
HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
ERROR CORR 01
MODIFICATION - 50,51,52

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
T2 FLOODPLAIN STUDY AT WAKE COUNTY M-6 JOB NO.6855
T3 100YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INO NINV IDIR STRT METRIC HVINS O WSEL FD
1, 4, 0, 0, 0,000000 0,00 0,0 0, 234,680 0,000
J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBM CHNIM ITRACE
1,000 0,000 +1,000 0,000 0,000 0,000 0,000 0,000 0,000 15,000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38,000 1,000 3,000 41,000 42,000 5,000 43,000 0,000 38,000 1,000
53,000 21,000 22,000 54,000 4,000 0,000 200,000 0,000 0,000 0,000

NC .085 .085 .060 .100 .300 0,000 0,000 0,000 0,000 0,000
OT 5,000 210,000 520,000 730,000 1350,000 730,000 0,000 0,000 0,000 0,000
ET 0,000 0,000 0,000 0,000 0,000 7,100 655,000 710,000 0,000 0,000

X1 2500,000 9,000 690,000 710,000 2500,000 2500,000 2500,000 0,000 0,000 0,000
GR 260,000 0,000 250,000 200,000 210,000 400,000 232,000 690,000 230,000 700,000
GR 232,000 710,000 240,000 825,000 250,000 950,000 260,000 1025,000 0,000 0,000
ET 0,000 0,000 0,000 0,000 0,000 7,100 630,000 710,000 0,000 0,000

X1 3250,000 0,000 0,000 0,000 750,000 750,000 750,000 0,000 7,230 0,000
ET 0,000 0,000 0,000 0,000 0,000 7,100 310,000 340,000 0,000 0,000

X1 4000,000 23,000 311,000 324,000 750,000 750,000 750,000 0,000 7,230 0,000
GR 273,900 0,000 268,400 68,000 266,800 78,000 266,500 100,000 262,200 200,000
GR 262,000 201,000 262,400 203,000 262,000 221,000 261,400 224,000 259,800 300,000
GR 258,100 311,000 254,200 314,000 253,700 320,000 253,700 323,000 256,300 324,000
GR 259,800 345,000 260,100 400,000 260,200 500,000 262,200 600,000 265,200 700,000
GR 265,900 270,800 270,800 800,000 274,700 900,000 0,000 0,000 0,000 0,000
ET 0,000 0,000 0,000 0,000 0,000 7,100 285,000 485,000 0,000 0,000

X1 4750,000 0,000 0,000 0,000 750,000 750,000 750,000 0,000 7,230 0,000
ET 0,000 0,000 0,000 0,000 0,000 7,100 340,000 360,000 0,000 0,000

X1 4800,000 23,000 344,500 353,500 50,000 50,000 50,000 0,000 0,000 0,000
X3 10,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000
GR 275,500 0,000 269,100 100,000 264,400 200,000 262,800 300,000 262,600 340,000
GR 257,100 344,500 255,900 345,000 255,600 346,000 255,900 347,000 257,100 347,500
GR 257,100 350,500 255,900 351,000 255,600 352,000 255,900 353,000 257,100 353,500

 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
 ERROR CORR - 01
 MODIFICATION - 50,51,52

NOTE- ASTERISK [*] AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

SECNO	CWSEL	EG	ELLC	ELMIN	10K*S	Q
2500,000	234,68	234,93	0,00	230,00	80,24	730,00
2500,000	235,68	235,92	0,00	230,00	55,83	730,00
3250,000	241,68	242,01	0,00	237,23	111,91	730,00
3250,000	241,77	242,17	0,00	237,23	135,08	730,00
4000,000	252,37	253,44	0,00	246,47	209,65	730,00
4000,000	252,68	253,60	0,00	246,47	168,35	730,00
4750,000	260,71	260,99	0,00	253,70	57,97	730,00
4750,000	260,67	260,99	0,00	253,70	63,65	730,00
* 4800,000	261,75	263,78	0,00	255,60	405,19	730,00
* 4800,000	261,74	263,77	0,00	255,60	405,54	730,00
* 4840,000	261,63	263,78	258,90	255,60	439,39	730,00
* 4840,000	261,91	263,77	258,90	255,60	358,47	730,00
5150,000	264,81	264,84	0,00	257,10	8,88	730,00
5150,000	265,06	265,10	0,00	257,10	13,15	730,00
* 5200,000	266,16	266,40	0,00	258,10	109,62	730,00
* 5200,000	266,18	266,74	0,00	258,10	194,61	730,00
5240,000	266,17	266,40	264,40	258,10	104,23	730,00
5240,000	266,24	266,74	264,40	258,10	174,74	730,00
5290,000	266,45	266,46	0,00	257,70	2,38	730,00
5290,000	266,84	266,86	0,00	257,70	5,09	730,00

100YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

SECNO	CWSEL	SSTA	STOHL	STCHR	ENDST	TOPWID
2500,000	234,68	592,85	690,00	710,00	748,53	155,68
2500,000	235,68	655,00	690,00	710,00	710,00	55,00
3250,000	241,68	601,11	690,00	710,00	745,25	144,13
3250,000	241,77	630,00	690,00	710,00	710,00	80,00
4000,000	252,37	301,27	311,00	324,00	343,82	42,55
4000,000	252,68	310,00	311,00	324,00	340,00	30,00
4750,000	260,71	256,92	311,00	324,00	525,35	268,43
4750,000	260,67	285,00	311,00	324,00	485,00	200,00
* 4800,000	261,75	340,70	344,50	353,50	360,56	19,86
* 4800,000	261,74	340,70	344,50	353,50	360,00	19,30
* 4840,000	261,63	340,79	344,50	353,50	360,39	19,60
* 4840,000	261,91	340,56	344,50	353,50	360,00	19,44
5150,000	264,81	314,91	600,00	613,00	751,99	437,08
5150,000	265,06	510,00	600,00	613,00	665,00	155,00
* 5200,000	266,16	497,05	798,00	807,00	807,00	309,95
* 5200,000	266,18	660,00	798,00	807,00	807,00	147,00
5240,000	266,17	495,84	798,00	807,00	807,00	311,16
5240,000	266,24	660,00	798,00	807,00	809,92	149,92
5290,000	266,45	195,38	600,00	613,00	765,83	570,44
5290,000	266,84	490,00	600,00	613,00	650,00	160,00

SUMMARY OF ERRORS

CAUTION SECNO= 4800,000 PROFILE= 1 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 4800,000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 4800,000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
 CAUTION SECNO= 4800,000 PROFILE= 2 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 4800,000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 4800,000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 4840,000 PROFILE= 1 HYDRAULIC JUMP D,S.
 CAUTION SECNO= 4840,000 PROFILE= 2 HYDRAULIC JUMP D,S.

