

INTERACTIVE HELP VERSION UPDATED FEB 1974
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 50,51,52,53,54,55,56,57,58

TRIB "A"

From Doug Quinn
 Hydrology

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKYOTIF CREEK TRIB. 5.34 MILE ABOVE I-95
 T3 19 JAN 1976 DLS

NO	CHECK	TYPE	DIRV	ICIF	STAT	METRIC	UVINS	0	INSEL	FO
	-1.	00 2.	-0.	-0.	015000	-0.000	-1.0	-0.	96.000	20.050
NO	PROD	PLGT	PREVS	XSECV	XSECH	IN	ALLDC	LOW	CRTH	ITRACE
	1.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000
J3	-2.000	39.000	40.000	41.000	42.000	43.000	1.000	50.000	4.000	27.000
J3	26.000	10.000	11.000	200.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
HC	1.161	.150	.040	.100	.300	-0.000	-0.000	-0.000	-0.000	-0.000
FT	2.000	1298.000	1297.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
FT	-0.000	20.000	7.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1620.000
X1	1.000	10.000	1597.000	1703.000	0.000	0.000	-0.000	1.000	-7.300	-0.000
GR	00.000	1000.000	100.000	1075.000	100.500	1100.000	99.100	1200.000	99.100	1500.000
GR	77.900	1400.000	95.300	1500.000	95.100	1600.000	91.900	1697.000	88.900	1700.000
GR	71.910	1703.000	97.700	1800.000	101.500	1900.000	103.800	2000.000	104.700	2100.000
GR	65.700	2200.000	135.500	2300.000	107.100	2400.000	-0.000	-0.000	-0.000	-0.000
FT	-0.000	20.000	7.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1620.000
Y1	290.000	0.000	-0.000	-0.000	290.000	290.000	290.000	0.000	-7.300	-0.000
FT	-0.000	-0.000	2.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000
Y1	240.000	0.000	0.000	0.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
MC	1.000	0.100	0.020	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
FT	-1.000	-0.000	5.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1575.000
Y1	341.000	0.000	-0.000	-1.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	10.000	1000.000	100.000	-0.000	2075.000	100.000	-0.000	1100.000	100.000	-0.000
BT	120.000	59.100	-7.000	1500.000	99.100	-0.000	1400.000	97.900	-9.000	1500.000
BT	28.300	-0.000	1600.000	95.100	0.000	1697.000	95.800	91.900	1700.000	95.800
BT	24.900	1703.000	95.800	91.900	1600.000	97.700	-0.000	1900.000	101.500	-0.000
BT	2000.000	103.800	-0.000	2100.000	104.700	-0.000	2200.000	105.700	-0.000	2300.000
BT	100.000	-0.000	2400.000	107.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	97.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1570.000
X1	350.000	0.000	-0.000	-0.000	10.000	10.000	10.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
MC	1.160	.150	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
FT	-0.000	-0.000	2.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1550.000
Y1	360.000	0.000	-0.000	-0.000	-1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	95.800	95.800	-0.000
BT	-0.000	-0.000	2.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1650.000
Y1	410.000	22.000	1750.000	1700.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
GR	100.000	3000.000	100.000	1100.000	100.000	1200.000	99.900	1300.000	98.200	1400.000
GR	94.100	1439.000	97.300	1500.000	97.800	1600.000	94.300	1700.000	92.400	1760.000

GR	98.200	1781.000	24.100	1784.000	90.700	1788.000	92.000	1788.000	94.500	1800.000
GR	21.000	1900.000	131.400	2009.000	109.700	2087.000	109.000	2100.000	110.000	2200.000
GR	112.700	2300.000	114.700	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000	1640.000
Y1	110.000	27.000	1394.000	1601.000	690.000	690.000	690.000	-0.000	-0.000	-0.000
GR	128.000	1900.000	123.600	1979.000	126.700	1984.000	126.500	1990.000	121.600	1200.000
GR	120.200	1233.000	113.600	1300.000	108.200	1352.000	108.700	1361.000	106.900	1450.000
GR	127.400	1412.000	112.000	1425.000	101.600	1461.000	101.200	1500.000	101.100	1594.000
GR	129.300	1595.000	78.400	1597.000	98.300	1600.000	101.000	1601.000	101.600	1700.000
GR	122.300	1715.000	103.200	1732.000	104.900	1741.000	108.100	1800.000	119.500	1900.000
GR	121.900	2000.000	123.500	2100.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1570.000	1740.000
Y1	1273.000	24.000	1700.000	1706.000	673.000	673.000	673.000	-0.000	-0.000	-0.000
GR	131.500	1000.000	123.900	1100.000	122.500	1200.000	121.400	1233.000	117.400	1241.000
GR	115.300	1310.000	114.300	1400.000	118.200	1500.000	106.600	1545.000	106.200	1600.000
GR	126.100	1710.000	104.300	1701.000	103.900	1703.000	104.500	1705.000	106.300	1706.000
GR	124.000	1800.000	102.400	1876.000	110.500	1900.000	112.000	2000.000	111.900	2080.000
GR	117.100	2100.000	118.000	2200.000	119.100	2300.000	119.900	2400.000	121.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1650.000	1745.000
Y1	1790.000	17.000	1676.000	1704.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
Y3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	111.900	111.900	-0.000
GR	120.700	1900.000	126.500	1100.000	123.400	1200.000	120.200	1300.000	112.600	1400.000
GR	116.500	1500.000	114.600	1600.000	107.900	1696.000	103.200	1700.000	107.900	1704.000
GR	113.700	1800.000	113.800	1900.000	114.100	2000.000	114.000	2200.000	114.600	2200.000
GR	119.700	2300.000	117.200	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1690.000	1860.000
Y1	1791.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	17.000	1000.000	125.700	-0.000	1100.000	126.500	-0.000	1200.000	123.400	-0.000
BT	120.700	120.200	-0.000	1400.000	117.600	-0.000	1500.000	115.500	-0.000	1600.000
BT	114.600	-0.000	1696.000	113.500	107.900	1700.000	113.500	111.900	1704.000	113.500
BT	117.900	1800.000	113.700	-0.000	1900.000	113.800	-0.000	2000.000	114.100	-0.000
BT	2100.000	114.000	-0.000	2200.000	114.600	-0.000	2300.000	115.700	-0.000	2400.000
BT	117.200	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1650.000	1900.000
Y1	1791.000	0.000	-0.000	-0.000	18.000	18.000	18.000	-0.000	-0.000	-0.000
Y2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
BT	116.500	1150.000	114.600	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1950.000
Y1	1817.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
Y3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	113.500	113.500	-0.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	2080.000
Y1	1827.000	20.000	1704.000	1706.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
GR	132.400	1000.000	129.900	1100.000	124.900	1200.000	120.200	1300.000	116.400	1400.000
GR	114.100	1500.000	113.500	1600.000	112.500	1612.000	107.400	1700.000	104.400	1701.000
GR	117.300	1700.000	107.700	1707.000	107.400	1706.000	107.300	1800.000	108.700	1900.000
GR	119.100	2000.000	111.100	2100.000	113.200	2200.000	114.300	2300.000	115.800	2400.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1570.000	1720.000
Y1	1650.000	25.000	1632.000	1640.000	1623.000	1623.000	1623.000	-0.000	-0.000	-0.000
GR	131.000	1000.000	132.500	1100.000	124.900	1200.000	125.700	1300.000	123.600	1392.000
GR	121.000	1400.000	115.100	1500.000	114.400	1510.000	113.500	1600.000	113.200	1632.000
GR	117.900	1600.000	111.900	1636.000	111.900	1637.000	114.800	1640.000	113.300	1700.000
GR	117.700	1700.000	112.000	1800.000	121.600	1870.000	122.700	1900.000	125.900	2000.000
GR	127.300	2100.000	128.900	2200.000	128.800	2284.000	129.000	2300.000	129.400	2400.000
BT	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1645.000	1740.000
Y1	1650.000	22.000	1683.000	1694.000	1000.000	1000.000	1000.000	-0.000	-0.000	-0.000
GR	144.300	1000.000	143.600	1100.000	142.700	1200.000	141.300	1285.000	140.800	1300.000

GR	135,300	1400,000	1257,000	1200,000	123,200	1600,000	120,400	1688,000	119,400	1691,000
CR	20,200	1600,000	120,500	1700,000	120,900	1780,000	124,700	1800,000	128,200	1844,000
BR	36,300	1900,000	143,300	2000,000	144,100	2100,000	143,900	2185,000	143,100	2200,000
CA	146,100	2350,000	146,100	2400,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1650,000	1750,000

X1	119,000	17,000	1197,000	1203,000	565,000	365,000	565,000	-0,000	-0,000	-0,000
CR	145,500	1000,000	114,800	1100,000	143,300	1200,000	141,700	1300,000	139,300	1400,000
BR	136,600	1500,000	135,100	1600,000	127,100	1697,000	125,100	1700,000	128,100	1703,000
CR	157,100	1800,000	137,500	1900,000	140,200	2000,000	142,800	2100,000	145,400	2200,000
CR	147,200	2300,000	151,700	2400,000	70,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1640,000	1760,000

X1	214,000	0,000	0,000	0,000	25,000	25,000	25,000	-0,000	-0,000	-0,000
X3	10,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	128,100	128,100	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1640,000	1760,600

X1	5741,000	0,000	-0,000	-0,000	1,000	1,000	1,000	-0,000	-0,000	-0,000
BT	17,000	1000,000	145,500	-0,000	2100,000	144,800	-0,000	1200,000	143,300	-0,000
BT	1300,000	1417,700	-0,000	1400,000	135,300	-0,000	1500,000	136,600	-0,000	1600,000
BT	135,100	-0,000	1697,000	134,000	128,100	1700,000	134,000	131,100	1703,000	134,000
BT	128,100	1600,000	135,100	-0,000	1900,000	137,500	-0,000	2000,000	140,200	-0,000
BT	2100,000	142,500	-0,000	2200,000	145,400	-0,000	2300,000	147,900	-0,000	2400,000
BT	150,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000

X1	5450,000	0,000	-0,000	-0,000	18,000	18,000	18,000	-0,000	-0,000	-0,000
X2	150,000	-0,000	-0,000	-0,000	-0,000	-0,000	1,000	-0,000	-0,000	-0,000
BT	1160	1130	1040	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000

X1	5060,000	0,000	-0,000	-0,000	1,000	1,000	1,000	-0,000	-0,000	-0,000
X3	10,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	134,000	134,000	-0,000
BT	-0,000	-0,000	2,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000

X1	2785,000	20,000	1702,000	1712,000	29,000	25,000	25,000	-0,000	-0,000	-0,000
CR	145,000	1200,000	142,300	1300,000	142,500	1400,000	137,500	1500,000	136,100	1536,000
BR	120,000	1600,000	128,400	1700,000	127,200	1702,000	125,800	1710,000	125,500	1712,000
CR	28,500	1700,000	127,000	1712,000	127,900	1800,000	134,200	1900,000	140,200	2000,000
CR	144,000	2100,000	146,700	2138,000	141,600	2200,000	145,000	2300,000	148,100	2350,000
BT	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000

