# FLOOD INSURANCE STUDY

## FEDERAL EMERGENCY MANAGEMENT AGENCY

**VOLUME 2 OF 3**

# SNOHOMISH COUNTY, WASHINGTON

### AND INCORPORATED AREAS

| COMMUNITY NAME | COMMUNITY NUMBER | COMMUNITY NAME | COMMUNITY NUMBER |
|---|---|---|---|
| ARLINGTON, CITY OF | 530271 | MILL CREEK, CITY OF | 530330 |
| BOTHELL, CITY OF | 530075 | MONROE, CITY OF | 530169 |
| BRIER, CITY OF | 530276 | MOUNTLAKE TERRACE, CITY OF | 530170 |
| DARRINGTON, TOWN OF | 530233 | MUKILTEO, CITY OF | 530235 |
| EDMONDS, CITY OF | 530163 | SNOHOMISH, CITY OF | 530171 |
| EVERETT, CITY OF | 530164 | SNOHOMISH COUNTY, UNINCORPORATED AREAS | 535534 |
| GOLD BAR, CITY OF | 530285 | | |
| GRANITE FALLS, CITY OF | 530287 | STANWOOD, CITY OF | 530172 |
| INDEX, TOWN OF | 530166 | STILLAGUAMISH TRIBE | 530238 |
| LAKE STEVENS, CITY OF | 530291 | SULTAN, CITY OF | 530173 |
| LYNNWOOD, CITY OF | 530167 | TULALIP TRIBE | 530225 |
| MARYSVILLE, CITY OF | 530168 | WOODWAY, TOWN OF | 530308 |

FEMA

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**Volume 3**

Exhibits



**Published Separately**

## 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.35 | 150 | 896 | 15.3 | 235.2 | 235.2 | 235.2 | 0.0 |
| B | 0.61 | 160 | 739 | 18.5 | 263.5 | 263.5 | 263.5 | 0.0 |
| C | 0.83 | 140 | 633 | 21.6 | 306.7 | 306.7 | 306.7 | 0.0 |
| D | 1.04 | 90 | 1,309 | 10.5 | 338.7 | 338.7 | 338.7 | 0.0 |
| E | 1.36 | 340 | 1,338 | 10.2 | 355.0 | 355.0 | 355.0 | 0.0 |
| F | 1.72 | 400 | 1,758 | 7.8 | 373.7 | 373.7 | 373.7 | 0.0 |
| G | 2.15 | 750 | 984 | 13.9 | 393.0 | 393.0 | 393.0 | 0.0 |
| H | 2.59 | 360 | 1,853 | 7.4 | 417.7 | 417.7 | 417.7 | 0.0 |
| I | 2.89 | 220 | 1,092 | 12.5 | 433.5 | 433.5 | 433.5 | 0.0 |
| J | 3.25 | 377 | 1,375 | 10.0 | 453.5 | 453.5 | 453.5 | 0.0 |
| K | 3.66 | 387/492[2] | 1,424 | 9.6 | 472.3 | 472.3 | 472.3 | 0.0 |
| L | 3.97 | 470 | 2,319 | 5.9 | 486.7 | 486.7 | 486.7 | 0.0 |
| M | 4.20 | 161/622[2] | 1,124 | 12.2 | 495.5 | 495.5 | 495.5 | 0.0 |
| N | 4.42 | 1,880 | 1,613 | 8.5 | 504.8 | 504.8 | 504.8 | 0.0 |
| O | 4.67 | 580 | 1,406 | 9.7 | 513.8 | 513.8 | 513.8 | 0.0 |
| P | 5.00 | 160 | 1,171 | 11.7 | 525.1 | 525.1 | 525.1 | 0.0 |
| Q | 5.28 | 180 | 1,952 | 6.3 | 537.8 | 537.8 | 537.8 | 0.0 |
| R | 5.53 | 497 | 1,204 | 9.0 | 547.5 | 547.5 | 547.5 | 0.0 |
| S | 5.91 | 650 | 1,451 | 7.4 | 564.5 | 564.5 | 564.5 | 0.0 |
| T | 6.16 | 200 | 1,098 | 9.8 | 572.9 | 572.9 | 572.9 | 0.0 |
| U | 6.57 | 810 | 943 | 11.5 | 593.5 | 593.5 | 593.5 | 0.0 |
| V | 7.00 | 300 | 1,522 | 7.1 | 608.9 | 608.9 | 608.9 | 0.0 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]WIDTH/WIDTH INCLUDING SPLIT FLOW

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SNOHOMISH COUNTY, WASHINGTON**

AND INCORPORATED AREAS

**FLOODWAY DATA**

**FLOODING SOURCE: CANYON 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 7.21 | 230 | 899 | 12.0 | 617.1 | 617.1 | 617.1 | 0.0 |
| X | 7.54 | 324 | 1,109 | 9.7 | 640.3 | 640.3 | 640.3 | 0.0 |
| Y | 7.90 | 150 | 940 | 11.5 | 656.0 | 656.0 | 656.0 | 0.0 |
| Z | 8.20 | 947 | 739 | 14.6 | 679.1 | 679.1 | 679.1 | 0.0 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET)[2] | SECTION AREA (SQ. FEET)[2] | MEAN VELOCITY (FEET PER SECOND)[2] | REGULATORY | WITHOUT FLOODWAY[2] | WITH FLOODWAY[2] | INCREASE[2] |
| A | 18,216 | 4,528 | 28,000 | 5.3 | 55.8 | 55.8 | 56.3 | 0.5 |
| B | 20,909 | 1,347 | 12,714 | 11.4 | 58.7 | 58.4 | 58.8 | 0.4 |
| C | 21,067 | 1,300 | 13,245 | 11.0 | 59.8 | 58.6 | 59.1 | 0.5 |
| D | 21,701 | 3,381 | 31,981 | 4.6 | 61.4 | 60.9 | 61.7 | 0.8 |
| E | 22,757 | 4,450 | 36,336 | 4.0 | 62.5 | 62.1 | 63.1 | 1.0 |
| F | 25,080 | 4,982 | 41,309 | 3.6 | 64.5 | 65.0 | 65.7 | 0.7 |
| G | 25,608 | 4,981 | 41,036 | 3.6 | 65.1 | 65.2 | 65.9 | 0.7 |
| H | 27,614 | 4,185 | 28,252 | 2.6 | 66.7 | 66.9 | 67.4 | 0.5 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER
[2]DATA REFLECTS COMBINED FLOODWAY FROM SKYKOMISH RIVER, RILEY SLOUGH AND HASKEL SLOUGH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: HASKEL SLOUGH**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.65 | 436 | 1,369 | 1.9 | 173.8 | 173.8 | 174.1 | 0.3 |
| B | 0.79 | 375 | 1,064 | 2.5 | 174.8 | 174.8 | 175.1 | 0.3 |
| C | 1.00 | 168 | 802 | 3.3 | 176.7 | 176.7 | 177.2 | 0.5 |
| D | 1.16 | 115 | 362 | 7.3 | 178.9 | 178.9 | 179.2 | 0.3 |
| E | 1.32 | 233 | 666 | 4.0 | 182.3 | 182.3 | 182.3 | 0.0 |
| F | 1.58 | 42 | 653 | 4.1 | 186.9 | 186.9 | 187.6 | 0.7 |
| G | 1.83 | 231 | 1,496 | 1.8 | 188.6 | 188.6 | 189.6 | 1.0 |
| H | 2.07 | 194 | 814 | 3.3 | 190.2 | 190.2 | 191.0 | 0.8 |
| I | 2.37 | 225 | 455 | 5.8 | 195.6 | 195.6 | 196.1 | 0.5 |
| J | 2.63 | 134 | 714 | 3.7 | 203.5 | 203.5 | 204.2 | 0.7 |
| K | 2.92 | 166 | 495 | 5.4 | 212.0 | 212.0 | 213.0 | 1.0 |
| L | 3.26 | 91 | 384 | 6.9 | 239.3 | 239.3 | 239.3 | 0.0 |
| M | 3.65 | 118 | 195 | 10.3 | 259.6 | 259.6 | 260.3 | 0.7 |
| N | 3.78 | 132 | 331 | 6.1 | 272.5 | 272.5 | 272.7 | 0.2 |
| O | 3.87 | 162 | 246 | 8.2 | 280.8 | 280.8 | 280.9 | 0.1 |
| P | 4.02 | 204 | 412 | 4.9 | 295.1 | 295.1 | 295.3 | 0.2 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: MAY 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A-S[2] | | | | | | | | |
| T | 9,182 | 318 | 1,161 | 1.2 | 43.8 | 43.8 | 43.8 | 0.0 |
| U | 9,692 | 117 | 307 | 4.7 | 44.1 | 44.1 | 44.4 | 0.3 |
| V | 9,825 | 59 | 273 | 5.3 | 44.4 | 44.4 | 44.9 | 0.5 |
| W | 10,001 | 49 | 205 | 7.0 | 45.1 | 45.1 | 45.2 | 0.1 |
| X | 10,351 | 55 | 254 | 5.7 | 45.8 | 45.8 | 46.7 | 0.9 |
| Y | 10,423 | 28 | 151 | 9.5 | 45.9 | 45.9 | 46.6 | 0.7 |
| Z | 10,523 | 62 | 224 | 6.4 | 48.6 | 48.6 | 48.8 | 0.2 |
| AA | 11,228 | 71 | 267 | 5.4 | 50.9 | 50.9 | 51.7 | 0.8 |
| AB | 12,368 | 128 | 184 | 7.8 | 56.2 | 56.2 | 57.2 | 1.0 |
| AC | 12,978 | 29 | 177 | 8.1 | 59.4 | 59.4 | 60.3 | 0.9 |
| AD | 13,078 | 30 | 143 | 10.1 | 60.0 | 60.0 | 60.6 | 0.6 |
| AE | 13,798 | 28 | 179 | 8.0 | 66.2 | 66.2 | 66.8 | 0.6 |
| AF | 14,698 | 33 | 173 | 8.3 | 70.6 | 70.6 | 71.4 | 0.8 |
| AG | 14,978 | 28 | 152 | 9.5 | 72.8 | 72.8 | 73.0 | 0.2 |
| AH | 15,588 | 41 | 165 | 7.7 | 77.1 | 77.1 | 77.7 | 0.6 |
| AI | 16,168 | 35 | 165 | 7.6 | 81.6 | 81.6 | 81.6 | 0.0 |
| AJ | 16,208 | 51 | 138 | 9.1 | 81.6 | 81.6 | 81.6 | 0.0 |
| AK | 16,283 | 71 | 301 | 4.2 | 83.1 | 83.1 | 83.1 | 0.0 |
| AL | 16,978 | 160 | 748 | 1.7 | 83.6 | 83.6 | 84.3 | 0.7 |
| AM | 17,638 | 253 | 853 | 1.5 | 83.9 | 83.9 | 84.8 | 0.9 |
| AN | 18,774 | 57 | 196 | 6.4 | 88.3 | 88.3 | 89.0 | 0.7 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAMMAMISH RIVER
[2]LOCATED ENTIRELY WITHIN KING COUNTY

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| AO | 19,404 | 70 | 289 | 4.4 | 92.6 | 92.6 | 92.7 | 0.1 |
| AP | 20,320 | 55 | 197 | 5.8 | 96.7 | 96.7 | 96.9 | 0.2 |
| AQ | 21,116 | 48 | 198 | 5.8 | 100.2 | 100.2 | 101.2 | 1.0 |
| AR | 21,141 | 36 | 203 | 5.6 | 100.9 | 100.9 | 101.5 | 0.6 |
| AS | 21,246 | 44 | 193 | 5.9 | 101.2 | 101.2 | 102.1 | 0.9 |
| AT | 21,751 | 55 | 238 | 4.8 | 104.3 | 104.3 | 104.3 | 0.0 |
| AU | 22,006 | 47 | 148 | 7.7 | 106.7 | 106.7 | 106.8 | 0.1 |
| AV | 22,206 | 45 | 311 | 3.7 | 108.1 | 108.1 | 108.4 | 0.3 |
| AW | 22,416 | 40 | 235 | 4.8 | 108.3 | 108.3 | 108.8 | 0.5 |
| AX | 22,921 | 33 | 192 | 5.9 | 110.5 | 110.5 | 111.0 | 0.5 |
| AY | 22,988 | 37 | 224 | 5.1 | 113.2 | 113.2 | 113.7 | 0.5 |
| AZ | 23,418 | 30 | 198 | 5.7 | 114.8 | 114.8 | 115.2 | 0.4 |
| BA | 23,458 | 30 | 222 | 5.1 | 114.9 | 114.9 | 115.7 | 0.8 |
| BB | 23,527 | 35 | 233 | 4.9 | 115.8 | 115.8 | 116.0 | 0.2 |
| BC | 24,397 | 341 | 1,281 | 0.8 | 117.0 | 117.0 | 117.9 | 0.9 |
| BD | 25,822 | 44 | 164 | 6.5 | 126.2 | 126.2 | 127.1 | 0.9 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAMMAMISH RIVER

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 426 | 305 | 3,231 | 12.9 | 461.4 | 461.4 | 461.4 | 0.0 |
| B | 800 | 340 | 2,944 | 14.2 | 464.5 | 464.5 | 464.5 | 0.0 |
| C | 1,645 | 601 | 5,098 | 8.2 | 473.0 | 473.0 | 473.2 | 0.2 |
| D | 2,476 | 557 | 3,686 | 11.3 | 478.2 | 478.2 | 478.4 | 0.2 |
| E | 3,297 | 458 | 3,672 | 11.4 | 486.0 | 486.0 | 486.1 | 0.1 |
| F | 3,934 | 248 | 2,628 | 15.9 | 492.2 | 492.2 | 492.4 | 0.2 |
| G | 4,800 | 424 | 3,146 | 13.3 | 505.1 | 505.1 | 505.5 | 0.4 |
| H | 5,617 | 383 | 3,395 | 12.3 | 514.2 | 514.2 | 514.3 | 0.1 |
| I | 5,888 | 469 | 3,347 | 12.5 | 518.0 | 518.0 | 518.5 | 0.5 |
| J | 6,249 | 485 | 3,771 | 11.1 | 521.9 | 521.9 | 522.3 | 0.4 |
| K | 6,512 | 425 | 3,284 | 13.3 | 525.0 | 525.0 | 525.0 | 0.0 |
| L | 6,934 | 314 | 3,060 | 13.7 | 527.9 | 527.9 | 528.8 | 0.9 |
| M | 7,138 | 316 | 2,683 | 15.6 | 529.5 | 529.5 | 529.7 | 0.2 |
| N | 7,380 | 260 | 2,392 | 17.5 | 531.6 | 531.6 | 531.6 | 0.0 |
| O | 7,503 | 389 | 3,333 | 12.6 | 535.2 | 535.2 | 535.2 | 0.0 |
| P | 7,600 | 364 | 3,427 | 12.2 | 535.4 | 535.4 | 535.4 | 0.0 |
| Q | 7,696 | 292 | 2,840 | 15.0 | 535.4 | 535.4 | 535.4 | 0.0 |
| R | 7,865 | 319 | 3,375 | 12.9 | 538.0 | 538.0 | 538.0 | 0.0 |
| S | 8,114 | 348 | 3,597 | 11.6 | 539.6 | 539.6 | 539.6 | 0.0 |
| T | 8,256 | 357 | 3,690 | 11.3 | 540.5 | 540.5 | 540.5 | 0.0 |
| U | 8,395 | 373 | 3,350 | 12.5 | 541.2 | 541.2 | 541.2 | 0.0 |
| V | 8,575 | 437 | 3,003 | 13.9 | 542.3 | 542.3 | 542.3 | 0.0 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FLOODING SOURCE: NORTH FORK SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 8,641 | 406 | 3,534 | 11.8 | 546.3 | 546.3 | 546.3 | 0.0 |
| X | 9,250 | 350 | 3,341 | 12.5 | 548.5 | 548.5 | 548.5 | 0.0 |
| Y | 9,549 | 346 | 3,269 | 12.8 | 550.0 | 550.0 | 550.0 | 0.0 |
| Z | 9,761 | 341 | 3,069 | 13.6 | 550.6 | 550.6 | 550.6 | 0.0 |
| AA | 10,381 | 523 | 3,052 | 13.7 | 555.8 | 555.8 | 555.8 | 0.0 |
| AB | 11,093 | 272 | 2,455 | 17.0 | 564.2 | 564.2 | 564.2 | 0.0 |
| AC | 12,474 | 664 | 4,348 | 9.6 | 575.8 | 575.8 | 575.8 | 0.0 |
| AD | 13,003 | 575 | 3,203 | 13.0 | 579.1 | 579.1 | 579.1 | 0.0 |
| AE | 13,897 | 685 | 3,674 | 11.1 | 588.4 | 588.4 | 588.4 | 0.0 |
| AF | 14,535 | 969 | 4,562 | 9.2 | 595.4 | 595.4 | 595.4 | 0.0 |
| AG | 15,249 | 916 | 3,649 | 11.3 | 604.1 | 604.1 | 604.1 | 0.0 |
| AH | 15,902 | 954 | 4,959 | 8.3 | 612.3 | 612.3 | 612.3 | 0.0 |
| AI | 16,594 | 428 | 2,807 | 14.7 | 617.9 | 617.9 | 617.9 | 0.0 |
| AJ | 17,987 | 968 | 4,133 | 10.5 | 636.4 | 636.4 | 636.8 | 0.4 |
| AK | 18,166 | 770 | 7,588 | 5.5 | 639.1 | 639.1 | 639.5 | 0.4 |
| AL | 19,133 | 686 | 3,778 | 10.9 | 643.4 | 643.4 | 643.4 | 0.0 |
| AM | 19,681 | 405 | 3,544 | 11.7 | 649.8 | 649.8 | 649.8 | 0.0 |
| AN | 22,220 | 378 | 2,764 | 15.0 | 672.6 | 672.6 | 672.6 | 0.0 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH FORK SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.73 | 379 | 5,118 | 6.1 | 76.8[2] | 73.5 | 74.2 | 0.7 |
| B | 2.30 | 365 | 4,148 | 7.5 | 82.2 | 82.2 | 82.5 | 0.3 |
| C | 2.65 | 520 | 4,975 | 6.3 | 84.8 | 84.8 | 84.9 | 0.1 |
| D | 2.84 | 502 | 4,869 | 6.4 | 85.6 | 85.6 | 85.6 | 0.0 |
| E | 2.90 | 279 | 4,859 | 6.4 | 86.0 | 86.0 | 86.3 | 0.3 |
| F | 3.01 | 1,110 | 11,097 | 2.8 | 86.7 | 86.7 | 86.9 | 0.2 |
| G | 3.40 | 1,124 | 6,273 | 5.0 | 87.4 | 87.4 | 87.8 | 0.4 |
| H | 3.80 | 588 | 5,568 | 5.6 | 89.2 | 89.2 | 89.8 | 0.6 |
| I | 4.23 | 500 | 4,501 | 6.9 | 91.4 | 91.4 | 92.2 | 0.8 |
| J | 4.53 | 1,621 | 9,433 | 3.3 | 93.8 | 93.8 | 94.8 | 1.0 |
| K | 4.94 | 611 | 4,783 | 6.5 | 96.8 | 96.8 | 97.4 | 0.6 |
| L | 5.32 | 381 | 4,089 | 7.6 | 99.5 | 99.5 | 99.9 | 0.4 |
| M | 5.85 | 1,763 | 10,740 | 2.9 | 103.1 | 103.1 | 103.7 | 0.6 |
| N | 6.13 | 1,200 | 6,411 | 4.9 | 105.3 | 105.3 | 106.2 | 0.9 |
| O | 6.55 | 645 | 4,465 | 7.0 | 108.4 | 108.4 | 109.1 | 0.7 |
| P | 7.01 | 1,919 | 8,516 | 3.7 | 111.8 | 111.8 | 112.3 | 0.5 |
| Q | 7.44 | 2,127 | 10,974 | 2.8 | 113.9 | 113.9 | 114.9 | 1.0 |
| R | 7.90 | 1,551 | 7,287 | 4.3 | 116.6 | 116.6 | 117.5 | 0.9 |
| S | 8.26 | 1,637 | 6,459 | 4.8 | 119.4 | 119.4 | 120.3 | 0.9 |
| T | 8.65 | 1,185 | 7,803 | 4.0 | 122.9 | 122.9 | 123.8 | 0.9 |
| U | 9.08 | 450 | 3,450 | 9.0 | 126.1 | 126.1 | 126.8 | 0.7 |
| V | 9.34 | 736 | 5,865 | 5.3 | 129.4 | 129.4 | 129.8 | 0.4 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]BACKWATER FROM SOUTH FORK STILLAGUAMISH RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 9.78 | 561 | 4,717 | 6.6 | 133.8 | 133.8 | 133.9 | 0.1 |
| X | 10.06 | 394 | 4,498 | 6.9 | 136.1 | 136.1 | 136.8 | 0.7 |
| Y | 10.55 | 343 | 3,423 | 9.1 | 139.5 | 139.5 | 140.0 | 0.5 |
| Z | 10.80 | 356 | 3,634 | 8.6 | 142.7 | 142.7 | 142.9 | 0.2 |
| AA | 11.12 | 573 | 3,971 | 7.8 | 145.1 | 145.1 | 145.5 | 0.4 |
| AB | 11.47 | 591 | 4,062 | 7.7 | 148.3 | 148.3 | 148.9 | 0.6 |
| AC | 11.85 | 805 | 4,576 | 6.8 | 152.2 | 152.2 | 152.6 | 0.4 |
| AD | 12.16 | 1,266 | 5,016 | 6.2 | 155.2 | 155.2 | 155.5 | 0.3 |
| AE | 12.67 | 1,245 | 4,430 | 7.0 | 160.8 | 160.8 | 161.3 | 0.5 |
| AF | 13.26 | 1,733 | 9,656 | 3.2 | 167.3 | 167.3 | 167.8 | 0.5 |
| AG | 13.65 | 1,190 | 7,447 | 4.2 | 169.8 | 169.8 | 170.6 | 0.8 |
| AH | 14.11 | 240 | 3,762 | 9.0 | 177.7 | 177.7 | 178.4 | 0.7 |
| AI | 14.60 | 899 | 3,363 | 7.9 | 185.5 | 185.5 | 185.7 | 0.2 |
| AJ | 15.27 | 1,384 | 4,927 | 5.4 | 194.3 | 194.3 | 194.3 | 0.0 |
| AK | 15.55 | 719 | 3,877 | 6.8 | 197.3 | 197.3 | 197.6 | 0.3 |
| AL | 15.66 | 615 | 3,083 | 8.6 | 198.5 | 198.5 | 199.0 | 0.5 |
| AM | 15.80 | 250 | 1,937 | 13.6 | 202.6 | 202.6 | 202.9 | 0.3 |
| AN | 15.82 | 280 | 2,965 | 8.9 | 205.5 | 205.5 | 205.5 | 0.0 |
| AO | 16.05 | 933 | 7,163 | 3.7 | 207.8 | 207.8 | 207.8 | 0.0 |
| AP | 16.44 | 557 | 3,694 | 7.1 | 210.1 | 210.1 | 210.3 | 0.2 |
| AQ | 16.84 | 426 | 2,589 | 10.2 | 214.9 | 214.9 | 215.0 | 0.1 |
| AR | 17.38 | 1898 | 7,606 | 3.5 | 222.5 | 222.5 | 222.7 | 0.2 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| AS | 17.60 | 230 | 1,925 | 13.7 | 224.9 | 224.9 | 225.1 | 0.2 |
| AT | 17.82 | 323 | 3,025 | 8.7 | 230.8 | 230.8 | 230.8 | 0.0 |
| AU | 18.26 | 549 | 4,151 | 6.4 | 238.0 | 238.0 | 238.4 | 0.4 |
| AV | 18.66 | 199 | 2,626 | 10.1 | 243.5 | 243.5 | 244.0 | 0.5 |
| AW | 19.12 | 200 | 2,254 | 11.7 | 253.3 | 253.3 | 253.3 | 0.0 |
| AX | 19.56 | 281 | 2,774 | 9.5 | 259.2 | 259.2 | 259.2 | 0.0 |
| AY | 19.87 | 524 | 3,299 | 8.0 | 264.0 | 264.0 | 264.2 | 0.2 |
| AZ | 20.25 | 627 | 3,803 | 6.9 | 270.1 | 270.1 | 270.8 | 0.7 |
| BA | 20.60 | 819 | 3,975 | 6.6 | 275.2 | 275.2 | 275.2 | 0.0 |
| BB[2] | 21.08 | 760 | 3,786 | 7.0 | 281.0 | 281.0 | 281.3 | 0.3 |
| BC | 21.14 | 276 | 2,306 | 11.4 | 282.0 | 282.0 | 282.3 | 0.3 |
| BD | 21.43 | 1,520 | 5,721 | 4.6 | 287.9 | 287.9 | 287.9 | 0.0 |
| BE | 21.84 | 485 | 4,084 | 6.5 | 292.5 | 292.5 | 293.1 | 0.6 |
| BF | 22.15 | 869 | 5,984 | 4.4 | 296.6 | 296.6 | 297.2 | 0.6 |
| BG | 22.50 | 1,084 | 5,185 | 5.1 | 300.6 | 300.6 | 301.3 | 0.7 |
| BH | 22.96 | 1,874 | 8,321 | 3.2 | 306.1 | 306.1 | 307.1 | 1.0 |
| BI | 23.38 | 644 | 3,485 | 7.6 | 314.1 | 314.1 | 314.6 | 0.5 |
| BJ | 23.96 | 1,061 | 7,559 | 3.5 | 321.7 | 321.7 | 322.1 | 0.4 |
| BK | 24.33 | 1,350 | 4,129 | 7.5 | 325.3 | 325.3 | 325.9 | 0.6 |
| BL | 24.78 | 500 | 3,624 | 7.2 | 332.7 | 332.7 | 333.7 | 1.0 |
| BM | 25.12 | 750 | 2,740 | 9.6 | 338.6 | 338.6 | 339.3 | 0.7 |
| BN | 25.59 | 1,137 | 6,102 | 4.3 | 348.3 | 348.3 | 349.2 | 0.9 |
| BO | 26.00 | 585 | 3,113 | 8.4 | 355.0 | 355.0 | 355.7 | 0.7 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARDS TO THE NEW BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| BP | 26.34 | 710 | 2,742 | 9.6 | 360.0 | 360.0 | 360.2 | 0.2 |
| BQ | 26.64 | 1,500 | 3,129 | 8.4 | 365.0 | 365.0 | 365.6 | 0.6 |
| BR | 26.99 | 1,310 | 8,156 | 3.2 | 370.7 | 370.7 | 371.2 | 0.5 |
| BS | 27.36 | 1,292 | 5,207 | 5.0 | 375.8 | 375.8 | 375.8 | 0.0 |
| BT | 27.71 | 930 | 6,525 | 4.0 | 381.9 | 381.9 | 382.6 | 0.7 |
| BU | 27.97 | 541 | 3,073 | 8.5 | 387.4 | 387.4 | 388.0 | 0.6 |
| BV | 28.41 | 345 | 2,540 | 10.3 | 396.6 | 396.6 | 397.1 | 0.5 |
| BW | 28.73 | 704 | 4,919 | 5.3 | 402.8 | 402.8 | 403.5 | 0.7 |
| BX | 29.18 | 393 | 2,574 | 10.2 | 409.0 | 409.0 | 409.7 | 0.7 |
| BY | 29.57 | 417 | 3,736 | 7.0 | 416.8 | 416.8 | 417.5 | 0.7 |
| BZ | 29.83 | 468 | 3,009 | 8.7 | 419.6 | 419.6 | 420.6 | 1.0 |
| CA | 30.00 | 374 | 2,515 | 10.4 | 423.7 | 423.7 | 424.2 | 0.5 |
| CB | 30.42 | 1,330 | 5,343 | 4.9 | 428.1 | 428.1 | 428.6 | 0.5 |
| CC | 30.70 | 586 | 3,325 | 7.9 | 433.2 | 433.2 | 433.7 | 0.5 |
| CD | 31.10 | 484 | 3,406 | 8.1 | 441.2 | 441.2 | 441.7 | 0.5 |
| CE | 31.62 | 836 | 5,892 | 3.9 | 448.9 | 448.9 | 449.2 | 0.3 |
| CF[2] | 61.87 | 360 | 3,103 | 7.3 | 453.1 | 453.1 | 453.6 | 0.5 |
| CG[2] | 32.20 | 529 | 4,099 | 5.6 | 459.4 | 459.4 | 460.4 | 1.0 |
| CH | 32.54 | 359 | 3,248 | 7.0 | 465.5 | 465.5 | 466.5 | 1.0 |
| CI | 33.03 | 297 | 2,661 | 8.6 | 474.4 | 474.4 | 474.7 | 0.3 |
| CJ | 33.35 | 672 | 5,036 | 4.5 | 480.3 | 480.3 | 480.9 | 0.6 |
| CK | 33.72 | 702 | 4,791 | 4.8 | 483.9 | 483.9 | 484.5 | 0.6 |
| CL | 34.02 | 250 | 5,992 | 3.8 | 488.2 | 488.2 | 488.8 | 0.6 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARDS TO THE NEW BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: NORTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 1.51 | 191 | 1,640 | 8.1 | 33.9 | 33.9 | 34.0 | 0.1 |
| B | 1.90 | 206 | 2,089 | 6.4 | 38.2 | 38.2 | 38.8 | 0.6 |
| C | 2.30 | 259 | 2,185 | 6.1 | 41.5 | 41.5 | 41.7 | 0.2 |
| D | 2.72 | 515 | 4,539 | 2.9 | 44.6 | 44.6 | 45.0 | 0.4 |
| E | 2.88 | 435 | 2,336 | 5.7 | 45.4 | 45.4 | 45.9 | 0.5 |
| F | 3.00 | 680 | 2,580 | 5.2 | 46.5 | 46.5 | 47.2 | 0.7 |
| G | 3.17 | 400 | 2,949 | 4.5 | 48.5 | 48.5 | 49.2 | 0.7 |
| H | 3.25 | 689 | 3,012 | 4.4 | 49.5 | 49.5 | 50.3 | 0.8 |
| I | 3.36 | 313 | 2,980 | 4.5 | 50.9 | 50.9 | 51.9 | 1.0 |
| J | 3.60 | 226 | 1,728 | 7.7 | 55.4 | 55.4 | 56.0 | 0.6 |
| K | 3.75 | 317 | 1,847 | 7.2 | 58.1 | 58.1 | 58.1 | 0.0 |
| L | 3.94 | 530 | 3,849 | 3.5 | 60.3 | 60.3 | 60.7 | 0.4 |
| M | 4.24 | 540 | 2,755 | 4.8 | 62.5 | 62.5 | 63.2 | 0.7 |
| N | 4.68 | 374 | 2,061 | 6.5 | 67.7 | 67.7 | 68.7 | 1.0 |
| O | 5.07 | 452 | 2,763 | 4.9 | 73.3 | 73.3 | 74.3 | 1.0 |
| P | 5.62 | 351 | 1,604 | 8.4 | 81.1 | 81.1 | 81.6 | 0.5 |
| Q | 5.90 | 398 | 1,924 | 7.0 | 85.6 | 85.6 | 85.7 | 0.1 |
| R | 6.28 | 550 | 3,393 | 4.0 | 89.7 | 89.7 | 89.9 | 0.2 |
| S | 6.52 | 384 | 2,432 | 5.6 | 91.7 | 91.7 | 92.2 | 0.5 |
| T | 6.77 | 415 | 1,982 | 6.9 | 95.7 | 95.7 | 96.5 | 0.8 |
| U | 6.99 | 226 | 1,814 | 7.5 | 100.5 | 100.5 | 101.3 | 0.8 |
| V | 7.24 | 198 | 1,632 | 8.3 | 105.2 | 105.2 | 105.5 | 0.3 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: PILCHUCK RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 7.63 | 500 | 2,304 | 5.9 | 112.8 | 112.8 | 113.4 | 0.6 |
| X | 7.88 | 660 | 2,218 | 6.1 | 116.6 | 116.6 | 117.6 | 1.0 |
| Y | 8.05 | 336 | 2,164 | 6.3 | 119.3 | 119.3 | 120.3 | 1.0 |
| Z | 8.30 | 241 | 1,849 | 7.4 | 123.4 | 123.4 | 124.2 | 0.8 |
| AA | 8.56 | 299 | 1,822 | 7.5 | 127.3 | 127.3 | 127.9 | 0.6 |
| AB | 8.71 | 330 | 2,844 | 4.8 | 129.6 | 129.6 | 130.3 | 0.7 |
| AC | 8.80 | 166 | 1,527 | 8.9 | 130.4 | 130.4 | 131.3 | 0.7 |
| AD | 8.91 | 156 | 1,326 | 10.3 | 132.6 | 132.6 | 133.0 | 0.4 |
| AE | 9.23 | 638 | 3,532 | 3.9 | 138.7 | 138.7 | 138.9 | 0.2 |
| AF | 9.62 | 635 | 2,640 | 4.7 | 142.1 | 142.1 | 143.0 | 0.9 |
| AG | 9.86 | 298 | 1,830 | 6.8 | 146.3 | 146.3 | 147.2 | 0.6 |
| AH | 10.17 | 230 | 1,391 | 9.0 | 153.0 | 153.0 | 153.8 | 0.8 |
| AI | 10.30 | 360 | 2,220 | 5.7 | 156.1 | 156.1 | 156.6 | 0.5 |
| AJ | 10.70 | 201 | 1,491 | 8.5 | 164.1 | 164.1 | 164.3 | 0.2 |
| AK | 10.92 | 438 | 2,564 | 5.0 | 167.8 | 167.8 | 167.8 | 0.0 |
| AL | 11.15 | 506 | 2,593 | 4.9 | 170.2 | 170.2 | 170.6 | 0.4 |
| AM[2] | 11.54 | 410 | 2,499 | 5.1 | 175.8 | 175.8 | 176.7 | 0.9 |
| AN | 11.75 | 264 | 1,743 | 7.3 | 180.1 | 180.1 | 180.8 | 0.7 |
| AO | 12.08 | 514 | 3,254 | 3.8 | 186.0 | 186.0 | 186.4 | 0.4 |
| AP | 12.28 | 332 | 2,138 | 5.8 | 188.1 | 188.1 | 188.5 | 0.4 |
| AQ | 12.44 | 365 | 2,168 | 5.8 | 190.5 | 190.5 | 190.8 | 0.3 |
| AR | 12.77 | 530 | 2,578 | 4.8 | 195.8 | 195.8 | 196.4 | 0.6 |
| AS | 13.08 | 511 | 2,373 | 5.2 | 201.3 | 201.3 | 201.7 | 0.4 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARDS TO THE NEW BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: PILCHUCK RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| AT | 13.27 | 507 | 1,843 | 6.7 | 205.1 | 205.1 | 205.5 | 0.4 |
| AU | 13.52 | 530 | 2,696 | 4.6 | 209.1 | 209.1 | 209.5 | 0.4 |
| AV | 13.75 | 810 | 3,133 | 4.0 | 212.1 | 212.1 | 212.6 | 0.5 |
| AW | 13.94 | 632 | 3,173 | 3.9 | 215.3 | 215.3 | 215.9 | 0.6 |
| AX | 14.22 | 674 | 3,258 | 3.8 | 218.9 | 218.9 | 219.9 | 1.0 |
| AY | 14.43 | 500 | 2,957 | 4.2 | 222.4 | 222.4 | 223.2 | 0.8 |
| AZ | 14.75 | 691 | 3,189 | 3.9 | 227.0 | 227.0 | 227.6 | 0.6 |
| BA | 15.03 | 701 | 3,238 | 3.8 | 230.8 | 230.8 | 231.7 | 0.9 |
| BB | 15.29 | 553 | 3,380 | 3.7 | 235.7 | 235.7 | 235.7 | 0.0 |
| BC | 15.50 | 269 | 1,807 | 6.9 | 239.5 | 239.5 | 240.4 | 0.9 |
| BD | 15.76 | 348 | 1,607 | 7.7 | 244.5 | 244.5 | 245.3 | 0.8 |
| BE | 16.06 | 261 | 2,177 | 5.7 | 249.9 | 249.9 | 250.5 | 0.6 |
| BF | 16.26 | 204 | 1,666 | 7.3 | 252.7 | 252.7 | 253.1 | 0.4 |
| BG | 16.61 | 186 | 1,539 | 7.9 | 258.7 | 258.7 | 258.9 | 0.2 |
| BH | 16.82 | 220 | 1,984 | 6.1 | 262.2 | 262.2 | 262.7 | 0.5 |
| BI | 17.08 | 586 | 2,793 | 4.2 | 265.8 | 265.8 | 266.2 | 0.4 |
| BJ | 17.29 | 284 | 1,584 | 7.4 | 268.8 | 268.8 | 269.4 | 0.6 |
| BK | 17.52 | 280 | 2,254 | 5.2 | 273.1 | 273.1 | 273.7 | 0.6 |
| BL | 17.84 | 288 | 1,697 | 6.9 | 277.9 | 277.9 | 278.2 | 0.3 |
| BM | 18.11 | 637 | 3,930 | 3.0 | 283.7 | 283.7 | 283.7 | 0.0 |
| BN | 18.46 | 178 | 1,674 | 7.0 | 289.2 | 289.2 | 289.9 | 0.7 |
| BO | 18.79 | 233 | 2,256 | 5.2 | 292.7 | 292.7 | 293.1 | 0.4 |
| BP | 19.05 | 103 | 1,354 | 8.6 | 295.2 | 295.2 | 295.5 | 0.3 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET)[2] | SECTION AREA (SQ. FEET)[2] | MEAN VELOCITY (FEET PER SECOND)[2] | REGULATORY | WITHOUT FLOODWAY[2] | WITH FLOODWAY[2] | INCREASE[2] |
| A | 10,085 | 5,247 | 38,464 | 3.1 | 49.0 | 49.1 | 49.7 | 0.6 |
| B | 10,930 | 5,203 | 36,600 | 3.3 | 49.3 | 49.4 | 50.2 | 0.8 |
| C | 12,250 | 5,325 | 27,454 | 4.5 | 49.8 | 50.0 | 50.8 | 0.8 |
| D | 13,517 | 5,142 | 30,804 | 5.1 | 53.1 | 52.4 | 52.7 | 0.3 |
| E | 14,784 | 4,758 | 34,784 | 3.9 | 54.1 | 54.4 | 55.0 | 0.6 |
| F | 16,315 | 4,876 | 35,588 | 3.9 | 57.2 | 55.5 | 56.1 | 0.6 |
| G | 17,054 | 3,939 | 24,210 | 6.1 | 59.4 | 55.8 | 56.3 | 0.5 |
| H | 18,216 | 4,528 | 28,000 | 5.3 | 60.2 | 55.8 | 56.3 | 0.5 |
| I | 21,701 | 3,381 | 31,981 | 4.6 | 62.5 | 60.9 | 61.7 | 0.8 |
| J | 22,757 | 4,450 | 36,336 | 4.0 | 63.5 | 62.1 | 63.1 | 1.0 |
| K | 25,080 | 4,982 | 41,309 | 3.6 | 64.5 | 65.0 | 65.7 | 0.7 |
| L | 25,608 | 4,981 | 41,036 | 3.6 | 65.4 | 65.2 | 65.9 | 0.7 |
| M | 27,614 | 4,185 | 28,252 | 2.6 | 65.8 | 66.9 | 67.4 | 0.5 |
| N | 31,733 | 3,291 | 20,800 | 7.1 | 68.3 | 70.4 | 70.6 | 0.2 |
| O | 32,261 | 2,759 | 19,947 | 7.4 | 70.5 | 71.3 | 71.7 | 0.4 |
| P | 33,106 | 2,630 | 20,267 | 7.3 | 73.0 | 73.0 | 73.7 | 0.7 |

