

THIS RUN EXECUTED 02/28/81 11:51:21

 HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
 ERROR CORR - 01,02,03
 MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY										5
T2	10 YR FLOOD										10
T3	CATTAIL CREEK FLOOD PROFILES										15
J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	2.	0.	0.	0.01172	0.	0.0	0.	0.0	0.0	20
J2	NPROF	IPLOT	PRFVS	XS' CV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	0.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	25
J3	VARIABLE CODES FOR SUMMARY PRINTOUT										
	150.00	0.0	160.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30
QT	5.	1685.	2955.	3645.	5690.	3645.	0.	0.	0.	0.	35
NC	0.130	0.130	0.055	0.1	0.5						40
X1	0.42	22.	625.	718.	0.	0.	0.	0.0	0.0	0.	45
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	61.	2871.4	150.	50
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	55
GR	2865.3	625.	2859.2	640.	2857.9	646.	2858.1	655.	2858.0	660.	60
GR	2857.8	670.	2857.5	677.	2858.9	689.	2861.3	709.	2866.2	718.	65
GR	2866.2	1208.	2881.9	1232.	0.0	0.	0.0	0.	0.0	0.	70
NC	0.0	0.0	0.045	0.0	0.0						75
X1	0.42	22.	640.	689.	100.	100.	100.	0.0	0.0	0.	80
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2866.2	2866.2		85
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	61.	2871.4	150.	90
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	95
GR	2865.3	625.	2859.2	640.	2857.9	646.	2858.1	655.	2858.0	660.	100
GR	2857.8	670.	2857.5	677.	2858.9	689.	2861.3	709.	2866.2	718.	105
GR	2866.2	1208.	2881.9	1232.	0.0	0.	0.0	0.	0.0	0.	110
SB	1.25	1.60	3.00	0.	49.00	0.20	400.00	0.0	2857.5	2857.5	115
X1	0.42	0.	0.	0.	31.	31.	31.	0.0	0.0	0.	120
X2	0.	0.0	1.	2865.7	2868.3	0.0	0.	0.0	0.0	0.	125
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2868.3	2868.3		130
BT	17.0	0.0	2880.4	0.0	13.0	2878.2	0.0	25.0	2873.5	0.0	135
BT	61.0	2871.9	0.0	150.0	2871.4	0.0	216.0	2868.8	0.0	320.0	140
BT	2868.4	0.0	417.0	2869.5	0.0	455.0	2868.5	0.0	575.0	2868.4	145
BT	0.0	600.0	2868.3	0.0	630.0	2868.3	0.0	630.0	2870.3	0.0	150
BT	700.0	2870.3	0.0	700.0	2868.3	0.0	1211.0	2868.3	0.0	1232.0	155
BT	2881.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160

B01

X1	0.42	19.	625.	718.	25.	25.	25.	0.0	0.0	0.	165
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	81.	2871.4	150.	170
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	175
GR	2865.3	625.	2859.6	638.	2859.0	645.	2859.2	655.	2858.5	677.	180
GR	2861.3	709.	2866.2	718.	2866.2	1208.	2881.9	1232.	0.0	0.	185
QT	5.	1665.	2915.	3595.	5610.	3595.	0.	0.	0.	0.	190
NC	0.150	0.110	0.055	0.0	0.8						195
X1	0.63	29.	219.	270.	1195.	1195.	1195.	0.0	0.0	0.	200
GR	2892.8	0.	2888.0	21.	2879.5	52.	2879.5	115.	2879.1	172.	205
GR	2880.3	203.	2880.5	219.	2872.3	230.	2871.3	235.	2870.5	240.	210
GR	2871.3	253.	2872.2	257.	2881.7	270.	2882.3	288.	2881.7	303.	215
GR	2881.0	305.	2883.2	350.	2884.3	350.	2883.7	390.	2883.7	402.	220
GR	2882.8	420.	2881.7	422.	2883.0	425.	2880.7	452.	2881.5	470.	225
GR	2882.2	606.	2884.0	615.	2887.5	765.	2892.8	963.	0.0	0.	230
QT	5.	1650.	2895.	3570.	5570.	3570.	0.	0.	0.	0.	235
X1	0.74	0.	0.	0.	580.	580.	580.	0.0	14.30	0.	240
QT	5.	1630.	2860.	3525.	5500.	3525.	0.	0.	0.	0.	245
NC	0.150	0.100	0.055	0.0	0.0						250
X1	0.93	21.	76.	162.	980.	980.	980.	0.0	0.0	0.	255
GR	2923.5	0.	2913.6	17.	2911.3	40.	2911.2	50.	2908.8	76.	260
GR	2901.0	91.	2901.0	97.	2901.9	100.	2905.8	135.	2911.5	162.	265
GR	2912.0	175.	2911.2	192.	2911.0	197.	2913.0	205.	2913.0	482.	270
GR	2916.6	591.	2914.8	750.	2915.1	790.	2917.6	890.	2923.5	1013.	275
GR	2929.5	1056.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	280
NC	0.0	0.0	0.045	0.0	0.5						285
X1	0.93	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	290
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2910.7	2910.5		295
SB	1.25	1.60	3.00	0.	20.00	2.90	410.00	2.74	2901.0	2901.0	300
X1	0.93	0.	0.	0.	12.	12.	12.	0.0	0.0	0.	305
X2	0.	0.0	1.	2910.5	2911.0	0.0	0.	0.0	0.0	0.	310
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2911.2	2911.0		315
BT	16.0	0.0	2923.5	0.0	17.0	2913.6	0.0	40.0	2911.3	0.0	320
BT	50.0	2911.2	0.0	60.0	2911.4	0.0	175.0	2912.0	0.0	192.0	325
BT	2911.2	0.0	197.0	2911.0	0.0	205.0	2913.0	0.0	482.0	2913.0	330
BT	0.0	591.0	2916.6	0.0	750.0	2914.8	0.0	790.0	2915.1	0.0	335
BT	890.0	2917.6	0.0	1013.0	2923.5	0.0	1056.0	2929.5	0.0	0.0	340
X1	0.94	0.	0.	0.	10.	10.	10.	0.0	3.70	0.	345
NC	0.150	0.150	0.055	0.0	0.0						350
QT	5.	1585.	2775.	3420.	5335.	3420.	0.	0.	0.	0.	355
X1	1.37	16.	78.	147.	2320.	2320.	2320.	0.0	-6.00	0.	360
GR	2965.0	0.	2951.7	13.	2949.5	78.	2943.8	87.	2943.0	96.	365
GR	2942.7	111.	2942.0	120.	2942.8	131.	2945.0	137.	2951.3	147.	370
GR	2951.4	150.	2952.1	168.	2951.5	173.	2952.8	178.	2959.0	354.	375
GR	2966.0	414.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	380
QT	5.	1580.	2770.	3410.	5320.	3410.	0.	0.	0.	0.	385

C01

NC 0.150 0.120 0.050 0.0 0.0

390

C01

NC	0.150	0.120	0.050	0.0	0.0						390
X1	1.42	0.	0.	0.	270.	270.	270.	0.0	6.00	0.	395
QT	5.	1560.	2730.	3360.	5240.	3360.	0.	0.	0.	0.	400
NC	0.150	0.110	0.055	0.0	0.0						405
X1	1.63	22.	121.	195.	1090.	1090.	1090.	0.0	0.0	0.	410
GR	2983.5	0.	2981.0	10.	2979.8	50.	2979.3	55.	2977.0	65.	415
GR	2969.5	121.	2962.5	133.	2961.9	143.	2962.4	153.	2963.0	157.	420
GR	2963.5	182.	2971.0	195.	2968.4	200.	2969.1	234.	2970.6	239.	425
GR	2971.4	246.	2971.1	265.	2970.3	270.	2972.1	275.	2971.7	327.	430
GR	2980.7	347.	2983.7	388.	0.0	0.	0.0	0.	0.0	0.	435
NC	0.0	0.0	0.045	0.0	0.0						440
X1	1.63	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	445
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2971.6	2969.8	0.	450
SB	1.25	1.60	3.00	0.	45.00	0.40	415.00	0.0	2961.0	2961.0	455
X1	1.63	0.	0.	0.	15.	15.	15.	0.0	0.0	0.	460
X2	0.	0.0	1.	2970.3	2970.2	0.0	0.	0.0	0.0	0.	465
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2972.1	2970.2	0.	470
BT	18.0	0.0	2983.5	0.0	10.0	2981.0	0.0	50.0	2979.8	0.0	475
BT	55.0	2979.3	0.0	65.0	2977.0	0.0	102.0	2972.1	0.0	125.0	480
BT	2972.2	0.0	190.0	2971.5	0.0	218.0	2970.4	0.0	237.0	2970.2	485
BT	0.0	239.0	2970.6	0.0	246.0	2971.4	0.0	265.0	2971.1	0.0	490
BT	270.0	2970.3	0.0	275.0	2972.1	0.0	327.0	2971.7	0.0	347.0	495
BT	2980.7	0.0	388.0	2983.7	0.0	0.0	0.0	0.0	0.0	0.0	500
X1	1.63	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	505
QT	5.	1545.	2700.	3325.	5180.	3325.	0.	0.	0.	0.	510
NC	0.150	0.120	0.055	0.0	0.8						515
X1	1.78	14.	58.	120.	735.	735.	735.	0.0	-1.20	0.	520
GR	3002.0	0.	2991.1	20.	2989.7	58.	2980.9	80.	2980.7	89.	525
GR	2979.2	91.	2979.2	99.	2987.5	120.	2988.0	140.	2988.1	164.	530
GR	2992.1	173.	2993.3	230.	2993.3	313.	3001.4	326.	0.0	0.	535
NC	0.0	0.0	0.045	0.0	0.5						540
X1	1.79	16.	58.	120.	60.	60.	60.	0.0	0.0	0.	545
GR	3002.0	0.	2991.1	20.	2989.7	58.	2983.0	75.	2980.9	80.	550
GR	2980.7	89.	2979.2	91.	2979.2	99.	2982.0	106.	2987.5	120.	555
GR	2988.0	140.	2988.1	164.	2992.1	173.	2993.3	230.	2993.3	313.	560
GR	3001.4	326.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	565
SB	1.25	1.60	3.00	0.	31.00	0.01	205.00	0.0	2979.2	2979.2	570
X1	1.79	0.	0.	0.	12.	12.	12.	0.0	0.0	0.	575
X2	0.	0.0	1.	2985.8	2986.5	0.0	0.	0.0	0.0	0.	580
BT	14.0	0.0	3002.0	0.0	20.0	2991.1	0.0	58.0	2989.7	0.0	585
BT	60.0	2989.3	0.0	110.0	2987.5	0.0	110.0	2986.5	0.0	118.0	590
BT	2986.7	0.0	120.0	2987.5	0.0	140.0	2988.0	0.0	164.0	2983.1	595
BT	0.0	173.0	2992.1	0.0	230.0	2993.3	0.0	313.0	2993.3	0.0	600
BT	326.0	3001.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	605

D01

NC	0.130	0.120	0.045	0.0	0.0						610
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D01

NC	0.130	0.120	0.045	0.0	0.0						610
X1	1.79	14.	58.	120.	15.	15.	15.	0.0	0.0	0.	615
GR	3002.0	0.	2991.1	20.	2989.7	58.	2980.9	80.	2980.7	89.	620
GR	2979.6	90.	2979.7	97.	2987.5	120.	2988.0	140.	2988.1	164.	625
GR	2992.1	173.	2993.3	230.	2993.3	313.	3001.4	326.	0.0	0.	630
QT	5.	1520.	2655.	3270.	5095.	3270.	0.	0.	0.	0.	635
NC	0.120	0.120	0.055	0.0	0.8						640
X1	2.02	16.	323.	360.	1225.	1225.	1225.	0.0	0.0	0.	645
GR	3023.5	0.	3011.1	21.	3011.1	65.	3011.1	160.	3011.1	319.	650
GR	3008.4	323.	3003.0	330.	3002.5	335.	3002.4	340.	3001.9	345.	655
GR	3003.3	353.	3011.0	360.	3012.0	368.	3012.9	386.	3012.9	396.	660
GR	3023.5	405.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	665
EJ											670

E01

ED1

*PROF 1

CCHV= 0.100 CEHV= 0.500

*SECNO .420

2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED

CATTAIL CREEK 10 YR FLOOD 02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.42	1685.	0.	1685.	0.	0.65	0	78.	
2862.25	0.0	0.	261.	0.	0.50	0	2865.30	
4.75	0.0	0.0	6.46	0.0	0.0	2862.90	2866.20	
0.011711	0.0	0.130	0.055	0.130	0.0	-0.00	632.51	
	2857.50	0.	0.	0.	39.	39.	710.74	0.

*SECNO .420

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2866.20 ELREA= 2866.20

0.42	1685.	0.	1685.	0.	0.76	2	49.	
2862.96	0.0	0.	240.	0.	0.12	0	2859.20	
5.46	0.0	0.0	7.02	0.0	0.77	2863.72	2858.90	
0.005453	0.045	0.130	0.045	0.130	0.06	-0.00	640.00	
	2857.50	100.	100.	100.	25.	25.	689.00	1.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHU	ELCHD						
	2857.50	2857.50						

*SECNO .420

*** GR CARDS REPEATED
CLASS A LOW FLOW

3420 BRIDGE W.S.= 2862.95 BRIDGE VELOCITY=, 6.33
CALCULATED CHANNEL AREA=, 266.

EGPRS	EGW	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2863.73	0.02	0.	1685.	400.	400.	2865.70
ELTRD							
2868.30							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2868.30 ELREA= 2868.30

0.42	1685.	0.	1685.	0.	0.76	0	49.	
2862.98	0.0	0.	241.	0.	-0.01	0	2859.20	
5.48	0.0	0.0	6.98	0.0	0.01	2863.73	2858.90	
0.005368	0.044	0.130	0.045	0.130	0.0	0.0	640.00	

F01

25 25 689.00 1.

368
369
370

CC
*S

SF
SE

3
PI

*

F01

2857.50 31. 31. 31. 25. 25. 689.00 1.

*SECNO .420

0.42 1685. 0. 1685. 0. 0.47 2 84.
 2863.42 0.0 0. 307. 0. -0.29 0 2865.30
 4.92 0.0 0.0 5.49 0.0 0.13 2863.89 2866.20
 0.005002 0.044 0.130 0.045 0.130 0.03 -0.00 629.27
 2858.50 25. 25. 25. 42. 41. 712.91 1.

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		10 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

0.63 1665. 0. 1665. 0. 2.00 11 37.
 2875.94 2875.94 0. 147. 0. 1.53 8 2880.50
 5.44 0.0 0.0 11.36 0.0 12.10 2877.94 2881.70
 0.030960 0.054 0.150 0.055 0.110 1.23 -0.00 225.12
 2870.50 1195. 1195. 1195. 19. 18. 262.12 7.

*SECNO .740

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

0.74 1650. 0. 1650. 0. 1.47 5 39.
 2890.84 0.0 0. 169. 0. -0.53 0 2894.80
 6.04 0.0 0.0 9.75 0.0 14.32 2892.31 2896.00
 0.020103 0.054 0.150 0.055 0.110 0.05 -0.00 224.31
 2884.80 580. 580. 580. 20. 18. 262.94 9.

*SECNO .930

3301 HV CHANGED MORE THAN HVINS

0.93 1630. 0. 1630. 0. 0.79 6 64.
 2907.45 0.0 0. 229. 0. -0.69 0 2908.80
 6.45 0.0 0.0 7.11 0.0 15.85 2908.23 2911.50
 0.013269 0.054 0.150 0.055 0.100 0.07 -0.00 78.60
 2901.00 980. 980. 980. 40. 24. 142.81 14.

