

HLC2 VERSION 1 UPDATED JAN 1975
 ERROR CORRECTIONS .01,.02,.03,.04,.05,.06,.07,.08
 NOTIFICATIONS .52,.53,.54,.55,.56,.57,.58

1 ROWAN COUNTY, SUBARIN E STREAM 12
 2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES, N.C. JUN 1974
 3 10 YEAR FLOOD WATER SURFACE PROFILE

	ICHECK	INR	INR1	INR2	DEPBC	INR3	2	INSEL	FO		
	DEPBC	INR	INR1	INR2	INR3	INSEL	FO	INSEL	FO		
	DE	NPROM	IPLOT	PREFVS	XSECV	XSECW	F1	ALD1	IPLOT	CIRCH	ITRACE
	0.0	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05	1,000	34,000	3,000	4,000	27,000	28,000	26,000	0.0	0.0	0.0	0.0
06	1,000	10,000	1,000	1,000	10,000	10,000	9,000	0.0	0.0	0.0	0.0
07	1,000	372,000	682,000	853,000	1253,000	853,000	853,000	0.0	0.0	0.0	0.0
08	1,000	0.0	0.0	0.0	0.0	0.0	-10,400	0.0	0.0	0.0	0.0
X1	1150,000	12,000	1153,000	1173,000	1150,000	1150,000	1150,000	0.0	0.0	0.0	0.0
09	1755,100	1040,000	752,400	1048,000	737,500	1023,000	736,500	11453,000	733,100	1164,000	0.0
10	1732,200	1166,000	1732,200	1166,000	732,800	1168,000	736,600	1173,000	739,300	1278,000	0.0
11	753,400	1330,000	755,100	1345,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X2	1250,000	10,0	10,0	0,0	100,000	100,000	100,000	0.0	0.0	0.0	0.0
12	0.025	0.025	0.025	0.025	0.000	0.000	0.000	0.0	0.0	0.0	0.0
13	1300,000	2,15,000	1493,600	1499,000	50,000	149,000	50,000	0.0	0.0	0.0	0.0
14	761,200	1000,000	757,200	1130,600	753,000	1209,000	756,400	1510,000	733,600	1472,000	0.0
15	737,300	1493,000	735,200	1493,000	734,300	1496,000	735,200	1428,100	737,300	1499,000	0.0
16	760,300	1925,000	746,600	1547,200	762,200	1643,000	733,400	1700,000	763,200	1799,000	0.0
17	10,900	14,700	2,500	0,0	6,000	0,010	26,260	0.0	0.0	0.0	0.0
18	1492,600	10,0	0,0	0,0	102,000	102,000	102,000	0.0	0.0	0.0	0.0
19	0,9	0,0	1,600	780,500	0,0	0,0	0,0	0,0	0,0	0,0	0,0
20	15,000	1000,000	742,100	0,0	106,000	757,200	0,0	1260,000	753,000	0,0	0.0
21	1365,000	240,000	0,0	100,000	785,500	0,0	1655,000	795,700	737,500	1433,200	0.0
22	745,700	739,400	1894,600	795,700	796,300	1498,100	748,700	739,400	1699,000	745,700	0.0
23	787,300	1400,000	786,300	0,0	1700,000	753,600	0,0	1799,000	761,200	0,0	0.0
24	0,055	0,055	0,055	0,100	0,500	0,0	0,0	0,0	0,0	0,0	0,0
25	14,6,000	12,000	1153,000	1173,000	50,000	149,000	50,000	0.0	0.0	0.0	0.0
26	17,000	1000,000	712,000	1090,000	737,500	1083,000	756,500	11453,000	753,100	1164,000	0.0
27	712,000	1466,000	732,900	1466,000	732,800	1168,000	736,600	1173,000	739,300	1278,000	0.0
28	14,6,000	1350,000	735,100	1545,000	0,0	0,0	6,0	0,0	0,0	0,0	0,0
29	14,6,000	10,0	0,0	0,0	106,000	106,000	106,000	0.0	0.0	0.0	0.0
30	0,000	450,000	450,000	551,000	895,000	551,000	0,0	0,0	0,0	0,0	0,0
31	5050,000	10,000	1645,000	1964,000	1498,000	1490,000	1508,000	0,0	0,0	0,0	0,0
32	770,000	1000,000	764,600	1019,000	756,400	1040,000	753,700	1045,000	749,900	1048,000	0.0
33	742,200	1050,000	750,000	1052,000	754,000	1064,000	759,200	1239,000	730,400	1215,000	0.0

