

Floodway

R-1  
WSEL = 10-Yr on Redfish River  
Channel for Floodway and etc

11 NORTH WILKESBORO, N.C.  
12 FLOOD INSURANCE STUDY  
13 TRIANGLE DISTRICT

	TCHECK	TRF	SPRY	YDIR	SIRI	METRIC	WDIRS	XSEL	FB	
	-0	-0	-0	-0	-0	-0	-0	863.530	-0	
J2	SPRCE	TPLOY	2WFSR	XSECV	XSECH	FA	ALLOE	IR	CHNH	YTPACE
	1.000	-0	-0	-0	-0	-0	-0	-0	-0	-0
J3	23.000	31.000	50.000	41.000	42.000	43.000	44.000	1.000	2.000	3.000
J4	53.000	54.000	52.000	32.000	1.000	7.000	7.000	2.000	24.000	13.000
J5	14.000	25.000	15.000	56.000	25.000	32.000	32.000	-0	-0	-0
NC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0	-0	-0
NT	5.000	200.000	150.000	400.000	400.000	750.000	750.000	-0	-0	-0
E1	-0	-0	-0	-0	10.000	-0	-0	-0	-0	-0
X1	2.250	20.000	272.000	242.000	-0	-0	-0	-0	-0	-0
GR	1052.000	1052.000	1052.000	1052.000	1040.100	1040.100	25.000	1007.700	40.000	1032.400
GR	1052.000	1052.000	1052.000	1052.000	1025.000	1025.000	122.000	1017.000	150.000	899.200
GR	863.700	228.000	661.200	250.000	972.100	972.100	272.000	975.000	274.000	200.000
GR	572.400	222.000	520.400	292.000	523.500	523.500	300.000	1006.100	350.000	1012.400
X1	4.500	-0	-0	-0	225.000	225.000	225.000	225.000	-0	10.900
X1	7.000	-0	-0	-0	250.000	250.000	250.000	250.000	-0	12.100
X1	9.000	13.000	100.000	200.000	200.000	200.000	200.000	200.000	-0	-0
GR	1072.400	1072.400	1072.400	1072.400	1030.400	1030.400	100.000	1020.800	130.000	1002.700
GR	1002.700	139.000	1013.400	150.000	1012.100	1012.100	122.000	1020.600	200.000	252.000
GR	1051.100	300.000	1066.300	350.000	1072.400	1072.400	400.000	-0	-0	-0
X1	11.500	-0	-0	-0	250.000	250.000	250.000	250.000	-0	11.900
X1	14.000	19.000	200.000	271.000	271.000	271.000	250.000	250.000	-0	-0
GR	1093.300	1064.200	1064.200	50.000	1071.900	1071.900	100.000	1055.600	150.000	1052.700
GR	1036.400	209.000	1034.500	239.000	1037.700	1037.700	241.000	1037.600	242.000	200.000
GR	1033.700	247.000	1034.300	250.000	1041.100	1041.100	271.000	1041.300	280.000	242.000
GR	1022.100	300.000	1062.000	350.000	1072.200	1072.200	300.000	1072.800	400.000	295.000
X1	16.000	-0	-0	-0	200.000	200.000	200.000	200.000	-0	5.000
X1	12.000	-0	-0	-0	200.000	200.000	200.000	200.000	-0	5.000
X1	20.000	-0	-0	-0	200.000	200.000	200.000	200.000	-0	5.000
X1	22.000	-0	-0	-0	200.000	200.000	200.000	200.000	-0	5.000

22,000	-0	-0	200,000	200,000	-0	5,000	-0
5,000	50,000	170,000	230,000	350,000	-0	-0	-0
25,000	16,000	150,000	215,000	300,000	-0	-0	-0
1107,200	0	1096,600	50,000	100,000	1069,200	1063,600	172,000
1085,300	173,000	1050,100	175,000	179,000	1053,700	1060,900	200,000
1085,100	215,000	1082,300	210,000	250,000	1094,800	1114,000	350,000
1128,700	500,000	-0	-0	-0	-0	-0	-0

27,000	-0	-0	200,000	200,000	-0	6,900	-0
20,000	-0	-0	200,000	200,000	-0	6,900	-0

31,000	-0	-0	200,000	200,000	-0	6,900	-0
5,000	70,000	150,000	200,000	200,000	-0	6,900	-0
33,000	12,000	144,000	170,000	200,000	200,000	-0	-0
1120,500	0	1104,500	50,000	100,000	1089,500	1097,700	150,000
1087,900	141,000	1093,300	170,000	200,000	1116,300	1123,100	293,000
1123,500	300,000	1121,700	350,000	-0	-0	-0	-0
-0	-0	-0	-0	-0	-0	-0	-0

SUMMARY PRINTOUT

TRIBUTARY 4-1 - NATURAL -

SECD	FEENCL	EUTPC	ELCC	ELMTV	G	CASPL	CRIPS	EG	TOR-ID	SRTA	ENDRT	SECD
2.25	0	0	0	975.00	490.00	983.53	0	983.62	70.57	229.50	300.07	2.25
2.25	100000.00	0	0	975.90	490.00	984.53	0	984.60	30.62	253.27	287.89	2.25
A 4.50	0	0	0	986.80	490.00	991.66	991.86	992.76	41.69	242.59	294.27	4.50
4.50	100000.00	0	0	986.60	490.00	992.08	992.08	994.25	9.85	272.15	282.00	4.50
7.00	0	0	0	995.50	490.00	1004.25	0	1004.89	45.36	249.54	294.92	7.00
7.00	100000.00	0	0	995.50	490.00	1006.62	0	1007.42	12.64	269.36	282.00	7.00
B 9.00	0	0	0	1008.70	490.00	1013.06	0	1013.49	48.13	125.37	184.03	9.00
9.00	100000.00	0	0	1008.70	490.00	1013.24	0	1013.62	53.14	125.06	184.49	9.00
11.50	0	0	0	1020.50	490.00	1024.84	0	1025.35	46.61	125.06	183.69	11.50
11.50	100000.00	0	0	1020.50	490.00	1024.67	0	1025.24	41.50	125.78	183.42	11.50
C 14.00	0	0	0	1032.60	490.00	1037.01	0	1037.43	51.73	206.63	258.36	14.00
14.00	100000.00	0	0	1032.60	490.00	1037.12	0	1037.50	52.54	206.18	258.71	14.00
16.00	0	0	0	1037.60	490.00	1042.59	0	1042.90	56.51	203.96	260.24	16.00
16.00	100000.00	0	0	1037.60	490.00	1042.62	0	1042.85	56.03	204.22	260.25	16.00
18.00	0	0	0	1042.60	490.00	1047.26	0	1047.59	53.50	205.64	259.14	18.00
18.00	100000.00	0	0	1042.50	490.00	1047.30	0	1047.61	53.84	205.45	259.29	18.00
20.00	0	0	0	1047.60	490.00	1052.54	0	1052.79	55.45	204.58	258.08	20.00
20.00	100000.00	0	0	1047.60	490.00	1052.50	0	1052.76	55.23	204.67	259.90	20.00
22.00	0	0	0	1052.60	490.00	1057.34	0	1057.65	54.20	205.25	259.45	22.00
22.00	100000.00	0	0	1052.50	490.00	1057.37	0	1057.66	54.35	205.16	259.51	22.00
D 25.00	0	0	0	1060.10	230.00	1065.24	0	1065.43	49.85	165.38	215.23	25.00
25.00	100000.00	0	0	1060.10	230.00	1065.27	0	1065.42	49.54	165.46	215.00	25.00
27.00	0	0	0	1067.00	230.00	1071.42	0	1071.81	24.68	168.37	193.05	27.00
27.00	100000.00	0	0	1067.00	230.00	1071.47	0	1071.33	25.08	168.20	193.24	27.00
29.00	0	0	0	1073.90	230.00	1078.97	0	1079.18	49.24	165.84	215.08	29.00
29.00	100000.00	0	0	1073.90	230.00	1078.95	0	1079.13	49.10	165.90	215.00	29.00
31.00	0	0	0	1080.80	230.00	1085.43	0	1085.74	27.33	167.56	194.89	31.00
31.00	100000.00	0	0	1080.80	230.00	1085.49	0	1085.78	29.42	167.32	196.74	31.00
33.00	0	0	0	1087.70	200.00	1090.74	0	1090.97	27.35	138.39	165.74	33.00
33.00	100000.00	0	0	1087.70	200.00	1090.84	0	1091.11	19.93	146.00	165.93	33.00

SUMMARY PRINTOUT

TRIBUTORY RAY NATURAL

SECD	CVSEL	VGL	DEPTH	VCH	QLOS	VLOS	QCH	VCH	QGR	YGR	AREA	SECD
2.25	425.53	0	7.63	2.84	193.74	1.91	175.20	2.80	120.97	2.18	213.69	2.25
2.25	950.53	0	8.67	3.00	208.72	2.34	215.34	3.00	62.91	1.96	192.12	2.25
4.50	991.56	.74	5.04	8.64	72.60	3.82	334.00	8.64	83.22	5.04	74.04	4.50
4.50	992.04	.60	5.22	12.01	7.00	4.34	352.54	12.01	0	0	41.86	4.50
7.00	1064.25	1.22	5.35	7.47	59.21	3.52	307.42	7.47	93.38	4.65	86.53	7.00
7.00	1066.62	.96	7.92	6.40	72.87	4.20	417.12	6.40	0	0	40.90	7.00
9.00	1013.06	1.63	4.34	5.30	0	0	490.00	5.30	0	0	92.42	9.00
9.00	1013.24	1.54	3.54	6.72	0	0	490.00	6.72	0	0	103.04	9.00
11.50	1024.82	2.15	4.24	5.40	0	0	490.00	5.40	0	0	89.29	11.50
11.50	1024.07	1.90	4.07	6.17	0	0	490.00	6.17	0	0	79.48	11.50
14.00	1037.01	2.67	4.41	5.22	0	0	490.00	5.22	0	0	93.95	14.00
14.00	1037.12	2.22	4.52	4.90	0	0	490.00	4.90	0	0	99.94	14.00
16.00	1022.84	3.16	5.04	3.70	0	0	490.00	3.70	0	0	130.85	16.00
16.00	1042.62	2.00	5.02	3.84	0	0	490.00	3.84	0	0	127.03	16.00
18.00	1047.26	3.74	4.64	4.57	0	0	490.00	4.57	0	0	107.21	18.00
18.00	1007.30	3.44	4.70	4.04	0	0	490.00	4.04	0	0	109.35	18.00
20.00	1052.30	4.26	4.92	4.00	0	0	490.00	4.00	0	0	122.97	20.00
20.00	1052.50	4.01	4.90	4.04	0	0	490.00	4.04	0	0	120.70	20.00
22.00	1057.36	4.60	4.74	4.35	0	0	490.00	4.35	0	0	112.63	22.00
22.00	1057.37	4.55	4.77	4.31	0	0	490.00	4.31	0	0	113.74	22.00
25.00	1055.28	5.45	5.14	3.11	0	0	230.00	3.11	.00	.02	75.00	25.00
25.00	1055.27	5.20	5.17	3.15	0	0	230.00	3.15	0	0	72.97	25.00
27.00	1071.42	5.72	4.02	4.94	0	0	230.00	4.94	0	0	46.23	27.00
27.00	1071.07	5.27	4.07	4.84	0	0	230.00	4.84	0	0	47.20	27.00
29.00	1078.47	5.91	5.07	3.37	0	0	230.00	3.37	.00	.03	65.19	29.00
29.00	1076.95	5.73	5.05	3.41	0	0	230.00	3.41	0	0	67.44	29.00
31.00	1085.43	6.26	4.63	4.44	0	0	230.00	4.44	0	0	51.52	31.00
31.00	1085.04	6.01	4.64	4.32	0	0	230.00	4.32	0	0	53.27	31.00
33.00	1090.70	6.50	3.00	3.94	9.80	1.80	190.11	3.94	0	0	53.54	33.00
33.00	1090.66	6.25	3.14	3.97	0	0	200.00	3.97	0	0	50.81	33.00

POSSIBLE ERROR SECD# 4.50 PROFILE# 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECD# 7.00 PROFILE# 1 20 TRIALS REQUIRED TO BALANCE NSEL

POSSIBLE ERROR SECD# 9.00 PROFILE# 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECD# 11.50 PROFILE# 2 20 TRIALS REQUIRED TO BALANCE NSEL

POSSIBLE ERROR SECD# 14.00 PROFILE# 2 20 TRIALS REQUIRED TO BALANCE NSEL

POSSIBLE ERROR SECD# 16.00 PROFILE# 2 20 TRIALS REQUIRED TO BALANCE NSEL







UNITED STATES  
 DEPARTMENT OF THE ARMY

SECNO	FLIACCL	ELTCD	ELCC	EIMIN	Q	CASFL	CPIMS	SG	TOPATO	SATA	EMDRT	SECNO
2.25	0	0	0	975.90	490.00	988.77	0	988.78	92.82	218.80	311.56	2.25
2.25	100000.00	0	0	975.90	490.00	988.77	0	988.78	41.48	232.70	298.27	2.25
4.50	0	0	0	986.50	490.00	991.87	991.87	992.74	41.71	252.57	294.28	4.50
4.50	100000.00	0	0	986.50	490.00	992.05	992.05	994.25	9.64	272.14	282.00	4.50
7.00	0	0	0	988.90	490.00	1004.25	0	1004.80	45.35	299.57	294.92	7.00
7.00	100000.00	0	0	988.90	490.00	1006.82	0	1007.42	12.62	249.38	282.00	7.00
9.00	0	0	0	1008.70	490.00	1013.04	0	1013.60	48.17	125.37	184.01	9.00
9.00	100000.00	0	0	1008.70	490.00	1013.23	0	1013.63	53.10	125.05	182.50	9.00
11.50	0	0	0	1020.60	490.00	1024.68	0	1025.35	49.58	125.04	183.90	11.50
11.50	100000.00	0	0	1020.60	490.00	1024.67	0	1025.26	41.40	125.78	183.41	11.50
14.00	0	0	0	1032.60	490.00	1037.01	0	1037.43	51.74	206.62	258.34	14.00
14.00	100000.00	0	0	1032.60	490.00	1037.12	0	1037.50	52.55	206.17	258.75	14.00
16.00	0	0	0	1037.60	490.00	1042.60	0	1042.90	56.50	203.96	240.44	16.00
16.00	100000.00	0	0	1037.60	490.00	1042.62	0	1042.85	56.03	200.23	260.25	16.00
18.00	0	0	0	1042.60	490.00	1047.24	0	1047.50	53.50	205.60	259.10	18.00
18.00	100000.00	0	0	1042.60	490.00	1047.30	0	1047.61	53.80	205.45	259.20	18.00
20.00	0	0	0	1047.60	490.00	1052.50	0	1052.70	55.44	204.55	260.00	20.00
20.00	100000.00	0	0	1047.60	490.00	1052.50	0	1052.76	55.23	200.67	259.90	20.00
22.00	0	0	0	1052.60	490.00	1057.34	0	1057.65	50.20	205.25	259.45	22.00
22.00	100000.00	0	0	1052.60	490.00	1057.37	0	1057.64	50.35	205.16	259.51	22.00
25.00	0	0	0	1060.10	230.00	1065.28	0	1065.43	49.85	145.34	215.24	25.00
25.00	100000.00	0	0	1060.10	230.00	1065.27	0	1065.42	49.50	145.64	215.00	25.00
27.00	0	0	0	1067.00	230.00	1071.42	0	1071.81	24.68	183.37	193.04	27.00
27.00	100000.00	0	0	1067.00	230.00	1071.47	0	1071.83	25.02	186.20	193.20	27.00
29.00	0	0	0	1073.90	230.00	1078.97	0	1079.10	49.24	145.64	215.04	29.00
29.00	100000.00	0	0	1073.90	230.00	1078.95	0	1079.13	49.10	145.90	215.00	29.00
31.00	0	0	0	1080.80	230.00	1085.43	0	1085.74	27.30	147.56	194.90	31.00
31.00	100000.00	0	0	1080.80	230.00	1085.40	0	1085.78	29.43	147.32	196.75	31.00
33.00	0	0	0	1087.70	200.00	1090.70	0	1090.97	27.36	146.38	145.70	33.00
33.00	100000.00	0	0	1087.70	200.00	1090.84	0	1091.11	19.93	146.00	145.93	33.00

QUALITY CONTROL

INTERVAL 1000

SECD	C-SEI	VCI	DEPTH	VCH	QIDR	VLOP	RCH	VCH	QPOA	VPOA	AREA	SECD
2.25	950.77	0	12.67	85	269.02	70	92.77	85	131.21	73	649.74	2.25
2.25	424.77	0	13.87	90	277.27	70	105.72	90	107.01	84	594.20	2.25
4.50	931.27	1.87	5.07	5.45	72.77	3.82	333.95	6.45	43.24	5.05	74.14	4.50
4.50	902.05	1.64	5.24	12.00	7.63	4.42	482.37	12.00	0	0	41.93	4.50
7.00	1000.25	2.33	5.36	7.48	29.11	3.52	307.56	7.48	93.34	4.64	86.47	7.00
7.00	1004.82	2.00	7.92	6.40	72.43	4.30	417.57	6.40	0	0	80.82	7.00
9.00	1013.05	2.74	4.34	5.30	0	0	490.00	5.30	0	0	92.50	9.00
9.00	1013.28	2.43	4.32	4.73	0	0	490.00	4.73	0	0	103.50	9.00
11.50	1020.88	3.24	4.26	5.00	0	0	490.00	5.00	0	0	89.21	11.50
11.50	1024.67	2.90	4.07	6.17	0	0	490.00	6.17	0	0	79.37	11.50
14.00	1037.01	3.70	4.41	5.21	0	0	490.00	5.21	0	0	93.90	14.00
14.00	1037.12	3.64	4.52	4.90	0	0	490.00	4.90	0	0	100.01	14.00
16.00	1042.89	4.30	5.00	3.75	0	0	490.00	3.75	0	0	130.82	16.00
16.00	1042.62	3.98	5.02	3.84	0	0	490.00	3.84	0	0	126.90	16.00
18.00	1047.24	4.65	4.64	4.87	0	0	490.00	4.87	0	0	107.23	18.00
18.00	1047.30	4.52	4.70	4.44	0	0	490.00	4.44	0	0	109.87	18.00
20.00	1052.54	5.34	4.94	4.00	0	0	490.00	4.00	0	0	122.42	20.00
20.00	1052.50	5.02	4.90	4.14	0	0	490.00	4.14	0	0	120.68	20.00
22.00	1057.34	5.92	4.74	4.37	0	0	490.00	4.37	0	0	112.60	22.00
22.00	1057.37	5.50	4.77	4.31	0	0	490.00	4.31	0	0	113.77	22.00
25.00	1045.24	6.54	5.14	3.11	0	0	230.00	3.11	0.00	0.02	73.90	25.00
25.00	1045.27	6.23	5.17	3.15	0	0	230.00	3.15	0	0	72.94	25.00
27.00	1071.42	6.60	4.42	4.97	0	0	230.00	4.97	0	0	46.23	27.00
27.00	1071.47	6.51	4.47	4.44	0	0	230.00	4.44	0	0	47.30	27.00
29.00	1074.97	7.10	5.07	3.37	0	0	230.00	3.37	0.00	0.01	49.19	29.00
29.00	1074.95	6.77	5.05	3.41	0	0	230.00	3.41	0	0	67.43	29.00
31.00	1085.43	7.37	4.63	4.44	0	0	230.00	4.44	0	0	51.53	31.00
31.00	1085.40	7.05	4.60	4.32	0	0	230.00	4.32	0	0	53.24	31.00
33.00	1000.70	7.62	3.04	3.94	9.69	1.80	190.11	3.94	0	0	53.50	33.00
33.00	1000.64	7.20	3.14	3.97	0	0	200.00	3.97	0	0	50.41	33.00

