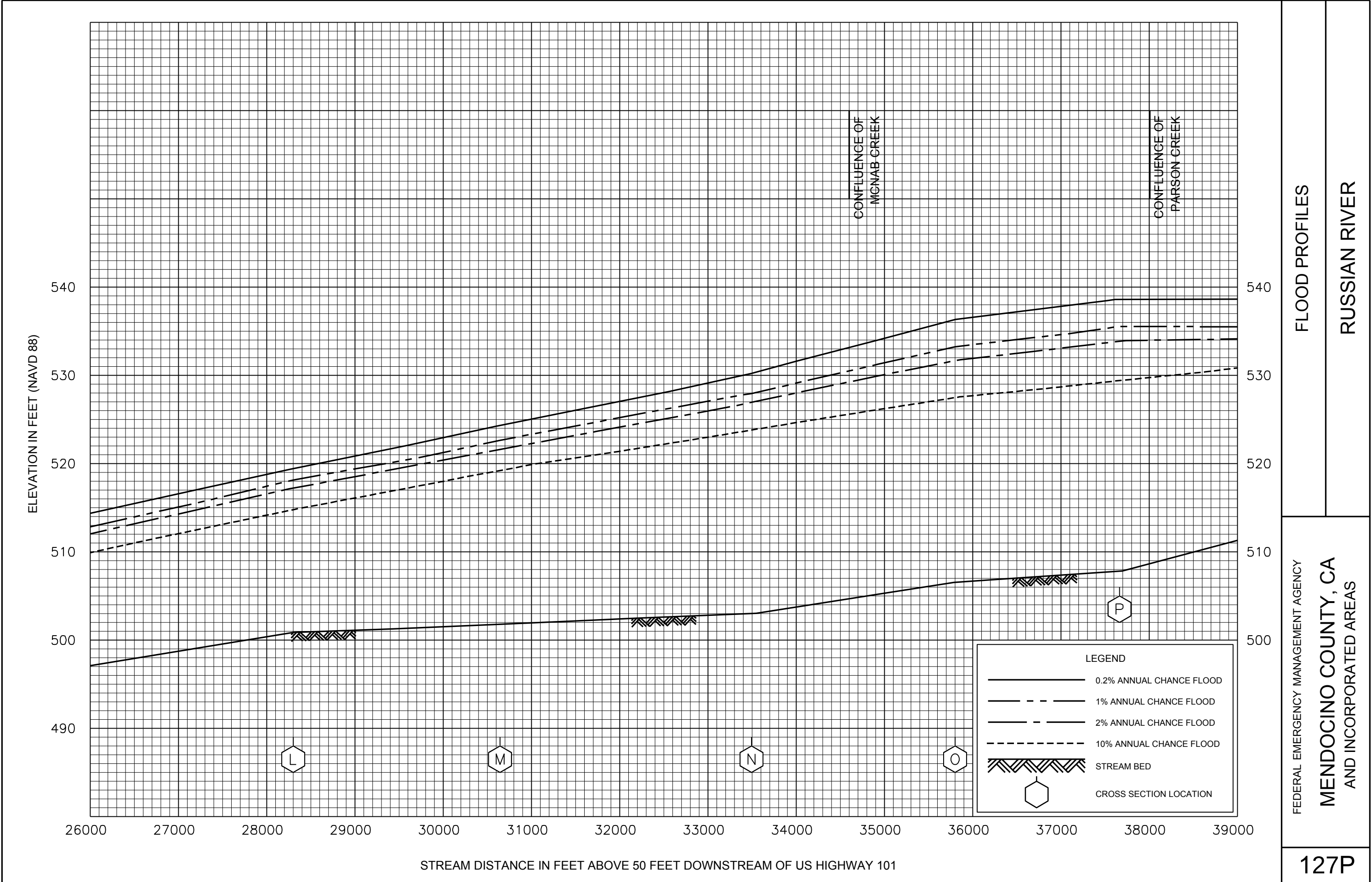
FEDERAL EMERGENCY MANAGEMENT AGENCY

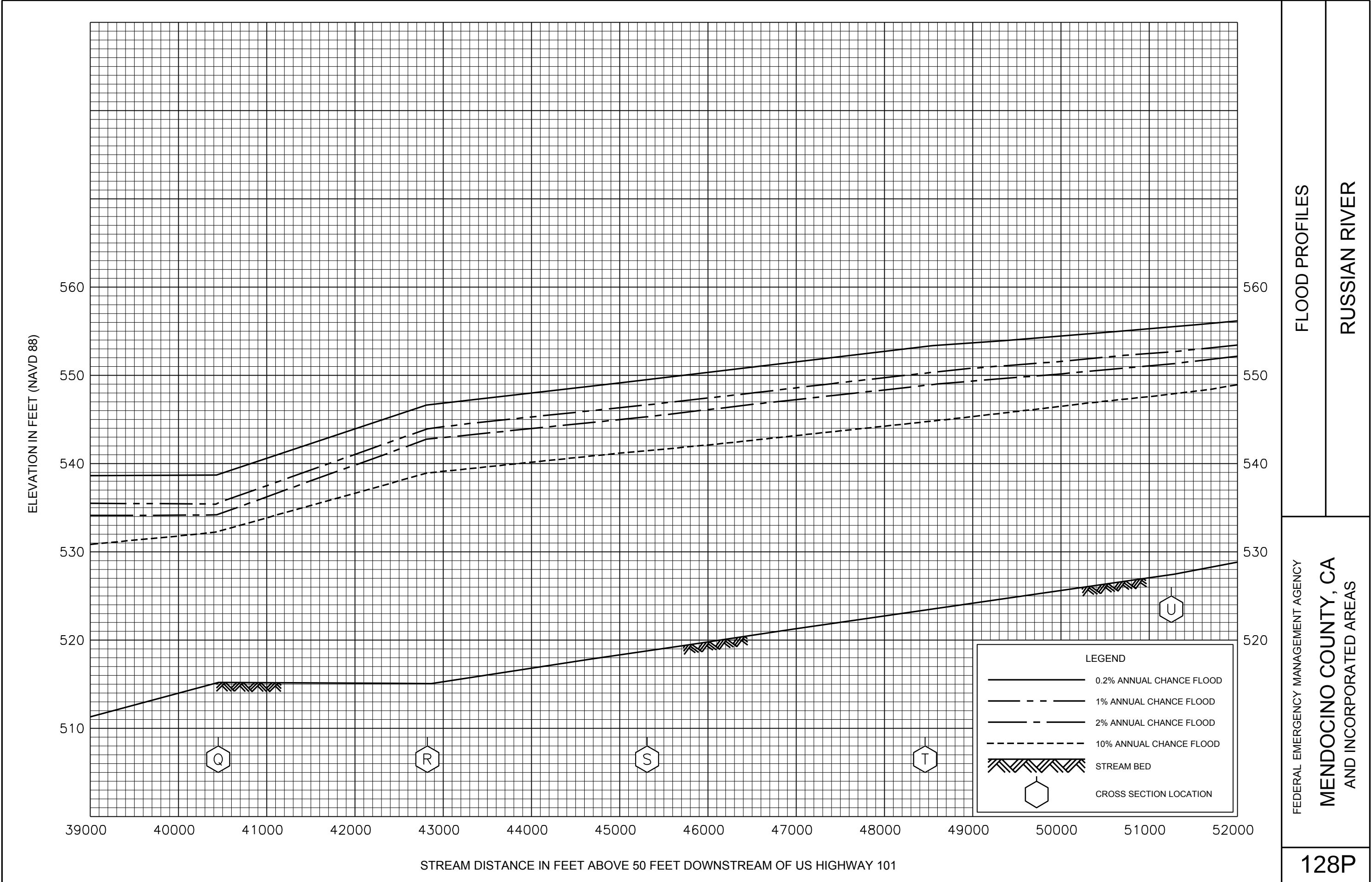
**MENDOCINO COUNTY, CA
AND INCORPORATED AREAS**