HEC-P VERSION UPDATED JAN 1975

ERROR CORRECTIONS 01,02,03,04,05,06,07,08

MODIFICATIONS 52,53,54,55,56,57,58

1. ROWAN COUNTY BASIN E STREAM 12
2. FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 16918
3. 50 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INO MINV IDIR SIRT METRIC HVINS O WSEL F4

210. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.

J2. INROE LIPOT PREVS XSECV XSECH FEL ALLOC IRW CINEM ITRACE

2,000. 0.0 -1,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

CCIV= 0.100 CEHV= 0.300

3720 ASSUMED CRITICAL DEPTH

| SECNO | DEPTH | CWSFL | CRIVS | WSELK | E6 | HV | HL | OLOSS | BANK ELEV |
|-------|-------|-------|-------|-------|-----|-------|-------|-------|------------|
| TIME | VLOD | VCH | VRD | XNL | ACH | AROB | VOL | TWA | LEFT/RIGHT |
| SLOPE | XLOGL | YLC4 | XLOOR | ITRL | TOC | ICONT | COPAR | TOPWD | ENDST |

| | | | | | | | | | |
|----------|-------|--------|--------|--------|--------|-------|-----|--------|---------|
| 1150.00 | 5.13 | 737.83 | 737.23 | 738.80 | 738.87 | 0.65 | 0.0 | 0.0 | 738.80 |
| 689. | 134. | 516. | 39. | 65. | 70. | 27. | 0. | 0. | 738.80 |
| 0.0 | 2.05 | 7.36 | 1.47 | 0.055 | 0.035 | 0.055 | 0.0 | 732.80 | 1081.28 |
| 0.006591 | 1150. | 1150. | 0. | 0. | 2.1 | 1.1 | 0.0 | 138.40 | 1220.39 |

| | | | | | | | | | |
|----------|------|--------|------|-------|--------|-------|-------|--------|---------|
| 1250.00 | 5.37 | 739.57 | 0.0 | 0.0 | 739.11 | 0.44 | 0.52 | 0.92 | 737.00 |
| 689. | 152. | 472. | 55. | 83. | 75. | 40. | 0. | 0. | 737.30 |
| 0.01 | 1.96 | 6.29 | 1.37 | 0.055 | 0.035 | 0.055 | 0.035 | 732.30 | 1081.41 |
| 0.004254 | 100. | 100. | 100. | 2. | 0. | 1 | 0.0 | 149.45 | 1230.36 |

CCIV= 0.100 CEHV= 0.300

5685 20 TRIALS USED CWSFL, WSEL

1185 min SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

| SECNO | DEPTH | CWSFL | CRIVS | WSELK | E6 | HV | HL | OLOSS | BANK ELEV |
|-------|-------|-------|-------|-------|-----|-------|-------|-------|------------|
| TIME | VLOD | VCH | VRD | XNL | ACH | AROB | VOL | TWA | LEFT/RIGHT |
| SLOPE | XLOGL | YLC4 | XLOOR | ITRL | TOC | ICONT | COPAR | TOPWD | ENDST |

| | | | | | | | | | |
|---------|------|--------|--------|-----|--------|-------|------|-----|--------|
| 1300.00 | 5.87 | 740.17 | 740.17 | 0.0 | 741.01 | 0.84 | 0.23 | 0.6 | 737.30 |
| 689. | 226. | 280. | 184. | 40. | 30. | 34.35 | 1.1 | 0.0 | 737.30 |