STBLE EPRAR 1 SECD= 4.50 PROFILES 1 CRITICAL DEPTH ASSUMED

STBLE EPRAR 2 SECD= 4.50 PROFILES 1 20 TRIALS REQUIRED TO BALANCE INSEL

STBLE EPRAR 3 SECD= 4.50 PROFILES 2 CRITICAL DEPTH ASSUMED

STBLE EPRAR 4 SECD= 4.50 PROFILES 2 20 TRIALS REQUIRED TO BALANCE INSEL



Check against Yarkin 4/5/56 profile 1004 = 265.00  
 Fluct. = 966.00

SUMMARY PARTITION  
 TRIBUTARY Y-1 NATURAL

SENO	FLERCL	ELTPO	ELLC	ELMIN	0	COSFL	CRINS	EG	YOPPTO	SSIA	EMDST	SECO
0	100000.00	0	0	902.00	740.00	902.75	0	949.02	106.11	393.33	501.40	5
0	100000.00	0	0	902.00	740.00	902.75	0	950.24	12.1A	447.82	500.00	5
*	3.25	0	947.00	952.00	740.00	942.72	0	942.75	119.30	359.72	509.11	3.25
*	3.25	100000.00	947.00	952.00	740.00	942.72	0	943.75	45.82	413.1A	500.00	3.25
8.00	100000.00	0	0	949.50	740.00	942.72	0	942.70	229.91	197.25	427.16	8.00
8.00	100000.00	0	0	949.50	740.00	943.79	0	943.80	170.64	209.33	345.97	8.00

SUMMARY PRINTOUT

TRIBUTARY Y-1 WATERJ1

SECHO	CASEL	VCL	DEPTH	VCH	WLOF	VLOF	REN	VCH	QDPF	VROF	AREA	SFCNO
0	943.75	0	5.75	5.1A	371.03	2.89	365.40	5.1A	.57	1.06	204.09	0
0	943.75	0	7.75	5.11	179.89	4.1A	540.07	6.11	0	0	136.07	0
	26.7											
3.25	943.73	3.45	10.73	1.33	542.17	1.00	205.86	1.33	12.37	.57	720.92	3.25
3.25	943.73	2.03	11.73	1.2A	536.82	1.20	293.5A	1.2A	0	0	621.70	3.25
6.00	943.70	10.55	13.20	.57	527.8A	.4A	45.70	.57	46.32	.30	1632.03	6.00
6.00	943.70	16.02	14.20	.60	542.00	.50	85.60	.60	19.07	.29	1429.51	6.00









SUMMARY PRINTOUT FOR MULTIPLE PROFILES

REDDIES RIVER 100-YR 2

SECTION NUMBER	CHANNEL LENGTH	MIN. EL. OF ROADWAY	MAX. EL. OF LOW CHORD	MIN. EL. OF DISCHARGE (CFS)	CASEL	TD	DEPTH	TOPWID	STENCL	STENCH	VCH
15.40	0.	0.	0.	647.70	23600.00	959.77	1459.41	17.07	96.21	0.	19.09
15.40	0.	0.	0.	647.70	23600.00	960.77	1517.91	18.07	99.36	1500.00	17.70
20.40	500.00	0.	0.	643.70	23600.00	969.14	3219.24	25.44	144.15	0.	10.56
20.40	500.00	0.	0.	643.70	23600.00	969.10	3100.64	25.40	114.72	1500.00	11.12
25.40	500.00	0.	0.	640.70	23600.00	971.68	3729.86	27.16	145.55	0.	9.69
25.40	500.00	0.	0.	640.70	23600.00	972.03	3565.06	27.33	117.47	1500.00	10.07
30.40	500.00	0.	0.	646.70	23600.00	973.92	3701.45	27.22	126.01	0.	9.67
30.40	500.00	0.	0.	646.70	23600.00	974.26	3672.91	27.56	117.80	1500.00	9.95
31.40	100.00	0.	0.	647.20	23600.00	974.31	3710.65	27.11	144.78	0.	9.93
31.40	100.00	0.	0.	647.20	23600.00	974.68	3604.52	27.09	117.70	1500.00	9.99
31.90	50.00	0.	0.	647.20	23600.00	974.57	3745.91	27.37	187.80	0.	9.79
31.90	50.00	0.	0.	647.20	23600.00	974.94	3649.69	27.74	118.07	1500.00	9.28
32.65	95.00	0.	0.	647.20	23600.00	974.63	4940.15	27.43	93.00	0.	10.65
32.65	95.00	0.	0.	647.20	23600.00	975.11	4975.55	27.91	93.00	1482.00	10.50
33.00	15.00	0.	0.	647.20	23600.00	975.79	7674.74	28.59	361.60	0.	7.46
33.00	15.00	0.	0.	647.20	23600.00	976.02	7286.41	28.82	161.54	1449.65	8.14
33.50	50.00	0.	0.	646.70	23600.00	975.90	8075.38	29.20	392.62	0.	7.41
33.50	50.00	0.	0.	646.70	23600.00	976.13	7853.08	29.43	154.80	1407.79	7.86
33.75	25.00	974.10	973.60	646.70	23600.00	975.80	5506.51	29.20	93.00	0.	9.92
33.75	25.00	974.10	973.60	646.70	23600.00	976.27	6145.41	31.57	93.00	1482.00	9.06
34.25	50.00	0.	0.	646.40	23600.00	976.30	6348.85	29.90	291.65	0.	9.22
34.25	50.00	0.	0.	646.40	23600.00	976.37	6340.11	31.07	98.30	1503.70	9.66
37.00	100.00	0.	0.	645.90	23600.00	976.95	6926.46	31.05	378.05	0.	6.64
37.00	100.00	0.	0.	645.90	23600.00	979.12	6875.88	33.22	121.76	1678.20	8.26
40.00	100.00	0.	0.	645.15	23600.00	977.46	7770.78	32.31	531.46	0.	8.00
40.00	100.00	0.	0.	645.15	23600.00	979.67	7714.60	34.52	158.67	1403.33	7.52
42.00	200.00	0.	0.	640.65	23600.00	977.75	8342.67	33.10	645.06	0.	7.59
42.00	200.00	0.	0.	640.65	23600.00	979.95	8212.37	35.30	179.03	1426.97	7.15
43.25	125.00	0.	0.	640.35	23600.00	977.92	6710.01	33.57	648.50	0.	7.34
43.25	125.00	0.	0.	640.35	23600.00	980.10	6492.64	35.75	192.46	1407.54	6.90
44.25	100.00	0.	0.	640.15	23600.00	976.03	8974.03	33.88	734.91	0.	7.18
44.25	100.00	0.	0.	640.15	23600.00	980.21	8692.35	36.06	204.69	1395.31	6.83
44.75	50.00	0.	0.	640.15	23600.00	978.07	9005.03	33.92	739.09	0.	7.16
44.75	50.00	0.	0.	640.15	23600.00	980.25	8730.17	36.10	206.92	1393.08	6.81
46.25	150.00	0.	0.	640.00	23600.00	978.45	13374.46	34.05	230.85	0.	5.15
46.25	150.00	0.	0.	640.00	23600.00	980.58	12277.27	36.14	163.58	1444.41	5.16

SECTION NUMBER	CHANNEL LENGTH	MIN FL OF ROADWAY	MAX EL OF LOG CLEARED GROUND	DISCHARGE (CFS)	CASEL	TOP MID	DEPTH	TOP MID	STEMCL	STEMCL	VCM
46.35	10.00	0.	975.40	23600.00	985.25	2049.45	9.85	308.92	0.	0.	15.59
46.35	10.00	0.	975.40	23600.00	985.11	1731.10	9.71	136.00	976.00	614.60	17.77
46.45	10.00	0.	975.40	23600.00	986.34	2580.40	10.94	324.42	0.	0.	13.51
46.45	10.00	0.	975.40	23800.00	986.32	2393.83	11.42	144.17	472.03	616.20	14.89
46.60	15.00	0.	976.50	23600.00	988.83	18410.76	39.33	204.63	0.	0.	3.39
46.60	15.00	0.	976.50	23600.00	990.41	19547.74	40.91	220.96	152.53	373.49	3.76
46.85	25.00	0.	950.00	23600.00	988.83	17910.12	38.83	290.78	0.	0.	3.96
46.85	25.00	0.	950.00	23600.00	990.41	19139.75	40.41	219.01	153.53	372.54	3.82
47.00	100.00	0.	952.70	23600.00	988.81	15339.12	36.11	270.06	0.	0.	4.38
47.00	100.00	0.	952.70	23600.00	990.39	16480.61	37.69	207.82	158.81	368.63	4.21
50.00	300.00	0.	953.10	23600.00	988.88	15033.55	35.78	267.48	0.	0.	4.43
50.00	300.00	0.	953.10	23600.00	990.45	16161.05	37.35	205.76	159.67	369.43	4.26
55.00	500.00	0.	953.50	23600.00	989.00	14517.92	35.20	243.06	0.	0.	4.53
55.00	500.00	0.	953.50	23600.00	990.58	14599.81	36.76	202.45	160.00	362.46	4.34
60.00	500.00	0.	970.00	23600.00	987.67	4850.13	18.67	261.07	0.	0.	9.31
60.00	500.00	0.	970.00	23600.00	990.26	5177.93	20.76	178.63	145.37	324.00	8.82
70.00	1000.00	0.	971.50	23600.00	990.99	5315.67	19.49	265.21	0.	0.	6.76
70.00	1000.00	0.	971.50	23600.00	992.32	5508.30	20.82	185.02	138.93	324.00	8.94
80.00	1000.00	0.	973.20	23600.00	992.91	5130.88	19.71	231.68	0.	0.	9.12
80.00	1000.00	0.	973.20	23600.00	994.13	5200.06	20.93	147.04	124.00	271.04	8.92
90.82	1052.00	0.	973.20	23600.00	995.08	6341.99	21.88	254.01	0.	0.	7.97
90.82	1052.00	0.	973.20	23600.00	995.18	6807.88	22.98	176.65	121.14	297.99	7.69
100.00	912.00	0.	971.00	23600.00	996.45	5965.34	25.45	329.79	0.	0.	9.00
100.00	912.00	0.	971.00	23600.00	997.52	5814.35	26.52	209.35	715.65	925.00	6.36
110.00	1000.00	0.	974.50	23600.00	995.11	4915.74	23.61	301.50	0.	0.	10.30
110.00	1000.00	0.	974.50	23600.00	999.24	4633.41	24.76	173.25	751.74	925.00	9.88
116.00	600.00	0.	977.00	23600.00	999.37	5305.36	22.37	210.68	0.	0.	9.66
116.00	600.00	0.	977.00	23600.00	1000.55	5163.27	23.55	158.43	143.00	301.43	9.33
116.50	50.00	0.	976.50	23600.00	990.50	4601.78	23.00	174.15	0.	0.	8.90
116.50	50.00	0.	976.50	23600.00	1000.84	5206.06	24.34	178.88	100.00	310.00	8.17
117.00	50.00	0.	974.50	23600.00	993.65	4670.58	23.15	174.70	0.	0.	8.41
117.00	50.00	0.	976.50	23600.00	1000.94	5277.34	24.09	179.42	100.00	310.00	8.09
117.50	0.	0.	977.00	23600.00	999.59	4425.31	22.59	172.71	0.	0.	9.14
117.50	0.	0.	977.00	23600.00	1000.84	5025.14	23.84	177.49	100.00	310.00	8.37
SECTION NUMBER	DISCHARGE CFS	CASEL	CASEL DIFF EACH S	CASEL DIFF EACH SECTION	CASEL	TOP MID	T.M. DIFF	LENGTH			
15.400	23800.000	989.770	0.	0.	96.211	0.	0.	0.			
15.400	23500.000	980.770	1.000	0.	99.364	0.	-3.153	0.			
20.000	23400.000	0.	0.	0.	0.	0.	0.	0.			

117.50	23400.00	959.770	0.	0.	0.	96.211	0.	0.
117.51	23400.00	960.770	1.000	0.	0.	99.360	-3.153	0.
20.400	23400.000	969.140	0.	9.370	0.	164.108	0.	500.000
20.400	23400.000	969.100	-0.041	8.330	0.	119.725	49.423	500.000
25.400	23800.000	971.892	0.	2.782	0.	145.587	0.	500.000
25.400	23800.000	972.029	0.137	2.929	0.	117.471	66.076	500.000
30.400	23600.000	973.919	0.	2.037	0.	156.006	0.	500.000
30.400	23600.000	974.241	0.322	2.232	0.	117.802	68.204	500.000
31.400	23600.000	974.314	0.	0.395	0.	184.783	0.	100.000
31.400	23400.000	974.687	0.373	0.426	0.	117.897	67.085	100.000
31.900	23600.000	974.565	0.	0.251	0.	187.799	0.	50.000
31.900	23600.000	974.984	0.419	0.257	0.	118.048	69.730	50.000
32.250	23400.000	974.573	0.	0.046	0.	93.000	0.	95.000
32.250	23800.000	975.105	0.472	0.161	0.	93.000	0.	95.000
33.000	23600.000	975.790	0.	1.157	0.	361.803	0.	15.000
33.000	23600.000	976.023	0.233	0.918	0.	161.538	200.265	15.000
33.500	23600.000	975.898	0.	0.108	0.	392.620	0.	50.000
33.500	23600.000	976.131	0.233	0.108	0.	164.800	227.819	50.000
33.750	23800.000	975.898	0.	0.000	0.	93.000	0.	25.000
33.750	23800.000	978.265	2.367	2.135	0.	93.000	0.	25.000
34.250	23600.000	976.305	0.	0.407	0.	291.006	0.	50.000
34.250	23600.000	978.347	2.042	0.102	0.	98.245	195.351	50.000
37.000	23600.000	976.951	0.	0.646	0.	378.054	0.	360.000
37.000	23600.000	979.123	2.172	0.756	0.	121.762	256.292	360.000
40.000	23600.000	977.456	0.	0.508	0.	531.457	0.	300.000
40.000	23600.000	979.670	2.214	0.547	0.	156.666	374.791	300.000
42.000	23600.000	977.751	0.	0.293	0.	645.043	0.	200.000
42.000	23600.000	979.950	2.199	0.250	0.	179.032	466.031	200.000
43.250	23600.000	977.915	0.	0.164	0.	698.499	0.	125.000
43.250	23600.000	980.100	2.184	0.150	0.	192.461	506.036	125.000
44.250	23600.000	978.032	0.	0.116	0.	734.915	0.	100.000
44.250	23600.000	980.209	2.177	0.110	0.	204.857	530.227	100.000
46.750	23600.000	978.072	0.	0.000	0.	739.089	0.	50.000
46.750	23600.000	980.253	2.181	0.083	0.	206.919	532.170	50.000
46.250	23800.000	978.451	0.	0.379	0.	240.850	0.	150.000
46.250	23800.000	980.483	2.032	0.379	0.	240.850	0.	150.000

SECTION NUMBER	DISCREPANCY CFS	CASEL	CASEL DIFF EACH	CASEL DIFF EACH SECTION	CASEL-SELK	TOP-ID	% DIFF	LENGTH
15.400	23400.000	959.770	0.	0.	0.	96.211	0.	0.
15.400	23400.000	960.770	1.000	0.	0.	99.360	-3.153	0.
20.400	23400.000	969.140	0.	9.370	0.	164.108	0.	500.000
20.400	23400.000	969.100	-0.041	8.330	0.	119.725	49.423	500.000
25.400	23800.000	971.892	0.	2.782	0.	145.587	0.	500.000
25.400	23800.000	972.029	0.137	2.929	0.	117.471	66.076	500.000
30.400	23600.000	973.919	0.	2.037	0.	156.006	0.	500.000
30.400	23600.000	974.241	0.322	2.232	0.	117.802	68.204	500.000
31.400	23600.000	974.314	0.	0.395	0.	184.783	0.	100.000
31.400	23400.000	974.687	0.373	0.426	0.	117.897	67.085	100.000
31.900	23600.000	974.565	0.	0.251	0.	187.799	0.	50.000
31.900	23600.000	974.984	0.419	0.257	0.	118.048	69.730	50.000
32.250	23400.000	974.573	0.	0.046	0.	93.000	0.	95.000
32.250	23800.000	975.105	0.472	0.161	0.	93.000	0.	95.000
33.000	23600.000	975.790	0.	1.157	0.	361.803	0.	15.000
33.000	23600.000	976.023	0.233	0.918	0.	161.538	200.265	15.000
33.500	23600.000	975.898	0.	0.108	0.	392.620	0.	50.000
33.500	23600.000	976.131	0.233	0.108	0.	164.800	227.819	50.000
33.750	23800.000	975.898	0.	0.000	0.	93.000	0.	25.000
33.750	23800.000	978.265	2.367	2.135	0.	93.000	0.	25.000
34.250	23600.000	976.305	0.	0.407	0.	291.006	0.	50.000
34.250	23600.000	978.347	2.042	0.102	0.	98.245	195.351	50.000
37.000	23600.000	976.951	0.	0.646	0.	378.054	0.	360.000
37.000	23600.000	979.123	2.172	0.756	0.	121.762	256.292	360.000
40.000	23600.000	977.456	0.	0.508	0.	531.457	0.	300.000
40.000	23600.000	979.670	2.214	0.547	0.	156.666	374.791	300.000
42.000	23600.000	977.751	0.	0.293	0.	645.043	0.	200.000
42.000	23600.000	979.950	2.199	0.250	0.	179.032	466.031	200.000
43.250	23600.000	977.915	0.	0.164	0.	698.499	0.	125.000
43.250	23600.000	980.100	2.184	0.150	0.	192.461	506.036	125.000
44.250	23600.000	978.032	0.	0.116	0.	734.915	0.	100.000
44.250	23600.000	980.209	2.177	0.110	0.	204.857	530.227	100.000
46.750	23600.000	978.072	0.	0.000	0.	739.089	0.	50.000
46.750	23600.000	980.253	2.181	0.083	0.	206.919	532.170	50.000
46.250	23800.000	978.451	0.	0.379	0.	240.850	0.	150.000
46.250	23800.000	980.483	2.032	0.379	0.	240.850	0.	150.000

47,000	2300,000	984,614	0.	-0.017	0.	270,061	0.	100,000
47,000	2300,000	990,302	1.578	-0.017	0.	207,821	62,220	100,000
50,000	2300,000	990,881	0.	0.067	0.	257,480	0.	300,000
50,000	2300,000	990,489	1.568	0.057	0.	205,742	61,717	300,000
55,000	2300,000	988,999	0.	0.118	0.	263,043	0.	500,000
55,000	2300,000	990,560	1.560	0.110	0.	202,454	60,809	500,000
60,000	2300,000	996,049	0.	-0.330	0.	261,667	0.	500,000
60,000	2300,000	990,250	1.557	-0.304	0.	178,632	82,435	500,000
70,000	2300,000	990,925	0.	2.316	0.	263,206	0.	1000,000
70,000	2300,000	992,322	1.330	2.046	0.	185,017	80,189	1000,000
80,000	2300,000	992,913	0.	1.928	0.	231,683	0.	1000,000
80,000	2300,000	994,122	1.214	1.605	0.	147,039	24,644	1000,000
90,000	2300,000	995,074	0.	2.145	0.	254,015	0.	1022,000
90,000	2300,000	990,179	1.100	2.051	0.	176,855	77,160	1082,000
100,000	2300,000	990,454	0.	1.376	0.	329,793	0.	918,000
100,000	2300,000	997,515	1.042	1.332	0.	209,388	120,446	918,000
110,000	2300,000	998,114	0.	1.659	0.	301,503	0.	1000,000
110,000	2300,000	999,256	1.142	1.740	0.	173,254	126,249	1000,000
115,000	2300,000	999,367	0.	1.253	0.	210,576	0.	600,000
115,000	2300,000	1000,554	1.187	1.298	0.	156,826	52,250	600,000
115,500	2300,000	999,407	0.	0.130	0.	174,107	0.	50,000
115,500	2300,000	1000,830	1.340	0.282	0.	178,875	-4,729	50,000
117,000	2300,000	999,654	0.	0.157	0.	174,700	0.	50,000
117,000	2300,000	1000,983	1.340	0.157	0.	179,815	-0,716	50,000
117,500	2300,000	999,528	0.	-0.045	0.	172,710	0.	0.
117,500	2300,000	1000,943	1.355	-0.050	0.	177,489	-4,779	0.

DATA FOR LAST CROSS SECTION.

