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

C
 1 KANNAPOLIS-ROWAN CO. STRM 4K
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES R-G JOB NO. 6918
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSLL	FG
	-1.	2.	0.	0.	0.017000	0.0	0.0	0.	732.400	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	0.0	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	0.055	0.055	0.035	0.100	0.300	0.0	0.0	0.0	0.0	0.0
BT	5,000	236,000	453,000	571,000	867,000	571,000	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	450,000	13,000	1256,000	1268,000	450,000	450,000	450,000	0.0	-2,000	0.0
GR	749,600	1000,000	745,700	1100,000	741,300	1200,000	734,200	1222,000	730,400	1256,000
GR	727,600	1260,000	727,400	1262,000	727,500	1264,000	729,600	1268,000	729,600	1300,000
GR	732,600	1400,000	744,500	1500,000	749,800	1600,000	0.0	0.0	0.0	0.0
X1	500,000	0.0	0.0	0.0	50,000	50,000	50,000	0.0	0.600	0.0
NC	0.025	0.025	0.025	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	550,000	20,000	1252,500	1257,500	50,000	30,000	50,000	0.0	0.0	0.0
GR	749,600	1000,000	745,700	1100,000	745,300	1133,000	740,100	1159,000	737,500	1200,000
GR	737,000	1205,000	733,600	1215,000	727,800	1249,000	729,300	1252,500	727,800	1253,000
GR	727,000	1254,000	726,800	1255,000	727,000	1253,000	727,800	1257,000	729,300	1267,500
GR	732,000	1393,000	741,400	1472,000	743,600	1500,000	748,800	1600,000	753,100	1661,000
SB	0.900	1.500	2.500	0.0	5.000	0.010	19,600	0.0	0.0	0.0
X1	578,000	0.0	0.0	0.0	28,000	28,000	28,000	0.0	0.0	0.0
X2	0.0	0.0	1,000	731,800	0.0	0.0	0.0	0.0	0.0	0.0
BT	16,000	1000,000	749,600	0.0	1100,000	745,700	0.0	1133,000	745,300	0.0
BT	1200,000	737,300	0.0	1252,500	734,800	729,300	1253,000	734,800	730,800	1254,000
BT	734,800	731,600	1255,000	734,800	731,800	1256,000	734,800	731,600	1257,000	734,800
BT	730,800	1257,500	734,800	729,300	1300,000	733,800	0.0	1400,000	735,900	0.0
BT	1500,000	743,600	0.0	1600,000	748,800	0.0	1681,000	753,100	0.0	0.0
NC	0.055	0.055	0.035	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	608,000	13,000	1256,000	1268,000	30,000	30,000	30,000	0.0	0.0	0.0
GR	749,600	1000,000	745,700	1100,000	741,300	1200,000	734,200	1222,000	730,400	1256,000
GR	727,600	1260,000	727,400	1262,000	727,500	1264,000	729,600	1268,000	729,600	1300,000
GR	732,600	1400,000	744,500	1500,000	749,800	1600,000	0.0	0.0	0.0	0.0
X1	678,000	0.0	0.0	0.0	70,000	70,000	70,000	0.0	0.600	0.0
BT	5,000	74,000	159,000	212,000	354,000	212,000	0.0	0.0	0.0	0.0
X1	3650,000	12,000	1125,000	1135,000	2972,000	2972,000	2972,000	0.0	0.0	0.0

GR	804,300	1000,000	797,200	1078,000	790,600	1100,000	789,400	1114,000	787,100	1118,000
GR	786,600	1125,000	783,900	1131,000	785,100	1135,000	787,300	1139,000	792,800	1200,000
GR	797,500	1219,000	803,400	1268,000	0.0	0.0	0.0	0.0	0.0	0.0
EJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	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
450.00	3.00	728.40	728.40	732.40	728.85	0.46	0.0	0.0	728.40
236.	0.	160.	76.	0.	25.	36.	0.	0.	727.60
11.0	0.0	6.49	2.11	0.055	0.035	0.055	0.0	725.40	1256.00
0.010352	450.	450.	450.	0	12	1	0.0	70.57	1326.57

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	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
500.00	3.02	729.02	729.02	0.0	729.46	0.44	0.50	0.0	729.00
236.	0.	158.	78.	0.	25.	37.	0.	0.	728.20
0.00	0.03	6.36	2.08	0.055	0.035	0.055	0.034	726.00	1255.84
0.009817	50.	50.	50.	2	5	1	0.0	71.41	1327.25

CCHV= 0.100 CEHV= 0.300

5685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	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
550.00	3.71	730.51	730.51	0.0	730.91	0.40	0.35	0.0	729.30
236.	19.	164.	113.	0.	15.	37.	0.	0.	729.30
0.01	3.33	6.75	3.06	0.025	0.015	0.025	0.029	726.80	1242.62
0.005171	50.	50.	50.	30	11	1	0.0	75.75	1318.57