CAUTION SECNO= 5200,000 PROFILE= 1 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 5200,000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 5200,000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
 CAUTION SECNO= 5200,000 PROFILE= 2 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 5200,000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 5200,000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

FLOODWAY DATA, 100YEAR FLOOD WATER SURF
 PROFILE NO. 2

STATION	FLOODWAY		MEAN VELOCITY	WATER SURFACE ELEVATION		DIFFERENCE
	WIDTH (FT)	SECTION AREA		WITH FLOODWAY	WITHOUT FLOODWAY	
2500,000	55,	205,	3,6	235,7	234,7	1,0
3250,000	80,	174,	4,2	241,8	241,7	,1
4000,000	30,	109,	6,7	252,7	252,4	,3
4750,000	200,	249,	2,9	260,7	260,7	0,0
4800,000	19,	73,	9,9	261,7	261,7	0,0
4840,000	19,	77,	9,5	261,9	261,6	,3
5150,000	155,	492,	1,5	265,0	264,8	,2
5200,000	147,	177,	4,1	266,2	266,2	0,0
5240,000	150,	188,	3,9	266,3	266,2	,1
5290,000	160,	678,	1,1	266,9	266,5	,4

STANDARD WATER SURFACE FORM, No. 1

 HEC2 REL. DATED NOV 76 UPDATED FEB 1977
 ERROR CORR - 01
 MODIFICATION - 50,51,52

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FQ
 -1. 4. 0. 0. 0.000000 0.00 0.0 0. 234.680 0.000

J2 NPROF IPILOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE
 1.000 0.000 -1.000 0.000 0.000 0.000 0.000 0.000 0.000 15.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000 1.000 3.000 41.000 42.000 5.000 43.000 0.000 38.000 1.000

53.000 21.000 22.000 54.000 4.000 0.000 200.000 0.000 0.000 0.000

NC .085 .085 .060 .100 .300 0.000 0.000 0.000 0.000 0.000
 QT 5.000 210.000 520.000 730.000 1350.000 730.000 0.000 0.000 0.000 0.000
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 655.000 710.000 0.000

X1 2500.000 9.000 690.000 710.000 2500.000 2500.000 2500.000 0.000 0.000 0.000
 GR 260.000 0.000 250.000 200.000 240.000 400.000 232.000 690.000 230.000 700.000
 GR 232.000 710.000 240.000 825.000 250.000 950.000 260.000 1025.000 0.000 0.000
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 630.000 710.000 0.000

X1 3250.000 0.000 0.000 0.000 750.000 750.000 750.000 0.000 7.230 0.000
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 310.000 340.000 0.000

X1 4000.000 23.000 311.000 324.000 750.000 750.000 750.000 0.000 -7.230 0.000
 GR 273.900 0.000 268.400 68.000 266.800 78.000 266.500 100.000 262.200 200.000
 GR 262.000 201.000 262.400 203.000 262.000 221.000 261.400 224.000 259.800 300.000
 GR 258.100 311.000 254.200 314.000 253.700 320.000 253.700 323.000 256.300 324.000
 GR 259.800 345.000 260.100 400.000 260.200 500.000 262.200 600.000 265.200 700.000
 GR 265.900 722.000 270.800 800.000 274.700 900.000 0.000 0.000 0.000 0.000
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 285.000 485.000 0.000

X1 4750.000 0.000 0.000 0.000 750.000 750.000 750.000 0.000 7.230 0.000
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 340.000 360.000 0.000

X1 4800.000 23.000 344.500 353.500 50.000 50.000 50.000 0.000 0.000 0.000
 X3 10.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
 GR 275.500 0.000 269.100 100.000 264.400 200.000 262.800 300.000 262.600 340.000
 GR 257.100 344.500 255.900 345.000 255.600 346.000 255.900 347.000 257.100 347.500
 GR 257.100 350.500 255.900 351.000 255.600 352.000 255.900 353.000 257.100 353.500
 GR 262.700 362.000 262.700 400.000 263.300 500.000 264.400 600.000 266.400 700.000
 GR 269.400 800.000 274.100 900.000 276.400 935.000 0.000 0.000 0.000 0.000
 SB 1.250 1.500 3.000 0.000 9.000 3.000 14.100 0.000 255.900 255.600
 ET 0.000 0.000 0.000 0.000 0.000 0.000 7.100 340.000 360.000 0.000

X1 4840.000 0.000 0.000 0.000 40.000 40.000 40.000 0.000 0.000 0.000

X2	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BT	23.000	0.000	275.500	0.000	100.000	269.100	0.000	200.000	264.400	0.000
BT	300.000	262.800	0.000	340.000	262.600	0.000	344.500	262.600	257.400	345.000
BT	262.600	258.600	346.000	262.600	258.900	347.000	262.600	258.600	347.500	262.600
BT	257.400	350.500	262.700	257.400	351.000	262.700	258.600	352.000	262.700	258.900
BT	353.000	262.700	258.600	353.500	262.700	257.400	362.000	262.700	0.000	400.000
BT	262.700	0.000	500.000	263.300	0.000	600.000	264.400	0.000	700.000	266.400
BT	0.000	800.000	269.400	0.000	900.000	271.100	0.000	935.000	276.400	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	510.000	665.000	0.000	0.000
X1	5150.000	18.000	600.000	613.000	310.000	310.000	310.000	0.000	-.600	0.000
GR	275.400	0.000	271.500	46.000	269.600	100.000	266.300	200.000	265.600	300.000
GR	264.400	400.000	264.000	500.000	261.800	600.000	257.700	600.000	257.800	606.000
GR	258.500	613.000	262.900	613.000	263.500	700.000	264.900	745.000	269.000	800.000
GR	274.300	872.000	275.500	900.000	277.800	1000.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	660.000	810.000	0.000	0.000
X1	5200.000	18.000	798.000	807.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	280.800	0.000	277.800	100.000	274.400	200.000	271.100	300.000	268.000	400.000
GR	266.100	500.000	265.100	600.000	265.100	700.000	266.000	798.000	258.100	798.000
GR	258.100	803.000	258.100	807.000	266.200	807.000	267.700	900.000	279.900	1000.000
GR	274.700	1100.000	278.600	1200.000	282.600	1300.000	0.000	0.000	0.000	0.000
SB	.900	1.500	3.000	0.000	9.000	.001	70.200	0.000	258.100	257.800
ET	0.000	0.000	0.000	0.000	0.000	7.100	660.000	810.000	0.000	0.000
X1	5240.000	0.000	0.000	0.000	40.000	40.000	40.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BT	18.000	0.000	280.800	0.000	100.000	277.800	0.000	200.000	274.400	0.000
BT	300.000	271.100	0.000	400.000	268.000	0.000	500.000	266.100	0.000	600.000
BT	265.100	0.000	700.000	265.100	0.000	798.000	266.000	0.000	798.000	266.000
BT	264.400	803.000	266.100	264.400	807.000	266.200	264.400	807.000	266.200	0.000
BT	900.000	267.700	0.000	1000.000	279.900	0.000	1100.000	274.700	0.000	1200.000
BT	278.600	0.000	1300.000	282.600	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	490.000	650.000	0.000	0.000
X1	5290.000	18.000	600.000	613.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	275.400	0.000	271.500	46.000	269.600	100.000	266.300	200.000	265.600	300.000
GR	264.400	400.000	264.000	500.000	261.800	600.000	257.700	600.000	257.800	606.000
GR	258.500	613.000	262.900	613.000	263.500	700.000	264.900	745.000	269.000	800.000
GR	274.300	872.000	275.500	900.000	277.800	1000.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1
*PROF 1