[1]STREAM DISTANCE IN FEET FROM CONFLUENCE WITH SNOQUALMIE RIVER
[2]DATA REFLECTS COMBINED FLOODWAY FROM SKYKOMISH RIVER, RILEY SLOUGH AND HASKEL SLOUGH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: RILEY SLOUGH**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 17.10 | 1,925 | 11,754 | 6.0 | 437.0 | 437.0 | 437.0 | 0.0 |
| B | 17.84 | 1,951 | 9,471 | 7.4 | 445.3 | 445.3 | 445.5 | 0.2 |
| C | 18.25 | 2,212 | 17,332 | 4.0 | 453.8 | 453.8 | 454.5 | 0.7 |
| D | 18.66 | 2,990 | 8,245 | 8.5 | 458.7 | 458.7 | 459.2 | 0.5 |
| E | 18.99 | 2,436 | 14,815 | 4.7 | 468.3 | 468.3 | 469.2 | 0.9 |
| F | 19.34 | 2,000 | 7,500 | 9.3 | 473.4 | 473.4 | 473.7 | 0.3 |
| G | 19.59 | 2,172 | 9,300 | 7.5 | 479.7 | 479.7 | 480.0 | 0.3 |
| H | 19.88 | 2,400 | 14,150 | 5.0 | 484.4 | 484.4 | 485.4 | 1.0 |
| I | 20.24 | 2,000 | 11,300 | 6.2 | 491.1 | 491.1 | 491.6 | 0.5 |
| J | 20.43 | 1,778 | 10,180 | 6.9 | 497.6 | 497.6 | 498.0 | 0.4 |
| K | 20.81 | 2,250 | 18,500 | 3.8 | 505.3 | 505.3 | 505.9 | 0.6 |
| L | 21.06 | 2,125 | 11,000 | 6.4 | 508.3 | 508.3 | 509.1 | 0.8 |
| M | 21.40 | 349 | 5,100 | 13.7 | 517.9 | 517.9 | 518.2 | 0.3 |
| N | 21.74 | 1,121 | 9,234 | 7.6 | 527.7 | 527.7 | 528.4 | 0.7 |
| O | 21.95 | 1,730 | 12,376 | 5.7 | 533.5 | 533.5 | 533.9 | 0.4 |
| P | 22.28 | 1,098 | 10,318 | 6.8 | 538.7 | 538.7 | 539.4 | 0.7 |
| Q | 22.51 | 1,012 | 10,258 | 6.8 | 544.1 | 544.1 | 545.1 | 1.0 |
| R | 22.91 | 900 | 7,820 | 9.0 | 551.0 | 551.0 | 551.8 | 0.8 |
| S | 23.15 | 831 | 9,090 | 7.7 | 560.5 | 560.5 | 560.8 | 0.3 |
| T | 23.50 | 841 | 7,521 | 9.3 | 571.0 | 571.0 | 571.5 | 0.5 |
| U | 23.80 | 460 | 5,242 | 13.4 | 579.7 | 579.7 | 580.6 | 0.9 |
| V | 24.18 | 405 | 6,454 | 10.8 | 585.8 | 585.8 | 596.4 | 0.6 |
| W | 24.75 | 493 | 5,954 | 11.8 | 612.3 | 612.3 | 613.1 | 0.8 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A[2] | 845 | 2,854 | 58,465 | 3.5 | 46.6/46.6[3] | 46.6 | 47.3 | 0.7 |
| B[2] | 1,109 | 3,011 | 60,876 | 3.3 | 46.7/46.7[3] | 46.7 | 47.4 | 0.7 |
| C[2] | 2,059 | 3,559 | 58,756 | 3.5 | 46.9/46.9[3] | 46.9 | 47.5 | 0.6 |
| D[2] | 3,274 | 4,440 | 70,101 | 2.9 | 47.2/47.2[3] | 47.2 | 47.9 | 0.7 |
| E[2] | 4,366 | 4,858 | 66,634 | 3.1 | 47.5/47.6[3] | 47.5 | 48.1 | 0.6 |
| F[2] | 6,019 | 4,971 | 74,139 | 2.7 | 48.0/48.0[3] | 48.0 | 48.6 | 0.6 |
| G[2] | 7,022 | 5,276 | 76,550 | 2.7 | 48.3/48.4[3] | 48.3 | 48.9 | 0.6 |
| H[2] | 8,078 | 6,724 | 87,358 | 2.3 | 48.7/48.6[3] | 48.7 | 49.3 | 0.6 |
| I[2] | 8,712 | 7,908 | 94,968 | 1.9 | 48.8/48.9[3] | 48.8 | 49.4 | 0.6 |
| J | 10,085 | 5,247 | 38,464 | 3.1 | 49.1 | 49.1 | 49.7 | 0.6 |
| K | 10,930 | 5,203 | 36,600 | 3.3 | 49.4 | 49.4 | 50.2 | 0.8 |
| L | 12,250 | 5,325 | 27,454 | 4.5 | 50.0 | 50.0 | 50.8 | 0.8 |
| M | 13,517 | 5,142 | 30,804 | 5.1 | 52.4 | 52.4 | 52.7 | 0.3 |
| N | 14,784 | 4,758 | 34,784 | 3.9 | 54.4 | 54.4 | 55.0 | 0.6 |
| O | 16,315 | 4,876 | 35,588 | 3.9 | 55.5 | 55.5 | 56.1 | 0.6 |
| P | 17,054 | 3,939 | 24,210 | 6.1 | 55.8 | 55.8 | 56.3 | 0.5 |
| Q | 18,216 | 4,528 | 28,000 | 5.3 | 55.8 | 55.8 | 56.3 | 0.5 |
| R | 20,909 | 1,347 | 12,714 | 11.4 | 58.4 | 58.4 | 58.8 | 0.4 |
| S | 21,067 | 1,300 | 13,245 | 11.0 | 58.6 | 58.6 | 59.1 | 0.5 |
| T | 21,701 | 3,381 | 31,981 | 4.6 | 60.9 | 60.9 | 61.7 | 0.8 |
| U | 22,757 | 4,450 | 36,336 | 4.0 | 62.1 | 62.1 | 63.1 | 1.0 |
| V | 25,080 | 4,982 | 41,309 | 3.6 | 65.0 | 65.0 | 65.7 | 0.7 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER
[2]SNOQUALMIE RIVER PORTION OF OVERFLOW
[3]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 25,608 | 4,981 | 41,036 | 3.6 | 65.2 | 65.2 | 65.9 | 0.7 |
| X | 27,614 | 4,185 | 28,252 | 2.6 | 66.9 | 66.9 | 67.4 | 0.5 |
| Y | 31,733 | 3,291 | 20,800 | 7.1 | 70.4 | 70.4 | 70.6 | 0.2 |
| Z | 32,261 | 2,759 | 19,947 | 7.4 | 71.3 | 71.3 | 71.7 | 0.4 |
| AA | 33,106 | 2,630 | 20,267 | 7.3 | 73.0 | 73.0 | 73.7 | 0.7 |
| AB | 34,320 | 2,445 | 29,091 | 5.1 | 76.0 | 76.0 | 76.7 | 0.7 |
| AC | 35,270 | 2,847 | 26,118 | 5.6 | 76.8 | 76.8 | 77.5 | 0.7 |
| AD | 36,432 | 3,298 | 29,989 | 4.9 | 78.3 | 78.3 | 79.0 | 0.7 |
| AE | 37,594 | 2,557 | 35,655 | 4.1 | 79.6 | 79.6 | 80.4 | 0.8 |
| AF | 38,491 | 3,114 | 27,305 | 5.4 | 80.0 | 80.0 | 80.8 | 0.8 |
| AG | 39,811 | 3,214 | 32,605 | 4.5 | 81.3 | 81.3 | 82.0 | 0.7 |
| AH | 40,709 | 3,553 | 30,664 | 4.8 | 82.2 | 82.2 | 82.8 | 0.6 |
| AI | 41,870 | 3,508 | 26,980 | 5.5 | 83.1 | 83.1 | 83.9 | 0.8 |
| AJ | 43,032 | 3,491 | 28,155 | 5.2 | 84.7 | 84.7 | 85.7 | 1.0 |
| AK | 44,352 | 3,408 | 36,911 | 4.0 | 86.6 | 86.6 | 87.6 | 1.0 |
| AL | 45,302 | 3,125 | 38,164 | 3.9 | 87.6 | 87.6 | 88.5 | 0.9 |
| AM | 46,042 | 3,000 | 30,689 | 4.8 | 88.2 | 88.2 | 89.2 | 1.0 |
| AN | 47,256 | 1,948 | 30,445 | 5.2 | 89.7/89.3[2] | 89.7 | 90.3 | 0.6 |
| AO | 48,338 | 1,782 | 19,368 | 8.1 | 90.6/90.0[2] | 90.6 | 91.0 | 0.4 |
| AP | 49,344 | 1,541 | 19,484 | 8.1 | 92.2/91.8[2] | 92.2 | 93.1 | 0.9 |
| AQ | 50,121 | 1,391 | 19,422 | 8.1 | 93.6/93.1[2] | 93.6 | 94.5 | 0.9 |
| AR | 51,236 | 1,560 | 21,250 | 7.4 | 95.9/95.5[2] | 95.9 | 96.8 | 0.9 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER
[2]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| AS | 52,499 | 1,560 | 22,099 | 7.1 | 97.6/97.2[2] | 97.6 | 98.5 | 0.9 |
| AT | 53,562 | 1,599 | 23,717 | 6.6 | 98.9 | 98.9 | 99.9 | 1.0 |
| AU | 54,477 | 3,038 | 31,703 | 5.0 | 100.1 | 100.1 | 101.0 | 0.9 |
| AV | 56,417 | 4,073 | 42,872 | 3.7 | 101.4 | 101.4 | 102.4 | 1.0 |
| AW | 57,294 | 3,598 | 36,403 | 4.3 | 101.9 | 101.9 | 102.9 | 1.0 |
| AX | 57,827 | 3,544 | 32,293 | 4.9 | 102.2 | 102.2 | 103.2 | 1.0 |
| AY | 58,887 | 3,092 | 29,727 | 5.3 | 103.0 | 103.0 | 104.0 | 1.0 |
| AZ | 60,127 | 2,774 | 27,702 | 5.7 | 104.2 | 104.2 | 105.1 | 0.9 |
| BA | 61,093 | 2,140 | 25,641 | 6.1 | 105.4 | 105.4 | 106.3 | 0.9 |
| BB | 61,746 | 1,749 | 20,476 | 7.7 | 106.2 | 106.2 | 107.0 | 0.8 |
| BC | 63,187 | 1,853 | 25,612 | 6.1 | 108.8 | 108.8 | 109.7 | 0.9 |
| BD | 64,507 | 2,438 | 29,250 | 5.4 | 110.5 | 110.5 | 111.4 | 0.9 |
| BE | 66,039 | 3,734 | 43,516 | 3.6 | 112.0 | 112.0 | 113.0 | 1.0 |
| BF | 67,182 | 3,713 | 36,330 | 4.3 | 112.7 | 112.7 | 113.7 | 1.0 |
| BG | 68,160 | 4,666 | 41,602 | 4.0 | 113.7 | 113.7 | 114.6 | 0.9 |
| BH | 69,037 | 4,366 | 43,292 | 3.9 | 115.6 | 115.6 | 116.2 | 0.6 |
| BI | 69,495 | 4,324 | 41,708 | 3.9 | 115.9 | 115.9 | 166.6 | 0.7 |
| BJ | 70,047 | 4,147 | 38,017 | 4.4 | 116.8 | 116.8 | 117.5 | 0.7 |
| BK | 70,861 | 4,023 | 39,144 | 3.4 | 117.4/117.4[2] | 117.4 | 118.3 | 0.9 |
| BL | 71,361 | 3,794 | 36,167 | 3.7 | 117.5/117.5[2] | 117.5 | 118.4 | 0.9 |
| BM | 71,568 | 4,071 | 35,777 | 4.5 | 117.5/117.5[2] | 117.5 | 118.5 | 1.0 |
| BN | 71,669 | 4,161 | 34,499 | 4.4 | 117.6/117.7[2] | 117.5 | 118.6 | 1.0 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER
[2]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| BO | 71,952 | 4,113 | 36,427 | 3.7 | 118.0/118.0 | 118.0 | 119.0 | 1.0 |
| BP | 72,690 | 3,959 | 38,175 | 3.5 | 118.7/118.7 | 118.7 | 119.5 | 0.8 |
| BQ | 74,054 | 3,487 | 30,499 | 4.4 | 119.7/119.7 | 119.7 | 120.4 | 0.7 |
| BR | 74,914 | 3,493 | 31,005 | 4.3 | 120.9/120.9 | 120.9 | 121.3 | 0.4 |
| BS | 75,705 | 2,972 | 25,516 | 5.2 | 121.9/121.9 | 121.9 | 122.3 | 0.4 |
| BT | 76,477 | 3,087 | 26,350 | 5.1 | 122.8/122.8 | 122.8 | 123.4 | 0.6 |
| BU | 77,119 | 3,028 | 23,589 | 5.7 | 123.7/123.7 | 123.7 | 124.3 | 0.6 |
| BV | 77,932 | 3,675 | 31,320 | 4.3 | 125.5/125.5 | 125.5 | 126.1 | 0.6 |
| BW | 78,577 | 3,728 | 25,512 | 5.2 | 126.4/126.4 | 126.4 | 127.0 | 0.6 |
| BX | 79,375 | 3,829 | 27,123 | 4.7 | 128.4/127.8 | 128.4 | 128.9 | 0.5 |
| BY | 80,594 | 3,435 | 23,092 | 5.5 | 131.4/130.2 | 131.4 | 131.7 | 0.3 |
| BZ | 81,530 | 3,488 | 27,028 | 4.7 | 133.7/132.6 | 133.7 | 133.9 | 0.2 |
| CA | 82,442 | 3,731 | 25,625 | 5.0 | 135.5/134.6 | 135.5 | 135.7 | 0.2 |
| CB | 83,006 | 4,025 | 32,700 | 3.9 | 137.0/135.8 | 137.0 | 137.1 | 0.1 |
| CC[2] | 83,581 | 4,193 | 25,988 | 4.9 | 137.8/136.7 | 137.8 | 137.8 | 0.0 |
| CD[2] | 84,505 | 4,765 | 35,287 | 3.6 | 139.2/138.2/138.2[3] | 139.2 | 139.4 | 0.2 |
| CE[2] | 86,043 | 4,560 | 30,603 | 4.2 | 141.1/139.8/139.6[3] | 141.1 | 141.2 | 0.1 |
| CF[2] | 86,635 | 3,877 | 24,434 | 5.2 | 141.9/140.9/140.5[3] | 141.9 | 142.1 | 0.2 |
| CG[2] | 87,052 | 3,632 | 21,783 | 5.9 | 143.0/142.3/141.7[3] | 143.0 | 143.1 | 0.1 |
| CH[2] | 87,735 | 3,252 | 20,945 | 6.1 | 144.5/143.9/143.1[3] | 144.5 | 144.6 | 0.1 |
| CI[2] | 88,481 | 2,391 | 15,999 | 8.0 | 146.4/145.7/144.7[3] | 146.4 | 146.4 | 0.0 |
| CJ[2] | 89,286 | 2,020 | 16,607 | 7.7 | 148.8/147.9/146.8[3] | 148.8 | 149.0 | 0.2 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER
[2]SKYKOMISH RIVER PORTION OF OVERFLOW
[3]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| ** | | | | | | | | |
| CN[4] | 91,532 | 1,567 | 14,397 | 8.6 | 155.9 | 155.9 | 156.8 | 0.9 |
| CO | 92,043 | 2,040 | 14,492 | 8.8 | 155.0 | 155.0 | 155.4 | 0.4 |
| CP | 92,619 | 2,299 | 15,876 | 8.1 | 156.8 | 156.8 | 157.4 | 0.6 |
| CQ | 93,119 | 2,622 | 19,197 | 6.7 | 159.5 | 159.5 | 159.7 | 0.2 |
| CR | 93,768 | 2,886 | 22,817 | 5.6 | 160.7 | 160.7 | 160.9 | 0.2 |
| CS | 94,641 | 3,388 | 22,126 | 5.8 | 161.8 | 161.8 | 162.1 | 0.3 |
| CT | 95,127 | 3,186 | 15,104 | 8.5 | 162.2 | 162.2 | 162.5 | 0.3 |
| CU | 95,788 | 3,202 | 18,216 | 7.0 | 165.0 | 165.0 | 165.2 | 0.2 |
| CV | 96,713 | 3,267 | 20,454 | 6.3 | 167.2 | 167.2 | 167.3 | 0.1 |
| CW | 97,292 | 3,511 | 19,945 | 6.4 | 168.3 | 168.3 | 168.6 | 0.3 |
| CX | 98,194 | 3,955 | 20,944 | 6.1 | 170.5 | 170.5 | 170.7 | 0.2 |
| CY | 98,725 | 3,722 | 13,487 | 9.5 | 171.0 | 171.0 | 171.1 | 0.1 |
| CZ | 99,305 | 3,130 | 13,455 | 9.5 | 173.1 | 173.1 | 173.6 | 0.5 |
| DA | 99,608 | 2,661 | 15,978 | 8.0 | 175.1 | 175.1 | 175.6 | 0.5 |
| DB | 100,534 | 1,850 | 8,917 | 14.4 | 176.4 | 176.4 | 176.4 | 0.0 |
| DC | 100,870 | 1,568 | 9,135 | 14.0 | 179.2 | 179.2 | 179.2 | 0.0 |
| DD | 102,212 | 3,462 | 18,158 | 7.1 | 187.2 | 187.2 | 187.2 | 0.0 |
| DE | 103,388 | 2,935 | 12,055 | 10.6 | 189.6 | 189.6 | 189.6 | 0.0 |
| DF | 104,190 | 2,626 | 12,643 | 10.1 | 193.1 | 193.1 | 193.1 | 0.0 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER
[2]SKYKOMISH RIVER PORTION OF OVERFLOW
**CROSS SECTIONS LETTERS ARE OFF DUE TO THE FACT THAT THE STUDY WAS NOT UPDATED IN THE CURRENTLY SECLUDED AREA
[4]THIS CROSS SECTION LIES WITHIN AN AREA THAT HAS NOT BEEN UPDATED ON THE FIRM AT THIS TIME DUE TO THE PRESENCE OF LEVEES THAT HAVE NOT BEEN DEMONSTRATED TO MEET THE REQUIREMENTS OF NFIP REGULATIONS SECTION 65.10. PLEASE REFER TO THE SECTION 4.4 OF THIS FIS REPORT FOR MORE INFORMATION.