CCHV= 0.100 CEHV= 0.500

*SECNO .930

*** GR CARDS REPEATED

601

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2910.70 ELREA= 2910.50

0.93	1630.	0.	1630.	0.	0.58	2	68.
2908.07	0.0	0.	266.	0.	-0.20	0	2908.80
7.01	0.0	0.0	6.13	0.0	0.34	2908.59	2911.50
0.005826	0.054	0.150	0.045	0.100	0.02	-0.00	77.52
	2901.00	40.	40.	40.	41.	26.	145.46
							14.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHU	ELCHD						
	2901.00	2901.00						

*SECNO .930

*** GR CARDS REPEATED
CLASS A LOW FLOW

3420 BRIDGE W.S.= 2907.87 BRIDGE VELOCITY=, 6.60
CALCULATED CHANNEL AREA=, 247.

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELIC
0.0	2908.71	0.16	0.	1630.	410.	410.	2910.50

ELTRD
2911.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2911.20 ELREA= 2911.00

0.93	1630.	0.	1630.	0.	0.54	0	69.
2908.17	0.0	0.	277.	0.	-0.05	0	2908.80
7.17	0.0	0.0	5.88	0.0	0.12	2908.71	2911.50
0.005202	0.054	0.150	0.045	0.100	0.0	-0.00	77.22
	2901.00	12.	12.	12.	42.	27.	146.22
							14.

*SECNO .940

*** GR CARDS REPEATED

3301 RV CHANGED MORE THAN HVINS

CATTAIL CREEK		10 YR FLOOD			02/28/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST
							VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

0.94	1630.	0.	1630.	0.	1.49	20	57.
2910.12	2910.12	0.	166.	0.	0.95	19	2912.50

H01

H01

5.42	0.0	0.0	9.80	0.0	0.09	2911.61	2915.20	
0.022132	0.054	0.150	0.045	0.100	0.48	-0.00	80.59	
	2904.70	10.	10.	10.	38.	19.	137.92	14.

*SECNO 1.370

3301 HV CHANGED MORE THAN HVINS

1.37	1585.	0.	1585.	0.	0.62	7	60.	
2941.56	0.0	0.	250.	0.	-0.87	0	2943.50	
5.56	0.0	0.0	6.33	0.0	30.49	2942.18	2945.30	
0.008604	0.054	0.150	0.055	0.150	0.09	-0.00	81.06	
	2936.00	2320.	2320.	2320.	31.	29.	141.07	25.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK			10 YR FLOOD		02/28/81		TOPWID		
MILE	Q	GLOB	GCH	GROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDST		VOL
	ELMIN	XLGBL	XLCH	XLOBR	WSDL				

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.42	1580.	0.	1580.	0.	1.49	2	55.	
2946.02	2946.02	0.	161.	0.	0.87	19	2949.50	
4.02	0.0	0.0	9.79	0.0	3.79	2947.51	2951.30	
0.028839	0.054	0.150	0.050	0.120	0.43	-0.00	83.50	
	2942.00	270.	270.	270.	29.	26.	138.61	26.

*SECNO 1.630

3301 HV CHANGED MORE THAN HVINS

1.63	1560.	0.	1560.	0.	0.78	6	62.	
2966.75	0.0	0.	220.	0.	-0.71	0	2969.50	
4.85	0.0	0.0	7.08	0.0	19.95	2967.53	2971.00	
0.013230	0.054	0.150	0.055	0.110	0.07	-0.00	125.70	
	2961.90	1090.	1090.	1090.	32.	30.	187.64	31.

*SECNO 1.630

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2971.60 ELREA= 2969.80

1.63	1560.	0.	1560.	0.	0.58	2	64.	
2967.30	0.0	0.	255.	0.	-0.20	0	2969.50	
5.40	0.0	0.0	6.12	0.0	0.33	2967.88	2971.00	
0.005704	0.054	0.150	0.045	0.110	0.02	-0.00	124.76	
	2961.90	40.	40.	40.	33.	31.	188.60	31.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHU	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

*** GR CARDS REPEATED
CATTAIL CREEK

10 YR FLOOD 02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

CLASS A LOW FLOW

3420 BRIDGE W.S.= 2967.29 BRIDGE VELOCITY= 5.56

CALCULATED CHANNEL AREA= 281.							
EGRS	ELWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2967.90	0.02	0.	1560.	415.	415.	2970.30

ELTRD
2970.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2972.10 ELREA= 2970.20

1.63	1560.	0.	1560.	0.	0.58	0	64.	
2967.32	0.0	0.	256.	0.	-0.01	0	2969.50	
5.42	0.0	0.0	6.10	0.0	0.01	2967.90	2971.00	
0.005628	0.054	0.150	0.045	0.110	0.0	-0.00	124.73	
	2961.90	15.	15.	15.	33.	31.	188.63	32.

*SECNO 1.630

*** GR CARDS REPEATED

1.63	1560.	0.	1560.	0.	0.55	2	64.	
2967.40	0.0	0.	261.	0.	-0.02	0	2969.50	
5.50	0.0	0.0	5.98	0.0	0.05	2967.96	2971.00	
0.005307	0.054	0.150	0.045	0.110	0.00	-0.00	124.80	
	2961.90	10.	10.	10.	33.	31.	188.76	32.

CCHV= 0.100 CEHV= 0.800

*SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		10 YR FLOOD		02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRIWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA

J01

ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
3685 20 TRIALS ATTEMPTED WSEL CWSEL							
3693 PROBABLE MINIMUM SPECIFIC ENERGY							
3720 CRITICAL DEPTH ASSUMED							
1.78	1545.	0.	1545.	0.	1.73	20	43.
2983.53	2983.53	0.	146.	0.	1.18	5	2988.50
5.23	0.0	0.0	10.56	0.0	7.82	2985.26	2986.30
0.031612	0.054	0.150	0.055	0.120	0.94	-0.00	70.42
	2978.00	735.	735.	735.	19.	24.	112.99
							35.

CCHV= 0.100 CEHV= 0.500

*SECNO 1.790

1.79	1545.	0.	1545.	0.	1.34	2	45.
2985.22	0.0	0.	167.	0.	-0.40	0	2989.70
6.02	0.0	0.0	9.27	0.0	1.25	2986.57	2987.50
0.014723	0.054	0.150	0.045	0.120	0.04	-0.00	69.37
	2979.20	60.	60.	60.	20.	25.	114.19
							35.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0
	ELCHU	ELCHD						
	2979.20	2979.20						

*SECNO 1.790

GR CARDS REPEATED
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC
2986.63	2986.55	0.00	0.	1548.	205.	205.	2985.80
ELTRD							
2986.50							

NOTE: QWEIR IS GREATER THAN 0 AND ELEV IS LESS THAN ELTRD

1.79	1545.	0.	1545.	0.	1.18	4	46.
2985.45	0.0	0.	177.	0.	-0.16	0	2989.70
6.25	0.0	0.0	8.72	0.0	0.08	2986.63	2987.50
0.012410	0.054	0.150	0.045	0.120	0.0	-0.00	68.77
	2979.20	12.	12.	12.	20.	26.	114.79
							35.

*SECNO 1.790

CATTAIL CREEK

10 YR FLOOD 02/28/81

MILE	Q	Q/C3	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
1.79	1545.	0.	1545.	0.	1.30	2	46.	
2985.59	0.0	0.	169.	0.	0.12	0	2989.70	

0.1

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K01

5.99	0.0	0.0	9.14	0.0	0.20	2986.89	2987.50	
0.014503	0.054	0.130	0.045	0.120	0.06	-0.00	68.27	
	2979.60	15.	15.	15.	21.	25.	114.38	35.

CCHV= 0.100 CEHV= 0.800
 *SECNO 2.020

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		10 YR FLOOD			D2/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
 3720 CRITICAL DEPTH ASSUMED

2.02	1520.	0.	1520.	0.	2.06	20	32.	
3007.37	3007.37	0.	132.	0.	0.77	11	3008.40	
5.47	0.0	0.0	11.53	0.0	25.31	3009.43	3011.00	
0.032021	0.054	0.120	0.055	0.120	0.61	-0.00	324.34	
	3001.90	1225.	1225.	1225.	17.	15.	356.70	40.

L01

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L01

THIS RUN EXECUTED 02/28/81 11:51:29

HEC2 RELEASE DATED NOV 76 UPDATED JULY1979
ERROR CORR - 01,02,03
MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY	675
T2	50 YR FLOOD	680
T3	CATTAIL CREEK	685

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	3.	0.	0.	0.01172	0.	0.0	0.	0.0	0.0	690

J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	2.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	695

M01

MD1

*PROF 2

CCHV= 0.100 CEHV= 0.500

*SECNO .420

2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED

CATTAIL CREEK		50 YR FLOOD			02/28/81			
Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMJN	XL OBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.42	2955.	0.	2955.	0.	0.95	0	84.	
2863.69	0.0	0.	378.	0.	0.50	0	2865.30	
6.19	0.0	0.0	7.82	0.0	0.0	2864.64	2866.20	
0.011674	0.0	0.130	0.055	0.130	0.0	-0.00	628.96	
	2857.50	0.	0.	0.	43.	42.	713.39	0.

*SECNO .420

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2866.20 ELREA= 2866.20

0.42	2955.	0.	2955.	0.	1.42	2	49.	
2864.36	0.0	0.	309.	0.	0.47	0	2859.20	
6.86	0.0	0.0	9.56	0.0	0.91	2865.78	2858.90	
0.007233	0.045	0.130	0.045	0.130	0.24	-0.00	640.00	
	2857.50	100.	100.	100.	25.	25.	689.00	1.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHU	ELCHD						
	2857.50	2857.50						

*SECNO .420

GR CARDS REPEATED
CLASS A LOW FLOW

3420 BRIDGE W.S.= 2864.34 BRIDGE VELOCITY= 8.85
CALCULATED CHANNEL AREA= 334.

EGPRS	EGWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2865.71	2865.80	0.04	0.	2955.	400.	400.	2865.70
	ELTRD						
	2868.30						

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2868.30 ELREA= 2868.30

0.42	2955.	0.	2955.	0.	1.40	0	49.	
2864.40	0.0	0.	311.	0.	-0.02	0	2859.20	
6.90	0.0	0.0	9.50	0.0	0.02	2865.80	2858.90	
0.007087	0.044	0.130	0.045	0.130	0.0	0.0	640.00	

AO2

2857.50 31. 31. 31. 25. 25. 689.00 1.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

0.42	2955.	0.	2955.	0.	0.58	3	99.	
2865.43	0.0	0.	482.	0.	-0.82	0	2865.30	
6.93	0.0	0.17	6.13	0.0	0.13	2866.07	2866.20	
0.003902	0.044	0.130	0.045	0.130	0.08	-0.00	617.76	
	2858.50	25.	25.	25.	54.	45.	716.57	1.

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		50 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	GROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

0.63	2915.	0.	2915.	0.	2.68	12	42.	
2877.84	2877.84	0.	222.	0.	2.09	8	2880.50	
7.34	0.0	0.0	13.13	0.0	9.93	2880.52	2881.70	
0.029049	0.054	0.150	0.055	0.110	1.67	-0.00	222.56	
	2870.50	1195.	1195.	1195.	22.	20.	264.72	11.

*SECNO .740

GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

0.74	2895.	0.	2895.	0.	2.13	4	44.	
2892.74	0.0	0.	247.	0.	-0.55	0	2894.80	
7.94	0.0	0.0	11.70	0.0	14.29	2894.87	2896.00	
0.021148	0.054	0.150	0.055	0.110	0.05	-0.00	221.77	
	2884.80	580.	580.	580.	23.	21.	265.53	14.

*SECNO .930

3301 HV CHANGED MORE THAN HVINS

0.93	2860.	0.	2860.	0.	1.02	3	80.	
2909.22	0.0	1.	354.	0.	-1.11	0	2908.80	
8.22	0.0	0.39	8.09	0.0	15.26	2910.24	2911.50	
0.011903	0.054	0.150	0.055	0.100	0.11	-0.00	71.38	
	2901.00	980.	980.	980.	48.	32.	151.23	21.

CCHV= 0.100 CEHV= 0.500

BO2

SECNO .930

802

*SECNO .930

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2910.70 ELREA= 2910.50

0.93	2860.	0.	2860.	0.	0.82	2	78.
2909.76	0.0	0.	395.	0.	-0.20	0	2908.80
8.76	0.0	0.0	7.25	0.0	0.32	2910.58	2911.50
0.005777	0.054	0.150	0.045	0.100	0.02	-0.00	76.00
	2901.00	40.	40.	40.	43.	35.	153.77
							21.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHU	ELCHD						
	2901.00	2901.00						

*SECNO .930

*** GR CARDS REPEATED
PRESSURE FLOW

EGPRS	EGLWC	H3	GWEIR	QPR	BAREA	TAREA	ELLC
2910.97	2910.73	0.21	0.	2860.	410.	410.	2910.50
ELTRD							
2911.00							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2911.20 ELREA= 2911.00

0.93	2860.	0.	2860.	0.	0.66	3	80.
2910.31	0.0	0.	438.	0.	-0.15	0	2908.80
9.31	0.0	0.0	6.53	0.0	0.39	2910.97	2911.50
0.004267	0.054	0.150	0.045	0.100	0.0	-0.00	76.00
	2901.00	12.	12.	12.	43.	37.	156.36
							21.

*SECNO .940

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		50 YR FLOOD			02/28/81			
MILE	Q	GLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL OBL	XLCH	XL OBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.94	2860.	0.	2860.	0.	1.96	20	67.
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002

2011.54	2011.54	0.	255.	0.	1.29	19	2912.50
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C02

2911.54	2911.54	0.	255.	0.	1.29	19	2912.50	
6.84	0.0	0.0	11.22	0.0	0.08	2913.50	2915.20	
0.020259	0.054	0.150	0.045	0.100	0.65	-0.00	77.85	
	2904.70	10.	10.	10.	41.	26.	144.37	21.

*SECNO 1.370

3301 HV CHANGED MORE THAN HVINS

1.37	2775.	0.	2775.	0.	0.94	6	65.	
2943.26	0.0	0.	357.	0.	-1.02	0	2943.50	
7.26	0.0	0.0	7.77	0.0	30.60	2944.20	2945.30	
0.009173	0.054	0.150	0.055	0.150	0.10	-0.00	78.36	
	2936.00	2320.	2320.	2320.	34.	31.	143.78	38.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		50 YR FLOOD			02/28/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

1.42	2770.	0.	2770.	0.	2.05	2	60.	
2947.41	2947.41	0.	241.	0.	1.11	15	2949.50	
5.41	0.0	0.0	11.48	0.0	3.80	2949.46	2951.30	
0.024273	0.054	0.150	0.050	0.120	0.56	-0.00	81.30	
	2942.00	270.	270.	270.	31.	28.	140.83	39.

*SECNO 1.630

3301 HV CHANGED MORE THAN HVINS

1.63	2730.	0.	2730.	0.	1.18	4	67.	
2968.20	0.0	0.	313.	0.	-0.87	0	2969.50	
6.30	0.0	0.0	8.73	0.0	19.84	2969.38	2971.00	
0.014101	0.054	0.150	0.055	0.110	0.09	-0.00	123.24	
	2961.90	1090.	1090.	1090.	35.	32.	190.14	46.