SPECIAL BRIDGE

5070, VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB XK XKCR COFG ROLEN# BWC RWP BAREA SS ELCHU ELCHD

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T1 KANNAPOLIS-ROWAN CO. STRM 4K
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	PO
	-10.	3.	0.	0.	0.017000	0.0	0.0	0.	733.400	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

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRHS	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	SORAR	TOPWID	ENDST
450.00	3.57	729.97	728.97	733.40	729.49	0.52	0.0	0.0	728.40
453.	2.	238.	213.	1.	32.	75.	0.	0.	727.60
0.0	1.17	7.53	2.83	0.055	0.035	0.055	0.0	725.40	1250.86
0.010034	450.	450.	450.	0	13	1	0.0	94.95	1345.01

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRHS	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
500.00	3.51	729.51	729.51	0.0	730.10	0.59	0.54	0.0	729.00
453.	1.	244.	207.	1.	31.	70.	0.	0.	728.20
0.00	1.16	7.34	2.95	0.055	0.035	0.055	0.034	726.00	1251.47
0.011552	50.	50.	50.	2	5	1	0.0	92.09	1343.55

CCHV= 0.100 CEHV= 0.300

3685 20 TRIALS USED WSEL,CWSEL.

7185 MIN SPECIFIC ENERGY

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T1 KANNAPOLIS-ROWAN CO. STRM 4K
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	4.	0.	0.	0.017000	0.0	0.0	0.	735.400	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	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

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	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
450.00	3.80	729.20	729.20	735.40	729.76	0.56	0.0	0.0	728.40
571.	4.	275.	291.	3.	34.	94.	0.	0.	727.60
0.0	1.48	0.03	3.11	0.055	0.035	0.055	0.0	725.40	1248.86
0.010243	450.	450.	450.	0	17	1	0.0	104.42	1353.28

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	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
500.00	3.71	729.71	729.71	0.0	730.36	0.65	0.55	0.0	729.00
571.	3.	284.	284.	2.	33.	87.	0.	0.	728.20
0.00	1.49	8.54	3.27	0.055	0.035	0.055	0.034	725.00	1249.61
0.012039	50.	50.	50.	2	5	1	0.0	100.87	1350.48

CCHV= 0.100 CEHV= 0.300

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

 HEC2 VERSION UPDATED JAN 1975
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 MODIFICATIONS 52,53,54,55,56,57,58

T1 KANNAPOLIS-ROWAN CO. STRM 4K
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-10.	5.	0.	0.	0.017000	0.0	0.0	0.	736.400	0.0
J2	NPROF	IPLT	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

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	QLOSS	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
450.00	4.25	729.65	729.65	736.40	730.29	0.64	0.0	0.0	728.40
867.	14.	359.	494.	7.	40.	136.	0.	0.	727.50
0.0	2.03	9.03	3.64	0.055	0.035	0.055	0.0	725.40	1244.00
0.010642	450.	450.	450.	0	17	1	0.0	123.57	1368.58

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	QLOSS	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
500.00	4.22	730.22	730.22	0.0	730.89	0.67	0.55	0.0	729.00
867.	14.	363.	491.	7.	39.	132.	0.	0.	728.20
0.00	2.05	9.22	3.71	0.055	0.035	0.055	0.034	726.00	1245.11
0.011257	50.	50.	50.	2	6	1	0.0	122.13	1367.24

