

RUN #3 - REVISED CROSS SECTIONS WITH FULL ENCROACHMENT

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*****
* WATER SURFACE PROFILES *
* VERSION OF NOVEMBER 1976 *
* UPDATED MAY 1984 *
* IBM-PC-XT VERSION *
* RUN DATE 10/14/88 TIME 16:03:05 *
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* U.S. ARMY CORPS OF ENGINEERS *
* THE HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET, SUITE D *
* DAVIS, CALIFORNIA 95616 *
* (916) 440-2105 (FTS) 448-2105 *
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PAGE 1

THIS RUN EXECUTED 10/14/88 16:03:06

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HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
IBM-PC-XT VERSION
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FR FREE FORMAT READER
T1 BASIN 15 STREAM 11
T2 MANGO CREEK - WAKE CO
T3 100 YR AND FLOODWAY

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J1 ICHECK INQ NINV IDIR STRT METRIC HVINS W WSEL FD

J2	NPROF	IPLOT	PRFVS	CV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	.000	-1.000	.000	.000	.000	.000	.000	.000	.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	110.000	150.000	200.000	.000	.000	.000	.000	.000	.000	.000
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NE	.085	.085	1.060	.100	.300	.000	.000	.000	.000	.000
BT	4.000	2410.000	2410.000	2410.000	4600.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	50.000	125.000
X1	6105.000	22.000	50.000	70.000	.000	.000	.000	.000	.000	.000
BR	184.300	.000	178.800	31.000	179.000	50.000	177.900	50.000	177.900	60.000
BR	178.600	70.000	178.600	100.000	178.600	140.000	178.600	200.000	178.700	248.000
BR	180.500	262.000	180.200	283.000	183.400	290.000	184.500	296.000	184.700	300.000
BR	184.500	303.000	183.600	311.000	181.800	315.000	182.100	337.000	187.500	366.000
BR	187.300	400.000	184.700	500.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	20.000	483.000
X1	5927.000	27.000	463.000	463.000	822.000	822.000	822.000	.000	.000	.000
BR	189.700	.000	184.600	6.000	184.700	13.000	181.900	63.000	181.600	86.000
BR	181.000	94.000	182.100	96.000	182.200	99.000	187.600	108.000	188.200	113.000
BR	189.100	122.000	187.600	132.000	182.600	139.000	181.300	163.000	180.600	213.000
BR	181.300	263.000	181.200	313.000	181.600	323.000	181.700	413.000	183.000	463.000
BR	183.500	468.000	182.200	473.000	179.500	476.000	182.400	483.000	183.200	523.000
BR	186.400	539.000	188.400	563.000	.000	.000	.000	.000	.000	.000

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10/14/88 16:03:06

PAGE 2

ET	.000	.000	9.100	.000	.000	.000	.000	.000	190.000	440.000
X1	6105.000	21.000	419.000	432.000	1330.000	1330.000	1330.000	.000	.000	.000
BR	201.600	.000	196.300	6.000	194.700	19.000	196.200	24.000	196.200	29.000
BR	196.200	32.000	194.900	36.000	193.000	53.000	186.500	71.000	186.700	100.000
BR	186.100	200.000	186.500	300.000	186.700	400.000	186.900	419.000	184.000	422.000
BR	183.800	426.000	184.100	431.000	186.800	432.000	189.800	500.000	196.100	600.000
BR	201.600	675.000	.000	.000	.000	.000	.000	.000	.000	.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	100.000	275.000
X1	6547.000	22.000	210.000	275.000	290.000	290.000	290.000	.000	.000	.000
BR	199.700	.000	198.900	7.000	196.500	17.000	196.500	25.000	194.700	35.000
BR	187.000	55.000	186.600	75.000	186.600	125.000	186.740	175.000	187.440	210.000
BR	186.900	225.000	187.600	275.000	188.000	300.000	186.400	302.000	186.600	312.000
BR	188.200	313.000	188.400	325.000	187.900	327.000	188.500	329.000	192.900	375.000
BR	198.600	425.000	202.540	475.000	.000	.000	.000	.000	.000	.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	240.000	480.000
X1	11241.000	27.000	253.000	298.000	2694.000	2694.000	2694.000	.000	.000	.000
BR	219.100	.000	219.200	3.000	215.900	14.000	213.700	53.000	207.800	103.000
BR	203.900	153.000	203.100	173.000	202.800	203.000	203.400	253.000	202.900	263.000
BR	196.200	273.000	195.700	280.000	199.800	285.000	199.800	293.000	202.900	298.000
BR	203.000	303.000	203.500	353.000	203.000	403.000	203.000	443.000	199.700	453.000
BR	202.700	476.000	203.100	503.000	202.700	553.000	203.000	603.000	204.100	623.000
BR	206.400	653.000	209.300	703.000	.000	.000	.000	.000	.000	.000