*SECNO 1.630

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2971.60 ELREA= 2969.80

1.63	2730.	0.	2730.	0.	0.90	2	69.	
2968.88	0.0	0.	359.	0.	-0.29	0	2969.50	
6.98	0.0	0.0	7.60	0.0	0.36	2969.77	2971.00	
0.006266	0.054	0.150	0.045	0.110	0.03	-0.00	122.07	

D02

2941.00	40.	40.	40.	36.	33.	191.32	47.
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*PRI

CCH
*SE
209

*SI

0

SP

SB

*S

32

32

PF

D02

2961.90 40. 40. 40. 36. 33. 191.32 47.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHU	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

*** GR CARDS REPEATED

CATTAIL CREEK		50 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

CLASS A LOW FLOW

3420 BRIDGE W.S.= 2968.86 BRIDGE VELOCITY= 7.79
 CALCULATED CHANNEL AREA= 350.

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2969.79	0.04	0.	2730.	415.	415.	2970.30

ELTRD
2970.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2972.10 ELREA= 2970.20

1.63	2730.	0.	2730.	0.	0.88	0	69.	
2968.91	0.0	0.	362.	0.	-0.01	0	2969.50	
7.01	0.0	0.0	7.55	0.0	0.02	2969.79	2971.00	
0.006143	0.054	0.150	0.045	0.110	0.0	-0.00	122.01	
	2961.90	15.	15.	15.	36.	33.	191.38	47.

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

1.63	2730.	0.	2726.	4.	0.85	2	101.	
2969.01	0.0	0.	369.	9.	-0.04	0	2969.50	
7.11	0.0	0.0	7.39	0.46	0.06	2969.86	2971.00	
0.005788	0.054	0.150	0.045	0.110	0.00	-0.00	121.84	
	2961.90	10.	10.	10.	36.	72.	229.65	47.

CCRIV= 0.100 CEHV= 0.800
 **SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

E02

CATTAIL CREEK

50 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1.78	2700.	0.	2700.	0.	2.21	20	51		
2985.23	2985.23	0.	226.	0.	1.37	5	2988.50		
7.23	0.0	0.0	11.94	0.0	8.10	2987.45	2986.30		
0.029006	0.054	0.150	0.055	0.120	1.09	-0.00	66.16		
	2978.00	735.	735.	735.	23.	28.	117.30	52.	

CCHV= 0.100 CEHV= 0.500
 *SECNO 1.790

1.79	2700.	0.	2700.	0.	1.85	2	53		
2986.86	0.0	0.	247.	0.	-0.36	0	2989.70		
7.66	0.0	0.0	10.93	0.0	1.23	2988.71	2987.50		
0.015227	0.054	0.150	0.045	0.120	0.04	-0.00	65.20		
	2979.20	60.	60.	60.	24.	29.	118.38	52.	

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS		
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0		
	ELCHD	ELCHD								
	2979.20	2979.20								

*SECNO 1.790

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGWC	H3	QWEIR	QPR	BAREA	TAREA	FLLC		
2991.17	2988.72	0.00	572.	2104.	205.	205.	2985.80		
	ELTRD								
	2986.50								

1.79	2700.	0.	2681.	19.	0.95	3	104.		
2988.53	0.0	0.	3.1	27.	-0.90	0	2989.70		
9.33	0.0	0.0	7.85	0.71	0.76	2989.48	2987.50		
0.005883	0.054	0.150	0.045	0.120	0.0	-0.00	60.97		
	2979.20	12.	12.	12.	28.	76.	164.97	52.	

*SECNO 1.790

CATTAIL CREEK

50 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		

F02

EG LEFT/RIGHT

3265

29

0.0

CCHV

*SEC

3301

29

0.0

SPEI

SB

2

*SE

PRE

2

2

2

0.

*SE

331

F02

DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN ELMIN	XNL XL OBL	XNCH XLCH	XNR XLOBR	OLOSS WSDL	CORAR WSDR	SSTA ENDST	VOL
1.79	2700.	0.	2676.	24.	1.01	2	104.	
2988.59	0.0	0.	330.	30.	0.06	0	2989.70	
8.99	0.0	0.0	8.12	0.79	0.09	2989.60	2987.50	
0.006573	0.054 2979.60	0.130 15.	0.045 15.	0.120 15.	0.03 28.	-0.00 76.	60.78 165.10	53.

CCHV= 0.100 CEHV= 0.800
*SECNO 2.020

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		50 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN ELMIN	XNL XL OBL	XNCH XLCH	XNR XLOBR	OLOSS WSDL	CORAR WSDR	SSTA ENDST	VOL
7185								
MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
2.02	2655.	1.	2654.	0.	2.79	14	37.	
3009.31	3009.31	1.	198.	0.	1.77	12	3008.40	
7.41	0.0	1.10	13.40	0.0	14.73	3012.09	3011.00	
0.029244	0.054 3001.90	0.120 1225.	0.055 1225.	0.120 1225.	1.42 20.	-0.00 17.	321.66 358.46	60.

D/S
3685
3693
3720
29
D.I
*SEI
328
330
2
0.
*SE
330
711
37
0
*S
32
33

602

THIS RUN EXECUTED 02/28/81 11:51:35

 HEC2 RELEASE DATED NOV 76 UPDATED JULY1979
 ERROR CORR - 01,02,03
 MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY	700
T2	100 YR FLOOD	705
T3	CATTAIL CREEK	710

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	4.	0.	0.	0.01172	0.	0.0	0.	0.0	0.0	715

J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	3.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	720

0.0

*SEC

3265

3495

2'

0.7

SPE

SB

2

*SE

PRI

0

*S

H02

*PROF 3

CCHV= 0.100 CEHV= 0.500

*SECNO .420

2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED

CATTAIL CREEK

100 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.42	3645.	0.	3645.	0.	1.09	0	87.	
2864.35	0.0	0.	435.	0.	0.50	0	2865.30	
6.85	0.0	0.0	8.39	0.0	0.0	2865.44	2866.20	
0.011701	0.0	0.130	0.055	0.130	0.0	-0.00	627.34	
	2857.50	0.	0.	0.	44.	43.	714.60	0.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2866.20 ELREA= 2866.20

0.42	3645.	0.	3645.	0.	1.80	2	49.	
2864.96	0.0	0.	339.	0.	0.71	0	2859.20	
7.46	0.0	0.0	10.76	0.0	0.97	2866.76	2858.90	
0.008117	0.045	0.130	0.045	0.130	0.35	-0.00	640.00	
	2857.50	100.	100.	100.	25.	25.	689.00	1.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHU	ELCHD						
	2857.50	2857.50						

*SECNO .420

GR CARDS REPEATED
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2867.02	2866.79	0.06	0.	3645.	400.	400.	2865.70
ELTRD							
2868.30							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2868.30 ELREA= 2868.30

0.42	3645.	0.	3645.	0.	1.56	3	49.
2865.46	0.0	0.	364.	0.	-0.24	0	2859.20
7.96	0.0	0.0	10.03	0.0	0.26	2867.02	2858.90

0.0

CCHV
*SEC

330

368
369
372

2

0.

CCI
*SI

71
37

0

SF
SE

*S

*S

33

PF

0.006408	0.044	0.130	0.045	0.130	0.0	-0.00	640.00	
	2857.50	31.	31.	31.	25.	25.	689.00	1.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

0.42	3645.	27.	3524.	94.	0.52	2	666.	
2866.71	0.0	58.	600.	248.	-1.04	0	2865.30	
8.21	0.0	0.47	5.87	0.38	0.10	2867.23	2866.20	
0.002726	0.044	0.130	0.045	0.130	0.10	-0.00	542.47	
	2858.50	25.	25.	25.	129.	537.	1208.77	2.

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLQBL	XLCH	XLQBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

0.63	3595.	0.	3595.	0.	3.01	20	44.	
2878.68	2878.68	0.	258.	0.	2.49	5	2880.50	
8.18	0.0	0.0	13.92	0.0	7.57	2881.69	2881.70	
0.028914	0.054	0.150	0.055	0.110	1.99	-0.00	221.44	
	2870.50	1195.	1195.	1195.	23.	21.	265.87	17.

*SECNO .740

*** GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

0.74	3570.	1.	3569.	0.	2.40	7	83.	
2893.62	2892.96	4.	287.	0.	-0.62	5	2894.80	
8.82	0.0	0.33	12.42	0.0	14.26	2896.01	2896.00	
0.021147	0.054	0.150	0.055	0.110	0.06	-0.00	140.49	
	2884.80	580.	580.	580.	104.	22.	266.74	21.

*SECNO .930

3301 HV CHANGED MORE THAN HVINS

0.93	3525.	6.	3519.	0.	1.13	4	92.	
2909.99	0.0	8.	412.	0.	-1.26	0	2908.80	
8.99	0.0	0.75	8.54	0.0	14.98	2911.12	2911.50	

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3720
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0.1

J02

0.011528	0.054	0.150	0.055	0.100	0.13	-0.00	63.18	
2901.00	980.	980.	980.	980.	56.	36.	154.82	29.

CCHV= 0.100 CEHV= 0.500
 *SECNO .930

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2910.70 ELREA= 2910.50

0.93	3525.	0.	3525.	0.	0.93	2	81.	
2910.53	0.0	0.	456.	0.	-0.20	0	2908.80	
9.53	0.0	0.0	7.73	0.0	0.32	2911.46	2911.50	
0.005766	0.054	0.150	0.045	0.100	0.02	-0.00	76.00	
	2901.00	40.	40.	40.	43.	38.	157.41	30.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHU	ELCHD						
	2901.00	2901.00						

*SECNO .930

*** GR CARDS REPEATED

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELIC
2912.37	2911.62	0.24	207.	3317.	410.	410.	2910.50
ELTRD							
2911.00							

0.93	3525.	31.	3492.	1.	0.65	2	138.	
2911.51	0.0	42.	538.	4.	-0.28	0	2908.80	
10.51	0.0	0.73	6.49	0.40	0.70	2912.16	2911.50	
0.003492	0.054	0.150	0.045	0.100	0.0	-0.00	37.83	
	2901.00	12.	12.	12.	81.	80.	199.07	30.

*SECNO .940

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL OBL	XL CH	XL OBR	WSDL	WSDR	ENDST	VOL

HEC
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NOTE-
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K02

K02

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

0.94	3525.	0.	3525.	0.	2.16	20	71.	
2912.18	2912.18	0.	299.	0.	1.51	19	2912.50	
7.48	0.0	0.0	11.78	0.0	0.07	2914.34	2915.20	
0.019619	0.054	0.150	0.045	0.100	0.75	-0.00	76.61	
	2904.70	10.	10.	10.	42.	29.	147.71	30.

*SECNO 1.370

3301 HV CHANGED MORE THAN HVINS

1.37	3420.	1.	3419.	0.	1.10	5	82.	
2944.01	0.0	4.	405.	0.	-1.06	0	2943.50	
8.01	0.0	0.38	8.42	0.0	30.66	2945.11	2945.30	
0.009418	0.054	0.150	0.055	0.150	0.77	-0.00	63.76	
	2936.00	2320.	2320.	2320.	49.	32.	144.94	49.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XL OBL	XLCH	XL OBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1.42	3410.	0.	3410.	0.	2.30	2	62.	
2948.05	2948.05	0.	280.	0.	1.20	15	2949.50	
6.05	0.0	0.0	12.18	0.0	3.81	2950.35	2951.30	
0.023536	0.054	0.150	0.050	0.120	0.60	-0.00	80.29	
	2942.00	270.	270.	270.	32.	29.	141.84	51.

*SECNO 1.630

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

1.63	3360.	0.	3357.	3.	1.37	5	92.	
2968.85	0.0	0.	358.	5.	-0.94	0	2969.50	
6.95	0.0	0.0	9.39	0.60	19.77	2970.22	2971.00	
0.014354	0.054	0.150	0.055	0.110	0.09	-0.00	122.11	
	2961.90	1090.	1090.	1090.	36.	64.	221.88	59.

*SECNO 1.630

L02

GR CARDS REPEATED

L02

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2971.60 ELREA= 2969.80

1.63	3360.	0.	3360.	0.	1.05	2	72.
2969.56	0.0	0.	408.	0.	-0.31	0	2969.50
7.66	0.0	0.0	8.24	0.0	0.37	2970.62	2971.00
0.006524	0.054	0.150	0.045	0.110	0.03	-0.00	121.00
	2961.90	40.	40.	40.	37.	35.	192.51
							59.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHD	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

CATTAIL CREEK	Q	QLOB	100 YR FLOOD	QROB	02/28/81	ITRIAL	TOPWID
Q	Q	ALOB	QCH	AROB	HV	IDC	BANK ELEV
Q	CRIS	VLOB	ACH	VROB	DHV	EG	LEFT/RIGHT
DEPTH	WSELK	XNL	VCH	XNR	HL	CORAR	SSTA
SLOPE	WTN	XLOBL	XNCH	XLOBR	OLOSS	WSDR	ENDST
	ELMIN		XLCH		WSDL		VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2971.13	2970.79	0.04	68.	3299.	415.	415.	2970.30
ELTRD							
2970.20							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2972.10 ELREA= 2970.20

1.63	3360.	0.	3289.	71.	0.76	3	116.
2970.38	0.0	0.	467.	62.	-0.30	0	2969.50
8.48	0.0	0.0	7.05	1.15	0.52	2971.13	2971.00
0.004104	0.054	0.150	0.045	0.110	0.0	-0.00	121.00
	2961.90	15.	15.	15.	37.	112.	270.22
							59.

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

1.63	3360.	1.	3285.	74.	0.74	0	124.
2970.44	0.0	3.	470.	64.	-0.02	0	2969.50
8.54	0.0	0.37	6.98	1.15	0.04	2971.18	2971.00

M02

0.003001	0.054	0.150	0.045	0.110	0.00	-0.00	114.04
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MD2

0.003991	0.054	0.150	0.045	0.110	0.00	-0.00	114.04	
	2961.90	10.	10.	10.	44.	112.	270.37	59.

CCHV= 0.100 CEHV= 0.800
 *SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1.78	3325.	0.	3325.	0.	2.42	20	55.	
2985.99	2985.99	0.	266.	0.	1.68	12	2988.50	
7.99	0.0	0.0	12.49	0.0	6.16	2988.41	2986.30	
0.028119	0.054	0.150	0.055	0.120	1.35	-0.00	64.27	
	2978.00	735.	735.	735.	25.	30.	119.22	66.

CCHV= 0.100 CEHV= 0.500
 *SECNO 1.790

1.79	3325.	0.	3325.	0.	2.10	2	59.	
2987.57	0.0	0.	286.	0.	-0.32	0	2989.70	
8.37	0.0	0.0	11.63	0.02	1.22	2989.67	2987.50	
0.015441	0.054	0.150	0.045	0.120	0.03	-0.00	63.41	
	2979.20	60.	60.	60.	26.	34.	122.76	67.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0
	ELCHD	ELCHD						
	2979.20	2979.20						

*SECNO 1.790

GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2994.10	2989.67	0.01	1161.	2173.	205.	205.	2985.80
	ELTRD						
	2986.50						

1.79	3325.	0.	3252.	73.	1.07	3	108.
2989.29	0.0	0.	387.	62.	-1.03	0	2989.70

A03

10.09	0.0	0.0	8.39	1.18	0.69	2990.36	2987.50	
0.005940	0.054	0.150	0.045	0.120	0.0	-0.00	59.03	
	2979.20	12.	12.	12.	30.	78.	166.69	67.

*SECNO 1.790

CATTAIL CREEK

100 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VL OB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL OBL	XLCH	XL OBR	WSDL	WSDR	ENDST	VOL
1.79	3325.	0.	3242.	83.	1.13	2	108.	
2989.35	0.0	0.	376.	65.	0.06	0	2989.70	
9.75	0.0	0.0	8.63	1.27	0.09	2990.48	2987.50	
0.006513	0.054	0.150	0.045	0.120	0.03	-0.00	58.86	
	2979.60	15.	15.	15.	30.	78.	166.82	67.

CCHV= 0.100 CEHV= 0.800

*SECNO 2.020

CATTAIL CREEK

100 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VL OB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL OBL	XLCH	XL OBR	WSDL	WSDR	ENDST	VOL
2.02	3270.	315.	2952.	3.	1.40	15	348.	
3011.97	3011.97	270.	296.	4.	0.27	8	3008.40	
10.07	0.0	1.17	9.99	0.77	9.87	3013.37	3011.00	
0.010270	0.054	0.120	0.055	0.120	0.22	0.0	19.52	
	3001.90	1225.	1225.	1225.	322.	26.	367.78	81.