CCHV= .100 CEHV= .300
*SECNO 2500.000

SECNO	DEPTH	CWSEL	CRIS	WSELK	EG	HV	HL	OLOSS	BANK	ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT	
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA	
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST	
2500.00	4.68	234.68	0.00	234.68	234.93	.25	0.00	0.00	232.00	
730.	248.	384.	98.	130.	74.	52.	0.	0.	232.00	
0.00	1.90	5.22	1.90	.085	.060	.085	0.000	230.00	592.85	
.008024	2500.	2500.	2500.	0	0	0	0.00	155.68	748.53	

0
FLOW DISTRIBUTION FOR SECNO= 2500.00 CWSEL= 234.68

 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
 ERROR CORR - 01
 MODIFICATION - 50,51,52

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 FLOODWAY

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	6.	0.	0.	0.000300	0.00	0.0	0.	235.680	0.000
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1
 *PROF 2
 CCHV= .100 CEHV= .300

*SECNO	2500.000									
SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV	
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT	
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA	
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST	

3470 ENCROACHMENT STATIONS=	655.0	710.0	TYPE=	1	TARGET=	55.000			
2500.00	5.68	235.68	0.00	234.68	235.92	.24	0.00	0.00	232.00
730.	302.	428.	0.	112.	94.	0.	0.	0.	100000.00
0.00	2.70	4.58	0.00	.085	.060	.085	0.000	230.00	655.00
.005583	2500.	2500.	2500.	0	0	0	0.00	55.00	710.00

*SECNO	3250.000								
3470 ENCROACHMENT STATIONS=	630.0	710.0	TYPE=	1	TARGET=	80.000			
3250.00	4.54	241.77	0.00	241.68	242.17	.40	6.21	.05	239.23
730.	297.	433.	0.	103.	71.	0.	3.	1.	100000.00
.04	2.88	6.11	0.00	.085	.060	.085	.060	237.23	630.00
.013508	750.	750.	750.	5	0	0	0.00	80.00	710.00

0
 *SECNO 4000.000
 3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	310.0	340.0	TYPE=	1	TARGET=	30.000			
4000.00	6.21	252.68	0.00	252.37	253.60	.92	11.28	.16	250.87
730.	3.	591.	136.	2.	71.	36.	6.	2.	249.07
.07	1.70	8.39	3.74	.085	.060	.085	.060	246.47	310.00
.016835	750.	750.	750.	4	0	0	0.00	30.00	340.00

0
 *SECNO 4750.000
 3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	285.0	485.0	TYPE=	1	TARGET=	200.000			
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

SECNO	CWSEL	EG	ELLC	ELMIN	10K*9	Q
2500.000	234.68	234.93	0.00	230.00	80.24	730.00
2500.000	235.68	235.92	0.00	230.00	55.83	730.00
3250.000	241.68	242.01	0.00	237.23	111.91	730.00
3250.000	241.77	242.17	0.00	237.23	135.08	730.00
4000.000	252.37	253.44	0.00	246.47	209.65	730.00
4000.000	252.68	253.60	0.00	246.47	168.35	730.00
4750.000	260.71	260.99	0.00	253.70	57.97	730.00
4750.000	260.67	260.99	0.00	253.70	63.65	730.00
* 4800.000	261.75	263.78	0.00	255.60	405.19	730.00
* 4800.000	261.74	263.77	0.00	255.60	405.54	730.00
* 4840.000	261.63	263.78	258.90	255.60	439.39	730.00
* 4840.000	261.91	263.77	258.90	255.60	358.47	730.00
5150.000	264.81	264.84	0.00	257.10	8.88	730.00
5150.000	265.06	265.10	0.00	257.10	13.15	730.00
* 5200.000	266.16	266.40	0.00	258.10	109.62	730.00
* 5200.000	266.18	266.74	0.00	258.10	194.61	730.00
5240.000	266.17	266.40	264.40	258.10	104.23	730.00
5240.000	266.24	266.74	264.40	258.10	174.74	730.00
5290.000	266.45	266.46	0.00	257.70	2.38	730.00
5290.000	266.84	266.86	0.00	257.70	5.09	730.00

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100YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

SECNO	CWSEL	SSTA	STCHL	STCHR	ENDST	TOPWID
2500.000	234.68	592.85	690.00	710.00	748.53	155.68
2500.000	235.68	655.00	690.00	710.00	710.00	55.00
3250.000	241.68	601.11	690.00	710.00	745.25	144.13
3250.000	241.77	630.00	690.00	710.00	710.00	80.00
4000.000	252.37	301.27	311.00	324.00	343.82	42.55
4000.000	252.68	310.00	311.00	324.00	340.00	30.00
4750.000	260.71	256.92	311.00	324.00	525.35	268.43
4750.000	260.67	285.00	311.00	324.00	485.00	200.00
* 4800.000	261.75	340.70	344.50	353.50	360.56	19.86
* 4800.000	261.74	340.70	344.50	353.50	360.00	19.30
* 4840.000	261.63	340.79	344.50	353.50	360.39	19.60
* 4840.000	261.91	340.56	344.50	353.50	360.00	19.44

	5150.000	264.81	314.91	600.00	613.00	751.99	437.08
	5150.000	265.06	510.00	600.00	613.00	665.00	155.00
*	5200.000	266.16	497.05	798.00	807.00	807.00	309.95
*	5200.000	266.18	660.00	798.00	807.00	807.00	147.00
	5240.000	266.17	495.84	798.00	807.00	807.00	311.16
	5240.000	266.24	660.00	798.00	807.00	809.92	149.92
	5290.000	266.45	195.38	600.00	613.00	765.83	570.44
	5290.000	266.84	490.00	600.00	613.00	650.00	160.00

SUMMARY OF ERRORS

CAUTION SECNO= 5200.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 5200.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