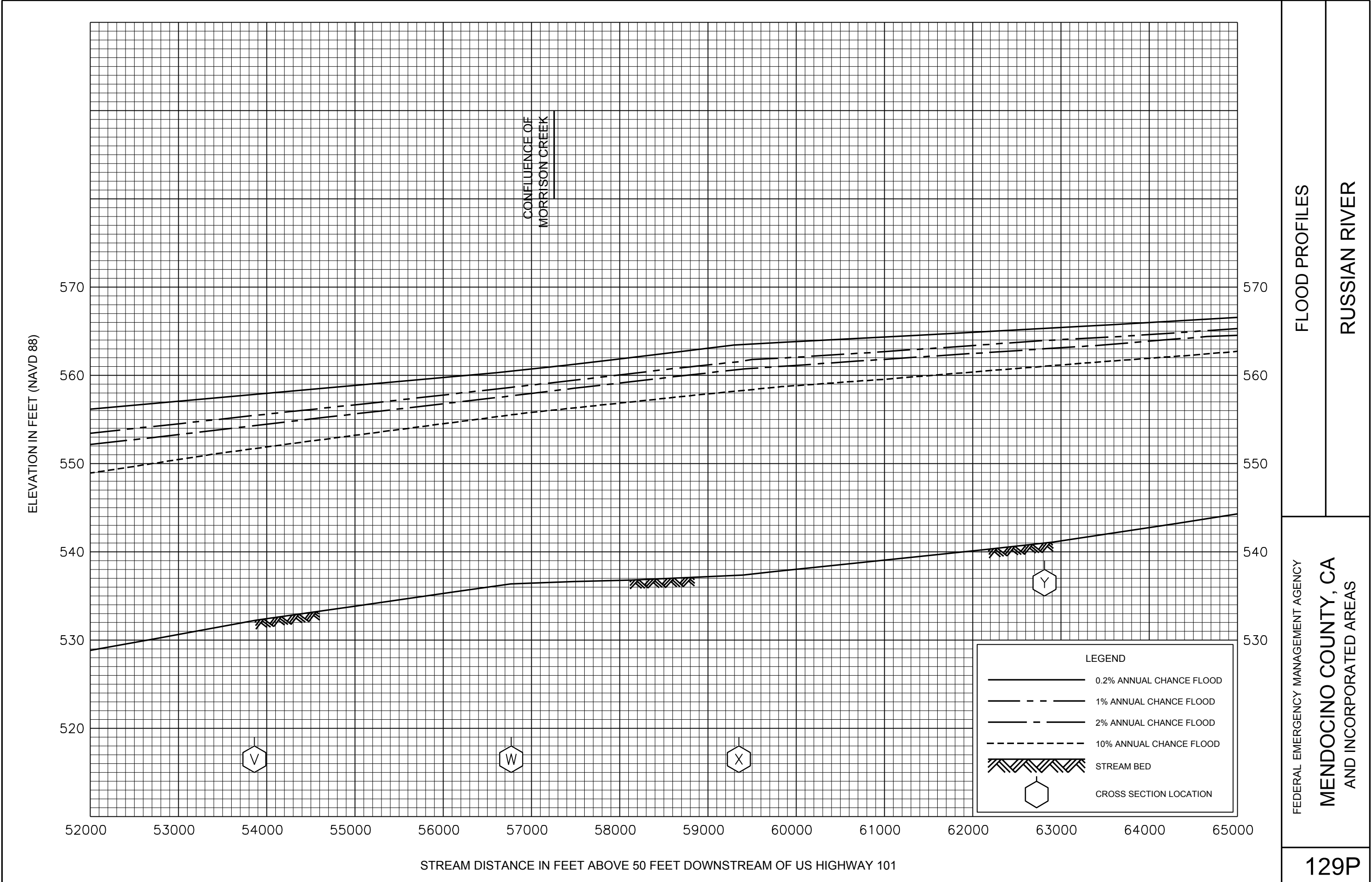
123P









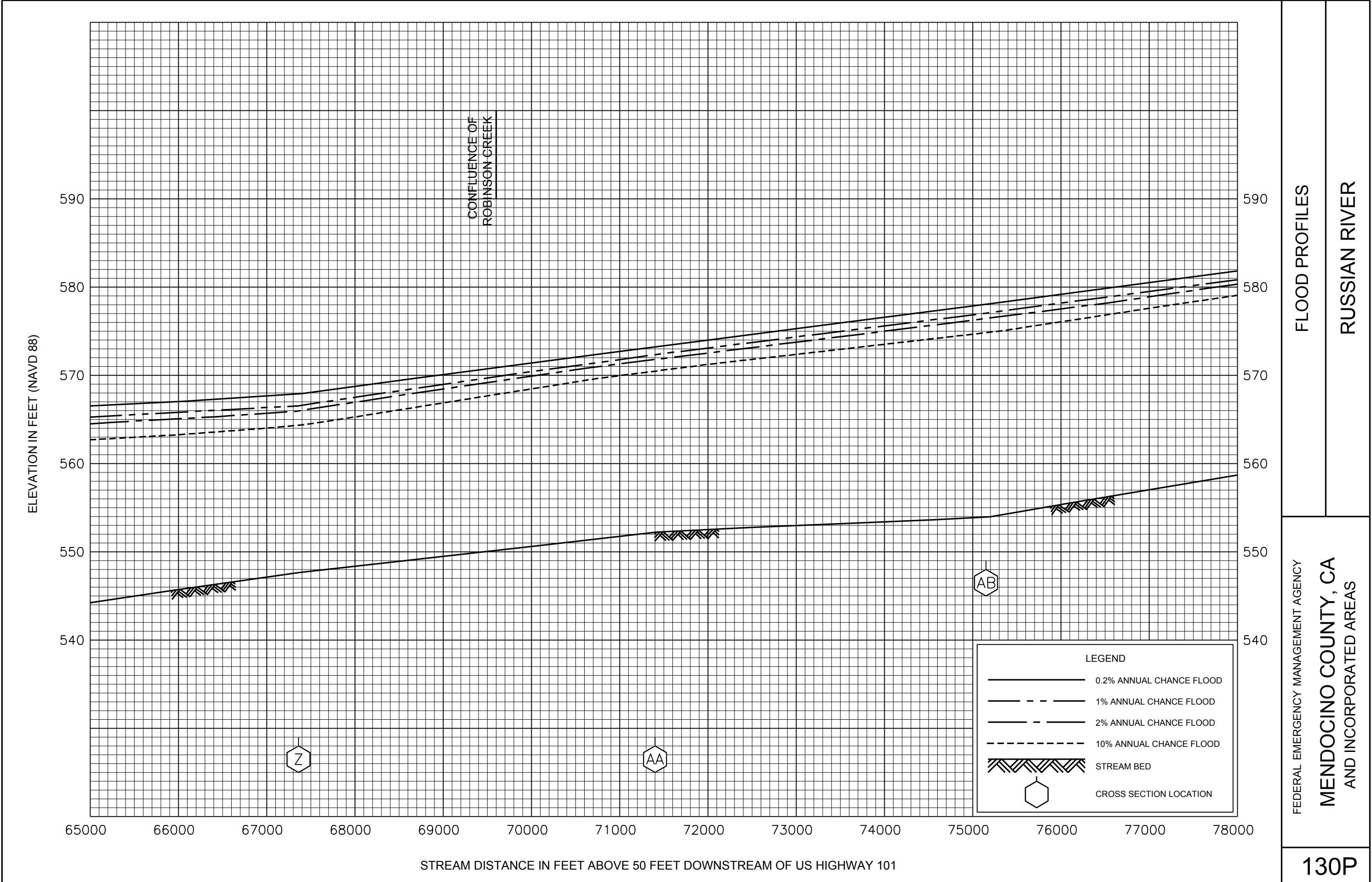


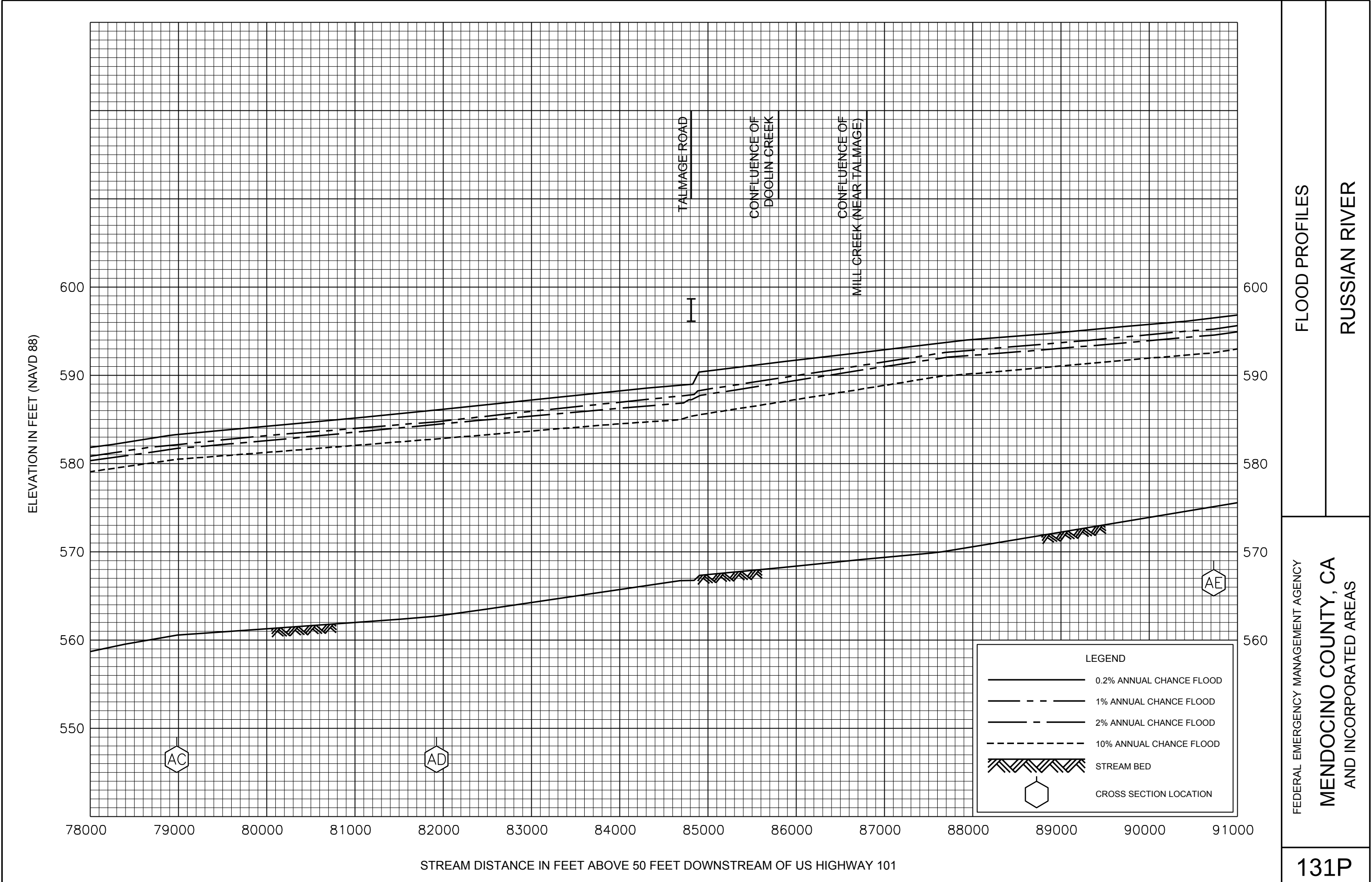
FLOOD PROFILES

RUSSIAN RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS





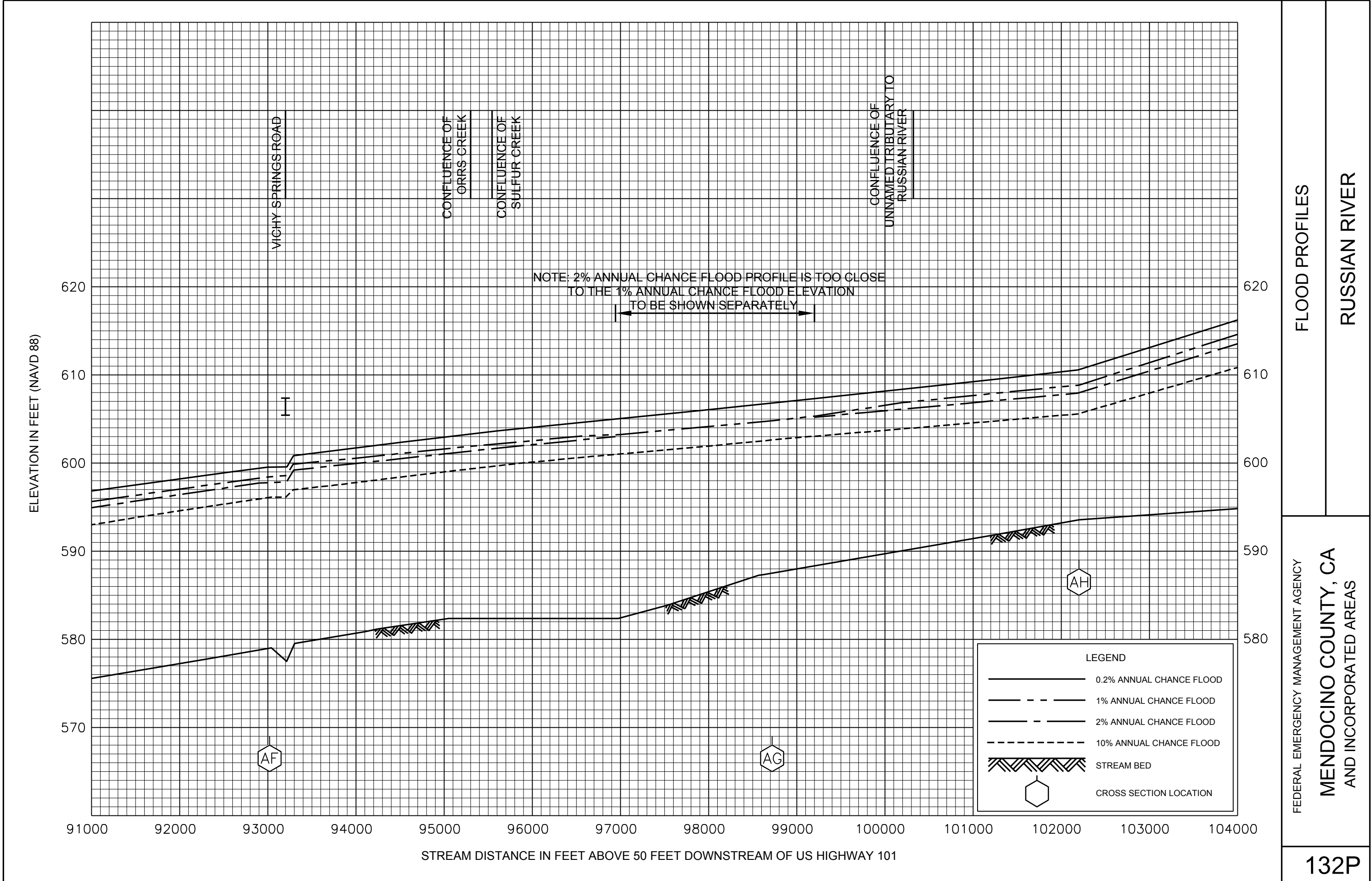