THE CURRENT VERSION IS UPATED JUNE 1976.
ERROR CORRECTIONS OF 01, 02, 03, 04, 05, 07, 08
MODIFICATIONS 52, 53, 54, 55, 56, 58, 59

10 BOROW COUNTY - BASE Elevation STREAM 12' 0" 10
11 FLOODPLATE STUDY AT BOROW & DAVIDSON COUNTIES - Headcut 104.63
12 100 YEAR FLOOD WATER SURFACE PROFILE

STATE-ASSUMED CRITICAL DEPTHS

| SECOND | DEFINH | CNSL | CRIVS | WSELK | EG | HV | HL | GLOSS | BANK TELEV. |
|--------|--------|------|-------|-------|------|--------|-------|--------|-------------|
| 0.0 | OL03 | 0CH | 0R0B | ALGB | ACH | AROB | VOL | TWA | LEE EIGHT |
| TIME | VLOD | VCH | VR0B | XNE | XNCN | XNR | WTN | LCNTN | STA |
| SLOPE | XLOAD | XLCN | XLOBB | ITRDL | TOC | TCOUNT | COHAR | TOPWID | ENOST |

| | | | | | | | | | |
|----------|-------|--------|--------|--------|--------|-------|-----|--------|---------|
| 1150.00 | 5,411 | 738,21 | 738,21 | 740,80 | 738,88 | 9,64 | 0,0 | 0,0 | 736,86 |
| 053. | 205, | 575, | 70, | 85, | 76, | 82, | 0, | 0, | 736,36 |
| 0,0 | 2190 | 7,54 | 1,68 | 0,055 | 0,035 | 0,055 | 4,0 | 732,80 | 1681,54 |
| 0,065209 | 1150, | 1150, | 1150, | 0, | 16, | 1 | 0,0 | 150,82 | 1232,13 |

1250.00 5.62 738.92 0.0 0.0 7.03 39 0.07 0.02 0.02 757.00
 053. 228. 526. 07. 01. 00. 53. 0. 0. 0. 757.50
 0.41 2.27 6.73 1.57 0.055 0.055 0.055 0.035 753.30 1069.84
 0.004471 100. 100. 0.02 0.0 0.0 0.0 100.31 1241.15

CCIVe = 9,100 CCIVe = 0.360
 5645 20 10140.8 1.826 4851, 6351

ANSWERING QUESTIONS

• 7201-79-0272 • 000111111111111111111111

SET 90 0001R 0001L 0010R 0010L 0011R 0011L 0012R 0012L 0013R 0013L
 6 0001R 0001L 0010R 0010L 0011R 0011L 0012R 0012L 0013R 0013L
 0001L 0001R 0010L 0010R 0011L 0011R 0012L 0012R 0013L 0013R
 0010R 0010L 0011R 0011L 0012R 0012L 0013R 0013L 0001R 0001L

1000.00 6.32 740.62 740.62 0.6 741.34 0.72 0.21 0.0 751.50
- 833. - 3.20 289.24 289.24 58.33 86.11 1.1 1.1 737.50