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| DG | 105,060 | 2,694 | 14,196 | 9.0 | 195.5 | 195.5 | 195.5 | 0.0 |
| DH | 105,590 | 2,768 | 11,673 | 11.0 | 197.1 | 197.1 | 197.1 | 0.0 |
| DI | 107,006 | 2,647 | 17,784 | 7.2 | 203.1 | 203.1 | 203.1 | 0.0 |
| DJ | 108,182 | 2,016 | 12,922 | 9.9 | 205.8 | 205.8 | 205.8 | 0.0 |
| DK | 109,615 | 1,518 | 14,137 | 9.1 | 211.7 | 211.7 | 211.7 | 0.0 |
| DL | 110,596 | 1,302 | 15,204 | 8.4 | 215.3 | 215.3 | 215.6 | 0.3 |
| DM | 111,416 | 906 | 10,726 | 11.9 | 217.0 | 217.0 | 217.5 | 0.5 |
| DN | 111,787 | 734 | 7,478 | 17.1 | 217.2 | 217.2 | 217.5 | 0.3 |
| DO | 112,918 | 1,271 | 14,692 | 8.7 | 224.1 | 224.1 | 225.1 | 1.0 |
| DP | 113,900 | 920 | 11,535 | 11.1 | 225.5 | 225.5 | 226.5 | 1.0 |
| DQ | 114,886 | 486 | 6,761 | 18.9 | 227.4 | 227.4 | 227.9 | 0.5 |
| DR | 116,315 | 422 | 8,118 | 15.8 | 234.6 | 234.6 | 235.6 | 1.0 |
| DS | 117,818 | 319 | 7,040 | 18.2 | 239.4 | 239.4 | 240.1 | 0.7 |
| DT | 118,758 | 330 | 7,730 | 15.3 | 244.7 | 244.7 | 245.6 | 0.9 |
| DU | 119,079 | 497 | 12,498 | 9.4 | 247.9 | 247.9 | 248.5 | 0.6 |
| DV | 119,463 | 424 | 9,189 | 12.8 | 247.9 | 247.9 | 248.1 | 0.2 |
| DW | 119,536 | 388 | 8,314 | 14.2 | 247.9 | 247.9 | 248.1 | 0.2 |
| DX | 119,597 | 395 | 8,454 | 14.0 | 248.6 | 248.6 | 249.1 | 0.5 |
| DY | 119,736 | 497 | 9,423 | 12.5 | 249.9 | 249.9 | 249.9 | 0.0 |
| DZ | 120,052 | 479 | 11,236 | 10.5 | 251.4 | 251.4 | 251.5 | 0.1 |
| EA | 120,425 | 435 | 9,578 | 12.3 | 251.4 | 251.4 | 251.6 | 0.2 |
| EB | 120,582 | 360 | 7,338 | 16.1 | 251.4 | 250.7 | 251.1 | 0.4 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| EC | 120,636 | 349 | 7,471 | 15.8 | 251.9 | 251.9 | 252.2 | 0.3 |
| ED | 120,662 | 420 | 8,093 | 14.6 | 252.8 | 252.8 | 252.9 | 0.1 |
| EE | 121,140 | 539 | 9,699 | 12.2 | 255.2 | 255.2 | 255.4 | 0.2 |
| EF | 122,035 | 578 | 7,405 | 15.9 | 257.1 | 257.1 | 257.3 | 0.2 |
| EG | 122,480 | 519 | 7,048 | 16.7 | 259.7 | 259.7 | 259.7 | 0.0 |
| EH | 123,018 | 274 | 4,905 | 24.1 | 261.8 | 261.8 | 261.8 | 0.0 |
| EI | 124,667 | 887 | 10,227 | 11.5 | 277.6 | 277.6 | 277.9 | 0.3 |
| EJ | 125,481 | 800 | 11,263 | 10.5 | 280.0 | 280.0 | 280.6 | 0.6 |
| EK | 126,014 | 935 | 7,227 | 16.3 | 282.1 | 282.1 | 282.1 | 0.0 |
| EL | 127,547 | 842 | 8,362 | 14.1 | 292.9 | 292.9 | 292.9 | 0.0 |
| EM | 127,956 | 617 | 6,747 | 17.5 | 294.6 | 294.6 | 294.6 | 0.0 |
| EN | 128,886 | 813 | 8,986 | 13.1 | 301.8 | 301.8 | 301.8 | 0.0 |
| EO | 129,628 | 534 | 7,490 | 15.8 | 304.3 | 304.3 | 304.3 | 0.0 |
| EP | 130,656 | 590 | 8,250 | 14.3 | 309.1 | 309.1 | 309.1 | 0.0 |
| EQ | 130,983 | 536 | 7,469 | 15.8 | 309.8 | 309.8 | 309.8 | 0.0 |
| ER | 131,705 | 318 | 5,389 | 21.9 | 311.2 | 311.2 | 311.2 | 0.0 |
| ES | 133,320 | 530 | 8,192 | 14.4 | 321.7 | 321.7 | 321.7 | 0.0 |
| ET | 134,432 | 638 | 6,848 | 17.2 | 325.5 | 325.5 | 325.2 | 0.0 |
| EU | 134,988 | 426 | 6,052 | 19.5 | 328.7 | 328.7 | 328.7 | 0.0 |
| EV | 135,909 | 381 | 6,187 | 19.1 | 336.7 | 336.7 | 336.7 | 0.0 |
| EW | 136,702 | 362 | 5,743 | 20.6 | 342.0 | 342.0 | 342.0 | 0.0 |
| EX | 137,812 | 333 | 7,358 | 16.0 | 349.8 | 349.8 | 349.8 | 0.0 |
| EY | 138,281 | 344 | 6,625 | 17.8 | 350.9 | 350.9 | 350.9 | 0.0 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNOQUALMIE RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SKYKOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A[2] | | | | | | | | |
| B-AH[3] | | | | | | | | |
| AI | 16.01 | 2,171 | 27,190 | 6.5 | 36.8 | 36.8 | 36.8 | 0.0 |
| AJ | 16.53 | 3,942 | 45,232 | 4.5 | 38.0 | 38.0 | 38.0 | 0.0 |
| AK | 16.86 | 3,567 | 63,610 | 3.2 | 38.3 | 38.3 | 38.5 | 0.2 |
| AL | 17.50 | 3,660 | 33,818 | 6.0 | 38.9 | 38.9 | 39.3 | 0.4 |
| AM | 18.02 | 4,024 | 47,800 | 4.3 | 39.7 | 39.7 | 40.1 | 0.4 |
| AN | 18.30 | 4,500 | 44,568 | 4.6 | 40.0 | 40.0 | 40.5 | 0.5 |
| AO | 18.50 | 4,205 | 43,529 | 4.7 | 40.2 | 40.2 | 40.7 | 0.5 |
| AP | 19.04 | 3,032 | 42,024 | 4.9 | 40.8 | 40.8 | 41.5 | 0.7 |
| AQ | 19.51 | 2,766 | 33,206 | 6.1 | 41.6 | 41.6 | 42.3 | 0.7 |
| AR | 19.85 | 3,165 | 40,383 | 5.1 | 42.5 | 42.5 | 43.2 | 0.7 |
| AS | 20.18 | 1,322 | 20,878 | 9.8 | 43.2 | 43.2 | 43.8 | 0.6 |
| AT | 20.44 | 1,031 | 25,015 | 10.1 | 44.4 | 44.4 | 45.4 | 1.0 |
| AU[4] | 20.46 | 1,024 | 25,415 | 8.0 | 44.4 | 44.4 | 45.4 | 1.0 |
| AV[4] | 20.74 | 1,489 | 31,916 | 6.4 | 44.4 | 44.4 | 45.0 | 0.6 |
| AW[4] | 20.98 | 1,988 | 36,038 | 5.7 | 45.5 | 45.5 | 46.2 | 0.7 |
| AX[4] | 21.28 | 2,598 | 55,133 | 5.7 | 46.6 | 46.6 | 47.3 | 0.7 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2]NO FLOODWAY OR FRINGE COMPUTED
[3]SEE TABLE 25, DENSITY FRINGE AREA DATA TABLE
[4]CROSS SECTIONS WITHIN THE NEW STUDY REACH

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SNOHOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A, A[2] | 898 | 2,854 | 58,465 | 3.5 | 46.6/46.6[4] | 46.6 | 47.3 | 0.7 |
| B, B[2] | 1,162 | 3,011 | 60,876 | 3.3 | 46.7/46.7[4] | 46.7 | 47.4 | 0.7 |
| C, C[2] | 2,165 | 3,559 | 58,756 | 3.5 | 46.9/46.9[4] | 46.9 | 47.5 | 0.6 |
| D, D[2] | 3,643 | 4,440 | 70,101 | 2.9 | 47.2/47.2[4] | 47.2 | 47.9 | 0.7 |
| E, E[2] | 4,699 | 4,858 | 66,634 | 3.1 | 47.6/47.5[4] | 47.6 | 48.1 | 0.5 |
| F, F[2] | 5,702 | 4,971 | 74,139 | 2.7 | 48.0/48.0[4] | 48.0 | 48.6 | 0.6 |
| G, G[2] | 6,917 | 5,276 | 76,550 | 2.7 | 48.4/48.3[4] | 48.4 | 48.9 | 0.5 |
| H, H[2] | 7,973 | 6,724 | 87,358 | 2.3 | 48.6/48.7[4] | 48.6 | 49.3 | 0.7 |
| I, I[2] | 8,765 | 8,188 | 94,968 | 1.9 | 48.9/48.8[4] | 48.9 | 49.4 | 0.5 |
| J | 9,398 | 5,247 | 64,973 | 1.6 | 48.9 | 48.9 | 49.5 | 0.6 |
| K | 10,190 | 3,671 | 58,838 | 1.5 | 49.0 | 49.0 | 49.6 | 0.6 |
| L | 11,458 | 3,410 | 59,078 | 1.5 | 49.1 | 49.1 | 49.7 | 0.6 |
| M | 11,510 | 3,572 | 58,645 | 1.5 | 49.1 | 49.1 | 49.7 | 0.6 |
| N | 12,250 | 3,500 | 67,909 | 1.3 | 49.1 | 49.1 | 49.8 | 0.7 |
| O | 13,411 | 3,255 | 65,784 | 1.3 | 49.1 | 49.1 | 49.8 | 0.7 |
| P | 14,414 | 3,668 | 77,212 | 1.1 | 49.2 | 49.2 | 49.9 | 0.7 |
| Q | 15,523 | 3,922 | 75,837 | 1.1 | 49.2 | 49.2 | 50.0 | 0.8 |
| R, A[3] | 17,266 | 4,187 | 76,029 | 1.1 | 49.2/49.2[4] | 49.2 | 50.0 | 0.8 |
| S, B[3] | 18,427 | 4,756 | 77,343 | 1.1 | 49.3/49.3[4] | 49.2 | 50.0 | 0.8 |
| T, C[3] | 20,117 | 4,961 | 92,162 | 0.9 | 49.3/49.3[4] | 49.3 | 50.1 | 0.8 |
| U, D[3] | 21,278 | 5,235 | 99,556 | 0.9 | 49.4/49.4[4] | 49.4 | 50.2 | 0.8 |
| V, E[3] | 22,598 | 5,480 | 110,739 | 0.8 | 49.4/49.4[4] | 49.4 | 50.2 | 0.8 |

[1]MAIN STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER
[2]SKYKOMISH RIVER PORTION OF OVERFLOW
[3]SNOQUALMIE OVERFLOW REACH 1 PORTION OF OVERFLOW
[4]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SNOQUALMIE RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W, F[2] | 23,813 | 6204 | 125,890 | 0.7 | 49.4/49.4[4] | 49.4 | 50.2 | 0.8 |
| X, G[2] | 24,605 | 7070 | 135,928 | 0.6 | 49.5/49.5[4] | 49.5 | 50.3 | 0.8 |
| Y, H[2] | 25,766 | 7788 | 156,260 | 0.6 | 49.5/49.5[4] | 49.5 | 50.3 | 0.8 |
| Z, I[2] | 27,350 | 8551 | 162,192 | 0.5 | 49.5/49.5[4] | 49.5 | 50.3 | 0.8 |
| AA, J[2] | 29,093 | 8,349/750[3] | 154,290 | 0.6 | 49.5/49.5[4] | 49.5 | 50.3 | 0.8 |

[1]MAIN STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER
[2]SNOQUALMIE OVERFLOW REACH 1 PORTION OF OVERFLOW
[3]TOTAL FLOODWAY WIDTH/FLOODWAY WIDTH IN SNOHOMISH COUNTY
[4]WHERE THERE ARE OVERFLOW REACHES, THE ORDER IS MAIN CHANNEL FIRST AND THEN OVERFLOW REACHES

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SNOQUALMIE RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 18.20 | 1,116 | 7,002 | 6.4 | 74.7 | 74.7 | 75.2 | 0.5 |
| B | 18.56 | 962 | 9,130 | 4.9 | 76.5 | 76.5 | 77.3 | 0.8 |
| C | 18.78 | 852 | 6,177 | 7.3 | 77.0 | 77.0 | 77.7 | 0.7 |
| D | 19.23 | 1,178 | 13,317 | 3.4 | 78.9 | 78.9 | 79.9 | 1.0 |
| E[2] | 19.92 | 428 | 4,494 | 10.2 | 82.9 | 82.9 | 83.5 | 0.6 |
| F | 20.15 | 436 | 3,923 | 11.7 | 85.6 | 85.6 | 86.0 | 0.4 |
| G | 20.48 | 703 | 6,756 | 6.8 | 90.0 | 90.0 | 90.1 | 0.1 |
| H | 20.88 | 847 | 9,363 | 4.9 | 91.8 | 91.8 | 92.1 | 0.3 |
| I | 21.13 | 962 | 7,912 | 5.8 | 93.0 | 93.0 | 93.4 | 0.4 |
| J | 21.33 | 941 | 7,604 | 6.0 | 94.4 | 94.4 | 94.9 | 0.5 |
| K | 21.56 | 1,071 | 7,656 | 6.0 | 96.0 | 96.0 | 97.0 | 1.0 |
| L | 21.88 | 344 | 3,484 | 12.3 | 99.3 | 99.3 | 100.0 | 0.7 |
| M | 22.25 | 628 | 5,797 | 7.4 | 104.1 | 104.1 | 105.0 | 0.9 |
| N | 22.61 | 514 | 5,364 | 8.0 | 106.5 | 106.5 | 107.3 | 0.8 |
| O | 22.82 | 288 | 4,482 | 9.5 | 107.9 | 107.9 | 108.6 | 0.7 |
| P | 23.09 | 256 | 4,470 | 9.6 | 109.9 | 109.9 | 110.4 | 0.5 |
| Q | 23.37 | 224 | 2,977 | 14.3 | 112.8 | 112.8 | 113.1 | 0.3 |
| R | 23.84 | 230 | 4,128 | 10.3 | 117.8 | 117.8 | 117.8 | 0.0 |
| S | 24.28 | 382 | 7,657 | 5.6 | 120.5 | 120.5 | 120.9 | 0.4 |
| T | 24.89 | 297 | 4,054 | 10.5 | 122.6 | 122.6 | 123.0 | 0.4 |
| U | 25.60 | 300 | 5,416 | 7.9 | 128.7 | 128.7 | 128.8 | 0.1 |
| V | 25.74 | 262 | 5,300 | 8.1 | 129.2 | 129.2 | 129.3 | 0.1 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH OF STILLAGUAMISH RIVER
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARD TO THE NEW AERIAL BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SOUTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 26.10 | 220 | 4,130 | 10.3 | 132.1 | 132.1 | 132.3 | 0.2 |
| X | 26.30 | 250 | 4,655 | 9.2 | 134.5 | 134.5 | 134.6 | 0.1 |
| Y | 26.74 | 350 | 4,485 | 9.5 | 138.3 | 138.3 | 138.5 | 0.2 |
| Z | 27.13 | 290 | 4,328 | 9.9 | 141.7 | 141.7 | 142.2 | 0.5 |
| AA | 30.35 | 300 | 4,100 | 10.4 | 170.5 | 170.5 | 171.1 | 0.6 |
| AB | 30.70 | 340 | 5,282 | 8.1 | 175.6 | 175.6 | 175.8 | 0.2 |
| AC | 31.22 | 266 | 4,702 | 9.3 | 182.4 | 182.4 | 183.1 | 0.7 |
| AD | 31.51 | 293 | 5,241 | 8.3 | 186.3 | 186.3 | 186.8 | 0.5 |
| AE | 31.92 | 263 | 4,606 | 9.4 | 191.8 | 191.8 | 192.8 | 1.0 |
| AF | 32.40 | 294 | 5,092 | 8.5 | 198.0 | 198.0 | 198.8 | 0.8 |
| AG | 32.66 | 240 | 3,929 | 11.1 | 201.8 | 201.8 | 202.6 | 0.8 |
| AH | 32.93 | 380 | 5,513 | 7.9 | 207.0 | 207.0 | 207.6 | 0.6 |
| AI | 33.10 | 609 | 7,354 | 5.9 | 209.4 | 209.4 | 210.3 | 0.9 |
| AJ | 33.29 | 291 | 4,149 | 10.5 | 212.6 | 212.6 | 213.2 | 0.6 |
| AK | 33.43 | 258 | 4,541 | 9.6 | 216.1 | 216.1 | 216.4 | 0.3 |
| AL | 33.77 | 416 | 3,768 | 9.6 | 222.6 | 222.6 | 223.1 | 0.5 |
| AM | 33.87 | 260 | 3,197 | 11.3 | 228.4 | 228.4 | 229.3 | 0.9 |
| AN | 34.10 | 187 | 2,407 | 15.0 | 236.9 | 236.9 | 237.2 | 0.3 |
| AO | 41.32 | 150 | 1,881 | 19.1 | 847.3 | 847.3 | 847.5 | 0.2 |
| AP | 41.63 | 541 | 5,269 | 6.8 | 857.8 | 857.8 | 857.8 | 0.0 |
| AQ[2] | 41.98 | 148 | 2,235 | 15.6 | 861.7 | 861.7 | 861.9 | 0.2 |
| AR[2] | 42.27 | 477 | 4,182 | 8.4 | 868.7 | 868.7 | 869.0 | 0.3 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH OF STILLAGUAMISH RIVER
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARD TO THE NEW AERIAL BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SOUTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| AS[2] | 42.56 | 272 | 2,963 | 11.8 | 871.3 | 871.3 | 871.6 | 0.3 |
| AT | 42.86 | 611 | 5,222 | 6.5 | 876.4 | 876.4 | 876.9 | 0.5 |
| AU | 43.30 | 282 | 3,009 | 11.3 | 881.5 | 881.5 | 881.9 | 0.4 |
| AV | 43.54 | 700 | 6,124 | 5.5 | 886.5 | 886.5 | 887.1 | 0.6 |
| AW | 43.94 | 401 | 3,184 | 10.3 | 891.8 | 891.8 | 892.4 | 0.6 |
| AX | 44.26 | 250 | 2,413 | 13.6 | 898.5 | 898.5 | 898.9 | 0.4 |
| AY | 44.47 | 205 | 2,454 | 13.4 | 903.7 | 903.7 | 903.9 | 0.2 |
| AZ | 44.76 | 267 | 2,903 | 11.0 | 911.5 | 911.5 | 912.0 | 0.5 |
| BA | 45.06 | 506 | 5,315 | 6.0 | 917.6 | 917.6 | 918.4 | 0.8 |
| BB | 45.37 | 431 | 3,731 | 8.5 | 922.7 | 922.7 | 923.3 | 0.6 |
| BC | 45.66 | 403 | 3,449 | 8.9 | 930.4 | 930.4 | 930.7 | 0.3 |
| BD | 45.98 | 223 | 2,395 | 12.8 | 939.6 | 939.6 | 940.2 | 0.6 |
| BE | 46.14 | 449 | 4,903 | 6.3 | 945.5 | 945.5 | 946.4 | 0.9 |
| BF | 46.44 | 159 | 1,936 | 15.3 | 952.6 | 952.6 | 953.1 | 0.5 |
| BG | 46.68 | 129 | 1,647 | 18.0 | 961.9 | 961.9 | 962.2 | 0.3 |
| BH | 46.96 | 219 | 2,542 | 11.7 | 973.2 | 973.2 | 974.1 | 0.9 |
| BI | 47.20 | 180 | 1,706 | 16.8 | 982.0 | 982.0 | 982.1 | 0.1 |
| BJ | 47.56 | 176 | 2,260 | 12.7 | 1,007.2 | 1,007.2 | 1,007.3 | 0.1 |
| BK | 47.95 | 243 | 1,894 | 15.1 | 1,028.2 | 1,028.2 | 1,028.8 | 0.6 |
| BL | 48.29 | 208 | 3,346 | 8.2 | 1,045.9 | 1,045.9 | 1,046.1 | 0.2 |
| BM | 48.55 | 239 | 1,865 | 14.8 | 1,057.6 | 1,057.6 | 1,058.4 | 0.8 |
| BN | 48.74 | 230 | 2,489 | 11.1 | 1,069.0 | 1,069.0 | 1,069.9 | 0.9 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH OF STILLAGUAMISH RIVER
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARD TO THE NEW AERIAL BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SOUTH FORK STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A-Z[2] | | | | | | | | |
| AA | 11.10 | 629 | 8,764 | 8.2 | 45.1 | 45.1 | 45.9 | 0.8 |
| AB | 11.11 | 552 | 8,778 | 8.2 | 45.2 | 45.2 | 45.9 | 0.7 |
| AC | 11.12 | 523 | 7,784 | 9.3 | 45.2 | 45.2 | 45.9 | 0.7 |
| AD | 11.50 | 970 | 9,076 | 7.9 | 46.3 | 46.3 | 46.8 | 0.5 |
| AE | 12.24 | 1001 | 8,633 | 8.7 | 48.0 | 48.0 | 48.6 | 0.6 |
| AF | 13.19 | 776 | 8,988 | 8.3 | 51.8 | 51.8 | 52.3 | 0.5 |
| AG | 14.14 | 1,050 | 10,120 | 6.5 | 56.0 | 56.0 | 57.0 | 1.0 |
| AH | 15.14 | 664 | 10,271 | 6.4 | 60.4 | 60.4 | 61.3 | 0.9 |
| AI | 16.59 | 713 | 8,582 | 7.7 | 62.4 | 62.4 | 63.0 | 0.6 |
| AJ | 16.92 | 2,546 | 18,133 | 3.6 | 67.5 | 67.5 | 67.8 | 0.3 |
| AK | 17.22 | 2,700 | 31,516 | 2.4 | 68.3 | 68.3 | 69.2 | 0.9 |
| AL | 17.73 | 512 | 6,478 | 11.6 | 71.2 | 71.2 | 71.8 | 0.6 |
| AM | 17.74 | 451 | 7,093 | 6.3 | 71.3 | 71.3 | 71.9 | 0.6 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH OF HAT SLOUGH
[2]NO FLOODWAY COMPUTED

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: STILLAGUAMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 14.11 | 584 | 4,334 | 2.1 | 56.0 | 56.0 | 57.0 | 1.0 |
| B | 16.94 | 1,285 | 5,402 | 1.7 | 58.2 | 58.2 | 58.2 | 0.0 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH OF HAT SLOUGH

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SNOHOMISH COUNTY, WASHINGTON**

AND INCORPORATED AREAS

**FLOODWAY DATA**

**FLOODING SOURCE: STILLAGUAMISH RIVER SPLIT FLOW**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 474 | 520 | 6330 | 9.3 | 116.8[2] | 116.1 | 116.9 | 0.8 |
| B | 585 | 480 | 5986 | 9.9 | 117.0 | 117.0 | 117.5 | 0.5 |
| C | 1,188 | 1,079 | 10,961 | 5.4 | 119.1 | 119.1 | 119.7 | 0.6 |
| D | 2,341 | 1,604 | 17,617 | 3.4 | 120.1 | 120.1 | 120.9 | 0.8 |
| E | 2,982 | 1,645 | 17,632 | 3.4 | 120.3 | 120.3 | 121.2 | 0.9 |
| F | 3,460 | 1,648 | 15,497 | 3.8 | 120.6 | 120.6 | 121.5 | 0.9 |
| G | 4,275 | 1,536 | 9,735 | 6.1 | 122.1 | 122.1 | 122.9 | 0.8 |
| H | 5,059 | 1,708 | 13,381 | 4.4 | 124.2 | 124.2 | 125.2 | 1.0 |
| I | 5,537 | 1,889 | 13,184 | 4.5 | 125.1 | 125.1 | 126.0 | 0.9 |
| J | 5,842 | 1,807 | 11,259 | 6.3 | 126.1 | 126.1 | 126.7 | 0.6 |
| K | 6,457 | 1,874 | 11,590 | 5.1 | 128.3 | 128.3 | 128.9 | 0.6 |
| L | 6,813 | 1,797 | 10,437 | 5.7 | 129.2 | 129.2 | 130.2 | 1.0 |
| M | 7,275 | 1,512 | 12,229 | 4.8 | 131.1 | 131.1 | 132.1 | 1.0 |
| N | 7,808 | 1,325 | 11,040 | 5.4 | 132.6 | 132.6 | 133.3 | 0.7 |
| O | 8,682 | 1,372 | 8,965 | 6.6 | 134.9 | 134.9 | 135.7 | 0.8 |
| P | 8,927 | 1,087 | 6,721 | 8.8 | 135.6 | 135.6 | 136.5 | 0.9 |
| Q | 9,493 | 909 | 5,358 | 11.0 | 139.7 | 139.7 | 140.4 | 0.7 |
| R | 9,793 | 742 | 8,073 | 7.3 | 143.2 | 143.2 | 144.2 | 1.0 |
| S | 10,347 | 819 | 8,516 | 6.9 | 144.7 | 144.7 | 145.7 | 1.0 |
| T | 10,869 | 970 | 6,382 | 9.3 | 146.3 | 146.3 | 146.9 | 0.6 |
| U | 10,969 | 1,030 | 7,211 | 8.2 | 147.7 | 147.7 | 147.8 | 0.1 |
| V | 11,769 | 539 | 5,545 | 10.7 | 152.3 | 152.3 | 152.4 | 0.1 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER
[2]ELEVATION CONTROLLED BY SKYKOMISH RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SULTAN RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 12,289 | 672 | 5,602 | 10.6 | 154.9 | 154.9 | 155.6 | 0.7 |
| X | 12,465 | 682 | 6,425 | 9.2 | 156.4 | 156.4 | 157.3 | 0.9 |
| Y | 12,850 | 678 | 6,440 | 9.2 | 158.0 | 158.0 | 159.0 | 1.0 |
| Z | 13,600 | 615 | 6,465 | 9.1 | 161.4 | 161.4 | 162.4 | 1.0 |
| AA | 14,187 | 417 | 5,384 | 11.0 | 163.9 | 163.9 | 164.9 | 1.0 |
| AB | 14,892 | 269 | 4,308 | 13.7 | 167.3 | 167.3 | 168.3 | 1.0 |
| AC | 15,998 | 329 | 4,853 | 12.2 | 173.5 | 173.5 | 174.2 | 0.7 |
| AD | 17,377 | 151 | 2,578 | 22.9 | 182.6 | 182.6 | 182.7 | 0.1 |