101

GR	355,500	3400,000	125,000	1200,000	123,500	1600,000	120,400	1688,000	119,400	1691,000
GR	25,200	1600,000	121,500	1700,000	120,900	1780,000	124,700	1800,000	128,200	1844,000
GR	356,300	1900,000	143,300	2000,000	144,100	2100,000	143,900	2185,000	143,100	2200,000
GR	144,100	2350,000	145,100	2400,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-3,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1650,000	1750,000
Y1	5075,000	17,000	1897,000	1703,000	905,000	565,000	565,000	-0,000	-0,000	-0,000
GR	145,500	1000,000	144,500	1100,000	143,300	1200,000	141,700	1300,000	139,300	1400,000
GR	135,600	1500,000	135,100	1600,000	128,100	1697,000	125,100	1700,000	128,100	1703,000
GR	135,700	1600,000	137,500	1900,000	140,200	2000,000	142,800	2100,000	145,400	2200,000
GR	147,900	2300,000	150,100	2400,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1640,000	1760,000
X1	5040,000	0,000	0,000	0,000	25,000	25,000	25,000	-0,000	-0,000	-0,000
X3	10,000	-3,000	-0,000	-0,000	-0,000	-0,000	-0,000	128,100	128,000	-0,000
TC	1,000	1,000	0,200	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1640,000	1760,000
Y1	5041,000	0,000	-0,000	-0,000	1,000	1,000	1,000	-0,000	-0,000	-0,000
BT	17,000	1000,000	145,500	-0,000	1100,000	144,800	-0,000	1300,000	143,300	-0,000
BT	1300,000	141,700	-0,000	1400,000	135,300	-0,000	1500,000	138,600	-0,000	1600,000
BT	135,100	-0,000	1897,000	134,000	128,100	1700,000	134,000	131,100	1703,000	134,000
BT	128,100	1600,000	135,100	-0,000	1900,000	137,500	-0,000	2000,000	140,200	-0,000
BT	2100,000	142,800	-0,000	2200,000	145,400	-0,000	2300,000	147,900	-0,000	2400,000
BT	150,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000
Y1	5050,000	0,000	-0,000	-0,000	18,000	18,000	18,000	-0,000	-0,000	-0,000
Y2	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1,000	-0,000	-0,000	-0,000
Y3	1,000	1,000	0,400	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
BT	-0,000	-0,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000
Y1	5060,000	0,000	-0,000	-0,000	1,000	1,000	1,000	-0,000	-0,000	-0,000
Y3	10,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	134,000	134,000	-0,000
BT	-0,000	-0,000	0,100	-0,000	-0,000	-0,000	-0,000	-0,000	1600,000	1780,000
Y1	5085,000	20,000	1700,000	1710,000	25,000	25,000	25,000	-0,000	-0,000	-0,000
GR	145,000	1200,000	142,300	2300,000	142,500	1400,000	137,500	1500,000	136,100	1536,000
GR	120,600	1600,000	126,900	1700,000	127,200	1700,000	125,800	1710,000	125,500	1712,000
GR	20,000	1700,000	177,500	1715,000	127,900	1900,000	134,200	1900,000	140,200	2000,000
GR	144,000	2100,000	146,700	2200,000	141,500	2200,000	143,000	2300,000	148,100	2350,000
BT	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000

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
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

 INTERACTIVE REC2 VERSION UPDATED FEB 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 50,51,52,53,54,55,56,57,58

T1 SPANKE RAPIDS EIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCYOYOTE CREEK TRIG. - 0.34 MILE ABOVE I-95
 T3 19 JAN 1976 RLO

01	CHECK	IND	MINV	DIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	3.	-0.	0.	0.000000	-0.00	-1.0	0.	89.070	-0.000
02	PROF	TPLOT	PREVS	XSECV	XSECH	FN	ALLOC	TBW	CHNIN	TRACE
	15.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000

*PROF 2

CDRVS 1.00 ELEV 1.00
 *SECD 1.000

SECD	DEPTH	CNSL	CRWS	WSELK	EG	HV	HL	LOSS	BANK ELEV
TIME	SLOPE	VCH	VRGB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLGBL	XLCH	XLGBR	ITIAL	IDC	ICONT	CORAR	TOPWD	ENDST

3471 ENCROACHMENT STATIONS=	1520.0	1710.0	TYPE=	1	TARGET=	90.000			
1.00	3.27	45.87	88.98	69.87	98.57	70	0.00	0.00	84.60
1250.	746.	446.	100.	308.	41.	35.	0.	0.	84.60
1.00	2.42	10.97	7.83	1.68	0.00	1.68	0.000	81.60	1520.00
.01433	0.	0.	0.	0.	9	1	0.00	90.00	1710.00

*SECD 290.000

7185 IN SECT 10 ENERGY

3472 ASSIGNED CRITICAL DEPTH

SECD	DEPTH	CNSL	CRWS	WSELK	EG	HV	HL	LOSS	BANK ELEV
TIME	SLOPE	VCH	VRGB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLGBL	XLCH	XLGBR	ITIAL	IDC	ICONT	CORAR	TOPWD	ENDST

3472 ENCROACHMENT STATIONS=	1625.0	1710.0	TYPE=	1	TARGET=	85.000			
225.00	7.23	95.14	96.13	0.00	97.59	1.46	4.53	0.00	91.90
1250.	674.	912.	104.	219.	34.	28.	2.	1.	91.90
1.00	3.07	14.89	8.70	1.60	0.00	1.60	0.00	88.90	1625.00
.024554	290.	290.	290.	0	5	1	0.00	85.00	1710.00

*SECD 340.000

INTERACTIVE REG2 VERSION UPDATED FEB 1976
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 50,51,52,53,54,55,56,57,58

COMMERCIAL SUPPLY & BOOK SERVICE CO., INC.

SUMMARY PRINTOUT

19 JAN 1976 DLR

SECNO XLCH ELT/D ELDC ELMIN Q CHSEL DT/MSR TOPWD STENGL STENCR HV

1.00	0.00	0.00	0.00	81.60	1290.00	88.87	0.00	263.48	0.00	0.00	.6
1.00	0.00	0.00	0.00	81.60	1290.00	89.87	1.00	90.00	1620.00	1710.00	.7
* 290.00	290.00	0.00	0.00	88.90	1290.00	95.96	0.00	244.27	0.00	0.00	.8
* 290.00	290.00	0.00	0.00	88.90	1290.00	96.13	.15	85.00	1625.00	1710.00	1.4
340.00	50.00	0.00	0.00	88.90	1290.00	97.12	0.00	341.67	0.00	0.00	.2
340.00	50.00	0.00	0.00	88.90	1290.00	97.87	.75	120.00	1600.00	1720.00	.3
* 341.00	1.00	95.10	94.90	88.90	1290.00	97.36	0.00	350.33	0.00	0.00	.6
* 341.00	1.00	95.10	94.90	88.90	1290.00	98.00	.64	127.00	1578.00	1705.00	1.0
359.00	18.00	95.10	94.90	88.90	1290.00	97.97	0.00	412.84	0.00	0.00	.2
359.00	18.00	95.10	94.90	88.90	1290.00	98.98	1.01	150.00	1570.00	1720.00	.3
350.00	1.00	0.00	0.00	88.90	1290.00	98.10	0.00	426.71	0.00	0.00	.0
350.00	1.00	0.00	0.00	88.90	1290.00	99.25	1.15	210.00	1550.00	1760.00	.0
410.00	50.00	0.00	0.00	90.10	1290.00	98.15	0.00	454.85	0.00	0.00	.1
410.00	50.00	0.00	0.00	90.10	1290.00	99.25	1.10	190.00	1650.00	1800.00	.1
* 1100.00	690.00	0.00	0.00	98.30	1290.00	103.12	0.00	274.79	0.00	0.00	.6
* 1100.00	690.00	0.00	0.00	96.30	1290.00	103.94	.82	110.00	1530.00	1640.00	1.0
1773.00	673.00	0.00	0.00	103.90	1290.00	109.56	0.00	402.03	0.00	0.00	.0
1773.00	673.00	0.00	0.00	103.90	1290.00	110.47	.91	170.00	1570.00	1740.00	.1
* 1790.00	17.00	0.00	0.00	103.90	1290.00	112.44	0.00	145.32	0.00	0.00	1.3
* 1790.00	17.00	0.00	0.00	103.90	1290.00	112.34	.10	80.00	1665.00	1745.00	1.4
* 1791.00	1.00	113.50	111.90	103.90	1290.00	115.11	0.00	703.57	0.00	0.00	.3
* 1791.00	1.00	113.50	111.90	103.90	1290.00	115.67	.56	170.00	1690.00	1860.00	.8
1809.00	16.00	113.50	111.90	103.90	1290.00	115.39	0.00	759.05	0.00	0.00	.1
1809.00	16.00	113.50	111.90	103.90	1290.00	116.43	1.04	250.00	1650.00	1900.00	.1
1811.00	1.00	0.00	0.00	103.90	1290.00	115.50	0.00	779.60	0.00	0.00	.0
1811.00	1.00	0.00	0.00	103.90	1290.00	116.55	1.08	350.00	1600.00	1950.00	.0
1827.00	17.00	0.00	0.00	104.30	1290.00	115.59	0.00	951.72	0.00	0.00	.0
1827.00	17.00	0.00	0.00	104.30	1290.00	116.64	1.05	480.00	1600.00	2080.00	.0
1828.00	1623.00	0.00	0.00	111.80	1290.00	115.89	0.00	302.88	0.00	0.00	.3
1828.00	1623.00	0.00	0.00	111.80	1290.00	116.77	.88	150.00	1570.00	1720.00	.4
1830.00	1000.00	0.00	0.00	119.40	1290.00	124.83	0.00	290.47	0.00	0.00	.2
1830.00	1000.00	0.00	0.00	119.40	1290.00	125.72	.69	95.00	1645.00	1740.00	.4
* 1835.00	665.00	0.00	0.00	125.10	1290.00	132.94	0.00	140.11	0.00	0.00	1.3
* 1835.00	665.00	0.00	0.00	125.10	1290.00	132.77	-.17	100.00	1650.00	1750.00	1.3
1840.00	25.00	0.00	0.00	125.10	1290.00	134.06	0.00	171.24	0.00	0.00	.5
1840.00	25.00	0.00	0.00	125.10	1290.00	133.94	-.12	120.00	1640.00	1760.00	.5

COPYRIGHT © 1975 BY SPACELAB INC.

SFCNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	HV
5041.00	1.00	134.00	131.10	125.10	1290.00	136.46	0.00	346.90	0.00	0.00	.6
5041.00	1.00	134.00	131.10	125.10	1290.00	136.81	.35	120.00	1640.00	1780.00	1.1
5059.00	10.00	134.00	131.10	125.10	1290.00	137.06	0.00	399.34	0.00	0.00	.2
5059.00	15.00	134.00	131.10	125.10	1290.00	137.97	.91	180.00	1600.00	1780.00	.2
5069.00	1.00	0.00	0.00	125.10	1290.00	137.24	0.00	412.65	0.00	0.00	.0
5069.00	1.00	0.00	0.00	125.10	1290.00	138.16	.91	180.00	1600.00	1780.00	.0
5085.00	25.00	0.00	0.00	125.50	1290.00	137.31	0.00	447.05	0.00	0.00	.0
5085.00	25.00	0.00	0.00	125.50	1290.00	138.21	.89	180.00	1600.00	1780.00	.0

FLOODWAY DATA, 19 JAN 1976 DLQ
 PROFILE NO. 2

STATION	FLOODWAY			WATER SURFACE ELEVATION		
	WIDTH (FT)	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1.000	94.	374.	2.5	89.9	88.9	1.0
250.000	74.	302.	4.3	96.6	96.0	.6
340.000	137.	619.	2.1	98.0	97.1	.9
341.000	124.	297.	4.3	97.7	97.4	.3
* 359.000	156.	549.	2.3	99.0	98.0	1.0
350.000	160.	800.	1.4	99.1	98.1	1.0
* 410.000	119.	683.	1.9	99.1	98.2	.9
* 1100.000	107.	324.	4.0	104.0	103.1	.9
* 1773.000	165.	706.	1.8	110.5	109.6	.9
1798.000	40.	216.	6.0	113.3	112.4	.9
1791.000	135.	404.	2.7	116.1	115.2	.9
* 1809.000	228.	655.	2.0	116.4	115.5	.9
1810.000	295.	1258.	1.0	116.5	115.6	.9
1827.000	225.1	7419.	.4	116.6	115.7	.9
* 3450.000	130.	435.	3.0	117.0	116.0	1.0
* 4450.000	111.	545.	2.4	125.7	124.8	.9
5045.000	45.	244.	5.7	133.5	132.9	.6
5042.000	56.	406.	3.2	135.1	134.1	1.0
5041.000	127.	359.	3.6	137.1	136.5	.6
* 5059.000	159.	572.	2.3	137.9	137.0	.9
* 5060.000	152.	1154.	1.1	138.2	137.3	.9
5065.000	269.	2718.	.5	138.2	137.3	.9

* Field Surveyed Cross Sections

POSSIBLE ERROR	SECNO= 290.00	PROFILE=	1 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO= 290.00	PROFILE=	1 PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO= 290.00	PROFILE=	1 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO= 290.00	PROFILE=	2 PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO= 341.00	PROFILE=	1 CRITICAL DEPTH ASSUMED

FLOODWAY DATA, 17 JAN 1976
 PROFILE NO. 2

DLU

FINAL

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION		DIFFERENCE
				WITH FLOODWAY	WITHOUT FLOODWAY	
1.000	75.	384.	3.4	99.9	98.9	1.0
290.000	85.	282.	4.6	96.1	96.0	.2
340.000	120.	562.	2.3	97.9	97.1	.8
341.000	127.	343.	3.0	98.0	97.4	.6
* 359.000	150.	541.	2.4	99.0	98.0	1.0
360.000	210.	1124.	1.1	99.2	98.1	1.1
* 410.000	150.	321.	1.6	99.2	98.2	1.0
* 1100.000	110.	323.	4.6	103.9	103.1	.8
* 1775.000	170.	725.	1.8	110.5	109.6	.9
1780.000	80.	287.	4.57	112.3	112.4	-.1
1781.000	170.	376.	3.4	115.7	115.1	.6
* 1800.000	250.	717.	1.8	116.4	115.4	1.0
1800.000	330.	1071.	.5	116.5	115.5	1.0
1827.000	450.	3723.	.3	116.6	115.6	1.0
* 3450.000	150.	469.	2.8	116.8	115.9	.9
* 4450.000	25.	468.	2.8	125.7	124.8	.9
5012.000	110.	316.	1.1	132.8	132.9	-.2
5013.000	120.	415.	2.7	133.9	134.1	-.1
5014.000	120.	318.	4.1	136.8	136.5	.3
* 5052.000	130.	644.	2.0	138.0	137.1	.9
* 5100.000	130.	1256.	1.0	138.2	137.2	1.0
5100.000	130.	1907.	.7	138.2	137.3	.9
* Surveyed Cross Sections						
POSSIBLE ERROR	SECTION=	290.00 PROFILE=	1 CRITICAL DEPTH ASSUMED			
POSSIBLE ERROR	SECTION=	290.00 PROFILE=	1 PROBABLE MIN-SPECIFIC-ENERGY			
POSSIBLE ERROR	SECTION=	290.00 PROFILE=	1 20 TRIALS REQUIRED TO BALANCE KSEL			
POSSIBLE ERROR	SECTION=	290.00 PROFILE=	2 CRITICAL DEPTH ASSUMED			
POSSIBLE ERROR	SECTION=	341.00 PROFILE=	1 CRITICAL DEPTH ASSUMED			

HALE BR

SUMMARY PRINTOUT

Hale Branch

Final

6/30/76

19 JAN 1976

DLQ

DLQ

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	2 HV
1.00	0.00	0.00	0.00	119.90	1480.00	133.60	0.00	353.29	0.00	0.00	.0
1.00	0.00	0.00	0.00	119.90	1480.00	134.60	1.00	195.98	1156.54	1352.52	1295 .0
300.00	1.00	0.00	0.00	122.60	1480.00	133.57	0.00	248.60	0.00	0.00	.0
300.00	1.00	0.00	0.00	122.60	1480.00	134.57	1.00	153.12	1178.23	1331.35	.0
938.00	638.00	0.00	0.00	124.90	1480.00	133.91	0.00	149.92	0.00	0.00	.4
938.00	638.00	0.00	0.00	124.90	1480.00	134.79	.88	67.19	1563.64	1630.83	1600 .5
988.00	50.00	0.00	0.00	124.90	1480.00	134.07	0.00	152.49	0.00	0.00	.4
988.00	50.00	0.00	0.00	124.90	1480.00	134.95	.88	68.72	1562.82	1631.54	.5
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.30	0.00	233.27	0.00	0.00	1.2
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.90	.60	92.36	1532.28	1624.65	1.5
1011.00	22.00	134.80	132.80	124.90	1480.00	138.83	0.00	251.11	0.00	0.00	.7
1011.00	22.00	134.80	132.80	124.90	1480.00	139.75	.92	112.15	1523.60	1635.75	.8
1012.00	1.00	0.00	0.00	124.90	1480.00	139.60	0.00	276.85	0.00	0.00	.0
1012.00	1.00	0.00	0.00	124.90	1480.00	140.59	.99	143.98	1518.22	1662.20	.0
1062.00	50.00	0.00	0.00	126.90	1480.00	139.62	0.00	302.49	0.00	0.00	.0
1062.00	50.00	0.00	0.00	126.90	1480.00	140.61	.99	162.21	1469.33	1631.55	.0
2250.00	1188.00	0.00	0.00	134.70	1480.00	140.86	0.00	194.41	0.00	0.00	.4
2250.00	1188.00	0.00	0.00	134.70	1480.00	141.62	.76	111.86	1310.48	1422.34	1361 .5
* 5000.00	2750.00	0.00	0.00	156.00	1480.00	161.79	0.00	213.10	0.00	0.00	.4
* 5000.00	2750.00	0.00	0.00	156.00	1480.00	162.69	.90	93.19	1697.81	1791.00	1785 .4
* 6600.00	1600.00	0.00	0.00	178.50	1480.00	181.71	0.00	301.28	0.00	0.00	.8
* 6600.00	1600.00	0.00	0.00	178.50	1480.00	182.61	.90	77.70	1431.80	1509.50	1488 1.8
* 8200.00	1600.00	0.00	0.00	192.00	1480.00	197.17	0.00	218.97	0.00	0.00	.5
* 8200.00	1600.00	0.00	0.00	192.00	1480.00	198.07	.90	77.47	1756.83	1834.30	1811 .8
* 9100.00	900.00	0.00	0.00	205.30	1480.00	209.05	0.00	189.34	0.00	0.00	1.1
* 9100.00	900.00	0.00	0.00	205.30	1480.00	209.65	.60	67.53	1347.93	1415.46	1373 1.7
* 9528.00	428.00	0.00	0.00	207.50	1480.00	215.36	0.00	265.86	0.00	0.00	.3
* 9528.00	428.00	0.00	0.00	207.50	1480.00	215.96	.60	94.09	1664.97	1759.07	1700 .4
9541.00	13.00	0.00	0.00	207.50	1480.00	215.52	0.00	280.63	0.00	0.00	.2
9541.00	13.00	0.00	0.00	207.50	1480.00	216.14	.63	99.52	1663.30	1762.82	.3
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.22	0.00	339.86	0.00	0.00	.5
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.82	.60	126.33	1674.53	1800.86	.9
9558.00	16.00	214.10	211.50	207.50	1480.00	216.78	0.00	377.88	0.00	0.00	.2
9558.00	16.00	214.10	211.50	207.50	1430.00	217.72	.93	162.68	1656.47	1819.15	.2
9559.00	1.00	0.00	0.00	207.50	1480.00	216.94	0.00	388.57	0.00	0.00	.0
9559.00	1.00	0.00	0.00	207.50	1480.00	217.91	.97	162.37	1643.95	1806.31	.0

HALE BR

SFCNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	HV
9572.00	13.00	0.00	0.00	108.80	1480.00	216.92	0.00	412.65	0.00	0.00	.1
9572.00	13.00	0.00	0.00	208.80	1480.00	217.88	.96	175.57	1637.86	1613.43	1680 .1

FLOODWAY DATA, 19 JAN 1976 DLO
 PROFILE NO. 2

STATION	FLOODWAY		MEAN VELOCITY	WATER SURFACE ELEVATION		DIFFERENCE
	WIDTH (FT)	SECTION AREA		WITH FLOODWAY	WITHOUT FLOODWAY	
1.000	196.	2201.	.7	134.6	133.6	1.0
* 300.000	153.	1414.	1.0	134.6	133.6	1.0
938.000	67.	559.	2.6	134.8	133.9	.9
988.000	69.	580.	2.6	135.0	134.1	.9
989.000	92.	387.	3.8	138.9	138.3	.6
* 1011.000	112.	546.	2.7	139.8	138.8	.9
1012.000	144.	1673.	.9	140.6	139.6	1.0
* 1062.000	162.	1516.	1.0	140.6	139.6	1.0
* 2250.000	112.	501.	3.0	141.6	140.9	.8
* 5000.000	93.	474.	3.1	162.7	161.8	.9
* 6600.000	78.	239.	6.2	182.6	181.7	.9
* 8200.000	77.	364.	4.1	198.1	197.2	.9
* 9100.000	68.	263.	5.6	209.6	209.0	.6
9528.000	94.	500.	7.0	216.0	215.4	.6
9541.000	100.	538.	2.7	216.1	215.5	.6
9542.000	126.	338.	4.4	216.8	216.2	.6
* 9558.000	163.	569.	2.6	217.7	216.8	.9
9559.000	162.	1045.	1.5	217.9	216.9	1.0
* 9572.000	176.	1056.	1.4	217.9	215.9	1.0

* Surveyed Cross Sections

- POSSIBLE ERROR SECNO= 989.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 989.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 5000.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 6600.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 6600.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 8200.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 9100.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 9100.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY

 INTERACTIVE NEC2 VERSION UPDATED FEB 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 50,51,52,53,54,55,56,57,58

T1 ROANKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKOYOTTE CREEK TRIB. - HALE S BRANCH
 T3 19 JAN 1976 DLW

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-1.	2.	-0.	-0.	-0.000000	-0.00	-1.0	-0.	133.600	-0.000
J2	MPROF	IFLOT	PREVS	XSECV	XSFCH	FN	ALLDC	IDW	CHNTM	ITRACE
	1.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000
J3	-2.000	39.000	40.000	41.000	42.000	43.000	1.000	50.000	4.000	27.000
J3	28.000	10.000	11.000	200.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	.100	.300	-0.000	-0.000	-0.000	-0.000	-0.000
QT	2.000	1480.000	1480.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
E1	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1169.000 1355.000
X1	1.000	18.000	1291.000	1300.000	0.000	0.000	0.000	1.000	2.700	-0.000
GR	139.600	1060.000	137.500	1020.000	135.600	1025.000	137.300	1530.000	137.600	1050.000
GR	136.500	1100.000	136.300	1105.000	135.000	1122.000	131.500	1137.000	127.100	1200.000
GR	123.400	1201.000	122.600	1295.000	123.600	1300.000	124.300	1319.000	134.100	1380.000
GR	134.900	1400.000	135.600	1445.000	139.700	1500.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1190.000 1330.000
X1	300.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	2.700	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	938.000	13.000	1596.000	1604.000	638.000	638.000	638.000	-0.000	-0.000	-0.000
GR	151.100	1200.000	148.100	1360.000	143.100	1400.000	136.300	1900.000	124.900	1595.000
GR	124.900	1596.000	124.900	1597.000	124.900	1603.000	124.900	1604.000	124.900	1605.000
GR	138.100	1700.000	143.400	1800.000	148.300	1900.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	988.000	0.000	-0.000	-0.000	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	132.800	132.800	-0.000
NC	.100	.100	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1540.000 1645.000
X1	980.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	13.000	1200.000	151.100	-0.000	1300.000	148.100	-0.000	1400.000	143.300	-0.000
BT	1500.000	136.300	-0.000	1595.000	134.800	124.900	1596.000	135.800	124.900	1597.000
BT	135.800	132.800	1603.000	135.900	132.800	1604.000	135.900	124.900	1605.000	134.800
BT	124.900	1700.000	138.100	-0.000	1800.000	143.400	-0.000	1900.000	148.300	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	1011.000	0.000	-0.000	-0.000	22.000	22.000	22.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
E1	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	1012.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	134.800	134.800	-0.000

THE UNIVERSITY OF MICHIGAN
 LIBRARY
 ANN ARBOR, MICHIGAN 48106

ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1500,000	1630,000
X1	1062.000	13.000	1597.000	1603.000	50.000	50.000	50.000	-0.000	-0.000	-0.000	-0.000
GR	148.300	1200.000	145.600	1300.000	138,800	1400.000	133,400	1500.000	127.900	1597.000	1597.000
GR	126.900	1598.000	126.900	1500.000	126.900	1602.000	128.000	1603.000	130.600	1610.000	1610.000
GR	140.700	1700.000	148.300	1800.000	152.400	1900.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1310,000	1430,000
X1	2250.000	16.000	1358.000	1365.000	1188.000	1180.000	1188.000	-0.000	-0.000	-0.000	-0.000
GR	161.600	900.000	157.600	1000.000	149.900	1100.000	146.800	1200.000	137.800	1300.000	1300.000
GR	137.000	1358.000	135.400	1360.000	134.700	1301.000	135.300	1364.000	137.100	1365.000	1365.000
GR	137.300	1400.000	137.000	1427.000	145.400	1500.000	154.500	1550.000	156.600	1600.000	1600.000
GR	160.800	1700.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1730,000	1800,000
X1	5000.000	27.000	1779.000	1791.000	2750.000	2750.000	2750.000	-0.000	-0.000	-0.000	-0.000
GR	200.400	1000.000	195.800	1100.000	190.600	1200.000	189.400	1261.000	185.200	1300.000	1300.000
GR	177.900	1400.000	175.400	1434.000	167.900	1500.000	162.900	1600.000	158.600	1637.000	1637.000
GR	158.000	1700.000	157.600	1779.000	156.300	1780.000	156.100	1785.000	156.900	1790.000	1790.000
GR	157.400	1791.000	157.700	1800.000	160.300	1833.000	164.400	1840.000	173.300	1892.000	1892.000
GR	174.100	1900.000	181.000	2000.000	181.200	2003.000	180.700	2100.000	180.300	2200.000	2200.000
GR	175.600	2300.000	178.600	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1450,000	1530,000
X1	6600.000	19.000	1476.000	1500.000	1600.000	1500.000	1600.000	-0.000	-0.000	-0.000	-0.000
GR	206.900	700.000	203.800	800.000	200.700	900.000	196.800	1000.000	191.600	1100.000	1100.000
GR	167.200	1200.000	181.100	1300.000	180.200	1400.000	179.800	1476.000	178.500	1489.000	1489.000
GR	179.100	1500.000	179.000	1544.000	182.200	1600.000	186.600	1700.000	190.900	1750.000	1750.000
GR	192.400	1752.000	195.400	1800.000	197.900	1900.000	196.400	2000.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1755,000	1835,000
X1	8200.000	18.000	1800.000	1822.000	1600.000	1600.000	1600.000	-0.000	-0.000	-0.000	-0.000
GR	214.900	1400.000	210.100	1500.000	204.500	1600.000	195.300	1700.000	193.200	1800.000	1800.000
GR	192.000	1803.000	192.100	1810.000	192.100	1819.000	194.300	1822.000	194.100	1872.000	1872.000
GR	196.100	1808.000	197.300	1900.000	200.900	2000.000	205.400	2076.000	206.600	2100.000	2100.000
GR	211.600	2200.000	215.300	2300.000	217.200	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1360,000	1405,000
X1	9100.000	15.000	1365.000	1381.000	900.000	900.000	900.000	-0.000	-0.000	-0.000	-0.000
GR	223.000	1000.000	220.200	1100.000	214.800	1200.000	208.700	1300.000	207.400	1329.000	1329.000
GR	206.500	1333.000	205.700	1365.000	205.300	1375.000	205.600	1381.000	205.700	1400.000	1400.000
GR	206.500	1420.000	209.700	1500.000	216.800	1600.000	222.900	1700.000	224.500	1800.000	1800.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1650,000	1770,000
X1	9520.000	17.000	1698.000	1702.000	428.000	428.000	428.000	-0.000	-0.000	-0.000	-0.000
GR	220.400	1000.000	229.100	1100.000	227.000	1200.000	224.600	1300.000	221.400	1400.000	1400.000
GR	218.100	1500.000	215.400	1600.000	209.500	1698.000	207.500	1700.000	209.500	1702.000	1702.000
GR	214.300	1800.000	215.900	1900.000	219.200	2000.000	223.900	2100.000	226.400	2200.000	2200.000
GR	226.600	2300.000	225.900	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1650,000	1770,000
X1	9545.000	0.000	0.000	0.000	13.000	13.000	13.000	-0.000	-0.000	-0.000	-0.000
XS	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	211.500	211.500	-0.000	-0.000
YS	1.000	1.000	0.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1700,000	1780,000
X1	9542.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000	-0.000
BT	17.000	1000.000	230.400	-0.000	1100.000	229.100	-0.000	1200.000	227.000	-0.000	-0.000
BT	1300.000	224.600	-0.000	1400.000	221.400	-0.000	1500.000	218.100	-0.000	1600.000	1600.000
BT	215.400	-0.000	1698.000	214.100	209.500	1700.000	214.100	211.500	1702.000	214.100	214.100
BT	209.500	1800.000	214.300	-0.000	1900.000	215.900	-0.000	2000.000	219.200	-0.000	-0.000
BT	2100.000	223.900	-0.000	2200.000	226.400	-0.000	2300.000	226.600	-0.000	2400.000	2400.000
BT	225.900	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1690,000	1820,000
X1	9558.000	0.000	-0.000	-0.000	16.000	16.000	16.000	-0.000	-0.000	-0.000	-0.000

XZ	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1630.000	1800.000
X1	9559.600	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	30.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	214.100	214.100	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1630.000	1800.000
X1	9572.000	22.000	1673.000	1688.000	13.000	13.000	13.000	-0.000	-0.000	-0.000
GR	231.100	1000.000	230.300	1100.000	228.300	1200.000	226.100	1300.000	222.500	1400.000
GR	217.600	1500.000	214.800	1600.000	210.800	1673.000	209.100	1677.000	208.800	1683.000
GR	209.000	1687.000	209.400	1688.000	209.600	1700.000	209.900	1714.000	211.600	1716.000
GR	213.900	1800.000	215.400	1900.000	219.500	2000.000	223.200	2100.000	225.600	2200.000
GR	225.000	2300.000	226.300	2400.000	-0.000	-0.000	-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
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
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

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

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKOYOTTE CREEK TRIB. - HALE S BRANCH
 T3 19 JAN 1976 DLD

J1	ICHECK	INO	MINV	IDIR	SIRT	METRIC	HVINS	0	WSEL	FG
	-10.	3.	-0.	-0.	0.000000	-0.00	-1.0	-0.	134.600	-0.000
J2	WPROF	TPL0T	PREVS	XSECV	XSECH	FN	ALLOD	IBW	CHNIN	ITRACE
	15.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	0.000	-0.000

*PROF 2

CCRV= .100 CERV= .300
 *SFCNO 1.000

SFCNO	DEPTH	WSEL	CRWS	WSELK	EG	HV	HL	GLOSS	BANK	ELFV
0	0.00	GCH	GR0B	ALOB	ACH	AR0B	VOL	TWA	LEFT/RIGHT	
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA	
SLOPE	YLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST	

3470 ENCROACHMENT STATIONS= 1165.0 1355.0 TYPE= 1 TARGET= 190.000
 1.00 14.70 134.60 125.23 134.60 134.63 .03 0.00 0.00 120.70
 1480. 798. 333. 349. 1411. 128. 618. 0. 0. 120.90
 0.00 .57 2.60 .57 .160 .040 .160 0.000 119.90 1165.00
 .000144 0. 0. 0. 0. 21 1 0.00 190.00 1355.00

*SFCNO 300.000

3470 ENCROACHMENT STATIONS= 1190.0 1330.0 TYPE= 1 TARGET= 140.000
 300.00 11.97 134.57 127.93 0.00 134.64 .08 0.00 .01 123.40
 1480. 789. 410. 281. 919. 104. 309. 0. 0. 123.60
 0.00 .86 3.90 .92 .160 .040 .160 0.000 122.60 1190.00
 .000448 0. 0. 0. 2 5 1 0.00 140.00 1330.00

*SFCNO 975.000

3470 ENCROACHMENT STATIONS= 1530.0 1660.0 TYPE= 1 TARGET= 130.000
 938.00 10.01 134.91 131.04 0.00 135.19 .26 .48 .06 124.90
 1480. 501. 545. 434. 407. 80. 350. 16. 2. 124.90
 .05 1.23 6.81 1.24 .160 .040 .160 0.000 124.90 1530.00
 .001556 138. 638. 438. 2 8 1 0.00 130.00 1660.00