FLOOD PROFILES

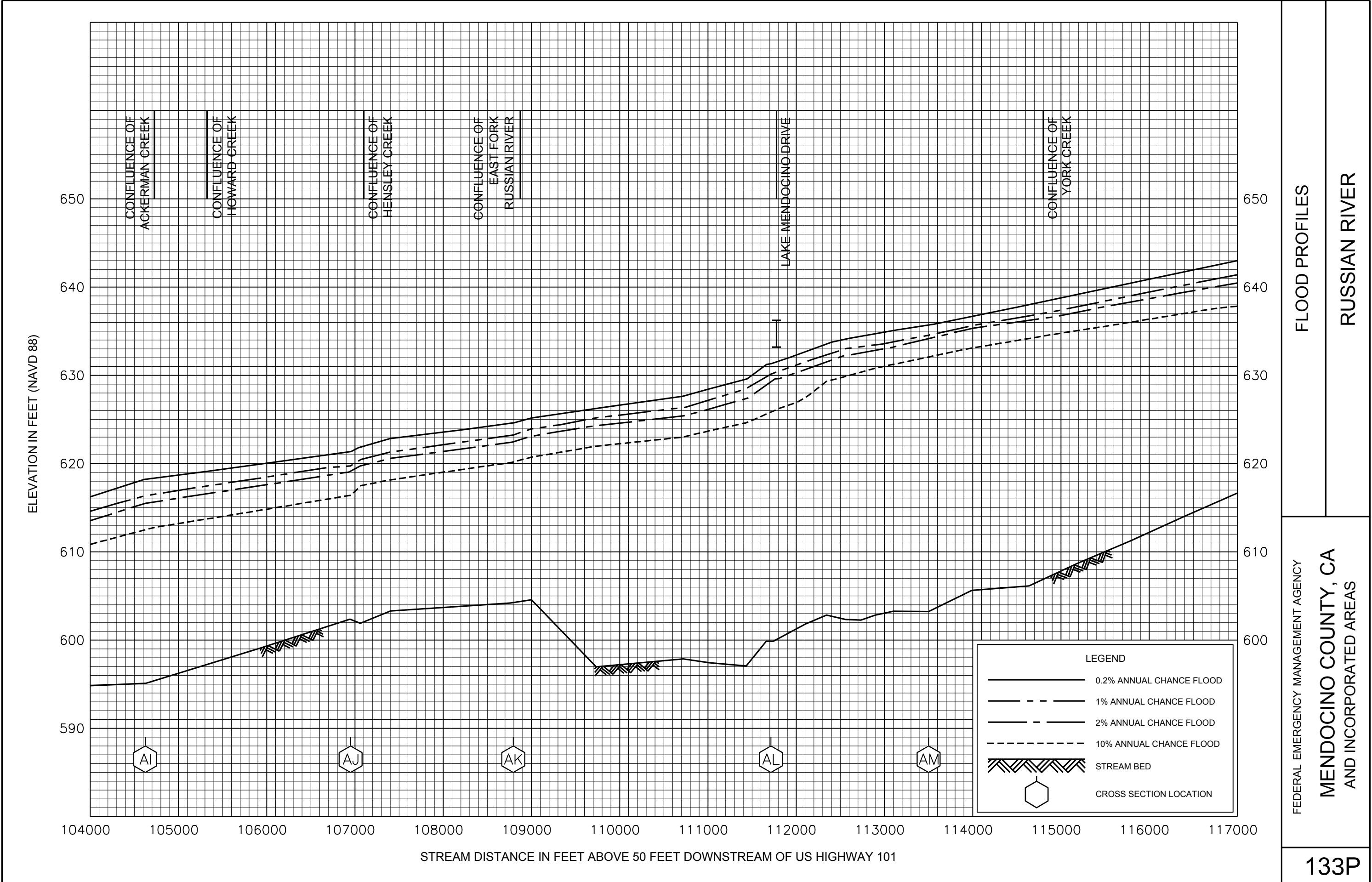
RUSSIAN RIVER

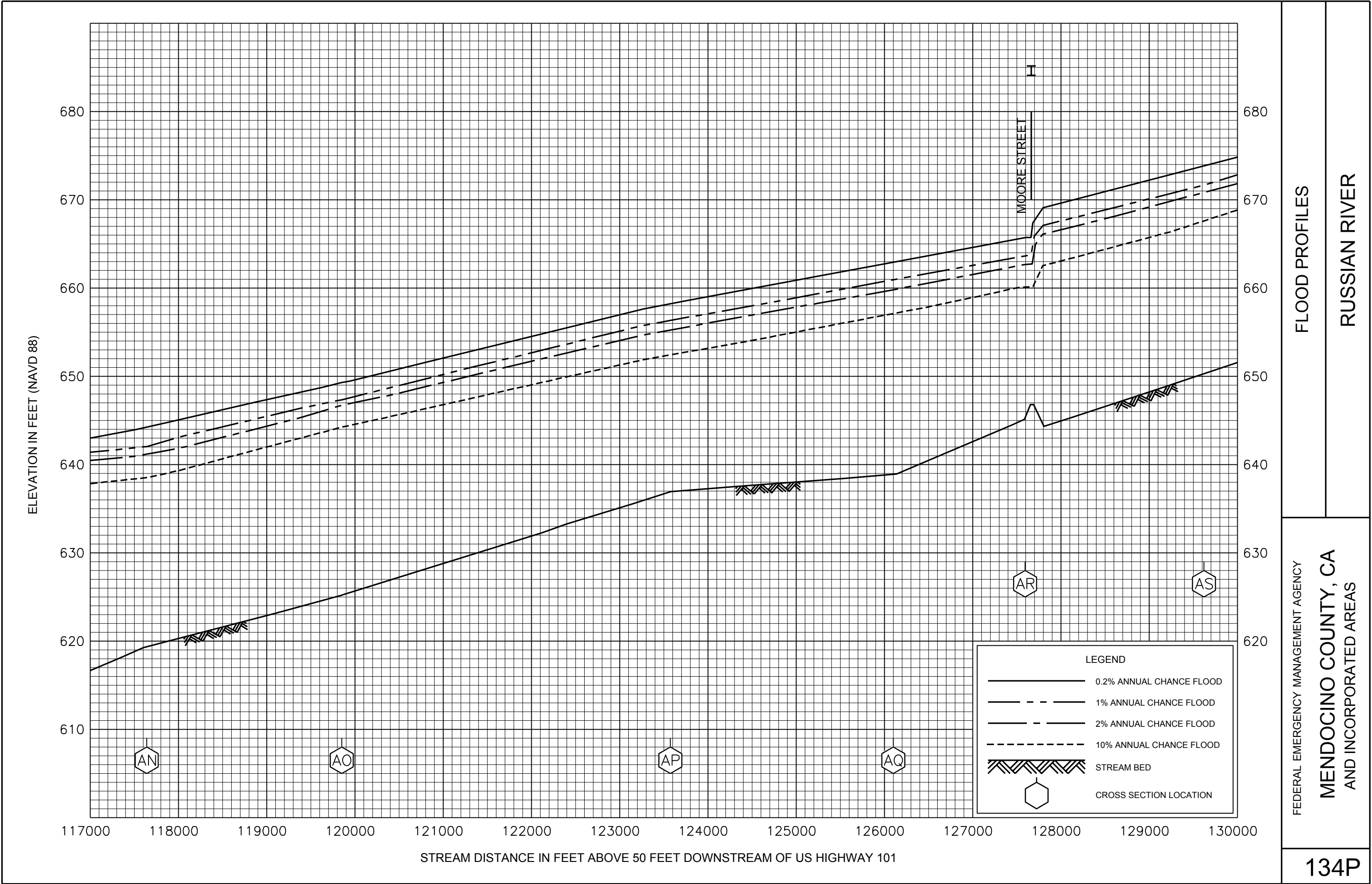
FEDERAL EMERGENCY MANAGEMENT AGENCY

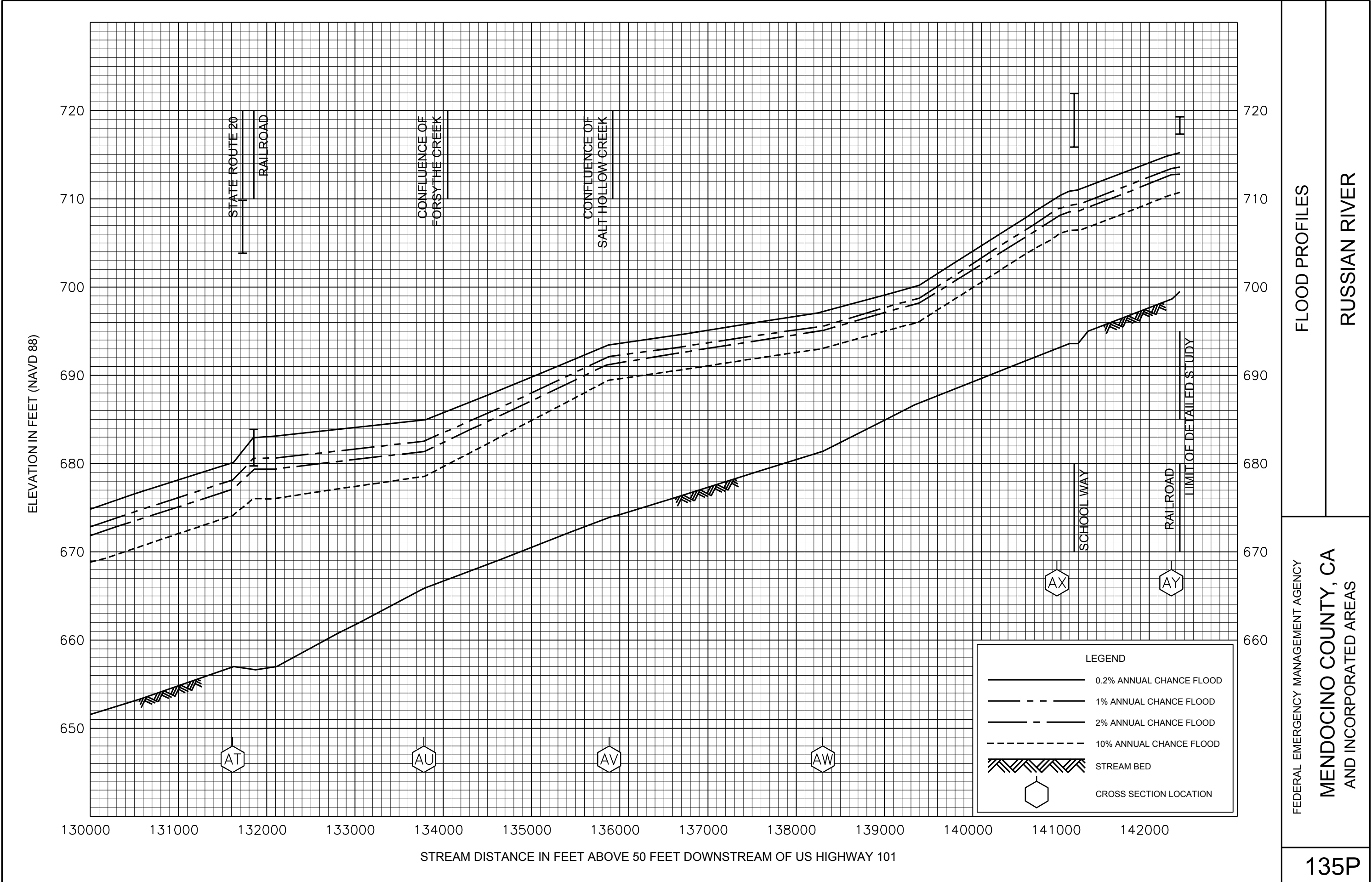
MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