PROFILE	TYPE	ENG	TARGET	TOP	JOINT	TOP	WIDTH
			AREA	ACHES	AREA	DIFF	
1	0.	0.	0.	68,238	0.		
2	4,300	0.	39,286	-26,952			



X1	30,250	15,000	150,000	100,000	50,000	50,000	0.	50,000	0.	0.	0.
GR	1006,500	0.	987,900	450,000	976,100	1220,000	976,000	976,000	1300,000	976,500	1400,000
GR	987,300	1500,000	961,500	1510,000	947,500	1530,000	946,500	946,500	1550,000	946,400	1575,000
GR	947,300	1525,000	961,500	1600,000	979,000	1625,000	976,000	976,000	1700,000	1005,600	2710,000
X1	37,000	0.	0.	0.	350,000	360,000	360,000	0.	0.	-0,500	0.
X1	40,000	0.	0.	0.	300,000	300,000	300,000	0.	0.	-0,750	0.
X1	42,000	0.	0.	0.	200,000	200,000	200,000	0.	0.	-0,500	0.
X1	43,250	0.	0.	0.	125,000	125,000	125,000	0.	0.	-0,300	0.
X1	44,250	0.	0.	0.	100,000	100,000	100,000	0.	0.	-0,200	0.
X1	44,750	0.	0.	0.	50,000	50,000	50,000	0.	0.	0.	0.
X1	46,250	13,000	475,000	615,000	150,000	150,000	150,000	0.	0.	0.	0.
GR	1610,000	40,000	927,800	355,000	981,200	438,000	975,700	439,000	945,000	945,000	460,000
GR	952,400	475,000	904,400	550,000	945,400	575,000	950,400	600,000	949,400	949,400	615,000
GR	943,400	425,000	981,400	620,000	927,100	700,000	927,100	0.	0.	0.	0.
X1	48,350	10,000	470,000	614,000	10,000	10,000	10,000	0.	0.	0.	0.
GR	1010,000	20,000	927,900	355,000	981,200	438,000	975,700	439,000	945,000	945,000	476,000
GR	975,400	414,000	981,400	615,000	921,400	600,000	921,400	700,000	1010,000	1010,000	749,000
X1	55,450	0.	0.	0.	10,000	10,000	10,000	0.	0.	0.	0.
GT	5,000	9300,000	18100,000	23000,000	23600,000	40200,000	0.	0.	0.	0.	0.
GT	0.	0.	0.	0.	5,400	0.	0.	0.	0.	0.	0.
X1	55,600	14,000	140,000	325,000	15,000	15,000	15,000	0.	0.	0.	0.
GR	1005,000	10,000	923,200	138,000	977,700	140,000	976,100	150,000	967,000	967,000	160,000
GR	954,400	280,000	810,000	280,000	950,400	275,000	950,400	300,000	954,400	954,400	315,000
GR	965,400	325,000	923,200	390,000	949,100	400,000	1005,000	500,000	0.	0.	0.
X1	46,650	0.	0.	0.	25,000	25,000	25,000	0.	0.	0,500	0.
X1	47,000	0.	0.	0.	100,000	100,000	100,000	0.	0.	2,700	0.
X1	50,000	0.	0.	0.	300,000	300,000	300,000	0.	0.	0,400	0.
X1	55,000	0.	0.	0.	500,000	500,000	500,000	0.	0.	0,700	0.
X1	60,000	12,000	192,000	324,000	500,000	500,000	500,000	0.	0.	0.	0.
GR	1005,000	45,000	955,800	93,000	956,200	100,000	982,600	120,000	981,700	981,700	145,000
GR	977,500	192,000	973,000	200,000	970,000	225,000	970,600	250,000	970,400	970,400	295,000
GR	920,000	324,000	1005,000	390,000	0.	0.	0.	0.	0.	0.	0.
X1	70,000	0.	0.	0.	1000,000	1000,000	1000,000	0.	0.	1,500	0.
X1	80,000	14,000	124,000	241,000	1000,000	1000,000	1000,000	0.	0.	0.	0.
GR	1010,700	40,000	1004,200	63,000	996,700	73,000	990,700	105,000	982,500	982,500	120,000
GR	920,200	192,000	974,000	150,000	973,200	175,000	973,700	200,000	973,200	973,200	225,000
GR	974,600	250,000	980,900	261,000	982,500	273,000	1010,000	410,000	0.	0.	0.
X1	90,620	0.	0.	0.	1082,000	1082,000	1082,000	0.	0.	0.	0.
X1	100,000	18,000	650,000	925,000	916,000	916,000	916,000	0.	0.	0.	0.
GR	1020,000	0.	1065,500	100,000	1044,000	200,000	998,000	387,000	993,000	993,000	355,000
GR	991,500	400,000	997,000	450,000	1034,000	550,000	1035,000	570,000	1031,000	1031,000	600,000
GR	945,000	750,000	922,500	600,000	982,000	630,000	975,000	635,000	977,000	977,000	850,000
GR	971,000	905,000	961,000	925,000	1034,000	1000,000	1000,000	0.	0.	0.	0.





SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SECTION NUMBER	CHANNEL LENGTH	MIN FL	MAX FL	MIN FL	MAX FL	DISCHARGE	C-SEL	TO	DEPTH	TOP	NO	STENCIL	STENCIL	VCM
		GROUND	GROUND	GROUND	GROUND	(CFS)								
15.40	0.	0.	0.	942.70	23800.00	0.00	959.60	3603.16	26.00	182.07	0.	0.	0.	10.06
15.40	0.	0.	0.	942.70	23800.00	0.00	970.60	3708.03	27.00	118.29	1500.00	1625.00	0.	9.79
20.40	500.00	0.	0.	943.70	23800.00	0.00	971.75	4010.11	28.00	100.37	0.	0.	0.	9.40
20.40	500.00	0.	0.	943.70	23800.00	0.00	972.67	3985.00	28.00	119.63	1500.00	1625.00	0.	9.30
25.40	500.00	0.	0.	944.70	23800.00	0.00	973.55	4274.22	28.85	206.05	0.	0.	0.	8.98
25.40	500.00	0.	0.	944.70	23800.00	0.00	974.47	4198.65	28.77	120.97	1500.00	1625.00	0.	8.98
30.40	500.00	0.	0.	945.70	23800.00	0.00	975.11	4124.45	28.81	200.62	0.	0.	0.	9.21
30.40	500.00	0.	0.	945.70	23800.00	0.00	976.09	4062.56	29.39	120.42	1500.00	1625.00	0.	9.12
31.40	100.00	0.	0.	947.20	23800.00	0.00	975.43	4045.11	28.23	198.42	0.	0.	0.	9.31
31.40	100.00	0.	0.	947.20	23800.00	0.00	976.42	4004.83	28.22	120.16	1500.00	1625.00	0.	9.20
31.40	50.00	0.	0.	947.20	23800.00	0.00	975.61	4111.72	28.85	200.89	0.	0.	0.	9.20
31.40	50.00	0.	0.	947.20	23800.00	0.00	976.62	4099.11	29.42	120.45	1500.00	1625.00	0.	9.11
32.45	95.00	0.	0.	947.20	23800.00	0.00	975.63	5257.57	28.43	93.00	0.	0.	0.	10.22
32.45	95.00	0.	0.	947.20	23800.00	0.00	976.71	5075.83	29.51	93.00	1462.00	1575.00	0.	9.60
33.00	15.00	0.	0.	947.20	23800.00	0.00	976.73	8303.88	29.53	409.59	0.	0.	0.	7.27
33.00	15.00	0.	0.	947.20	23800.00	0.00	977.56	8223.67	30.36	167.60	1445.69	1613.49	0.	7.50
33.50	50.00	0.	0.	946.70	23800.00	0.00	974.82	8724.05	30.12	419.72	0.	0.	0.	7.02
33.50	50.00	0.	0.	946.70	23800.00	0.00	974.65	8645.33	30.95	172.91	1442.25	1615.16	0.	7.23
33.75	25.00	0.	0.	946.70	23800.00	0.00	976.63	5886.47	30.23	93.00	0.	0.	0.	9.53
33.75	25.00	0.	0.	946.70	23800.00	0.00	976.93	5710.57	30.82	93.00	1462.00	1575.00	0.	9.53
34.35	50.00	0.	0.	945.80	23800.00	0.00	977.37	6480.92	30.07	374.90	0.	0.	0.	6.68
34.35	50.00	0.	0.	945.80	23800.00	0.00	977.20	5942.95	30.80	119.42	1460.58	1600.00	0.	9.13
37.00	350.00	0.	0.	945.80	23800.00	0.00	977.92	7551.90	32.02	476.64	0.	0.	0.	8.15
37.00	350.00	0.	0.	945.80	23800.00	0.00	977.66	6615.72	32.06	186.68	1451.12	1600.00	0.	8.42
40.00	300.00	0.	0.	945.15	23800.00	0.00	978.37	8431.44	33.22	658.27	0.	0.	0.	7.53
40.00	300.00	0.	0.	945.15	23800.00	0.00	978.49	7290.45	33.10	122.35	1417.45	1600.00	0.	7.61
42.00	200.00	0.	0.	944.65	23800.00	0.00	978.62	9049.91	33.97	745.10	0.	0.	0.	7.13
42.00	200.00	0.	0.	944.65	23800.00	0.00	978.79	7724.34	34.14	211.60	1388.20	1600.00	0.	7.47
43.25	125.00	0.	0.	944.35	23800.00	0.00	978.76	9441.99	34.81	795.86	0.	0.	0.	5.90
43.25	125.00	0.	0.	944.35	23800.00	0.00	978.97	8622.77	34.62	244.82	1355.18	1600.00	0.	7.21
44.25	100.00	0.	0.	944.15	23800.00	0.00	978.86	9721.67	34.71	810.33	0.	0.	0.	6.74
44.25	100.00	0.	0.	944.15	23800.00	0.00	979.10	8311.98	34.95	265.52	1330.68	1600.00	0.	7.03
44.75	50.00	0.	0.	944.15	23800.00	0.00	979.69	9751.14	30.74	833.89	0.	0.	0.	6.73
44.75	50.00	0.	0.	944.15	23800.00	0.00	979.15	8303.82	35.00	246.89	1333.11	1600.00	0.	7.01
46.25	150.00	0.	0.	944.40	23800.00	0.00	979.18	13963.84	30.78	203.63	0.	0.	0.	5.01
46.25	150.00	0.	0.	944.40	23800.00	0.00	979.48	13588.97	31.00	150.00	0.	0.	0.	5.01

SECTION NUMBER	CHANNEL LENGTH	MIN FL. SQAD-SY	MAX FL. OF LOS CHAED	MIN FL. DISCHARGE (CES)	CASEL TO	DEPTH	TOP-ID	STENCL	STENCA	VCH
46.35	10.00	0.	0.	975.40 23600.00	985.24 2964.72	9.84	308.76	0.	0.	15.58
46.35	10.00	0.	0.	975.40 23600.00	985.11 1733.78	9.71	138.00	475.00	614.00	17.75
46.85	10.00	0.	0.	975.40 23600.00	986.32 2513.45	10.02	323.91	0.	0.	13.57
46.85	10.00	0.	0.	975.40 23600.00	986.73 2354.32	11.33	141.93	473.04	614.97	15.15
46.80	15.00	0.	0.	949.50 23600.00	983.54 1443.05	39.34	204.85	0.	0.	3.49
46.80	15.00	0.	0.	949.50 23600.00	985.41 1984.33	40.91	220.97	152.53	373.50	3.76
46.85	25.00	0.	0.	950.00 23600.00	985.23 17912.27	38.23	290.80	0.	0.	3.96
46.85	25.00	0.	0.	950.00 23600.00	990.01 19141.22	40.41	219.02	153.53	372.55	3.82
47.00	100.00	0.	0.	952.70 23600.00	985.82 15341.12	35.12	270.08	0.	0.	4.37
47.00	100.00	0.	0.	952.70 23600.00	990.30 15492.02	37.49	297.53	158.21	366.64	4.21
50.00	300.00	0.	0.	953.10 23600.00	988.28 15035.51	35.78	267.50	0.	0.	4.03
50.00	300.00	0.	0.	953.10 23600.00	990.45 16152.53	37.35	295.77	159.67	365.44	4.26
55.00	500.00	0.	0.	953.20 23600.00	985.80 14519.82	35.20	243.08	0.	0.	4.53
55.00	500.00	0.	0.	953.20 23600.00	990.36 14800.96	36.76	292.47	160.00	362.47	4.34
60.00	500.00	0.	0.	970.00 23600.00	984.87 4651.45	18.67	261.08	0.	0.	9.31
60.00	500.00	0.	0.	970.00 23600.00	990.26 5178.79	20.29	176.65	145.35	324.00	8.82
70.00	1000.00	0.	0.	971.50 23600.00	990.99 5316.36	19.49	245.21	0.	0.	8.78
70.00	1000.00	0.	0.	971.50 23600.00	992.32 5508.79	20.82	145.02	138.98	324.00	8.83
80.00	1000.00	0.	0.	973.20 23600.00	992.91 5131.27	19.71	231.69	0.	0.	9.12
80.00	1000.00	0.	0.	973.20 23600.00	994.33 5200.34	20.93	147.04	124.00	271.04	8.92
90.00	1062.00	0.	0.	973.20 23600.00	995.08 6342.25	21.88	254.02	0.	0.	7.97
90.00	1062.00	0.	0.	973.20 23600.00	995.18 6806.11	22.99	176.86	121.14	298.00	7.49
100.00	912.00	0.	0.	971.00 23600.00	996.05 5965.57	25.45	329.80	0.	0.	9.00
100.00	912.00	0.	0.	971.00 23600.00	997.52 5814.44	26.52	299.35	715.64	925.00	8.36
110.00	1000.00	0.	0.	974.50 23600.00	996.11 4915.86	23.61	301.51	0.	0.	10.30
110.00	1000.00	0.	0.	974.50 23600.00	997.26 4833.49	24.76	173.26	731.74	925.00	9.68
116.00	400.00	0.	0.	977.00 23600.00	999.37 5305.45	22.37	210.68	0.	0.	9.66
116.00	400.00	0.	0.	977.00 23600.00	1000.55 5163.35	23.55	156.43	143.00	301.43	9.33
116.50	50.00	0.	0.	976.50 23600.00	995.50 4001.85	23.00	174.15	0.	0.	8.90
116.50	50.00	0.	0.	976.50 23600.00	1000.54 5206.13	24.34	179.88	100.00	310.00	8.17
117.00	50.00	0.	0.	976.50 23600.00	992.85 4970.64	23.15	174.70	0.	0.	8.81
117.00	50.00	0.	0.	976.50 23600.00	1000.99 5277.40	24.49	179.42	100.00	310.00	8.09
117.50	0.	0.	0.	977.00 23600.00	999.59 4425.38	22.59	172.71	0.	0.	9.14
117.50	0.	0.	0.	977.00 23600.00	1000.94 5025.20	23.94	177.49	100.00	310.00	8.37
SECTION NUMBER	DISCHARGE	CASEL	CASEL DIFF	CASEL DIFF	CASEL SELK	TOP-ID	T.W.	DIFF	LENGTH	
15.400	23600.000	969.600	0.	0.	0.	182.074	0.	0.	0.	
15.400	23600.000	970.600	1.000	0.	0.	118.286	63.789	0.	0.	
55.000	0.	971.762	0.	2.162	0.	196.369	0.	0.	300.000	



47.000	23600.000	955.517	1.577	-0.617	270.678	0.	0.	270.678	0.	100.000
47.000	23600.000	955.517	1.577	-0.617	207.612	0.	0.	42.246	0.	100.000
50.000	23600.000	955.517	0.	0.047	257.450	0.	0.	0.	0.	500.000
50.000	23600.000	955.517	1.567	0.057	205.775	0.	0.	41.724	0.	500.000
55.000	23600.000	955.517	0.	-0.112	261.079	0.	0.	0.	0.	500.000
55.000	23600.000	955.517	1.560	0.110	202.456	0.	0.	60.611	0.	500.000
60.000	23600.000	955.517	0.	-0.330	261.079	0.	0.	0.	0.	500.000
60.000	23600.000	955.517	1.555	-0.303	178.667	0.	0.	82.432	0.	500.000
70.000	23600.000	955.517	0.	2.315	225.212	0.	0.	0.	0.	1000.000
70.000	23600.000	955.517	1.536	2.065	185.024	0.	0.	60.186	0.	1000.000
80.000	23600.000	955.517	0.	1.978	251.691	0.	0.	0.	0.	1000.000
80.000	23600.000	955.517	1.214	1.606	197.043	0.	0.	54.648	0.	1000.000
90.520	23600.000	955.517	0.	2.165	254.019	0.	0.	0.	0.	1002.000
90.520	23600.000	955.517	1.100	2.050	176.659	0.	0.	77.160	0.	1002.000
100.000	23600.000	955.517	0.	1.376	329.799	0.	0.	0.	0.	918.000
100.000	23600.000	955.517	1.042	1.338	209.354	0.	0.	120.444	0.	918.000
110.000	23600.000	955.517	0.	1.659	301.506	0.	0.	0.	0.	1000.000
110.000	23600.000	955.517	1.102	1.700	171.755	0.	0.	128.251	0.	1000.000
115.000	23600.000	955.517	0.	1.253	210.676	0.	0.	0.	0.	600.000
115.000	23600.000	1000.952	1.187	1.222	158.427	0.	0.	52.249	0.	600.000
115.500	23600.000	955.517	0.	0.130	174.147	0.	0.	0.	0.	50.000
115.500	23600.000	1000.952	1.340	0.282	178.876	0.	0.	-4.729	0.	50.000
117.000	23600.000	955.517	0.	0.157	174.700	0.	0.	0.	0.	50.000
117.000	23600.000	1000.952	1.347	0.157	179.416	0.	0.	-4.716	0.	50.000
117.500	23600.000	955.517	0.	-0.065	172.710	0.	0.	0.	0.	0.
117.500	23600.000	1000.943	1.355	-0.050	177.489	0.	0.	-4.779	0.	0.

DATA FOR LAST CROSS SECTION

PROFILE	TYPE	ENC	TARGET	TOP WIDTH	TOP WIDTH	AREA-ACRES	AREA-DIFF
1	0.	0.	0.	70.438	0.	0.	0.
2	4.000	0.	0.	40.497	-29.940	0.	0.

# REDDIES RIVER

\*\*\*\*\*  
 HEC2 VERSION UPDATED JAN 1976  
 ERROR CORRECTION 01,02,03,04,05,06,07,08,09  
 MODIFICATIONS 52,53,54,55,56,57,58  
 \*\*\*\*\*

23600

C  
 T1 WILKESBORO N C  
 T2 FLOOD INSURANCE STUDY  
 T3 REDDIES RIVER 10-YR Q

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FC
	0.	2.	0.	0.	0.	0.	0.	0.	359,770	0.
J2	NPROP	IPLOT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIP	ITRACE
	1.000	0.	0.	10.000	100.000	0.	0.	0.	0.	0.
J3	1.000	34,000	8,000	4,000	27,000	28,000	26,000	0.	0.	0.
NC	0.075	0.070	0.065	0.100	0.300	0.	0.	0.	0.	0.
QT	5,000	9400,000	16200,000	23800,000	23800,000	40000,000	0.	0.	0.	0.
ET	0.	0.	0.	0.	10,400	0.	0.	0.	0.	0.
X1	15,400	16,000	1500,000	1625,000	0.	0.	0.	0.	0.	0.
GR	1002,600	0.	984,200	450,000	974,400	1220,000	972,300	1300,000	972,800	1400,000
GR	963,600	1500,000	957,800	1510,000	943,600	1530,000	942,800	1550,000	942,700	1575,000
GR	943,600	1585,000	957,800	1600,000	975,300	1625,000	972,300	1700,000	974,900	1755,000
GR	1005,600	2710,000	0.	0.	0.	0.	0.	0.	0.	0.
X1	20,400	0.	0.	0.	500,000	500,000	500,000	0.	1,000	0.
X1	25,400	0.	0.	0.	500,000	500,000	500,000	0.	1,000	0.
X1	30,400	0.	0.	0.	500,000	500,000	500,000	0.	2,000	0.
X1	31,400	0.	0.	0.	100,000	100,000	100,000	0.	0,500	0.
X1	31,900	0.	0.	0.	50,000	50,000	50,000	0.	0.	0.
NC	0.076	0.090	0.050	0.100	0.300	0.	0.	0.	0.	0.
X1	32,450	15,000	1462,000	1575,000	95,000	95,000	95,000	0.	0.	0.
X3	10,000	0.	0.	0.	0.	0.	0.	978,600	978,600	0.
GR	1006,300	0.	978,500	1300,000	973,100	1405,000	968,600	1435,000	963,200	1448,000
GR	958,000	1462,000	949,300	1495,000	947,200	1525,000	948,300	1505,000	958,700	1575,000
GR	957,000	1590,000	959,800	1615,000	973,600	1645,000	978,500	1800,000	1005,600	2710,000
X1	33,000	0.	0.	0.	15,000	15,000	15,000	0.	0.	0.
SR	1,250	2,040	3,000	255,000	50,000	15,000	3435,000	4,000	0.	0.
X1	33,500	0.	0.	0.	50,000	50,000	50,000	0.	-0,500	0.
X1	33,750	0.	0.	0.	25,000	25,000	25,000	0.	0.	0.
X2	0.	0.	1,000	973,600	978,100	0.	0.	0.	0.	0.
X3	10,000	0.	0.	0.	0.	0.	0.	978,600	978,600	0.
NC	0.070	0.090	0.050	0.100	0.300	0.	0.	0.	0.	0.
X1	34,250	15,000	1510,000	1600,000	50,000	50,000	50,000	0.	0.	0.