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

500 YEAR FLOOD WATER SURFACE

| SECTION NUMBER | CHANNEL LENGTH | MIN. EL. OF ROADWAY | MAX. EL. OF ROADWAY | DISCHARGE (CFS) | CWSL | WID | TQ | E6 | OPWID | STENCL | STENCR | VCH | |
|----------------|----------------|---------------------|---------------------|-----------------|---------|--------|---------|--------|--------|--------|--------|-------|------|
| 1150.00 | 1150.00 | 0.0 | 0.0 | 752.80 | 372.00 | 736.98 | 58.92 | 737.75 | 61.07 | 0.0 | 0.0 | 7.12 | |
| 1150.00 | 1150.00 | 0.0 | 0.0 | 752.80 | 689.00 | 737.98 | 86.18 | 738.57 | 138.40 | 0.0 | 0.0 | 7.36 | |
| 1150.00 | 1150.00 | 0.0 | 0.0 | 752.80 | 853.00 | 738.21 | 106.25 | 738.85 | 159.82 | 0.0 | 0.0 | 7.64 | |
| 1150.00 | 1150.00 | 0.0 | 0.0 | 752.80 | 1253.00 | 738.68 | 153.99 | 739.39 | 171.88 | 0.0 | 0.0 | 8.54 | |
| 1250.00 | 100.00 | 0.0 | 0.0 | 733.30 | 372.00 | 737.97 | 58.08 | 738.57 | 116.67 | 0.0 | 0.0 | 5.38 | |
| 1250.00 | 100.00 | 0.0 | 0.0 | 733.30 | 689.00 | 738.67 | 105.66 | 739.11 | 149.45 | 0.0 | 0.0 | 6.29 | |
| 1250.00 | 100.00 | 0.0 | 0.0 | 733.30 | 853.00 | 738.92 | 127.58 | 738.39 | 160.31 | 0.0 | 0.0 | 6.73 | |
| 1250.00 | 100.00 | 0.0 | 0.0 | 733.30 | 1253.00 | 738.46 | 105.68 | 739.96 | 184.16 | 0.0 | 0.0 | 7.38 | |
| 1300.00 | 50.00 | 0.0 | 0.0 | 734.30 | 372.00 | 739.37 | 91.69 | 740.12 | 41.80 | 0.0 | 0.0 | 3.38 | |
| 1300.00 | 50.00 | 0.0 | 0.0 | 734.30 | 689.00 | 740.17 | 96.01 | 741.01 | 63.96 | 0.0 | 0.0 | 9.39 | |
| 1300.00 | 50.00 | 0.0 | 0.0 | 734.30 | 853.00 | 740.62 | 132.87 | 741.53 | 100.32 | 0.0 | 0.0 | 8.89 | |
| 1300.00 | 50.00 | 0.0 | 0.0 | 734.30 | 1253.00 | 741.12 | 195.52 | 741.06 | 142.78 | 0.0 | 0.0 | 5.42 | |
| 1402.00 | 102.00 | 745.70 | 740.30 | 734.30 | 372.00 | 739.51 | 57.31 | 740.12 | 44.10 | 0.0 | 0.0 | 7.72 | |
| 1402.00 | 102.00 | 745.70 | 740.30 | 734.30 | 689.00 | 746.97 | 3415.10 | 746.97 | 366.01 | 0.0 | 0.0 | 9.47 | |
| 1402.00 | 102.00 | 745.70 | 740.30 | 734.30 | 853.00 | 747.22 | 3673.81 | 747.22 | 372.20 | 0.0 | 0.0 | 6.55 | |
| 1402.00 | 102.00 | 745.70 | 740.30 | 734.30 | 1253.00 | 747.69 | 4201.53 | 747.70 | 382.64 | 0.0 | 0.0 | 0.72 | |
| 1452.00 | 50.00 | 0.0 | 50.0 | 734.40 | 372.00 | 740.18 | 143.74 | 740.25 | 167.56 | 0.0 | 0.0 | 2.67 | |
| 1452.00 | 50.00 | 0.0 | 0.0 | 734.40 | 689.00 | 746.97 | 1949.84 | 746.97 | 235.87 | 0.0 | 0.0 | 0.70 | |
| 1452.00 | 50.00 | 0.0 | 0.0 | 734.40 | 853.00 | 747.21 | 2051.62 | 747.22 | 257.35 | 0.0 | 0.0 | 0.83 | |
| 1452.00 | 50.00 | 0.0 | 0.0 | 734.40 | 1253.00 | 747.69 | 2253.45 | 747.70 | 240.23 | 0.0 | 0.0 | 1.14 | |
| 1552.00 | 100.00 | 0.0 | 0.0 | 734.30 | 372.00 | 740.22 | 101.18 | 740.36 | 147.05 | 0.0 | 0.0 | 3.51 | |
| 1552.00 | 100.00 | 0.0 | 0.0 | 734.30 | 689.00 | 746.97 | 1751.39 | 746.97 | 232.85 | 0.0 | 0.0 | 10.75 | |
| 1552.00 | 100.00 | 0.0 | 0.0 | 734.30 | 853.00 | 747.22 | 1848.55 | 747.22 | 234.34 | 0.0 | 0.0 | 3.89 | |
| 1552.00 | 100.00 | 0.0 | 0.0 | 734.30 | 1253.00 | 747.69 | 2042.22 | 747.70 | 237.23 | 0.0 | 0.0 | 1.22 | |
| 3050.00 | 1498.00 | 0.0 | 0.0 | 745.80 | 230.00 | 753.00 | 18.13 | 753.99 | 15.47 | 0.0 | 0.0 | 7.97 | |
| 3050.00 | 1498.00 | 0.0 | 0.0 | 749.80 | 459.00 | 754.47 | 46.40 | 755.43 | 61.08 | 0.0 | 0.0 | 7.96 | |
| 3050.00 | 1498.00 | 0.0 | 0.0 | 749.80 | 581.00 | 755.06 | 71.98 | 755.81 | 96.36 | 0.0 | 0.0 | 7.36 | |
| 3050.00 | 1498.00 | 0.0 | 0.0 | 749.80 | 885.00 | 755.66 | 108.46 | 756.45 | 100.54 | 0.0 | 0.0 | 6.22 | |
| 2900 | 4600.00 | 1550.00 | 0.0 | 3.0 | 801.20 | 131.00 | 804.18 | 12.35 | 804.83 | 25.72 | 0.0 | 0.0 | 6.76 |
| 2900 | 4600.00 | 1550.00 | 0.0 | 0.0 | 801.20 | 262.60 | 805.03 | 27.26 | 805.71 | 54.74 | 0.0 | 0.0 | 7.61 |
| 2900 | 4600.00 | 1550.00 | 0.0 | 0.0 | 801.20 | 357.00 | 805.26 | 32.64 | 806.08 | 36.09 | 0.0 | 0.0 | 8.58 |
| 2900 | 4600.00 | 1550.00 | 0.0 | 0.0 | 801.20 | 523.00 | 805.91 | 56.84 | 806.89 | 39.92 | 0.0 | 0.0 | 9.82 |