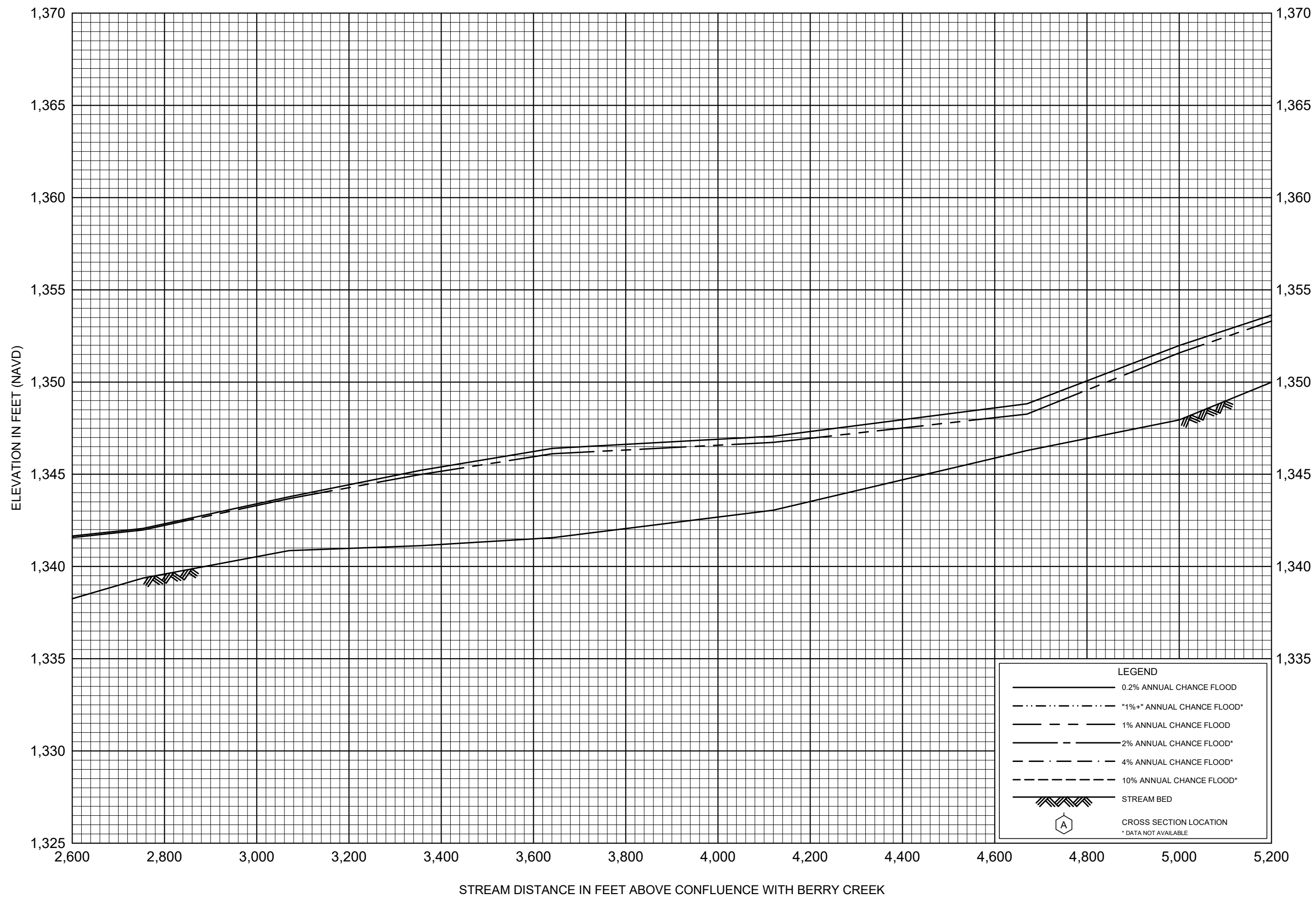
131P











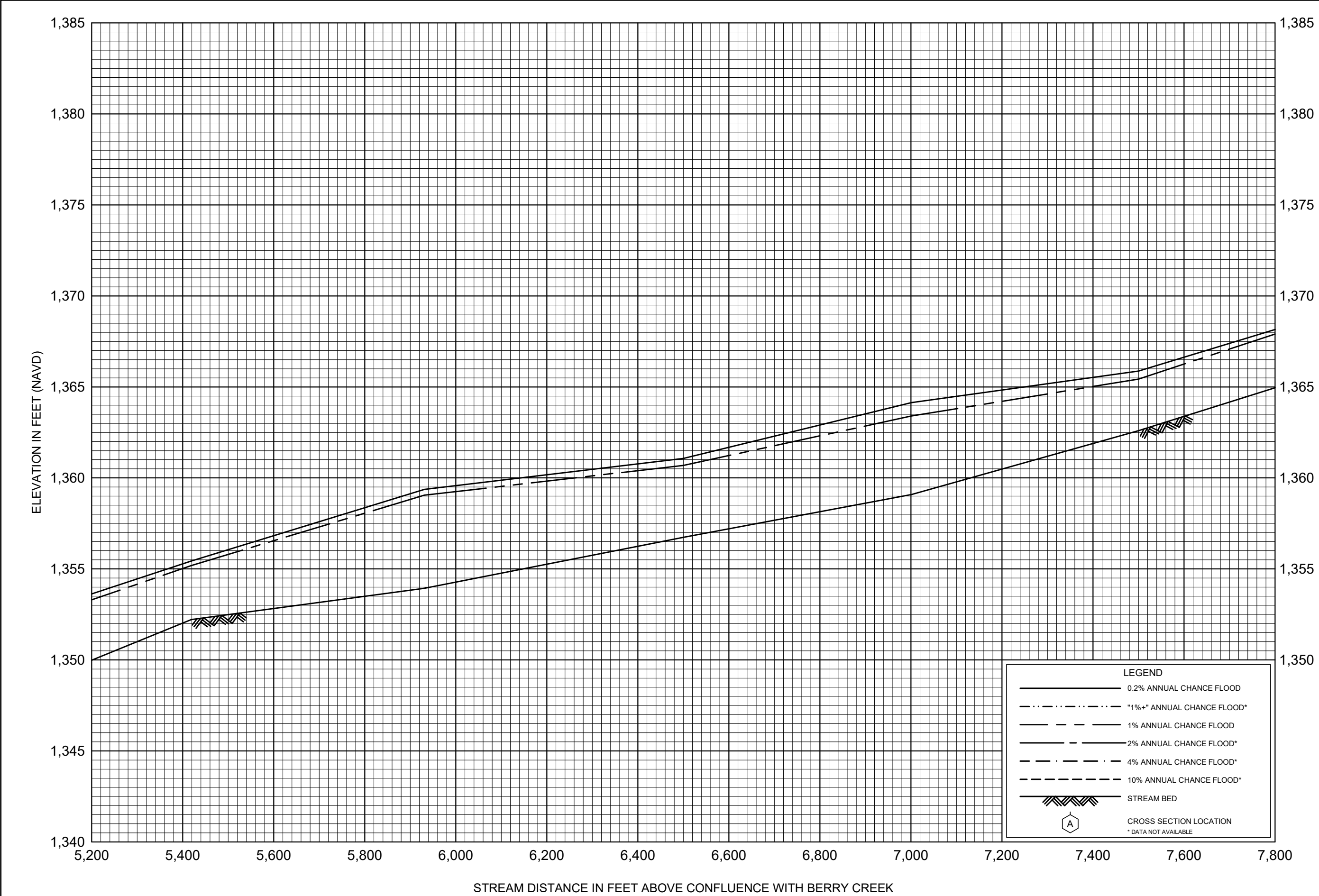
FLOOD PROFILES

SCOUT LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

137P



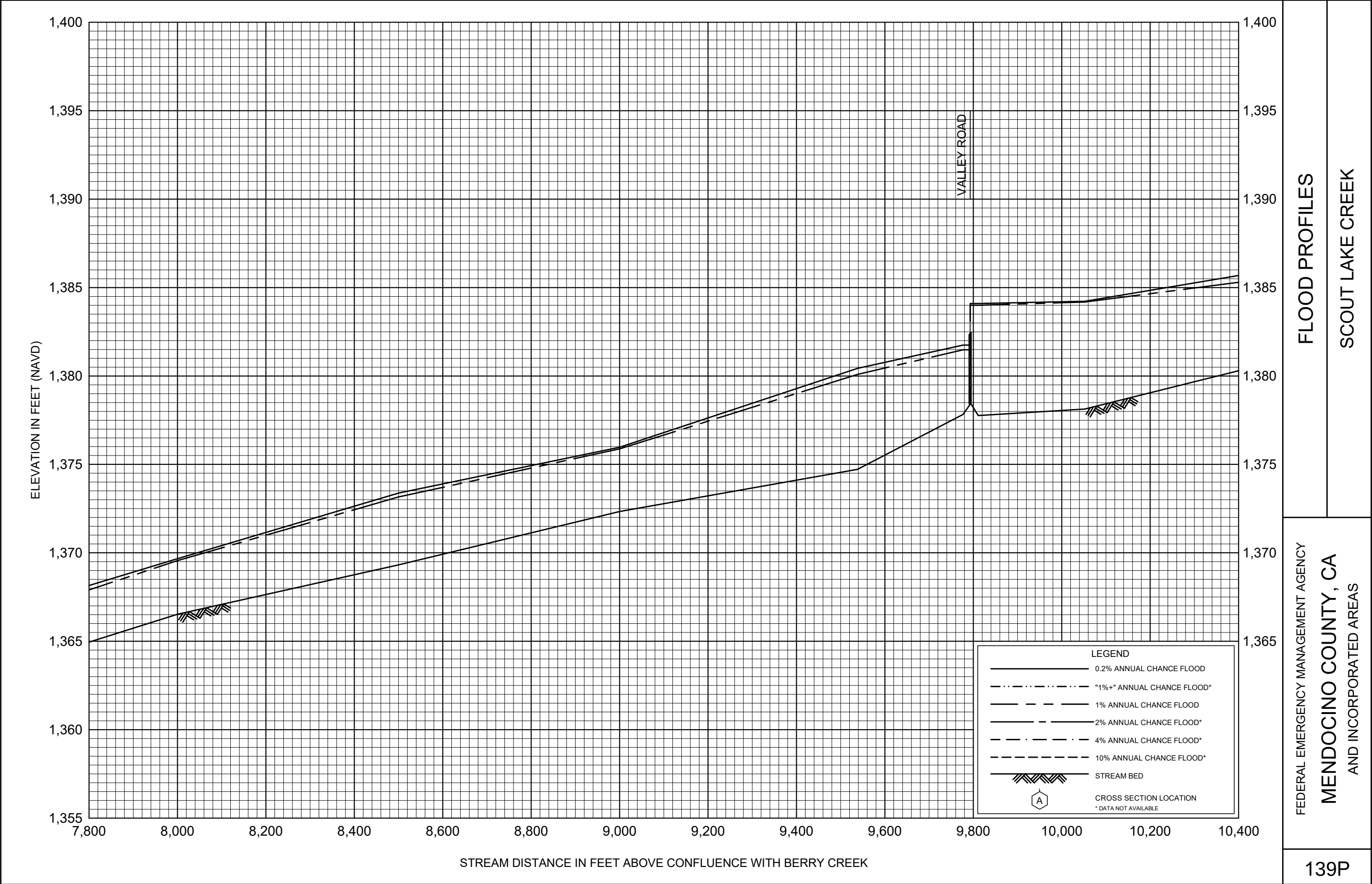
FLOOD PROFILES