[1]STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SKYKOMISH RIVER

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SULTAN RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 92 | 45 | 195 | 5.2 | 88.8 | 88.8 | 88.8 | 0.0 |
| B | 1,212 | 36 | 187 | 5.4 | 100.3 | 100.3 | 100.3 | 0.0 |
| C | 2,552 | 36 | 120 | 8.4 | 111.6 | 111.6 | 111.9 | 0.3 |
| D[2] | 4,381 | 55 | 205 | 4.9 | 131.7 | 131.7 | 131.8 | 0.1 |
| E[2] | 4,799 | 39 | 124 | 8.1 | 136.1 | 136.1 | 136.1 | 0.0 |
| F | 5,139 | 24 | 117 | 8.6 | 140.1 | 140.1 | 140.1 | 0.0 |
| G | 5,349 | 54 | 134 | 7.5 | 142.6 | 142.6 | 142.6 | 0.0 |
| H | 6,203 | 38 | 180 | 5.6 | 148.5 | 148.5 | 148.9 | 0.4 |
| I | 7,378 | 52 | 144 | 7.0 | 158.3 | 158.3 | 158.5 | 0.2 |
| J | 8,572 | 37 | 200 | 3.3 | 167.9 | 167.9 | 168.6 | 0.7 |
| K | 10,042 | 31 | 109 | 6.1 | 180.2 | 180.2 | 181.1 | 0.9 |
| L | 12,058 | 49 | 151 | 4.0 | 199.2 | 199.2 | 199.2 | 0.0 |
| M[2] | 12,821 | 31 | 78 | 7.8 | 207.1 | 207.1 | 207.3 | 0.2 |
| N | 13,677 | 48 | 112 | 5.5 | 214.7 | 214.7 | 215.2 | 0.5 |
| O | 14,439 | 60 | 170 | 3.6 | 221.8 | 221.8 | 222.2 | 0.4 |
| P | 17,381 | 40 | 100 | 6.1 | 247.2 | 247.2 | 247.3 | 0.1 |
| Q | 18,983 | 42 | 103 | 5.9 | 257.1 | 257.1 | 257.1 | 0.0 |
| R | 20,408 | 43 | 148 | 4.1 | 270.8 | 270.8 | 271.7 | 0.9 |
| S | 21,971 | 44 | 89 | 6.9 | 285.0 | 285.0 | 285.9 | 0.9 |
| T | 23,566 | 36 | 69 | 7.5 | 298.3 | 298.3 | 298.4 | 0.1 |
| U | 25,033 | 21 | 81 | 6.4 | 307.6 | 307.6 | 307.6 | 0.0 |
| V[2] | 25,358 | 28 | 108 | 4.8 | 309.4 | 309.4 | 309.8 | 0.4 |

[1]STREAM DISTANCE IN FEET ABOVE KING COUNTY-SNOHOMISH COUNTY LINE
[2]VALUES BASED ON APPROPRIATE HYDRAULIC MODEL OUTPUT WITHOUT REGARD TO THE NEW AERIAL BASE MAP ADJUSTMENTS

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## FLOODWAY DATA

**FLOODING SOURCE: SWAMP 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 25,521 | 36 | 105 | 5.0 | 310.4 | 310.4 | 310.8 | 0.4 |
| X | 25,940 | 18 | 62 | 8.4 | 315.9 | 315.9 | 315.9 | 0.0 |
| Y | 26,267 | 26 | 75 | 7.0 | 316.7 | 316.7 | 316.7 | 0.0 |
| Z | 27,708 | 30 | 75 | 6.9 | 334.1 | 334.1 | 334.1 | 0.0 |
| AA | 28,510 | 63 | 206 | 2.5 | 337.1 | 337.1 | 337.4 | 0.3 |
| AB | 29,758 | 40 | 153 | 3.4 | 345.6 | 345.6 | 346.1 | 0.5 |

[1]STREAM DISTANCE IN FEET ABOVE KING COUNTY-SNOHOMISH COUNTY LINE

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SNOHOMISH COUNTY, WASHINGTON**

AND INCORPORATED AREAS

## FLOODWAY DATA

**FLOODING SOURCE: SWAMP 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 PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.52 | 641 | 4,079 | 3.7 | 127.9* | 125.5 | 125.9 | 0.4 |
| B | 0.70 | 580 | 3,473 | 4.3 | 128.9* | 126.2 | 127.0 | 0.8 |
| C | 1.02 | 487 | 2,529 | 5.9 | 131.1* | 129.4 | 129.7 | 0.3 |
| D | 1.31 | 395 | 2,634 | 5.7 | 134.9* | 133.2 | 133.4 | 0.2 |
| E | 1.92 | 527 | 3,805 | 3.9 | 141.1* | 141.1 | 141.8 | 0.7 |
| F | 2.33 | 700 | 3,219 | 4.6 | 147.5* | 146.7 | 147.1 | 0.4 |
| G[2] | 2.70 | 219 | 2,067 | 7.2 | 151.9* | 151.9 | 152.0 | 0.1 |
| H | 2.80 | 225 | 3,280 | 4.5 | 152.7 | 152.7 | 152.8 | 0.1 |
| I | 3.08 | 196 | 1,745 | 8.5 | 154.8 | 154.8 | 154.9 | 0.1 |
| J | 3.53 | 327 | 2,008 | 7.4 | 162.4 | 162.4 | 162.6 | 0.2 |
| K | 3.69 | 250 | 2,274 | 6.6 | 164.9 | 164.9 | 165.1 | 0.2 |
| L | 3.70 | 224 | 2,217 | 6.9 | 164.9 | 164.9 | 165.2 | 0.3 |
| M | 3.87 | 680 | 4,005 | 3.5 | 166.6 | 166.6 | 166.7 | 0.1 |
| N | 4.05 | 317 | 2,273 | 6.2 | 168.7 | 168.7 | 169.2 | 0.5 |
| O | 4.32 | 364 | 3,184 | 3.4 | 172.1 | 172.1 | 173.0 | 0.9 |
| P | 4.94 | 250 | 1,231 | 4.5 | 176.5 | 176.5 | 177.3 | 0.8 |
| Q | 5.42 | 464 | 2,020 | 2.8 | 181.7 | 181.7 | 182.6 | 0.9 |
| R | 5.80 | 80 | 871 | 6.0 | 188.2 | 188.2 | 188.6 | 0.4 |
| S | 6.00 | 158 | 740 | 7.0 | 191.1 | 191.1 | 191.5 | 0.4 |
| T | 6.44 | 191 | 769 | 6.8 | 204.6 | 204.6 | 205.1 | 0.5 |
| U | 6.60 | 100 | 500 | 10.4 | 215.8 | 215.8 | 215.8 | 0.0 |
| V | 6.91 | 102 | 612 | 8.5 | 234.4 | 234.4 | 234.9 | 0.5 |
| W | 7.30 | 241 | 686 | 7.2 | 273.2 | 273.2 | 273.4 | 0.2 |

*ELEVATIONS CONTROLLED BY SKYKOMISH RIVER

[1]STREAM DISTANCE IN MILES ABOVE CONFLUENCE WITH SKYKOMISH RIVER

[2] THIS CROSS SECTION LIES WITHIN AN AREA THAT HAS NOT BEEN UPDATED ON THE FIRM AT THIS TIME DUE TO THE PRESENCE OF LEVEES THAT HAVE NOT BEEN DEMONSTRATED TO MEET THE REQUIREMENTS OF NFIP REGULATIONS SECTION 65.10. PLEASE REFER TO THE SECTION 4.4 OF THIS FIS REPORT FOR MORE INFORMATION.

TABLE 24

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FLOODING SOURCE: WALLACE RIVER**

**Table 25: Density Fringe Area Data**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[2] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A[4] | | | | | | | | |
| B | 1.65 | 422 | 6,973 | 2.9 | * | 11.7[3] | 11.8[3] | 0.1 |
| C | 1.83 | 373 | 5,928 | 3.6 | * | 11.8[3] | 11.9[3] | 0.1 |
| D | 2.40 | 420 | 6,488 | 3.2 | * | 12.3[3] | 12.6[3] | 0.3 |
| E | 2.87 | 1,214 | 9,589 | 3.7 | * | 12.5[3] | 13.1[3] | 0.6 |
| F | 3.19 | 5,113 | 29,486 | 3.4 | * | 12.7[3] | 13.6[3] | 0.9 |
| G | 4.24 | 900 | 7,861 | 3.5 | 14.0 | 14.0 | 14.6 | 0.6 |
| H | 5.54 | 2,055 | 21,310 | 3.5 | 15.3 | 15.3 | 15.7 | 0.4 |
| I | 6.21 | 2,256 | 17,790 | 3.9 | 15.7 | 15.7 | 16.2 | 0.5 |
| J | 6.72 | 3,080 | 33,618 | 2.7 | 16.1 | 16.1 | 16.6 | 0.5 |
| K | 6.85 | 2,916 | 36,389 | 2.6 | 16.1 | 16.1 | 16.6 | 0.5 |
| L | 7.37 | 345 | 7,971 | 4.2 | 16.2 | 16.2 | 16.8 | 0.6 |
| M | 8.75 | 1,454 | 19,353 | 4.4 | 16.7 | 16.7 | 17.3 | 0.6 |
| N | 9.12 | 1,082 | 15,311 | 4.6 | 16.9 | 16.9 | 17.3 | 0.4 |
| O | 9.32 | 1,218 | 15,282 | 5.0 | 16.9 | 16.9 | 17.3 | 0.4 |
| P | 9.40 | 1,083 | 14,007 | 5.3 | 16.9 | 16.9 | 17.3 | 0.4 |
| Q | 10.95 | 1,648 | 21,971 | 7.3 | 18.9 | 18.9 | 18.9 | 0.0 |
| R | 11.46 | 1,750 | 27,045 | 6.0 | 20.1 | 20.1 | 20.2 | 0.1 |
| S | 13.08 | 2,377 | 35,749 | 5.6 | 22.8 | 22.8 | 23.1 | 0.3 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

[2] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE

[3]ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER FROM PUGET SOUND

[4]NO DENSITY FRINGE OR FLOODWAY COMPUTED

*CONTROLLED BY COASTAL FLOODING – SEE FIRM FOR REGULATORY BASE FLOOD ELEVATION

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

**DENSITY FRINGE AREA DATA**

**FLOODING SOURCE: EBEY SLOUGH**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[2] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.00 | 407 | 5,237 | 4.1 | 15.5 | 15.5 | 16.1 | 0.6 |
| B | 0.25 | 250 | 5,157 | 3.5 | 15.8 | 15.8 | 16.4 | 0.6 |
| C | 0.60 | 272 | 5,205 | 3.3 | 16.1 | 16.1 | 16.6 | 0.5 |

[1]STREAM DISTANCE IN MILES ABOVE CONFLUENCE WITH STEAMBOAT SLOUGH
[2] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: EBEY-STEAMBOAT SLOUGH CONNECTOR**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION[3] | DISTANCE[1] | WIDTH[2] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.00 | 8,540 | 19,109 | 1.0 | 23.9 | 23.9 | 24.2 | 0.3 |
| B | 0.76 | 3,514 | 46,938 | 3.1 | 24.2 | 24.2 | 24.6 | 0.4 |
| C | 1.65 | 4,690 | 91,868 | 1.5 | 25.0 | 25.0 | 25.6 | 0.6 |
| D | 2.06 | 6,340 | 130,368 | 1.0 | 25.1 | 25.1 | 25.7 | 0.6 |
| E | 2.68 | 6,910 | 135,254 | 1.0 | 25.2 | 25.2 | 25.8 | 0.6 |
| F | 3.16 | 7,487 | 126,411 | 1.5 | 25.3 | 25.3 | 25.9 | 0.6 |
| G | 3.65 | 7,565, | 114,236 | 2.3 | 25.4 | 25.4 | 26.0 | 0.6 |
| H | 4.05 | 9,145 | 131,146 | 2.6 | 25.5 | 25.5 | 26.1 | 0.6 |
| I | 4.67 | 5,050 | 47,238 | 3.9 | 25.7 | 25.7 | 26.5 | 0.8 |
| J | 5.19 | 3,960 | 40,187 | 2.1 | 26.1 | 26.1 | 27.0 | 0.9 |
| K | 5.63 | 3,050 | 30,009 | 2.7 | 26.4 | 26.4 | 27.4 | 1.0 |
| L | 6.04 | 2,040 | 3,835 | 7.0 | 26.8 | 26.8 | 27.8 | 1.0 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE
[3] THIS CROSS SECTION LIES WITHIN AN AREA THAT HAS NOT BEEN UPDATED ON THE FIRM AT THIS TIME DUE TO THE PRESENCE OF LEVEES THAT HAVE NOT BEEN DEMONSTRATED TO MEET THE REQUIREMENTS OF NFIP REGULATIONS SECTION 65.10. PLEASE REFER TO THE SECTION 4.4 OF THIS FIS REPORT FOR MORE INFORMATION.

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: MARSHLAND DIVERSION CHANNEL**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[4] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A[2] | | | | | | | | |
| B | 0.50 | 1,171 | 18,260 | 4.9 | * | 9.9[3] | 9.9[3] | 0.0 |
| C | 2.02 | 766 | 12,298 | 7.3 | * | 12.7[3] | 13.0[3] | 0.3 |
| D | 2.60 | 1,227 | 21,123 | 4.2 | 14.3 | 14.3 | 14.9 | 0.6 |
| E | 2.90 | 581 | 10,504 | 8.5 | 14.3 | 14.3 | 14.9 | 0.6 |
| F | 3.30 | 703 | 22,351 | 4.0 | 15.4 | 15.4 | 16.1 | 0.7 |
| G | 3.68 | 390 | 11,748 | 7.6 | 15.4 | 15.4 | 16.1 | 0.7 |
| H | 3.86 | 750 | 11,890 | 7.5 | 15.7 | 15.7 | 16.3 | 0.6 |
| I | 4.40 | 1,549 | 15,115 | 6.8 | 16.6 | 16.6 | 17.0 | 0.4 |
| J | 4.65 | 1,004 | 14,690 | 7.0 | 17.0 | 17.0 | 17.3 | 0.3 |
| K | 4.84 | 467 | 11,220 | 7.8 | 17.1 | 17.1 | 17.4 | 0.3 |
| L | 5.00 | 522 | 11,669 | 7.4 | 17.4 | 17.4 | 17.6 | 0.2 |
| M | 5.59 | 546 | 13,088 | 7.1 | 18.3 | 18.3 | 18.3 | 0.0 |
| N | 6.25 | 534 | 11,654 | 8.3 | 19.9 | 19.9 | 19.9 | 0.0 |
| O | 6.77 | 1,557 | 19,236 | 7.7 | 20.9 | 20.9 | 21.3 | 0.4 |
| P | 7.31 | 1,630 | 20,540 | 5.6 | 22.3 | 22.3 | 22.7 | 0.4 |
| Q | 7.66 | 432 | 11,799 | 7.7 | 22.6 | 22.6 | 22.9 | 0.3 |
| R | 7.92 | 590 | 14,029 | 6.6 | 22.8 | 22.8 | 23.1 | 0.3 |
| S | 8.08 | 721 | 14,071 | 6.7 | 22.8 | 22.8 | 23.2 | 0.4 |
| T | 8.40 | 465 | 36,660 | 8.8 | 23.0 | 23.0 | 23.4 | 0.4 |
| U | 8.87 | 449 | 52,800 | 7.6 | 23.7 | 23.7 | 24.1 | 0.4 |
| V | 9.93 | 503 | 24,582 | 8.5 | 25.0 | 25.0 | 25.6 | 0.6 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2] NO DENSITY FRINGE OR FLOODWAY COMPUTED
[3]ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER FROM PUGET SOUND
[4] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE

*CONTROLLED BY COASTAL FLOODING – SEE FIRM FOR REGULATORY BASE FLOOD ELEVATION

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: SNOHOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[2] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| W | 11.02 | 1,392 | 16,252 | 8.7 | 26.6 | 26.6 | 26.9 | 0.3 |
| X | 12.23 | 388 | 14,725 | 9.3 | 29.2 | 29.2 | 29.3 | 0.1 |
| Y | 12.70 | 344 | 12,558 | 10.5 | 31.4 | 31.4 | 31.4 | 0.0 |
| Z | 13.00 | 454 | 16,589 | 8.4 | 33.4 | 33.4 | 33.4 | 0.0 |
| AA | 13.60 | 1,729 | 27,636 | 4.5 | 34.0 | 34.0 | 34.1 | 0.1 |
| AB | 13.94 | 617 | 18.353 | 6.9 | 34.0 | 34.0 | 34.1 | 0.1 |
| AC | 14.15 | 594 | 15,742 | 8.1 | 34.1 | 34.1 | 34.1 | 0.0 |
| AD | 14.57 | 917 | 18.301 | 7.4 | 34.6 | 34.6 | 34.6 | 0.0 |
| AE | 14.85 | 1,041 | 20,328 | 7.0 | 34.9 | 34.9 | 34.9 | 0.0 |
| AF | 15.20 | 1,187 | 23,450 | 6.7 | 35.3 | 35.3 | 35.3 | 0.0 |
| AG | 15.42 | 1,480 | 29,130 | 5.7 | 35.8 | 35.8 | 35.8 | 0.0 |
| AH | 15.68 | 1,450 | 39,835 | 4.3 | 36.5 | 36.5 | 36.5 | 0.0 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: SNOHOMISH RIVER**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.16 | 2,917 | 30,510 | 3.9 | * | 9.9[2] | 9.9[2] | 0.0 |
| B | 0.80 | 1,353 | 21,730 | 4.7 | * | 10.9[2] | 10.9[2] | 0.0 |
| C | 1.12 | 2,889 | 17,842 | 4.4 | * | 11.6[2] | 11.9[2] | 0.3 |
| D | 1.49 | 1,368 | 19,526 | 5.3 | * | 12.0[2] | 12.3[2] | 0.3 |
| E | 1.62 | 596 | 12,265 | 5.9 | * | 12.1[2] | 12.6[2] | 0.5 |
| F | 1.72 | 626 | 12,730 | 5.1 | * | 12.4[2] | 12.9[2] | 0.5 |
| G | 2.15 | 1,309 | 17,342 | 4.8 | 13.1 | 13.1 | 13.8 | 0.7 |
| H | 2.60 | 1,148 | 13,451 | 5.6 | 13.8 | 13.8 | 14.5 | 0.7 |
| I | 3.30 | 1,150 | 16,315 | 4.5 | 15.0 | 15.0 | 15.5 | 0.5 |
| J | 3.76 | 2,145 | 22,823 | 4.5 | 15.3 | 15.3 | 15.9 | 0.6 |
| K | 4.04 | 2,772 | 26,253 | 4.9 | 15.5 | 15.5 | 16.1 | 0.6 |
| L | 4.20 | 350 | 6,490 | 3.5 | 16.0 | 16.0 | 16.6 | 0.6 |
| M | 4.96 | 349 | 5,844 | 2.9 | 16.7 | 16.7 | 17.2 | 0.5 |
| N | 5.70 | 240 | 4,566 | 3.4 | 16.7 | 16.7 | 17.2 | 0.5 |
| O | 6.23 | 742 | 10,093 | 1.6 | 16.7 | 16.7 | 17.2 | 0.5 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH

[2]ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER FROM PUGET SOUND

*CONTROLLED BY COASTAL FLOODING – SEE FIRM FOR REGULATORY BASE FLOOD ELEVATION

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: STEAMBOAT SLOUGH**

| LOCATION | | FLOODWAY | | | 1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) | | | |
|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[2] (FEET) | SECTION AREA (SQ. FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| A | 0.17 | 610 | 7,084 | 3.6 | * | 10.9[3] | 10.9[3] | 0.0 |
| B | 0.23 | 505 | 4,798 | 5.3 | * | 11.5[3] | 11.6[3] | 0.1 |
| C | 0.88 | 278 | 4,356 | 5.8 | * | 12.5[3] | 13.2[3] | 0.7 |
| D | 1.08 | 382 | 4,948 | 3.8 | 13.8 | 13.8 | 14.8 | 1.0 |
| E | 1.35 | 207 | 3,281 | 4.9 | 14.4 | 14.4 | 15.0 | 0.6 |
| F | 2.49 | 309 | 4,189 | 4.5 | 15.2 | 15.2 | 15.7 | 0.5 |
| G | 2.91 | 260 | 3,250 | 2.1 | 15.5 | 15.5 | 16.1 | 0.6 |
| H | 3.24 | 259 | 3,086 | 2.1 | 15.5 | 15.5 | 16.1 | 0.6 |
| I | 3.79 | 272 | 2,925 | 2.7 | 15.5 | 15.5 | 16.1 | 0.6 |
| J | 4.50 | 364 | 3,413 | 2.2 | 15.7 | 15.7 | 16.3 | 0.6 |

[1]STREAM DISTANCE IN MILES ABOVE MOUTH
[2] WIDTHS TAKE INTO ACCOUNT FLOODWAY FRINGE AND DENSITY FRINGE
[3]ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER FROM PUGET SOUND
*CONTROLLED BY COASTAL FLOODING – SEE FIRM FOR REGULATORY BASE FLOOD ELEVATION

TABLE 25

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SNOHOMISH COUNTY, WASHINGTON**

**AND INCORPORATED AREAS**

## DENSITY FRINGE AREA DATA

**FLOODING SOURCE: UNION SLOUGH**

### Table 26: Flood Hazard and Non-Encroachment Data for Selected Streams

**[Not Applicable to this FIS Project]**

## 6.4 Coastal Flood Hazard Mapping

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

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

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

- The *primary frontal dune zone* is defined in 44 CFR Section 59.1 of the NFIP regulations. The primary frontal dune represents a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes that occur immediately landward and adjacent to the beach. The primary frontal dune zone is subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune zone occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

- The *wave runup zone* occurs where the (eroded) ground profile is 3.0 feet or more below the 2-percent wave runup elevation.

- The *wave overtopping splash zone* is the area landward of the crest of an overtopped barrier, in cases where the potential 2-percent wave runup exceeds the barrier crest elevation by 3.0 feet or more.

- The *breaking wave height zone* occurs where 3-foot or greater wave heights could occur (this is the area where the wave crest profile is 2.1 feet or more above the total stillwater elevation).

- The *high-velocity flow zone* is landward of the overtopping splash zone (or area on a sloping beach or other shore type), where the product of depth of flow times the flow velocity squared ($hv^2$) is greater than or equal to 200 $ft^3/sec^2$. This zone may only be used on the Pacific Coast.

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

Table 27 indicates the coastal analyses used for floodplain mapping and the criteria used to determine the inland limit of the open-coast Zone VE and the SFHA boundary at each transect.

**Table 27: Summary of Coastal Transect Mapping Considerations**

| Coastal Transect | Primary Frontal Dune (PFD) Identified | Wave Runup Analysis | Wave Height Analysis | Zone VE Limit | SFHA Boundary |
|---|---|---|---|---|---|
| | | Zone Designation and BFE (ft NAVD 88) | Zone Designation and BFE (ft NAVD 88) | | |
| 1 | | AE 13 | N/A | N/A | N/A |
| 2 | | AE 13 | N/A | N/A | N/A |
| 3 | | VE 16 | N/A | Runup | N/A |
| 4 | | AE 13 | N/A | N/A | N/A |
| 5 | | AE 14 | N/A | N/A | N/A |
| 6 | | AE 14 | N/A | N/A | N/A |
| 7 | | VE 16 | N/A | Runup | N/A |
| 8 | | AE 14 | N/A | N/A | N/A |
| 9 | | AE 15 | N/A | N/A | N/A |
| 10 | | VE 18 | N/A | Runup | N/A |
| 11 | | VE 17 | N/A | Runup | N/A |
| 12 | | VE 18 | N/A | Runup | N/A |
| 13 | | AE 13 | N/A | N/A | N/A |
| 14 | | AE 14 | N/A | N/A | N/A |
| 15 | | AE 13 | N/A | N/A | N/A |
| 16 | | AE 13 | N/A | N/A | N/A |
| 17 | | VE 18 | N/A | Runup | N/A |
| 18 | | AE 13 | N/A | N/A | N/A |
| 19 | | AE 13 | N/A | N/A | N/A |
| 20 | | AE 14 | N/A | N/A | N/A |
| 21 | | VE 16 | N/A | Runup | N/A |
| 22 | | VE 16 | N/A | Runup | N/A |
| 23 | | VE 19 | N/A | Runup | N/A |
| 24 | | VE 23 | N/A | Runup | N/A |
| 25 | | AE 13 | N/A | N/A | N/A |
| 26 | | AE 13 | N/A | N/A | N/A |
| 27 | | VE 18 | N/A | Runup | N/A |
| 28 | | VE 18 | N/A | Runup | N/A |
| 29 | | VE 16 | N/A | Runup | N/A |

**Table 27: Summary of Coastal Transect Mapping Considerations (*continued*)**

| Coastal Transect | Primary Frontal Dune (PFD) Identified | Wave Runup Analysis | Wave Height Analysis | Zone VE Limit | SFHA Boundary |
|---|---|---|---|---|---|
| | | Zone Designation and BFE (ft NAVD 88) | Zone Designation and BFE (ft NAVD 88) | | |
| 30 | | VE 16 | N/A | Runup | N/A |
| 31 | | VE 16 | N/A | Runup | N/A |
| 32 | | VE 22 | N/A | Runup | N/A |
| 33 | | VE 17 | N/A | Runup | N/A |
| 34 | | AE 13 | N/A | N/A | N/A |
| 35 | | VE 16 | N/A | Runup | N/A |
| 36 | | VE 18 | N/A | Runup | N/A |

## 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 32, "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 http://www.fema.gov 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 http://www.fema.gov/plan/prevent/fhm/ot_lmreq.shtm.

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 http://www.fema.gov 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 http://www.fema.gov/plan/prevent/fhm/ot_lmreq.shtm.

### 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 http://www.fema.gov 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 Snohomish County FIRM are listed in Table 28.

**Table 28: Incorporated Letters of Map Change**

| Case Number | Effective Date | Flooding Source | FIRM Panel(s) |
|---|---|---|---|
| 08-10-0789P | 02-23-2009 | Penny Creek | 53061C1330F<br>53061C1335F |
| 09-10-1086P | 12-23-2009 | Unnamed Tributary to Pilchuck River | 53061C1055G |
| 10-10-1047P | 10-15-2010 | Pilchuck River | 53061C0755F |

### 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 Snohomish County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) 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 29, "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 29 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 Snohomish County FIRMs in countywide format was 11/08/1999.