ET	.000	.000	9.100	.000	.000	.000	.000	.000	120.000	260.000
X1	12133.000	21.000	247.000	259.000	892.000	892.000	892.000	.000	.000	.000
BR	227.500	.000	212.400	21.000	208.900	45.000	207.600	93.000	206.400	106.000
BR	206.600	138.000	206.300	153.000	206.100	154.000	206.400	226.000	207.400	247.000
BR	202.900	253.000	202.400	254.000	202.900	257.000	205.200	259.000	204.800	268.000
BR	206.400	274.000	207.300	284.000	208.700	317.000	209.200	338.000	211.000	378.000

26

ET	.000	.000	9.100	.000	.000	.000	.000	.000	.000	130.000	260.000
X1	12741.000	11.000	221.00	234.000	608.000	608.000	608.000	.000	.000	.000	.000
6R	214.800	.000	213.300	90.000	211.500	168.000	211.000	221.000	207.100	223.000	
6R	206.200	226.000	206.500	232.000	209.800	234.000	212.200	243.000	212.700	290.000	
6R	216.900	324.000	.000	.000	.000	.000	.000	.000	.000	.000	
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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10/14/88 16:03:06

SEGNU	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	GLUSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLUB	VCH	VROB	XNL	XNCH	XNR	MTN	ELMIN	SSTA
SLOPE	XLUBL	XLLH	XLOBH	ITRIAL	IDC	ICONT	CDRAB	TUPWID	ENDSI

*PRDF 1

CLR= .100 CRV= .300

*SEGNU 8105.000

8105.00	8.60	186.50	.00	186.50	186.52	.02	.00	.00	179.00
2410.	193.	269.	1949.	202.	169.	1878.	0.	0.	178.60
.00	.96	1.59	1.04	.085	.060	.085	.000	177.90	15.70
.000260	0.	0.	0.	0	0	0	.00	344.93	360.63

*SEGNU 8927.000

3265 DIVIDED FLOW

8927.00	7.26	186.76	.00	.00	186.76	.02	.26	.00	183.00
2410.	2134.	124.	152.	2119.	96.	191.	44.	8.	182.40
.22	1.01	1.30	.80	.085	.060	.085	.000	179.50	3.46
.000322	822.	822.	822.	2	0	0	.00	513.29	543.32

*SEGNU 8105.000

8105.00	4.54	188.14	187.59	.00	188.42	.28	1.56	.08	186.90
2410.	2010.	363.	38.	586.	50.	20.	91.	22.	186.50
.32	2.43	7.30	1.56	.085	.060	.085	.000	183.60	66.46
.001109	1330.	1330.	1330.	8	14	0	.00	395.90	462.36

*SEGNU 8547.000

8547.00	4.39	190.29	.00	.00	190.41	.11	1.97	.02	187.44
2410.	1328.	765.	297.	563.	232.	159.	96.	24.	187.60
.36	2.36	3.38	1.87	.085	.060	.085	.000	185.90	46.43
.001413	290.	290.	290.	1	0	0	.00	301.39	347.82

*SEGNU 11241.000

11241.00	6.57	204.27	.00	.00	204.58	.31	14.12	.06	203.40
2410.	210.	1189.	1011.	115.	200.	452.	149.	48.	202.90
.54	1.82	5.95	2.24	.085	.060	.085	.000	195.70	148.20
.008964	2694.	2694.	2694.	6	0	0	.00	477.07	625.27