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

CATT.
SUMM

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B03

B03

THIS RUN EXECUTED 02/28/81 11:51:40

HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
ERROR CORR - 01,02,03
MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY	725
T2	500 YR FLOOD	730
T3	CATTAIL CREEK	735

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	5.	0.	0.	0.01172	0.	0.0	0.	0.0	0.0	740

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	15.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	745

C03

C03

*PROF 4

CCHV= 0.100 CEHV= 0.500

*SECNO .420

2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED

CATTAIL CREEK		500 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.42	5690.	9.	5681.	0.	1.47	0	133.	
2865.99	0.0	14.	583.	0.	0.50	0	2865.30	
8.49	0.0	0.61	9.74	0.0	0.0	2867.46	2866.20	
0.011609	0.0	0.130	0.055	0.130	0.0	-0.00	584.28	
	2857.50	0.	0.	0.	87.	46.	717.62	0.

*SECNO .420

0.42	5690.	208.	4835.	647.	1.71	6	668.	
2866.74	2866.64	128.	426.	425.	0.24	8	2859.20	
9.24	0.0	1.62	11.36	1.52	0.86	2868.44	2858.90	
0.006660	0.045	0.130	0.045	0.130	0.12	-0.00	540.44	
	2857.50	100.	100.	100.	124.	544.	1208.82	2.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHD	ELCHD						
	2857.50	2857.50						

*SECNO .420

*** GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	GPR	BAREA	TAREA	ELLC
2871.76	2869.53	0.04	1757.	3949.	400.	400.	2865.70
ELTRD							
2868.30							

0.42	5690.	437.	3712.	1541.	0.53	3	843.	
2868.63	0.0	427.	519.	1412.	-1.18	0	2859.20	
11.13	0.0	1.02	7.16	1.09	0.71	2869.16	2858.90	
0.002034	0.044	0.130	0.045	0.130	0.0	-0.00	259.29	
	2857.50	31.	31.	31.	405.	547.	1211.72	3.

D03

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*SECNO .420

3265 DIVIDED FLOW

0.42	5690.	293.	4261.	1136.	0.33	2	922.		
2868.89	0.0	410.	804.	1325.	-0.20	0	2865.30		
10.39	0.0	0.72	5.30	0.86	0.04	2869.22	2866.20		
0.001506	0.044	0.130	0.045	0.130	0.02	-0.00	213.65		
	2858.50	25.	25.	25.	458.	541.	1212.12		4.

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		500 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.63	5610.	727.	4859.	24.	1.96	20	308.		
2881.69	2881.69	365.	403.	25.	1.63	8	2880.50		
11.19	0.0	1.99	12.05	0.93	4.10	2883.65	2881.70		
0.014690	0.054	0.150	0.055	0.110	1.31	-0.00	44.03		
	2870.50	1195.	1195.	1195.	200.	262.	506.15		50.

*SECNO .740

GR CARDS REPEATED

3265 DIVIDED FLOW

CATTAIL CREEK		500 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.74	5570.	704.	4846.	20.	1.99	4	296.		
2895.93	2895.93	356.	400.	21.	0.02	5	2894.80		
11.14	0.0	1.98	12.10	0.93	8.58	2897.92	2896.00		
0.014907	0.054	0.150	0.055	0.110	0.02	-0.00	44.21		
	2884.80	580.	580.	580.	200.	252.	496.23		61.

*SECNO .930

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E03

3265 DIVIDED FLOW

0.93	5500.	38.	5462.	0.	1.83	3	111.
2911.08	0.0	28.	502.	0.	-0.16	0	2908.80
10.08	0.0	1.35	10.89	0.02	14.97	2912.91	2911.50
0.015671	0.054	0.150	0.055	0.100	0.02	-0.00	51.25
	2901.00	980.	980.	980.	68.	78.	197.54
							75.

CCHV= 0.100 CEHV= 0.500
*SECNO .930

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

0.93	5500.	74.	5413.	14.	1.32	2	168.
2912.03	0.0	63.	583.	18.	-0.51	0	2908.80
11.03	0.0	1.16	9.29	0.78	0.38	2913.34	2911.50
0.006443	0.054	0.150	0.045	0.100	0.05	-0.00	32.67
	2901.00	40.	40.	40.	86.	82.	201.13
							76.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.80	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHU	ELCHD						
	2901.00	2901.00						

*SECNO .930

*** GR CARDS REPEATED
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QFR	BAREA	TAREA	ELLC
2916.50	2913.70	0.35	2142.	3399.	410.	410.	2910.50
ELTRD							
2911.00							

0.93	5500.	107.	5346.	47.	1.06	2	177.
2912.67	0.0	93.	638.	44.	-0.26	0	2908.80
11.67	0.0	1.15	8.38	1.07	0.39	2913.73	2911.50
0.004649	0.054	0.150	0.045	0.100	0.0	-0.00	26.26
	2901.00	12.	12.	12.	93.	85.	203.70
							76.

*SECNO .940

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		500 YR FLOOD		02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV

CAUTION
CAUTION
CAUTION
CAUTION
CAUTION

F03

LEFT/RIGHT

F03

DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	VOL
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	
3685 20 TRIALS ATTEMPTED WSEL CWSEL								
3693 PROBABLE MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
0.94	5500.	9.	5491.	0.	2.65	20	93.	
2913.79	2913.79	9.	420.	0.	1.59	15	2912.50	
9.09	0.0	0.98	13.06	0.0	0.08	2916.44	2915.20	
0.017716	0.054	0.150	0.045	0.100	0.79	-0.00	62.03	
	2904.70	10.	10.	10.	57.	36.	155.32	76.

*SECNO 1.370

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

1.37	5335.	75.	5260.	1.	1.56	4	146.	
2945.68	0.0	70.	520.	2.	-1.08	0	2943.50	
9.68	0.0	1.06	10.11	0.35	30.70	2947.25	2945.30	
0.010184	0.054	0.150	0.055	0.150	0.11	-0.00	13.53	
	2936.00	2320.	2320.	2320.	99.	61.	173.70	103.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		500 YR FLOOD			02/28/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	VOL
1.42	5320.	0.	5320.	0.	2.94	2	73.	
2949.71	2949.71	1.	386.	0.	1.38	15	2949.50	
7.71	0.0	0.33	13.77	0.0	3.89	2952.65	2951.30	
0.021993	0.054	0.150	0.050	0.120	0.69	-0.00	71.83	
	2942.00	270.	270.	270.	41.	32.	144.47	106.

*SECNO 1.630

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

1.63	5240.	2.	5102.	136.	1.80	5	122.	
2970.39	0.0	3.	467.	62.	-1.14	0	2969.50	
8.49	0.0	0.70	10.92	2.18	19.43	2972.19	2971.00	

MILE
0.42
0.42
0.63
0.74
0.92
0.92
0.92
1.3
1.4
1.6
1.6
1.7
1.7
2.0

G03

0.014694	0.051	0.150	0.055	0.110	0.11	-0.00	114.37	
2961.90	1090.	1090.	1090.	1090.	44.	112.	270.24	118.

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2971.60 ELREA= 2969.80

1.63	5240.	0.	5046.	194.	1.35	2	142.	
2971.26	0.0	0.	532.	107.	-0.46	0	2969.50	
9.36	0.0	0.0	9.49	1.81	0.37	2972.61	2971.00	
0.006389	0.054	0.150	0.045	0.110	0.05	-0.00	121.00	
2961.90	40.	40.	40.	40.	37.	115.	272.67	118.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHD	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

*** GR CARDS REPEATED

CATTAIL CREEK			500 YR FLOOD			02/28/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	RL	EG	LEFT/RIGHT	
SLOPE	WTN	XLN	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2973.21	2972.68	0.04	1563.	3680.	415.	415.	2970.30
ELTRD							
2970.20							

1.63	5240.	22.	4902.	316.	0.95	3	228.	
2972.26	0.0	29.	606.	205.	-0.39	0	2969.50	
10.36	0.0	0.76	8.10	1.54	0.61	2973.21	2971.00	
0.003907	0.054	0.150	0.045	0.110	0.0	-0.00	100.38	
2961.90	15.	15.	15.	15.	58.	170.	328.25	119.

*SECNO 1.630

*** GR CARDS REPEATED

1.63	5240.	23.	4894.	324.	0.94	0	228.	
2972.32	0.0	30.	609.	211.	-0.02	0	2969.50	
10.42	0.0	0.76	8.03	1.53	0.04	2973.25	2971.00	

H03

H03

0.003816 0.054 0.150 0.045 0.110 0.00 -0.00 100.01
2961.90 10. 10. 10. 58. 170. 328.36 119.

CCHV= 0.100 CEHV= 0.800
*SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		500 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.78 5180. 0. 5043. 137. 2.55 20 108.
2988.08 2988.08 0. 388. 62. 1.62 8 2988.50
10.08 0.0 0.0 12.99 2.21 5.50 2990.64 2986.30
0.021186 0.054 0.150 0.055 0.120 1.29 -0.00 59.04
2978.00 735. 735. 735. 30. 78. 166.66 130.

CCHV= 0.100 CEHV= 0.500
*SECNO 1.790

CATTAIL CREEK		500 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.79 5180. 0. 5074. 106. 2.68 2 107.
2989.22 2989.22 0. 383. 59. 0.12 5 2989.70
10.02 0.0 0.0 13.26 1.80 1.06 2991.89 2987.50
0.015001 0.054 0.150 0.045 0.120 0.06 -0.00 59.23
2979.20 60. 60. 60. 30. 78. 166.51 130.

SPECIAL BRIDGE

SB	HK	XKOR	COFq	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0
	ELCHU	ELCHD						
	2979.20	2979.20						

*SECNO 1.790

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

103

EGPRS 3005.08	EGLWC 2991.90	H3 0.01	QWEIR 2960.	QPR 2225.	BAREA 205.	TAREA 205.	ELLC 2985.80		
ELTRD 2986.50									
1.79	5180.	3.	4945.	232.	1.75	4	130.		
2990.39	0.0	7.	455.	115.	-0.92	0	2989.70		
11.19	0.0	0.44	10.86	2.01	0.25	2992.14	2987.50		
0.008195	0.054	0.130	0.045	0.120	0.0	-0.00	39.15		
	2979.20	12.	12.	12.	50.	80.	169.16		131.

*SECNO 1.790

CATTAIL CREEK									
500 YR FLOOD									
02/28/81									
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL	
1.79	5180.	5.	4921.	254.	1.79	2	133.		
2990.50	0.0	9.	447.	120.	0.04	0	2989.70		
10.90	0.0	0.58	11.02	2.12	0.13	2992.29	2987.50		
0.008604	0.054	0.130	0.045	0.120	0.02	-0.00	36.35		
	2979.60	15.	15.	15.	53.	80.	169.39	131.	

CCHV= 0.100 CEHV= 0.800

*SECNO 2.020

CATTAIL CREEK									
500 YR FLOOD									
02/28/81									
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL	
2.02	5095.	1236.	3826.	33.	1.53	15	378.		
3013.05	3013.05	599.	336.	25.	-0.26	8	3008.40		
11.15	0.0	2.06	11.40	1.31	12.01	3014.59	3011.00		
0.011303	0.054	0.120	0.055	0.120	0.03	-0.00	17.89		
	3001.90	1225.	1225.	1225.	324.	55.	396.13	152.	

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

THIS RUN EXECUTED U2/28/81 11:51:49

 HEC2 RELEASE DATED NOV 76 UPDATED JULY1979
 ERROR CORR - 01,02,03
 MODIFICATION - 50,51,52,53,54

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER
 INDICATES MESSAGE IN SUMMARY OF ERRORS LIST/

CATTAIL CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	TDK*S	VCH	AREA	.D1K
0.420	0.	0.0	0.0	2857.5	1685.0	2862.25	0.0	2862.90	117.11	6.46	260.86	155.71
0.420	0.	0.0	0.0	2857.5	2955.0	2863.69	0.0	2864.64	116.74	7.82	378.03	273.49
0.420	0.	0.0	0.0	2857.5	3645.0	2864.35	0.0	2865.44	117.01	8.39	434.61	336.96
0.420	0.	0.0	0.0	2857.5	5690.0	2865.99	0.0	2867.46	116.09	9.74	597.58	528.09
0.420	100.	0.0	0.0	2857.5	1685.0	2862.96	0.0	2863.72	54.53	7.02	240.19	228.17
0.420	100.	0.0	0.0	2857.5	2955.0	2864.36	0.0	2865.78	72.33	9.56	309.13	347.47
0.420	100.	0.0	0.0	2857.5	3645.0	2864.96	0.0	2866.76	81.17	10.76	338.69	404.58
0.420	100.	0.0	0.0	2857.5	5690.0	2866.74	2866.64	2868.44	66.60	11.36	978.50	697.20
0.420	31.	2868.3	2865.7	2857.5	1685.0	2862.98	0.0	2863.73	53.68	6.98	241.33	229.97
0.420	31.	2868.3	2865.7	2857.5	2955.0	2864.40	0.0	2865.80	70.87	9.50	311.02	351.01
0.420	31.	2868.3	2865.7	2857.5	3645.0	2865.46	0.0	2867.02	64.08	10.03	363.59	455.35
0.420	31.	2868.3	2865.7	2857.5	5690.0	2868.63	0.0	2869.16	20.34	7.16	2357.39	1261.49
0.420	25.	0.0	0.0	2858.5	1685.0	2863.42	0.0	2863.89	50.02	5.49	306.90	238.25
0.420	25.	0.0	0.0	2858.5	2955.0	2865.43	0.0	2866.01	39.02	6.13	482.24	473.07
0.420	25.	0.0	0.0	2858.5	3645.0	2866.71	0.0	2867.23	27.26	5.87	906.28	698.16
0.420	25.	0.0	0.0	2858.5	5690.0	2868.89	0.0	2869.22	15.06	5.30	2538.70	1466.10
* 0.630	1195.	0.0	0.0	2870.5	1665.0	2875.94	2875.94	2877.94	309.60	11.36	146.61	94.63
* 0.630	1195.	0.0	0.0	2870.5	2915.0	2877.84	2877.84	2880.52	290.49	13.13	222.04	171.03
* 0.630	1195.	0.0	0.0	2870.5	3595.0	2878.68	2878.68	2881.69	287.14	13.92	258.19	211.42
* 0.630	1195.	0.0	0.0	2870.5	5610.0	2881.69	2881.69	2883.65	146.90	12.05	793.01	462.85
0.740	580.	0.0	0.0	2884.8	1650.0	2890.84	0.0	2892.31	201.03	9.75	169.32	116.37
0.740	580.	0.0	0.0	2884.8	2895.0	2892.74	0.0	2894.87	211.48	11.70	247.35	199.08
0.740	580.	0.0	0.0	2884.8	3570.0	2893.62	2892.96	2896.01	211.47	12.42	291.41	245.49
* 0.740	580.	0.0	0.0	2884.8	5570.0	2895.93	2895.93	2897.92	141.07	12.10	777.53	456.20
0.930	980.	0.0	0.0	2901.0	1630.0	2907.45	0.0	2908.23	132.69	7.11	229.14	141.51
0.930	980.	0.0	0.0	2901.0	2860.0	2909.22	0.0	2910.24	119.03	8.09	354.65	262.15
0.930	980.	0.0	0.0	2901.0	3525.0	2909.99	0.0	2911.12	115.28	8.54	419.53	328.31
0.930	980.	0.0	0.0	2901.0	5500.0	2911.08	0.0	2912.91	156.71	10.89	529.99	439.36
0.930	40.	0.0	0.0	2901.0	1630.0	2908.01	0.0	2908.59	58.26	6.13	266.08	213.54
0.930	40.	0.0	0.0	2901.0	2860.0	2909.76	0.0	2910.58	57.77	7.25	394.65	376.29
0.930	40.	0.0	0.0	2901.0	3525.0	2910.53	0.0	2911.46	57.66	7.73	455.79	464.21
0.930	40.	0.0	0.0	2901.0	5500.0	2912.03	0.0	2913.34	64.43	9.29	663.93	685.18