SCOUT LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA

AND INCORPORATED AREAS

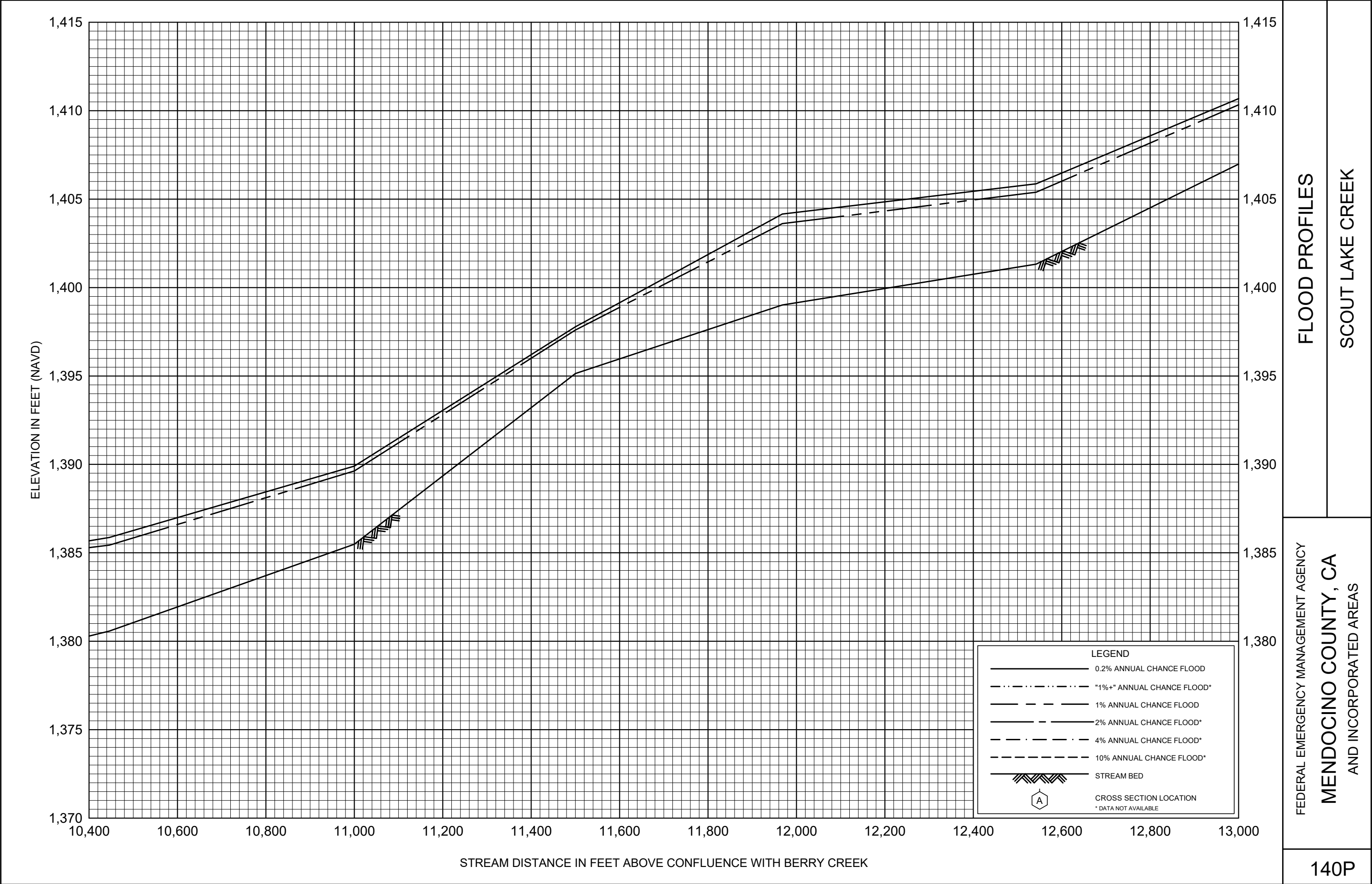


FLOOD PROFILES

SCOUT LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

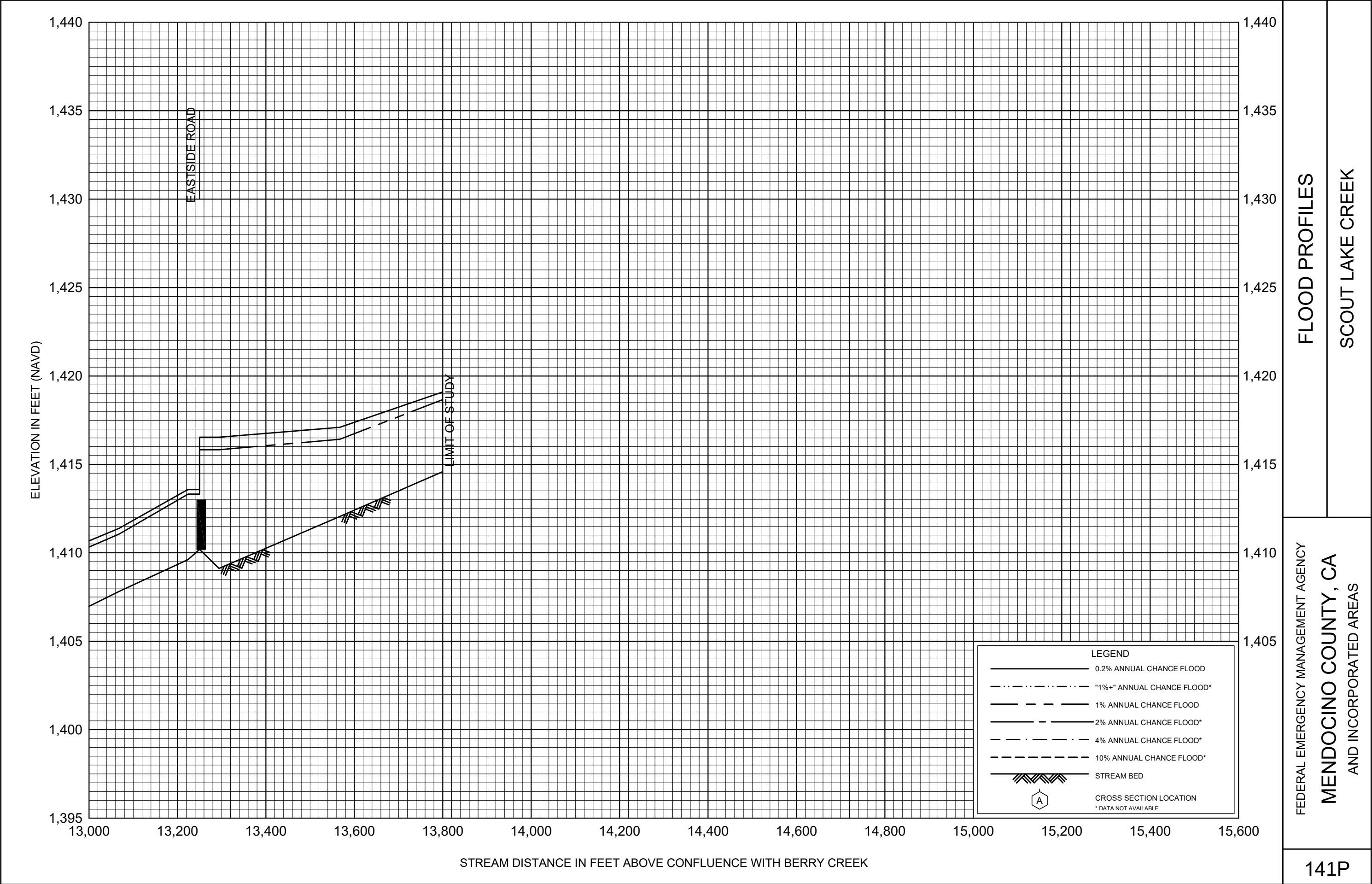


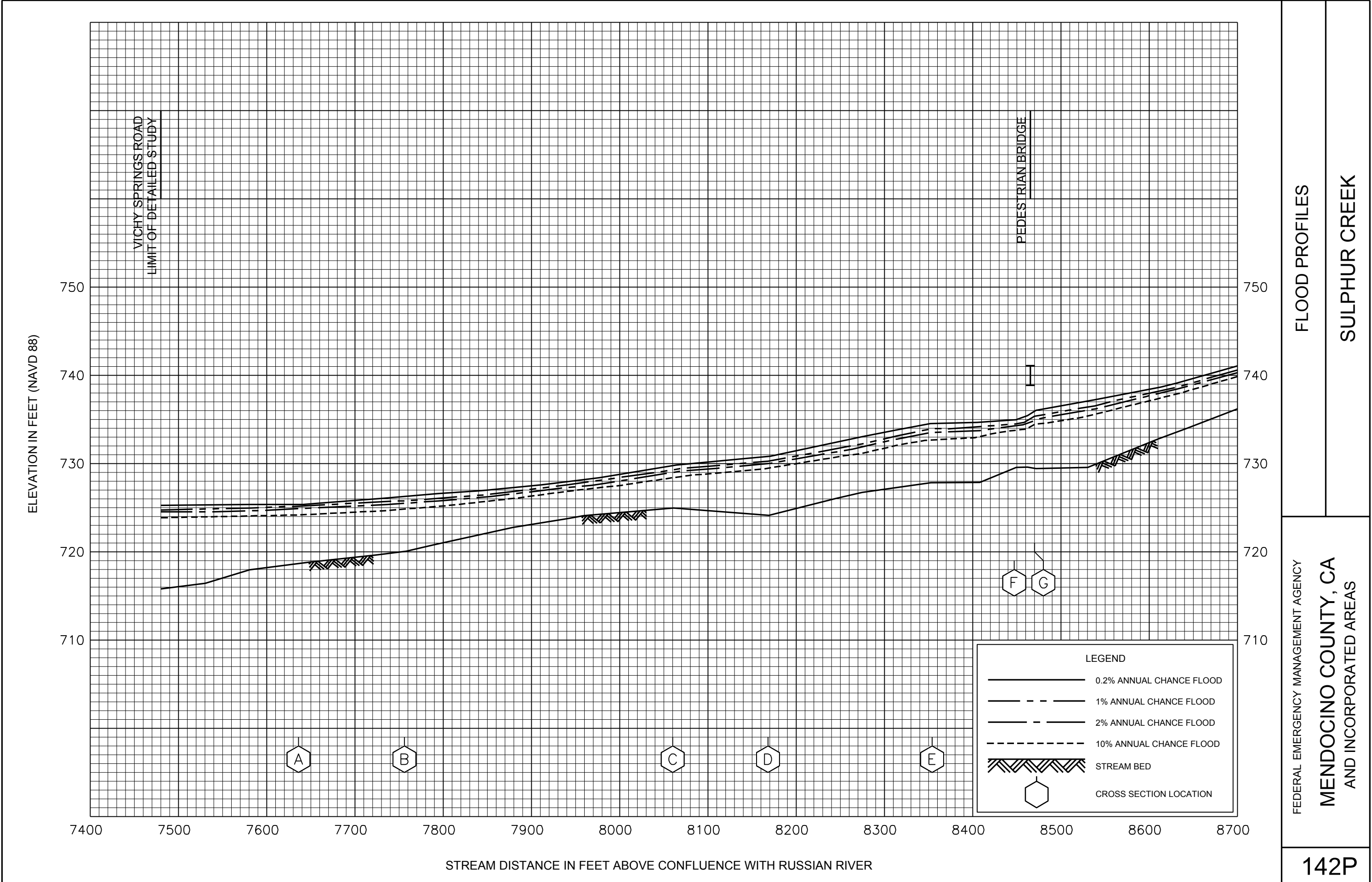