*SEGNU 12133.000

12133.00	7.56	209.98	.00	.00	210.12	.13	5.52	.02	207.40
2410.	1614.	331.	464.	627.	70.	196.	166.	57.	205.20
.62	2.57	4.72	2.37	.085	.060	.085	.000	202.40	37.59
.004525	892.	892.	892.	3	0	0	.00	317.75	355.34

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10/14/88 16:03:06

SEGNU	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	GLUSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLUB	VCH	VROB	XNL	XNCH	XNR	MTN	ELMIN	SSTA
SLOPE	XLUBL	XLLH	XLOBH	ITRIAL	IDC	ICONT	CDRAB	TUPWID	ENDSI

28

*SEGNU 12741.000

12741.00	8.02	214.22	.00	.00	214.80	.58	4.55	.13	211.00
2410.	1166.	849.	404.	324.	92.	121.	176.	61.	209.80
.60	3.60	9.13	3.33	.085	.060	.085	.000	206.20	34.94
.014604	608.	608.	608.	2	0	0	.00	267.35	302.29

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10/14/88 16:03:06

PAGE 5

THIS RUN EXECUTED 10/14/88 16:03:35

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HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
IBM-PC-XT VERSION
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01 BASIN 15 STREAM 11
 02 MANGU CREEK - WAKE COUNTY
 03 100 YEAR FLOOD ANALYSIS

J1	LINEBK	ING	NINV	IDIR	STRT	METRIC	HVINS	W	WSEL	FG
	0.	3.	0.	0.	.000000	.00	.0	0.	186.500	.000

J2	MPRUF	IPLOF	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	LNHIF	ITRACE
	15.000	.000	-1.000	.000	.000	.000	.000	.000	.000	.000

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10/14/88 16:03:06

PAGE 6

SEGNU	DEPTH	CRSEL	CRKAS	WSELK	Eg	HV	HL	GLUSS	BANK ELEV
W	GLUB	GCH	GRUB	ALUB	AUH	ARGB	VDL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VRUB	ANL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLRBF	ITRIAL	IDC	ICDNT	CDRAR	TWPWIL	ENDST

*PRUF 2

UCHV= .100 CERV= .300
 *SEGNU 6105.000

3470 ENCROACHMENT STATIONS=	50.0	125.0	TYPE=	1	TARGET=	75.000
6105.00	8.60	186.50	.00	186.50	186.76	.26 .00 .00 179.00
2410.	0.	791.	1619.	0.	169.	434. 0. 0. 178.60
.00	.00	4.70	3.73	.085	.060	.085 .000 177.90 50.00
.003381	0.	0.	0.	0	0	0 .00 75.00 125.00

0

*SEGNU 6927.000

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS=	20.0	483.0	TYPE=	1	TARGET=	463.000
6927.00	7.87	187.37	.00	186.76	187.38	.02 .60 .02 183.00
2410.	2291.	119.	0.	2340.	108.	0. 29. 5. 100000.00

#SECNO 8105.000

3470 ENCROACHMENT STATIONS=	190.0	440.0	TYPE=	1	TARGET=	250.000			
8105.00	4.79	188.39	.00	188.14	188.85	.46	1.34	.13	186.90
2410.	1909.	465.	36.	441.	53.	11.	74.	15.	186.80
.30	4.33	8.78	3.21	.085	.060	.085	.000	183.60	190.00
.025/27	1330.	1330.	1330.	4	0	0	.00	250.00	440.00

#SECNO 8547.000

3470 ENCROACHMENT STATIONS=	100.0	275.0	TYPE=	1	TARGET=	175.000			
8547.00	5.14	191.94	.00	190.29	191.22	.18	2.33	.03	187.44
2410.	1305.	1105.	0.	468.	280.	0.	78.	17.	100000.00
.33	2.79	3.94	.00	.085	.060	.085	.000	185.90	100.00
.003679	290.	290.	290.	3	0	0	.00	175.00	275.00