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FLOODWAY DATA, 100YEAR FLOOD WATER SURF
 PROFILE NO. 2

STATION	FLOODWAY			WATER SURFACE ELEVATION		
	WIDTH (FT)	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
2500.000	55.	205.	3.6	235.7	234.7	1.0
3250.000	80.	174.	4.2	241.8	241.7	.1
4000.000	30.	109.	6.7	252.7	252.4	.3
4750.000	200.	249.	2.9	260.7	260.7	0.0
4800.000	19.	73.	9.9	261.7	261.7	0.0
4840.000	19.	77.	9.5	261.9	261.6	.3
5150.000	155.	492.	1.5	265.0	264.8	.2
5200.000	147.	177.	4.1	266.2	266.2	0.0
5240.000	150.	188.	3.9	266.3	266.2	.1
5290.000	160.	678.	1.1	266.9	266.5	.4

1

THIS RUN EXECUTED 29 JUL 77 05.45.10

 HEC2 VERSION UPDATED JAN 1975
 ERKOR COKRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FR
	-1.	2.	0.	0.	0.008000	0.0	0.0	0.	257.000	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
J3	1.000	34.000	3.000	4.000	27.000	28.000	26.000	0.0	0.0	0.0
NC	0.085	0.085	0.060	0.100	0.300	0.0	0.0	0.0	0.0	0.0
QT	5.000	210.000	520.000	730.000	1350.000	730.000	0.0	0.0	0.0	0.0
ET	5.000	0.0	0.0	0.0	0.0	-10.400	0.0	0.0	0.0	0.0
X1	2500.000	9.000	690.000	710.000	2500.000	2500.000	2500.000	0.0	0.0	0.0
GR	260.000	0.0	250.000	200.000	240.000	400.000	232.000	690.000	230.000	700.000
GR	232.000	710.000	240.000	825.000	250.000	950.000	260.000	1025.000	0.0	0.0
X1	3250.000	0.0	0.0	0.0	750.000	750.000	750.000	0.0	7.230	0.0
X1	4000.000	23.000	311.000	324.000	750.000	750.000	750.000	0.0	-7.230	0.0
GR	273.900	0.0	268.400	68.000	266.800	78.000	266.500	100.000	262.200	200.000
GR	262.000	201.000	262.400	203.000	262.000	221.000	261.400	224.000	259.800	300.000
GR	258.100	311.000	254.200	314.000	253.700	320.000	253.700	323.000	256.300	324.000
GR	259.800	345.000	260.100	400.000	260.200	500.000	262.200	600.000	265.200	700.000
GR	265.900	722.000	270.800	800.000	274.700	900.000	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	7.100	250.000	450.000	0.0	0.0
X1	4750.000	0.0	0.0	0.0	750.000	750.000	750.000	0.0	7.230	0.0
ET	5.000	0.0	0.0	0.0	0.0	7.100	341.000	360.000	0.0	0.0
X1	4800.000	23.000	344.500	353.500	50.000	50.000	50.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR	275.500	0.0	269.100	100.000	264.400	200.000	262.800	300.000	262.600	340.000
GR	257.100	344.500	255.900	345.000	255.600	346.000	255.900	347.000	257.100	347.500
GR	257.100	350.500	255.900	351.000	255.600	352.000	255.900	353.000	257.100	353.500
GR	262.700	362.000	262.700	400.000	263.300	500.000	264.400	600.000	266.400	700.000
GR	269.400	800.000	274.100	900.000	276.400	935.000	0.0	0.0	0.0	0.0
SB	1.250	1.500	3.000	0.0	9.000	3.000	14.100	0.0	255.900	255.600
ET	5.000	0.0	0.0	0.0	0.0	7.100	341.000	360.000	0.0	0.0
X1	4840.000	0.0	0.0	0.0	40.000	40.000	40.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BT	23.000	0.0	275.500	0.0	100.000	269.100	0.0	200.000	264.400	0.0
BT	300.000	262.800	0.0	340.000	262.600	0.0	344.500	262.600	257.400	345.000
BT	262.600	258.600	346.000	262.600	258.900	347.000	262.600	258.600	347.500	262.600
BT	257.400	350.500	262.700	257.400	351.000	262.700	258.600	352.000	262.700	258.900
BT	353.000	262.700	258.600	353.500	262.700	257.400	362.000	262.700	0.0	400.000

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

10 YEAR FLOOD WATER SURF

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
2500.00	2500.00	0.0	0.0	230.00	210.00	233.23	23.54	233.41	82.45	0.0	0.0	3.73
3250.00	750.00	0.0	0.0	237.23	210.00	240.29	19.62	240.53	73.80	0.0	0.0	4.24
4000.00	750.00	0.0	0.0	246.47	210.00	250.11	16.81	250.57	18.64	0.0	0.0	5.50
4750.00	750.00	0.0	0.0	253.70	210.00	258.08	24.51	258.34	23.64	0.0	0.0	4.22
4800.00	50.00	0.0	0.0	255.60	210.00	258.91	9.05	260.01	13.23	0.0	0.0	8.65
4840.00	40.00	262.60	258.90	255.60	210.00	262.77	51.16	262.87	106.94	0.0	0.0	2.84
5150.00	310.00	0.0	0.0	257.10	210.00	263.23	67.79	263.27	203.24	0.0	0.0	1.78
5200.00	50.00	0.0	0.0	258.10	210.00	263.14	20.01	263.47	9.00	0.0	0.0	4.63
5240.00	40.00	265.10	264.40	258.10	210.00	263.14	20.01	263.47	9.00	0.0	0.0	4.63
5290.00	50.00	0.0	0.0	257.70	210.00	263.60	56.35	263.65	185.04	0.0	0.0	2.09

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
2500.000	210.000	233.234	0.0	0.0	0.0	82.449	0.0	2500.000
3250.000	210.000	240.295	0.0	7.061	0.0	73.802	0.0	750.000
4000.000	210.000	250.108	0.0	9.813	0.0	18.639	0.0	750.000
4750.000	210.000	258.077	0.0	7.969	0.0	23.641	0.0	750.000
4800.000	210.000	258.908	0.0	0.831	0.0	13.225	0.0	50.000
4840.000	210.000	262.773	0.0	3.865	0.0	106.944	0.0	40.000
5150.000	210.000	263.234	0.0	0.461	0.0	203.238	0.0	310.000
5200.000	210.000	263.139	0.0	-0.095	0.0	9.000	0.0	50.000
5240.000	210.000	263.139	0.0	0.0	0.0	9.000	0.0	40.000
5290.000	210.000	263.600	0.0	0.461	0.0	185.042	0.0	50.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	3.926	0.0

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	3.	0.	0.	0.008000	0.0	0.0	0.	259.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