FLOOD PROFILES

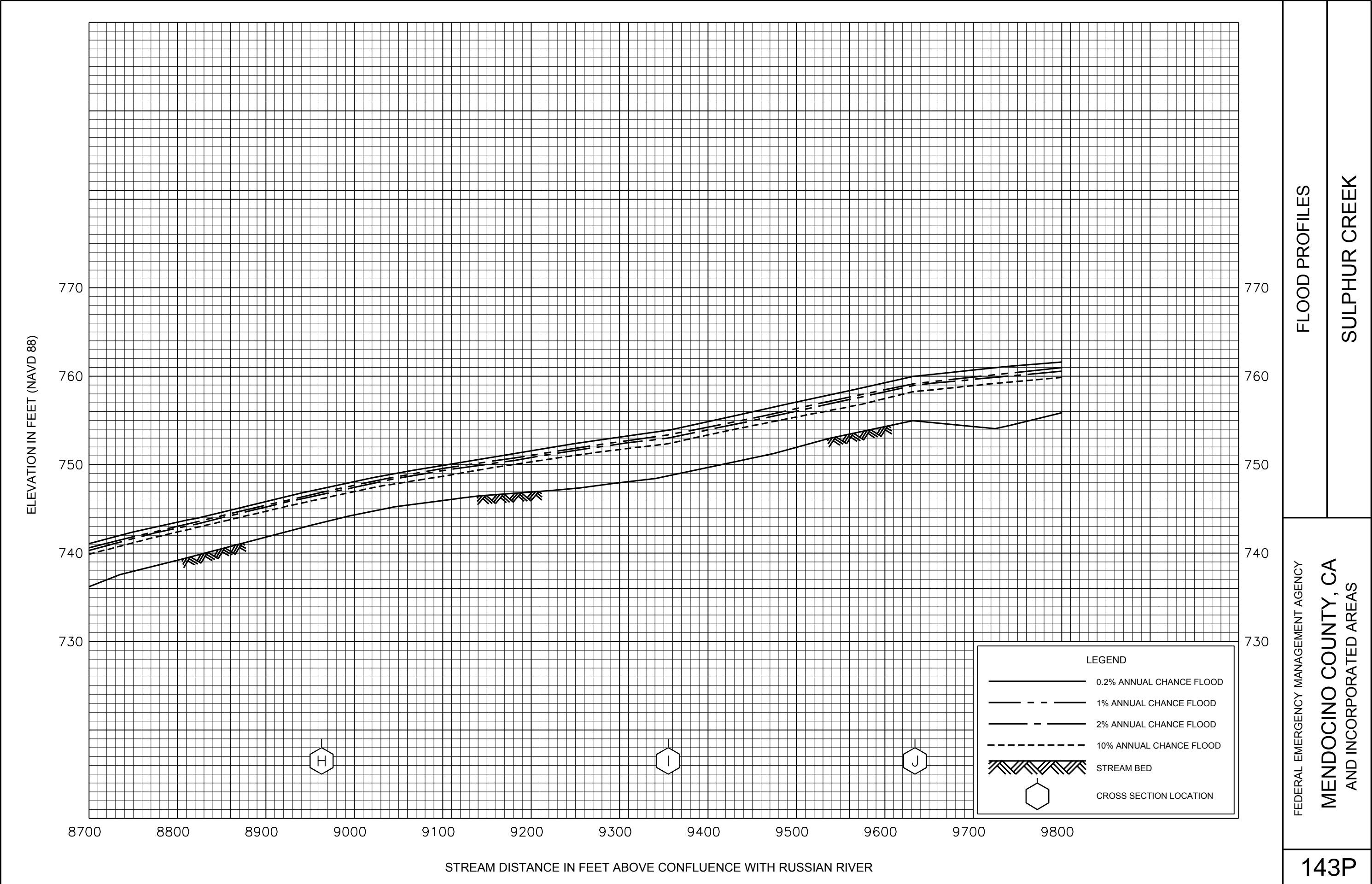
SCOUT LAKE CREEK

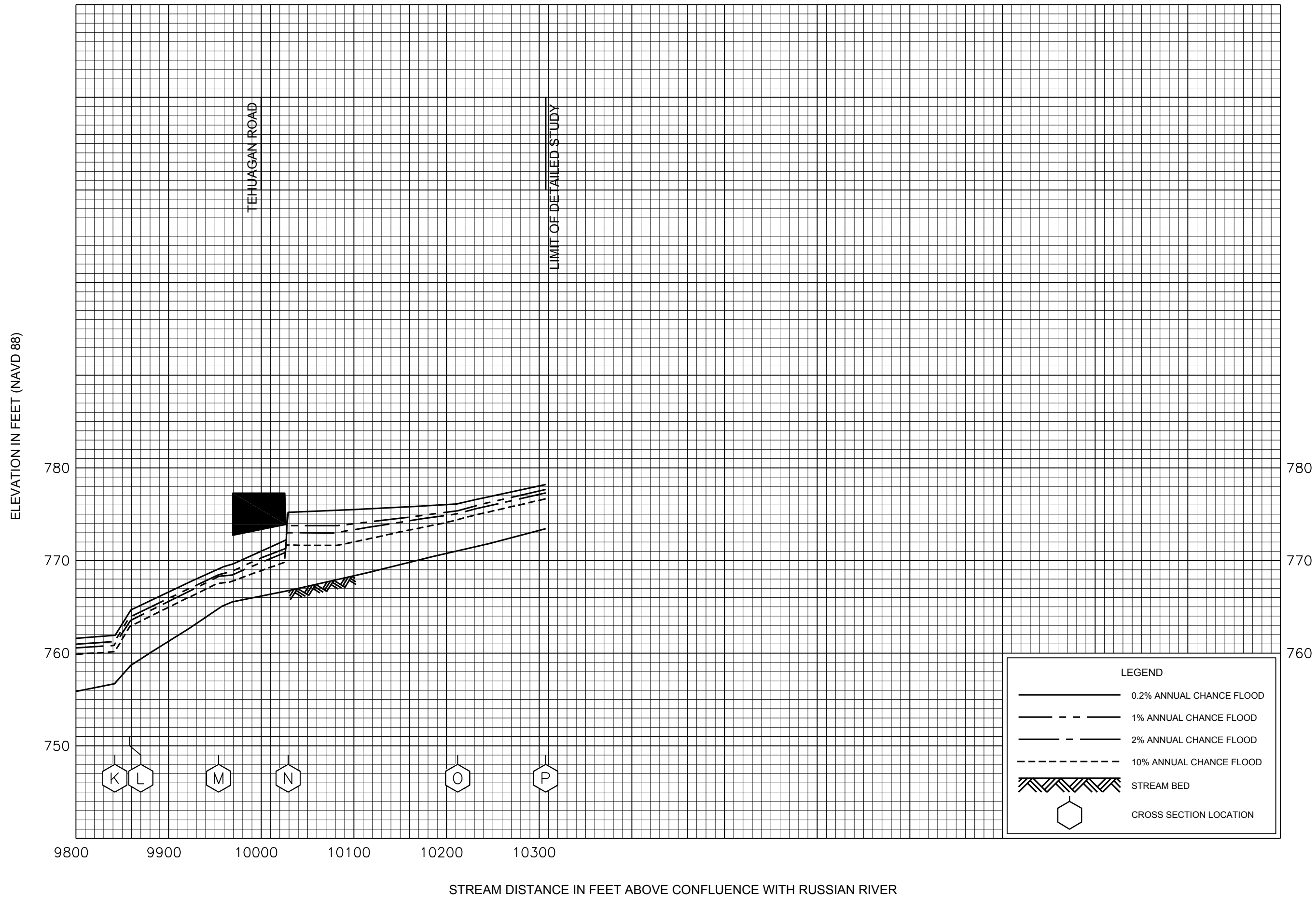
FEDERAL EMERGENCY MANAGEMENT AGENCY

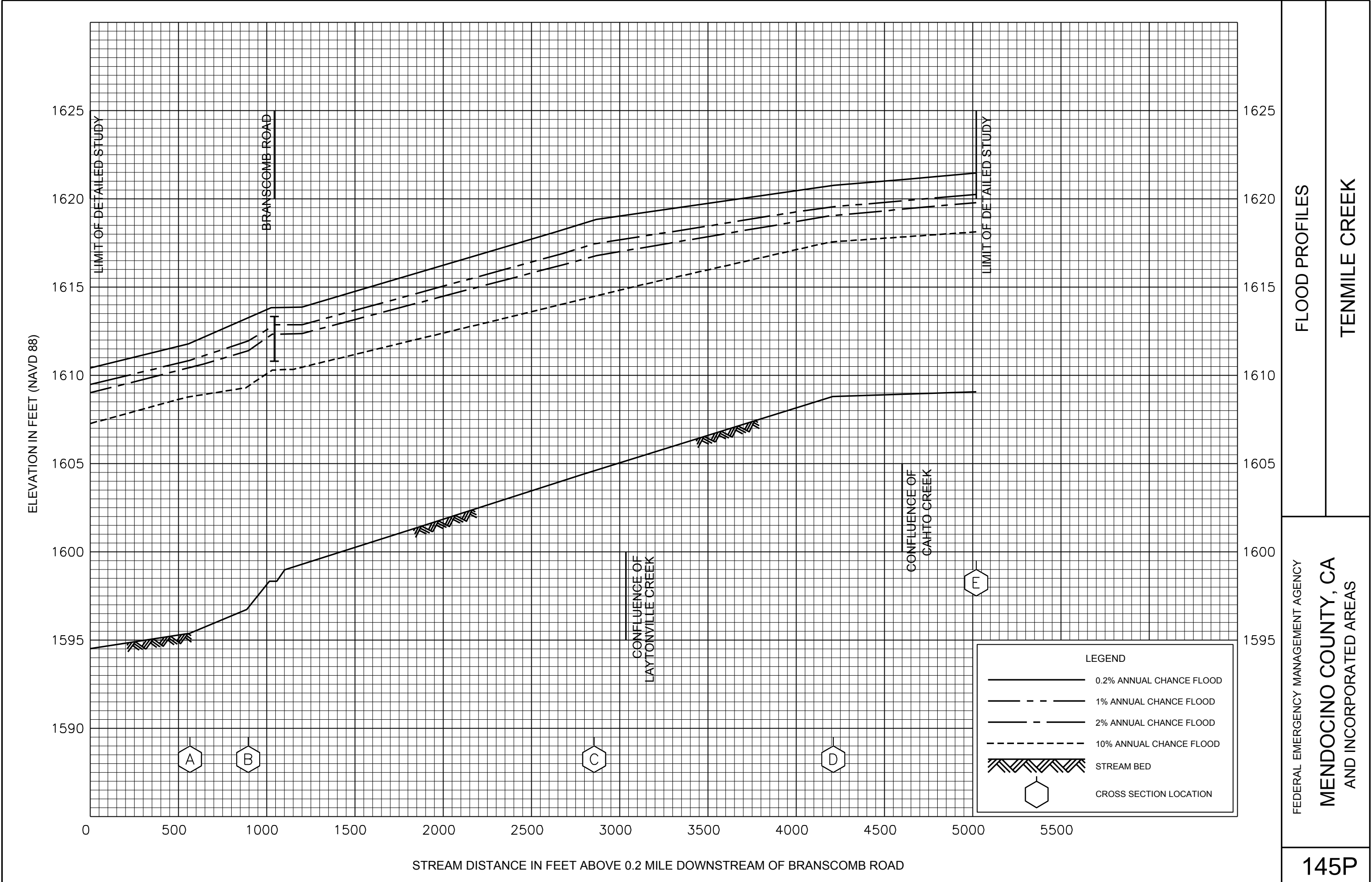
MENDOCINO COUNTY, CA
AND INCORPORATED AREAS