GR	947,300	1585,000	961,500	1600,000	979,000	1625,000	978,000	1700,000	1005,600	2710,000
X1	37,000	0	0	360,000	360,000	360,000	360,000	0	-0,500	0
X1	40,000	0	0	300,000	300,000	300,000	300,000	0	-0,750	0
X1	42,000	0	0	200,000	200,000	200,000	200,000	0	-0,500	0
X1	43,250	0	0	125,000	125,000	125,000	125,000	0	-0,300	0
X1	44,250	0	0	100,000	100,000	100,000	100,000	0	-0,200	0
X1	44,750	0	0	50,000	50,000	50,000	50,000	0	0	0
X1	46,250	13,000	475,000	615,000	150,000	150,000	150,000	0	0	460,000
GR	1010,000	80,000	987,900	355,000	981,200	438,000	981,500	475,000	975,600	476,000
GR	952,400	475,000	944,400	550,000	915,400	575,000	950,400	600,000	949,400	615,000
GR	963,100	625,000	981,400	690,000	987,100	700,000	987,100	700,000	1010,000	740,000
X1	46,350	10,000	476,000	614,000	10,000	10,000	10,000	0	0	0
GR	1010,000	80,000	987,900	355,000	981,200	438,000	981,500	475,000	975,600	476,000
GR	575,000	614,000	981,400	615,000	981,400	690,000	987,100	700,000	1010,000	740,000
X1	46,450	0	0	10,000	10,000	10,000	10,000	0	0	0
GT	5,000	9300,000	18100,000	23600,000	23600,000	40200,000	0	0	0	0
ET	0	0	0	0	5,400	0	0	0	0	0
X1	46,600	14,000	160,000	325,000	15,000	15,000	15,000	0	0	0
GR	1005,000	10,000	983,200	138,000	977,700	140,000	976,100	150,000	967,000	160,000
GR	954,400	200,000	949,500	250,000	950,400	275,000	955,400	300,000	954,400	315,000
GR	965,400	325,000	983,400	390,000	989,100	400,000	1005,000	500,000	0	0
X1	46,600	14,000	160,000	325,000	15,000	15,000	15,000	0	0	0
GR	1005,000	12,000	985,800	95,000	988,200	100,000	981,600	120,000	981,700	145,000
X1	40,000	12,000	192,000	324,000	500,000	500,000	500,000	0	0	0
GR	977,600	192,000	973,000	200,000	970,000	225,000	970,600	250,000	970,400	295,000
GR	980,000	324,000	1005,000	590,000	0	0	0	0	0	0
X1	70,000	0	0	1000,000	1000,000	1000,000	1000,000	0	1,500	0
X1	50,000	10,000	124,000	261,000	1000,000	1000,000	1000,000	0	0	0
GR	1010,700	40,000	1004,200	65,000	996,700	73,000	990,700	105,000	982,500	124,000
GR	980,200	192,000	974,600	150,000	973,200	175,000	973,700	200,000	973,200	225,000
GR	974,600	250,000	980,900	261,000	982,500	273,000	1010,000	410,000	0	0
X1	90,220	0	0	1082,000	1082,000	1082,000	1082,000	0	0	0
X1	100,000	18,000	850,000	925,000	918,000	918,000	918,000	0	0	0
GR	1080,000	0	1068,500	109,000	1084,000	200,000	998,000	347,000	993,000	355,000
GR	991,500	400,000	997,000	450,000	1034,000	550,000	1035,000	570,000	1031,000	600,000
GR	985,000	750,000	982,500	800,000	982,000	830,000	975,000	835,000	977,000	850,000
GR	971,000	905,000	981,000	925,000	1034,000	1000,000	1000,000	0	0	0
X1	110,000	0	0	0	1000,000	1000,000	1000,000	0	3,500	0
X1	114,000	15,000	143,000	243,000	600,000	600,000	600,000	0	0	0
GR	1074,000	0	1037,500	80,000	1015,000	95,000	1013,000	120,000	984,000	143,000

















SUMMARY PRINTOUT FOR MULTIPLE PROFILES

REDDIES RIVER 500-YR Q

SECTION CHANNEL MIN EL OF MAX EL OF MIN EL DISCHARGE CWSEL TO DEPTH TOPWID STENCL STENCR VCH

NUMBER	LENGTH	ROADWAY	LOW	CHORD	GROUND	(CFS)							
15.40	0.	0.	0.	0.	942.70	9400.00	959.77	1459.41	17.07	96.21	0.	0.	7.54
15.40	0.	0.	0.	0.	942.70	18200.00	965.50	2542.57	22.80	131.65	0.	0.	9.84
15.40	0.	0.	0.	0.	942.70	23800.00	969.58	3631.00	26.86	181.58	0.	0.	10.08
15.40	0.	0.	0.	0.	942.70	40400.00	979.80	10045.88	37.10	1111.71	0.	0.	7.87
20.40	500.00	0.	0.	0.	943.70	9400.00	961.77	1618.25	18.07	99.37	0.	0.	6.94
20.40	500.00	0.	0.	0.	943.70	18200.00	968.01	2915.28	24.31	150.20	0.	0.	8.97
20.40	500.00	0.	0.	0.	943.70	23800.00	971.70	4001.67	28.04	196.05	0.	0.	9.41
20.40	500.00	0.	0.	0.	943.70	40400.00	980.60	9814.41	36.90	1090.72	0.	0.	8.02
25.40	500.00	0.	0.	0.	944.70	9400.00	963.43	1727.10	18.73	101.44	0.	0.	6.56
25.40	500.00	0.	0.	0.	944.70	18200.00	969.99	3166.52	25.25	161.80	0.	0.	8.48
25.40	500.00	0.	0.	0.	944.70	23800.00	973.53	4267.97	28.83	205.83	0.	0.	8.99
25.40	500.00	0.	0.	0.	944.70	40400.00	981.45	9610.97	36.75	1071.64	0.	0.	8.16
30.40	500.00	0.	0.	0.	946.70	9400.00	964.90	1646.56	18.24	99.91	0.	0.	6.90
30.40	500.00	0.	0.	0.	946.70	18200.00	971.62	3076.10	24.92	157.70	0.	0.	8.65
30.40	500.00	0.	0.	0.	946.70	23800.00	975.09	4119.90	28.39	200.45	0.	0.	9.22
30.40	500.00	0.	0.	0.	946.70	40400.00	982.28	8368.35	35.58	946.38	0.	0.	9.11
31.40	100.00	0.	0.	0.	947.20	9400.00	965.26	1615.60	18.06	99.32	0.	0.	7.00
31.40	100.00	0.	0.	0.	947.20	18200.00	971.96	3033.37	24.76	155.74	0.	0.	8.73
31.40	100.00	0.	0.	0.	947.20	23800.00	975.41	4060.86	28.21	198.27	0.	0.	9.32
31.40	100.00	0.	0.	0.	947.20	40400.00	982.47	8048.86	35.27	910.75	0.	0.	9.40
31.90	50.00	0.	0.	0.	947.20	9400.00	965.45	1647.76	18.25	99.94	0.	0.	6.90
31.90	50.00	0.	0.	0.	947.20	18200.00	972.17	3089.18	24.97	158.30	0.	0.	8.63
31.90	50.00	0.	0.	0.	947.20	23800.00	975.62	4127.57	28.42	200.73	0.	0.	9.21
31.90	50.00	0.	0.	0.	947.20	40400.00	982.64	8216.12	35.44	929.60	0.	0.	9.25
32.85	95.00	0.	0.	0.	947.20	9400.00	965.71	2389.72	18.51	93.00	0.	0.	6.69
32.85	95.00	0.	0.	0.	947.20	18200.00	972.32	4226.45	25.12	93.00	0.	0.	9.01
32.85	95.00	0.	0.	0.	947.20	23800.00	975.62	5253.81	28.42	93.00	0.	0.	10.23
32.85	95.00	0.	0.	0.	947.20	40400.00	983.15	14370.30	35.95	873.74	0.	0.	8.26
33.00	15.00	0.	0.	0.	947.20	9400.00	965.97	2883.31	18.77	186.86	0.	0.	5.81
33.00	15.00	0.	0.	0.	947.20	18200.00	973.06	6056.88	25.86	238.53	0.	0.	6.89
33.00	15.00	0.	0.	0.	947.20	23800.00	976.72	8296.19	29.52	409.03	0.	0.	7.28
33.00	15.00	0.	0.	0.	947.20	40400.00	983.17	14400.29	35.97	875.67	0.	0.	8.24
33.50	50.00	0.	0.	0.	946.70	9400.00	966.07	3106.10	19.37	189.56	0.	0.	5.53
33.50	50.00	0.	0.	0.	946.70	18200.00	973.15	6380.65	26.45	252.21	0.	0.	6.66
33.50	50.00	0.	0.	0.	946.70	23800.00	976.21	8716.16	30.11	439.17	0.	0.	7.03
33.50	50.00	0.	0.	0.	946.70	40400.00	983.28	15168.95	36.48	923.88	0.	0.	7.92
33.75	25.00	978.10	973.60	946.70	9400.00	966.07	2610.85	19.37	93.00	0.	0.	6.32	
33.75	25.00	978.10	973.60	946.70	18200.00	973.15	4631.98	26.45	93.00	0.	0.	8.49	
33.75	25.00	978.10	973.60	946.70	23800.00	976.91	5842.37	30.21	93.00	0.	0.	9.54	
33.75	25.00	978.10	973.60	946.70	40400.00	984.72	17197.76	38.02	1040.12	0.	0.	7.19	



SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	DEPTH	TOPWID	BTENCL	BTENCR	VCH	
34.25	50.00	0.	0.	946.40	9400.00	966.14	2658.65	19.74	104.61	0.	0.	6.33
34.25	50.00	0.	0.	946.40	18200.00	973.35	5065.15	26.95	182.67	0.	0.	8.19
34.25	50.00	0.	0.	946.40	23800.00	977.36	6933.36	30.96	374.41	0.	0.	8.69
34.25	50.00	0.	0.	946.40	40400.00	984.54	13798.84	38.14	1225.46	0.	0.	8.64
37.00	360.00	0.	0.	945.90	9400.00	966.63	2936.65	20.73	107.73	0.	0.	5.95
37.00	360.00	0.	0.	945.90	18200.00	973.90	5503.32	28.00	195.57	0.	0.	7.76
37.00	360.00	0.	0.	945.90	23800.00	977.91	7573.71	32.01	474.49	0.	0.	8.15
37.00	360.00	0.	0.	945.90	40400.00	984.99	15239.26	39.09	1334.52	0.	0.	7.97
40.00	300.00	0.	0.	945.15	9400.00	966.97	3259.43	21.82	119.55	0.	0.	5.59
40.00	300.00	0.	0.	945.15	18200.00	974.32	6022.61	29.17	209.95	0.	0.	7.31
40.00	300.00	0.	0.	945.15	23800.00	978.38	8423.24	33.21	657.06	0.	0.	7.53
40.00	300.00	0.	0.	945.15	40400.00	985.33	17090.93	40.18	1460.39	0.	0.	7.29
42.00	200.00	0.	0.	944.65	9400.00	967.17	3478.42	22.52	128.24	0.	0.	5.17
42.00	200.00	0.	0.	944.65	18200.00	974.56	6370.08	29.81	292.29	0.	0.	7.05
42.00	200.00	0.	0.	944.65	23800.00	978.61	9041.19	33.86	743.93	0.	0.	7.14
42.00	200.00	0.	0.	944.65	40400.00	985.51	18357.26	40.86	1539.12	0.	0.	6.83
43.25	125.00	0.	0.	944.35	9400.00	967.28	3607.40	22.93	133.21	0.	0.	5.25
43.25	125.00	0.	0.	944.35	18200.00	974.70	6390.98	30.35	350.28	0.	0.	6.88
43.25	125.00	0.	0.	944.35	23800.00	978.75	9432.99	34.40	794.72	0.	0.	6.90
43.25	125.00	0.	0.	944.35	40400.00	985.61	19136.61	41.26	1585.09	0.	0.	6.60
44.25	100.00	0.	0.	944.15	9400.00	967.36	3698.12	23.21	136.63	0.	0.	5.17
44.25	100.00	0.	0.	944.15	18200.00	974.80	6760.56	30.65	362.30	0.	0.	6.76
44.25	100.00	0.	0.	944.15	23800.00	978.84	9712.50	34.70	829.22	0.	0.	6.75
44.25	100.00	0.	0.	944.15	40400.00	985.68	19684.56	41.53	1614.31	0.	0.	6.44
44.75	50.00	0.	0.	944.15	9400.00	967.40	3708.99	23.25	137.04	0.	0.	5.16
44.75	50.00	0.	0.	944.15	18200.00	974.62	6781.20	30.69	363.77	0.	0.	6.75
44.75	50.00	0.	0.	944.15	23800.00	978.88	9741.99	34.73	832.78	0.	0.	6.73
44.75	50.00	0.	0.	944.15	40400.00	985.71	19732.24	41.56	1615.63	0.	0.	6.43
46.25	150.00	0.	0.	944.40	9400.00	967.72	6220.46	23.32	185.94	0.	0.	3.28
46.25	150.00	0.	0.	944.40	18200.00	975.30	10985.85	30.90	228.18	0.	0.	4.46
46.25	150.00	0.	0.	944.40	23800.00	979.17	13956.66	34.77	243.59	0.	0.	5.01
46.25	150.00	0.	0.	944.40	40400.00	985.58	19744.98	41.18	313.54	0.	0.	6.81
46.35	10.00	0.	0.	975.40	9400.00	980.62	645.04	5.22	139.73	0.	0.	13.04
46.35	10.00	0.	0.	975.40	18200.00	983.91	1564.09	8.51	289.95	0.	0.	14.41
46.35	10.00	0.	0.	975.40	23800.00	985.24	2084.77	9.64	308.76	0.	0.	15.58
46.35	10.00	0.	0.	975.40	40400.00	988.39	3649.25	12.99	353.31	0.	0.	18.18
46.45	10.00	0.	0.	975.40	9400.00	981.71	888.35	6.31	248.89	0.	0.	10.74
46.45	10.00	0.	0.	975.40	18200.00	984.95	1960.48	9.55	304.53	0.	0.	12.41
46.45	10.00	0.	0.	975.40	23800.00	986.32	2563.42	10.92	323.91	0.	0.	13.57
46.45	10.00	0.	0.	975.40	40400.00	989.69	4443.87	14.29	371.72	0.	0.	15.91



SECTION NUMBER	CHANNEL LENGTH	MIN EL. OF ROADWAY	MAX EL. OF LOW CHORD	MIN EL. OF GROUND	DISCHARGE (CFS)	CWSEL	TO	DEPTH	TOPWID	STENCL	STENCR	VCH
46.60	15.00	0.	0.	949.50	9300.00	983.62	13581.96	34.12	254.84	0.	0.	1.86
46.60	15.00	0.	0.	949.50	18100.00	987.18	16791.86	37.68	281.98	0.	0.	3.17
46.60	15.00	0.	0.	949.50	23600.00	988.84	18413.04	39.34	294.65	0.	0.	3.69
46.60	15.00	0.	0.	949.50	40200.00	992.67	22485.62	43.17	340.13	0.	0.	5.83
46.85	25.00	0.	0.	950.00	9300.00	983.62	13162.19	33.62	250.95	0.	0.	1.90
46.85	25.00	0.	0.	950.00	18100.00	987.17	16317.15	37.17	278.15	0.	0.	3.23
46.85	25.00	0.	0.	950.00	23600.00	988.83	17912.26	38.83	290.60	0.	0.	3.96
46.85	25.00	0.	0.	950.00	40200.00	992.66	21915.00	42.66	333.91	0.	0.	5.93
47.00	100.00	0.	0.	952.70	9300.00	983.61	11029.19	30.91	240.24	0.	0.	2.12
47.00	100.00	0.	0.	952.70	18100.00	987.16	13877.77	34.46	257.47	0.	0.	3.58
47.00	100.00	0.	0.	952.70	23600.00	988.82	15341.11	36.12	270.08	0.	0.	4.37
47.00	100.00	0.	0.	952.70	40200.00	992.63	19006.65	39.93	300.61	0.	0.	6.50
50.00	300.00	0.	0.	953.10	9300.00	983.63	10741.87	30.53	238.72	0.	0.	2.16
50.00	300.00	0.	0.	953.10	18100.00	987.21	13572.34	34.11	254.75	0.	0.	3.63
50.00	300.00	0.	0.	953.10	23600.00	988.88	15035.50	35.78	267.50	0.	0.	4.43
50.00	300.00	0.	0.	953.10	40200.00	992.75	18720.09	39.65	297.18	0.	0.	6.96
55.00	500.00	0.	0.	953.80	9300.00	983.67	10251.50	29.87	236.08	0.	0.	2.22
55.00	500.00	0.	0.	953.80	18100.00	987.30	13060.33	33.50	250.46	0.	0.	3.72
55.00	500.00	0.	0.	953.80	23600.00	989.00	14519.81	35.20	263.08	0.	0.	4.53
55.00	500.00	0.	0.	953.80	40200.00	992.97	18246.05	39.17	293.37	0.	0.	6.67
60.00	500.00	0.	0.	970.00	9300.00	983.48	2378.41	13.48	221.34	0.	0.	5.83
60.00	500.00	0.	0.	970.00	18100.00	987.01	3057.36	17.01	252.53	0.	0.	8.16
60.00	500.00	0.	0.	970.00	23600.00	988.67	4351.44	18.67	261.08	0.	0.	9.31
60.00	500.00	0.	0.	970.00	40200.00	992.55	7291.12	22.55	281.04	0.	0.	12.13
70.00	1000.00	0.	0.	971.50	9300.00	985.00	2387.39	13.50	221.50	0.	0.	5.82
70.00	1000.00	0.	0.	971.50	18100.00	989.05	4240.14	17.55	255.33	0.	0.	7.80
70.00	1000.00	0.	0.	971.50	23600.00	990.99	5316.36	19.49	265.21	0.	0.	8.76
70.00	1000.00	0.	0.	971.50	40200.00	995.57	8376.73	24.07	288.85	0.	0.	11.07
80.00	1000.00	0.	0.	973.20	9300.00	986.54	2322.46	13.34	178.45	0.	0.	5.89
80.00	1000.00	0.	0.	973.20	18100.00	990.86	4105.09	17.66	210.50	0.	0.	8.09
80.00	1000.00	0.	0.	973.20	23600.00	992.91	5131.26	19.71	231.69	0.	0.	9.12
80.00	1000.00	0.	0.	973.20	40200.00	997.76	8040.35	24.56	277.43	0.	0.	11.69
90.82	1082.00	0.	0.	973.20	9300.00	988.06	2896.28	14.86	189.59	0.	0.	5.14
90.82	1082.00	0.	0.	973.20	18100.00	992.80	5072.66	19.60	230.54	0.	0.	7.04
90.82	1082.00	0.	0.	973.20	23600.00	995.08	6342.25	21.88	254.02	0.	0.	7.97
90.82	1082.00	0.	0.	973.20	40200.00	1000.46	5982.48	27.26	294.50	0.	0.	10.12
100.00	918.00	0.	0.	971.00	9300.00	989.07	2506.06	18.07	199.69	0.	0.	6.42
100.00	918.00	0.	0.	971.00	18100.00	994.04	4618.06	23.04	292.75	0.	0.	8.25
100.00	918.00	0.	0.	971.00	23600.00	996.45	5965.56	25.45	329.80	0.	0.	9.00
100.00	918.00	0.	0.	971.00	40200.00	1002.26	10212.79	31.26	392.21	0.	0.	10.47

