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ROCKWELL, N.C.  
CROWAN CO.  
BASIN H. STREAM IR  
BOST BRANCH

123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901

PROGRAMMER=KEZIAH ACCOUNT=RTI.A25.P03078

JOB TURN-AROUND JOB PARAMETERS TIME USED INCLUDES MISC. JOB VALUES

	DATE	TIME	SPECIFIED	USED	NO.	EQUIVALENT		
ENTERED	5/27/77	15:50:25.7	TIME	2:00.0	0:13.0	CPU	0:02.4	LINES IN 84
EXECUTED	5/27/77	18:20:45.7	PAGES	100	8	UR EXCPS	0:01.9	LINES OUT 306
RETURNED	5/30/77	13:13:42.7	CARDS	0	0	DISK EXCPS	0:08.6	MEMORY TIME 6475 K-SEC
JOB ENTERED ON FRIDAY			PLOTS	0	0	TAPE READ-WRITE	0:00.0	PRIORITY 00
						TAPE FILE SEARCH	0:00.0	APPROX. COST \$2.40

JOB CONSOLE LOG

N 18.19.20 JOB 13 -- RMAK1X -- JCL INTERPRETED, TUCC CPU #2  
N 18.20.32 JOB 13 -- RMAK1X -- BEGINNING EXEC - INIT 4 - CLASS  
L\*18.20.45 JOB 13 +++++S=068,T=02,J=RMAK1X 18:20:45 KEZIAH  
N 18.21.47 JOB 13 END EXECUTION.

//RMAK1X JOB RTI.A25.P03078.KEZIAH.M=1.T=2.P=100.PRTY=0.D=RTIMG

\*\*\*PROCLIB=RTI.MG.PROCLIB

// EXEC HEC2

XXG EXEC PGM=HEC2,R=500K	00000010
XXSTEPLIB DD DSN=RTI.A25.P03078.JCW.LIB.LOAD,DISP=SHR	00000020
XXFT03F001 DD SYCOUT=A	00000030
XXFT01F001 DD DDNAME=SYSIN	00000040
XXFT91F001 DD DSN=8191,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000050
XX UCBL=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000060
XXFT92F001 DD DSN=8192,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000070
XX UCBL=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000080
XXFT93F001 DD DSN=8193,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000090
XX UCBL=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000100
XXFT94F001 DD DSN=8194,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000110
XX UCBL=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000120
XXFT95F001 DD DSN=8195,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000130
XX UCBL=(BUFNO=1,RECFM=VBS,LRECL=1000,BLKSIZE=6400)	00000140
XXFT96F001 DD DSN=8196,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000150
XX UCBL=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000160

//SYSIN DD \*

//

IEF236I ALLOC. FOR RMAK1X G

IEF237I 158 ALLOCATED TO STEPLIB

IEF237I 562 ALLOCATED TO FT03F001

IEF237I 501 ALLOCATED TO FT01F001

IEF237I 15A ALLOCATED TO FT91F001

IEF237I 15A ALLOCATED TO FT92F001

IEF237I 15A ALLOCATED TO FT93F001

IEF237I 15A ALLOCATED TO FT94F001

IEF237I 15A ALLOCATED TO FT95F001

IEF237I 15A ALLOCATED TO FT96F001

IEF142I - STEP WAS EXECUTED - COND CODE 0000

IEF285I RTI.A25.P03078.JCW.LIB.LOAD	KEPT
IEF285I VOL SER NOS= RTI444.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I91	DELETED
IEF285I VOL SER NOS= SPARE7.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I92	DELETED
IEF285I VOL SER NOS= SPARE7.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I93	DELETED
IEF285I VOL SER NOS= SPARE7.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I94	DELETED
IEF285I VOL SER NOS= SPARE7.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I95	DELETED
IEF285I VOL SER NOS= SPARE7.	
IEF285I SYS77147.T181920.RV001.RMAK1X.I96	DELETED
IEF285I VOL SER NOS= SPARE7.	