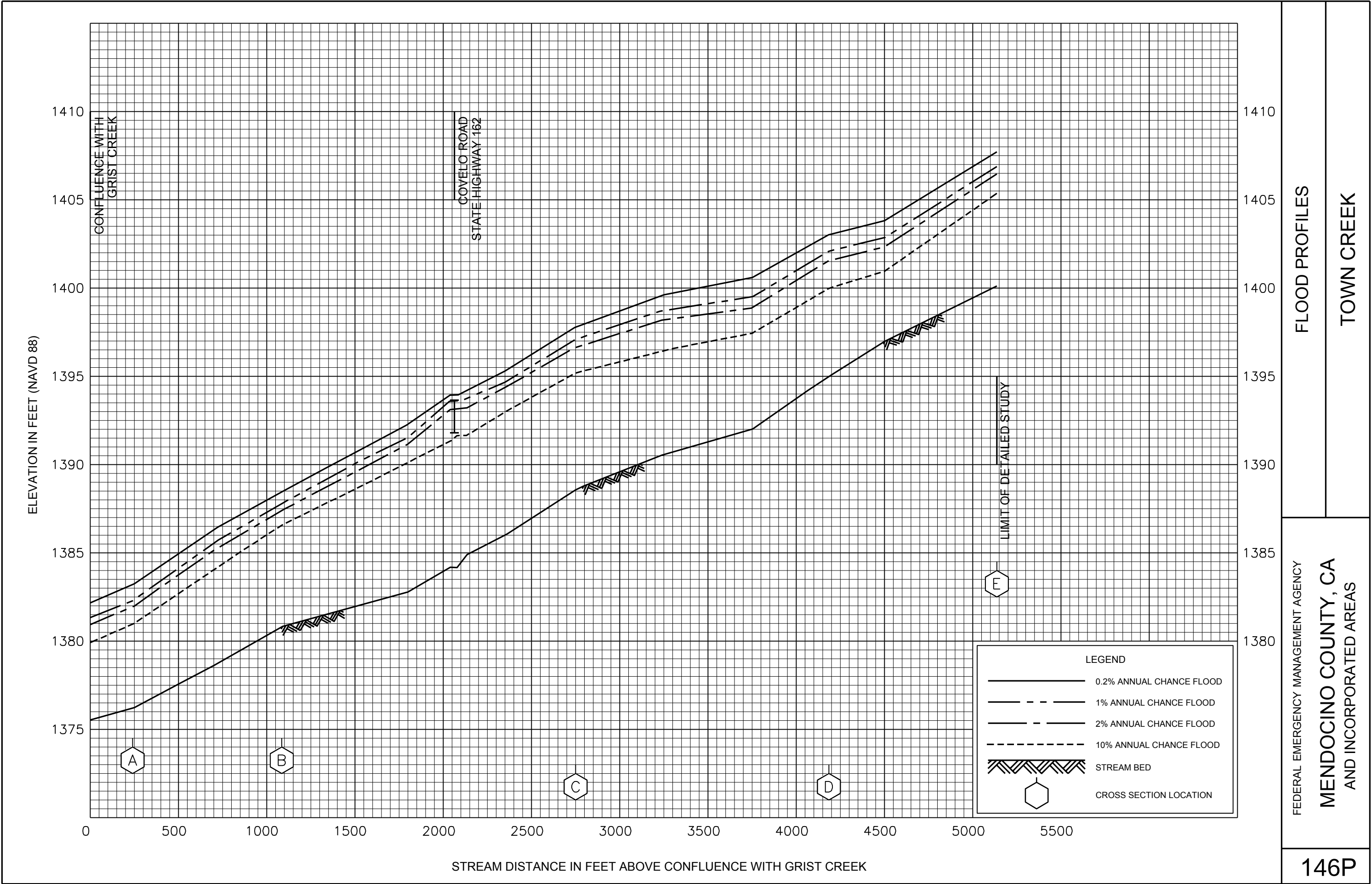


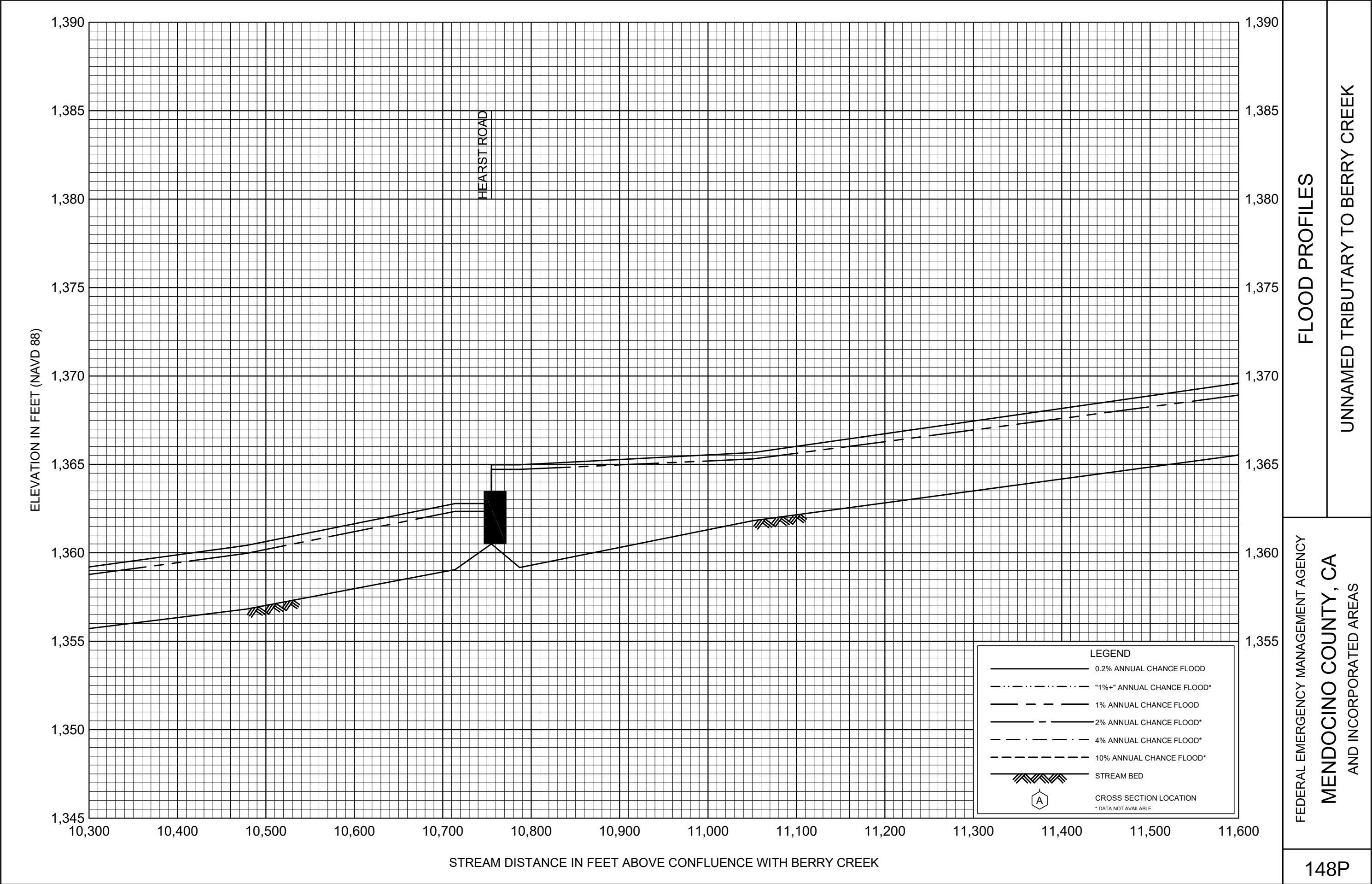


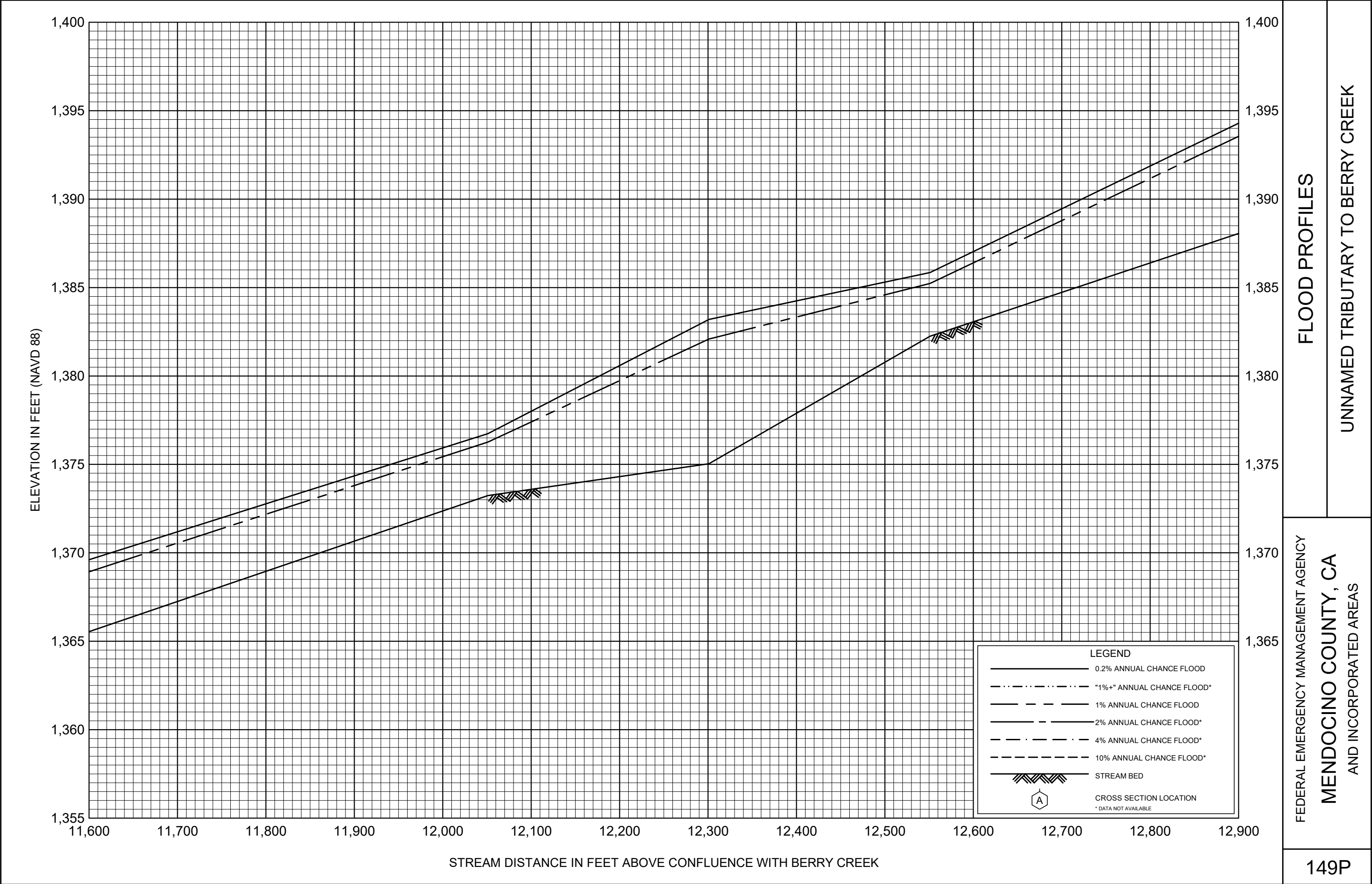






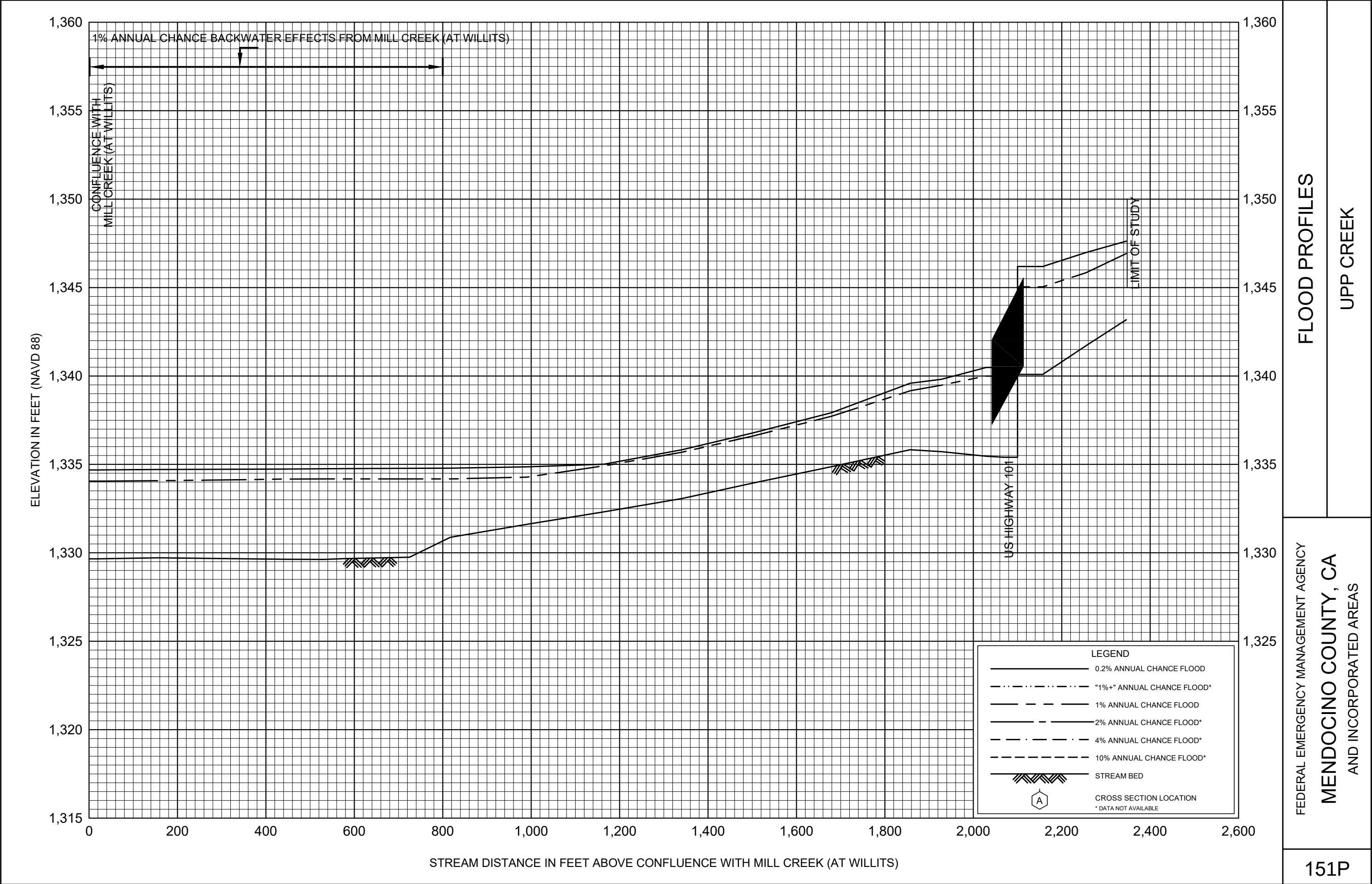


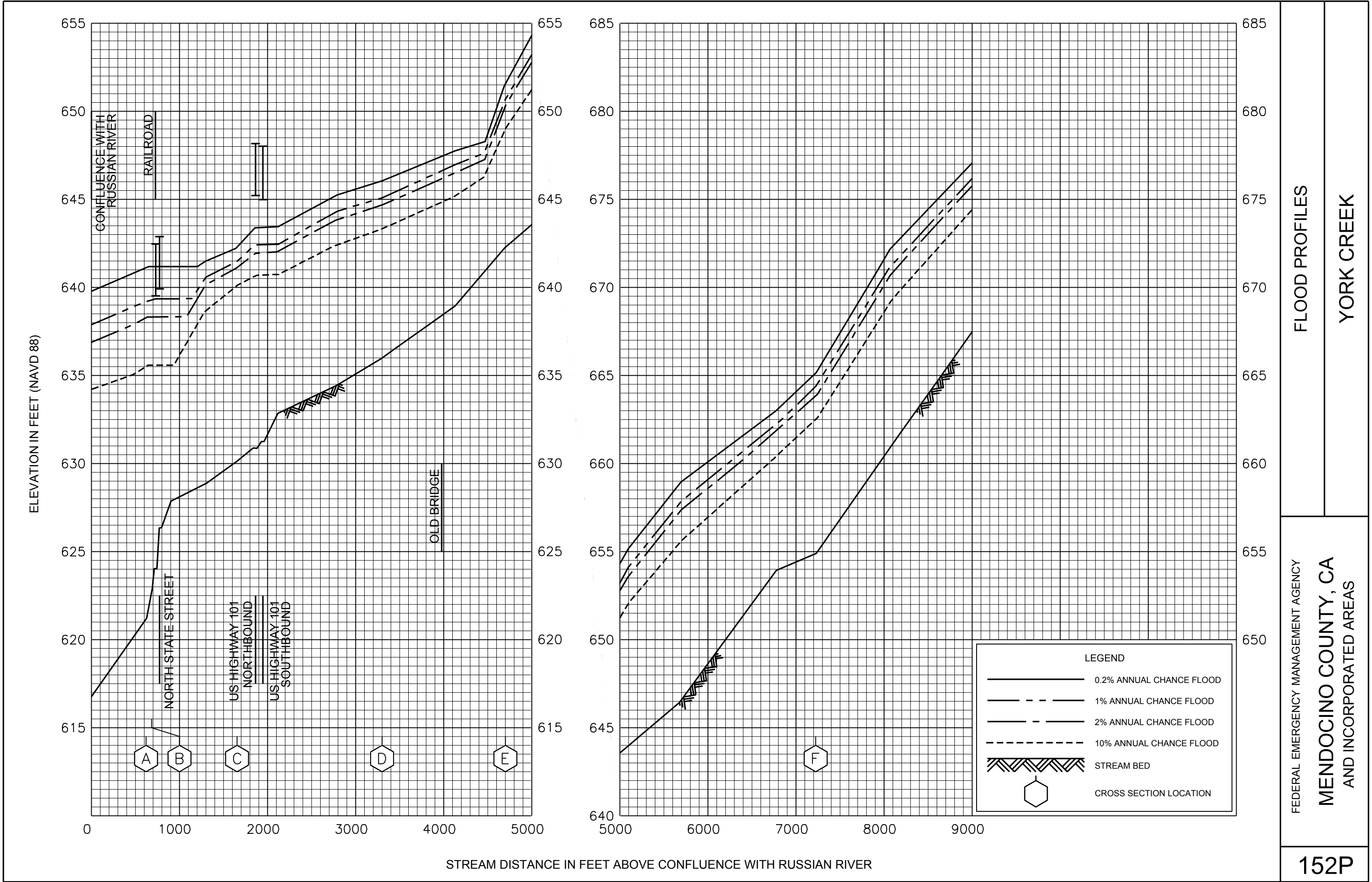






FEDERAL EMERGENCY MANAGEMENT AGENCY
MENDOCINO COUNTY, CA
AND INCORPORATED AREAS