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	DEPTH	TOPWID	STENCL	STENCR	VCH
110.00	1000.00	0.	0.	974.50	9300.00	990.68	1881.44	18.18	190.84	0.	0.	7.79
110.00	1000.00	0.	0.	974.50	18100.00	995.71	3746.90	21.21	242.07	0.	0.	9.52
110.00	1000.00	0.	0.	974.50	23600.00	998.11	4915.86	23.61	301.51	0.	0.	10.30
110.00	1000.00	0.	0.	974.50	40200.00	1003.25	8658.42	29.35	371.96	0.	0.	11.77
116.00	600.00	0.	0.	977.00	9300.00	992.05	2283.51	15.05	188.49	0.	0.	6.58
116.00	600.00	0.	0.	977.00	18100.00	997.03	4209.84	20.03	203.59	0.	0.	8.61
116.00	600.00	0.	0.	977.00	23600.00	999.37	5305.45	22.37	210.68	0.	0.	9.66
116.00	600.00	0.	0.	977.00	40200.00	1004.83	8320.22	27.83	227.25	0.	0.	12.29
116.50	50.00	0.	0.	976.50	9300.00	992.15	1929.42	15.65	148.28	0.	0.	6.34
116.50	50.00	0.	0.	976.50	18100.00	997.14	3625.54	20.64	165.82	0.	0.	8.04
116.50	50.00	0.	0.	976.50	23600.00	999.50	4601.85	23.00	174.15	0.	0.	8.90
116.50	50.00	0.	0.	976.50	40200.00	1005.05	7343.15	28.55	192.62	0.	0.	10.95
117.00	50.00	0.	0.	976.50	9300.00	992.28	1967.71	15.78	148.74	0.	0.	6.25
117.00	50.00	0.	0.	976.50	18100.00	997.29	3686.52	20.79	166.37	0.	0.	7.95
117.00	50.00	0.	0.	976.50	23600.00	999.65	4670.64	23.15	174.70	0.	0.	8.81
117.00	50.00	0.	0.	976.50	40200.00	1005.23	7447.67	28.73	193.08	0.	0.	10.84
117.50	0.	0.	0.	977.00	9300.00	992.23	1808.88	15.23	146.80	0.	0.	6.62
117.50	0.	0.	0.	977.00	18100.00	997.23	3470.02	20.23	164.40	0.	0.	8.29
117.50	0.	0.	0.	977.00	23600.00	999.59	4425.38	22.59	172.71	0.	0.	9.14
117.50	0.	0.	0.	977.00	40200.00	1005.15	7126.03	28.15	191.63	0.	0.	11.18

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF	WSEL DIFF	CWSEL - WSELK	TOPWID	T.W. DIFF	LENGTH
EACH SECTION								
15.400	9400.000	959.770		0.	0.	96.211	0.	0.
15.400	18200.000	965.500	5.730	0.	0.	131.652	-35.441	0.
15.400	23800.000	971.230	5.730	0.	0.	181.583	-85.372	0.
15.400	40400.000	980.800	10.240	0.	0.	1111.713	-1015.502	0.
20.400	9400.000	961.772	0.	2.002	0.	99.370	0.	500.000
20.400	18200.000	968.008	6.236	2.508	0.	150.203	-50.832	500.000
20.400	23800.000	971.736	3.728	2.176	0.	196.021	-96.681	500.000
20.400	40400.000	980.604	8.867	0.804	0.	1090.716	-991.346	500.000
25.400	9400.000	963.427	0.	1.655	0.	101.436	0.	500.000
25.400	18200.000	969.951	6.524	1.943	0.	161.799	-60.363	500.000
25.400	23800.000	973.531	3.580	1.795	0.	205.829	-104.393	500.000
25.400	40400.000	981.446	7.915	0.843	0.	1071.836	-970.400	500.000
30.400	9400.000	964.945	0.	1.518	0.	99.915	0.	500.000
30.400	18200.000	971.618	6.673	1.667	0.	157.704	-57.789	500.000
30.400	23800.000	975.094	3.476	1.563	0.	200.452	-100.537	500.000
30.400	40400.000	982.283	7.189	0.837	0.	946.378	-846.463	500.000
31.400	9400.000	965.262	0.	0.318	0.	99.319	0.	100.000
31.400	18200.000	971.957	6.695	0.339	0.	155.738	-56.419	100.000
31.400	23800.000	975.413	3.456	0.319	0.	198.267	-98.948	100.000
31.400	40400.000	982.468	7.055	0.185	0.	910.750	-811.431	100.000
31.900	9400.000	965.452	0.	0.190	0.	99.938	0.	50.000
31.900	18200.000	972.167	6.715	0.210	0.	158.302	-58.364	50.000
31.900	23800.000	975.617	3.450	0.204	0.	200.734	-100.796	50.000
31.900	40400.000	982.640	7.022	0.172	0.	929.601	-829.663	50.000
32.850	9400.000	965.707	0.	0.255	0.	99.915	0.	50.000



32,850	40400,000	983,151	7,534	0,512	0	873,738	-780,738	95,000
33,000	9400,000	965,973	0	0,266	0	186,858	0	15,000
33,000	18200,000	973,057	7,084	0,734	0	238,535	-51,677	15,000
33,000	23800,000	976,715	3,659	1,098	0	409,026	-222,168	15,000
33,000	40400,000	983,166	6,451	0,015	0	875,671	-688,813	15,000
33,500	9400,000	966,074	0	0,101	0	189,559	0	50,000
33,500	18200,000	973,149	7,075	0,092	0	252,211	-62,652	50,000
33,500	23800,000	976,809	3,660	0,094	0	439,167	-249,607	50,000
33,500	40400,000	983,276	6,467	0,110	0	923,877	-734,318	50,000
33,750	9400,000	966,074	0	0,000	0	93,000	0	25,000
33,750	18200,000	973,149	7,075	0,000	0	93,000	0	25,000
33,750	23800,000	976,914	3,765	0,105	0	93,000	0	25,000
33,750	40400,000	984,722	7,808	1,436	0	1040,125	-947,125	25,000
34,250	9400,000	966,140	0	0,066	0	104,611	0	50,000
34,250	18200,000	973,348	7,208	0,199	0	182,666	-78,055	50,000
34,250	23800,000	977,358	4,010	0,444	0	374,411	-269,800	50,000
34,250	40400,000	984,541	7,183	-0,181	0	1225,464	-1120,853	50,000
37,000	9400,000	966,625	0	0,485	0	107,734	0	360,000
37,000	18200,000	973,898	7,272	0,550	0	195,572	-87,838	360,000
37,000	23800,000	977,911	4,014	0,553	0	474,489	-366,755	360,000
37,000	40400,000	984,988	7,077	0,427	0	1334,522	-1226,788	360,000
40,000	9400,000	966,975	0	0,350	0	119,554	0	300,000
40,000	18200,000	974,317	7,342	0,419	0	209,950	-90,396	300,000
40,000	23800,000	978,356	4,039	0,444	0	657,060	-537,506	300,000
40,000	40400,000	985,331	6,975	0,343	0	1460,392	-1340,839	300,000
42,000	9400,000	967,173	0	0,198	0	128,241	0	200,000
42,000	18200,000	974,558	7,385	0,241	0	292,286	-164,044	200,000
42,000	23800,000	979,610	4,052	0,254	0	743,933	-615,692	200,000
42,000	40400,000	985,515	6,905	0,184	0	1539,120	-1410,878	200,000
43,250	9400,000	967,283	0	0,110	0	133,207	0	125,000
43,250	18200,000	974,698	7,415	0,141	0	350,282	-217,075	125,000
43,250	23800,000	978,751	4,053	0,141	0	794,725	-661,518	125,000
43,250	40400,000	985,614	6,863	0,099	0	1585,090	-1451,882	125,000
44,250	9400,000	967,364	0	0,081	0	136,635	0	100,000
44,250	18200,000	974,802	7,438	0,104	0	362,298	-225,663	100,000
44,250	23800,000	978,851	4,048	0,099	0	829,217	-692,582	100,000
44,250	40400,000	985,683	6,833	0,069	0	1614,307	-1477,672	100,000
44,750	9400,000	967,398	0	0,034	0	137,042	0	50,000
44,750	18200,000	974,642	7,444	0,040	0	363,766	-226,724	50,000
44,750	23800,000	978,884	4,042	0,034	0	832,778	-695,736	50,000
44,750	40400,000	985,706	6,822	0,023	0	1615,630	-1478,587	50,000
46,250	9400,000	967,720	0	0,323	0	185,941	0	150,000
46,250	18200,000	975,298	7,578	0,456	0	228,178	-42,237	150,000
46,250	23800,000	979,174	3,876	0,290	0	243,594	-57,653	150,000
46,250	40400,000	985,576	6,402	-0,130	0	313,540	-127,599	150,000
46,350	9400,000	980,621	0	12,901	0	139,726	0	10,000
46,350	18200,000	983,908	3,287	8,610	0	289,953	-150,227	10,000
46,350	23800,000	985,238	1,330	6,064	0	308,760	-169,034	10,000
46,350	40400,000	988,387	3,149	2,811	0	353,309	-213,582	10,000
46,450	9400,000	981,711	0	1,089	0	258,887	0	10,000
46,450	18200,000	984,947	3,236	1,078	0			



46,600	9300,000	983,616	0.	1,907	0.	250,838	0.	15,000
46,600	18100,000	987,176	3,858	2,229	0.	251,979	-27,141	15,000
46,600	23600,000	988,836	1,660	2,516	0.	294,607	-39,509	15,000
46,600	40200,000	992,669	3,833	2,983	0.	340,133	-85,295	15,000
46,850	9300,000	983,617	0.	-0,000	0.	250,950	0.	25,000
46,850	18100,000	987,175	3,557	-0,001	0.	278,146	-27,197	25,000
46,850	23600,000	988,834	1,659	-0,002	0.	290,800	-39,851	25,000
46,850	40200,000	992,665	3,831	-0,004	0.	333,911	-82,961	25,000
47,000	9300,000	983,614	0.	-0,004	0.	240,237	0.	100,000
47,000	18100,000	987,163	3,549	-0,012	0.	257,467	-17,230	100,000
47,000	23600,000	988,817	1,654	-0,017	0.	270,077	-29,840	100,000
47,000	40200,000	992,626	3,810	-0,038	0.	300,611	-60,373	100,000
50,000	9300,000	983,634	0.	0,020	0.	238,719	0.	300,000
50,000	18100,000	987,211	3,577	0,048	0.	254,752	-16,032	300,000
50,000	23600,000	988,884	1,673	0,067	0.	267,496	-28,777	300,000
50,000	40200,000	992,754	3,870	0,127	0.	297,176	-59,456	300,000
55,000	9300,000	983,670	0.	0,036	0.	230,082	0.	500,000
55,000	18100,000	987,296	3,626	0,085	0.	250,458	-14,376	500,000
55,000	23600,000	989,001	1,705	0,118	0.	263,079	-26,997	500,000
55,000	40200,000	992,974	3,973	0,221	0.	293,370	-57,288	500,000
60,000	9300,000	983,477	0.	-0,193	0.	221,339	0.	500,000
60,000	18100,000	987,008	3,531	-0,288	0.	252,526	-31,187	500,000
60,000	23600,000	988,671	1,664	-0,330	0.	261,079	-39,740	500,000
60,000	40200,000	992,553	3,881	-0,422	0.	281,040	-59,701	500,000
70,000	9300,000	985,003	0.	1,326	0.	221,501	0.	1000,000
70,000	18100,000	989,054	4,052	2,046	0.	255,329	-33,828	1000,000
70,000	23600,000	990,987	1,932	2,315	0.	265,212	-43,711	1000,000
70,000	40200,000	995,569	4,582	3,016	0.	288,847	-67,346	1000,000
80,000	9300,000	986,544	0.	1,541	0.	178,447	0.	1000,000
80,000	18100,000	990,850	4,316	1,806	0.	210,500	-32,053	1000,000
80,000	23600,000	992,914	2,054	1,928	0.	231,691	-53,244	1000,000
80,000	40200,000	997,759	4,845	2,190	0.	277,430	-118,983	1000,000
90,820	9300,000	988,061	0.	1,517	0.	189,591	0.	1082,000
90,820	18100,000	992,803	4,742	1,943	0.	230,543	-40,952	1082,000
90,820	23600,000	995,079	2,276	2,165	0.	254,019	-64,428	1082,000
90,820	40200,000	1000,463	5,384	2,704	0.	294,503	-101,912	1082,000
100,000	9300,000	989,069	0.	1,007	0.	199,685	0.	918,000
100,000	18100,000	994,044	4,976	1,241	0.	292,752	-93,067	918,000
100,000	23600,000	996,455	2,411	1,376	0.	329,798	-130,113	918,000
100,000	40200,000	1002,261	5,806	1,798	0.	392,208	-192,523	918,000
110,000	9300,000	990,676	0.	1,607	0.	190,838	0.	1000,000
110,000	18100,000	995,709	5,033	1,664	0.	242,074	-51,237	1000,000
110,000	23600,000	998,114	2,405	1,659	0.	301,506	-110,669	1000,000
110,000	40200,000	1003,846	5,732	1,585	0.	371,962	-181,125	1000,000
116,000	9300,000	992,047	0.	1,371	0.	188,487	0.	600,000
116,000	18100,000	997,028	4,981	1,319	0.	203,585	-15,198	600,000
116,000	23600,000	999,367	2,339	1,253	0.	210,676	-22,199	600,000
116,000	40200,000	1004,835	5,467	0,989	0.	227,249	-38,762	600,000
116,500	9300,000	992,149	0.	0,102	0.	148,282	0.	50,000
116,500	18100,000	997,141	4,992	0,113	0.	165,823	-17,512	50,000
116,500	23600,000	999,497	2,355	0,170	0.	178,447	-17,512	50,000





N-1

T1 NORTH WILKESBORO, NORTH CAROLINA  
 T2 FLOOD INSURANCE STUDY  
 T3 TRIBUTARY T-1, 10 YR 0

J1	ICHECK	ING	NINV	IDIF	STRT	METRIC	HVINS	0	WSEL	FD
	-0	2	-0	-0	012900	-0	-0	-0	1065,000	-0
J2	NPROF	IFLOT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1,000	-0	-0	5,000	50,000	-0	-0	-0	-0	-0
J3	1,000	34,000	8,000	4,000	27,000	28,000	26,000	-0	-0	-0
NC	090	090	060	100	300	-0	-0	-0	-0	-0
QT	5,000	550,000	970,000	1180,000	1180,000	1750,000	-0	-0	-0	-0
ET	-0	-0	-0	-0	10,400	-0	-0	-0	-0	-0
X1	68,000	21,000	250,000	373,000	-0	-0	-0	-0	-0	-0
GR	1095,200	0	1095,900	16,000	1096,800	59,000	1095,200	100,000	1090,700	150,000
GR	1090,100	179,000	1089,500	200,000	1088,000	250,000	1087,200	288,000	1064,700	300,000
GR	1059,200	308,000	1057,100	323,000	1051,900	337,000	1052,300	364,000	1052,800	371,000
GR	1056,100	373,000	1055,800	400,000	1057,200	450,000	1061,500	500,000	1076,500	550,000
GR	1092,100	595,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	70,000	-0	-0	-0	200,000	200,000	200,000	-0	2,900	-0
X1	75,000	-0	-0	-0	500,000	500,000	500,000	-0	7,200	-0
QT	5,000	490,000	870,000	1050,000	1050,000	1560,000	-0	-0	-0	-0
X1	80,000	16,000	226,000	257,000	500,000	500,000	500,000	-0	-4,900	-0
GR	1084,900	0	1084,400	27,000	1084,800	30,000	1084,200	50,000	1083,600	100,000
GR	1083,400	150,000	1082,900	200,000	1082,600	221,000	1083,100	224,000	1082,300	226,000
GR	1073,900	240,000	1073,800	251,000	1074,300	253,000	1082,400	257,000	1085,100	300,000
GR	1087,500	306,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	83,500	-0	-0	-0	350,000	350,000	350,000	-0	4,900	-0
X1	84,000	11,000	226,000	257,000	50,000	50,000	50,000	-0	700	-0
GR	1085,000	0	1084,500	15,000	1100,000	15,000	1100,000	226,000	1082,300	226,000
GR	1073,900	240,000	1073,800	251,000	1074,300	253,000	1082,400	257,000	1085,100	300,000
GR	1087,500	306,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	85,750	0	0	0	175,000	175,000	175,000	-0	2,200	-0
X1	86,000	16,000	226,000	257,000	25,000	25,000	25,000	-0	3,000	-0
GR	1084,900	0	1084,400	27,000	1084,500	30,000	1084,200	50,000	1083,600	100,000
GR	1083,400	150,000	1082,900	200,000	1082,600	221,000	1083,100	224,000	1082,300	226,000
GR	1073,900	240,000	1073,800	251,000	1074,300	253,000	1082,400	257,000	1085,100	300,000
GR	1087,500	306,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	90,000	-0	-0	-0	400,000	400,000	400,000	-0	4,700	-0
QT	5,000	470,000	770,000	1040,000	1040,000	1510,000	-0	-0	-0	-0









\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

\*\*\*\*\*

\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIF- \*  
\* ICATION 59 IS TO \*

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR \*  
\* INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION \*  
\* OF CONVEYANCE VERSUS DISTANCE. \*

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY "N" VALUES IN THE CHANNEL. THE, \*  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN "N" VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO "N" VALUE \*  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPU- \*  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY. \*

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING. \*

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STANDARD \*  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL \*  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD \*  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID UP TO \*  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM AREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED. \*

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD). \*

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO \*

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW. \*

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE. \*

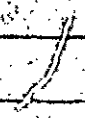
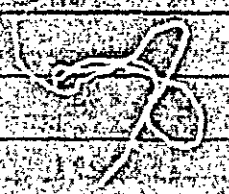
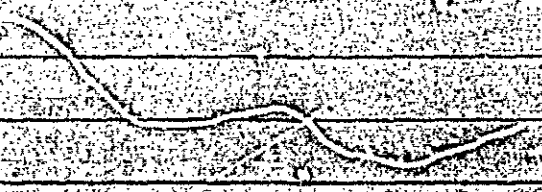
\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE. \*

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PROGRAM \*  
\* CHANGES CAN BE DIRECTED TO ALLAN OTO (FTS 448-2105 OR 448-3292). \*