**Table 29: 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) |
|---|---|---|---|---|---|
| Arlington, City of | 06/27/1975 | 06/27/1975 | N/A | 11/16/1983 | 06/19/2020<br>11/08/1999 |
| Bothell, City of | 05/24/1974 | 05/24/1974 | 11/12/1976 | 06/01/1982 | 06/19/2020<br>11/08/1999<br>03/02/1994 |
| Brier, City of | 01/24/1975 | 01/24/1975 | N/A | 09/24/1984 | 06/19/2020<br>11/08/1999 |
| Darrington, Town of | 08/19/1985 | N/A | N/A | 08/19/1985 | 06/19/2020<br>11/08/1999 |
| Edmonds, City of | 07/26/1974 | 07/26/1974 | 01/16/1976 | 08/08/1978 | 06/19/2020<br>11/08/1999<br>02/19/1986<br>12/07/1982 |
| Everett, City of | 06/21/1974 | 06/21/1974 | N/A | 04/03/1978 | 06/19/2020<br>09/16/2005<br>11/08/1999<br>09/05/1990 |
| Gold Bar, City of | 09/19/1975 | 09/19/1975 | N/A | 12/01/1983 | 06/19/2020<br>11/08/1999 |
| Granite Falls, City of[1] | 11/08/1999 | N/A | N/A | 11/08/1999 | 06/19/2020 |

[1] This community did not have a FIRM prior to the first countywide FIRM for Snohomish County

**Table 29: Community Map History (*continued*)**

| 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) |
|---|---|---|---|---|---|
| Index, Town of | 12/27/1974 | 12/27/1974 | N/A | 12/01/1983 | 06/19/2020<br>11/08/1999 |
| Lake Stevens, City of | 04/17/1989 | 04/17/1989 | N/A | 04/17/1989 | 06/19/2020<br>11/08/1999 |
| Lynnwood, City of | 06/28/1974 | 06/28/1974 | 12/26/1975 | 06/05/1985 | 06/19/2020<br>11/08/1999<br>09/17/1992 |
| Marysville, City of | 03/15/1974 | 03/15/1974 | 04/02/1976 | 02/15/1984 | 06/19/2020<br>09/16/2005<br>11/08/1999 |
| Mill Creek, City of[1] | 11/08/1999 | N/A | N/A | 11/08/1999 | 06/19/2020<br>09/16/2005 |
| Monroe, City of | 11/05/1976 | 11/05/1976 | 01/16/1979 | 12/01/1983 | 06/19/2020<br>09/16/2005<br>11/08/1999 |
| Mountlake Terrace, City of | 06/28/1974 | 06/28/1974 | 09/26/1975 | 08/19/1985 | 06/19/2020<br>11/08/1999<br>09/30/1987 |
| Mukilteo, City of | 07/11/1975 | 07/11/1975 | N/A | 02/19/1986 | 06/19/2020<br>11/08/1999<br>11/05/1986 |
| Snohomish, City of | 03/08/1974 | 03/08/1974 | 05/28/1976 | 11/16/1983 | 06/19/2020<br>09/16/2005<br>11/08/1999 |
| Snohomish County, Unincorporated Areas | 12/23/1971 | 12/23/1971 | 12/13/1977 | 03/15/1984 | 06/19/2020<br>09/16/2005<br>11/08/1999<br>09/30/1992 |
| Stanwood, City of | 06/28/1974 | 06/28/1974 | 04/02/1976 | 11/16/1983 | 06/19/2020<br>11/08/1999 |

[1] This community did not have a FIRM prior to the first countywide FIRM for Snohomish County

**Table 29: Community Map History (*continued*)**

| 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) |
|---|---|---|---|---|---|
| Stillaguamish Tribe | 06/19/2020 | N/A | N/A | N/A | 06/19/2020 |
| Sultan, City of | 06/07/1974 | 06/07/1974 | 04/02/1976 | 09/30/1983 | 06/19/2020<br>11/08/1999 |
| Tulalip Tribe | 06/19/2020 | N/A | N/A | N/A | 06/19/2020 |
| Woodway, Town of | 09/19/1975 | 09/19/1975 | N/A | 07/03/1986 | 06/19/2020<br>11/08/1999 |

# SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

## 7.1 Contracted Studies

Table 30 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

**Table 30: Summary of Contracted Studies Included in this FIS Report**

| Flooding Source | FIS Report Dated | Contractor | Number | Work Completed Date | Affected Communities |
|---|---|---|---|---|---|
| Canyon Creek | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Ebey Slough | 09/16/2005 | WEST Consultants Inc. | DACW67-97-D-1016 | 2001 | Marysville, City of; Snohomish County, Unincorporated Areas; Tulalip Tribe |
| Ebey-Steamboat Slough Connector | 09/16/2005 | WEST Consultants Inc. | DACW67-97-D-1016 | 2001 | Snohomish County, Unincorporated Areas |
| Haskel Slough | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Hat Slough | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Lower Stillaguamish River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Marshland Diversion Channel | N/A | USACE, Seattle District | H-07-76 | 1981 | Everett, City of; Snohomish County, Unincorporated Areas |
| May Creek | 06/19/2020 | Snohomish County and Northwest Hydraulic Consultants, Inc. | N/A | 2006 | Gold Bar, City of; Snohomish County, Unincorporated Areas |
| North Creek | 11/08/1999 | Northwest Hydraulic Consultants, Inc | EMW-93-C-4152 | 1992 | Bothell, City of |
| North Fork Skykomish River | 06/19/2020 | Snohomish County and Northwest Hydraulic Consultants, Inc. | N/A | 2010 | Gold Bar, City of; Index, Town of; Snohomish County, Unincorporated Areas; Sultan, City of |
| North Fork Stillaguamish River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Pilchuck River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Port Susan | 06/19/2020 | STARR | HSFEHQ-09-D-0370 | 2013 | Snohomish County, Unincorporated Areas; Tulalip Tribe |

**Table 30: Summary of Contracted Studies Included in this FIS Report (continued)**

| Flooding Source | FIS Report Dated | Contractor | Number | Work Completed Date | Affected Communities |
|---|---|---|---|---|---|
| Possession Sound | 06/19/2020 | STARR | HSFEHQ-09-D-0370 | 2013 | Everett, City of; Snohomish County, Unincorporated Areas; Tulalip Tribe |
| Puget Sound | 06/19/2020 | STARR | HSFEHQ-09-D-0370 | 2013 | Edmonds, City of; Snohomish County, Unincorporated Areas; Woodway, Town of |
| Riley Slough | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Sauk River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Scriber Creek | N/A | Northwest Hydraulic Consultants, Inc. and R.W. Beck and Associates | N/A | 1990 | Lynnwood, City of; Snohomish County, Unincorporated Areas |
| Skagit Bay | 06/19/2020 | STARR | HSFEHQ-09-D-0370 | 2013 | Snohomish County, Unincorporated Areas; Stanwood, City of |
| Skykomish River | 06/19/2020 | Snohomish County and Northwest Hydraulic Consultants, Inc. | N/A | 2010 | Snohomish County, Unincorporated Areas |
| Snohomish River | 09/16/2005 | WEST Consultants Inc | DACW67-97-D-1016 | 2001 | Everett, City of; Snohomish County, Unincorporated Areas |
| Snoqualmie River | 06/19/2020 | Northwest Hydraulic Consultants, Inc. | N/A | 2010 | Snohomish County, Unincorporated Areas |
| South-Cook Slough | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |

**Table 30: Summary of Contracted Studies Included in this FIS Report (continued)**

| Flooding Source | FIS Report Dated | Contractor | Number | Work Completed Date | Affected Communities |
|---|---|---|---|---|---|
| South Fork Skykomish River | 06/19/2020 | Snohomish County and Northwest Hydraulic Consultants, Inc. | N/A | 2010 | Snohomish County, Unincorporated Areas |
| South Fork Stillaguamish River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Steamboat Slough | 09/16/2005 | WEST Consultants Inc. | DACW67-97-D-1016 | 2001 | Everett, City of; Marysville, City of; Snohomish County, Unincorporated Areas; Tulalip Tribe |
| Stillaguamish River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Stillaguamish River Split Flow | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, Unincorporated Areas |
| Sultan River | 06/19/2020 | Snohomish County and Northwest Hydraulic Consultants, Inc. | N/A | 2010 | Snohomish County, Unincorporated Areas; Sultan, City of |
| Swamp Creek | N/A | USACE, Seattle District | EMW-89-E-2994 | 1991 | Brier, City of; Snohomish County, Unincorporated Areas |
| Union Slough | 09/16/2005 | WEST Consultants Inc. | DACW67-97-D-1016 | 2001 | Everett, City of; Snohomish County, Unincorporated Areas |
| Wallace River | N/A | USACE, Seattle District | H-07-76 | 1981 | Snohomish County, 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 31. 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 31: Community Meetings**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Arlington, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Bothell, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Bothell, City of | 06/19/2020 | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Brier, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Darrington, Town of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Darrington, Town of | 06/19/2020 | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Edmonds, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Everett, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Everett, City of | 06/19/2020 | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Gold Bar, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Granite Falls, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Index, Town of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Index, Town of | 06/19/2020 | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Lake Stevens, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Lynnwood, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Lynnwood, City of | 06/19/2020 | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Marysville, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Mill Creek, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Mill Creek, City of | 06/19/2020 | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Monroe, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Mountlake Terrace, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Mountlake Terrace, City of | 06/19/2020 | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Mukilteo, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Snohomish, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Snohomish, City of | 06/19/2020 | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Snohomish County, Unincorporated Areas | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Snohomish County, Unincorporated Areas | 06/19/2020 | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Stanwood, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Stillaguamish Tribe | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Stillaguamish Tribe | 06/19/2020 | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Sultan, City of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Sultan, City of | 06/19/2020 | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Tulalip Tribe | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| Woodway, Town of | 06/19/2020 | 09/29/2005 | Scoping | FEMA and Snohomish County |
| | | 10/19/2010 | Initial CCO | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/03/2010<br>11/10/2010 | Public Meeting | FEMA, Baker (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

**Table 31: Community Meetings (Continued)**

| Community | FIS Report Dated | Date of Meeting | Meeting Type | Attended By |
|---|---|---|---|---|
| Woodway, Town of | 06/19/2020 | 04/07/2011 | Risk MAP Discovery Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 07/01/2014 | Flood Risk Review Meeting/Coastal Draft Maps | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/09/2015 | Levee Seclusion Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 09/14/2016 | Final CCO Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |
| | | 11/28/2016<br>12/12/2016 | Public Meeting | FEMA, STARR (the Study Contractor), Washington Department of Ecology, Snohomish County and community officials |

## 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 32 is a list of the locations where FIRMs for Snohomish 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 32: Map Repositories**

| Community | Address | City | State | Zip Code |
|---|---|---|---|---|
| Arlington, City of | City Hall<br>238 North Olympic Avenue | Arlington | WA | 98223 |
| Bothell, City of | City Hall<br>18415 101st Avenue Northeast | Bothell | WA | 98011 |
| Brier, City of | City Hall<br>2901 228th Street Southwest | Brier | WA | 98036 |
| Darrington, Town of | Town Hall<br>1005 Cascade Street | Darrington | WA | 98241 |
| Edmonds, City of | City Hall<br>121 5th Avenue North | Edmonds | WA | 98020 |
| Everett, City of | City Hall<br>2930 Wetmore Avenue<br>Suite 10-A | Everett | WA | 98201 |
| Gold Bar, City of | City Hall<br>107 5th Street | Gold Bar | WA | 98251 |
| Granite Falls, City of | City Hall<br>206 South Granite Avenue | Granite Falls | WA | 98252 |
| Index, Town of | Town Hall<br>511 Avenue A | Index | WA | 98256 |
| Lake Stevens, City of | City Hall/Permit Center<br>1812 Main Street | Lake Stevens | WA | 98258 |

**Table 32: Map Repositories (*continued*)**

| Community | Address | City | State | Zip Code |
|---|---|---|---|---|
| Lynnwood, City of | City Hall<br>19100 44th Avenue West | Lynnwood | WA | 98036 |
| Marysville, City of | City Hall<br>1049 State Avenue | Marysville | WA | 98270 |
| Mill Creek, City of | City Hall<br>15728 Main Street | Mill Creek | WA | 98012 |
| Monroe, City of | City Hall, Engineering Department<br>806 West Main Street | Monroe | WA | 98272 |
| Mountlake Terrace, City of | City Hall<br>6100 219th Street Southwest, Suite 200 | Mountlake Terrace | WA | 98043 |
| Mukilteo, City of | City Hall<br>11930 Cyrus Way | Mukilteo | WA | 98275 |
| Snohomish, City of | City Hall<br>116 Union Avenue | Snohomish | WA | 98290 |
| Snohomish County, Unincorporated Areas | Planning and Development Services<br>3000 Rockefeller Avenue | Everett | WA | 98201 |
| Stanwood, City of | City Hall<br>10220 270th Street Northwest | Stanwood | WA | 98292 |
| Stillaguamish Tribe | Natural Resources Department<br>3322 236th Street Northeast | Arlington | WA | 98223 |
| Sultan, City of | City Hall<br>319 Main Street, Suite 200 | Sultan | WA | 98294 |
| Tulalip Tribe | Natural Resources Department<br>6406 Marine Drive | Tulalip | WA | 98271 |
| Woodway, Town of | Town Hall<br>23920 113th Place West | Woodway | WA | 98020 |

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 33 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 33: Additional Information**

| FEMA and the NFIP | |
|---|---|
| FEMA and FEMA Engineering Library website | http://www.fema.gov |
| NFIP website | http://www.fema.gov/business/nfip |
| NFHL Dataset | http://msc.fema.gov |
| FEMA Region X | Federal Regional Center<br>130 228th Street Southwest<br>Bothell, Washington 98021-8627<br>(425) 487-4600 |
| **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 | David Radabaugh<br>Washington Department of Ecology<br>3190 160th Avenue Southeast<br>Bellevue, Washington 98008-5452<br>Phone: (425) 649-4260<br>David.radabaugh@ecy.wa.gov |
| State GIS Coordinator | Joy Paulus<br>Department of Information Services<br>1110 Jefferson Street Southeast<br>Olympia, Washington 98504-2445<br>Phone: (360) 902-3447<br>Cell: (360) 628-2621<br>joyp@dis.wa.gov |

## SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 34 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 34: Bibliography and References**

| Citation in this FIS | Publisher/ Issuer | *Publication Title,* "Article," Volume, Number, etc. | Author/Editor | Place of Publication | Publication Date/ Date of Issuance | Link |
|---|---|---|---|---|---|---|
| ADCIRC | Luettich, R.A., Jr., and J.J. Westerink | A (Parallel) Advanced Circulation Model for Oceanic, Coastal and Estuarine Waters," ADCIRC version 50.99 | | | 2012 | |
| BAKER | Federal Emergency Management Agency | *Puget Sound LiDAR Consortium. 6ft DEM* | Federal Emergency Management Agency | | 2005-2009 | http://pugetsoundlidar.ess.washington.edu/lidardata/index.html |
| EPA HSPF | U.S. Environmental Protection Agency | *Hydrologic Simulation Program - FORTRAN (HSPF); User' s Manual for Release 8.0, EPA-600/3-84-066* | Environmental Research Laboratory | Athens, Georgia | 1984 and 1988 | |
| FHA HY8 | U.S. Environmental Protection Agency | *HY8 Culvert Analysis Microcomputer Program and Applications Guide* | Federal Highway Administration | Washington, D.C. | 1987 | |
| HEC-2 | U.S. Department of the Army, Corps of Engineers | *HEC-2 Water-Surface Profiles, Generalized Computer Program* | Hydrologic Engineering Center | Davis, California | 1980, 1982 and 1990 | |
| HEC-RAS | U.S. Department of the Army, Corps of Engineers | *HEC-River Analysis System (RAS)* | Hydrologic Engineering Center | Davis, California | | |
| HEC-WRC | U.S. Department of the Army, Corps of Engineers | *HEC-WRC Floodflow Frequency Analysis Computer Program* | Hydrologic Engineering Center | Davis, California | January 12, 1987 | |

**Table 34: 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 |
|---|---|---|---|---|---|---|
| PSLC | Federal Emergency Management Agency | *Puget Sound LiDAR Consortium. 4ft DEM* | Federal Emergency Management Agency | | 2005-2009 | http://pugetsoundlidar.ess.washington.edu/lidardata/index.html |
| Reference 1 | Snohomish County Public Works | *Scriber Creek Watershed Management Plan* | R.W. Beck and Associates | Brier, Washington | December 1989 | |
| STARR | Federal Emergency Management Agency | *Physical Map Revision - Snohomish County, WA Coastal* | Federal Emergency Management Agency | Laurel, MD | January 2013 | |
| TOPO1 | CH2M Hill, Inc., | *Aerial Topographic Mapping, Scale 1:2,400, Contour Interval 2 feet.* | | North Creek Valley, Washington | 1977 | |
| TOPO2 | King County Engineering Dept | *1953 Aerial Topographic Survey, Scale 1:4,800, Contour Interval 10 feet, Sheets 1 and 2* | | Bothell, Washington | 1953 | |
| TOPO3 | Northwest Hydraulic Consultants, Inc., | *City of Lynnwood, Flood Insurance Study Workmap, Scale 1:2,400, Contour Interval 5 feet, Washington* | | | March 15, 1988 | |
| TOPO4 | U.S. Department of the Army, Corps of Engineers, Seattle District | *Flood Insurance Study Work Maps, Snohomish County, Scale 1:1,200, redrawn to 1:2,400* | | | November 1976 to September 1981 | |

**Table 34: 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 |
|---|---|---|---|---|---|---|
| TOPO5 | U.S. Department of the Army, Corps of Engineers, Seattle District | *Aerial Photographs, flown at 6,000 feet* | | *City of Arlington, Washington, January 4, 1973, and June 8, 1976; Marysville, Washington, April 30, 1973; Monroe, Washington, June 18, 1976; Snohomish, Washington, March 29, 1972, April 30, 1973, and June 18, 1976; Stanwood, Washington, April 30, 1976; Sultan, Washington, 1977; Index, Washington, June 18, 1976.* | | |
| TOPO6 | U.S. Department of the Interior, Geological Survey | *15-Minute Series Topographic Maps, Scale 1:62,500, enlarged to 1:12,000, Contour Interval 80 feet* | | Index, Washington | 1957 | |

**Table 34: 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 |
|---|---|---|---|---|---|---|
| TOPO7 | U.S. Department of the Interior, Geological Survey | *7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Intervals 20 and 40 feet* | | *Bothell, Washington, 1953, Photorevised 1981; Kirkland, Washington, 1950, Photorevised 1968 and 1973; Arlington East, Washington, 1956, Photorevised 1958; Edmonds West, Washington, 1953, Photorevised 1968 and 1973* | | |
| TOPO8 | U.S. Department of the Army, Corps of Engineers, Seattle District | *Work Map for Flood Insurance Study, Snohomish River and Tributaries, Scale 1:4,800, District File No. E-2-6-467, September 1981* | | | | |
| TOPO9 | Washington State Highway Commission, Department of Highways, | *State Route 522, 80th N.E. to State Route 405, Topographic Maps, Scale 1:1,200, Contour Interval 2 feet, Sheets 2A and 3* | | Olympia, Washington | March 1973 | |
| UNET | U.S. Department of the Army, Corps of Engineers | *UNET One-dimensional Unsteady Flow Through a Full Network of Open Channels, Version 3.2* | Hydrologic Engineering Center | Davis, California | 1997 | |

ELEVATIONS DOWNSTREAM FROM THIS POINT ARE CONTROLLED BY SOUTH FORK STILLAGUAMISH RIVER

ELEVATION IN FEET (NAVD 88)

290
280
270
260
250
240
230
220
210
200

0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20 1.30

STREAM DISTANCE IN MILES ABOVE MOUTH

A

B

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

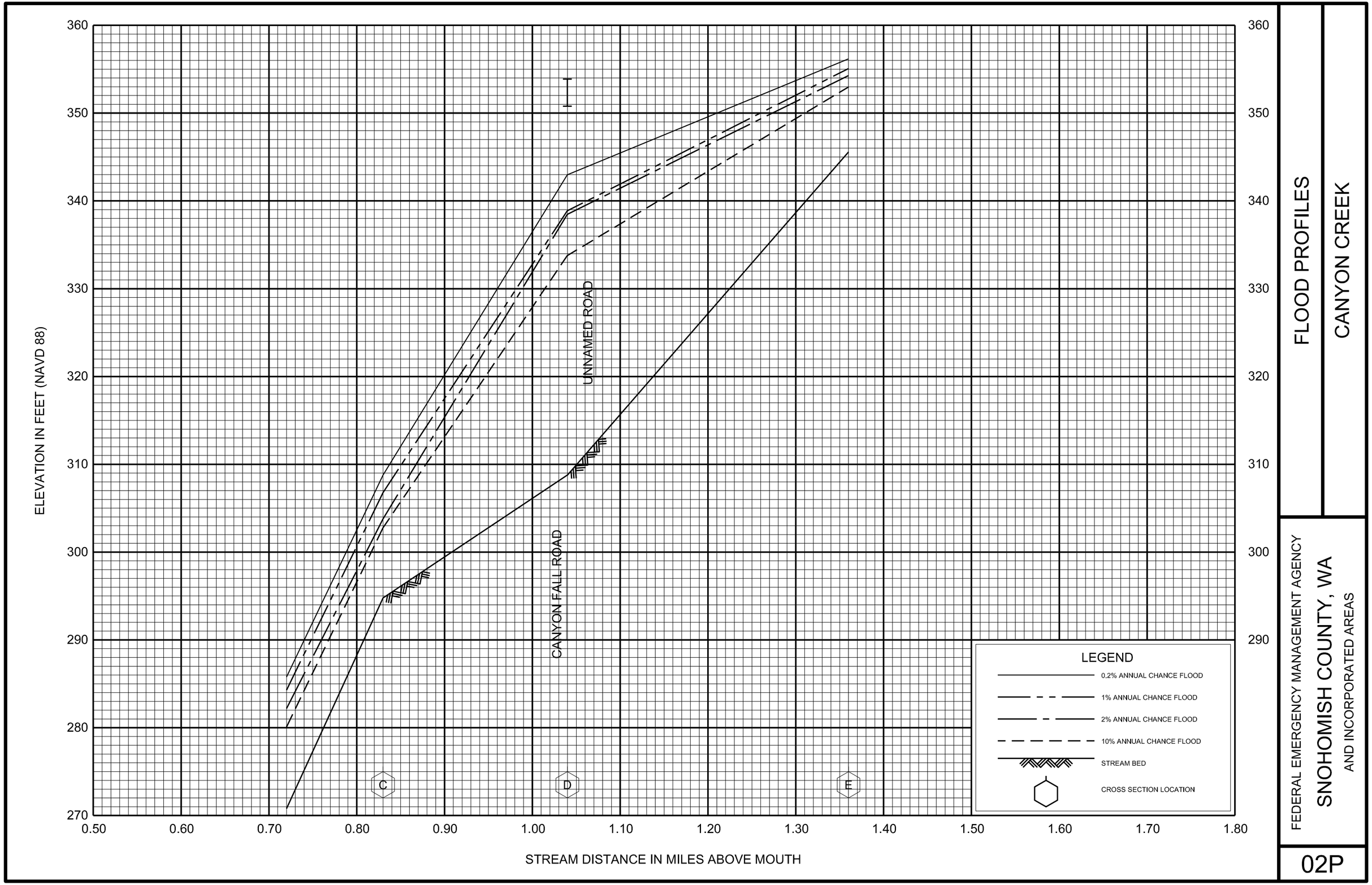
## CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

01P




FLOOD PROFILES

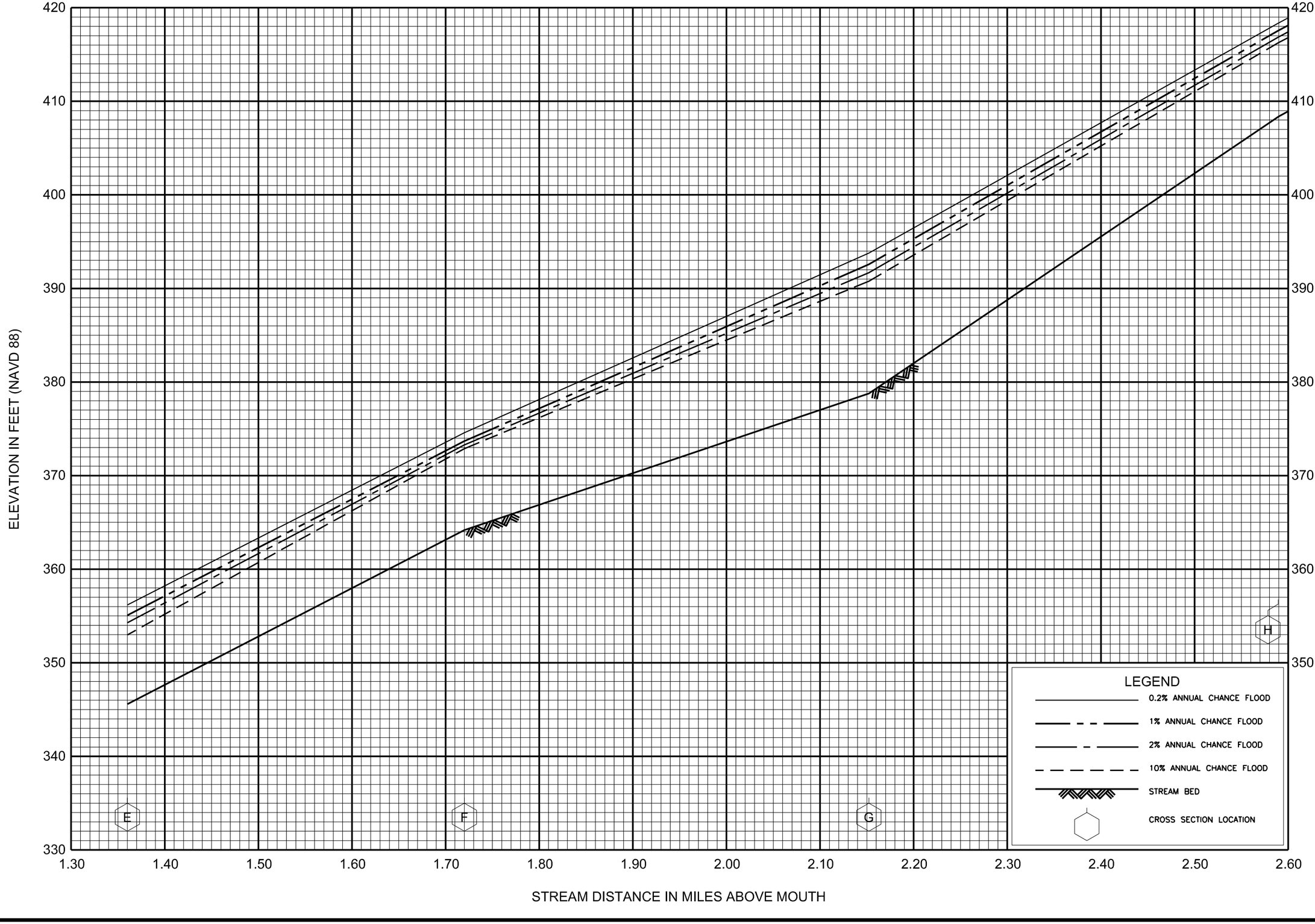
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