12

K03

12

L03

ADVA VZU ADEL MK

SECNO	XLCH	ELTRD	ELIC	ELMIN	Q	CWSEL	CRWS	EG	1DK+S	VCH	AREA	.D1K
0.930	12.	2911.0	2910.5	2901.0	1630.0	2908.17	0.0	2908.71	52.02	5.88	277.03	225.99
0.930	12.	2911.0	2910.5	2901.0	2860.0	2910.31	0.0	2910.97	42.67	6.53	437.80	437.82
0.930	12.	2911.0	2910.5	2901.0	3525.0	2911.51	0.0	2912.16	34.92	6.49	584.48	596.51
0.930	12.	2911.0	2910.5	2901.0	5500.0	2912.67	0.0	2913.73	46.49	8.38	774.95	806.67
* 0.940	10.	0.0	0.0	2904.7	1630.0	2910.12	2910.12	2911.61	221.32	9.80	166.36	109.57
* 0.940	10.	0.0	0.0	2904.7	2860.0	2911.54	2911.54	2913.50	202.59	11.22	254.81	200.94
* 0.940	10.	0.0	0.0	2904.7	3525.0	2912.18	2912.18	2914.34	196.19	11.78	299.12	251.67
* 0.940	10.	0.0	0.0	2904.7	5500.0	2913.79	2913.79	2916.44	177.16	13.06	429.31	413.22
1.370	2320.	0.0	0.0	2936.0	1585.0	2941.56	0.0	2942.18	86.04	6.33	250.30	170.87
1.370	2320.	0.0	0.0	2936.0	2775.0	2943.26	0.0	2944.20	91.73	7.77	357.29	289.74
1.370	2320.	0.0	0.0	2936.0	3420.0	2944.01	0.0	2945.11	94.18	8.42	409.67	352.41
1.370	2320.	0.0	0.0	2936.0	5335.0	2945.68	0.0	2947.25	101.84	10.11	593.13	528.65
* 1.420	270.	0.0	0.0	2942.0	1580.0	2946.02	2946.02	2947.51	268.39	9.79	161.31	96.44
* 1.420	270.	0.0	0.0	2942.0	2770.0	2947.41	2947.41	2949.46	242.73	11.48	241.20	177.79
* 1.420	270.	0.0	0.0	2942.0	3410.0	2948.05	2948.05	2950.35	235.36	12.18	280.02	222.27
* 1.420	270.	0.0	0.0	2942.0	5320.0	2949.71	2949.71	2952.65	219.93	13.77	387.00	358.73
1.630	1090.	0.0	0.0	2961.9	1560.0	2966.75	0.0	2967.53	132.30	7.08	220.29	135.63
1.630	1090.	0.0	0.0	2961.9	2730.0	2968.20	0.0	2969.38	141.01	8.73	312.89	229.90
1.630	1090.	0.0	0.0	2961.9	3360.0	2968.85	0.0	2970.22	143.54	9.39	362.68	280.45
1.630	1090.	0.0	0.0	2961.9	5240.0	2970.39	0.0	2972.19	146.94	10.92	532.49	432.28
1.630	40.	0.0	0.0	2961.9	1560.0	2967.30	0.0	2967.88	57.04	6.12	254.77	206.55
1.630	40.	0.0	0.0	2961.9	2730.0	2968.87	0.0	2969.77	62.66	7.60	359.26	344.87
1.630	40.	0.0	0.0	2961.9	3360.0	2969.56	0.0	2970.62	65.24	8.24	407.78	416.00
1.630	40.	0.0	0.0	2961.9	5240.0	2971.26	0.0	2972.61	63.89	9.49	638.83	655.57
1.630	15.	2970.2	2970.3	2961.9	1560.0	2967.32	0.0	2967.90	56.28	6.10	255.91	207.95
1.630	15.	2970.2	2970.3	2961.9	2730.0	2968.91	0.0	2969.79	61.43	7.55	361.68	348.31
1.630	15.	2970.2	2970.3	2961.9	3360.0	2970.38	0.0	2971.13	41.04	7.05	528.58	524.50
1.630	15.	2970.2	2970.3	2961.9	5240.0	2972.26	0.0	2973.21	39.07	8.10	838.77	838.30
1.630	10.	0.0	0.0	2961.9	1560.0	2967.40	0.0	2967.96	53.07	5.98	260.94	214.14
1.630	10.	0.0	0.0	2961.9	2730.0	2969.01	0.0	2969.86	57.88	7.39	378.07	358.85
1.630	10.	0.0	0.0	2961.9	3360.0	2970.44	0.0	2971.18	39.91	6.98	537.89	531.86
1.630	10.	0.0	0.0	2961.9	5240.0	2972.32	0.0	2973.25	38.16	8.03	850.15	848.31
* 1.780	735.	0.0	0.0	2978.0	1545.0	2983.53	2983.53	2985.26	316.12	10.56	146.27	86.90
* 1.780	735.	0.0	0.0	2978.0	2700.0	2985.23	2985.23	2987.45	290.06	11.94	226.10	158.53
* 1.780	735.	0.0	0.0	2978.0	3325.0	2985.99	2985.99	2988.41	281.19	12.49	266.24	198.28
* 1.780	735.	0.0	0.0	2978.0	5180.0	2988.08	2988.08	2990.64	211.26	12.99	450.05	355.88
1.790	60.	0.0	0.0	2979.2	1545.0	2985.21	0.0	2986.55	147.23	9.27	166.60	127.33
1.790	60.	0.0	0.0	2979.2	2700.0	2986.86	0.0	2988.71	152.27	10.93	247.13	218.81
1.790	60.	0.0	0.0	2979.2	3325.0	2987.57	0.0	2989.67	154.41	11.63	286.08	267.58
* 1.790	60.	0.0	0.0	2979.2	5180.0	2989.22	2989.22	2991.89	150.01	13.26	441.39	422.93
1.790	12.	2986.5	2985.8	2979.2	1545.0	2985.45	0.0	2986.63	124.10	8.72	177.25	138.69
1.790	12.	2986.5	2985.8	2979.2	2700.0	2988.53	0.0	2989.48	58.83	7.85	368.80	352.02
1.790	12.	2986.5	2985.8	2979.2	3325.0	2989.29	0.0	2990.36	59.40	8.39	449.71	431.42
1.790	12.	2986.5	2985.8	2979.2	5180.0	2990.39	0.0	2992.14	81.95	10.86	577.06	572.20

M03

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	TKSS	VCH	AREA	.D1K
1.790	15.	0.0	0.0	2979.6	1545.0	2985.59	0.0	2986.89	145.03	9.14	168.99	128.29
1.790	15.	0.0	0.0	2979.6	2700.0	2988.59	0.0	2989.60	65.73	8.12	359.71	333.03
1.790	15.	0.0	0.0	2979.6	3325.0	2989.35	0.0	2990.48	65.13	8.63	441.04	411.99
1.790	15.	0.0	0.0	2979.6	5180.0	2990.50	0.0	2992.29	86.04	11.02	575.46	558.46
* 2.020	1225.	0.0	0.0	3001.9	1520.0	3007.37	3007.37	3009.43	320.21	11.53	131.87	84.94
* 2.020	1225.	0.0	0.0	3001.9	2655.0	3009.31	3009.31	3012.09	292.44	13.40	198.73	155.26
* 2.020	1225.	0.0	0.0	3001.9	3270.0	3011.97	3011.97	3013.37	102.70	9.99	569.01	322.68
* 2.020	1225.	0.0	0.0	3001.9	5095.0	3013.05	3013.05	3014.59	113.03	11.40	959.16	479.24

CATTAIL CREEK

SUMMARY PRINTOUT TABLE 150

SECCNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWJD	XLGH
0.420	1685.	2862.2	0.0	0.0	0.0	78.23	0.0
0.420	2955.	2863.7	1.4	0.0	0.0	84.42	0.0
0.420	3645.	2864.3	0.7	0.0	0.0	87.25	0.0
0.420	5690.	2866.0	1.6	0.0	0.0	133.34	0.0
0.420	1685.	2863.0	0.0	0.7	0.0	49.00	100.00
0.420	2955.	2864.4	1.4	0.7	0.0	49.00	100.00
0.420	3645.	2865.0	0.6	0.6	0.0	49.00	100.00
0.420	5690.	2866.7	1.8	0.7	0.0	668.38	100.00
0.420	1685.	2863.0	0.0	0.0	0.0	49.00	31.00
0.420	2955.	2864.4	1.4	0.0	0.0	49.00	31.00
0.420	3645.	2865.5	1.1	0.5	0.0	49.00	31.00
0.420	5690.	2868.6	3.2	1.9	0.0	843.04	31.00
0.420	1685.	2863.4	0.0	0.4	0.0	83.65	25.00
0.420	2955.	2865.4	2.0	1.0	0.0	98.81	25.00
0.420	3645.	2866.7	1.3	1.2	0.0	666.30	25.00
0.420	5690.	2868.9	2.2	0.3	0.0	921.78	25.00
0.630	1685.	2875.9	0.0	12.5	0.0	37.00	1195.00
0.630	2915.	2877.8	1.9	12.4	0.0	42.16	1195.00
0.630	3595.	2878.7	0.8	12.0	0.0	44.42	1195.00
0.630	5610.	2881.7	3.0	12.8	0.0	307.67	1195.00
0.740	1650.	2890.8	0.0	14.9	0.0	38.62	580.00
0.740	2895.	2892.7	1.9	14.9	0.0	43.76	580.00
0.740	3570.	2893.6	0.9	14.9	0.0	83.38	580.00
0.740	5570.	2895.9	2.3	14.2	0.0	295.71	580.00
0.930	1630.	2907.4	0.0	16.6	0.0	64.21	980.00
0.930	2860.	2909.2	1.8	16.5	0.0	79.85	980.00
0.930	3525.	2910.0	0.8	16.4	0.0	91.64	980.00
0.930	5500.	2911.1	1.1	15.1	0.0	111.23	980.00
0.930	1630.	2908.0	0.0	0.6	0.0	67.94	40.00
0.930	2860.	2909.8	1.8	0.5	0.0	77.77	40.00
0.930	3525.	2910.5	0.8	0.5	0.0	81.41	40.00
0.930	5500.	2912.0	1.5	0.9	0.0	168.46	40.00
0.930	1630.	2908.2	0.0	0.2	0.0	69.00	12.00
0.930	2860.	2910.3	2.1	0.5	0.0	80.36	12.00
0.930	3525.	2911.5	1.2	1.0	0.0	138.43	12.00
0.930	5500.	2912.7	1.2	0.6	0.0	177.44	12.00
0.940	1630.	2910.1	0.0	1.9	0.0	57.33	10.00
0.940	2860.	2911.5	1.4	1.2	0.0	66.82	10.00
0.940	3525.	2912.2	0.6	0.7	0.0	71.70	10.00
0.940	5500.	2913.8	1.6	1.1	0.0	93.29	10.00
1.370	1585.	2941.6	0.0	31.4	0.0	60.01	2320.00
1.370	2775.	2943.3	1.7	31.7	0.0	65.41	2320.00

BD4

4.270 3420 2944.0 0.7 31.8 0.0 81.78 2320.00

804

1.370	3420.	2944.0	0.7	31.8	0.0	81.78	2320.00
1.370	5335.	2945.7	1.7	31.9	0.0	145.94	2320.00

004

CD4

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWD	XLCH	
*	1.420	1580.	2946.0	0.0	4.5	0.0	55.12	270.00
*	1.420	2770.	2947.4	1.4	4.2	0.0	59.53	270.00
*	1.420	3410.	2948.1	0.6	4.0	0.0	61.56	270.00
*	1.420	5320.	2949.7	1.7	4.0	0.0	72.65	270.00
	1.630	1560.	2966.8	0.0	20.7	0.0	61.94	1090.00
	1.630	2730.	2968.2	1.4	20.8	0.0	66.90	1090.00
	1.630	3360.	2968.8	0.6	20.7	0.0	91.90	1090.00
	1.630	5240.	2970.4	1.5	20.7	0.0	122.47	1090.00
	1.630	1560.	2967.3	0.0	0.5	0.0	63.83	40.00
	1.630	2730.	2968.9	1.6	0.7	0.0	69.25	40.00
	1.630	3360.	2969.6	0.7	0.7	0.0	71.51	40.00
	1.630	5240.	2971.3	1.7	0.9	0.0	141.75	40.00
	1.630	1560.	2967.3	0.0	0.0	0.0	63.89	15.00
	1.630	2730.	2968.9	1.6	0.0	0.0	69.37	15.00
	1.630	3360.	2970.4	1.5	0.8	0.0	115.71	15.00
	1.630	5240.	2972.3	1.9	1.0	0.0	227.87	15.00
	1.630	1560.	2967.4	0.0	0.1	0.0	64.16	10.00
	1.630	2730.	2969.0	1.6	0.1	0.0	100.53	10.00
	1.630	3360.	2970.4	1.4	0.1	0.0	123.30	10.00
	1.630	5240.	2972.3	1.9	0.1	0.0	228.35	10.00
*	1.780	1545.	2985.5	0.0	16.1	0.0	42.57	735.00
*	1.780	2700.	2985.2	1.7	16.2	0.0	51.14	735.00
*	1.780	3325.	2986.0	0.8	15.6	0.0	54.95	735.00
*	1.780	5180.	2988.1	2.1	15.8	0.0	107.62	735.00
	1.790	1545.	2985.2	0.0	1.7	0.0	44.82	60.00
	1.790	2700.	2986.9	1.6	1.6	0.0	53.17	60.00
	1.790	3325.	2987.6	0.7	1.6	0.0	59.36	60.00
	1.790	5180.	2989.2	1.6	1.1	0.0	107.28	60.00
	1.790	1545.	2985.5	0.0	0.2	0.0	46.02	12.00
	1.790	2700.	2988.5	3.1	1.7	0.0	103.99	12.00
	1.790	3325.	2989.3	0.8	1.7	0.0	107.66	12.00
	1.790	5180.	2990.4	1.1	1.2	0.0	130.07	12.00
	1.790	1545.	2985.6	0.0	0.1	0.0	46.11	15.00
	1.790	2700.	2988.6	3.0	0.1	0.0	104.32	15.00
	1.790	3325.	2989.4	0.8	0.1	0.0	107.96	15.00
	1.790	5180.	2990.5	1.1	0.1	0.0	133.04	15.00
*	2.020	1520.	3007.4	0.0	21.8	0.0	32.36	1225.00
*	2.020	2035.	3009.3	1.9	20.7	0.0	36.80	1225.00
*	2.020	3270.	3012.0	2.3	22.6	0.0	348.26	1225.00
*	2.020	5095.	3013.1	1.1	22.6	0.0	378.44	1225.00

SUMMARY OF ERRORS

CAUTION SECNO= 0.630 PROFILE= 1 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 0.630 PROFILE= 2 CRITICAL DEPTH ASSUMED

DD4

D04

CAUTION SECNO= 0.630 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.630 PROFILE= 3

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.630 PROFILE= 3

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.630 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.630 PROFILE= 4

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.630 PROFILE= 4

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.740 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.940 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.940 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 3

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 3

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.940 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 4

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 4

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 1.420 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.420 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.420 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.420 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1.780 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 1.780 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1.780 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 1.780 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 3

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1.780 PROFILE= 3

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 1.780 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 4

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1.780 PROFILE= 4

20 TRIALS ATTEMPTED TO BALANCE WSEL

E04

CAUTION SECNO= 1.790 PROFILE= 4 CRITICAL DEPTH ASSUMED

ED4

CAUTION SECNO= 1.790 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.020 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.020 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2.020 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.020 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.020 PROFILE= 4 CRITICAL DEPTH ASSUMED