| SECTION NUMBER | DISCHARGE CFS | CWSL | CWSL DIFF EACH | CWSL DIFF EACH SECTION | CWSL-KWSLK | 10FT WID | T.W. DIFF | LENGTH |
|----------------|---------------|---------|----------------|------------------------|------------|----------|-----------|----------|
| 1150.000 | 572.000 | 756.912 | 0.0 | 0.0 | 0.0 | 61.067 | 0.0 | 1150.000 |
| 1150.000 | 629.000 | 737.927 | 0.949 | 0.0 | 138.399 | -77.332 | 1150.000 | |
| 1150.000 | 853.000 | 738.207 | 0.280 | 0.0 | 150.315 | -89.751 | 1150.000 | |
| 1150.000 | 1253.000 | 736.682 | 0.475 | 0.0 | 371.877 | -110.810 | 1150.000 | |
| | | | | | | | | |
| 1250.000 | 372.000 | 737.974 | 0.0 | 0.905 | 0.0 | 116.673 | 0.0 | 100.000 |
| 1250.000 | 689.000 | 738.672 | 0.639 | 0.749 | 0.0 | 149.455 | -32.782 | 100.000 |
| 1250.000 | 855.000 | 738.919 | 0.246 | 0.711 | 0.0 | 160.314 | -45.642 | 100.000 |
| 1250.000 | 1253.000 | 739.456 | 0.537 | 0.773 | 0.0 | 184.163 | -87.496 | 100.000 |