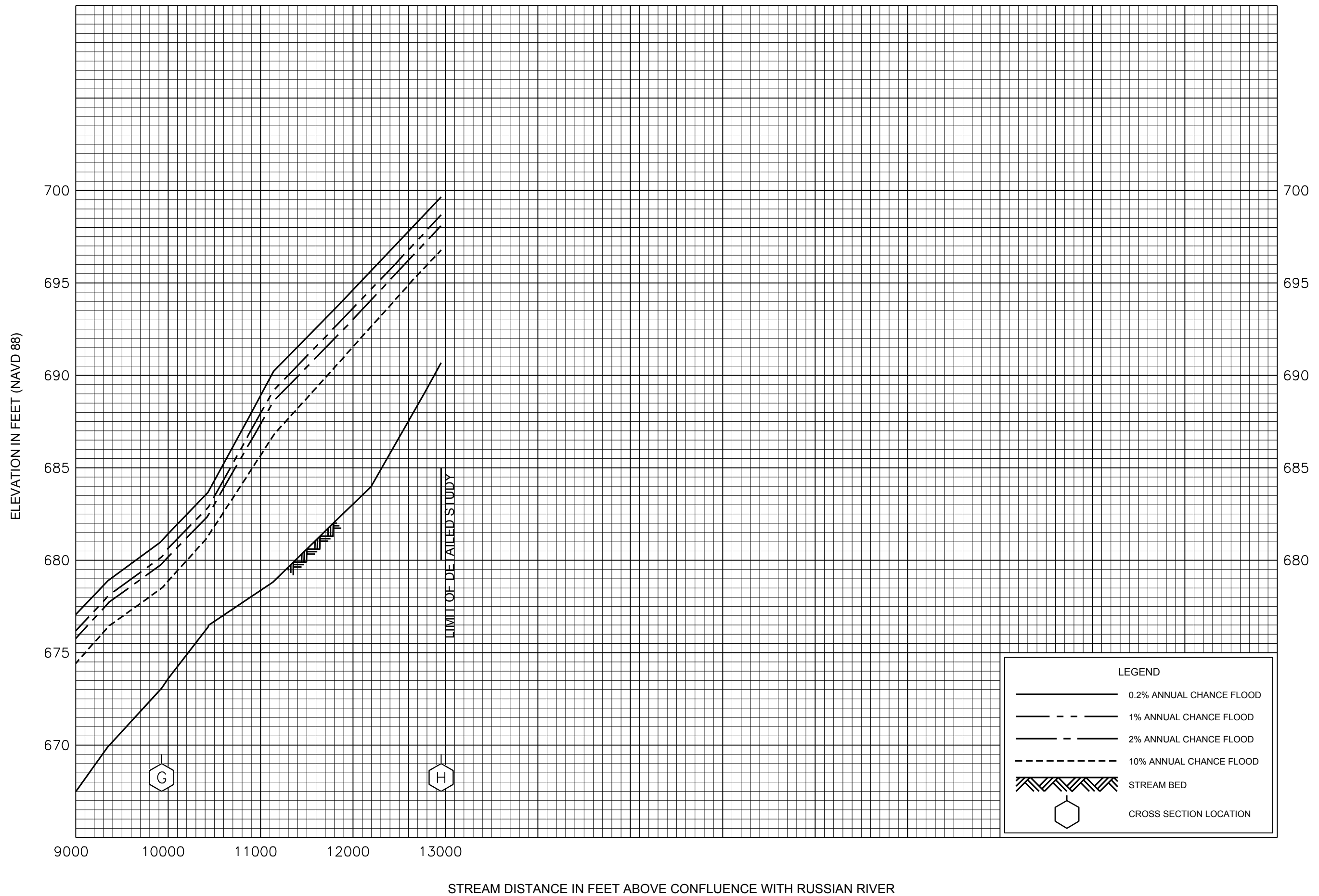


FLOOD PROFILES

YORK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MENDOCINO COUNTY, CA
AND INCORPORATED AREAS



FEDERAL EMERGENCY MANAGEMENT AGENCY

**MENDOCINO COUNTY, CA
AND INCORPORATED AREAS**

FLOOD PROFILES

YORK CREEK

153P