2500.00	4.23	234.23	0.0	259.00	234.46	0.23	0.0	0.0	232.00
520.	152.	308.	60.	90.	65.	36.	0.	0.	232.00
0.0	1.68	4.77	1.68	0.085	0.060	0.085	0.0	230.00	609.03
0.007951	2500.	2500.	2500.	0	0	11	0.0	133.07	742.11
3250.00	4.01	241.24	0.0	0.0	241.55	0.31	7.07	0.02	239.23
520.	138.	328.	55.	74.	60.	29.	3.	2.	239.23
0.05	1.87	5.44	1.87	0.085	0.060	0.085	0.060	237.23	616.96
0.011350	750.	750.	750.	4	0	1	0.0	122.01	738.97

3301 HV CHANGED MORE THAN HVINS

4000.00	5.25	251.72	0.0	0.0	252.57	0.85	10.86	0.16	250.87
520.	3.	456.	61.	2.	58.	21.	5.	4.	249.07
0.08	1.35	7.85	2.89	0.085	0.060	0.085	0.060	246.47	305.50
0.019096	750.	750.	750.	5	0	1	0.0	34.40	339.90
4750.00	6.41	260.11	0.0	0.0	260.47	0.36	7.84	0.05	258.10
520.	21.	395.	104.	15.	73.	53.	7.	5.	256.30
0.15	1.38	5.39	1.95	0.085	0.060	0.085	0.060	253.70	284.67
0.006590	750.	750.	750.	4	0	1	0.0	138.08	422.75

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	4.	0.	0.	0.008000	0.0	0.0	0.	260.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	SNFN	ALLDC	IBW	CHNIM	ITRACE
	3.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

2500.00	4.68	234.68	0.0	260.00	234.93	0.25	0.0	0.0	232.00
730.	248.	384.	98.	131.	74.	52.	0.	0.	232.00
0.0	1.90	5.21	1.90	0.085	0.060	0.085	0.0	230.00	592.72
0.007984	2500.	2500.	2500.	0	0	11	0.0	155.85	748.58

3250.00	4.45	241.68	0.0	0.0	242.01	0.33	7.05	0.03	239.23
730.	231.	408.	91.	109.	69.	43.	4.	3.	239.23
0.05	2.12	5.92	2.12	0.085	0.060	0.085	0.060	237.23	601.23
0.011242	750.	750.	750.	4	0	1	0.0	143.98	745.20

3301 HV CHANGED MORE THAN HVINS

4000.00	5.91	252.38	251.93	0.0	253.44	1.06	11.21	0.22	250.87
730.	15.	600.	115.	7.	67.	33.	7.	4.	249.07
0.08	2.08	8.99	3.50	0.085	0.060	0.085	0.060	246.47	301.23
0.020855	750.	750.	750.	9	11	1	0.0	42.63	343.86

3301 HV CHANGED MORE THAN HVINS

4750.00	7.00	260.70	0.0	0.0	260.99	0.28	7.47	0.08	258.10
730.	52.	437.	241.	39.	81.	159.	10.	7.	256.30
0.13	1.35	5.40	1.51	0.085	0.060	0.085	0.060	253.70	256.99
0.005811	750.	750.	750.	6	0	1	0.0	268.28	525.27

3685 20 TRIALS USED WSEL,CWSEL

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	5.	0.	0.	0.008000	0.0	0.0	0.	262.000	0.0
J2	NPROP	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XLN	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
2500.00	5.65	235.65	0.0	262.00	235.94	0.29	0.0	0.0	232.00
1350.	563.	564.	223.	242.	93.	96.	0.	0.	232.00
0.0	2.32	6.06	2.32	0.085	0.060	0.085	0.0	230.00	557.51
0.007913	2500.	2500.	2500.	0	0	10	0.0	205.03	762.54
3250.00	5.36	242.59	0.0	0.0	242.98	0.39	7.00	0.03	239.23
1350.	536.	602.	212.	205.	87.	81.	7.	3.	239.23
0.05	2.61	6.90	2.61	0.085	0.060	0.085	0.060	237.23	568.11
0.011187	750.	750.	750.	4	0	1	0.0	190.22	758.33

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XLN	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
4000.00	7.24	253.71	253.71	0.0	254.36	0.65	9.34	0.0	250.87
1350.	114.	719.	516.	53.	84.	207.	13.	8.	249.07
0.08	2.17	8.57	2.49	0.085	0.060	0.085	0.060	246.47	245.94
0.013938	750.	750.	750.	8	11	1	0.0	290.96	536.90
4750.00	7.68	261.38	0.0	0.0	261.69	0.31	7.30	0.03	258.10
1350.	117.	577.	626.	87.	80.	308.	24.	17.	256.70