02P




FLOOD PROFILES

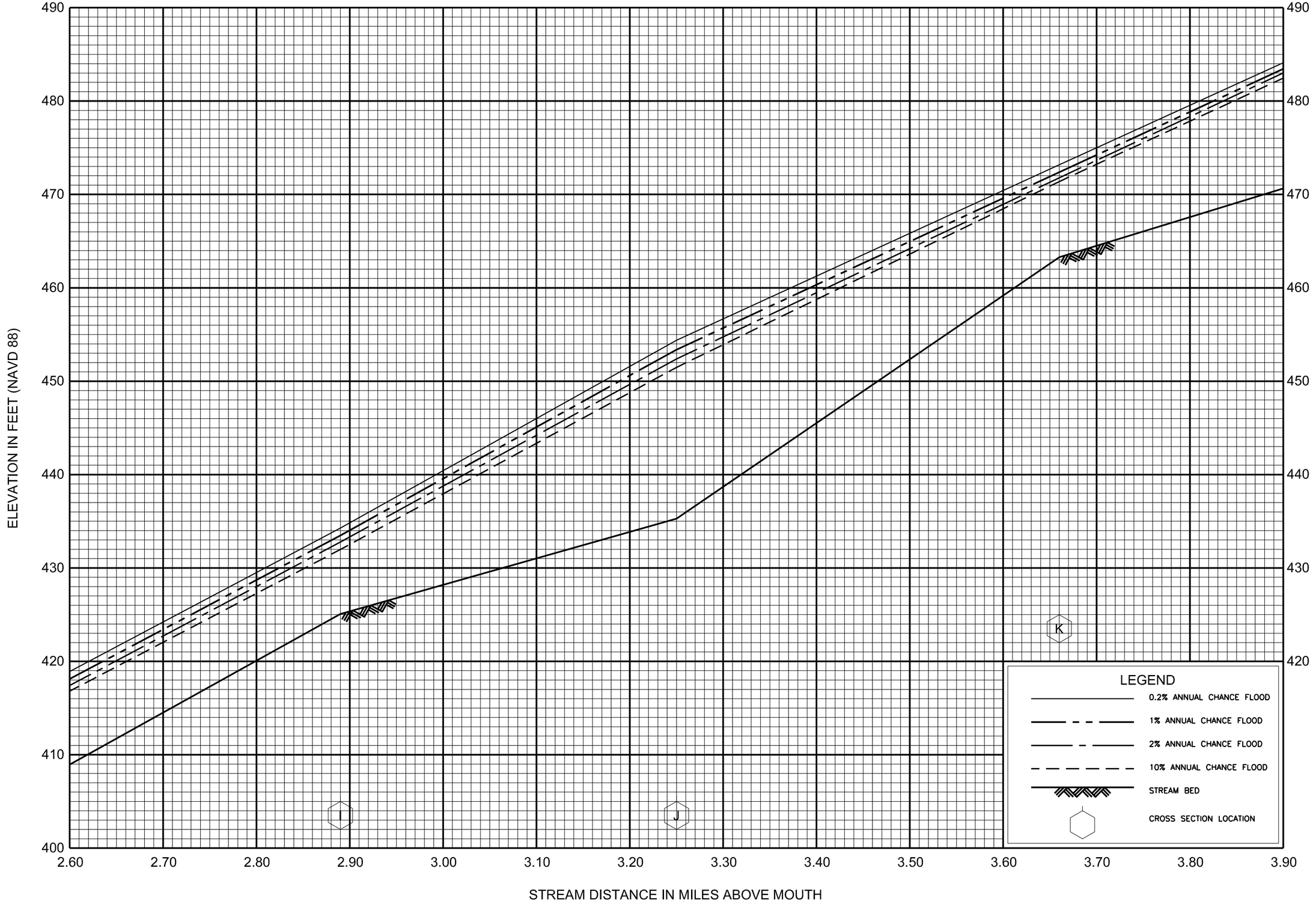
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

03P




FLOOD PROFILES

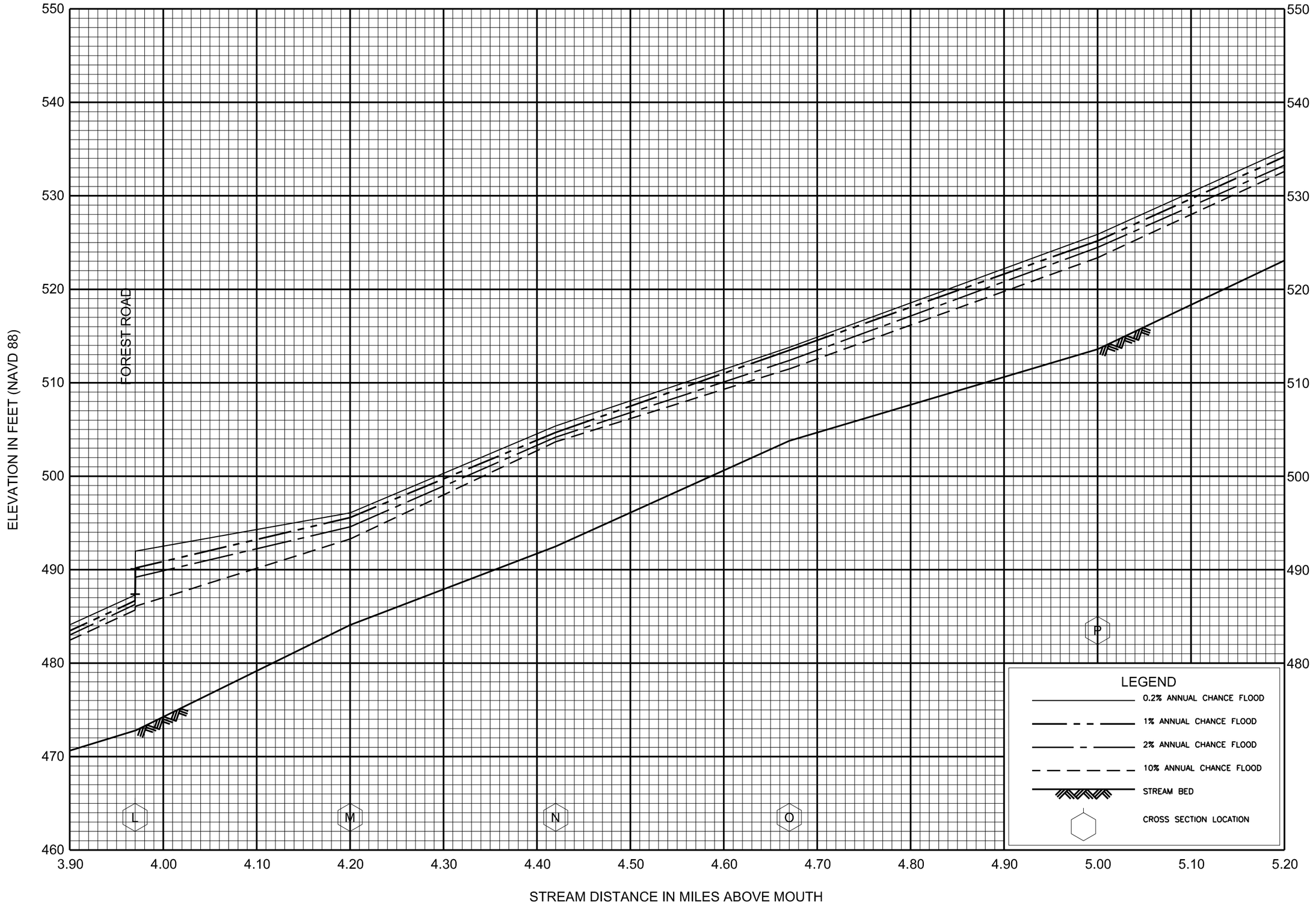
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

04P




FLOOD PROFILES

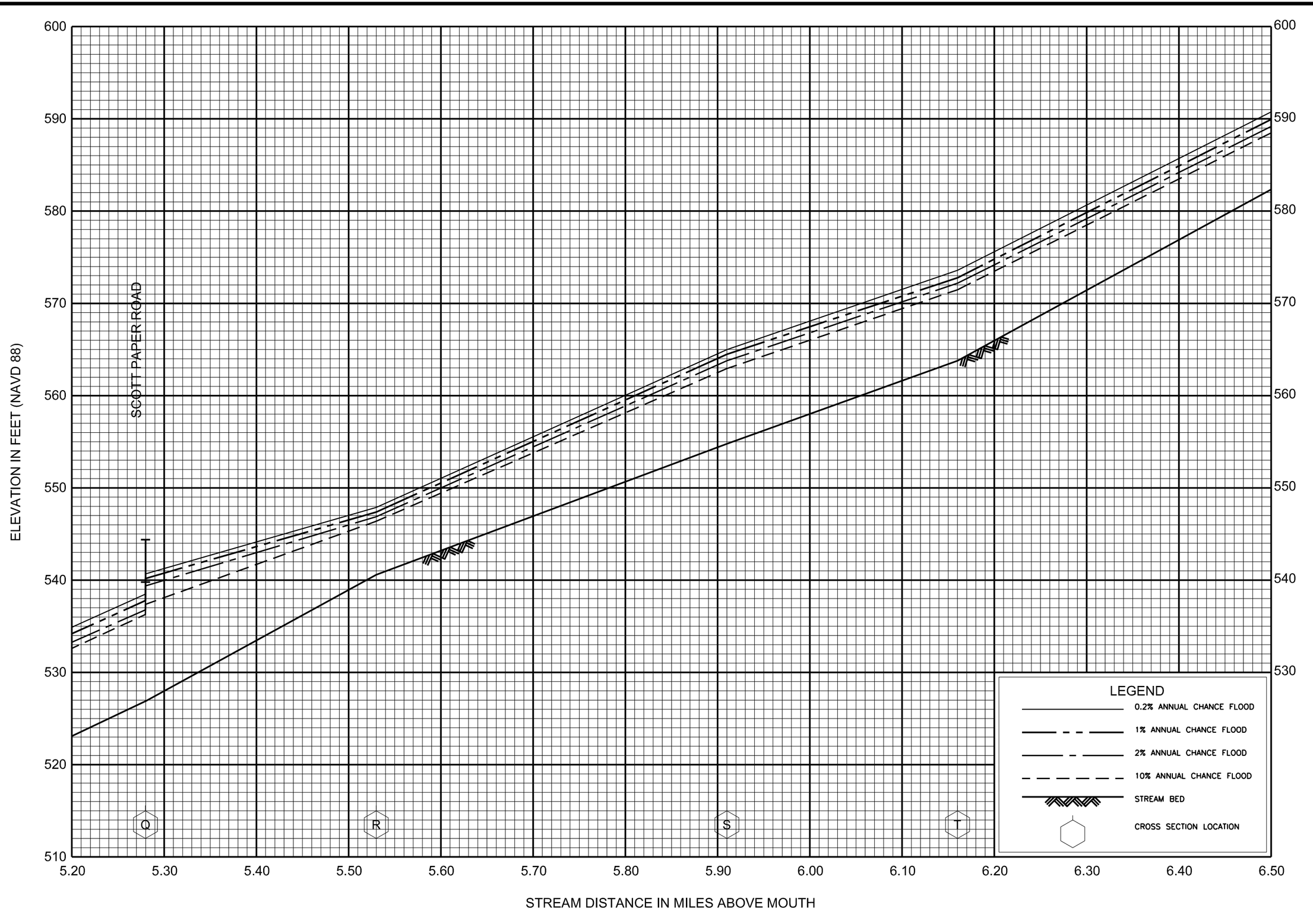
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

05P




FLOOD PROFILES

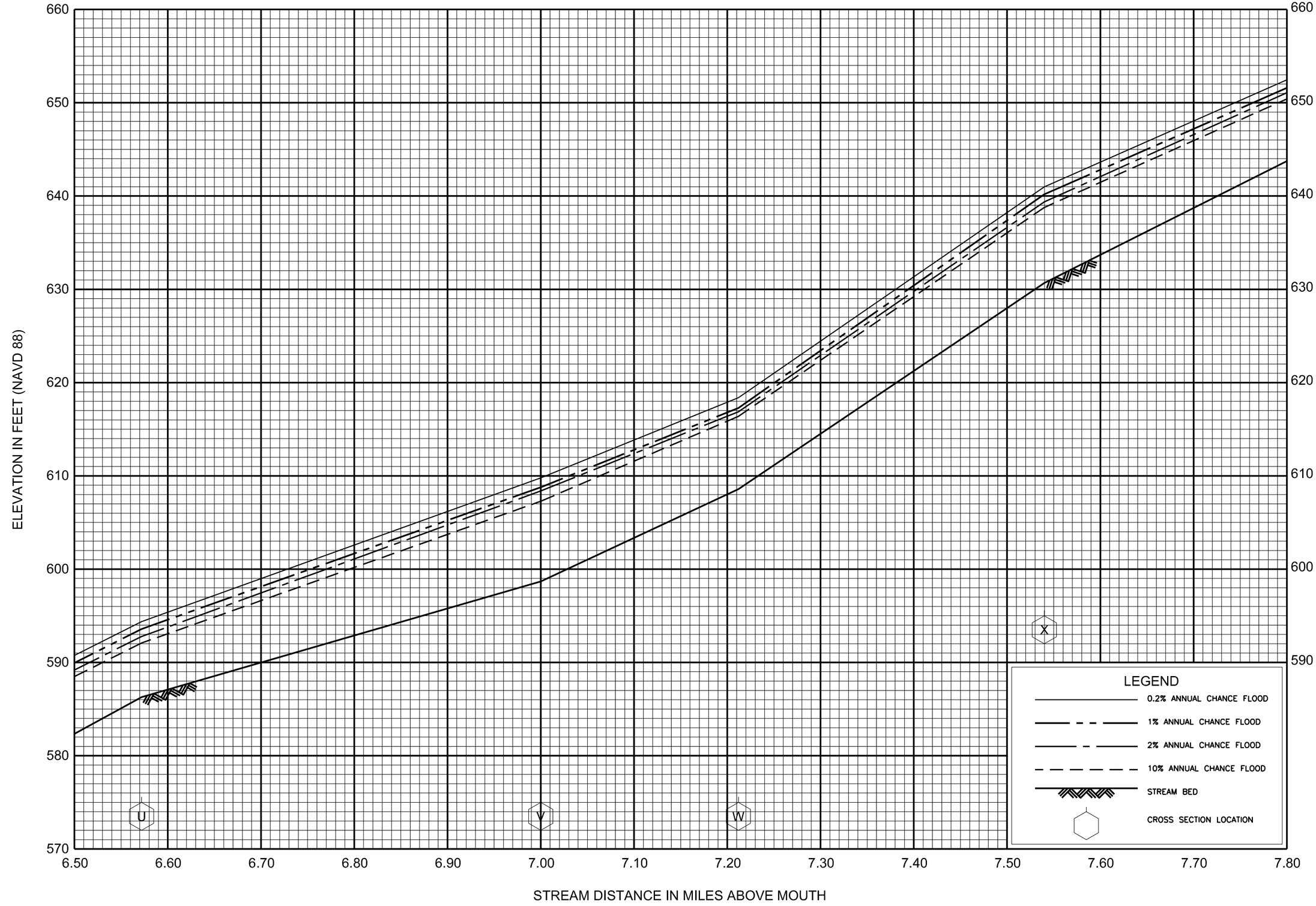
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

06P




FLOOD PROFILES

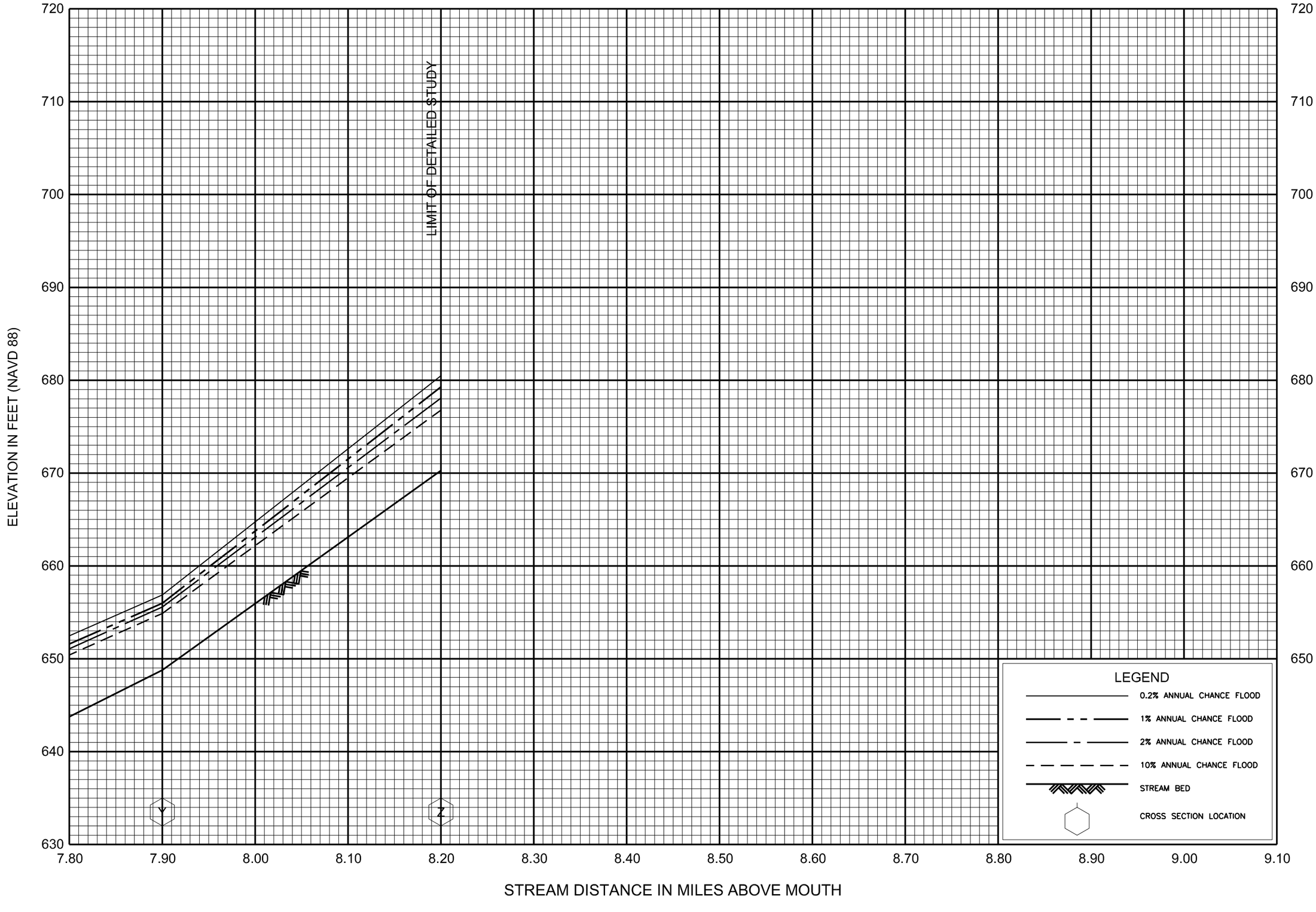
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

07P




FLOOD PROFILES

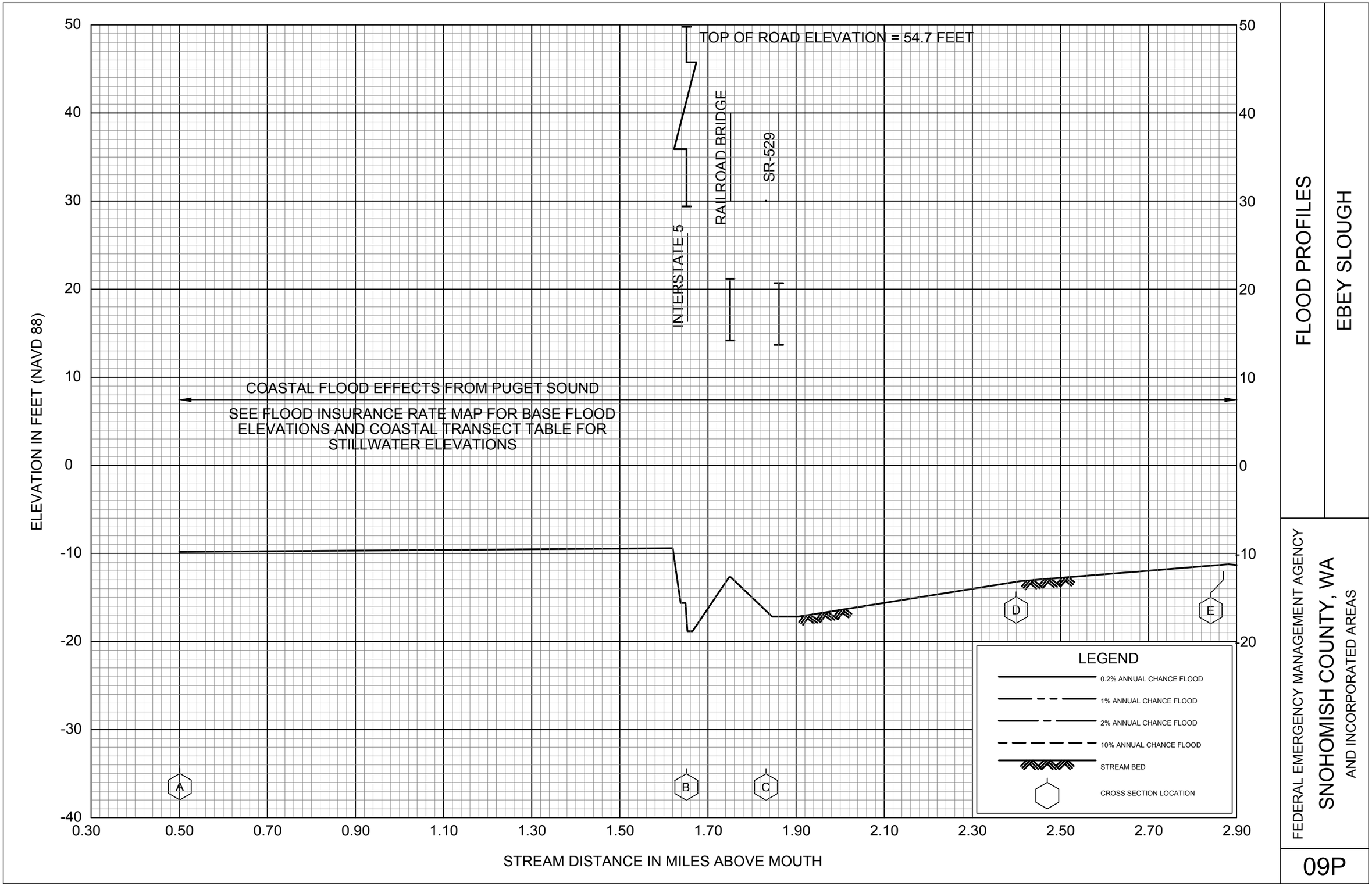
CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

08P




FLOOD PROFILES

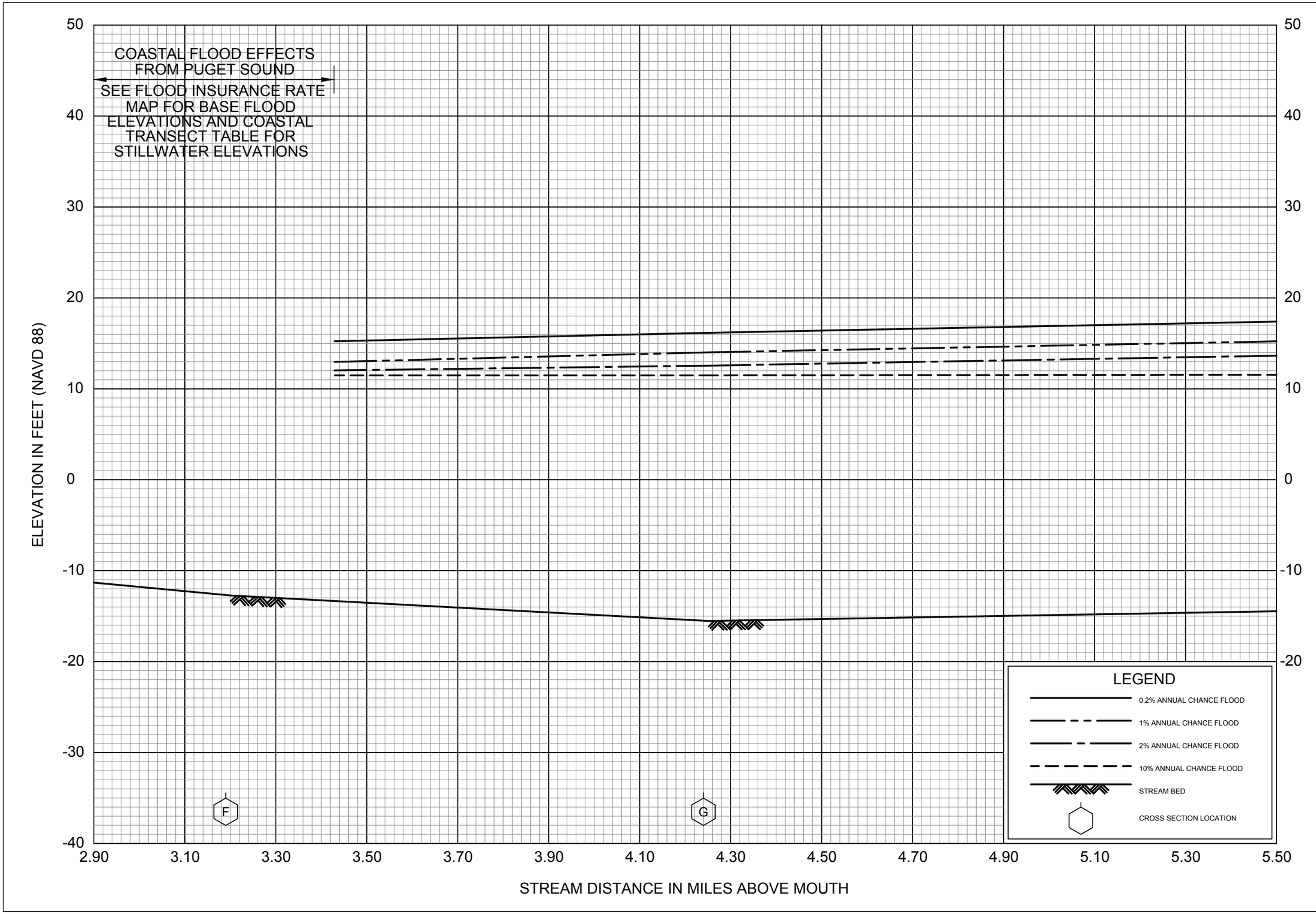
EBEY SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

09P




FLOOD PROFILES

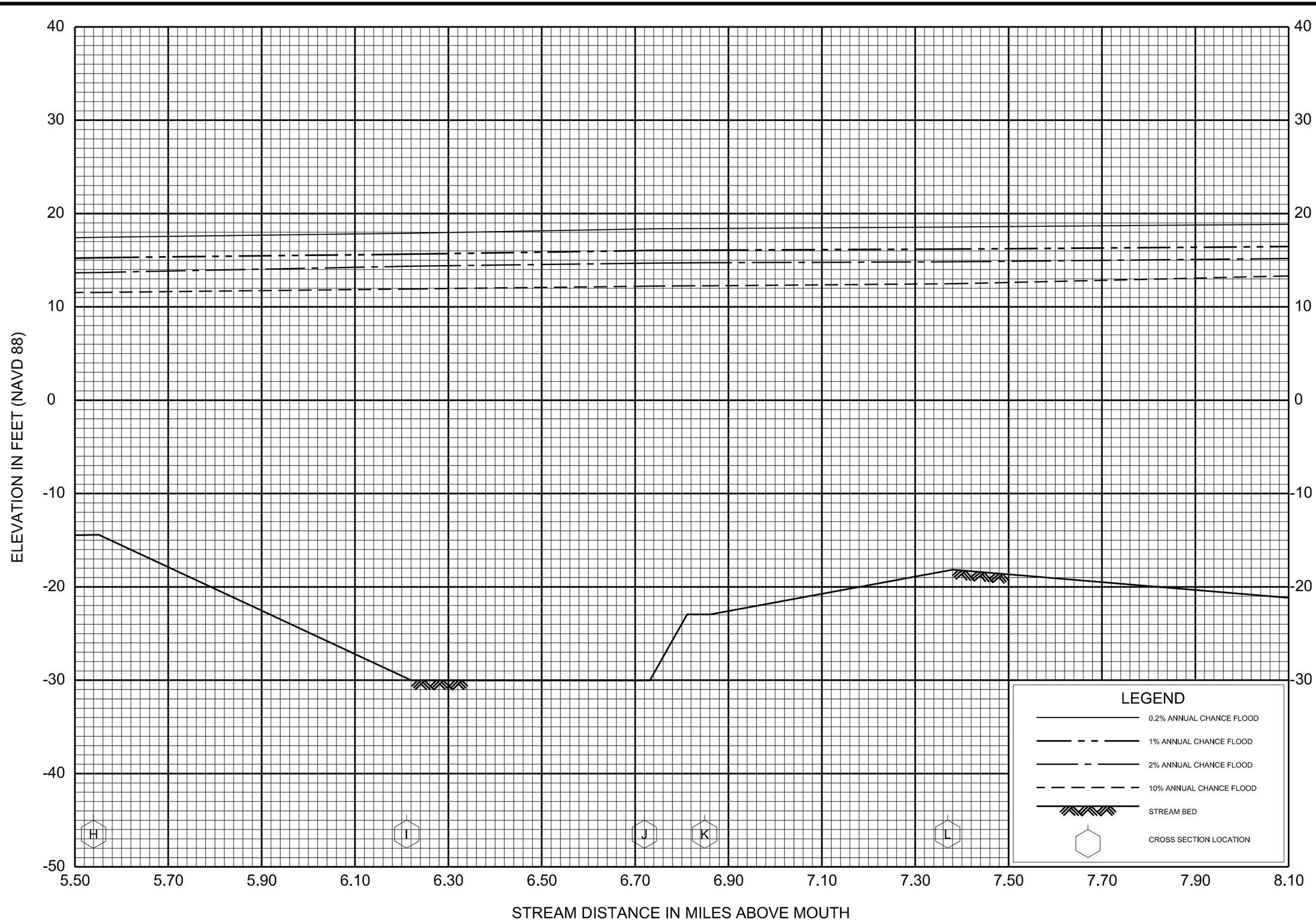
EBEY SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