\*\*\*\*\*



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60



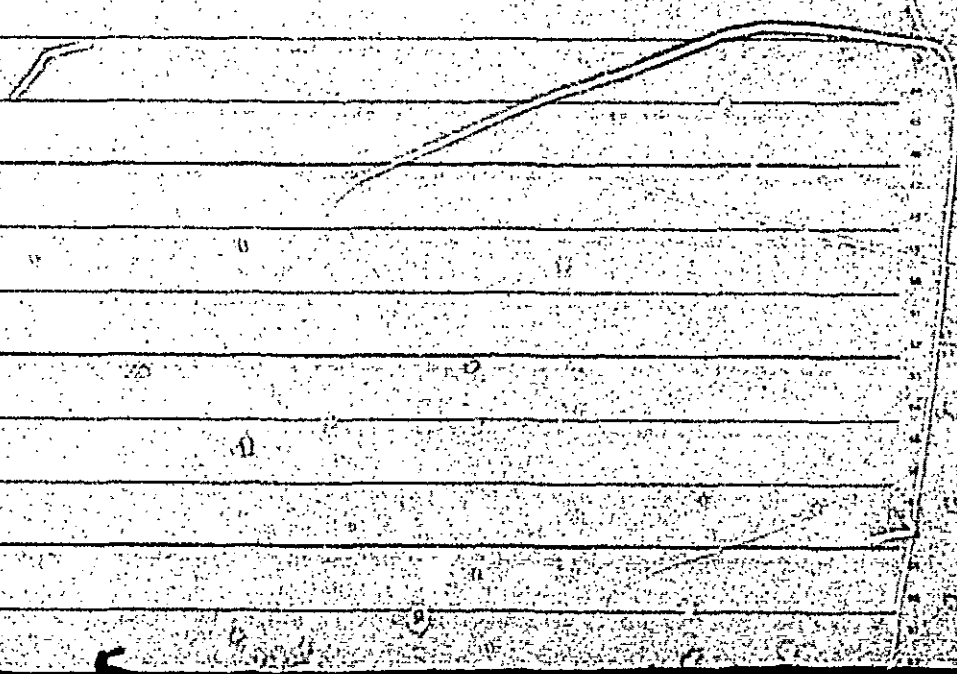


SUMMARY PRINTOUT

TRIBUTARY T-1, 10 YR Q

SECNO	XLCH	ELTRD	ELLC	ELMTN	D	CWSEL	.01K	DEPTH	TOPWID	STENCL	STENCR	VCH
68,00	-0	0	0	1051,90	550,00	1054,70	48,57	2,80	42,69	0	0	5,67
68,00	-0	0	0	1051,90	970,00	1055,69	85,56	3,79	45,97	0	0	6,88
68,00	-0	0	0	1051,90	1180,00	1056,12	104,55	4,22	85,83	0	0	7,31
68,00	-0	0	0	1051,90	1750,00	1056,97	155,02	5,07	118,42	0	0	8,25
70,00	200,00	0	0	1054,80	550,00	1057,46	44,30	2,66	42,25	0	0	6,03
70,00	200,00	0	0	1054,80	970,00	1058,42	78,63	3,62	45,41	0	0	7,28
70,00	200,00	0	0	1054,80	1180,00	1058,83	95,51	4,03	62,60	0	0	7,78
70,00	200,00	0	0	1054,80	1750,00	1059,66	140,76	4,86	110,19	0	0	8,81
75,00	500,00	0	0	1062,00	550,00	1064,75	47,08	2,75	42,50	0	0	5,79
75,00	500,00	0	0	1062,00	970,00	1065,73	82,53	3,73	45,73	0	0	7,05
75,00	500,00	0	0	1062,00	1180,00	1066,14	100,60	4,14	77,07	0	0	7,51
75,00	500,00	0	0	1062,00	1750,00	1067,01	150,43	5,01	115,84	0	0	8,42
80,00	500,00	0	0	1068,90	490,00	1072,63	34,06	3,73	20,65	0	0	6,03
80,00	500,00	0	0	1068,90	870,00	1073,88	57,24	4,98	23,34	0	0	9,83
80,00	500,00	0	0	1068,90	1050,00	1074,35	67,45	5,45	24,35	0	0	10,54
* 80,00	500,00	0	0	1068,90	1560,00	1075,38	93,09	6,48	26,59	0	0	12,38
83,50	350,00	0	0	1073,80	490,00	1078,23	46,29	4,43	22,15	0	0	6,45
83,50	350,00	0	0	1073,80	870,00	1079,91	83,72	6,11	25,81	0	0	7,46
83,50	350,00	0	0	1073,80	1050,00	1080,59	101,78	6,79	27,27	0	0	7,81
83,50	350,00	0	0	1073,80	1560,00	1082,29	155,35	8,49	30,93	0	0	8,49
84,00	50,00	0	0	1074,50	490,00	1078,78	43,55	4,28	21,84	0	0	6,74
84,00	50,00	0	0	1074,50	870,00	1080,43	78,94	5,93	25,40	0	0	7,79
84,00	50,00	0	0	1074,50	1050,00	1081,10	96,26	6,60	26,84	0	0	8,13
84,00	50,00	0	0	1074,50	1560,00	1082,76	147,25	8,26	30,42	0	0	8,84
85,75	175,00	0	0	1076,70	490,00	1080,99	43,72	4,29	21,86	0	0	6,72
85,75	175,00	0	0	1076,70	870,00	1082,58	77,61	5,88	25,28	0	0	7,69
85,75	175,00	0	0	1076,70	1050,00	1083,21	93,79	6,51	26,65	0	0	8,29
85,75	175,00	0	0	1076,70	1560,00	1084,75	140,37	8,05	29,98	0	0	9,15
86,00	25,00	0	0	1076,80	490,00	1081,39	49,47	4,59	22,51	0	0	6,15
86,00	25,00	0	0	1076,80	870,00	1083,01	85,89	6,21	26,00	0	0	7,32
86,00	25,00	0	0	1076,80	1050,00	1083,64	103,13	6,84	27,38	0	0	7,73
86,00	25,00	0	0	1076,80	1560,00	1085,20	152,25	8,40	30,74	0	0	8,62
90,00	400,00	0	0	1081,50	490,00	1085,77	43,33	4,27	21,81	0	0	6,76
90,00	400,00	0	0	1081,50	870,00	1087,41	78,37	5,91	25,35	0	0	7,83
90,00	400,00	0	0	1081,50	1050,00	1088,05	95,03	6,55	26,75	0	0	8,21
90,00	400,00	0	0	1081,50	1560,00	1089,61	142,14	8,11	30,10	0	0	9,07
95,00	500,00	0	0	1087,30	430,00	1090,81	53,46	3,51	107,88	0	0	4,32
95,00	500,00	0	0	1087,30	770,00	1091,87	114,45	4,57	161,31	0	0	4,45
95,00	500,00	0	0	1087,30	940,00	1092,30	150,54	5,00	190,91	0	0	4,44
95,00	500,00	0	0	1087,30	1390,00	1093,40	270,87	6,10	208,02	0	0	4,27
* 100,00	500,00	0	0	1093,20	430,00	1096,15	33,27	2,95	97,50	0	0	6,61
* 100,00	500,00	0	0	1093,20	770,00	1096,74	54,64	3,54	110,15	0	0	7,95
* 100,00	500,00	0	0	1093,20	940,00	1096,99	66,00	3,70	130,50	0	0	8,33
* 100,00	500,00	0	0	1093,20	1390,00	1097,52	96,42	4,38	174,30	0	0	8,12

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CHSEL	.01K	DEPTH	TOPWID	STENCL	STENCR	VCH
100.50	50.00	0	0	1093.70	430.00	1096.86	31.56	3.16	22.54	0	0	7.24
* 100.50	50.00	0	0	1093.70	770.00	1097.58	45.16	3.88	24.25	0	0	10.10
* 100.50	50.00	0	0	1093.70	940.00	1098.06	55.86	4.36	25.00	0	0	10.68
* 100.50	50.00	0	0	1093.70	1390.00	1099.09	84.33	5.39	25.00	0	0	12.21
* 101.50	100.00	1104.90	1100.80	1093.80	430.00	1098.68	85.22	4.88	7.00	0	0	12.60
* 101.50	100.00	1104.90	1100.80	1093.80	770.00	1101.10	149.15	7.30	7.00	0	0	15.06
* 101.50	100.00	1104.90	1100.80	1093.80	940.00	1102.31	181.81	8.51	7.00	0	0	15.78
* 101.50	100.00	1104.90	1100.80	1093.80	1390.00	1105.26	493.53	11.46	78.27	0	0	14.19
102.00	50.00	0	0	1094.30	430.00	1101.06	73.63	6.76	24.13	0	0	6.20
102.00	50.00	0	0	1094.30	770.00	1104.63	167.22	10.33	32.11	0	0	6.49
102.00	50.00	0	0	1094.30	940.00	1106.29	237.73	13.99	173.30	0	0	6.15
102.00	50.00	0	0	1094.30	1390.00	1107.86	390.36	13.56	277.14	0	0	6.02
105.00	300.00	0	0	1097.50	430.00	1102.38	40.07	4.88	19.95	0	0	9.18
105.00	300.00	0	0	1097.50	770.00	1105.29	96.60	7.79	26.44	0	0	9.31
105.00	300.00	0	0	1097.50	940.00	1106.68	132.66	9.18	29.54	0	0	9.23
105.00	300.00	0	0	1097.50	1390.00	1107.80	166.58	10.30	32.07	0	0	11.75
111.00	600.00	0	0	1103.70	430.00	1108.87	46.14	5.17	20.61	0	0	5.81
111.00	600.00	0	0	1103.70	770.00	1110.28	74.33	6.58	24.04	0	0	7.31
111.00	600.00	0	0	1103.70	940.00	1110.93	89.99	7.23	25.62	0	0	7.74
111.00	600.00	0	0	1103.70	1390.00	1112.93	149.62	9.23	30.51	0	0	7.82
115.00	500.00	0	0	1108.70	430.00	1113.61	41.71	4.91	19.98	0	0	6.26
115.00	500.00	0	0	1108.70	770.00	1115.45	78.21	6.75	24.45	0	0	7.04
115.00	500.00	0	0	1108.70	940.00	1116.14	95.63	7.44	26.13	0	0	7.40
115.00	500.00	0	0	1108.70	1390.00	1117.54	136.70	8.84	29.55	0	0	8.30





SUMMARY PRINTOUT

TRIBUTARY T-1, 10 YR Q

SECNO	Q	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
68,00	550,00	1054,70	0	1	-10,30	42,69	-0
68,00	970,00	1055,69	,99	4,73	-11,31	45,97	-0
68,00	1180,00	1056,12	,43	5,16	-13,88	85,83	-0
68,00	1750,00	1056,97	,85	5,22	-18,03	118,42	-0
70,00	550,00	1057,46	0	2,76	0	42,25	200,00
70,00	970,00	1058,42	,96	2,73	0	45,41	200,00
70,00	1180,00	1058,83	,40	2,71	0	62,60	200,00
70,00	1750,00	1059,66	,83	2,69	0	110,19	200,00
75,00	550,00	1064,75	0	7,29	0	42,54	500,00
75,00	970,00	1065,73	,97	7,30	0	45,73	500,00
75,00	1180,00	1066,14	,41	7,31	0	77,07	500,00
75,00	1750,00	1067,01	,87	7,35	0	115,84	500,00
80,00	490,00	1072,63	0	7,86	0	20,65	500,00
80,00	870,00	1073,88	1,25	8,15	0	23,34	500,00
80,00	1050,00	1074,35	,47	8,21	0	24,35	500,00
* 80,00	1560,00	1075,38	1,03	8,38	0	26,59	500,00
83,50	490,00	1078,23	0	5,60	0	22,15	350,00
83,50	870,00	1079,91	1,69	6,03	0	25,81	350,00
83,50	1050,00	1080,59	,68	6,25	0	27,27	350,00
83,50	1560,00	1082,29	1,70	6,91	0	30,93	350,00
84,00	490,00	1078,78	0	,55	0	21,84	50,00
84,00	870,00	1080,43	1,65	,52	0	25,40	50,00
84,00	1050,00	1081,10	,67	,51	0	26,84	50,00
84,00	1560,00	1082,76	1,66	,47	0	30,42	50,00
85,75	490,00	1080,99	0	2,21	0	21,86	175,00
85,75	870,00	1082,58	1,59	2,15	0	25,28	175,00
85,75	1050,00	1083,21	,63	2,11	0	26,65	175,00
85,75	1560,00	1084,75	1,55	2,00	0	29,98	175,00
86,00	490,00	1081,39	0	,40	0	22,51	25,00
86,00	870,00	1083,01	1,61	,43	0	26,00	25,00
86,00	1050,00	1083,64	,64	,44	0	27,38	25,00
86,00	1560,00	1085,20	1,55	,45	0	30,74	25,00
90,00	490,00	1085,77	0	4,37	0	21,81	400,00
90,00	870,00	1087,43	1,64	4,41	0	25,35	400,00
90,00	1050,00	1088,64	,64	4,41	0	26,75	400,00
90,00	1560,00	1089,61	1,55	4,41	0	30,10	400,00
95,00	430,00	1090,81	0	5,04	0	107,88	500,00
95,00	770,00	1091,87	1,06	4,46	0	181,31	500,00
95,00	940,00	1092,30	,43	4,24	0	190,91	500,00
95,00	1390,00	1093,40	1,11	3,80	0	208,02	500,00
* 100,00	430,00	1096,15	0	5,34	0	97,50	500,00
* 100,00	770,00	1096,74	,99	4,87	0	110,15	500,00
* 100,00	940,00	1096,99	,25	4,69	0	130,50	500,00
* 100,00	1390,00	1097,52	,54	4,12	0	174,30	500,00

SECNO	Q	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
100.50	430.00	1096.86	0	.71	0	22.54	50.00
* 100.50	770.00	1097.58	.72	.85	0	24.25	50.00
* 100.50	940.00	1098.06	.48	1.07	0	25.00	50.00
* 100.50	1390.00	1099.09	1.03	1.57	0	25.00	50.00
* 101.50	430.00	1098.68	0	1.81	0	7.00	100.00
* 101.50	770.00	1101.10	2.43	3.52	0	7.00	100.00
* 101.50	940.00	1102.31	1.21	4.25	0	7.00	100.00
* 101.50	1390.00	1105.26	2.95	6.17	0	78.27	100.00
102.00	430.00	1101.06	0	2.35	0	24.13	50.00
102.00	770.00	1104.63	3.57	3.52	0	32.11	50.00
102.00	940.00	1106.29	1.66	3.97	0	173.30	50.00
102.00	1390.00	1107.86	1.58	2.60	0	277.14	50.00
105.00	430.00	1102.38	0	1.32	0	19.95	300.00
105.00	770.00	1105.29	2.91	.66	0	26.44	300.00
105.00	940.00	1106.68	1.39	.39	0	29.54	300.00
105.00	1390.00	1107.80	1.13	-.06	0	32.07	300.00
111.00	430.00	1108.87	0	6.50	0	20.61	600.00
111.00	770.00	1110.28	1.41	4.99	0	24.04	600.00
111.00	940.00	1110.93	.64	4.25	0	25.62	600.00
111.00	1390.00	1112.93	2.00	5.13	0	30.51	600.00
115.00	430.00	1113.61	0	4.73	0	19.98	500.00
115.00	770.00	1115.45	1.84	5.16	0	24.45	500.00
115.00	940.00	1116.14	.70	5.22	0	26.15	500.00
115.00	1390.00	1117.54	1.40	4.61	0	29.55	500.00

POSSIBLE ERROR SECNO= 80.00 PROFILE= 4 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.00 PROFILE= 2 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.00 PROFILE= 3 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.00 PROFILE= 3 20 TRIALS REQUIRED TO BALANCE WREL
POSSIBLE ERROR SECNO= 100.00 PROFILE= 4 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.00 PROFILE= 4 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR SECNO= 100.50 PROFILE= 2 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.50 PROFILE= 3 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.50 PROFILE= 3 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR SECNO= 100.50 PROFILE= 4 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 100.50 PROFILE= 4 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR SECNO= 101.50 PROFILE= 1 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR SECNO= 101.50 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR SECNO= 101.50 PROFILE= 2 SLOPE TOO STEEP



R-1

PROFILE PLOTTED 22 OCT. 1976 BY S.P.F.

T1 NORTH WILKESBORO NORTH CAROLINA  
T2 FLOOD INSURANCE STUDY  
T3 TRIBUTARY P-1 10 YR @

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	WSEL	FG	
	-0	2	-0	-0	-0	-0	-0	983.530	-0	
J2	NPROF	TPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	-0	-0	5.000	50.000	-0	-0	-0	-0	-0
J3	-3.000	31.000	40.000	41.000	42.000	43.000	1.000	2.000	3.000	4.000
J3	53.000	54.000	38.000	38.000	1.000	7.000	8.000	26.000	13.000	55.000
J3	14.000	26.000	15.000	56.000	25.000	38.000	-0	-0	-0	-0
NC	.090	.090	.090	.100	.300	-0	-0	-0	-0	-0
QT	5.000	200.000	350.000	490.000	490.000	750.000	-0	-0	-0	-0
ET	-0	-0	-0	-0	10.400	-0	-0	-0	-0	-0

TRIBUTARY P-1

X1	2.250	20.000	273.000	282.000	-0	-0	-0	-0	-0	-0
GR	1058.400	0	1054.400	15.000	1040.100	25.000	1047.700	99.000	1038.400	78.000
GR	1030.300	89.000	1026.700	200.000	1025.000	128.000	1017.900	150.000	999.200	200.000
GR	983.700	228.000	981.200	250.000	979.100	273.000	975.900	274.000	975.900	278.000
GR	978.600	282.000	980.400	293.000	983.500	300.000	1006.100	350.000	1016.600	379.000
Y1	4.500	-0	-0	-0	225.000	225.000	225.000	-0	10.900	-0
X1	7.000	-0	-0	-0	250.000	250.000	250.000	-0	12.100	-0
X1	9.000	13.000	100.000	200.000	200.000	200.000	200.000	-0	-0	-0
GR	1076.400	0	1057.300	50.000	1030.900	100.000	1009.800	130.000	1008.700	132.000
GR	1008.700	139.000	1013.600	159.000	1012.100	182.000	1020.600	200.000	1038.000	250.000
GR	1051.100	300.000	1066.300	350.000	1078.400	400.000	-0	-0	-0	-0
X1	11.500	-0	-0	-0	250.000	250.000	250.000	-0	11.900	-0
X1	14.000	19.000	200.000	271.000	250.000	250.000	250.000	-0	-0	-0
GR	1093.300	0	1054.200	50.000	1071.900	100.000	1055.600	150.000	1038.700	200.000
GR	1036.400	209.000	1034.900	230.000	1032.700	241.000	1032.600	243.000	1032.600	246.000
GR	1033.700	247.000	1034.300	250.000	1041.100	271.000	1041.300	289.000	1046.200	295.000
GR	1048.100	300.000	1060.000	350.000	1073.200	392.000	1073.800	400.000	-0	-0
X1	16.000	-0	-0	-0	200.000	200.000	200.000	-0	5.000	-0
X1	18.000	-0	-0	-0	200.000	200.000	200.000	-0	5.000	-0
X1	20.000	-0	-0	-0	200.000	200.000	200.000	-0	5.000	-0







\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 21 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

T1 NORTH WILKESBORO NORTH CAROLINA  
T2 FLOOD INSURANCE STUDY  
T3 TRIBUTARY R-1 100 YEAR Q

J1 ICHECK INQ NINV TOTR STRT METRIC MVTNS Q WBEI EQ  
-0 4 -0 -0 -0 -0 -0 -0 -0 988.770 -0

J2 NPROF TPLT PRFS XSECV XSECH FN ALIDC TBW CHNM ITRACE  
3.000 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0



\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

T1 NORTH WILKESBORO NORTH CAROLINA  
T2 FLOOD INSURANCE STUDY  
T3 TRIBUTARY R-1 500 YEAR Q

J1 ICHECK INC NINV IDIR STRT METRIC HVINS Q WSEL EQ  
-0 6 -0 -0 -0 -0 -0 -0 -0 994.410 -0

J2 NPROF IPLOT PREVB XSECV XSECH FN ALLOC IRW CHNTH ITRACE  
15.000 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0

\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

\*\*\*\*\*  
\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIF- \*  
\* ICATION 59 IS TO \*

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCRoACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR \*  
\* INTERPOLATION WAS USED TO CALCULATE ENCRoACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION \*  
\* OF CONVEYANCE VERSUS DISTANCE. \*

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY "N" VALUES IN THE CHANNEL. THE \*  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN "N" VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO "N" VALUE \*  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPUTA- \*  
\* TION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY. \*

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING. \*

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STANDARD \*  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL \*  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD \*  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID UP TO \*  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED. \*

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD). \*

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO \*

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW. \*

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE. \*

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCRoACHMENT STATION WHEN CALCULATING CONVEYANCE. \*

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PROGRAM \*  
\* CHANGES CAN BE DIRECTED TO ALLAN QTO (FIS 448-2105 OR 448-3292). \*