10/14/88 16:03:06

PAGE 7

SELNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	GLOSS	BANK ELEV
W	DLDB	GDH	GDDB	ALDB	ACH	ARDB	VOL	LWA	LEFT/RIGHT
TIME	VLOB	VDR	VROB	ANL	INCH	ANK	WTN	ELMIN	SETA
SLOPE	VLOBL	XLDB	XLDR	ITRIAL	IDC	ICUNT	CDRAB	TOPWID	ENBSI

#SECNO 11041.000

3470 ENCROACHMENT STATIONS=	240.0	480.0	TYPE=	1	TARGET=	240.000			
11041.00	7.24	204.74	.00	204.27	205.29	.25	14.92	.05	203.40
2410.	40.	1009.	1011.	21.	230.	387.	121.	30.	205.90
.30	1.40	5.91	2.61	.085	.060	.085	.000	195.70	240.00
.007148	2694.	2694.	2694.	6	0	0	.00	240.00	480.00

#SECNO 12133.000

3470 ENCROACHMENT STATIONS=	120.0	260.0	TYPE=	1	TARGET=	140.000			
12133.00	8.41	210.81	.00	209.98	211.06	.25	5.76	.01	207.40
2410.	1939.	464.	7.	557.	60.	6.	134.	33.	205.20
.36	3.48	5.80	1.18	.085	.060	.085	.000	202.40	120.00
.005716	892.	892.	892.	4	0	0	.00	140.00	260.00

#SECNO 12741.000

3470 ENCROACHMENT STATIONS=	130.0	260.0	TYPE=	1	TARGET=	130.000			
12741.00	8.88	215.08	.00	214.22	215.58	.50	4.45	.07	211.00
2410.	1276.	628.	305.	323.	103.	84.	142.	35.	209.80
.39	3.96	8.02	3.62	.085	.060	.085	.000	206.20	130.00
.009686	608.	608.	608.	2	0	0	.00	130.00	260.00

10/14/88 16:03:06

PAGE 8

THIS RUN EXECUTED 10/14/88 16:03:48

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MUC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
IBM-PC-XT VERSION
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100 YR AND FLOODWAY

SUMMARY PRINTOUT TABLE 110

SECTNO	CWSEL	DIFKWE	EG	TOPWID	GLDB	GCH	GROR	PERENC	STENCL	STCHL	STCHR	STENL
6105.000	186.50	.00	186.52	344.93	192.74	268.69	1948.57	.00	.00	50.00	70.00	.00
6105.000	186.50	.00	186.76	75.00	.00	791.15	1618.25	75.00	50.00	50.00	70.00	125.00
6927.000	186.76	.00	186.78	513.29	2134.04	123.80	152.17	.00	.00	463.00	483.00	.00
6927.000	187.37	.61	187.36	438.29	2291.31	118.89	.00	463.00	20.00	463.00	483.00	483.00
8105.000	188.14	.00	188.42	395.90	2009.78	362.59	37.23	.00	.00	419.00	432.00	.00
8105.000	188.39	.25	188.85	250.00	1909.07	464.66	36.27	250.00	190.00	419.00	432.00	440.00
8547.000	190.24	.00	190.41	301.39	1227.51	765.18	297.31	.00	.00	210.00	275.00	.00
8547.000	191.04	.75	191.22	175.00	1305.46	1104.52	.00	175.00	100.00	210.00	275.00	275.00
11241.000	204.27	.00	204.58	477.07	209.55	1189.02	1011.44	.00	.00	253.00	298.00	.00
11241.000	204.94	.67	205.29	240.00	40.03	1358.74	1011.24	240.00	240.00	253.00	298.00	480.00
12133.000	209.98	.00	210.12	317.75	1614.36	301.57	464.37	.00	.00	247.00	259.00	.00
12133.000	210.81	.83	211.06	140.00	1919.16	464.18	6.65	140.00	120.00	247.00	259.00	259.00
12741.000	214.22	.00	214.80	267.35	1166.04	840.03	483.93	.00	.00	221.00	234.00	.00
12741.000	215.08	.86	215.58	130.00	1277.56	827.77	304.67	130.00	130.00	221.00	234.00	260.00