10P



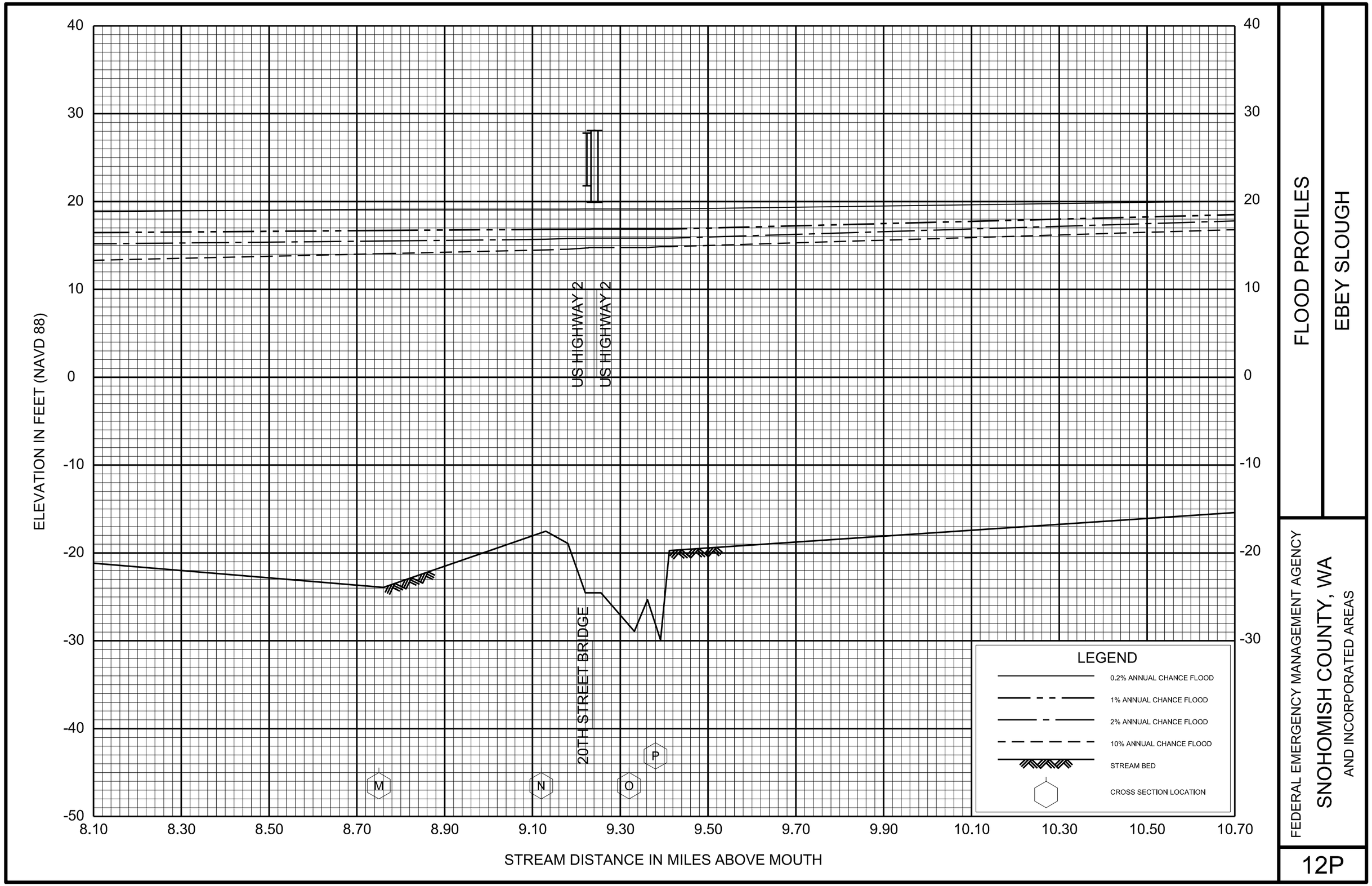

FLOOD PROFILES

EBEY SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS




FLOOD PROFILES

EBEY SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

12P

ELEVATION IN FEET (NAVD 88)

50
40
30
20
10
0
-10
-20
-30
-40

10.70 10.90 11.10 11.30 11.50 11.70 11.90 12.10 12.30 12.50 12.70 12.90 13.10 13.30

STREAM DISTANCE IN MILES ABOVE MOUTH

JACKNIFE BRIDGE

LIMIT OF DETAILED STUDY

Q

R

S

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

EBEY SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

13P

ELEVATION IN FEET (NAVD 88)

40
30
20
10
0
-10
-20
-30
-40
-50

-0.10 0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20

STREAM DISTANCE IN MILES ABOVE CONFLUENCE WITH STEAMBOAT SLOUGH

A
B
C

LEGEND

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

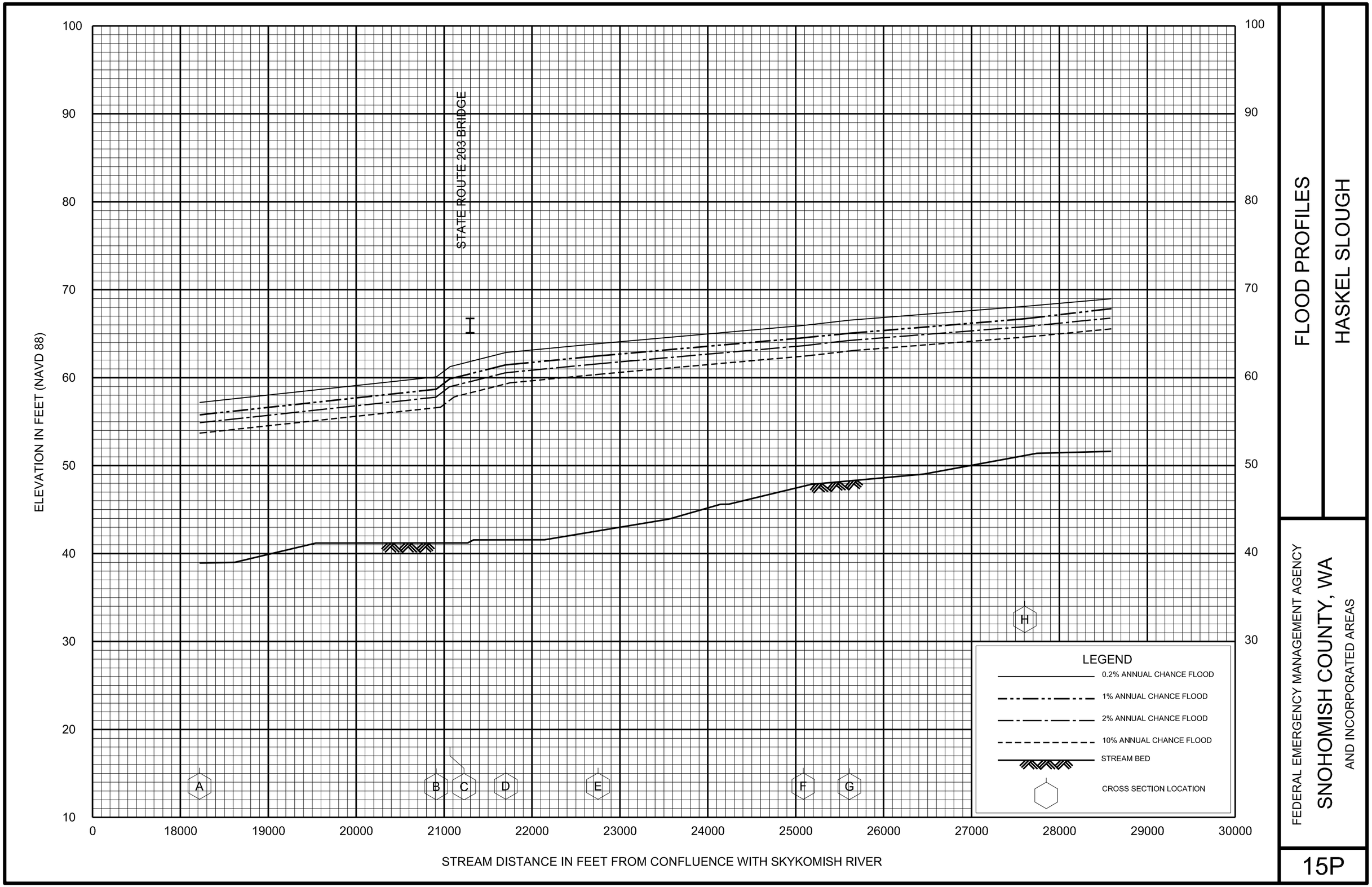
# FLOOD PROFILES

## EBEY - STEAMBOAT SLOUGH CONNECTOR

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS




FLOOD PROFILES

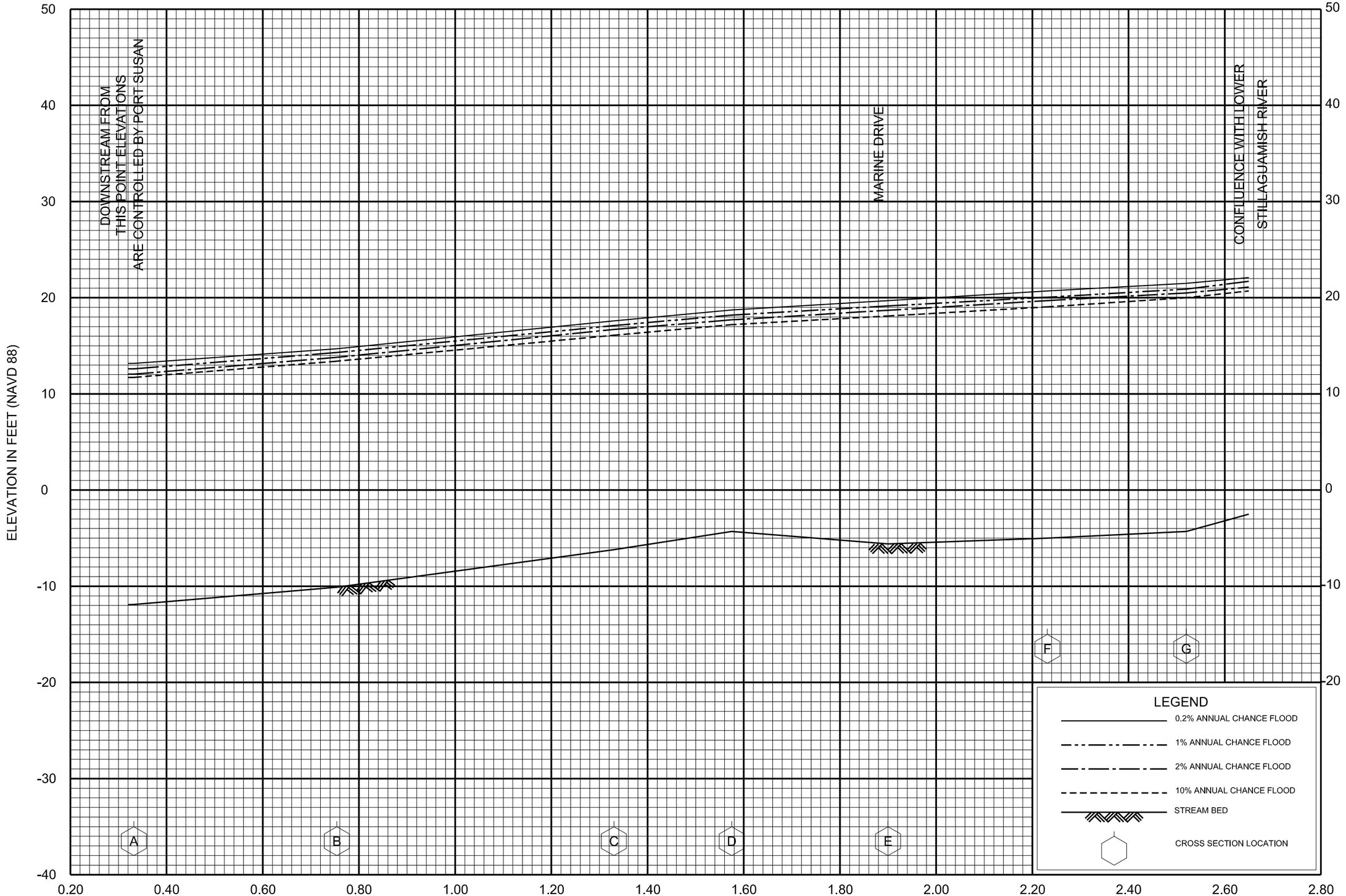
HASKEL SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

15P




FLOOD PROFILES

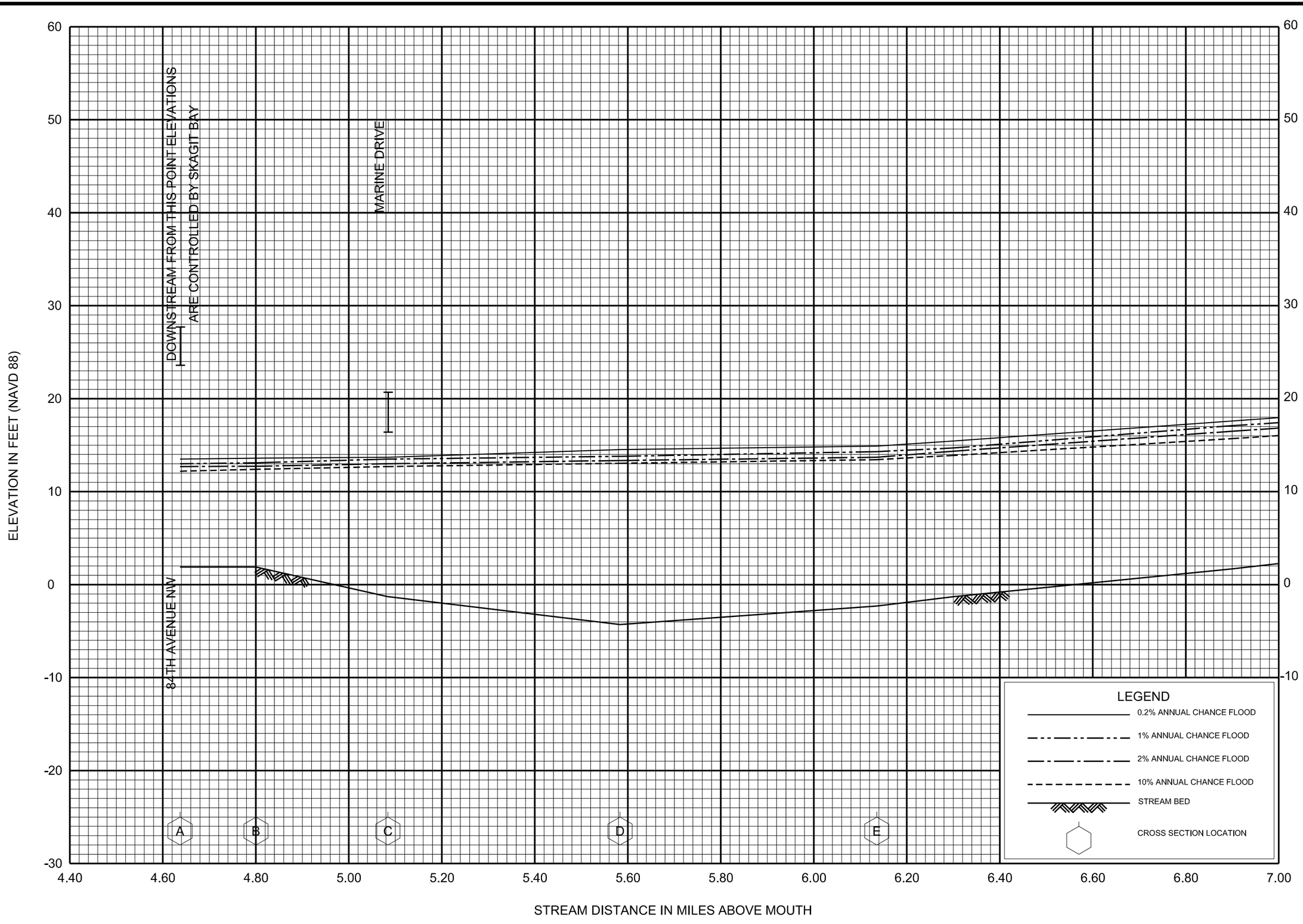
HAT SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

16P




FLOOD PROFILES

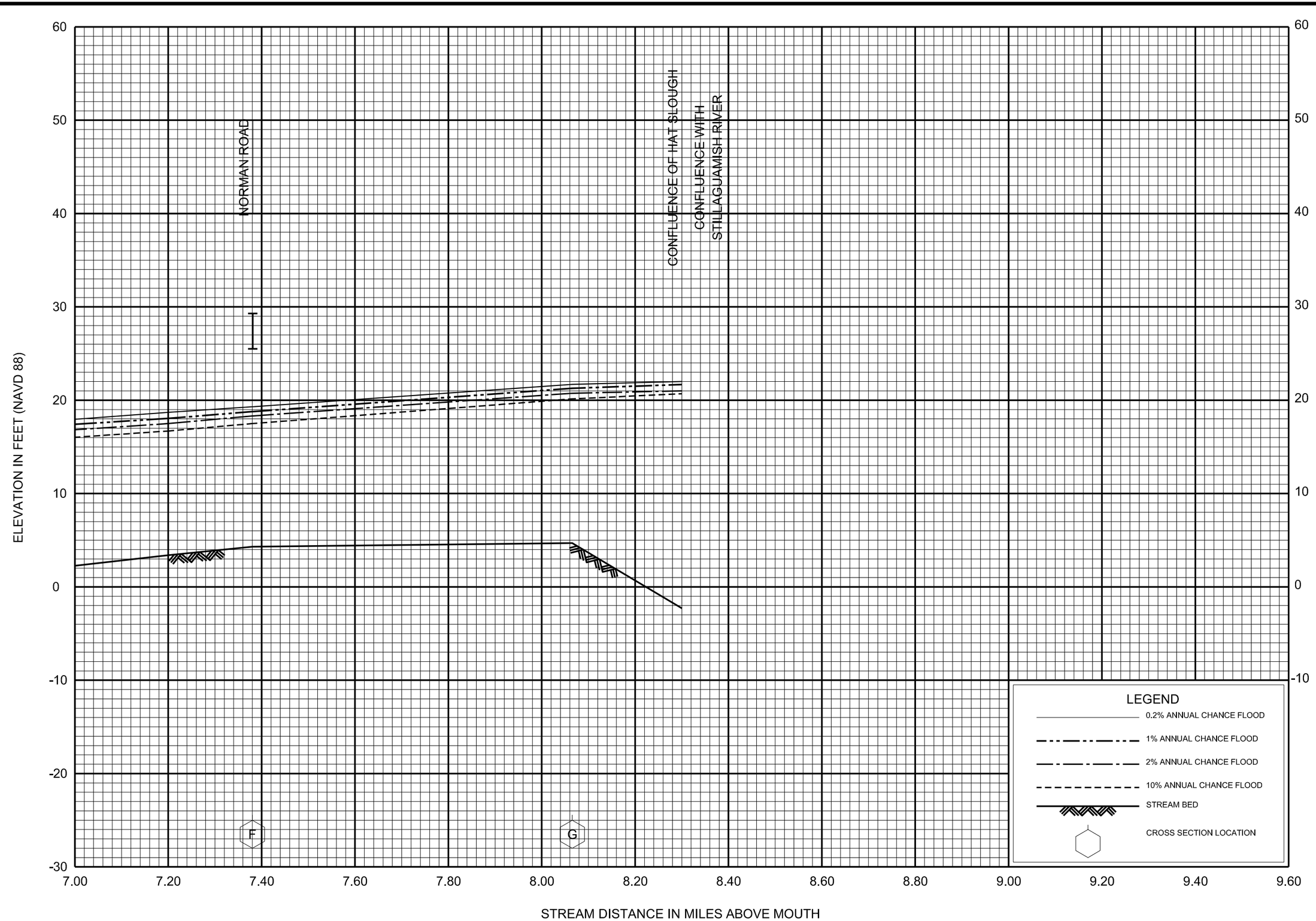
LOWER STILLAGUAMISH RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