*SFCNO 988.000

3470 ENCROACHMENT STATIONS= 1530.0 1660.0 TYPE= 1 TARGET= 130.000
 918.00 10.09 134.99 132.87 0.00 135.26 .27 .08 .00 124.90
 1480. 502. 542. 436. 413. 81. 355. 17. 2. 124.90

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

SUMMARY PRINTOUT

19 JAN 1976 DLO

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	HV
1.00	0.00	0.00	0.00	119.90	1480.00	133.60	0.00	353.29	0.00	0.00	.0
1.00	0.00	0.00	0.00	119.90	1480.00	134.60	1.00	190.00	1165.00	1355.00	.0
300.00	1.00	0.00	0.00	122.60	1480.00	133.57	0.00	248.60	0.00	0.00	.0
307.00	1.00	0.00	0.00	122.60	1480.00	134.57	.99	140.00	1190.00	1330.00	.0
938.00	638.00	0.00	0.00	124.90	1480.00	133.91	0.00	149.92	0.00	0.00	.4
938.00	638.00	0.00	0.00	124.90	1480.00	134.91	1.00	130.00	1530.00	1660.00	.2
988.00	50.00	0.00	0.00	124.90	1480.00	134.07	0.00	152.49	0.00	0.00	.4
988.00	50.00	0.00	0.00	124.90	1480.00	134.99	.92	130.00	1530.00	1660.00	.2
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.55	0.00	241.68	0.00	0.00	1.2
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.37	.19	105.00	1540.00	1645.00	2.0
1011.00	22.00	134.80	132.80	124.90	1480.00	139.06	0.00	258.49	0.00	0.00	.8
1011.00	22.00	134.80	132.80	124.90	1480.00	140.12	1.06	130.00	1530.00	1660.00	.4
1012.00	1.00	0.00	0.00	124.90	1480.00	139.91	0.00	287.34	0.00	0.00	.0
1012.00	1.00	0.00	0.00	124.90	1480.00	140.59	.67	130.00	1530.00	1660.00	.0
1062.00	50.00	0.00	0.00	126.90	1480.00	139.93	0.00	309.83	0.00	0.00	.0
1062.00	50.00	0.00	0.00	126.90	1480.00	140.59	.66	130.00	1500.00	1630.00	.0
2250.00	1188.00	0.00	0.00	134.70	1480.00	141.01	0.00	197.48	0.00	0.00	.3
2250.00	1188.00	0.00	0.00	134.70	1480.00	141.79	.78	120.00	1310.00	1430.00	.3
5000.00	2750.00	0.00	0.00	156.00	1480.00	161.68	0.00	210.69	0.00	0.00	.4
5000.00	2750.00	0.00	0.00	156.00	1480.00	162.45	.77	70.00	1730.00	1800.00	1.0
* 6600.00	1600.00	0.00	0.00	178.50	1480.00	181.71	0.00	301.28	0.00	0.00	.8
* 6600.00	1600.00	0.00	0.00	178.50	1480.00	182.46	.75	80.00	1450.00	1530.00	1.5
8200.00	1600.00	0.00	0.00	192.00	1480.00	197.17	0.00	218.97	0.00	0.00	.5
8200.00	1600.00	0.00	0.00	192.00	1480.00	198.03	.86	80.00	1755.00	1835.00	.7
* 9100.00	900.00	0.00	0.00	205.30	1480.00	209.05	0.00	189.34	0.00	0.00	1.1
* 9100.00	900.00	0.00	0.00	205.30	1480.00	210.08	1.03	45.00	1360.00	1405.00	2.2
9528.00	428.00	0.00	0.00	207.50	1480.00	215.36	0.00	265.86	0.00	0.00	.3
9528.00	428.00	0.00	0.00	207.50	1480.00	216.23	.86	120.00	1650.00	1770.00	.2
9541.00	13.00	0.00	0.00	207.50	1480.00	215.52	0.00	280.63	0.00	0.00	.2
9541.00	13.00	0.00	0.00	207.50	1480.00	216.31	.79	120.00	1650.00	1770.00	.2
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.12	0.00	233.66	0.00	0.00	.5
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.41	.28	80.00	1700.00	1780.00	1.1
9558.00	16.00	214.10	211.50	207.50	1480.00	216.79	0.00	378.62	0.00	0.00	.1
9558.00	16.00	214.10	211.50	207.50	1480.00	217.67	.89	130.00	1690.00	1820.00	.3
9559.00	1.00	0.00	0.00	207.50	1480.00	216.90	0.00	385.80	0.00	0.00	.0
9559.00	1.00	0.00	0.00	207.50	1480.00	217.92	1.02	170.00	1630.00	1800.00	.0

SECNO	XLCH	ELTRD	ELLC	ELMIN	0	CWSEL	DIFWSp	TOPWID	STENCL	STENCR	HV
9572.00	13.00	0.00	0.00	208.80	1480.00	216.88	0.00	410.18	0.00	0:00	.1
9572.00	13.00	0.00	0.00	208.80	1480.00	217.88	1.01	170.00	1650.00	1800.00	.1

Copyright © 1988 by American Nuclear Society
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the American Nuclear Society.

SUMMARY PRINTOUT

Bell's Branch & Nash Creek

Final 6/30/76

19 JAN 1976 DLQ

DLQ

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	# HV
1000.00	0.00	0.00	0.00	109.60	4080.00	117.16	0.00	354.46	0.00	0.00	.3
1000.00	0.00	0.00	0.00	109.60	4080.00	118.16	1.00	223.61	1263.11	1486.72	1372.4
1550.00	500.00	0.00	0.00	112.60	4080.00	120.01	0.00	352.44	0.00	0.00	.3
* 1550.00	500.00	0.00	0.00	112.60	4080.00	120.91	.90	220.43	1265.21	1485.64	.4
2500.00	950.00	0.00	0.00	115.30	4080.00	123.80	0.00	390.24	0.00	0.00	.1
* 2500.00	950.00	0.00	0.00	115.30	4080.00	124.70	.90	259.08	1145.43	1404.51	1149.2
3050.00	550.00	0.00	0.00	118.20	4080.00	125.83	0.00	185.94	0.00	0.00	1.4
* 3050.00	550.00	0.00	0.00	118.20	4080.00	126.74	.91	109.83	1166.38	1276.21	1240.1.8
3629.00	579.00	0.00	0.00	119.90	4080.00	130.35	0.00	337.91	0.00	0.00	.4
* 3629.00	579.00	0.00	0.00	119.90	4080.00	131.15	.80	182.70	1253.40	1436.10	1370.5
3679.00	50.00	0.00	0.00	119.30	4080.00	130.12	0.00	306.73	0.00	0.00	.9
3679.00	50.00	0.00	0.00	119.30	4080.00	130.88	.76	89.88	1452.30	1542.19	1500.1.1
* 3680.00	1.00	129.60	127.50	119.30	4080.00	132.07	0.00	602.57	0.00	0.00	1.3
* 3680.00	1.00	129.60	127.50	119.30	4080.00	132.67	.60	203.25	1398.25	1601.51	1.6
3720.00	40.00	129.60	127.50	119.30	4080.00	132.75	0.00	661.87	0.00	0.00	.7
3720.00	40.00	129.60	127.50	119.30	4080.00	133.59	.84	280.72	1364.96	1645.69	.8
3721.00	1.00	0.00	0.00	119.30	4080.00	133.35	0.00	705.51	0.00	0.00	.2
3721.00	1.00	0.00	0.00	119.30	4080.00	134.24	.89	283.02	1366.73	1649.76	.2
3771.00	50.00	0.00	0.00	119.90	4080.00	133.52	0.00	525.01	0.00	0.00	.1
3771.00	50.00	0.00	0.00	119.90	4080.00	134.41	.89	258.91	1201.54	1460.45	1370.1
750.00	700.00	0.00	0.00	122.40	3020.00	134.09	0.00	371.08	0.00	0.00	.0
750.00	700.00	0.00	0.00	122.40	3020.00	134.95	.86	277.14	1604.70	1881.84	1817.0
1800.00	1050.00	0.00	0.00	125.00	3020.00	135.15	0.00	297.33	0.00	0.00	.1
1800.00	1050.00	0.00	0.00	125.00	3020.00	135.89	.74	186.63	1364.86	1551.49	1428.2
2800.00	1000.00	0.00	0.00	131.10	3020.00	138.24	0.00	252.35	0.00	0.00	.5
* 2800.00	1000.00	0.00	0.00	131.10	3020.00	139.14	.90	131.39	1441.63	1573.03	1535.8
5300.00	2500.00	0.00	0.00	136.80	3020.00	145.47	0.00	426.14	0.00	0.00	1707.0
* 5300.00	2500.00	0.00	0.00	136.80	3020.00	146.37	.90	313.10	1564.26	1877.36	.1

FLOODWAY DATA, 19 JAN 1976 DLO
 PROFILE NO. 2

used this for
 FM other from
 8-12-76

----- FLOODWAY ----- WATER SURFACE ELEVATION
 STATION WIDTH SECTION MEAN WITH WITHOUT DIFFERENCE
 (FT) AREA VELOCITY FLOODWAY FLOODWAY

1000.000	224,	1521,	2.7	118.2	117.2	1.0
* 1550.000	220,	1447,	2.8	120.9	120.0	.9
* 2500.000	259,	1840,	2.2	124.7	123.8	.9
* 3050.000	110,	768,	5.3	126.7	125.8	.9
* 3629.000	183,	1437,	2.6	131.2	130.4	.8
3679.000	90,	851,	4.8	130.9	130.1	.8
3680.000	203,	807,	5.1	132.7	132.1	.6
* 3720.000	281,	1281,	3.2	133.6	132.7	.8
3721.000	283,	2335,	2.7	134.2	133.7	.9
3771.000	259,	2677,	1.5	134.4	133.5	.9
* 750.000	277,	2606,	1.2	134.9	134.1	.9
* 1800.000	187,	1484,	2.0	135.9	135.1	.7
* 2800.000	131,	822,	3.7	139.1	138.2	.9
* 5300.000	313,	2053,	1.5	146.4	145.5	.9

* Surveyed Cross Sections

- POSSIBLE ERROR SECNO= 1550.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 2500.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 3050.00 PROFILE= 2 ASSUMED WSEL=MIN DIFF + .1FT
- POSSIBLE ERROR SECNO= 3050.00 PROFILE= 2 20 TRIALS REQUIRED TO BALANCE WSEL
- POSSIBLE ERROR SECNO= 3629.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
- POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL
- POSSIBLE ERROR SECNO= 3680.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 2800.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY
- POSSIBLE ERROR SECNO= 5300.00 PROFILE= 2 PROBABLE MIN SPECIFIC ENERGY