F04

FD4

CATTAIL CREEK

YANCEY CO NC FEMA STUDY

500 YR FLOOD

100 YR FLOOD

50 YR FLOOD

10 YR FLOOD

MILE	Q	ELEV	Q	ELEV	Q	ELEV	Q	ELEV
0.420	5690.	2866.0	3645.	2864.3	2955.	2863.7	1685.	2862.2
0.420	5690.	2868.9	3645.	2866.7	2955.	2865.4	1685.	2863.4
0.630	5610.	2881.7	3595.	2878.7	2915.	2877.8	1665.	2875.9
0.740	5570.	2895.9	3570.	2893.6	2895.	2892.7	1650.	2890.8
0.930	5500.	2911.1	3525.	2910.0	2860.	2909.2	1630.	2907.4
0.930	5500.	2912.7	3525.	2911.5	2860.	2910.3	1630.	2908.2
0.940	5500.	2913.8	3525.	2912.2	2860.	2911.5	1630.	2910.1
1.370	5335.	2945.7	3420.	2944.0	2775.	2943.3	1585.	2941.6
1.420	5320.	2949.7	3410.	2948.1	2770.	2947.4	1580.	2946.0
1.630	5240.	2970.4	3360.	2968.8	2730.	2968.2	1560.	2966.8
1.630	5240.	2972.3	3360.	2970.4	2730.	2969.0	1560.	2967.4
1.780	5180.	2988.1	3325.	2986.0	2700.	2985.2	1545.	2983.5
1.790	5180.	2989.2	3325.	2987.6	2700.	2986.9	1545.	2985.2
1.790	5180.	2990.5	3325.	2989.4	2700.	2988.6	1545.	2985.6
2.020	5095.	3013.1	3270.	3012.0	2655.	3009.3	1520.	3007.4

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AD1

THIS RUN EXECUTED 02/28/81 11:51:05

 HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
 ERROR CORR - 01,02,03
 MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY	RAM 2-2-81 CATTM1	5
T2	100 YR FLOOD	GD, HCDG13	10
T3	CATTAIL CREEK	100 YR FLOODWAY	15

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	4.	0.	0.	0.01172	0.	0.0	0.	0.0	0.0	20

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	0.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	25

J3	VARIABLE CODES FOR SUMMARY PRINTOUT										
	110.00	0.0	200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30

QT	5.	1685.	2955.	3645.	5690.	3645.	0.	0.	0.	0.	35
NC	0.130	0.130	0.055	0.1	0.5						40
ET	0.	0.0	0.0	0.0	0.0	7.11	625.00	720.00	0.0	0.0	45

X1	0.42	22.	625.	718.	0.	0.	0.	0.0	0.0	0.	50
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	61.	2871.4	150.	55
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	60
GR	2865.3	625.	2859.2	640.	2857.9	646.	2858.1	655.	2858.0	660.	65
GR	2857.8	670.	2857.5	677.	2858.9	689.	2861.3	709.	2866.2	718.	70
GR	2866.2	1208.	2881.7	1232.	0.0	0.	0.0	0.	0.0	0.	75
NC	0.0	0.0	0.045	0.0	0.0						80
ET	0.	0.0	0.0	0.0	0.0	7.11	625.00	720.00	0.0	0.0	85

X1	0.42	22.	640.	689.	100.	100.	100.	0.0	0.0	0.	90
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2866.2	2866.2		95
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	61.	2871.4	150.	100
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	105
GR	2865.3	625.	2859.2	640.	2857.9	646.	2858.1	655.	2858.0	660.	110
GR	2857.8	670.	2857.5	677.	2858.9	689.	2861.3	709.	2866.2	718.	115
GR	2866.2	1208.	2881.9	1232.	0.0	0.	0.0	0.	0.0	0.	120
SB	1.25	1.60	3.00	0.	49.00	0.20	400.00	0.0	2857.5	2857.5	125
ET	0.	0.0	0.0	0.0	0.0	7.11	625.00	720.00	0.0	0.0	130

X1	0.42	0.	0.	0.	31.	31.	31.	0.0	0.0	0.	135
X2	0.	0.0	1.	2865.7	2868.3	0.0	0.	0.0	0.0	0.	140
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2868.3	2868.3		145
BT	17.0	0.0	2880.4	0.0	13.0	2878.2	0.0	25.0	2873.5	0.0	150
BT	61.0	2871.9	0.0	150.0	2871.4	0.0	216.0	2868.8	0.0	320.0	155
BT	2868.4	0.0	417.0	2869.5	0.0	455.0	2868.5	0.0	575.0	2868.4	160
BT	0.0	600.0	2868.3	0.0	630.0	2868.3	0.0	630.0	2870.3	0.0	165

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B01

BT	700.0	2870.3	0.0	700.0	2868.3	0.0	1211.0	2868.3	0.0	1232.0	170
BT	2881.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	175
ET	0.	0.0	0.0	0.0	0.0	7.11	625.00	720.00	0.0	0.0	180

X1	0.42	19.	625.	718.	25.	25.	25.	0.0	0.0	0.	185
GR	2880.4	0.	2878.5	13.	2873.5	25.	2871.9	81.	2871.4	150.	190
GR	2868.8	216.	2868.4	320.	2869.5	417.	2866.9	516.	2866.9	531.	195
GR	2865.3	625.	2859.6	638.	2859.0	645.	2859.2	655.	2858.5	677.	200
GR	2861.3	709.	2866.2	718.	2866.2	1208.	2881.9	1232.	0.0	0.	205
QT	5.	1665.	2915.	3595.	5610.	3595.	0.	0.	0.	0.	210
NC	0.150	0.110	0.055	0.0	0.8						215
ET	0.	0.0	0.0	0.0	0.0	7.11	215.00	270.00	0.0	0.0	220

X1	0.63	29.	219.	270.	1195.	1195.	1195.	0.0	0.0	0.	225
GR	2892.8	0.	2888.0	21.	2879.5	52.	2879.5	115.	2879.1	172.	230
GR	2880.3	203.	2880.5	219.	2872.3	230.	2871.3	235.	2870.5	240.	235
GR	2871.3	253.	2872.2	257.	2881.7	270.	2882.3	288.	2881.7	303.	240
GR	2881.0	305.	2883.2	350.	2884.3	350.	2883.7	390.	2883.7	402.	245
GR	2882.8	420.	2881.7	422.	2883.0	425.	2880.7	452.	2881.5	470.	250
GR	2882.2	606.	2884.0	615.	2887.5	765.	2892.8	963.	0.0	0.	255
QT	5.	1650.	2895.	3570.	5570.	3570.	0.	0.	0.	0.	260
ET	0.	0.0	0.0	0.0	0.0	7.11	215.00	270.00	0.0	0.0	265

X1	0.74	0.	0.	0.	580.	580.	580.	0.0	14.30	0.	270
QT	5.	1630.	2860.	3525.	5500.	3525.	0.	0.	0.	0.	275
NC	0.150	0.100	0.055	0.0	0.0						280
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	165.00	0.0	0.0	285

X1	0.93	21.	76.	162.	980.	980.	980.	0.0	0.0	0.	290
GR	2923.5	0.	2913.6	17.	2911.3	40.	2911.2	50.	2908.8	76.	295
GR	2901.0	91.	2901.0	97.	2901.9	100.	2905.8	135.	2911.5	162.	300
GR	2912.0	175.	2911.2	192.	2911.0	197.	2913.0	205.	2913.0	482.	305
GR	2916.6	591.	2914.8	750.	2915.1	790.	2917.6	890.	2923.5	1013.	310
GR	2929.5	1056.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	315
NC	0.0	0.0	0.045	0.0	0.5						320
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	165.00	0.0	0.0	325

X1	0.93	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	330
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2910.7	2910.5	0.	335
SB	1.25	1.60	3.00	0.	20.00	2.90	410.00	2.74	2901.0	2901.0	340
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	165.00	0.0	0.0	345

X1	0.93	0.	0.	0.	12.	12.	12.	0.0	0.0	0.	350
X2	0.	0.0	1.	2910.5	2911.0	0.0	0.	0.0	0.0	0.	355
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2911.2	2911.0	0.	360
BT	16.0	0.0	2923.5	0.0	17.0	2913.6	0.0	40.0	2911.3	0.0	365
BT	50.0	2911.2	0.0	60.0	2911.4	0.0	175.0	2912.0	0.0	192.0	370
BT	2911.2	0.0	197.0	2911.0	0.0	205.0	2913.0	0.0	482.0	2913.0	375
BT	0.0	591.0	2916.6	0.0	750.0	2914.8	0.0	790.0	2915.1	0.0	380
BT	890.0	2917.6	0.0	1013.0	2923.5	0.0	1056.0	2929.5	0.0	0.0	385
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	165.00	0.0	0.0	390

X1	0.94	0.	0.	0.	10.	10.	10.	0.0	3.70	0.	395
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C01

NC	0.150	0.150	0.055	0.0	0.0						400
QT	5.	1585.	2775.	3420.	5335.	3420.	0.	0.	0.	0.	405
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	150.00	0.0	0.0	410
X1	1.37	16.	78.	147.	2320.	2320.	2320.	0.0	-6.00	0.	415
GR	2965.0	0.	2951.7	13.	2949.5	78.	2943.8	87.	2943.0	96.	420
GR	2942.7	111.	2942.0	120.	2942.8	131.	2945.0	137.	2951.3	147.	425
GR	2951.4	150.	2952.1	168.	2951.5	173.	2952.8	178.	2959.0	354.	430
GR	2966.0	414.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	435
QT	5.	1580.	2770.	3410.	5320.	3410.	0.	0.	0.	0.	440
NC	0.150	0.120	0.050	0.0	0.0						445
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	150.00	0.0	0.0	450
X1	1.42	0.	0.	0.	270.	270.	270.	0.0	6.00	0.	455
QT	5.	1560.	2730.	3360.	5240.	3360.	0.	0.	0.	0.	460
NC	0.150	0.110	0.055	0.0	0.0						465
ET	0.	0.0	0.0	0.0	0.0	7.11	120.00	200.00	0.0	0.0	470
X1	1.63	22.	121.	195.	1090.	1090.	1090.	0.0	0.0	0.	475
GR	2983.5	0.	2981.0	10.	2979.8	50.	2979.3	55.	2977.0	65.	480
GR	2969.5	121.	2962.5	133.	2961.9	143.	2962.4	153.	2963.0	157.	485
GR	2963.5	182.	2971.0	195.	2968.4	200.	2969.1	234.	2970.6	239.	490
GR	2971.4	246.	2971.1	265.	2970.3	270.	2972.1	275.	2971.7	327.	495
GR	2980.7	347.	2983.7	388.	0.0	0.	0.0	0.	0.0	0.	500
NC	0.0	0.0	0.045	0.0	0.0						505
ET	0.	0.0	0.0	0.0	0.0	7.11	120.00	200.00	0.0	0.0	510
X1	1.63	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	515
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2971.6	2969.8		520
SB	1.25	1.60	3.00	0.	45.00	0.40	415.00	0.0	2961.0	2961.0	525
ET	0.	0.0	0.0	0.0	0.0	7.11	120.00	200.00	0.0	0.0	530
X1	1.63	0.	0.	0.	15.	15.	15.	0.0	0.0	0.	535
X2	0.	0.0	1.	2970.3	2970.2	0.0	0.	0.0	0.0	0.	540
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2972.1	2970.2		545
BT	18.0	0.0	2983.5	0.0	10.0	2981.0	0.0	50.0	2979.8	0.0	550
BT	55.0	2979.3	0.0	65.0	2977.0	0.0	102.0	2972.1	0.0	125.0	555
BT	2972.2	0.0	190.0	2971.5	0.0	218.0	2970.4	0.0	237.0	2970.2	560
BT	0.0	239.0	2970.6	0.0	246.0	2971.4	0.0	265.0	2971.1	0.0	565
BT	270.0	2970.3	0.0	275.0	2972.1	0.0	327.0	2971.7	0.0	347.0	570
BT	2980.7	0.0	388.0	2983.7	0.0	0.0	0.0	0.0	0.0	0.0	575
ET	0.	0.0	0.0	0.0	0.0	7.11	120.00	200.00	0.0	0.0	580
X1	1.63	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	585
QT	5.	1545.	2700.	3325.	5180.	3325.	0.	0.	0.	0.	590
NC	0.150	0.120	0.055	0.0	0.8						595
ET	0.	0.0	0.0	0.0	0.0	7.11	55.00	125.00	0.0	0.0	600
X1	1.78	14.	58.	120.	735.	735.	735.	0.0	-1.20	0.	605
GR	3002.0	0.	2991.1	20.	2989.7	58.	2980.9	80.	2980.7	89.	610
GR	2979.2	91.	2979.2	99.	2987.5	120.	2988.0	140.	2988.1	164.	615
GR	2992.1	173.	2993.3	230.	2993.3	313.	3001.4	326.	0.0	0.	620
NC	0.0	0.0	0.045	0.0	0.5						625

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D01											
ET	0.	0.0	0.0	0.0	0.0	7.11	55.00	125.00	0.0	0.0	630
X1	1.79	16.	58.	120.	60.	60.	60.	0.0	0.0	0.	635
GR	3002.0	0.	2991.1	20.	2989.7	58.	2983.0	75.	2980.9	80.	640
GR	2980.7	89.	2979.2	91.	2979.2	99.	2982.0	106.	2987.5	120.	645
GR	2988.0	140.	2988.1	164.	2992.1	173.	2993.3	230.	2993.3	313.	650
GR	3001.4	326.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	655
SB	1.25	1.60	3.00	0.	31.00	0.01	205.00	0.0	2979.2	2979.2	660
ET	0.	0.0	0.0	0.0	0.0	7.11	55.00	125.00	0.0	0.0	665
X1	1.79	0.	0.	0.	12.	12.	12.	0.0	0.0	0.	670
X2	0.	0.0	1.	2985.8	2986.5	0.0	0.	0.0	0.0	0.	675
BT	14.0	0.0	3002.0	0.0	20.0	2991.1	0.0	58.0	2989.7	0.0	680
BT	60.0	2989.3	0.0	110.0	2987.5	0.0	110.0	2986.5	0.0	118.0	685
BT	2986.7	0.0	120.0	2987.5	0.0	140.0	2988.0	0.0	164.0	2988.1	690
BT	0.0	173.0	2992.1	0.0	230.0	2993.3	0.0	313.0	2993.3	0.0	695
BT	326.0	3001.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	700
NC	0.130	0.120	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	705
ET	0.	0.0	0.0	0.0	0.0	7.11	55.00	125.00	0.0	0.0	710
X1	1.79	14.	58.	120.	15.	15.	15.	0.0	0.0	0.	715
GR	3002.0	0.	2991.1	20.	2989.7	58.	2980.9	80.	2980.7	89.	720
GR	2979.6	90.	2979.7	97.	2987.5	120.	2988.0	140.	2988.1	164.	725
GR	2992.1	173.	2993.3	230.	2993.3	313.	3001.4	326.	0.0	0.	730
QT	5.	1520.	2655.	3270.	5095.	3270.	0.	0.	0.	0.	735
NC	0.120	0.120	0.055	0.0	0.8	0.0	0.0	0.0	0.0	0.0	740
ET	0.	0.0	0.0	0.0	0.0	7.11	320.00	360.00	0.0	0.0	745
X1	2.02	16.	323.	360.	1225.	1225.	1225.	0.0	0.0	0.	750
GR	3023.5	0.	3011.1	21.	3011.1	65.	3011.1	160.	3011.1	319.	755
GR	3008.4	323.	3003.0	330.	3002.5	335.	3002.4	340.	3001.9	345.	760
GR	3003.3	353.	3011.0	360.	3012.0	368.	3012.9	386.	3012.9	396.	765
GR	3023.5	405.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	770
EJ											775

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*PROF 1

CCHV= 0.100 CEHV= 0.500

*SECNO .420

2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED

CATTAIL CREEK

100 YR FLOOD

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	VOL
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	
0.42	3645.	0.	3645.	0.	1.09	0	87.	
2864.35	0.0	0.0	435.	0.0	0.50	0	2865.30	
6.85	0.0	0.0	8.39	0.0	0.0	2865.44	2866.20	
0.011701	0.0	0.130	0.055	0.130	0.0	-0.00	627.34	
	2857.50	0.	0.	0.	44.	43.	714.60	0.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2866.20 ELREA= 2866.20

0.42	3645.	0.	3645.	0.	1.80	2	49.	
2864.96	0.0	0.0	339.	0.0	0.71	0	2859.20	
7.46	0.0	0.0	10.76	0.0	0.97	2866.76	2858.90	
0.008117	0.045	0.130	0.045	0.130	0.35	-0.00	640.00	
	2857.50	100.	100.	100.	25.	25.	689.00	1.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHU	ELCHD						
	2857.50	2857.50						

*SECNO .420

*** GR CARDS REPEATED
PRESSURE FLOW

EGPRS	EGWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2867.02	2866.79	0.06	0.	3645.	400.	400.	2865.70
ELTRD							
2868.30							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2868.30 ELREA= 2868.30

0.42	3645.	0.	3645.	0.	1.56	3	49.	
2865.46	0.0	0.0	364.	0.0	-0.24	0	2859.20	
7.96	0.0	0.0	10.03	0.0	0.26	2867.02	2858.90	

FD1

FD1

0.006408	0.044	0.130	0.045	0.130	0.0	-0.00	640.00	
	2857.50	31.	31.	31.	25.	25.	689.00	1.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

0.42	3645.	27.	3524.	94.	0.52	2	666.	
2866.71	0.0	58.	600.	248.	-1.04	0	2865.30	
8.21	0.0	0.47	5.87	0.38	0.10	2867.23	2866.20	
0.002726	0.044	0.130	0.045	0.130	0.10	-0.00	542.47	
	2858.50	25.	25.	25.	129.	537.	1208.77	2.