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

500 YEAR FLOOD WATER SUR

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH	
A	2500.00	2500.00	0.0	0.0	230.00	210.00	233.23	23.54	233.41	82.45	0.0	0.0	3.73
	2500.00	2500.00	0.0	0.0	230.00	520.00	234.23	58.32	234.46	133.07	0.0	0.0	4.77
	2500.00	2500.00	0.0	0.0	230.00	730.00	234.68	81.70	234.93	155.85	0.0	0.0	5.21
	2500.00	2500.00	0.0	0.0	230.00	1350.00	235.65	151.76	235.94	205.03	0.0	0.0	6.06
	3250.00	750.00	0.0	0.0	237.23	210.00	240.29	19.62	240.53	73.80	0.0	0.0	4.24
	3250.00	750.00	0.0	0.0	237.23	520.00	241.24	48.81	241.55	122.01	0.0	0.0	5.44
	3250.00	750.00	0.0	0.0	237.23	730.00	241.68	68.85	242.01	143.98	0.0	0.0	5.92
	3250.00	750.00	0.0	0.0	237.23	1350.00	242.59	127.64	242.98	190.22	0.0	0.0	6.90
	4000.00	750.00	0.0	0.0	246.47	210.00	250.11	16.81	250.57	18.64	0.0	0.0	5.50
	4000.00	750.00	0.0	0.0	246.47	520.00	251.72	37.63	252.57	34.40	0.0	0.0	7.85
	4000.00	750.00	0.0	0.0	246.47	730.00	252.38	50.55	253.44	42.63	0.0	0.0	8.99
	4000.00	750.00	0.0	0.0	246.47	1350.00	253.71	114.35	254.36	290.96	0.0	0.0	8.57
B	4750.00	750.00	0.0	0.0	253.70	210.00	258.08	24.51	258.34	23.64	0.0	0.0	4.22
	4750.00	750.00	0.0	0.0	253.70	520.00	260.11	64.06	260.47	138.78	0.0	0.0	5.39
	4750.00	750.00	0.0	0.0	253.70	730.00	260.70	95.77	260.99	268.28	0.0	0.0	5.40
	4750.00	750.00	0.0	0.0	253.70	1350.00	261.38	159.39	261.69	334.62	0.0	0.0	6.43
	4800.00	50.00	0.0	0.0	255.60	210.00	258.91	9.05	260.01	13.23	0.0	0.0	8.65
	4800.00	50.00	0.0	0.0	255.60	520.00	260.79	24.94	262.52	17.61	0.0	0.0	11.25
	4800.00	50.00	0.0	0.0	255.60	730.00	261.75	36.28	263.78	19.86	0.0	0.0	12.38
	4800.00	50.00	0.0	0.0	255.60	1350.00	263.96	115.67	264.58	332.36	0.0	0.0	9.03
	4840.00	40.00	262.60	258.90	255.60	210.00	262.77	51.16	262.87	106.94	0.0	0.0	2.84
	4840.00	40.00	262.60	258.90	255.60	520.00	263.07	59.57	263.52	179.63	0.0	0.0	6.22
	4840.00	40.00	262.60	258.90	255.60	730.00	261.63	263.4	263.78	19.59	0.0	0.0	12.72
	4840.00	40.00	262.60	258.90	255.60	1350.00	264.16	135.73	264.58	363.12	0.0	0.0	7.83
C	5150.00	310.00	0.0	0.0	257.10	210.00	263.23	67.79	263.27	203.24	0.0	0.0	1.78
	5150.00	310.00	0.0	0.0	257.10	520.00	264.24	157.04	264.27	379.54	0.0	0.0	2.12
	5150.00	310.00	0.0	0.0	257.10	730.00	264.81	244.95	264.84	437.11	0.0	0.0	2.01
	5150.00	310.00	0.0	0.0	257.10	1350.00	265.46	374.30	265.49	526.30	0.0	0.0	2.57
	5200.00	50.00	0.0	0.0	258.10	210.00	263.14	20.01	263.47	9.00	0.0	0.0	4.63
	5200.00	50.00	0.0	0.0	258.10	520.00	262.83	264.7	265.14	9.00	0.0	0.0	12.26
	5200.00	50.00	0.0	0.0	258.10	730.00	266.16	69.72	266.40	309.95	0.0	0.0	5.28
	5200.00	50.00	0.0	0.0	258.10	1350.00	266.36	86.66	266.85	330.18	0.0	0.0	7.98
	5240.00	40.00	265.10	264.40	258.10	210.00	263.14	20.01	263.47	9.00	0.0	0.0	4.63
	5240.00	40.00	265.10	264.40	258.10	520.00	262.97	264.7	265.15	9.00	0.0	0.0	11.85
	5240.00	40.00	265.10	264.40	258.10	730.00	266.17	71.46	266.40	311.13	0.0	0.0	5.16
	5240.00	40.00	265.10	264.40	258.10	1350.00	266.53	104.23	266.85	350.71	0.0	0.0	6.73
D	5290.00	50.00	0.0	0.0	257.70	210.00	263.60	56.35	263.65	185.04	0.0	0.0	2.09
	5290.00	50.00	0.0	0.0	257.70	520.00	265.43	246.58	265.44	438.02	0.0	0.0	1.43
	5290.00	50.00	0.0	0.0	257.70	730.00	266.45	472.81	266.46	570.42	0.0	0.0	1.14
	5290.00	50.00	0.0	0.0	257.70	1350.00	266.94	615.36	266.95	591.58	0.0	0.0	1.68

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
2500.000	210.000	233.23	234	0.0	0.0	82.45	0.0	2500.000

2500.000	520.000	234.233	1.000	0.0	0.0	133.072	-50.622	2500.000
2500.000	730.000	234.684	0.450	0.0	0.0	155.854	-73.404	2500.000
2500.000	1350.000	235.655	0.971	0.0	0.0	205.033	-122.583	2500.000
3250.000	210.000	240.295	0.0	7.061	0.0	73.802	0.0	750.000
3250.000	520.000	241.244	0.950	7.011	0.0	122.010	-48.207	750.000
3250.000	730.000	241.677	0.432	6.993	0.0	143.978	-70.175	750.000
3250.000	1350.000	242.588	0.911	6.933	0.0	190.222	-116.419	750.000
4000.000	210.000	250.108	0.0	9.813	0.0	18.639	0.0	750.000
4000.000	520.000	251.720	1.611	10.475	0.0	34.398	-15.758	750.000
4000.000	730.000	252.381	0.662	10.704	0.0	42.633	-23.994	750.000
4000.000	1350.000	253.708	1.327	11.120	0.0	290.962	-272.323	750.000
4750.000	210.000	258.077	0.0	7.969	0.0	23.641	0.0	750.000
4750.000	520.000	260.113	2.036	8.394	0.0	138.078	-114.438	750.000
4750.000	730.000	260.704	0.591	8.323	0.0	268.278	-244.637	750.000
4750.000	1350.000	261.379	0.675	7.672	0.0	334.617	-310.976	750.000
4800.000	210.000	258.908	0.0	0.831	0.0	13.225	0.0	50.000
4800.000	520.000	260.786	1.878	0.673	0.0	17.613	-4.388	50.000
4800.000	730.000	261.750	0.963	1.046	0.0	19.863	-6.638	50.000
4800.000	1350.000	263.958	2.209	2.579	0.0	332.364	-319.139	50.000
4840.000	210.000	262.773	0.0	3.865	0.0	106.944	0.0	40.000
4840.000	520.000	263.071	0.298	2.285	0.0	179.628	-72.684	40.000
4840.000	730.000	261.626	-1.445	-0.124	0.0	19.591	87.353	40.000
4840.000	1350.000	264.156	2.530	0.197	0.0	363.116	-256.172	40.000
5150.000	210.000	263.234	0.0	0.461	0.0	203.238	0.0	310.000
5150.000	520.000	264.243	1.009	1.172	0.0	379.536	-176.298	310.000
5150.000	730.000	264.814	0.571	3.188	0.0	437.112	-233.875	310.000
5150.000	1350.000	265.456	0.643	1.301	0.0	526.300	-323.063	310.000
5200.000	210.000	263.139	0.0	-0.095	0.0	9.000	0.0	50.000
5200.000	520.000	262.806	-0.333	-1.437	0.0	9.000	0.0	50.000
5200.000	730.000	266.156	3.350	1.342	0.0	309.955	-300.955	50.000
5200.000	1350.000	266.356	0.200	0.899	0.0	330.177	-321.177	50.000
5240.000	210.000	263.139	0.0	0.0	0.0	9.000	0.0	40.000
5240.000	520.000	262.970	-0.169	0.164	0.0	9.000	0.0	40.000
5240.000	730.000	266.170	3.200	0.014	0.0	311.131	-302.131	40.000
5240.000	1350.000	266.527	0.357	0.172	0.0	350.711	-341.711	40.000
5290.000	210.000	263.600	0.0	0.461	0.0	185.042	0.0	50.000
5290.000	520.000	265.430	1.830	2.460	0.0	438.022	-252.980	50.000
5290.000	730.000	266.452	1.022	0.282	0.0	570.421	-385.379	50.000
5290.000	1350.000	266.938	0.487	0.411	0.0	591.576	-406.534	50.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	3.926	0.0
2	0.0	0.0	7.685	3.758
3	0.0	0.0	9.893	5.966
4	0.0	0.0	18.142	14.216