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100 YR AND FLOODWAY

SUMMARY PRINTOUT TABLE 150

SECTNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10XFS	VCH	AREA	1013
6105.000	.00	.00	.00	177.90	2410.00	186.50	.00	186.52	2.60	1.59	2248.02	1494.42
6105.000	.00	.00	.00	177.90	2410.00	186.50	.00	186.76	33.81	4.70	602.99	414.67
6927.000	822.00	.00	.00	179.50	2410.00	186.76	.00	186.78	3.82	1.30	2405.22	1232.76
6927.000	822.00	.00	.00	179.50	2410.00	187.37	.00	187.28	3.10	1.10	2447.68	1369.58
8105.000	1330.00	.00	.00	183.60	2410.00	188.14	167.69	188.42	193.39	7.30	655.70	173.30
8105.000	1330.00	.00	.00	183.60	2410.00	188.39	.00	188.85	257.27	6.78	505.07	150.25
8547.000	290.00	.00	.00	185.90	2410.00	190.29	.00	190.41	34.33	3.38	954.02	411.34
8547.000	290.00	.00	.00	185.90	2410.00	191.04	.00	191.22	38.79	3.94	748.04	386.97
11241.000	2694.00	.00	.00	195.70	2410.00	204.27	.00	204.58	89.64	5.95	766.31	254.55
11241.000	2694.00	.00	.00	195.70	2410.00	204.94	.00	205.29	73.48	5.91	638.04	281.14
12133.000	892.00	.00	.00	202.40	2410.00	209.98	.00	210.12	45.25	4.72	893.48	358.27
12133.000	892.00	.00	.00	202.40	2410.00	210.81	.00	211.06	57.16	5.80	642.60	318.77
12741.000	608.00	.00	.00	206.20	2410.00	214.22	.00	214.80	146.54	9.13	537.67	199.09
12741.000	608.00	.00	.00	206.20	2410.00	215.08	.00	215.58	96.86	8.02	510.10	244.88

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10/14/88 15103106

32

100 YR AND FLOODWAY

SUMMARY PRINTOUT TABLE 150

SECTNO	U	CNSEL	DIFNSP	DIFNSX	DIFKNS	TOPWID	XLCH
8105.000	2410.00	186.50	.00	.00	.00	344.93	.00
8105.000	2410.00	186.50	.00	.00	.00	75.00	.00
8927.000	2410.00	186.76	.00	.26	.00	513.29	822.00
8927.000	2410.00	187.37	.61	.87	.51	438.29	822.00
8105.000	2410.00	188.14	.00	1.38	.00	395.90	1330.00
8105.000	2410.00	188.39	.25	1.02	.25	250.00	1330.00
8547.000	2410.00	190.29	.00	2.15	.00	301.39	290.00
8547.000	2410.00	191.04	.75	2.65	.75	175.00	290.00
11241.000	2410.00	204.27	.00	13.98	.00	477.07	2694.00
11241.000	2410.00	204.94	.67	13.90	.67	240.00	2694.00
12133.000	2410.00	209.98	.00	5.71	.00	317.75	892.00
12133.000	2410.00	210.81	.83	5.97	.83	140.00	892.00
12741.000	2410.00	214.22	.00	4.24	.00	267.35	608.00
12741.000	2410.00	215.08	.86	4.27	.86	130.00	608.00

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10/14/88 16:03:06

SUMMARY OF ERRORS AND SPECIAL NOTES

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10/14/88 16:03:06

FLOODWAY DATA, 100 YR AND FLOODWAY
PROFILE NO. 2

STATION	FLOODWAY			WATER SURFACE ELEVATION		
	WIDTH	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
8105.000	75.	603.	4.0	186.5	186.5	.0
8927.000	463.	2448.	1.0	187.4	186.8	.6
8105.000	250.	505.	4.8	188.3	188.1	.2
8547.000	175.	748.	3.2	191.0	190.3	.7
11241.000	240.	639.	3.8	205.0	204.3	.7
12133.000	140.	643.	3.8	210.8	210.0	.8
12741.000	130.	510.	4.7	215.1	214.2	.9

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33

RECZ RELEASE DATED NOV 76 UPDAT AY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
IBM-PC-XT VERSION

GREENHORN & COMPANY, INC.

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