FLOODWAY DATA, 19 JAN 1976 DLO
 PROFILE NO. 2

STATION	FLOODWAY		MEAN VELOCITY	WATER SURFACE ELEVATION		
	WIDTH (FT)	SECTION AREA		WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1000.000	224.	1521.	2.7	118.2	117.2	1.0
* 1550.000	220.	1447.	2.8	120.9	120.0	.9
* 2500.000	259.	1848.	2.2	124.7	123.8	.9
* 3050.000	110.	768.	5.3	126.7	125.8	.9
* 3629.000	183.	1437.	2.8	131.2	130.4	.8
3679.000	90.	851.	1.8	130.9	130.1	.8
3680.000	203.	807.	5.1	132.7	132.1	.6
* 3720.000	281.	1891.	3.2	133.6	132.7	.8
3721.000	283.	2335.	1.7	134.2	133.3	.9
3771.000	259.	2677.	1.5	134.4	133.5	.9
* 750.000	277.	2606.	1.2	134.9	134.1	.9
* 1800.000	187.	1484.	2.0	135.9	135.1	.7
* 2800.000	131.	822.	3.7	139.1	138.2	.9
* 5300.000	313.	2053.	1.5	146.4	145.5	.9

* Surveyed Cross Sections

POSSIBLE ERROR	SECNO=	1550.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	2500.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	3050.00	PROFILE=	2	ASSUMED WSEL=MIN DIFF + .1FT
POSSIBLE ERROR	SECNO=	3050.00	PROFILE=	2	20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO=	3629.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	3680.00	PROFILE=	1	CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO=	3680.00	PROFILE=	1	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	3680.00	PROFILE=	1	20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO=	3680.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	2800.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY
POSSIBLE ERROR	SECNO=	5300.00	PROFILE=	2	PROBABLE MIN SPECIFIC ENERGY

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

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKYOTTE CREEK TRIB, - BELL S BRANCH AND NASH CREEK
 T3 19 JAN 1976 DLD

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	D	WSEL	FQ
	-1.	2.	-0.	-0.	.005000	-0.00	-1.0	-0.	117.000	-0.000
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRAGE
	1,000	-0,000	-1,000	-0,000	-0,000	-0,000	-1,000	-0,000	0,000	-0,000
J3	-2,000	39,000	40,000	41,000	42,000	43,000	1,000	50,000	4,000	27,000
J3	28,000	10,000	11,000	200,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
NC	.160	.160	.040	.100	.300	-0,000	-0,000	-0,000	-0,000	-0,000
OT	2,000	4080,000	4080,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1260,000 1480,000
X1	1000,000	17,000	1367,000	1378,000	0,000	0,000	0,000	1,000	-3,000	-0,000
GR	138,200	1000,000	130,600	1100,000	129,300	1122,000	126,500	1135,000	118,400	1200,000
GR	116,900	1215,000	114,200	1300,000	114,300	1367,000	113,100	1368,000	112,600	1373,000
GR	112,600	1377,000	113,800	1378,000	114,500	1400,000	114,500	1500,000	114,500	1510,000
GR	131,300	1600,000	141,900	1700,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1260,000 1480,000
X1	1550,000	0,000	-0,000	-0,000	550,000	550,000	500,000	1,000	3,000	-0,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1150,000 1400,000
X1	2500,000	15,000	1191,000	1207,000	950,000	950,000	950,000	-0,000	-0,000	-0,000
GR	149,400	1000,000	121,000	1100,000	118,100	1115,000	117,700	1171,000	118,600	1191,000
GR	115,300	1192,000	115,500	1200,000	116,500	1205,000	118,000	1207,000	117,200	1268,000
GR	117,400	1300,000	118,000	1400,000	118,200	1433,000	126,100	1500,000	144,900	1600,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1160,000 1280,000
X1	3050,000	13,000	1233,000	1247,000	550,000	550,000	550,000	-0,000	-0,000	-0,000
GR	144,400	1000,000	130,500	1100,000	119,900	1164,000	120,000	1200,000	120,100	1233,000
GR	118,200	1234,000	118,200	1240,000	118,600	1246,000	119,800	1247,000	119,800	1278,000
GR	124,100	1300,000	136,300	1400,000	143,300	1500,000	-0,000	-0,000	-0,000	-0,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1270,000 1460,000
X1	3629,000	23,000	1361,000	1380,000	579,000	579,000	579,000	-0,000	-0,000	-0,000
GR	139,300	1000,000	133,700	1100,000	132,700	1128,000	130,000	1139,000	130,800	1154,000
GR	129,700	1169,000	130,500	1176,000	127,800	1200,000	123,200	1300,000	122,700	1361,000
GR	119,900	1362,000	120,900	1367,000	121,700	1373,000	123,700	1380,000	123,400	1400,000
GR	123,200	1445,000	126,500	1455,000	131,100	1500,000	134,000	1562,000	132,200	1569,000
GR	131,400	1600,000	136,400	1700,000	143,800	1800,000	-0,000	-0,000	-0,000	-0,000
ET	-0,000	-0,000	9,100	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	1400,000 1610,000
X1	3679,000	25,000	1485,000	1515,000	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	127,500	127,500	-0,000
GR	141,100	1000,000	136,300	1100,000	132,500	1200,000	130,300	1300,000	129,800	1400,000
GR	120,300	1484,000	120,300	1485,000	120,300	1486,000	120,300	1490,000	119,800	1494,000
GR	119,800	1495,000	119,800	1496,000	119,300	1500,000	120,000	1504,000	120,000	1505,000

CONSULT INSTRUCTIONS @ MOORE ENGINEERING, INC.

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

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKOYOTTE CREEK TRIB.- BELL S BRANCH AND NASH CREEK
 T3 19 JAN 1976 DLQ

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	D	HSEL	FQ
	-10.	3.	-0.	-0.	0.000000	-0.00	-1.0	-0.	118.160	-0.000
J2	NPROF	IPLDT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTM	ITRACE
	15.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000

*PROF 2

CDHV= .100 CERV= .300

*SECNO 1000.000

SECNO	DEPTH	CWSEL	CRIS	HSELK	EG	HV	HL	LOSS	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=	1260.0	1480.0	TYPE=	1	TARGET=	220.000			
1000.00	8.56	118.16	115.14	118.16	118.55	.39	0.00	0.00	111.30
4080.	1624.	893.	1564.	716.	91.	687.	0.	0.	110.80
.00	2.27	9.79	2.28	.160	.040	.160	0.000	109.60	1260.00
.004720	0.	0.	0.	0	13	1	0.00	220.00	1480.00

*SECNO 1550.000

3470 ENCROACHMENT STATIONS=	1260.0	1480.0	TYPE=	1	TARGET=	220.000			
1550.00	8.26	120.86	118.13	0.00	121.29	.43	2.73	.01	114.30
4080.	1618.	903.	1559.	684.	88.	657.	18.	3.	113.80
.04	2.37	10.27	2.37	.160	.040	.160	.037	112.60	1260.00
.005456	550.	500.	550.	2	5	1	0.00	220.00	1480.00

*SECNO 2500.000

3470 ENCROACHMENT STATIONS=	1150.0	1400.0	TYPE=	1	TARGET=	250.000			
2500.00	9.41	124.71	121.03	0.00	124.98	.27	3.67	.02	118.60
4080.	492.	1063.	2525.	277.	141.	1371.	53.	8.	118.00
.12	1.78	7.56	1.84	.160	.040	.160	.039	115.30	1150.00
.002876	950.	950.	950.	3	8	1	0.00	250.00	1400.00

*SECNO 3050.000

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1150.0 1400.0 TYPE= 1 TARGET= 250.000

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

CONTINUED FROM PREVIOUS PAGE

SUMMARY PRINTOUT

19 JAN 1976 DLQ

SECNO XLCH ELTRD ELLC ELWIN Q CMSEL DIFMSP TOPMID STENGL STENCH HV

1000.00	0.00	0.00	0.00	109.60	4080.00	117.16	0.00	354.46	0.00	0.00	0.00	1000.00
1550.00	500.00	0.00	0.00	112.60	4080.00	120.01	0.00	352.44	0.00	0.00	0.00	1550.00
2500.00	950.00	0.00	0.00	115.30	4080.00	123.80	0.00	390.24	0.00	0.00	0.00	2500.00
3050.00	550.00	0.00	0.00	118.20	4080.00	125.83	0.00	185.94	0.00	0.00	0.00	3050.00
3629.00	579.00	0.00	0.00	119.90	4080.00	130.35	0.00	337.91	0.00	0.00	0.00	3629.00
3679.00	50.00	0.00	0.00	119.30	4080.00	130.12	0.00	306.73	0.00	0.00	0.00	3679.00
3680.00	1.00	129.60	127.50	119.30	4080.00	132.11	0.00	606.51	0.00	0.00	0.00	3680.00
3720.00	40.00	129.60	127.50	119.30	4080.00	132.82	0.00	657.33	0.00	0.00	0.00	3720.00
3721.00	1.00	0.00	0.00	119.30	4080.00	133.42	0.00	710.72	0.00	0.00	0.00	3721.00
3771.00	50.00	0.00	0.00	119.90	4080.00	133.58	0.00	529.74	0.00	0.00	0.00	3771.00
750.00	780.00	0.00	0.00	122.40	3020.00	134.14	0.00	371.73	0.00	0.00	0.00	750.00
1800.00	1050.00	0.00	0.00	125.00	3020.00	135.18	0.00	297.72	0.00	0.00	0.00	1800.00
2800.00	1000.00	0.00	0.00	131.10	3020.00	138.24	0.00	252.32	0.00	0.00	0.00	2800.00
5300.00	2500.00	0.00	0.00	136.80	3020.00	145.47	0.00	426.14	0.00	0.00	0.00	5300.00

COPYRIGHT © 1974 BY IBM CORPORATION

FLOODWAY DATA, 19 JAN 1976 DLG
 PROFILE NO. 2

FINAL

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1000.000	220.	1494.	2.7	118.2	117.2	1.0
* 1550.000	220.	1429.	2.9	120.9	120.0	0.9
* 2500.000	250.	1789.	2.3	124.7	123.8	0.9
* 3050.000	120.	824.	5.0	126.6	125.8	0.8
* 3629.000	130.	1053.	3.9	131.2	130.4	0.8
3679.000	210.	1462.	2.8	131.6	130.1	1.5
3680.000	142.	196.	20.8	127.4	132.1	-4.7
* 3720.000	240.	1193.	3.4	133.9	132.8	1.0
3721.000	270.	2394.	1.7	134.6	133.4	1.2
3771.000	270.	2863.	1.4	134.8	133.6	1.2
* 750.000	280.	2724.	1.1	135.3	134.1	1.1
1800.000	160.	1305.	2.3	136.1	135.2	0.9
* 2800.000	180.	1037.	2.9	139.0	138.2	0.8
* 5300.000	240.	1626.	1.9	146.6	145.5	1.1

POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 CRITICAL DEPTH ASSUMED
 POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 PROBABLE MIN SPECIFIC ENERGY
 POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL
 POSSIBLE ERROR SECNO= 3680.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

* Emerged Cross Sections

CONTINUED INFORMATION IS LOCATED ON THE FOLLOWING PAGE(S)

 INTERACTIVE HEC2 VERSION UPDATED FEB 1976

FIA STUDY

ERROR CORRECTIONS: 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 50,51,52,53,54,55,56,57,58