CCHV= 0.100 CEHV= 0.300

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

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 OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
450.00	450.00	0.0	0.0	725.40	236.00	728.40	23.20	728.86	70.57	0.0	0.0	6.49
450.00	450.00	0.0	0.0	725.40	453.00	728.97	45.22	729.49	94.95	0.0	0.0	7.53
450.00	450.00	0.0	0.0	725.40	571.00	729.20	56.42	729.76	104.42	0.0	0.0	8.03
450.00	450.00	0.0	0.0	725.40	867.00	729.65	84.04	730.29	123.57	0.0	0.0	9.03
500.00	50.00	0.0	0.0	726.00	236.00	729.02	23.82	729.46	71.41	0.0	0.0	6.36
500.00	50.00	0.0	0.0	726.00	453.00	729.51	42.15	730.10	92.09	0.0	0.0	7.94
500.00	50.00	0.0	0.0	726.00	571.00	729.71	52.04	730.36	100.87	0.0	0.0	8.54
500.00	50.00	0.0	0.0	726.00	867.00	730.22	81.71	730.89	122.13	0.0	0.0	9.22
550.00	50.00	0.0	0.0	726.80	236.00	730.51	32.82	730.91	75.75	0.0	0.0	6.75
550.00	50.00	0.0	0.0	726.80	453.00	730.91	56.89	731.41	99.28	0.0	0.0	8.11
550.00	50.00	0.0	0.0	726.80	571.00	731.07	69.77	731.62	108.89	0.0	0.0	8.59
550.00	50.00	0.0	0.0	726.80	867.00	731.47	109.83	732.03	132.48	0.0	0.0	8.88
578.00	28.00	733.80	731.80	726.80	236.00	730.51	32.90	730.91	75.85	0.0	0.0	6.74
578.00	28.00	733.80	731.80	726.80	453.00	730.91	57.09	731.41	99.44	0.0	0.0	8.08
578.00	28.00	733.80	731.80	726.80	571.00	731.08	70.02	731.62	109.07	0.0	0.0	8.56
578.00	28.00	733.80	731.80	726.80	867.00	735.99	1741.27	736.00	218.68	0.0	0.0	0.92
608.00	30.00	0.0	0.0	727.40	236.00	730.89	41.19	731.05	91.17	0.0	0.0	4.21
608.00	30.00	0.0	0.0	727.40	453.00	731.31	62.30	731.60	108.92	0.0	0.0	5.91
608.00	30.00	0.0	0.0	727.40	571.00	731.46	71.21	731.83	115.26	0.0	0.0	6.74
608.00	30.00	0.0	0.0	727.40	867.00	735.99	812.20	736.01	212.06	0.0	0.0	1.63
678.00	70.00	0.0	0.0	728.00	236.00	731.08	25.99	731.46	74.31	0.0	0.0	5.95
678.00	70.00	0.0	0.0	728.00	453.00	731.66	49.60	732.11	98.81	0.0	0.0	7.02
678.00	70.00	0.0	0.0	728.00	571.00	731.90	62.74	732.37	109.25	0.0	0.0	7.41
678.00	70.00	0.0	0.0	728.00	867.00	736.00	663.10	736.02	205.22	0.0	0.0	1.90
3650.00	2972.00	0.0	0.0	783.90	74.00	786.05	5.59	786.67	10.52	0.0	0.0	6.37
3650.00	2972.00	0.0	0.0	783.90	159.00	786.91	13.19	787.77	17.67	0.0	0.0	7.64
3650.00	2972.00	0.0	0.0	783.90	212.00	787.41	20.17	788.25	22.73	0.0	0.0	7.74
3650.00	2972.00	0.0	0.0	783.90	354.00	788.19	35.66	789.18	32.72	0.0	0.0	8.75

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH 0	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
450.000	236.000	728.396	0.0	0.0	0.0	70.566	0.0	450.000
450.000	453.000	728.974	0.578	0.0	0.0	94.947	-24.380	450.000
450.000	571.000	729.197	0.224	0.0	0.0	104.423	-33.856	450.000
450.000	867.000	729.650	0.453	0.0	0.0	123.571	-53.004	450.000
500.000	236.000	729.017	0.0	0.621	0.0	71.412	0.0	50.000
500.000	453.000	729.506	0.489	0.532	0.0	92.087	-20.675	50.000
500.000	571.000	729.714	0.208	0.516	0.0	100.872	-29.460	50.000
500.000	867.000	730.216	0.503	0.566	0.0	122.126	-50.714	50.000
550.000	236.000	730.512	0.0	1.496	0.0	75.752	0.0	50.000
550.000	453.000	730.910	0.398	1.405	0.0	99.281	-23.529	50.000
550.000	571.000	731.073	0.163	1.359	0.0	108.894	-33.142	50.000
550.000	867.000	731.472	0.399	1.256	0.0	132.480	-56.728	50.000

	578,000	236,000	730,514	0.0	0.002	0.0	75,853	0.0	28,000	
	578,000	453,000	730,913	0.399	0.003	0.0	99,439	-23,586	28,000	
	578,000	571,000	731,075	0.163	0.003	0.0	109,067	-33,214	28,000	
	578,000	867,000	735,994	4.918	4.522	0.0	218,676	-142,823	28,000	
	608,000	236,000	730,885	0.0	0.371	0.0	91,173	0.0	30,000	
1	608,000	453,000	731,307	0.422	0.394	0.0	108,922	-17,749	30,000	1
2	608,000	571,000	731,459	0.151	0.383	0.0	115,260	-24,087	30,000	2
3	608,000	867,000	735,992	4.533	-0.002	0.0	212,063	-120,889	30,000	3
4										4
5	678,000	236,000	731,082	0.0	0.197	0.0	74,312	0.0	70,000	5
6	678,000	453,000	731,664	0.581	0.356	0.0	98,810	-24,498	70,000	6
7	678,000	571,000	731,902	0.239	0.444	0.0	109,253	-34,940	70,000	7
8	678,000	867,000	735,997	4.095	0.006	0.0	205,219	-130,906	70,000	8
9										9
10	3650,000	74,000	786,052	0.0	84,969	0.0	10,516	0.0	2972,000	10
11	3650,000	159,000	786,912	0.860	55,248	0.0	17,670	-7,155	2972,000	11
12	3650,000	212,000	787,407	0.495	55,504	0.0	22,732	-12,217	2972,000	12
13	3650,000	354,000	788,186	0.779	52,188	0.0	32,721	-22,206	2972,000	13
14										14

DATA FOR LAST CROSS SECTION

	PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF	
15						15
16						16
17						17
18						18
19	1	0.0	0.0	3.299	0.0	19
20	2	0.0	0.0	4.493	1.194	20
21	3	0.0	0.0	5.068	1.769	21
22	4	0.0	0.0	9.001	5.702	22
23						23
24						24
25						25
26						26
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54						54
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56						56
57						57

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

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