\*\*\*\*\*



SUMMARY PRINTOUT

TRIBUTARY R-1 10 YR 0

SECNO	ELENCE	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	TOPWID	BATA	ENDBT	SECNO	
2.25	0	0	0	975.90	200.00	983.57	987.0	0	983.54	70.57	229.50	300.07	2.25
2.25	0	0	0	975.90	390.00	987.11	989.3	0	987.12	86.15	221.84	307.99	2.25
2.25	0	0	0	975.90	490.00	988.77	990.6	0	988.78	92.82	218.84	311.66	2.25
2.25	0	0	0	975.90	750.00	994.41	993.4	0	994.42	115.48	208.65	324.14	2.25
* 4.50	0	0	0	986.80	200.00	990.25	990.25	0	991.25	16.36	270.24	286.60	4.50
* 4.50	0	0	0	986.80	390.00	991.63	991.63	0	992.38	38.63	255.12	293.78	4.50
* 4.50	0	0	0	986.80	490.00	991.87	991.87	0	992.76	41.71	252.57	294.28	4.50
4.50	0	0	0	986.80	750.00	994.30	0	0	994.52	69.16	230.62	299.78	4.50
7.00	0	0	0	998.90	200.00	1003.18	0	0	1003.57	30.62	261.09	291.70	7.00
7.00	0	0	0	998.90	390.00	1003.82	0	0	1004.49	39.79	254.16	293.95	7.00
7.00	0	0	0	998.90	490.00	1004.25	0	0	1004.89	45.35	249.57	294.92	7.00
* 7.00	0	0	0	998.90	750.00	1004.71	1004.71	0	1005.61	50.46	245.50	295.96	7.00
9.00	0	0	0	1008.70	200.00	1011.23	0	0	1011.71	21.36	127.97	149.33	9.00
9.00	0	0	0	1008.70	390.00	1012.74	0	0	1013.12	40.79	125.82	183.35	9.00
9.00	0	0	0	1008.70	490.00	1013.06	0	0	1013.49	48.17	125.37	184.03	9.00
9.00	0	0	0	1008.70	750.00	1013.90	0	0	1014.34	61.65	124.17	185.81	9.00
11.50	0	0	0	1020.60	200.00	1023.39	0	0	1023.74	22.76	127.61	150.36	11.50
11.50	0	0	0	1020.60	390.00	1024.32	0	0	1024.85	33.42	126.28	182.67	11.50
11.50	0	0	0	1020.60	490.00	1024.88	0	0	1025.35	46.58	125.46	183.89	11.50
11.50	0	0	0	1020.60	750.00	1025.46	0	0	1026.07	59.53	124.66	185.08	11.50
14.00	0	0	0	1032.60	200.00	1035.92	0	0	1036.24	36.33	218.66	254.99	14.00
14.00	0	0	0	1032.60	390.00	1036.78	0	0	1037.13	50.16	207.51	257.66	14.00
14.00	0	0	0	1032.60	490.00	1037.01	0	0	1037.43	51.74	206.62	258.36	14.00
14.00	0	0	0	1032.60	750.00	1037.72	0	0	1038.22	56.75	203.82	260.57	14.00
16.00	0	0	0	1037.60	200.00	1041.65	0	0	1041.75	49.22	208.03	257.25	16.00
16.00	0	0	0	1037.60	390.00	1042.34	0	0	1042.53	54.05	205.33	259.38	16.00
16.00	0	0	0	1037.60	490.00	1042.69	0	0	1042.90	56.50	203.96	260.46	16.00
16.00	0	0	0	1037.60	750.00	1043.34	0	0	1043.64	61.05	201.42	262.47	16.00
18.00	0	0	0	1042.60	200.00	1046.17	0	0	1046.39	42.25	213.54	255.78	18.00
18.00	0	0	0	1042.60	390.00	1046.98	0	0	1047.26	51.47	206.77	258.24	18.00
18.00	0	0	0	1042.60	490.00	1047.26	0	0	1047.59	53.50	205.64	259.14	18.00
18.00	0	0	0	1042.60	750.00	1047.98	0	0	1048.38	58.58	202.80	261.38	18.00
20.00	0	0	0	1047.60	200.00	1051.54	0	0	1051.66	48.45	208.46	256.91	20.00
20.00	0	0	0	1047.60	390.00	1052.22	0	0	1052.44	53.24	205.78	259.03	20.00
20.00	0	0	0	1047.60	490.00	1052.54	0	0	1052.79	55.46	204.55	260.00	20.00
20.00	0	0	0	1047.60	750.00	1053.10	0	0	1053.54	59.99	202.01	262.00	20.00
22.00	0	0	0	1052.60	200.00	1056.29	0	0	1056.48	44.90	211.24	256.14	22.00
22.00	0	0	0	1052.60	390.00	1057.05	0	0	1057.31	52.05	206.45	258.50	22.00
22.00	0	0	0	1052.60	490.00	1057.36	0	0	1057.65	54.20	205.25	259.45	22.00
22.00	0	0	0	1052.60	750.00	1058.07	0	0	1058.44	59.21	202.45	261.66	22.00
25.00	0	0	0	1060.10	80.00	1063.80	0	0	1063.90	17.94	171.22	189.17	25.00
25.00	0	0	0	1060.10	170.00	1064.70	0	0	1064.87	26.28	167.70	193.97	25.00
25.00	0	0	0	1060.10	230.00	1065.28	0	0	1065.43	49.85	165.38	215.23	25.00
25.00	0	0	0	1060.10	350.00	1065.74	0	0	1065.94	52.16	163.63	215.79	25.00

SECNO	FL ENCL	ELTRD	ELLC	ELMIN	Q	CWSEI	CRIBS	EG	TOPWID	SSTA	FNDET	SECNO
27.00	0	0	0	1067.00	80.00	1069.58	0	1070.03	10.92	172.28	183.20	27.00
27.00	0	0	0	1067.00	170.00	1070.80	0	1071.20	19.30	170.64	189.95	27.00
27.00	0	0	0	1067.00	230.00	1071.42	0	1071.81	24.68	168.37	193.06	27.00
27.00	0	0	0	1067.00	350.00	1072.19	0	1072.54	49.92	165.33	215.25	27.00
29.00	0	0	0	1073.90	80.00	1077.37	0	1077.51	15.90	172.01	187.95	29.00
29.00	0	0	0	1073.90	170.00	1078.32	0	1078.53	24.60	168.39	193.03	29.00
29.00	0	0	0	1073.90	230.00	1078.97	0	1079.14	49.20	165.84	215.08	29.00
29.00	0	0	0	1073.90	350.00	1079.45	0	1079.67	51.73	163.95	215.68	29.00
31.00	0	0	0	1080.80	80.00	1083.64	0	1083.94	12.35	172.20	184.55	31.00
31.00	0	0	0	1080.80	170.00	1084.82	0	1085.15	20.91	169.97	190.88	31.00
31.00	0	0	0	1080.80	230.00	1085.43	0	1085.74	27.34	167.56	194.90	31.00
31.00	0	0	0	1080.80	350.00	1086.07	0	1086.38	50.29	165.05	215.34	31.00
33.00	0	0	0	1087.70	70.00	1089.59	0	1089.70	19.33	144.49	163.81	33.00
33.00	0	0	0	1087.70	150.00	1090.39	0	1090.54	24.93	140.22	165.15	33.00
33.00	0	0	0	1087.70	200.00	1090.70	0	1090.97	27.36	138.38	165.74	33.00
33.00	0	0	0	1087.70	290.00	1091.45	0	1091.70	32.26	134.65	166.91	33.00

SUMMARY PRINTOUT

TRIBUTARY R-1 10 YR Q

SECNO	CWRF1	VOL	DEPTH	VCH	DLDR	VLDR	RCH	VCH	QROR	VROR	AREA	SECNO	
2.25	987.53	987.0	0	7.63	1.16	79.08	.78	71.57	1.16	49.35	.89	218.69	2.25
2.25	987.11	989.3	0	11.21	.90	203.23	.74	84.58	.90	102.19	.76	501.24	2.25
2.25	988.77	990.6	0	12.87	.85	266.02	.74	92.77	.85	131.21	.73	649.78	2.25
2.25	988.41	991.4	0	18.51	.66	427.94	.62	105.93	.66	216.13	.56	1237.14	2.25
*	4.50	990.25	.63	3.45	8.10	.45	1.29	194.96	8.10	4.59	2.66	26.14	4.50
*	4.50	991.63	1.46	4.83	7.79	47.66	3.26	284.30	7.79	58.05	4.24	64.78	4.50
*	4.50	991.87	1.87	5.07	8.65	72.77	3.82	333.95	8.65	83.28	5.05	74.13	4.50
	4.50	994.30	.74	7.50	4.54	290.83	3.03	275.01	4.54	184.16	3.47	209.74	4.50
	7.00	1003.18	.84	4.28	5.34	12.22	1.89	169.21	5.34	18.57	2.41	45.77	7.00
	7.00	1003.82	1.84	4.92	7.43	51.54	3.18	277.13	7.43	61.33	4.16	68.22	7.00
	7.00	1004.25	2.33	5.35	7.48	89.11	3.52	307.55	7.48	93.34	4.66	86.47	7.00
*	7.00	1004.71	4.65	5.81	9.01	182.74	4.93	408.38	9.01	158.87	6.05	108.64	7.00
	9.00	1011.23	1.03	2.53	5.53	0	0	200.00	5.53	0	0	36.19	9.00
	9.00	1012.74	2.18	4.04	4.99	0	0	390.00	4.99	0	0	78.21	9.00
	9.00	1013.06	2.74	4.34	5.30	0	0	490.00	5.30	0	0	92.50	9.00
	9.00	1013.90	5.22	5.20	5.35	0	0	750.00	5.35	0	0	140.31	9.00
	11.50	1023.39	1.25	2.79	4.79	0	0	200.00	4.79	0	0	41.80	11.50
	11.50	1024.32	2.59	3.72	5.88	0	0	390.00	5.88	0	0	66.29	11.50
	11.50	1024.86	3.26	4.28	5.49	0	0	490.00	5.49	0	0	89.23	11.50
	11.50	1025.46	5.97	4.86	6.29	0	0	750.00	6.29	0	0	119.15	11.50
	14.00	1035.92	1.50	3.32	4.59	0	0	200.00	4.59	0	0	43.61	14.00
	14.00	1036.78	3.02	4.18	4.73	0	0	390.00	4.73	0	0	82.50	14.00
	14.00	1037.01	3.79	4.41	5.21	0	0	490.00	5.21	0	0	93.99	14.00
	14.00	1037.72	4.69	5.12	5.65	0	0	750.00	5.65	0	0	132.80	14.00
	16.00	1041.65	1.77	4.05	2.64	0	0	200.00	2.64	0	0	75.82	16.00
	16.00	1042.34	3.47	4.74	3.50	0	0	390.00	3.50	0	0	111.47	16.00
	16.00	1042.69	4.30	5.09	3.75	0	0	490.00	3.75	0	0	130.82	16.00
	16.00	1043.34	7.38	5.74	4.44	0	0	750.00	4.44	0	0	168.98	16.00
	18.00	1046.17	2.07	3.57	3.73	0	0	200.00	3.73	0	0	53.68	18.00
	18.00	1046.98	3.93	4.38	4.24	0	0	390.00	4.24	0	0	92.05	18.00
	18.00	1047.26	4.85	4.66	4.57	0	0	490.00	4.57	0	0	107.23	18.00
	18.00	1047.99	8.11	5.38	5.07	0	0	750.00	5.07	0	0	147.93	18.00
	20.00	1051.54	2.35	3.94	2.84	0	0	200.00	2.84	0	0	70.47	20.00
	20.00	1052.22	4.39	4.62	3.70	0	0	390.00	3.70	0	0	105.30	20.00
	20.00	1052.54	5.38	4.94	4.00	0	0	490.00	4.00	0	0	122.45	20.00
	20.00	1053.19	8.82	5.59	4.69	0	0	750.00	4.69	0	0	159.80	20.00
	22.00	1056.29	2.65	3.69	3.41	0	0	200.00	3.41	0	0	58.69	22.00
	22.00	1057.05	4.85	4.45	4.05	0	0	390.00	4.05	0	0	96.31	22.00
	22.00	1057.36	5.92	4.76	4.35	0	0	490.00	4.35	0	0	112.64	22.00
	22.00	1058.07	9.53	5.47	4.90	0	0	750.00	4.90	0	0	153.16	22.00
	25.00	1063.80	2.96	3.70	2.60	0	0	200.00	2.60	0	0	30.76	25.00
	25.00	1064.70	5.36	4.60	3.36	0	0	170.00	3.36	0	0	50.60	25.00
	25.00	1065.28	6.56	5.18	3.11	0	0	230.00	3.11	.00	.02	73.99	25.00
	25.00	1065.74	10.49	5.64	3.63	0	0	349.76	3.63	.24	.98	96.72	25.00



SECNO	CWSEL	VDI	DEPTH	VCH	QI OR	VI OR	QCH	VCH	QROB	VROB	AREA	SECNO
27.00	1069.58	3.06	2.58	5.33	0	0	80.00	5.33	0	0	15.01	27.00
27.00	1070.84	5.55	3.81	5.08	0	0	170.00	5.08	0	0	33.48	27.00
27.00	1071.42	6.84	4.42	4.97	0	0	230.00	4.97	0	0	46.23	27.00
27.00	1072.19	10.79	5.19	4.69	0	0	350.00	4.69	0.00	0.04	74.62	27.00
29.00	1077.37	3.16	3.47	2.97	0	0	80.00	2.97	0	0	26.91	29.00
29.00	1078.32	5.73	4.42	3.69	0	0	170.00	3.69	0	0	46.11	29.00
29.00	1078.97	7.10	5.07	3.37	0	0	230.00	3.37	0.00	0.03	68.19	29.00
29.00	1079.45	11.17	5.55	3.79	0	0	349.82	3.79	0.18	0.96	92.44	29.00
31.00	1083.64	3.26	2.84	4.46	0	0	80.00	4.46	0	0	17.95	31.00
31.00	1084.82	5.92	4.02	4.60	0	0	170.00	4.60	0	0	36.96	31.00
31.00	1085.43	7.37	4.63	4.46	0	0	230.00	4.46	0	0	51.53	31.00
31.00	1086.07	11.56	5.27	4.48	0	0	350.00	4.48	0.00	0.03	78.25	31.00
33.00	1089.59	3.36	1.89	2.65	12	57	69.88	2.65	0	0	26.58	33.00
33.00	1090.39	6.11	2.69	3.52	4.56	1.44	145.40	3.52	0	0	44.42	33.00
33.00	1090.74	7.62	3.04	3.96	9.89	1.80	190.11	3.96	0	0	53.54	33.00
33.00	1091.45	11.91	3.75	4.22	26.75	2.20	233.24	4.22	0	0	74.57	33.00

POSSIBLE ERROR SECNO= 4.50 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 4.50 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 4.50 PROFILE= 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 4.50 PROFILE= 2 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 4.50 PROFILE= 3 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 4.50 PROFILE= 3 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 7.00 PROFILE= 4 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 7.00 PROFILE= 4 20 TRIALS REQUIRED TO BALANCE WSEL

Y-1

C  
T1 NORTH WILKESBORO, N. C.  
T2 FLOOD INSURANCE STUDY  
T3 TRIBUTARY Y-1 10-YR U

J1 ICHECK INO NINV IDIR STRT METRIC HVINS Q WSEL PG  
-0 2 -0 -0 .014200 -0 -0 -0 955,000 -0

J2 NPROF IPLDT PREVS XSECV XSECH FN ALLDC ISW CHNIM ITRACE  
1,000 -0 -0 10,000 100,000 -0 -0 -0 -0 -0

J3 -3,000 31,000 40,000 41,000 42,000 43,000 1,000 2,000 3,000 4,000  
J3 53,000 54,000 38,000 38,000 1,000 7,000 8,000 26,000 13,000 55,000  
J3 14,000 26,000 15,000 56,000 25,000 38,000 -0 -0 -0 -0  
NC .080 .080 .080 .100 .300 -0 -0 -0 -0 -0  
QT 5,000 350,000 640,000 760,000 760,000 1170,000 -0 -0 -0 -0  
ET -0 -0 -0 -0 -0 10,400 -0 -0 -0 -0

TRIBUTARY Y-1

X1 0 19,000 480,000 500,000 0 0 0 -0 -0 -0  
GR 991,500 0 978,500 65,000 956,000 134,000 963,500 155,000 964,500 205,000  
GR 971,500 223,000 973,000 300,000 966,500 330,000 961,500 337,000 961,000 350,000  
GR 952,500 360,000 948,000 400,000 946,500 478,000 942,000 480,000 948,000 500,000  
GR 958,400 520,000 958,600 550,000 955,500 585,000 987,500 650,000 -0 -0  
SB 1,250 1,500 2,500 500,000 10,000 6,000 25,000 -0 -0 -0

X1 3,250 0 0 0 325,000 325,000 325,000 -0 10,000 -0  
X2 -0 -0 1,000 951,700 962,500 -0 -0 -0 -0 -0

X1 8,000 17,000 368,000 380,000 475,000 475,000 475,000 -0 -0 -0  
GR 1026,500 0 1008,000 50,000 977,500 150,000 963,600 180,000 963,500 196,000  
GR 961,200 200,000 956,400 250,000 953,700 300,000 951,600 368,000 950,100 370,000  
GR 949,500 373,000 950,000 378,000 952,000 380,000 968,000 450,000 985,500 500,000  
GR 997,000 550,000 1005,000 600,000 -0 -0 -0 -0 -0 -0  
EJ -0 -0 -0 -0 -0 -0 -0 -0 -0 -0







\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT. 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

T1 NORTH WILKESBORO, N. C.  
T2 FLOOD INSURANCE STUDY  
T3 TRIBUTARY Y-1 500-YR Q

J1 ICHECK JNO NINV IDIR STRT METRIC HVINS Q WSEL FQ  
-0 6. -0 -0 -0 014200 -0 -0 -0 965,000

J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM TTRACE  
15,000 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0

\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

\*\*\*\*\*

\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIFICATION 59 IS TO \*

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION OF CONVEYANCE VERSUS DISTANCE. \*

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY "N" VALUES IN THE CHANNEL. THE PROGRAM WILL NOW ALLOW BOTH A CHANGE IN "N" VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO "N" VALUE VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPUTATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY. \*

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING. \*

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STANDARD TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINT/OUT OF CALCULATED CHANNEL AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID UP TO ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED. \*

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD). \*

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO \*

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WETR FLOW. \*

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE. \*

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE. \*

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PROGRAM CHANGES CAN BE DIRECTED TO ALLAN DTG (FTS 448-2105 OR 448-3292). \*

\*\*\*\*\*

SUMMARY PRINTOUT

TRIBUTARY V-1 10-YR Q

SECNO	ELENCL	ELTRD	ELLC	ELMTN	Q	CWSEL	CRWS	EG	TOPWID	SSTA	ENDST	SECNO	
0	0	0	0	942.00	350.00	947.84	0	948.07	91.39	408.10	499.48	0	
0	0	0	0	942.00	640.00	948.53	0	948.79	105.78	395.25	501.03	0	
0	0	0	0	942.00	760.00	948.75	0	949.02	108.09	393.35	501.44	0	
0	0	0	0	942.00	1170.00	949.39	0	949.72	115.09	387.63	502.68	0	
*	3.25	0	962.50	951.70	952.00	350.00	957.03	957.03	957.81	46.43	450.34	496.77	3.25
*	3.25	0	962.50	951.70	952.00	640.00	962.57	0	962.58	148.89	359.91	508.80	3.25
*	3.25	0	962.50	951.70	952.00	760.00	962.73	0	962.75	149.39	359.72	509.11	3.25
*	3.25	0	962.50	951.70	952.00	1170.00	963.05	0	963.09	150.36	359.35	509.71	3.25
8.00	0	0	0	949.50	350.00	958.04	0	958.04	173.56	232.88	406.44	8.00	
8.00	0	0	0	949.50	640.00	962.61	0	962.62	228.86	197.55	426.41	8.00	
8.00	0	0	0	949.50	760.00	962.79	0	962.79	229.91	197.25	427.16	8.00	
8.00	0	0	0	949.50	1170.00	963.16	0	963.17	232.26	196.58	428.85	8.00	