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCTAWATTE CREEK TRIB. - BELL'S BRANCH AND NASH CREEK
 T3 19 JAN 1976 DLN

J1	ICHECK	TNO	NINV	TDIR	STRT	METRIC	HVINS	D	NSEL	FQ
	-1.	2.	-0.	-0.	005000	-0.00	-1.0	-0.		
J2	NPROF	IPLUT	PRFVS	XSECV	XSECH	FN	ALLDC	TBW	CNTH	TTRACE
	1.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000
J3	-2.000	37.000	40.000	41.000	42.000	43.000	1.000	1.000	4.400	27.500
J3	28.000	11.000	11.000	200.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	.100	.300	0.000	0.000	0.000	0.000	0.000
QT	2.000	4050.000	4080.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1260.000
X1	1000.000	17.000	1367.000	1373.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	138.200	1000.000	130.600	1100.000	129.300	1122.000	125.500	138.000	118.500	1200.000
GR	116.900	1215.000	114.200	1300.000	114.300	1367.000	113.100	1368.000	112.600	1373.000
GR	112.600	1377.000	113.800	1378.000	114.500	1400.000	114.500	1500.000	114.500	1510.000
GR	131.300	1600.000	141.900	1700.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1260.000
X1	1550.000	0.000	-0.000	-0.000	550.000	550.000	500.000	1.000	3.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1150.000
X1	2500.000	15.000	1191.000	1207.000	950.000	950.000	950.000	-0.000	-0.000	-0.000
GR	149.400	1000.000	121.000	1100.000	118.100	1115.000	117.700	1171.000	118.800	1191.000
GR	115.300	1192.500	115.500	1200.000	116.500	1205.000	118.000	1207.000	117.200	1200.000
GR	117.400	1300.000	118.000	1400.000	118.200	1433.000	126.100	1500.000	144.900	1600.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1150.000
X1	3050.000	13.000	1233.000	1247.000	550.000	550.000	550.000	-0.000	-0.000	-0.000
GR	244.400	1000.000	130.500	1100.000	119.900	1164.000	120.000	1200.000	120.300	1233.000
GR	118.200	1234.000	118.200	1240.000	118.600	1246.000	119.800	1247.000	119.600	1278.000
GR	124.100	1300.000	136.300	1400.000	143.300	1500.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1270.000
X1	3620.000	23.000	1361.000	1380.000	579.000	579.000	579.000	-0.000	-0.000	-0.000
GR	139.300	1000.000	133.700	1100.000	132.700	1128.000	130.000	1139.000	130.100	1154.000
GR	129.700	1169.000	130.500	1176.000	127.800	1200.000	123.200	1300.000	122.100	1301.000
GR	119.900	1362.000	120.900	1367.000	121.700	1373.000	123.700	1380.000	123.500	1400.000
GR	123.200	1445.000	126.500	1455.000	131.100	1500.000	134.000	1562.000	132.200	1569.000
GR	131.400	1600.000	136.400	1700.000	143.800	1800.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1400.000
X1	3679.000	25.000	1485.000	1515.000	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	141.100	1000.000	136.300	1100.000	132.500	1200.000	130.300	1300.000	129.600	1400.000
GR	120.300	1484.000	120.300	1485.000	120.300	1486.000	120.300	1490.000	119.800	1494.000
GR	119.800	1495.000	119.800	1496.000	119.300	1500.000	120.000	1504.000	120.000	1505.000

GR	120,000	1508,000	120,700	1510,000	120,800	1514,000	120,800	1515,000	120,800	1518,000
GR	129,900	1600,000	130,600	1700,000	131,600	1800,000	133,700	1900,000	137,900	2000,000
NC	.100	.100	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1435,000	1580,000
X1	3680,000	0.000	-6.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	22,000	1300,000	141,100	0.000	1100,000	136,300	0.000	1200,000	132,500	0.000
RT	1300,000	130,300	-0.000	1400,000	129,600	-0.000	1484,000	129,600	120,300	1485,000
BT	129,600	120,300	1486,000	129,600	127,300	1494,000	129,600	127,300	1495,000	129,600
BT	119,800	1496,000	129,600	127,400	1504,000	129,600	127,400	1505,000	129,600	120,000
BT	1506,000	129,600	127,500	1514,000	129,600	127,500	1515,000	129,600	120,600	1516,000
BT	129,600	120,300	1600,000	129,900	-0.000	1700,000	130,600	-0.000	1800,000	131,600
BT	-0.000	1900,000	133,700	-0.000	2000,000	137,900	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1390,000	1630,000
X1	3720,000	0.000	-0.000	-0.000	40,000	40,000	40,000	-0.000	-0.000	-0.000
Y2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1370,000	1640,000
X1	3721,000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10,000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	129,600	129,600	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1200,000	1470,000
X1	3771,000	23,000	1361,000	1380,000	50,000	50,000	50,000	-0.000	-0.000	-0.000
GR	139,300	1000,000	133,700	1100,000	132,700	1128,000	130,000	1139,000	130,800	1154,000
GR	129,700	1169,000	130,500	1176,000	127,800	1200,000	123,200	1300,000	127,700	1361,000
GR	119,900	1352,000	120,900	1367,000	121,700	1373,000	123,700	1380,000	123,400	1400,000
GR	123,200	1445,000	126,500	1455,000	131,100	1500,000	134,000	1562,000	132,200	1569,000
GR	131,400	1600,000	136,400	1700,000	137,800	1800,000	-0.000	-0.000	-0.000	-0.000
BT	2,000	3020,000	3020,000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1605,000	1885,000
X1	750,000	18,000	1811,000	1824,000	700,000	700,000	700,000	-0.000	-0.000	-0.000
GR	148,000	1200,000	144,300	1300,000	141,600	1414,000	141,100	1422,000	137,700	1464,000
GR	130,800	1475,000	136,000	1500,000	127,900	1600,000	125,500	1700,000	125,100	1811,000
GR	123,500	1812,000	122,400	1823,000	123,000	1823,000	124,900	1824,000	124,600	1882,000
GR	130,500	1900,000	135,300	2000,000	149,400	2000,000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1370,000	1530,000
X1	1800,000	20,000	1811,000	1824,000	1050,000	1050,000	1050,000	-0.000	-0.000	-0.000
GR	155,300	1700,000	151,500	1100,000	148,300	1196,000	146,600	1200,000	133,900	1300,000
GR	128,600	1435,000	128,900	1421,000	127,000	1422,000	126,200	1427,000	126,700	1433,000
GR	128,700	1435,000	127,500	1478,000	125,700	1479,000	125,000	1486,000	125,700	1490,000
GR	127,700	1461,000	127,200	1500,000	127,600	1551,000	137,200	1600,000	133,800	1700,000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1410,000	1590,000
X1	2300,000	24,000	1524,000	1545,000	1000,000	1000,000	1000,000	-0.000	-0.000	-0.000
GR	157,200	1100,000	150,900	1200,000	141,900	1300,000	139,900	1360,000	139,100	1400,000
GR	132,200	1524,000	131,200	1526,000	131,100	1527,000	131,400	1528,000	131,300	1545,000
GR	131,800	1553,000	131,400	1556,000	131,300	1558,000	132,900	1559,000	133,900	1600,000
GR	140,700	1641,000	143,900	1700,000	147,700	1800,000	152,000	1900,000	151,500	2000,000
GR	151,500	2100,000	153,700	2200,000	159,100	2300,000	164,800	2400,000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600,000	1840,000
X1	5300,000	19,000	1700,000	1715,000	2500,000	2500,000	2500,000	-0.000	-0.000	-0.000
GR	154,200	1000,000	153,700	1100,000	150,500	1200,000	145,600	1300,000	145,600	1400,000
GR	154,000	1500,000	139,400	1530,000	139,100	1553,000	140,000	1600,000	140,100	1700,000
GR	138,000	1705,000	137,400	1709,000	136,800	1712,000	140,200	1715,000	139,700	1800,000
GR	139,800	1900,000	141,100	1922,000	156,800	2000,000	167,400	2100,000	-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

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

T1 RDANDKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKOYOTTE CREEK TRIB. - BELL'S BRANCH AND NASH CREEK
 T3 19 JAN 1976 DLD

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-10.	3.	-0.	-0.	0.000000	*0.00	-1.00	0.	118.16	-0.000

J2	NPROF	TPLDT	PRFVS	XSECV	XSECH	FN	ALLDC	TBW	CRNTH	TIRACE
	15.000	-0.000	-1.000	-0.000	-0.000	-0.000	*1.000	-0.000	-0.000	-0.000

*PROF 2

CCHV= .100 CERV= .300

*SECNO 1000.000

SECNO	DEPTH	CHSEL	CRWS	WSELK	EG	HV	HL	LOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOR	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	EL MIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 1260.0 1480.0 TYPE= 1 TARGET= 220.000

1000.00	8.56	118.16	115.14	118.16	118.55	.39	0.00	0.00	111.30
4080.	1624.	893.	1554.	716.	91.	687.	0.	0.	110.80
0.00	2.27	9.79	2.28	.160	.040	.160	0.000	109.60	1260.00
.004720	0.	0.	0.	0	13	1	0.00	220.00	1480.00

*SECNO 1550.000

3470 ENCROACHMENT STATIONS= 1260.0 1480.0 TYPE= 1 TARGET= 220.000

1550.00	8.76	120.86	118.13	0.00	121.29	.43	2.73	.01	114.30
4080.	1618.	903.	1559.	584.	88.	657.	18.	3.	113.80
.04	2.37	10.27	2.37	.160	.040	.160	.037	112.60	1260.00
.005456	550.	500.	550.	2	5	1	0.00	220.00	1480.00

*SECNO 2500.000

3470 ENCROACHMENT STATIONS= 1150.0 1400.0 TYPE= 1 TARGET= 250.000

2500.00	9.41	124.71	121.03	0.00	124.98	.27	3.67	.02	118.60
4080.	492.	1063.	1525.	277.	141.	1371.	53.	8.	118.00
.12	1.76	7.56	1.84	.160	.040	.160	.039	115.30	1150.00
.002876	950.	950.	950.	3	8	1	0.00	250.00	1400.00