| | | | | | | | | |
|----------|----------|---------|-------|--------|-----|----------|----------|----------|
| 1300,000 | 372,000 | 759,379 | 0.0 | 2,801 | 0.0 | 41,801 | 0.0 | 50,000 |
| 1300,000 | 689,000 | 790,171 | 0.797 | 1,498 | 0.0 | 33,960 | -22,169 | 40,000 |
| 1300,000 | 653,000 | 740,617 | 0.946 | 1,629 | 0.0 | 100,317 | -58,516 | 50,000 |
| 1300,000 | 1253,000 | 741,129 | 0.507 | 1,668 | 0.0 | 142,788 | -100,979 | 50,000 |
| 1402,000 | 372,000 | 739,567 | 0.0 | 0,133 | 0.0 | 4,54,037 | 0.0 | 102,000 |
| 1402,000 | 689,000 | 746,989 | 7.461 | 6,798 | 0.0 | 366,814 | -322,717 | 102,000 |
| 1402,000 | 653,000 | 747,216 | 0.247 | 6,599 | 0.0 | 372,200 | -528,105 | 102,000 |
| 1402,000 | 1253,000 | 747,693 | 0.478 | 6,599 | 0.0 | 362,682 | -538,946 | 102,000 |
| 1452,000 | 372,000 | 740,176 | 0.0 | 0,668 | 0.0 | 167,559 | 0.0 | 50,000 |
| 1452,000 | 689,000 | 740,966 | 6,793 | -0,001 | 0.0 | 235,868 | -88,309 | 50,000 |
| 1452,000 | 653,010 | 747,215 | 0.247 | -0,001 | 0.0 | 237,355 | -69,796 | 50,000 |
| 1452,000 | 1253,000 | 747,691 | 0.476 | -0,602 | 0.0 | 230,233 | -72,675 | 50,000 |
| 1552,000 | 372,000 | 740,226 | 0.0 | 0,045 | 0.0 | 147,052 | 0.0 | 100,000 |
| 1552,000 | 689,006 | 746,969 | 6,749 | 0,001 | 0.0 | 232,854 | -85,882 | 100,000 |
| 1552,000 | 653,000 | 747,216 | 0.247 | 0,001 | 0.0 | 234,343 | -87,291 | 100,000 |
| 1552,000 | 1253,000 | 747,694 | 0.478 | 0,003 | 0.0 | 237,227 | -90,175 | 100,000 |
| 3050,000 | 236,000 | 755,000 | 0.0 | 12,705 | 0.0 | 15,466 | 0.0 | 1498,000 |
| 3050,000 | 459,000 | 754,478 | 1,470 | 7,508 | 0.0 | 161,085 | -45,616 | 1498,000 |
| 3050,000 | 581,000 | 755,082 | 0,608 | 7,856 | 0.0 | 96,368 | -80,893 | 1498,000 |
| 3050,000 | 885,000 | 755,656 | 0,574 | 7,963 | 0.0 | 100,541 | -65,074 | 1498,000 |
| 4600,000 | 131,000 | 804,177 | 0.0 | 50,173 | 0.0 | 25,724 | 0.0 | 1550,000 |
| 4600,000 | 262,000 | 805,851 | 0,854 | 50,356 | 0.0 | 34,756 | -2,013 | 1550,000 |
| 4600,000 | 337,000 | 805,259 | 0,228 | 50,177 | 0.0 | 36,026 | -10,363 | 1550,000 |
| 4600,000 | 533,000 | 805,906 | 0,647 | 50,242 | 0.0 | 33,917 | -14,193 | 1550,000 |

DATA FOR LAST CROSS SECTION

| PROFILE | TYPE-ENC. | TARGET | TOP-WIDTH | TOP-WIDTH | |
|---------|-----------|------------|-----------|-----------|--|
| | | AREA-ACRES | AREA-DIFF | | |
| 1 | 0.0 | 0.0 | 6,405 | 0.0 | |
| 2 | 0.0 | 0.0 | 6,400 | 0.195 | |
| 3 | 0.0 | 0.0 | 9,994 | 5,569 | |
| 4 | 0.0 | 0.0 | 10,424 | 6,018 | |