SUMMARY PRINTOUT

TRIBUTARY Y-1 10-YR Q

SECNO	CWSEL	VOL	DEPTH	VCH	QLDB	VLOB	RCH	VCH	QROB	VROB	AREA	SECNO
0	947.84	0	5.84	4.39	100.12	1.85	249.88	4.39	0	0	111.10	0
0	948.53	0	6.53	4.96	288.96	2.63	350.81	4.96	.23	.84	180.98	0
0	948.75	0	6.75	5.18	370.80	2.89	380.63	5.18	.57	1.06	203.83	0
0	949.39	0	7.39	5.74	662.97	3.57	504.05	5.74	2.97	1.60	275.63	0
*	3.25	957.03	.62	5.03	7.41	37.41	2.90	312.59	7.41	0	55.12	3.25
*	3.25	962.57	3.28	10.57	1.16	454.20	.86	175.80	1.16	10.00	697.01	3.25
*	3.25	962.73	3.45	10.73	1.33	542.17	1.00	205.46	1.33	12.35	720.98	3.25
*	3.25	963.05	3.89	11.05	1.91	842.29	1.45	307.18	1.91	20.52	767.70	3.25
8.00	958.04	4.77	8.54	.66	258.62	.49	62.11	.66	29.27	.37	705.10	8.00
8.00	962.61	16.03	13.11	.49	494.86	.40	73.03	.49	72.11	.29	1643.00	8.00
8.00	962.79	16.55	13.29	.57	587.98	.46	85.70	.57	86.32	.34	1682.07	8.00
8.00	963.16	17.73	13.66	.82	906.16	.68	128.58	.82	135.26	.50	1771.15	8.00

POSSIBLE ERROR SECNO= 3.25 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 3.25 PROFILE= 1 SLOPE TOO STEEP



Y-2

C	NORTH WILKESBORO, N.C.										
T1	FLOOD INSURANCE STUDY										
T2	TRIBUTARY Y-2 10-YR Q										
T3											
J1	ICHECK	ING	WINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG	
	0	2	-0	-0	-0	-0	-0	-0	961,000	-0	
J2	NPROF	IPLT	PRPVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	1,000	-0	-0	10,000	100,000	-0	-0	-0	-0	-0	
J3	-3,000	31,000	40,000	41,000	42,000	43,000	1,000	2,000	3,000	4,000	
J3	53,000	54,000	38,000	38,000	1,000	7,000	8,000	26,000	13,000	55,000	
J3	14,000	26,000	15,000	56,000	25,000	38,000	-0	-0	-0	-0	
NC	.050	.080	.080	.100	.300	-0	-0	-0	-0	-0	
QT	5,000	400,000	690,000	840,000	840,000	1200,000	-0	-0	-0	-0	
ET	-0	-0	-0	-0	10,400	-0	-0	-0	-0	-0	
X1	5,700	7,000	443,500	446,500	-0	-0	-0	-0	-4,790	-0	
GR	965,200	0	965,900	443,500	949,300	443,500	949,300	446,500	965,900	446,500	
GR	968,000	850,000	966,600	1100,000	-0	-0	-0	-0	-0	-0	
X1	67,700	0	0	0	100,000	100,000	100,000	-0	2,360	-0	
X1	7,700	0	0	0	100,000	100,000	100,000	-0	2,360	-0	
X3	10,000	-0	-0	-0	-0	-0	-0	966,500	966,500	-0	
SB	0	1,500	2,500	500,000	7,000	0	12,600	-0	-0	-0	
X1	4,500	0	0	0	180,000	180,000	180,000	-0	4,250	-0	
X2	-0	-0	1,000	957,800	966,000	-0	-0	-0	-0	-0	
X3	10,000	-0	-0	-0	-0	-0	-0	966,500	966,500	-0	
X1	13,500	10,000	90,000	110,000	500,000	500,000	500,000	-0	-0	-0	
GR	967,000	0	966,300	25,000	963,000	40,000	963,000	90,000	959,500	92,000	
GR	959,500	98,000	964,000	110,000	988,000	180,000	989,500	190,000	1020,000	300,000	
X1	17,500	12,000	537,000	554,000	400,000	400,000	400,000	-0	-0	-0	
GR	1019,000	0	1003,500	150,000	996,000	200,000	979,000	280,000	978,000	300,000	
GR	971,500	350,000	971,500	537,000	969,500	540,000	969,500	550,000	971,500	554,000	
GR	1004,000	600,000	1036,000	465,000	-0	-0	-0	-0	-0	-0	
X1	22,500	15,000	450,000	470,000	500,000	500,000	500,000	-0	-0	-0	
GR	1049,000	150,000	1033,000	200,000	1021,000	300,000	1015,000	330,000	1003,500	340,000	
GR	1002,000	350,000	999,500	380,000	999,500	403,000	997,000	405,000	987,000	450,000	
GR	987,000	455,000	983,500	457,000	983,500	465,000	986,500	470,000	1051,000	600,000	
X1	31,000	15,000	275,000	290,000	850,000	850,000	850,000	-0	-0	-0	
GR	1073,500	0	1052,000	100,000	1037,000	150,000	1019,000	200,000	1015,000	233,000	
GR	1016,500	234,000	1017,000	262,000	1013,500	265,000	1013,000	275,000	1009,800	275,000	
GR	1011,200	220,000	1013,400	240,000	1018,000	270,000	1018,000	275,000	1018,000	275,000	









2550. C  
2600. C  
31.00 2650. C

IRLE  
INLE  
IRWE

M  
M  
M

\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

\*\*\*\*\*  
\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIF- \*  
\* ICATION 59 IS TO \*

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCRoACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR \*  
\* INTERPOLATION WAS USED TO CALCULATE ENCRoACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION \*  
\* OF CONVEYANCE VERSUS DISTANCE. \*

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY "N" VALUES IN THE CHANNEL. THE, \*  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN "N" VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO "N" VALUE \*  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPLI- \*  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY. \*

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING. \*

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STANDARD \*  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL \*  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD \*  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID UP TO \*  
\* FLLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BARFA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED. \*

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD). \*

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO \*

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW. \*

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE. \*

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCRoACHMENT STATION WHEN CALCULATING CONVEYANCE. \*

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PROGRAM \*  
\* CHANGES CAN BE DIRECTED TO ALLAN DTC (FTS 448-2105 OR 448-3292). \*

\*\*\*\*\*

SUMMARY PRINTOUT

TRIBUTARY Y-2 10-YR Q

SECD	ELENCL	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	TOPWID	SSTA	ENDST	SECD
5.70	0	0	0	944.51	400.00	961.00	0	961.12	376.81	0	446.50	5.70
5.70	0	0	0	944.51	690.00	961.20	0	961.33	463.79	0	463.79	5.70
5.70	0	0	0	944.51	840.00	961.30	0	961.43	483.01	0	483.01	5.70
5.70	0	0	0	944.51	1200.00	961.40	0	961.60	502.22	0	502.22	5.70
6.70	0	0	0	946.87	400.00	963.36	0	963.48	380.45	0	446.50	7.70
6.70	0	0	0	946.87	690.00	963.55	0	963.68	463.53	0	463.53	7.70
6.70	0	0	0	946.87	840.00	963.60	0	963.76	472.74	0	472.74	7.70
6.70	0	0	0	946.87	1200.00	963.80	0	963.98	509.14	0	509.14	7.70
* 7.70	0	0	0	949.23	400.00	966.59	965.72	966.60	602.61	0	1100.00	7.70
* 7.70	0	0	0	949.23	690.00	966.69	966.69	966.71	640.15	0	1100.00	7.70
* 7.70	0	0	0	949.23	840.00	966.82	966.82	966.84	688.26	0	1100.00	7.70
* 7.70	0	0	0	949.23	1200.00	966.51	966.51	966.59	577.22	0	577.22	7.70
<i>Rt. 2 = Sta. 8+50 — Begin Profile here.</i>												
* 9.50	0	966.00	957.80	953.48	400.00	964.27	0	966.64	3.00	443.50	446.50	9.50
* 9.50	0	966.00	957.80	953.48	690.00	970.18	0	970.30	464.80	0	464.80	9.50
* 9.50	0	966.00	957.80	953.48	840.00	970.11	970.11	970.36	451.80	0	451.80	9.50
* 9.50	0	966.00	957.80	953.48	1200.00	972.32	0	972.33	1100.00	0	1100.00	9.50
13.50	0	0	0	959.50	400.00	967.28	963.48	967.30	119.58	0	119.58	13.50
13.50	0	0	0	959.50	690.00	970.46	0	970.47	128.85	0	128.85	13.50
13.50	0	0	0	959.50	840.00	970.59	0	970.61	129.23	0	129.23	13.50
13.50	0	0	0	959.50	1200.00	972.39	0	972.42	134.48	0	134.48	13.50
* 17.50	0	0	0	969.50	400.00	971.92	971.92	972.16	207.85	346.75	554.60	17.50
* 17.50	0	0	0	969.50	690.00	972.07	972.07	972.46	209.24	345.58	554.81	17.50
* 17.50	0	0	0	969.50	840.00	972.22	972.22	972.59	210.59	344.44	555.02	17.50
* 17.50	0	0	0	969.50	1200.00	972.41	972.41	972.90	212.33	342.96	555.29	17.50
22.50	0	0	0	983.50	400.00	987.89	0	988.54	26.80	446.00	472.80	22.50
22.50	0	0	0	983.50	690.00	989.09	0	989.88	34.61	440.60	475.22	22.50
22.50	0	0	0	983.50	840.00	989.28	0	990.32	35.83	439.76	475.59	22.50
22.50	0	0	0	983.50	1200.00	990.06	0	991.36	40.91	436.25	477.16	22.50
31.00	0	0	0	1009.80	400.00	1013.39	0	1013.70	72.52	267.23	339.74	31.00
31.00	0	0	0	1009.80	690.00	1013.90	0	1014.33	76.42	264.66	341.08	31.00
31.00	0	0	0	1009.80	840.00	1014.28	0	1014.70	77.58	264.33	341.91	31.00
31.00	0	0	0	1009.80	1200.00	1014.85	0	1015.37	79.33	263.84	343.17	31.00

SUMMARY PRINTOUT

TRIBUTARY Y-2 10-YR D

SECNO	CWSEL	VOL	DEPTH	VCH	QLOB	VL08	QCH	VCH	QROB	VROB	AREA	SECNO	
5.70	961.00	0	16.49	3.55	224.32	2.03	175.68	3.55	0	0	159.74	5.70	
5.70	961.20	0	16.69	3.53	512.97	2.63	176.75	3.53	.28	.36	245.99	5.70	
5.70	961.30	0	16.70	3.30	671.87	2.81	166.22	3.30	1.91	.55	293.33	5.70	
5.70	961.40	0	16.80	3.73	1004.27	3.54	199.08	3.73	6.65	.82	342.59	5.70	
6.70	963.36	.37	16.49	3.50	226.82	2.02	173.18	3.50	0	0	161.92	7.70	
6.70	963.55	.56	16.68	3.54	512.32	2.63	177.41	3.54	.27	.36	245.36	7.70	
6.70	963.60	.64	16.73	3.78	649.08	3.01	190.01	3.78	.91	.51	267.80	7.70	
6.70	963.80	.81	16.93	3.45	1016.31	3.39	175.30	3.45	8.39	.82	360.78	7.70	
*	7.70	966.59	1.24	17.36	.54	359.25	.73	28.37	.54	12.38	.22	599.15	7.70
*	7.70	966.69	1.61	17.46	.82	621.09	1.16	42.81	.82	26.10	.36	662.07	7.70
*	7.70	966.82	1.81	17.59	.84	755.57	1.27	44.50	.84	39.93	.39	748.27	7.70
*	7.70	966.51	1.86	17.28	1.83	1073.72	2.35	95.02	1.83	31.26	.70	553.26	7.70
*	9.50	964.27	2.55	10.79	12.35	0	0	399.99	12.35	0	0	32.38	9.50
*	9.50	970.18	3.49	16.70	3.48	515.46	2.61	174.22	3.48	.32	.37	248.43	9.50
*	9.50	970.11	3.81	16.63	5.16	582.60	3.48	257.39	5.16	.00	.04	217.42	9.50
*	9.50	972.32	6.92	18.84	.38	973.13	.85	21.41	.38	205.46	.30	1899.47	9.50
13.50	967.28	5.09	7.78	.86	286.97	1.06	107.22	.86	5.81	.37	410.50	13.50	
13.50	970.46	9.53	10.96	.71	533.42	.96	134.26	.71	22.32	.37	805.18	13.50	
13.50	970.59	9.77	11.09	.85	650.20	1.15	162.02	.85	27.78	.44	822.11	13.50	
13.50	972.39	23.91	12.89	.92	938.87	1.29	209.77	.92	51.36	.50	1059.51	13.50	
*	17.50	971.92	7.50	2.42	4.90	231.15	2.90	168.72	4.90	.13	1.00	114.05	17.50
*	17.50	972.07	13.90	2.57	6.19	461.98	4.25	207.67	6.19	.34	1.47	145.78	17.50
*	17.50	972.22	14.36	2.72	5.82	610.60	4.45	228.83	5.82	.57	1.54	76.91	17.50
*	17.50	972.41	29.77	2.91	6.31	930.41	5.34	268.49	6.31	1.10	1.85	217.40	17.50
22.50	987.89	8.51	4.39	6.57	5.67	3.19	389.41	6.57	4.93	2.54	62.98	22.50	
22.50	989.09	15.31	5.59	7.41	49.76	5.07	616.92	7.41	23.32	3.45	99.83	22.50	
22.50	989.28	15.98	5.78	8.49	69.65	5.98	739.08	8.49	31.27	4.03	106.42	22.50	
22.50	990.06	31.60	6.56	9.59	154.50	7.36	984.18	9.59	61.22	4.81	136.33	22.50	
31.00	1013.39	10.10	3.59	5.24	2.30	1.58	227.27	5.24	170.34	3.13	99.28	31.00	
31.00	1013.90	17.63	4.10	6.28	24.52	3.75	319.81	6.28	345.67	4.31	137.64	31.00	
31.00	1014.28	18.65	4.48	6.09	48.36	4.50	304.85	6.09	446.70	4.48	166.94	31.00	
31.00	1014.85	35.20	5.05	6.53	100.54	5.96	427.09	6.53	672.37	5.16	212.41	31.00	

- POSSIBLE ERROR SECNO= 7.70 PROFILE= 1 ASSUMED WSEL=MIN DIFF + .1FT
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 2 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 2 20 TRIALS REQUIRED TO BALANCE WSEL
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 3 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 3 20 TRIALS REQUIRED TO BALANCE WSEL
- POSSIBLE ERROR SECNO= 7.70 PROFILE= 4 CRITICAL DEPTH ASSUMED











\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

\*\*\*\*\*

\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIFICATION 59 IS TO \*

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION OF CONVEYANCE VERSUS DISTANCE. \*

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY "N" VALUES IN THE CHANNEL. THE PROGRAM WILL NOW ALLOW BOTH A CHANGE IN "N" VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO "N" VALUE VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPUTATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY. \*

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING. \*

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STANDARD TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID UP TO ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED. \*

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD). \*

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO \*

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW. \*

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE. \*

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE. \*

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PROGRAM CHANGES CAN BE DIRECTED TO ALLAN OTO (RTS 448-2105 OR 448-3292). \*

\*\*\*\*\*



SUMMARY PRINTOUT

TRIBUTARY Y-3 10-YR Q

SECNO	ELEINCL	ELTRD	ELLC	ELMIN	Q	CASEL	CRWS	EG	TOPWID	BSTA	ENDST	SECNO
31.25	0	0	0	976.85	170.00	980.86	0	981.02	21.44	375.26	396.70	31.25
31.25	0	0	0	976.85	320.00	981.94	0	982.17	69.20	343.73	412.92	31.25
31.25	0	0	0	976.85	410.00	982.32	0	982.57	91.81	326.76	418.58	31.25
31.25	0	0	0	976.85	590.00	982.87	0	983.12	124.55	302.21	426.76	31.25
32.75	0	990.00	982.00	977.60	170.00	982.67	0	982.78	67.57	344.95	412.52	32.75
32.75	0	990.00	982.00	977.60	320.00	990.51	0	990.51	166.00	285.00	451.00	32.75
32.75	0	990.00	982.00	977.60	410.00	990.72	0	990.72	166.38	285.00	451.38	32.75
32.75	0	990.00	982.00	977.60	590.00	991.06	0	991.06	167.01	285.00	452.01	32.75
35.50	0	0	0	980.50	170.00	985.81	0	986.01	19.56	271.90	291.46	35.50
35.50	0	0	0	980.50	320.00	990.51	0	990.52	162.10	193.10	355.21	35.50
35.50	0	0	0	980.50	410.00	990.72	0	990.74	169.26	90.22	359.48	35.50
35.50	0	0	0	980.50	590.00	991.06	0	991.10	179.66	185.55	364.21	35.50
36.50	0	988.00	985.00	981.50	170.00	988.27	0	988.33	28.50	256.00	294.50	36.50
36.50	0	988.00	985.00	981.50	320.00	990.54	0	990.57	124.51	211.21	335.72	36.50
36.50	0	988.00	985.00	981.50	410.00	990.75	0	990.80	134.00	206.02	340.01	36.50
36.50	0	988.00	985.00	981.50	590.00	991.10	0	991.18	148.30	198.67	346.97	36.50
39.00	0	0	0	985.50	170.00	989.37	0	989.51	22.80	137.52	160.31	39.00
39.00	0	0	0	985.50	320.00	990.99	0	991.16	27.20	131.35	162.55	39.00
39.00	0	0	0	985.50	410.00	991.34	0	991.57	28.14	134.88	163.03	39.00
39.00	0	0	0	985.50	590.00	991.92	0	992.28	29.74	134.10	163.84	39.00

SUMMARY PRINTOUT

TRIBUTARY Y-3 10-YR Q

SECNO	CHSEL	VOL	DEPTH	VCH	QLOB	VLOB	QCH	VCH	QROB	VROB	AREA	SECNO
31.25	980.86	0	4.01	3.21	0	0	170.00	3.21	.00	.02	53.01	31.25
31.25	981.94	0	5.09	3.97	9.90	.91	296.10	3.97	13.99	1.31	96.08	31.25
31.25	982.32	0	5.47	4.26	31.59	1.22	349.22	4.26	29.19	1.58	126.42	31.25
31.25	982.87	0	6.02	4.63	94.75	1.61	430.56	4.63	64.69	1.92	185.44	31.25
32.75	982.67	.20	5.07	2.74	0	0	166.18	2.74	3.82	.87	64.98	32.75
32.75	990.51	2.37	12.91	.30	161.95	.24	89.20	.30	88.85	.24	1277.55	32.75
32.75	990.72	2.48	13.12	.37	207.94	.30	87.57	.37	114.50	.30	1312.79	32.75
32.75	991.06	2.68	13.46	.51	300.13	.41	123.64	.51	166.24	.41	1369.69	32.75
35.50	985.84	.57	5.34	3.25	0	0	170.00	3.25	0	0	52.27	35.50
35.50	990.51	7.64	10.01	1.19	79.76	.57	196.24	1.19	44.01	.49	394.37	35.50
35.50	990.72	7.98	10.22	1.41	109.88	.71	239.08	1.41	61.06	.59	429.76	35.50
35.50	991.06	8.55	10.56	1.78	173.29	.94	317.56	1.78	99.16	.78	490.19	35.50
36.50	988.27	.73	6.77	2.03	.06	.19	149.94	2.03	0	0	84.00	36.50
36.50	990.54	8.39	9.04	1.75	49.31	.69	245.38	1.75	25.31	.61	253.40	36.50
36.50	990.75	8.79	9.25	2.06	71.13	.84	300.78	2.06	38.09	.75	281.22	36.50
36.50	991.10	9.49	9.60	2.59	121.95	1.12	400.49	2.59	67.56	1.00	330.46	36.50
39.00	989.37	1.13	3.87	3.06	0	0	170.00	3.06	0	0	55.53	39.00
39.00	990.99	9.39	5.49	3.33	0	0	320.00	3.33	0	0	396.15	39.00
39.00	991.34	9.91	5.84	3.88	0	0	410.00	3.88	0	0	105.80	39.00
39.00	991.92	10.79	6.42	4.80	0	0	590.00	4.80	0	0	122.84	39.00