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-1.	4.	0.	0.	0.008000	0.0	0.5	0.	260.000	0.0
J2	NPROF	IPLT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
J3	1.000	34.000	3.000	4.000	27.000	28.000	26.000	0.0	0.0	0.0
NC	0.085	0.085	0.060	0.100	0.300	0.0	0.0	0.0	0.0	0.0
QT	5.000	210.000	520.000	730.000	1350.000	730.000	0.0	0.0	0.0	0.0
ET	5.000	0.0	0.0	0.0	0.0	-10.400	0.0	0.0	0.0	0.0
X1	2500.000	9.000	690.000	710.000	2500.000	2500.000	2500.000	0.0	0.0	0.0
GR	260.000	0.0	250.000	200.000	240.000	400.000	232.000	690.000	230.000	700.000
GR	232.000	710.000	240.000	825.000	250.000	950.000	260.000	1025.000	0.0	0.0
X1	3250.000	0.0	0.0	0.0	750.000	750.000	750.000	0.0	7.230	0.0
X1	4000.000	23.000	311.000	324.000	750.000	750.000	750.000	0.0	-7.230	0.0
GR	275.900	0.0	268.400	68.000	266.800	78.000	266.500	100.000	262.200	200.000
GR	262.000	201.000	262.400	203.000	262.000	221.000	261.400	224.000	259.800	300.000
GR	258.100	311.000	254.200	314.000	253.700	320.000	253.700	323.000	256.300	324.000
GR	259.800	345.000	260.100	400.000	260.200	500.000	262.200	600.000	265.200	700.000
GR	265.900	722.000	270.800	800.000	274.700	900.000	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	7.100	250.000	450.000	0.0	0.0
X1	4750.000	0.0	0.0	0.0	750.000	750.000	750.000	0.0	7.230	0.0
ET	5.000	0.0	0.0	0.0	0.0	7.100	341.000	360.000	0.0	0.0
X1	4800.000	23.000	344.500	353.500	50.000	50.000	50.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR	275.500	0.0	269.100	100.000	264.400	200.000	262.800	300.000	262.600	340.000
GR	257.100	344.500	255.900	345.000	255.600	346.000	255.900	347.000	257.100	347.500
GR	257.100	350.500	255.900	351.000	255.600	352.000	255.900	353.000	257.100	353.500
GR	262.700	362.000	262.700	400.000	263.300	500.000	264.400	600.000	266.400	700.000
GR	269.400	800.000	274.100	900.000	276.400	935.000	0.0	0.0	0.0	0.0
SB	1.250	1.500	3.000	0.0	9.000	3.000	14.100	0.0	255.900	255.600
ET	5.000	0.0	0.0	0.0	0.0	7.100	341.000	360.000	0.0	0.0
X1	4840.000	0.0	0.0	0.0	40.000	40.000	40.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BT	25.000	0.0	275.500	0.0	100.000	269.100	0.0	200.000	264.400	0.0
BT	300.000	262.800	0.0	340.000	262.600	0.0	344.500	262.600	257.400	345.000
BT	262.600	253.600	346.000	262.600	258.900	347.000	262.600	258.600	347.500	262.600
BT	257.400	350.500	262.700	257.400	351.000	262.700	258.600	352.000	262.700	258.900

1 SUMMARY PRINTOUT FOR MULTIPLE PROFILES 1

4 100 YEAR FLOOD WATER SUR 5

6 SECTION NUMBER	7 CHANNEL LENGTH	8 MIN EL OF ROADWAY	9 MAX EL OF LOW CHORD	10 MIN EL OF GROUND	11 DISCHARGE (CFS)	12 CWSEL	13 TQ	14 EG	15 TOPWID	16 STENCL	17 STENCR	18 VCH
9 2500.00	2500.00	0.0	0.0	230.00	730.00	234.68	81.70	234.93	155.85	0.0	0.0	5.21
11 3250.00	750.00	0.0	0.0	237.23	730.00	241.67	68.88	242.01	144.01	0.0	0.0	5.91
13 4000.00	750.00	0.0	0.0	246.47	730.00	253.15	75.42	253.64	236.80	0.0	0.0	6.62
15 4750.00	750.00	0.0	0.0	253.70	730.00	260.35	73.43	260.87	233.06	0.0	0.0	6.77
17 4800.00	50.00	0.0	0.0	255.60	730.00	261.77	36.49	263.78	19.90	0.0	0.0	12.33
19 4840.00	40.00	262.60	258.90	255.60	730.00	261.87	37.88	263.78	20.15	0.0	0.0	12.04
21 5150.00	310.00	0.0	0.0	257.10	730.00	264.43	182.82	264.47	399.12	0.0	0.0	2.60
23 5200.00	50.00	0.0	0.0	258.10	730.00	263.99	24.52	266.93	9.00	0.0	0.0	13.77
25 5240.00	40.00	265.10	264.40	258.10	730.00	264.12	25.26	266.93	9.00	0.0	0.0	13.45
27 5290.00	50.00	0.0	0.0	257.70	730.00	267.23	711.68	267.23	504.34	0.0	0.0	0.80

29 SECTION NUMBER	30 DISCHARGE CFS	31 CWSEL	32 CWSEL DIFF EACH Q	33 CWSEL DIFF EACH SECTION	34 CWSEL-WSELK	35 TOPWID	36 T.W. DIFF	37 LENGTH
31 2500.000	730.000	234.684	0.0	0.0	0.0	155.854	0.0	2500.000
33 3250.000	730.000	241.674	0.0	6.991	0.0	144.006	0.0	750.000
35 4000.000	730.000	253.153	0.0	11.478	0.0	236.804	0.0	750.000
37 4750.000	730.000	260.346	0.0	7.194	0.0	233.058	0.0	750.000
39 4800.000	730.000	261.767	0.0	1.420	0.0	19.902	0.0	50.000
41 4840.000	730.000	261.869	0.0	0.103	0.0	20.148	0.0	40.000
43 5150.000	730.000	264.429	0.0	2.560	0.0	399.120	0.0	310.000
45 5200.000	730.000	263.990	0.0	-0.439	0.0	9.000	0.0	50.000
47 5240.000	730.000	264.123	0.0	0.133	0.0	9.000	0.0	40.000
49 5290.000	730.000	267.227	0.0	3.104	0.0	504.340	0.0	50.000