G	CORE=500K	TIME---0:11.3	UR---424	RD/WR---0:00.0	RC-----0
G	USED=242K	CPU---0:02.4	DISK---402	REWIND---0:00.0	
G		I/O---0:08.9	TAPE-----0	FL SR---0:00.0	

RMAK1X TIME---0:11.3

\*\*\*\*\*  
 HEC2 RELEASE DATED NOV 76 U//DATED FEB 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52  
 \*\*\*\*\*

C  
 T1 ROCKWELL-ROWAN COUNTY BASIN H STREAM 1R UNNAMED  
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918  
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FR
	-10.	2.	0.	0.	0.012000	0.0	0.0	0.0	678.200	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	0.0	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
J3	VARIABLE CODES FOR SUMMARY PRINTOUT									
	38.000	39.000	40.000	41.000	43.000	42.000	1.000	2.000	26.000	53.000
	54.000	25.000	50.000	0.0	201.000	0.0	0.0	0.0	0.0	0.0
J5	LPRNT	NUMSEC	*****REQUESTED SECTION NUMBERS*****							
	-10.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MADE IN U.S.A.

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 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52  
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T1 ROCKWELL-ROWAN COUNTY BASIN H STREAM 1R UNNAMED  
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918  
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.012000	0.0	0.0	0.	681,200	0.0

J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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 HEC2 RELEASE DATED NOV 72 UPDATED FEB 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52  
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NOTE- ASTERISK (\*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

10 YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

	SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
A	1600.000	1600.00	0.0	0.0	384.00	673.20	675.50	0.0	2.93	1057.23	1174.56	131.75	0.0
	1600.000	1600.00	0.0	0.0	819.00	673.20	676.19	0.0	3.74	1055.29	1194.23	221.35	0.70
* B	3150.000	1550.00	0.0	0.0	353.00	698.40	702.93	702.93	6.89	1075.82	1139.96	72.72	0.0
	3150.000	1550.00	0.0	0.0	753.00	698.40	703.77	703.66	8.35	1071.01	1141.31	128.99	0.84
*	3200.000	50.00	0.0	0.0	353.00	703.40	707.32	707.32	8.01	1360.33	1419.03	62.49	0.0
	3200.000	50.00	0.0	0.0	753.00	703.40	708.01	708.01	9.35	1356.38	1420.49	165.00	0.69
	3286.000	86.00	722.40	707.40	353.00	703.40	722.91	0.0	0.18	1260.30	1486.39	2091.08	0.0
	3286.000	86.00	722.40	707.40	753.00	703.40	724.02	0.0	0.34	1246.84	1505.38	2361.06	1.11
C	3336.000	50.00	0.0	0.0	353.00	708.40	722.91	0.0	0.47	1018.80	1173.21	1151.95	0.0
	3336.000	50.00	0.0	0.0	753.00	708.40	724.02	0.0	0.87	1012.45	1177.19	1329.30	1.11
* D	5575.000	2239.00	0.0	0.0	168.00	753.40	756.44	756.44	8.21	1317.59	1328.35	20.62	0.0
	5575.000	2239.00	0.0	0.0	394.00	753.40	758.32	758.32	8.61	1306.81	1345.20	58.43	1.87
*	5600.000	25.00	0.0	0.0	168.00	753.60	757.69	757.69	8.41	1479.59	1497.74	26.66	0.0
	5600.000	25.00	0.0	0.0	394.00	753.60	759.11	0.0	7.60	147.36	1525.92	77.23	1.43
	5663.000	63.00	763.90	756.10	168.00	753.60	764.53	0.0	0.25	1391.34	1663.28	924.46	0.0
	5663.000	63.00	763.90	756.10	394.00	753.60	765.03	0.0	0.50	1383.40	1684.49	1067.03	0.50
E	5688.000	25.00	0.0	0.0	168.00	753.80	764.53	0.0	0.37	1226.52	1489.70	879.76	0.0
	5688.000	25.00	0.0	0.0	394.00	753.80	765.03	0.0	0.75	1218.62	1506.33	1016.28	0.50
F	5838.000	150.00	0.0	0.0	155.00	756.00	764.53	0.0	0.93	1300.63	1398.71	262.25	0.0
	5838.000	150.00	0.0	0.0	367.00	756.00	765.03	0.0	1.78	1300.07	1418.78	316.23	0.50

SUMMARY OF ERRORS

CAUTION SECNO= 3150.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 3150.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 3200.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 3200.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 3200.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3200.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3200.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3200.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 5575.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 5575.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 5575.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 5575.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 5575.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 5575.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 5600.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 5600.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 5600.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