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XN	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.63	3595.	0.	3595.	0.	3.01	20	44.	
2878.68	2878.68	0.	258.	0.	2.49	5	2880.50	
8.18	0.0	0.0	13.92	0.0	7.57	2881.69	2881.70	
0.028914	0.054	0.150	0.055	0.110	1.99	-0.00	221.44	
	2870.50	1195.	1195.	1195.	23.	21.	265.87	17.

*SECNO .740

GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

0.74	3570.	1.	3569.	0.	2.40	7	83.	
2893.62	2892.96	4.	287.	0.	-0.62	5	2894.80	
8.82	0.0	0.33	12.42	0.0	14.26	2896.01	2896.00	
0.021147	0.054	0.150	0.055	0.110	0.06	-0.00	140.49	
	2884.80	580.	580.	580.	104.	22.	266.74	21.

*SECNO .930

3301 HV CHANGED MORE THAN HVINS

0.93	3525.	6.	3519.	0.	1.13	4	92.	
2909.99	0.0	8.	412.	0.	-1.26	0	2908.80	
8.99	0.0	0.75	8.54	0.0	14.98	2911.12	2911.50	

601

0.011528	0.054	0.150	0.055	0.100	0.13	-0.00	63.18	
2901.00	980.	980.	980.	980.	56.	36.	154.82	29.

CCHV= 0.100 CEHV= 0.500
 *SECNO .930

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2910.70 ELREA= 2910.50

0.93	3525.	0.	3525.	0.	0.93	2	81.	
2910.53	0.0	0.	456.	0.	-0.20	0	2908.80	
9.53	0.0	0.0	7.73	0.0	0.32	2911.46	2911.50	
0.005766	0.054	0.150	0.045	0.100	0.02	-0.00	76.00	
2901.00	40.	40.	40.	40.	43.	38.	157.41	30.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHD	ELCHD						
	2901.00	2901.00						

*SECNO .930

*** GR CARDS REPEATED

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC
2912.37	2911.62	0.24	207.	3317.	410.	410.	2910.50
ELTRD							
2911.00							

0.93	3525.	31.	3492.	1.	0.65	2	138.	
2911.51	0.0	42.	538.	4.	-0.28	0	2908.80	
10.51	0.0	0.73	6.49	0.40	0.70	2912.16	2911.50	
0.003492	0.054	0.150	0.045	0.100	0.0	-0.00	37.83	
2901.00	12.	12.	12.	12.	81.	80.	199.07	30.

*SECNO .940

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK			100 YR FLOOD		02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	YTRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

HD1

H01

3685 20 TRIALS ATTEMPTED WSEL, CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

0.94	3525.	0.	3525.	0.	2.16	20	71.
2912.18	2912.18	0.	299.	0.	1.51	19	2912.50
7.48	0.0	0.0	11.78	0.0	0.07	2914.34	2915.20
0.019619	0.054	0.150	0.045	0.100	0.75	-0.00	76.61
	2904.70	10.	10.	10.	42.	29.	147.71
							30.

*SECNO 1.370

3301 HV CHANGED MORE THAN HVINS

1.37	3420.	1.	3419.	0.	1.10	5	82.
2944.01	0.0	4.	406.	0.	-1.06	0	2943.50
8.01	0.0	0.38	8.42	0.0	30.66	2945.11	2945.30
0.009418	0.054	0.150	0.055	0.150	0.11	-0.00	63.16
	2936.00	2320.	2320.	2320.	49.	32.	144.94
							49.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	FLOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.42	3410.	0.	3410.	0.	2.30	2	62.
2948.05	2948.05	0.	280.	0.	1.20	15	2949.50
6.05	0.0	0.0	12.18	0.0	3.81	2950.35	2951.30
0.023536	0.054	0.150	0.050	0.120	0.60	-0.00	80.79
	2942.00	270.	270.	270.	32.	29.	147.84
							51.

*SECNO 1.630

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

1.63	3360.	0.	3357.	3.	1.37	5	92.
2968.85	0.0	0.	358.	5.	-0.94	0	2969.50
6.95	0.0	0.0	9.39	0.60	19.77	2970.22	2971.00
0.014354	0.054	0.150	0.055	0.110	0.09	-0.00	122.11
	2967.90	1090.	1090.	1090.	36.	64.	221.88
							59.

*SECNO 1.630

101

*** GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2971.60 ELREA= 2969.80

1.63	3360.	0.	3360.	0.	1.05	2	72.	
2969.56	0.0	0.	408.	0.	-0.31	0	2969.50	
7.66	0.0	0.0	8.24	0.0	0.37	2970.62	2971.00	
0.006524	0.054	0.150	0.045	0.110	0.03	-0.00	121.00	
	2961.90	40.	40.	40.	37.	35.	192.51	59.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHD	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2971.13	2970.79	0.04	68.	3299.	415.	415.	2970.30
ELTRD							
2970.20							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2972.10 ELREA= 2970.20

1.63	3360.	0.	3289.	71.	0.76	3	116.	
2970.38	0.0	0.	467.	62.	-0.30	0	2969.50	
8.48	0.0	0.0	7.05	1.15	0.52	2971.13	2971.00	
0.004104	0.054	0.150	0.045	0.110	0.0	-0.00	121.00	
	2961.90	15.	15.	15.	37.	112.	270.22	59.

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

1.63	3360.	1.	3285.	74.	0.74	0	124.	
2970.44	0.0	3.	470.	64.	-0.02	0	2969.50	
8.54	0.0	0.37	6.98	1.15	0.04	2971.18	2971.00	

101

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0.003991	0.054	0.150	0.045	0.110	0.00	-0.00	114.04	
	2987.90	70.	70.	70.	44.	712.	270.37	59.

CCHV= 0.100 CEHV= 0.800
 *SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1.78	3325.	0.	3325.	0.	2.42	20	55.	
2985.99	2985.99	0.	266.	0.	1.68	12	2988.50	
7.99	0.0	0.0	12.49	0.0	6.16	2988.41	2986.30	
0.028119	0.054	0.150	0.055	0.120	1.35	-0.00	64.27	
	2978.00	735.	735.	735.	25.	30.	119.22	66.

CCHV= 0.100 CEHV= 0.500
 *SECNO 1.790

1.79	3325.	0.	3325.	0.	2.10	2	59.	
2987.57	0.0	0.	286.	0.	-0.32	0	2989.70	
8.37	0.0	0.0	11.63	0.02	1.22	2989.67	2987.50	
0.015441	0.054	0.150	0.045	0.120	0.03	-0.00	63.41	
	2979.20	60.	60.	60.	26.	34.	122.76	67.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0
ELCHD	ELCHD							
2979.20	2979.20							

*SECNO 1.790

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2994.70	2989.67	0.01	7767.	2173.	205.	205.	2985.80
ELTRD							
2986.50							

1.79	3325.	0.	3252.	73.	1.07	3	108.
2989.29	0.0	0.	387.	62.	-1.03	0	2989.70

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K01

0.00 0.054 0.150 0.045 0.110 0.00 -0.00 114.04 2987.90 70. 70. 70. 44. 712. 270.37 59.

K01

10.09	0.0	0.0	8.39	1.18	0.69	2990.36	2987.50	
0.005940	0.054	0.150	0.045	0.120	0.0	-0.00	59.03	
	2979.20	12.	12.	12.	30.	78.	166.69	67.

*SECNO 1.790

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
1.79	3325.	0.	3242.	83.	1.13	2	108.	
2989.35	0.0	0.	376.	65.	0.06	0	2989.70	
9.75	0.0	0.0	8.63	1.27	0.09	2990.48	2987.50	
0.006513	0.054	0.130	0.045	0.120	0.03	-0.00	58.86	
	2979.60	15.	15.	15.	30.	78.	166.82	67.

CCHV= 0.100 CEHV= 0.800

*SECNO 2.020

CATTAIL CREEK		100 YR FLOOD			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.02	3270.	315.	2952.	3.	1.40	15	348.	
3011.97	3011.97	270.	296.	4.	0.27	8	3008.40	
10.07	0.0	1.17	9.69	0.77	9.87	3013.37	3011.00	
0.010270	0.054	0.120	0.055	0.120	0.22	0.0	19.52	
	3001.90	1225.	1225.	1225.	322.	26.	367.78	81.

L01

L01

THIS RUN EXECUTED 02/28/81 11:51:11

HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
ERROR CORR - 01 02 03
MODIFICATION - 50,51,52,53,54

T1	YANCEY CO NC FEMA STUDY	780
T2	100 YR FLOODWAY	785
T3	CATTAIL CREEK 100 YR FLOODWAY	790
J1	ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FQ	
	0. 6. 0. 0. 0.0 0. 0.0 0. 2865.34 0.0	795
J2	NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE	
	15. 0. -1. 0. 0. 0.0 0.0 0. 0. 0.	800

M01

MO1

*PROF 2

CCHV= 0.100 CEHV= 0.500

*SECNO .420

CATTAIL CREEK		100 YR FLOODWAY		02/28/81			
Q	ALOB	QCH	QROB	HV	ITRIAL	TOPWID	
CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
WSELK	VL OB	VCH	VROB	HL	EG	LEFT/RIGHT	
WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	625.0	720.0	TYPE=	1	TARGET=	95.000		
0.42	3645.	0.	3645.	0.	0.75	0	91.	
2865.34	0.0	0.	523.	0.	0.50	0	2865.30	
7.84	2864.35	0.0	6.96	0.0	0.0	2866.09	2866.20	
0.006738	0.0	0.130	0.055	0.130	0.0	-0.00	625.00	
	2857.50	0.	0.	0.	47.	45.	716.42	0.

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	625.0	720.0	TYPE=	1	TARGET=	95.000		
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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA=	2866.20	ELREA=	2866.20
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0.42	3645.	0.	3645.	0.	1.51	2	49.	
2865.60	0.0	0.	370.	0.	0.75	0	2859.20	
8.10	2864.96	0.0	9.85	0.0	0.64	2867.11	2858.90	
0.006042	0.045	0.130	0.045	0.130	0.38	-0.00	640.00	
	2857.50	100.	100.	100.	25.	25.	689.00	1.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	49.00	0.20	400.00	0.0
	ELCHU	ELCHD						
	2857.50	2857.50						

*SECNO .420

3700. BRIDGE STENCL=	625.00	STENCR=	720.00
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GR CARDS REPEATED
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2867.65	2867.13	0.04	0.	3645.	400.	400.	2865.70
	ELTRD						
	2868.30						

3470 ENCROACHMENT STATIONS=	625.0	720.0	TYPE=	1	TARGET=	95.000		
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AD?

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2868.30 ELREA= 2868.30

0.42	3645.	0.	3645.	0.	1.22	3	49.
2866.44	0.0	0.	411.	0.	-0.29	0	2859.20
8.94	2865.46	0.0	8.86	0.0	0.56	2867.66	2858.90
0.004244	0.044	0.130	0.045	0.130	0.0	-0.00	640.00
	2857.50	31.	31.	31.	25.	25.	689.00

*SECNO .420

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 625.0 720.0 TYPE= 1 TARGET= 95.000

0.42	3645.	0.	3644.	1.	0.47	3	95.
2867.34	0.0	0.	659.	2.	-0.74	0	2865.30
8.84	2866.71	0.0	5.53	0.43	0.07	2867.81	2866.20
0.002195	0.044	0.130	0.045	0.130	0.07	-0.00	625.00
	2858.50	25.	25.	25.	47.	48.	720.00

CCHV= 0.100 CEHV= 0.800

*SECNO .630

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK 100 YR FLOODWAY 02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XL	XNCH	XNR	OLSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST
							VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 215.0 270.0 TYPE= 1 TARGET= 55.000

0.63	3595.	0.	3595.	0.	2.97	20	45.
2878.72	2878.72	0.	260.	0.	2.49	11	2880.50
8.22	2878.68	0.0	13.82	0.0	6.37	2881.69	100000.00
0.028328	0.054	0.150	0.055	0.170	1.99	-0.00	221.39
	2870.50	1195.	1195.	1195.	23.	21.	265.92

*SECNO .740

GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 215.0 270.0 TYPE= 1 TARGET= 55.000

0.74	3570.	0.	3570.	0.	2.43	4	46.
2893.58	0.0	0.	285.	0.	-0.54	0	2894.80
8.78	2893.62	0.0	12.51	0.0	14.27	2896.01	100000.00
0.021546	0.054	0.150	0.055	0.170	0.05	-0.00	220.63
	2884.80	580.	580.	580.	24.	22.	266.69

B02

*SECNO .93D

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	75.0	165.0	TYPE=	1	TARGET=	90.000		
0.93	3525.	1.	3524.	0.	1.12	5	80.	
2910.01	0.0	1.	414.	0.	-1.30	0	2908.80	
9.01	2909.99	0.71	8.51	0.0	15.00	2911.14	2911.50	
0.011385	0.054	0.150	0.055	0.100	0.15	-0.00	75.00	
	2901.00	980.	980.	980.	44.	36.	154.95	26.