51 DATA FOR LAST CROSS SECTION 67

52 PROFILE	53 TYPE ENC	54 TARGET	55 TOP WIDTH AREA-ACRES	56 TOP WIDTH AREA-DIFF
55 1	0.0	0.0	11.923	0.0

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIBUTARY 2 (ZEBULON) BASIN 10
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOODWAY

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	6.	0.	0.	0.0	0.0	0.0	0.	235.680	0.0

J2	NPROF	IPLOT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300
 2800 NAT Q1= 81.70 WSEL= 234.68 ENC Q1= 81.70 WSEL= 235.68 RATIO= 0.0

NAT Q1=	154.	RATIOS	LOB,CH,ROB=	0.4187	0.4155	0.1658	WSEL=	235.68	
SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCKOACHMENT STATIONS= 663.9 720.3 TYPE= 4 TARGET= 0.470
 2500.00 5.68 235.68 0.0 234.68 235.90 0.22 0.0 0.0 232.00
 730. 221. 421. 88. 87. 94. 34. 0. 0. 232.00
 0.0 2.56 4.50 2.55 0.085 0.060 0.085 0.0 230.00 663.94
 0.004324 2500. 2500. 2500. 0 0 1 0.0 56.40 720.33

2800 NAT Q1= 68.88 WSEL= 241.67 ENC Q1= 68.88 WSEL= 242.67 RATIO= 0.0
 NAT Q1= 134. RATIOS LOB,CH,ROB= 0.4026 0.4380 0.1594 WSEL= 242.67

3301 HV CHANGED MORE THAN HVINS

3470 ENCKOACHMENT STATIONS= 673.2 716.7 TYPE= 4 TARGET= 0.486
 5250.00 4.28 241.51 0.0 241.67 242.31 0.80 6.24 0.17 239.23
 730. 145. 528. 57. 34. 66. 14. 3. 1. 239.23
 0.03 4.20 8.03 4.19 0.085 0.060 0.085 0.060 237.23 673.19
 0.022127 750. 750. 750. 3 0 1 0.0 43.47 716.66

2800 NAT Q1= 75.42 WSEL= 253.15 ENC Q1= 75.42 WSEL= 254.15 RATIO= 0.0
 NAT Q1= 159. RATIOS LOB,CH,ROB= 0.1088 0.4282 0.4631 WSEL= 254.15

3470 ENCKOACHMENT STATIONS= 309.2 328.6 TYPE= 4 TARGET= 0.526
 4000.00 6.98 253.45 0.0 253.15 254.30 0.85 11.98 0.01 250.87
 730. 15. 626. 88. 4. 31. 18. 5. 1. 249.07
 0.06 3.46 7.76 4.80 0.085 0.060 0.085 0.060 246.47 309.18
 0.012062 750. 750. 750. 6 0 1 0.0 19.43 328.60

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
A 2500.00	2500.00	0.0	0.0	230.00	730.00	234.68	81.70	234.93	155.85	360.0	0.0	5.21
2500.00	2500.00	0.0	0.0	230.00	730.00	235.68	111.02	235.90	56.40	663.94	720.34	4.50
3250.00	750.00	0.0	0.0	237.23	730.00	241.67	68.88	242.01	144.01	0.0	0.0	5.91
3250.00	750.00	0.0	0.0	237.23	730.00	241.51	49.07	242.31	43.47	673.19	716.66	8.03
4000.00	750.00	0.0	0.0	246.47	730.00	253.15	75.42	253.64	236.80	0.0	0.0	6.62
4000.00	750.00	0.0	0.0	246.47	730.00	253.45	66.47	254.30	19.43	309.18	328.60	7.76
B 4750.00	750.00	0.0	0.0	253.70	730.00	260.35	73.43	260.87	233.06	0.0	0.0	6.77
4750.00	750.00	0.0	0.0	253.70	730.00	260.65	88.68	261.00	190.15	250.00	450.00	5.79
4800.00	50.00	0.0	0.0	255.60	730.00	261.77	36.49	263.78	19.90	0.0	0.0	12.33
4800.00	50.00	0.0	0.0	255.60	730.00	261.81	37.45	263.74	19.00	341.00	360.00	12.09
4840.00	40.00	262.60	258.90	255.60	730.00	261.87	37.88	263.78	20.15	0.0	0.0	12.04
4840.00	40.00	262.60	258.90	255.60	730.00	262.09	41.36	263.76	19.00	341.00	360.00	11.31
C 5150.00	310.00	0.0	0.0	257.10	730.00	264.43	182.82	264.47	399.12	0.0	0.0	2.60
5150.00	310.00	0.0	0.0	257.10	730.00	265.00	201.06	265.04	156.57	518.12	674.69	2.49
5200.00	50.00	0.0	0.0	258.10	730.00	263.99	24.52	266.93	9.00	0.0	0.0	13.77
5200.00	50.00	0.0	0.0	258.10	730.00	263.97	24.39	266.93	9.00	798.00	807.00	13.82
5240.00	40.00	0.0	0.0	258.10	730.00	264.12	25.26	266.93	9.00	0.0	0.0	13.45
5240.00	40.00	0.0	0.0	258.10	730.00	264.10	25.11	266.94	9.00	798.00	807.00	13.52
D 5290.00	50.00	0.0	0.0	257.70	730.00	267.23	711.68	267.23	604.34	0.0	0.0	0.80
5290.00	50.00	0.0	0.0	257.70	730.00	267.26	384.86	267.28	160.00	495.00	655.00	1.48
SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL - WSELK	TOPWID	T.W. DIFF	LENGTH				
A 2500.000	730.000	234.684	0.0	0.0	0.0	155.854	0.0	2500.000				
2500.000	730.000	235.680	0.996	0.0	0.0	56.398	99.456	2500.000				
3250.000	730.000	241.674	0.0	6.991	0.0	144.006	0.0	750.000				
3250.000	730.000	241.514	-0.160	5.834	0.0	43.470	100.537	750.000				
4000.000	730.000	253.153	0.0	11.478	0.0	236.804	0.0	750.000				
4000.000	730.000	253.455	0.302	11.941	0.0	19.426	217.378	750.000				
B 4750.000	730.000	260.346	0.0	7.194	0.0	233.058	0.0	750.000				
4750.000	730.000	260.647	0.301	7.193	0.0	190.147	42.911	750.000				
4800.000	730.000	261.767	0.0	1.420	0.0	19.902	0.0	50.000				
4800.000	730.000	261.813	0.047	1.166	0.0	18.999	0.903	50.000				
4840.000	730.000	261.869	0.0	0.103	0.0	20.148	0.0	40.000				
4840.000	730.000	262.086	0.217	0.273	0.0	18.999	1.149	40.000				
C 5150.000	730.000	264.429	0.0	2.560	0.0	399.120	0.0	310.000				
5150.000	730.000	264.995	0.566	2.909	0.0	156.571	242.550	310.000				