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FLOOD INSURANCE ZONE DATA FOR 10 YEAR FLOOD WATER SURF

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND C.		
		10'	20'	0.2'
1600,000	0.	675.5	676.2	0.0
3150,000	1550.	700.0	700.8	*****
3200,000	1600.	*****	*****	*****
3286,000	1686.	20.0	21.1	0.0
3336,000	1736.	722.9	724.0	*****
5575,000	3975.	403.4	405.3	350.4
5600,000	4000.	*****	*****	*****
5663,000	4063.	42.1	42.6	-15.0
5688,000	4088.	764.4	764.8	*****
5838,000	4238.	*****	*****	*****
WEIGHTED AVG FOR REACH		****	****	****

FHF FOR THE REACH = 005 WITH 0.0% OF THE REACH WITHIN 0.5 FEET  
 ZONE FOR THE REACH = A 1

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	AVG ELEVATION DATA			WTD. AVG.	FHF	PERCENT WITHIN
		10'	1'	DIFF.			
SEC. 1600,000							
1	100.	676.4	0.1	676.3	676.3	005	100.
2	200.	678.2	0.3	677.9	677.1	005	0.
3	300.	679.9	0.5	679.4	677.9	005	33.
4	400.	681.7	0.7	681.0	678.7	005	0.
5	500.	683.5	0.9	682.6	679.4	005	20.
6	600.	685.2	1.0	684.2	680.2	005	0.
7	700.	687.0	1.2	685.8	681.0	005	14.
8	800.	688.8	1.4	687.4	681.8	005	0.
9	900.	690.5	1.6	688.9	682.6	005	11.
10	1000.	692.3	1.8	690.5	683.4	005	0.
11	1100.	694.1	2.0	692.1	684.2	005	9.
12	1200.	695.9	2.2	693.7	685.0	005	0.
13	1300.	697.6	2.4	695.3	685.8	005	8.
14	1400.	699.4	2.6	696.8	686.6	005	0.
15	1500.	701.2	2.7	698.4	687.3	005	7.
SEC. 3150,000							
16	1550.	704.7	1576.4	-871.7	589.9	005	0.
SEC. 3200,000							
SEC. 3286,000							
17	1700.	722.9	604.5	118.4	562.2	005	0.
SEC. 3336,000							
18	1800.	723.4	258.1	465.3	556.8	005	0.



19	1900.	724.6	18.0	706.6	564.7	005	0.
20	2000.	726.1	33.7	692.4	571.1	005	0.
21	2100.	727.6	49.5	678.1	576.2	005	0.
22	2200.	729.1	65.3	663.8	580.1	005	0.
23	2300.	730.6	81.0	649.6	583.2	005	0.
24	2400.	732.1	96.8	635.3	585.3	005	0.
25	2500.	733.6	112.6	621.0	586.8	005	0.
26	2600.	735.1	128.3	606.8	587.5	005	0.
27	2700.	736.6	144.1	592.5	587.7	005	0.
28	2800.	738.1	159.9	578.2	587.4	005	0.
29	2900.	739.6	175.6	564.0	586.6	005	0.
30	3000.	741.1	191.4	549.7	585.3	005	0.
31	3100.	742.6	207.2	535.4	583.7	005	0.
32	3200.	744.1	222.9	521.2	581.8	005	0.
33	3300.	745.6	238.7	506.9	579.5	005	0.
34	3400.	747.1	254.5	492.6	576.9	005	0.
35	3500.	748.6	270.2	478.4	574.1	005	0.
36	3600.	750.1	286.0	464.1	571.1	005	0.
37	3700.	751.6	301.8	449.8	567.8	005	0.
38	3800.	753.1	317.5	435.5	564.3	005	3.
39	3900.	754.6	333.3	421.3	560.6	005	0.
	3975.					SEC.	5575.000
40	4000.	756.5	880.1	-123.6	543.5	005	0.
	4000.					SEC.	5600.000
	4063.					SEC.	5663.000
	4088.					SEC.	5688.000
41	4100.	764.5	133.6	630.9	545.7	005	0.
42	4200.	764.5	1379.0	-614.5	518.1	005	0.
	4238.					SEC.	5838.000

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS  
INPUT 2UN WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END  
OF EACH REACH BY INC NO. FOR EXAMPLE 202 1 42  
A NEGATIVE INC NO. WILL SUPPRESS INTERMEDIATE INC OUTPUT.

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