CCHV= 0.100 CEHV= 0.500
*SECNO .93D

*** GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	75.0	165.0	TYPE=	1	TARGET=	90.000		
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=	2910.70	ELREA=	2910.50					
0.93	3525.	0.	3525.	0.	0.92	2	81.	
2910.55	0.0	0.	457.	0.	-0.20	0	2908.80	
9.55	2910.53	0.0	7.71	0.0	0.31	2911.47	2911.50	
0.005720	0.054	0.150	0.045	0.100	0.02	-0.00	76.00	
	2901.00	40.	40.	40.	43.	38.	157.48	26.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	20.00	2.90	410.00	2.74
	ELCHU	ELCHD						
	2901.00	2901.00						

*SECNO .93D
3700. BRIDGE STENCL= 75.00 STENCR= 165.00

*** GR CARDS REPEATED
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2912.38	2911.63	0.24	111.	3411.	410.	410.	2910.50
ELTRD							
2911.00							

3470 ENCROACHMENT STATIONS=	75.0	165.0	TYPE=	1	TARGET=	90.000		
0.93	3525.	1.	3524.	0.	0.64	2	90.	
2911.62	0.0	3.	548.	0.	-0.28	0	2908.80	
10.62	2911.51	0.47	6.43	0.15	0.80	2912.27	2911.50	
0.003343	0.054	0.150	0.045	0.100	0.0	-0.00	75.00	
	2901.00	12.	12.	12.	44.	46.	165.00	26.

C02

C02

*SECNO .940

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOODWAY			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 2D TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=		75.0	165.0	TYPE=	1	TARGET=	90.000	
0.94	3525.	0.	3525.	0.	2.16	20	71.	
2912.18	2912.18	0.	299.	0.	1.52	19	2912.50	
7.48	2912.18	0.0	11.78	0.0	0.07	2914.34	2915.20	
0.019616	0.054	0.150	0.045	0.100	0.76	-0.00	76.61	
	2904.70	10.	10.	10.	42.	29.	147.71	26.

*SECNO 1.370

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		75.0	150.0	TYPE=	1	TARGET=	75.000	
1.37	3420.	1.	3419.	0.	1.10	5	70.	
2944.01	0.0	1.	406.	0.	-1.05	0	2943.50	
8.01	2944.01	0.52	8.42	0.0	30.67	2945.11	2945.30	
0.009419	0.054	0.150	0.055	0.150	0.11	-0.00	75.00	
	2936.00	2320.	2320.	2320.	38.	32.	144.94	45.

*SECNO 1.420

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOODWAY			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=		75.0	150.0	TYPE=	1	TARGET=	75.000	
1.42	3410.	0.	3410.	0.	2.31	2	62.	
2948.05	2948.05	0.	280.	0.	1.21	15	2949.50	
6.05	2948.05	0.0	12.19	0.0	3.82	2950.35	2951.30	
0.023610	0.054	0.150	0.050	0.120	0.60	-0.00	80.29	
	2942.00	270.	270.	270.	32.	29.	141.84	47.

D02

D02

*SECNO 1.630

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	120.0	200.0	TYPE=	1	TARGET=	80.000		
1.63	3360.	0.	3360.	0.	1.37	5	70.	
2968.86	0.0	0.	358.	0.	-0.94	0	2969.50	
6.96	2968.85	0.0	9.39	0.43	19.78	2970.23	2971.00	
0.014332	0.054	0.150	0.055	0.110	0.09	-0.00	122.10	
	2961.90	1090.	1090.	1090.	36.	42.	200.00	55.

*SECNO 1.630

*** GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	120.0	200.0	TYPE=	1	TARGET=	80.000		
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA=	2971.60	ELREA=	2969.80					
1.63	3360.	0.	3360.	0.	1.05	2	72.	
2969.58	0.0	0.	409.	0.	-0.32	0	2969.50	
7.68	2969.56	0.0	8.22	0.0	0.37	2970.63	2971.00	
0.006472	0.054	0.150	0.045	0.110	0.03	-0.00	121.00	
	2961.90	40.	40.	40.	37.	35.	192.54	56.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	0.40	415.00	0.0
	ELCHU	ELCHD						
	2961.00	2961.00						

*SECNO 1.630

3700. BRIDGE STENCL= 120.00 STENCR= 200.00

*** GR CARDS REPEATED

ERROR ELTRD.LT.MIN ROAD ELEV, ELTRD SET EQUAL TO MIN ROAD ELEV
CATTAIL CREEK 100 YR FLOODWAY 02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISW	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	X.OBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL

CLASS A LOW FLOW

3420 BRIDGE W.S.= 2969.56 BRIDGE VELOCITY= 8.80

CALCULATED CHANNEL AREA= 382.

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2971.21	2970.66	0.04	0.	3215.	415.	415.	2970.30

ELTRD

E02

EO2

2971.11

3470 ENCROACHMENT STATIONS= 120.0 200.0 TYPE= 1 TARGET= 80.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2972.10 ELREA= 2970.20

1.63	3360.	0.	3360.	0.	1.03	0	72.
2969.62	0.0	0.	412.	0.	-0.02	0	2969.50
7.72	2970.38	0.0	8.16	0.0	0.03	2970.66	2971.00
0.006321	0.054	0.150	0.045	0.110	0.0	-0.00	121.00
	2961.90	15.	15.	15.	37.	35.	192.61
							56.

*SECNO 1.630

*** GR CARDS REPEATED

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 120.0 200.0 TYPE= 1 TARGET= 80.000

1.63	3360.	0.	3359.	1.	1.00	2	75.
2969.72	0.0	0.	419.	2.	-0.04	0	2969.50
7.82	2970.44	0.21	8.01	0.57	0.06	2970.72	2971.00
0.005981	0.054	0.150	0.045	0.110	0.00	-0.00	120.00
	2961.90	10.	10.	10.	38.	42.	200.00
							56.

CCHV= 0.100 CEHV= 0.800

*SECNO 1.780

3301 HV CHANGED MORE THAN HVINS

CATTAIL CREEK		100 YR FLOODWAY			02/28/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 55.0 125.0 TYPE= 1 TARGET= 70.000

1.78	3325.	0.	3325.	0.	2.42	20	55.
2985.99	2985.99	0.	266.	0.	1.43	5	2988.50
7.99	2985.99	0.0	12.50	0.0	8.21	2988.41	2986.30
0.028163	0.054	0.150	0.055	0.120	1.14	-0.00	64.28
	2978.00	735.	735.	735.	25.	30.	119.21
							62.

CCHV= 0.100 CEHV= 0.500

*SECNO 1.790

3470 ENCROACHMENT STATIONS= 55.0 125.0 TYPE= 1 TARGET= 70.000

1.79	3325.	0.	3325.	0.	2.10	2	60.
2987.57	0.0	0.	286.	0.	-0.33	0	2989.70

FO2

F02

8.37	2987.57	0.0	11.62	0.17	1.22	2989.67	2987.50	
0.015407	0.054	0.150	0.045	0.120	0.03	-0.00	63.40	
	2979.20	60.	60.	60.	26.	34.	122.91	62.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	31.00	0.01	205.00	0.0
	ELCHU	ELCHD						
	2979.20	2979.20						

*SECNO 1.790
3700. BRIDGE STENCL= 55.00 STENCR= 125.00

*** GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2994.11	2989.67	0.01	956.	2368.	205.	205.	2985.80
ELTRD							
2986.50							

3470 ENCROACHMENT STATIONS= 55.0 125.0 TYPE= 1 TARGET= 70.000

1.79	3325.	0.	3311.	14.	0.92	3	70.	
2989.96	0.0	1.	429.	12.	-1.17	0	2989.70	
10.76	2989.29	0.23	7.72	1.15	1.22	2990.89	2987.50	
0.004491	0.054	0.150	0.045	0.120	0.0	-0.00	55.00	
	2979.20	12.	12.	12.	34.	36.	125.00	62.

*SECNO 1.790

CATTAIL CREEK

100 YR FLOODWAY

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS= 55.0 125.0 TYPE= 1 TARGET= 70.000

1.79	3325.	0.	3310.	15.	0.98	2	70.	
2990.01	0.0	1.	416.	12.	0.06	0	2989.70	
10.41	2989.35	0.31	7.95	1.22	0.07	2990.98	2987.50	
0.004926	0.054	0.130	0.045	0.120	0.03	-0.00	55.00	
	2979.60	15.	15.	15.	34.	36.	125.00	62.

CCHV= 0.100 CERV= 0.800

*SECNO 2.020

3301 HV CHANGED MORE THAN HVINS

GD2

CATTAIL CREEK

100 YR FLOODWAY

02/28/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRISWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

3685 20 TRIALS ATTEMPTED WSEL CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=		320.0	360.0	TYPE=	1	TARGET=	40,000		
2.02	3270.	4.	3266.	0.	3.16	20	39		
3010.16	3010.16	2.	229.	0.	2.18	15	3008.40		
8.26	3011.97	1.69	14.27	0.0	11.95	3013.32	100000.00		
0.028431	0.054	0.120	0.055	0.120	1.74	-0.00	320.39		
	3001.90	1225.	1225.	1225.	21.	18.	359.24	72.	

HD2

THIS RUN EXECUTED 02/28/81 11:51:17

 HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
 ERROR CORR - 01,02,03
 MODIFICATION - 50,51,52,53,54

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER
 INDICATES MESSAGE IN SUMMARY OF ERRORS LIST/

CATTAIL CREEK

SUMMARY PRINTOUT TABLE 110

SECNO	CWSEL	DIFKWS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	QCH	QROB
0.420	2864.35	0.0	2865.44	87.	0.	0.	0.	625.	718.	0.	3645.	0.
0.420	2865.34	0.99	2866.09	91.	95.	625.	720.	625.	718.	0.	3645.	0.
0.420	2864.96	0.0	2866.76	49.	0.	0.	0.	640.	689.	0.	3645.	0.
0.420	2865.60	0.64	2867.11	49.	95.	625.	720.	640.	689.	0.	3645.	0.
0.420	2865.46	0.0	2867.02	49.	0.	0.	0.	640.	689.	0.	3645.	0.
0.420	2866.44	0.98	2867.66	49.	95.	625.	720.	640.	689.	0.	3645.	0.
0.420	2866.71	0.0	2867.23	666.	0.	0.	0.	625.	718.	27.	3524.	94.
0.420	2867.34	0.63	2867.81	95.	95.	625.	720.	625.	718.	0.	3644.	1.
* 0.630	2878.68	0.0	2881.69	44.	0.	0.	0.	219.	270.	0.	3595.	0.
* 0.630	2878.72	0.04	2881.69	45.	55.	215.	270.	219.	270.	0.	3595.	0.
0.740	2893.62	0.0	2896.01	83.	0.	0.	0.	219.	270.	1.	3569.	0.
0.740	2893.58	-0.04	2896.01	46.	55.	215.	270.	219.	270.	0.	3570.	0.
0.930	2909.99	0.0	2911.12	92.	0.	0.	0.	76.	162.	6.	3519.	0.
0.930	2910.01	0.02	2911.14	80.	90.	75.	165.	76.	162.	1.	3524.	0.
0.930	2910.53	0.0	2911.46	81.	0.	0.	0.	76.	162.	0.	3525.	0.
0.930	2910.55	0.02	2911.47	81.	90.	75.	165.	76.	162.	0.	3525.	0.
0.930	2911.51	0.0	2912.16	138.	0.	0.	0.	76.	162.	31.	3492.	1.
0.930	2911.62	0.12	2912.27	90.	90.	75.	165.	76.	162.	1.	3524.	0.
* 0.940	2912.18	0.0	2914.34	71.	0.	0.	0.	76.	162.	0.	3525.	0.
* 0.940	2912.18	0.00	2914.34	71.	90.	75.	165.	76.	162.	0.	3525.	0.
1.370	2944.01	0.0	2945.11	82.	0.	0.	0.	78.	147.	1.	3419.	0.
1.370	2944.01	0.00	2945.11	70.	75.	75.	150.	78.	147.	1.	3419.	0.
* 1.420	2948.05	0.0	2950.35	62.	0.	0.	0.	78.	147.	0.	3410.	0.
* 1.420	2948.05	-0.00	2950.35	62.	75.	75.	150.	78.	147.	0.	3410.	0.
1.630	2968.85	0.0	2970.22	92.	0.	0.	0.	121.	195.	0.	3357.	3.
1.630	2968.86	0.01	2970.23	70.	80.	120.	200.	121.	195.	0.	3360.	0.

SECNO	CWSEL	DIFKWS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	QCH	QROB
1.630	2969.56	0.0	2970.62	72.	0.	0.	0.	121.	195.	0.	3360.	0.
1.630	2969.58	0.01	2970.63	72.	80.	120.	200.	121.	195.	0.	3360.	0.
1.630	2970.38	0.0	2971.13	116.	0.	0.	0.	121.	195.	0.	3289.	71.
1.630	2969.62	-0.76	2970.66	72.	80.	120.	200.	121.	195.	0.	3360.	0.
1.630	2970.44	0.0	2971.18	124.	0.	0.	0.	121.	195.	1.	3285.	74.
1.630	2969.72	-0.71	2970.72	75.	80.	120.	200.	121.	195.	0.	3359.	1.
* 1.780	2985.99	0.0	2988.41	55.	0.	0.	0.	58.	120.	0.	3325.	0.
* 1.780	2985.99	-0.00	2988.41	55.	70.	55.	125.	58.	120.	0.	3325.	0.
1.790	2987.57	0.0	2989.67	59.	0.	0.	0.	58.	120.	0.	3325.	0.
1.790	2987.57	0.00	2989.67	60.	70.	55.	125.	58.	120.	0.	3325.	0.
1.790	2989.29	0.0	2990.36	108.	0.	0.	0.	58.	120.	0.	3252.	73.
1.790	2989.96	0.67	2990.89	70.	70.	55.	125.	58.	120.	0.	3311.	14.
1.790	2989.35	0.0	2990.48	108.	0.	0.	0.	58.	120.	0.	3242.	83.
1.790	2990.01	0.65	2990.98	70.	70.	55.	125.	58.	120.	0.	3310.	15.
* 2.020	3011.97	0.0	3013.37	348.	0.	0.	0.	323.	360.	315.	2952.	3.
* 2.020	3010.16	-1.81	3013.32	39.	40.	320.	360.	323.	360.	4.	3266.	0.

SUMMARY OF ERRORS

CAUTION SECNO= 0.630 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.630 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.630 PROFILE= 1

2D TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.630 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.630 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.630 PROFILE= 2

2D TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.940 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 1

2D TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.940 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.940 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.940 PROFILE= 2

2D TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 1.420 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.420 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

J02

CAUTION SECNO= 1.780 PROFILE= 1
20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 1.780 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1.780 PROFILE= 2
PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1.780 PROFILE= 2
20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2.020 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2.020 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2.020 PROFILE= 2
PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2.020 PROFILE= 2
20 TRIALS ATTEMPTED TO BALANCE WSEL

K02

K02

FLOODWAY DATA 2 CATTAIL CREEK
 PROFILE NO. 2

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
0.420	95.	523.	7.0	2865.3	2864.3	1.0
0.420	95.	370.	9.8	2865.6	2865.0	0.6
0.420	95.	411.	8.9	2866.4	2865.5	0.9
0.420	95.	662.	5.5	2867.3	2866.7	0.6
0.630	55.	260.	13.8	2878.7	2878.7	0.0
0.740	55.	295.	12.5	2893.6	2893.6	0.0
0.930	90.	415.	8.5	2910.0	2910.0	0.0
0.930	90.	457.	7.7	2910.5	2910.5	0.0
0.930	90.	551.	6.4	2911.6	2911.5	0.1
0.940	90.	299.	11.8	2912.2	2912.2	0.0
1.370	75.	407.	8.4	2944.0	2944.0	0.0
1.420	75.	280.	12.2	2948.1	2948.1	0.0
1.630	80.	358.	9.4	2968.9	2968.8	0.1
1.630	80.	409.	8.2	2969.6	2969.6	0.0
1.630	80.	412.	8.2	2970.4	2970.4	0.0
1.630	80.	421.	8.0	2970.4	2970.4	0.0
1.780	70.	266.	12.5	2986.0	2986.0	0.0
1.790	70.	286.	11.6	2987.6	2987.6	0.0
1.790	70.	441.	7.5	2990.0	2989.3	0.7
1.790	70.	429.	7.7	2990.0	2989.4	0.6
2.020	40.	231.	14.1	3012.0	3012.0	0.0

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