17P



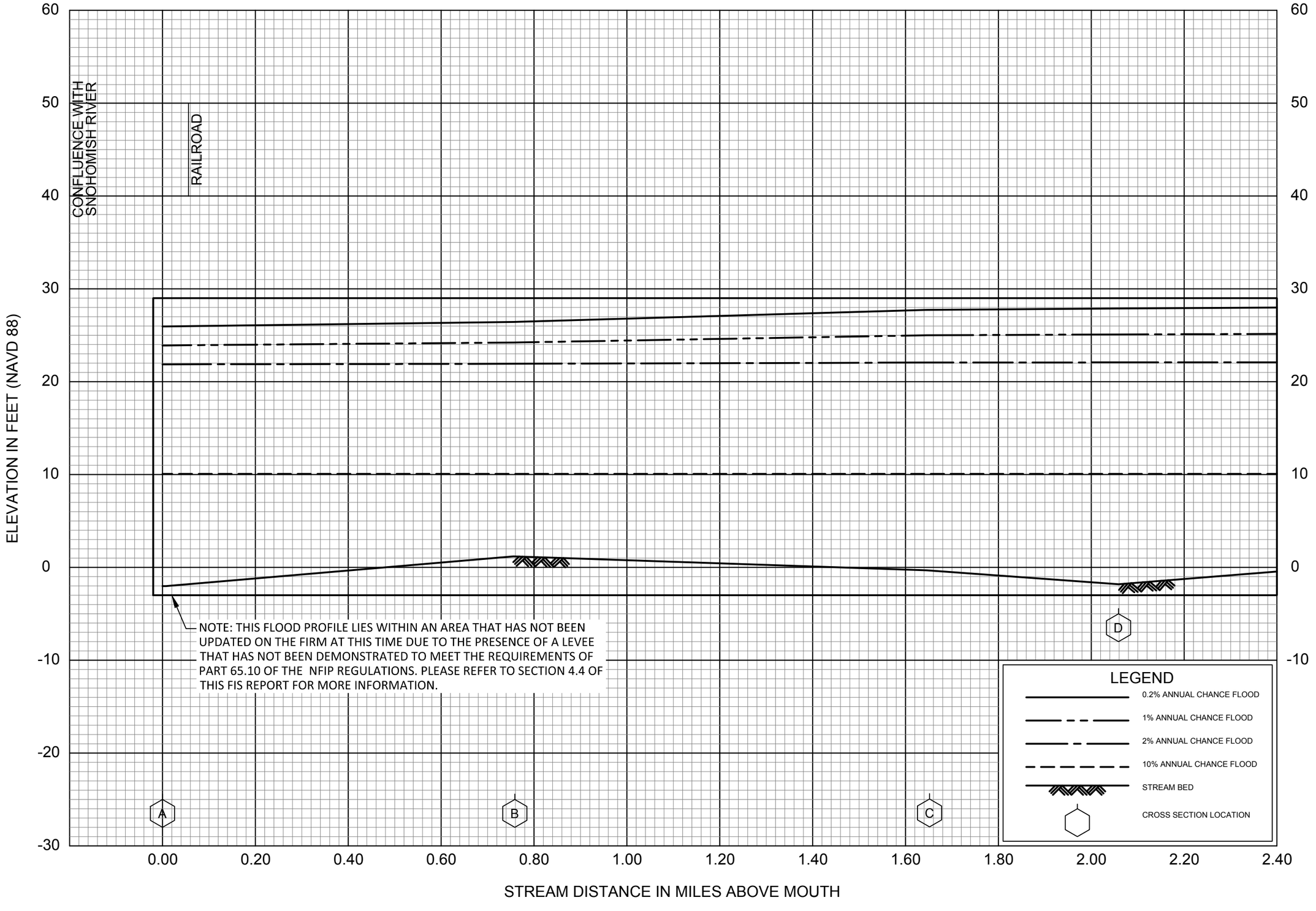

FLOOD PROFILES

LOWER STILLAGUAMISH RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS




FLOOD PROFILES

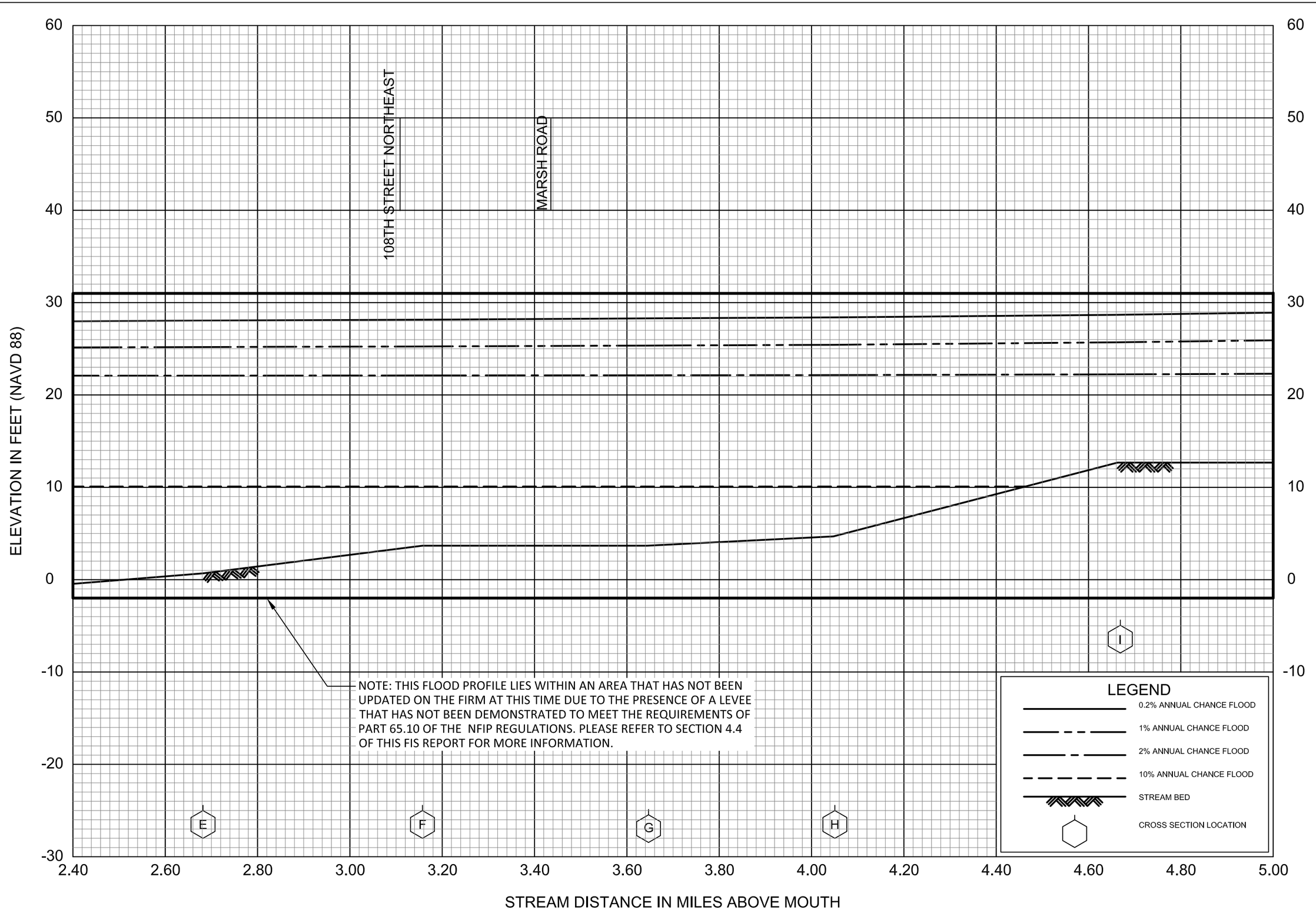
MARSHLAND DIVERSION CHANNEL

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

19P



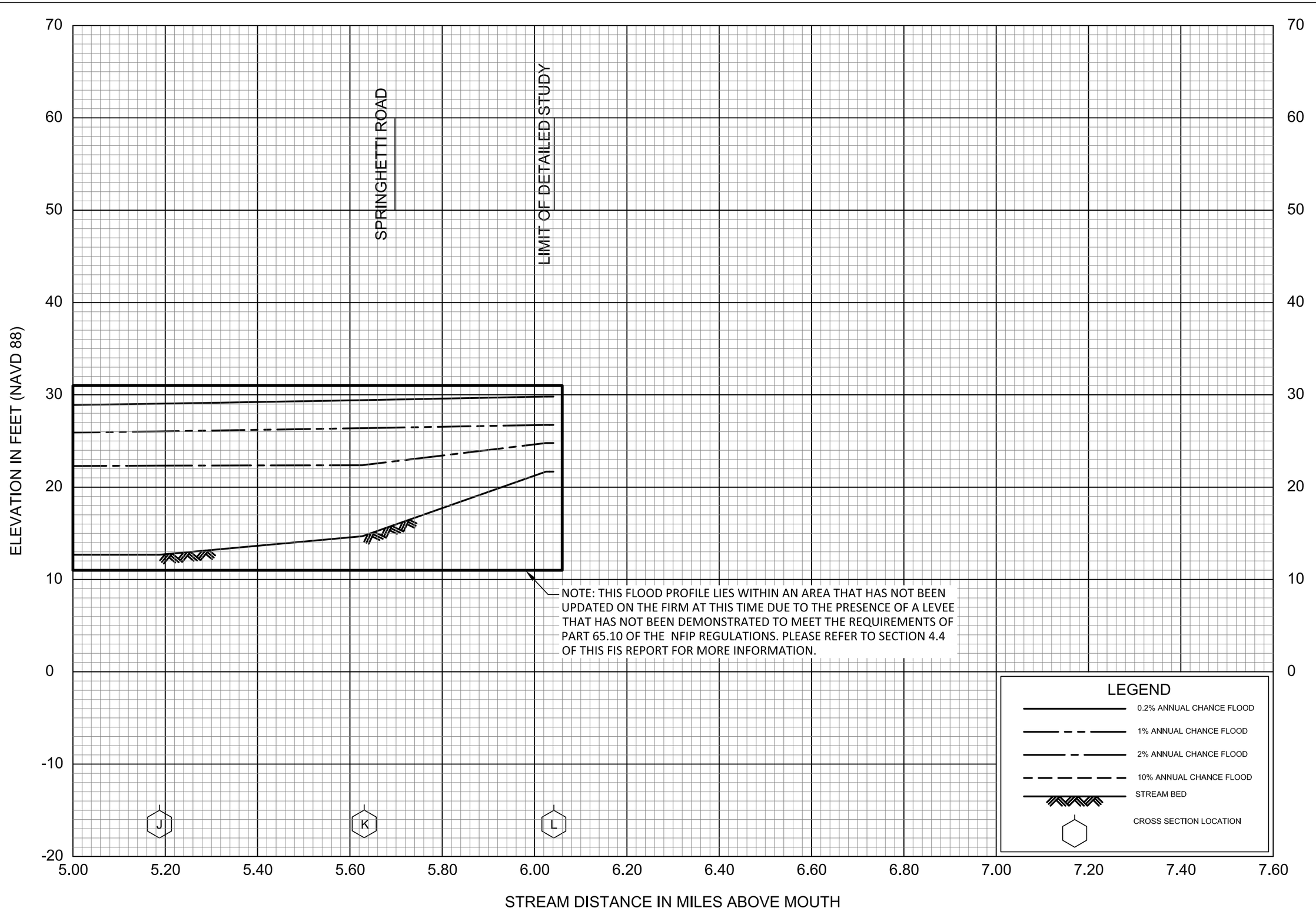

FLOOD PROFILES

MARSHLAND DIVERSION CHANNEL

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS



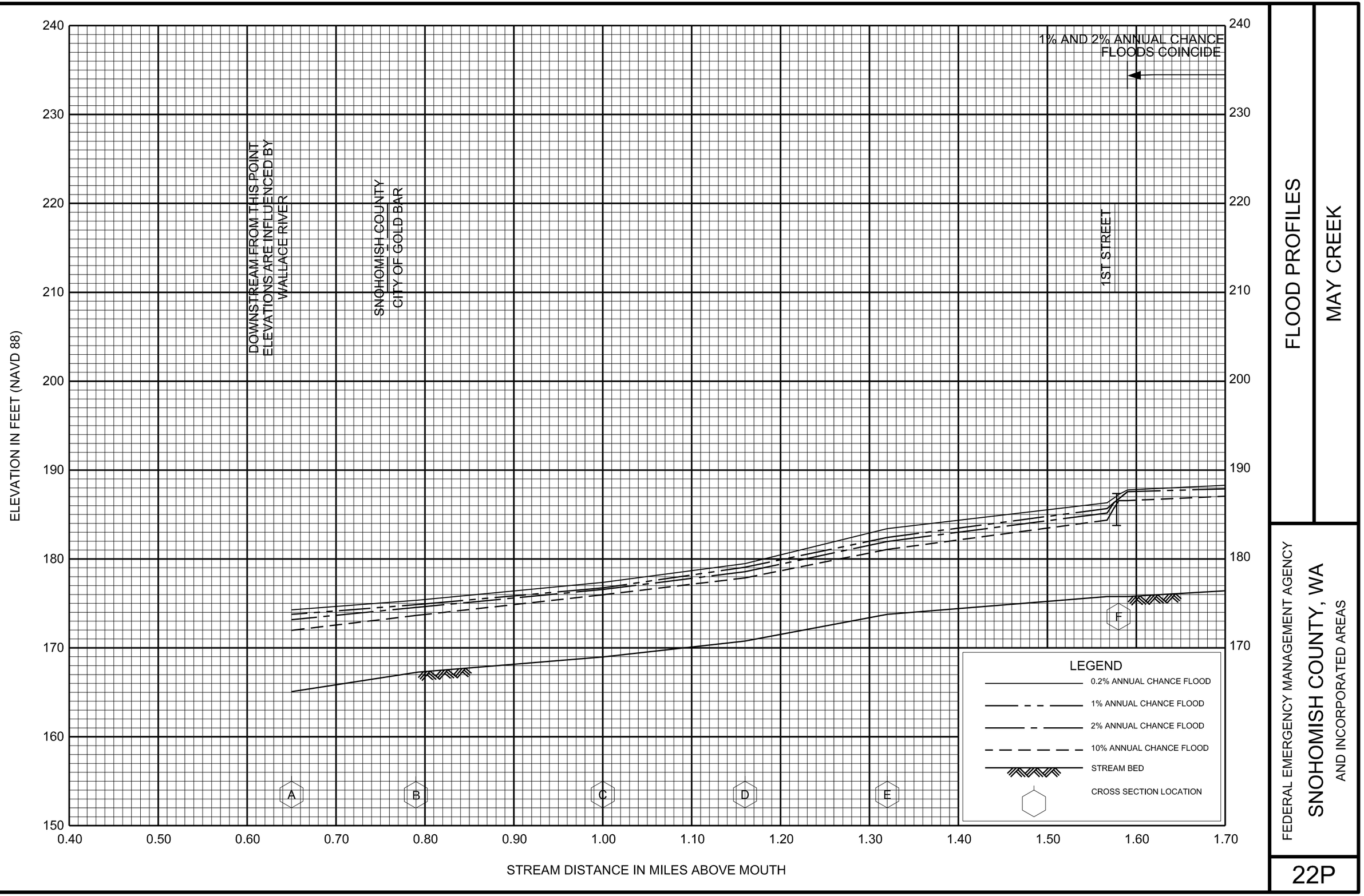

FLOOD PROFILES

MARSHLAND DIVERSION CHANNEL

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS




FLOOD PROFILES

MAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

22P

1% AND 2% ANNUAL CHANCE FLOODS COINCIDE

SNOHOMISH COUNTY
CITY OF GOLD BAR

CITY OF GOLD BAR
SNOHOMISH COUNTY

G

H

I

LEGEND

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

ELEVATION IN FEET (NAVD 88)

240
230
220
210
200
190
180
170
160
150

1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00

STREAM DISTANCE IN MILES ABOVE MOUTH

FLOOD PROFILES

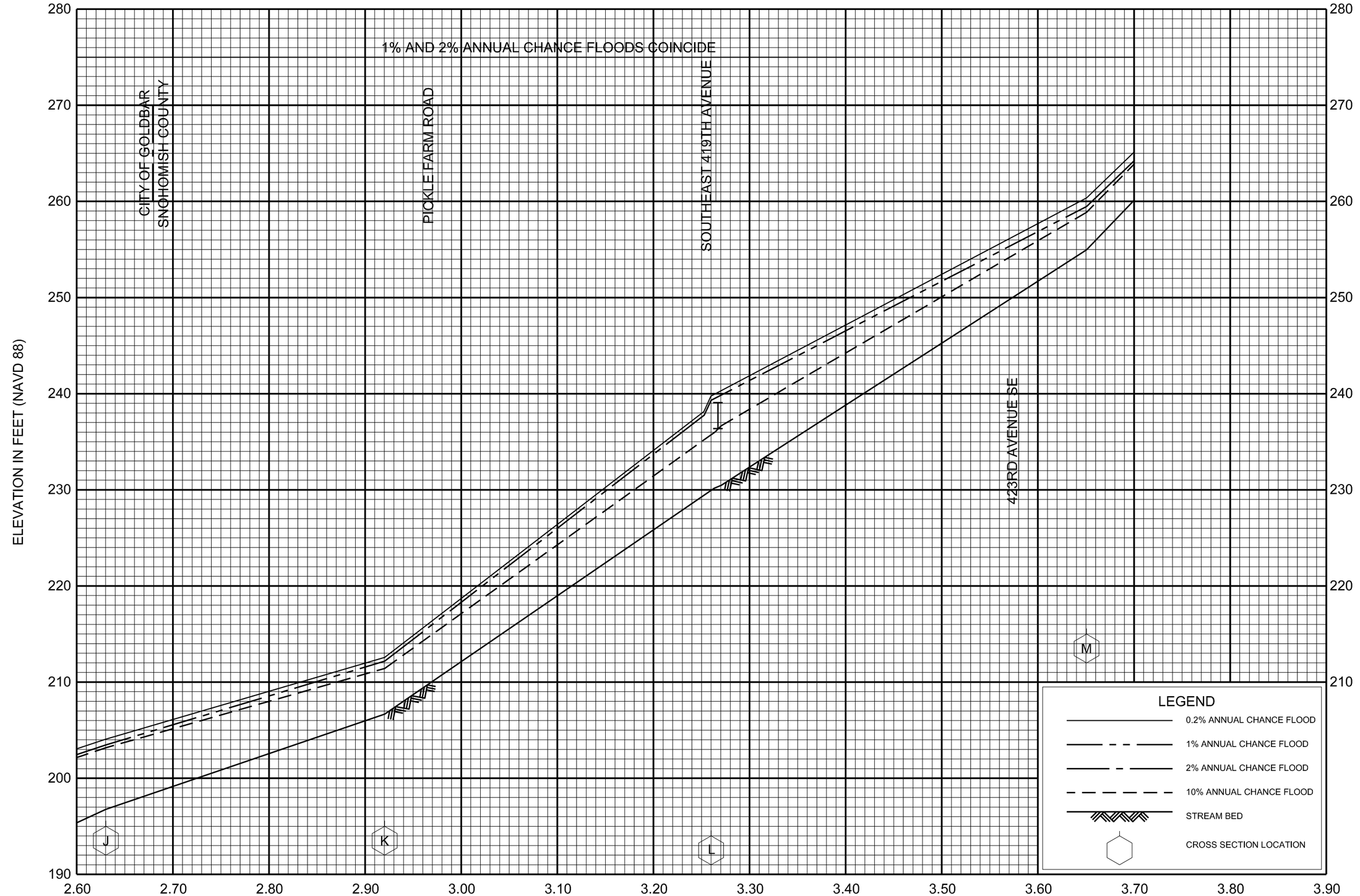
MAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

23P



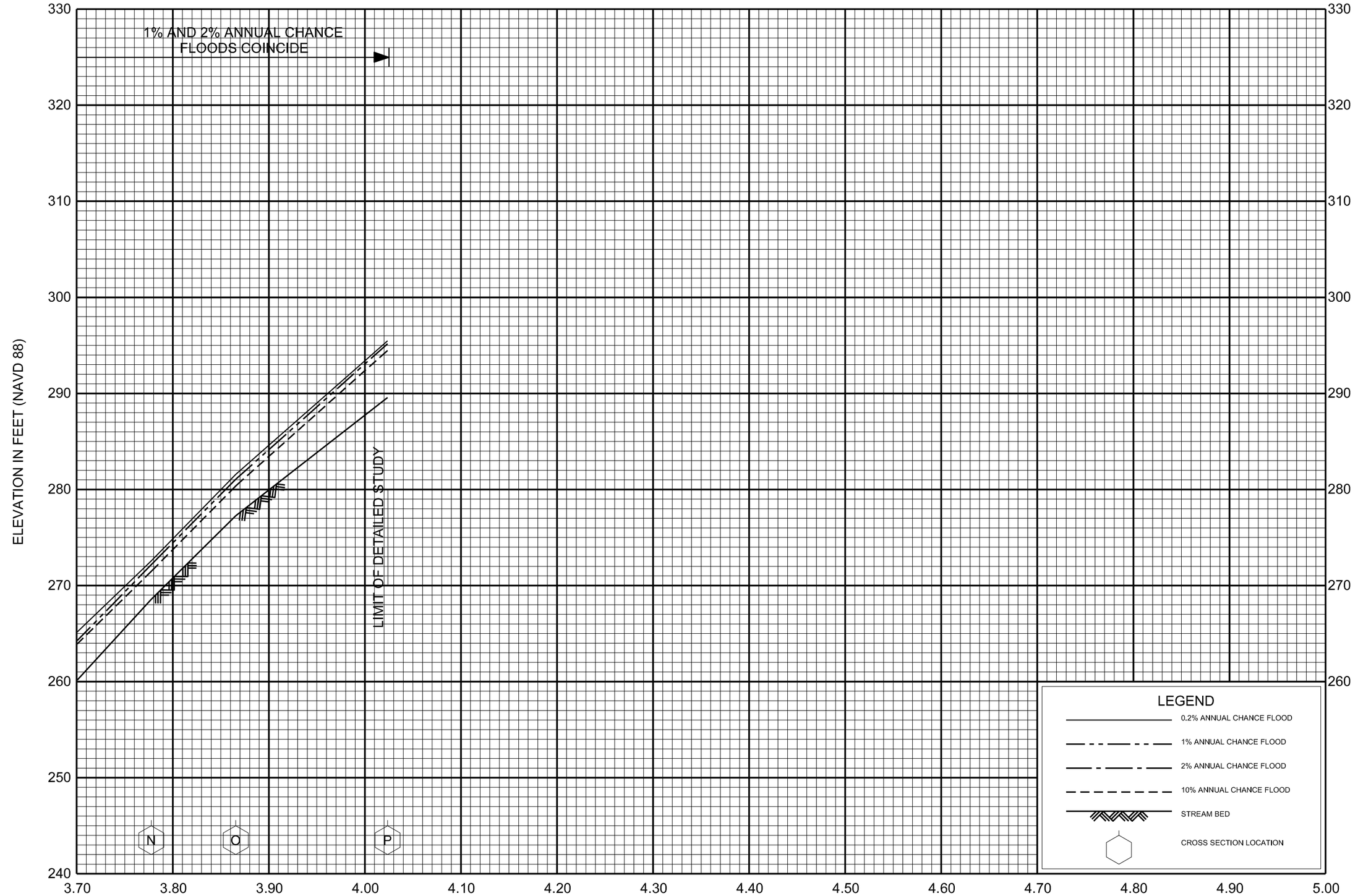

FLOOD PROFILES

MAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS




FLOOD PROFILES

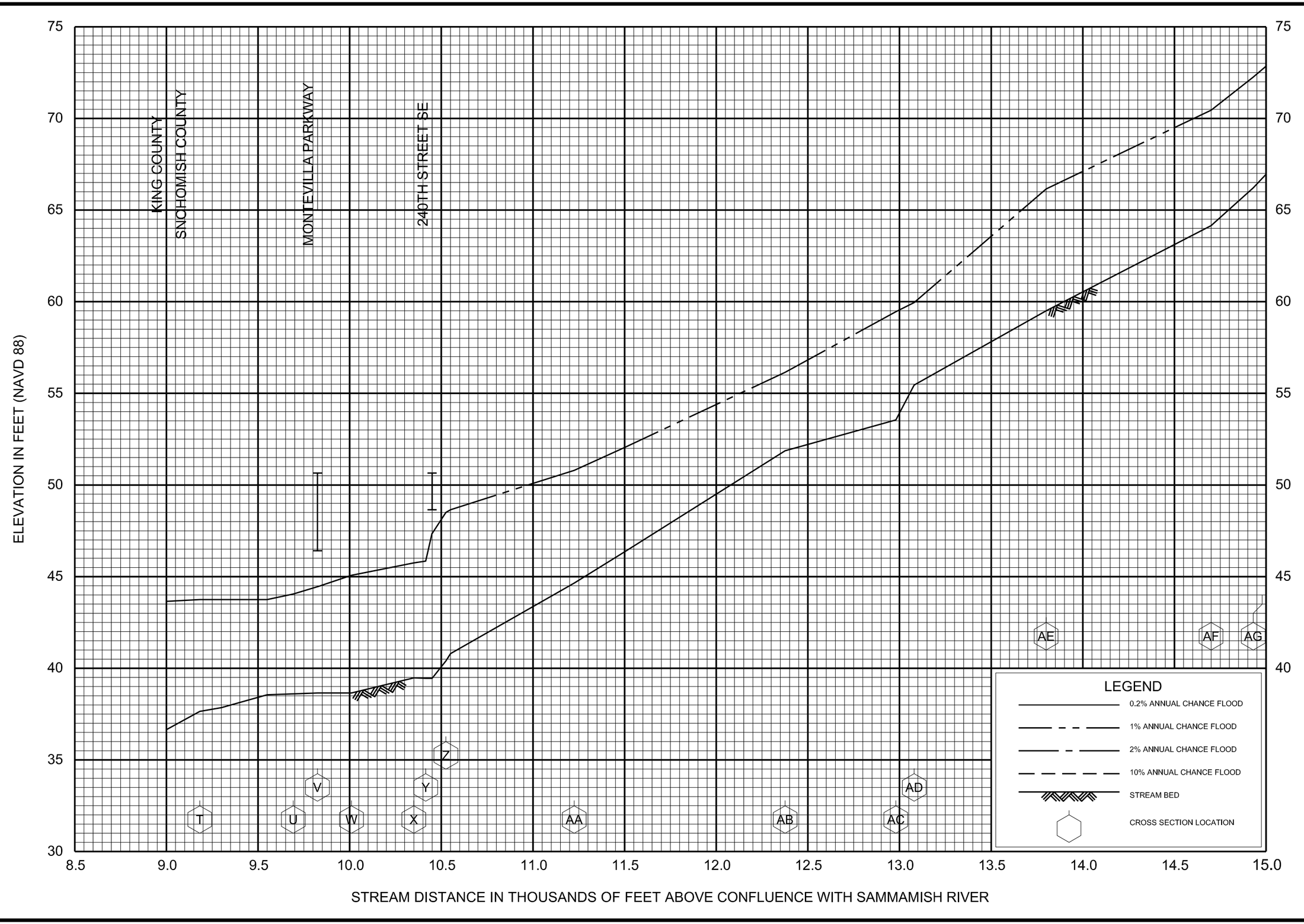
MAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

25P




FLOOD PROFILES

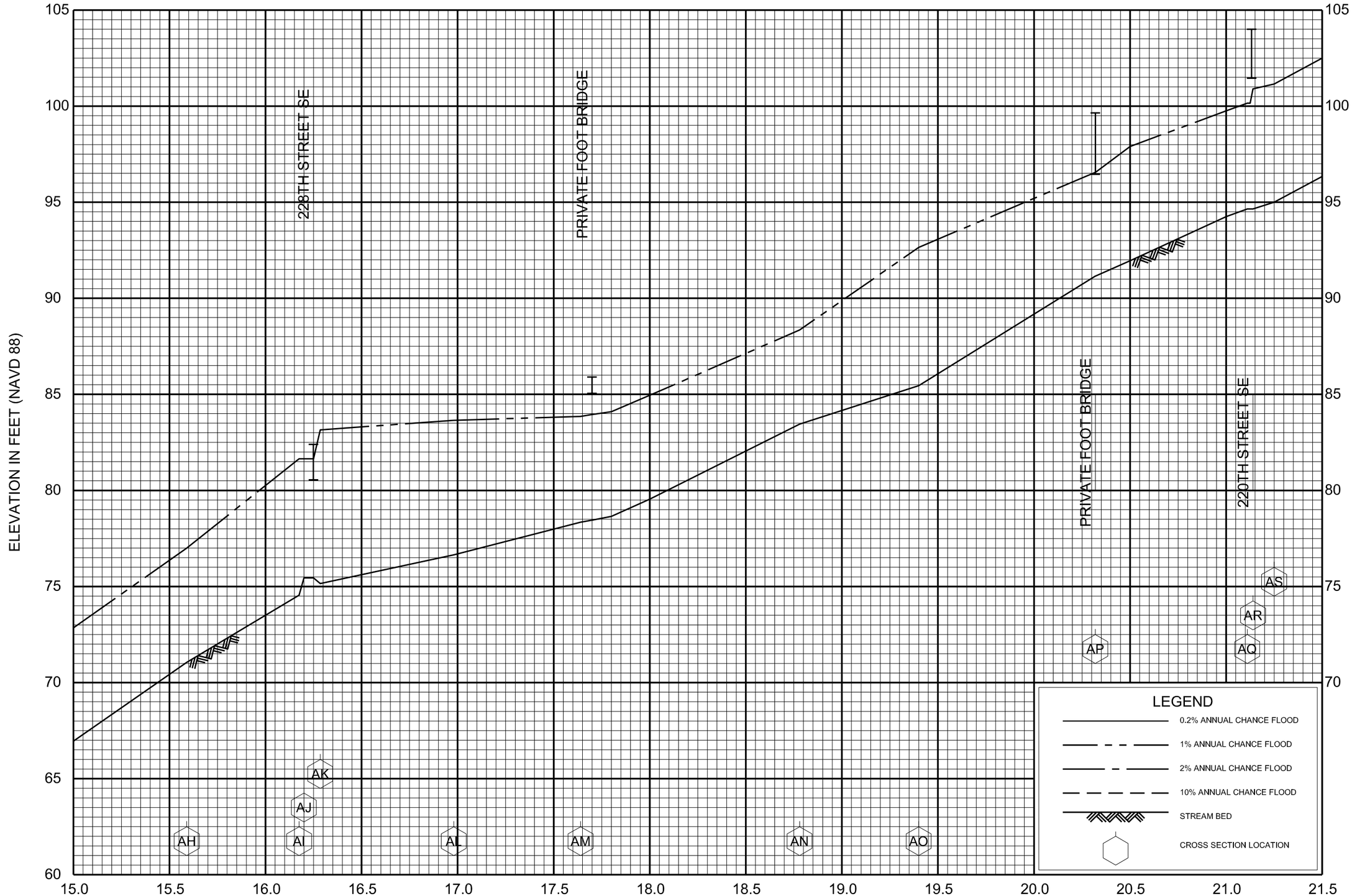
NORTH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

26P




FLOOD PROFILES

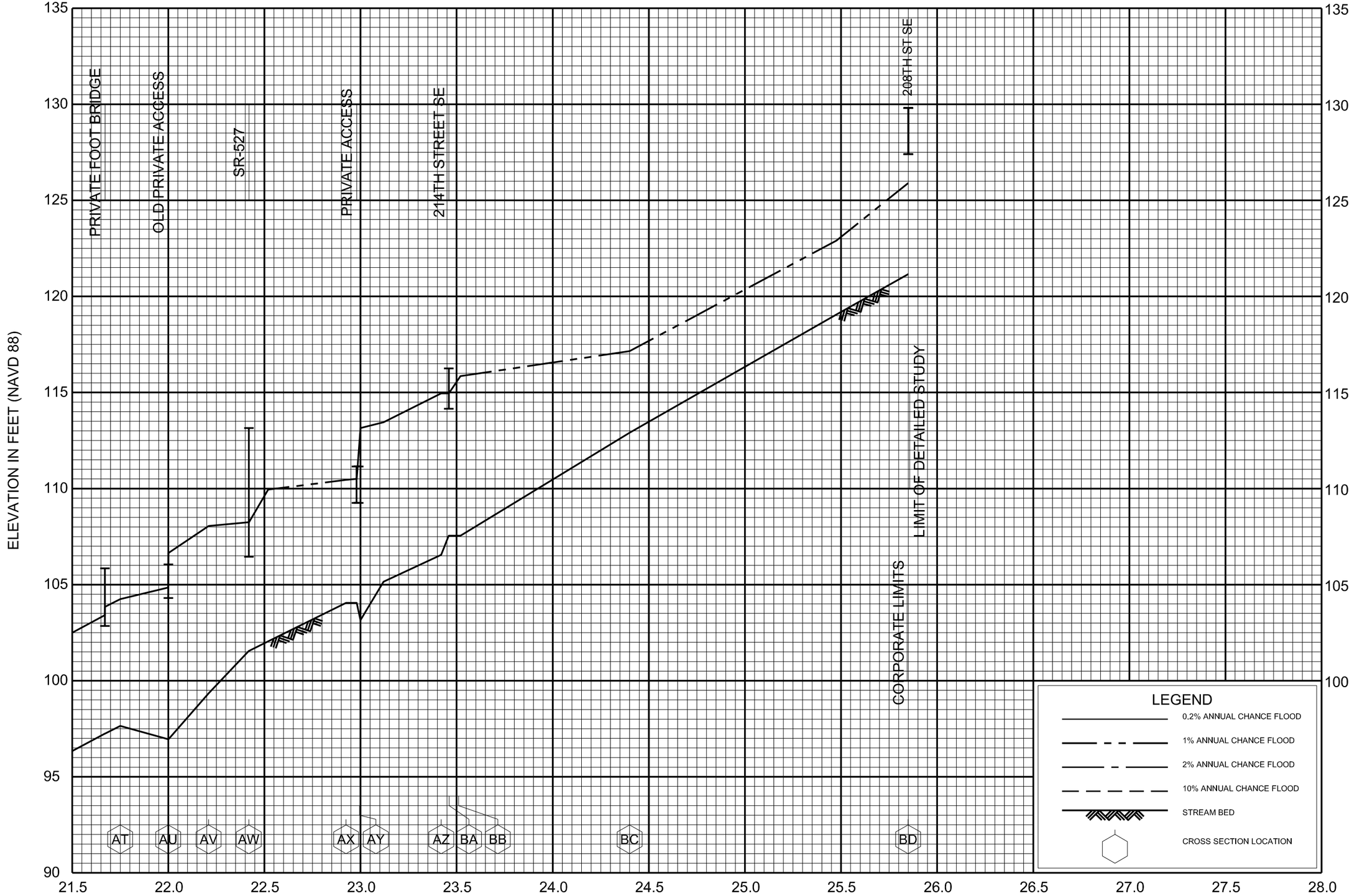
NORTH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

27P




FLOOD PROFILES

NORTH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SNOHOMISH COUNTY, WA

AND INCORPORATED AREAS

28P