*SECNO 3050.000

3301 HV CHANGED MORE THAN HVINS

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

SUMMARY PRINTOUT

19 JAN 1976 DEB

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CHSEL	DIFASF	TOPID	STENCL	STENCR	HV
1000.00	0.00	0.00	0.00	109.60	4080.00	117.16	0.00	354.46	0.00	0.00	.3
1000.00	0.00	0.00	0.00	109.60	4080.00	118.16	1.00	220.00	1260.00	1480.00	.3
1550.00	500.00	0.00	0.00	112.60	4080.00	120.01	0.00	220.00	0.00	0.00	.3
1550.00	500.00	0.00	0.00	112.60	4080.00	120.86	.85	220.00	1260.00	1480.00	.3
2500.00	950.00	0.00	0.00	115.30	4080.00	123.80	0.00	390.24	0.00	0.00	.1
2500.00	950.00	0.00	0.00	115.30	4080.00	124.71	.91	250.00	1150.00	1400.00	.2
3050.00	550.00	0.00	0.00	118.20	4080.00	125.83	0.00	185.00	0.00	0.00	1.4
3050.00	550.00	0.00	0.00	118.20	4080.00	126.64	.81	120.00	1440.00	1280.00	1.4
3629.00	579.00	0.00	0.00	119.90	4080.00	130.35	0.00	337.91	0.00	0.00	.4
3629.00	579.00	0.00	0.00	119.90	4080.00	131.16	.81	130.00	1270.00	1400.00	.6
3679.00	50.00	0.00	0.00	119.30	4080.00	130.12	0.00	305.75	0.00	0.00	.9
3679.00	50.00	0.00	0.00	119.30	4080.00	131.58	1.48	210.00	1400.00	1410.00	.3
* 3680.00	1.00	129.60	127.50	119.30	4080.00	132.11	0.00	606.51	0.00	0.00	1.3
* 3680.00	1.00	129.60	127.50	119.30	4080.00	127.39	-4.72	141.82	2435.00	1580.00	6.7
3720.00	40.00	129.60	127.50	119.30	4080.00	132.82	0.00	667.33	0.00	0.00	.7
3720.00	40.00	129.60	127.50	119.30	4080.00	133.86	1.03	240.00	1390.00	1630.00	.9
3721.00	1.00	0.00	0.00	119.30	4080.00	133.42	0.00	710.72	0.00	0.00	.2
3721.00	1.00	0.00	0.00	119.30	4080.00	134.65	1.23	270.00	1370.00	1640.00	.2
3771.00	50.00	0.00	0.00	119.90	4080.00	133.58	0.00	529.74	0.00	0.00	.1
3771.00	50.00	0.00	0.00	119.90	4080.00	134.82	1.23	270.00	1200.00	1470.00	.1
750.00	700.00	0.00	0.00	122.40	3020.00	134.14	0.00	371.73	0.00	0.00	.0
750.00	700.00	0.00	0.00	122.40	3020.00	135.27	1.12	280.00	1605.00	1885.00	.0
1800.00	1050.00	0.00	0.00	125.00	3020.00	135.18	0.00	297.72	0.00	0.00	.1
1800.00	1050.00	0.00	0.00	125.00	3020.00	136.07	.90	160.00	1370.00	1530.00	.2
2800.00	1600.00	0.00	0.00	131.10	3020.00	138.24	0.00	252.32	0.00	0.00	.5
2800.00	1600.00	0.00	0.00	131.10	3020.00	138.99	.75	180.00	1410.00	1590.00	.5
5300.00	2500.00	0.00	0.00	136.80	3020.00	145.47	0.00	426.14	0.00	0.00	.0
5300.00	2500.00	0.00	0.00	136.80	3020.00	146.62	0.15	240.00	1600.00	1840.00	.1

FLOODWAY DATA, 19 JAN 1976 DLG
 PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION		
				WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1000.000	220.	1494.	2.7	118.2	117.2	1.0
* 1550.000	220.	1429.	2.9	120.9	120.0	.9
* 2500.000	250.	1789.	2.7	124.7	123.8	.9
* 3050.000	120.	824.	5.0	126.8	125.8	.8
* 3629.000	130.	1053.	3.9	131.2	130.4	.8
3679.000	210.	1462.	2.8	131.6	130.1	1.5
3680.000	142.	196.	20.6	127.4	132.1	-4.7
* 3720.000	240.	1193.	3.4	133.9	132.8	1.0
3721.000	270.	2394.	1.7	134.6	133.4	1.2
3771.000	270.	2853.	1.4	134.8	133.6	1.2
* 750.000	250.	2724.	1.1	135.3	134.1	1.1
* 1800.000	150.	1305.	2.3	136.1	135.2	.9
* 2800.000	160.	1037.	2.9	139.0	138.2	.8
* 5300.000	240.	1626.	1.9	146.6	145.5	1.1

POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 PROBABLE MIN SPECIFIC ENERGY

POSSIBLE ERROR SECNO= 3680.00 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 3580.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

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

FIA STUDY

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKYDITE CREEK TRIB. - 0.34 MILE ABOVE I-95
 T3 19 JAN 1975 DLQ

J1	ICFEK	INC	MINV	IDIR	STRT	METRIC	HVINS	G	WSEL	FR
	-1.	2.	-0.	-0.	015000	-0.00	-1.0	-10.	94.000	0.000
J2	IPROF	IPLUT	PRFVS	XSECV	XSECH	FN	ALLOD	ISW	CHNIM	ITRACE
	1.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000
J3	-2.000	39.000	40.000	41.000	42.000	43.000	1.000	28.000	1.000	27.000
J3	28.000	10.000	11.000	200.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	.100	.300	-0.000	-0.000	-0.000	-0.000	-0.000
GT	2.000	1290.000	1290.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-9.000	-0.000	-0.000	-0.000	-0.000	1620.000	1710.000
X1	1.000	16.000	1697.000	1703.000	0.000	0.000	0.000	1.000	7.300	-0.000
GR	100.000	1000.000	100.000	1075.000	100.000	1100.000	99.100	1200.000	99.200	1300.000
GR	97.900	1400.000	95.300	1500.000	95.100	1600.000	91.900	1697.000	88.900	1700.000
GR	91.900	1703.000	97.700	1800.000	101.500	1900.000	103.800	2000.000	104.700	2100.000
GR	105.700	2200.000	106.600	2300.000	107.100	2400.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1625.000	1710.000
X1	290.000	0.000	-0.000	-0.000	290.000	290.000	290.000	1.000	7.300	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1720.000
X1	340.000	0.000	0.000	0.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
NC	.100	.100	.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1578.000	1705.000
X1	341.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	18.700	1000.000	100.000	-0.000	1075.000	100.000	-0.000	1100.000	100.000	-0.000
BT	1200.000	99.100	-0.000	1300.000	99.100	-0.000	1400.000	97.900	-0.000	1500.000
BT	95.300	-0.000	1600.000	95.100	70.000	1697.000	95.800	91.900	1700.000	95.800
BT	94.900	1703.000	95.800	91.900	1800.000	97.700	-0.000	1900.000	101.500	-0.000
BT	2000.000	103.800	-0.000	2100.000	104.700	-0.000	2200.000	105.700	-0.000	2300.000
BT	106.600	-0.000	2400.000	107.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1570.000	1720.000
X1	359.000	0.000	-0.000	-0.000	18.000	18.000	10.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1550.000	1760.000
X1	360.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	95.800	95.800	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1450.000	1600.000
X1	410.000	22.000	1760.000	1768.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
GR	100.000	1000.000	100.000	1100.000	100.000	1200.000	99.900	1300.000	98.200	1400.000
GR	98.100	1439.000	97.300	1500.000	97.800	1600.000	94.300	1700.000	92.400	1760.000

GR	90.200	1761.000	90.100	1764.000	90.700	1768.000	92.000	1768.000	92.000	1768.000	1000.000
GR	98.000	1900.000	101.400	2000.000	108.700	2087.000	109.000	2100.000	110.000	2200.000	2200.000
GR	112.700	2300.000	114.700	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000	1640.000
X1	1100.000	27.000	1594.000	1601.000	690.000	690.000	690.000	-0.000	-0.000	-0.000	-0.000
GR	128.000	1000.000	128.500	1079.000	126.700	1086.000	120.200	1188.000	121.000	1200.000	1200.000
GR	129.200	1230.000	113.600	1300.000	108.200	1352.000	108.700	1400.000	109.200	1400.000	1400.000
GR	107.400	1412.000	112.000	1425.000	101.600	1461.000	101.200	1500.000	101.100	1500.000	1500.000
GR	99.300	1595.000	98.400	1597.000	98.300	1600.000	101.000	1601.000	101.800	1700.000	1700.000
GR	102.300	1715.000	103.200	1732.000	104.900	1741.000	108.100	1800.000	119.500	1900.000	1900.000
GR	121.900	2000.000	123.600	2100.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1773.000	24.000	1700.000	1706.000	673.000	673.000	673.000	-0.000	-0.000	-0.000	-0.000
GR	131.600	1000.000	128.400	1100.000	122.500	1200.000	121.400	1233.000	117.400	1241.000	1241.000
GR	115.800	1300.000	114.300	1400.000	108.200	1500.000	106.600	1545.000	108.200	1600.000	1600.000
GR	106.100	1700.000	104.300	1701.000	193.900	1703.000	104.500	1705.000	106.300	1706.000	1706.000
GR	108.000	1800.000	109.400	1876.000	119.500	1909.000	112.000	1989.000	120.000	2000.000	2000.000
GR	117.100	2100.000	118.000	2200.000	119.100	2300.000	119.200	2400.000	119.200	2400.000	2400.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1790.000	17.000	1696.000	1704.000	17.000	17.000	17.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	111.900	111.900	-3.900	-3.900
GR	128.700	1000.000	126.500	1100.000	123.400	1200.000	120.200	1300.000	117.000	1300.000	1300.000
GR	115.500	1500.000	114.600	1600.000	107.900	1696.000	103.500	1788.000	107.900	1700.000	1700.000
GR	113.700	1800.000	113.800	1900.000	114.100	2000.000	114.000	2100.000	114.000	2200.000	2200.000
GR	115.700	2300.000	117.200	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.100	.100	.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1690.000	1860.000
X1	1791.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000	-0.000
BT	17.000	1000.000	128.700	-0.000	1100.000	126.500	-0.000	1300.000	117.000	1300.000	1300.000
BT	1300.000	120.200	-0.000	1400.000	117.600	-0.000	1500.000	115.500	-0.000	1600.000	1600.000
BT	114.600	-0.000	1696.000	113.500	107.900	1700.000	113.500	111.900	1704.000	113.500	113.500
BT	107.900	1800.000	113.700	-0.000	1900.000	113.800	-0.000	2000.000	114.100	-0.000	-0.000
BT	2100.000	114.000	-0.000	2200.000	114.600	-0.000	2300.000	115.700	-0.000	2400.000	2400.000
BT	117.200	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1690.000	1860.000
X1	1809.000	0.000	-0.000	-0.000	18.000	18.000	18.000	-0.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.900	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1950.000
Y1	1810.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	113.500	113.500	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	2080.000
X1	1827.000	20.000	1700.000	1708.000	17.000	17.000	17.000	-0.000	-0.000	-0.000	-0.000
GR	132.900	1000.000	129.900	1100.000	124.900	1200.000	120.200	1300.000	116.400	1400.000	1400.000
GR	114.000	1500.000	112.500	1600.000	112.500	1612.000	107.400	1700.000	104.400	1701.000	1701.000
GR	104.300	1704.000	104.700	1707.000	107.400	1708.000	107.300	1800.000	108.700	1900.000	1900.000
GR	109.300	2000.000	111.800	2100.000	113.200	2200.000	114.300	2300.000	115.800	2400.000	2400.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1970.000	1720.000
X1	3450.000	25.000	1632.000	1640.000	1623.000	1623.000	1623.000	-0.000	-0.000	-0.000	-0.000
GR	134.400	1000.000	132.500	1100.000	129.900	1200.000	125.700	1300.000	123.800	1392.000	1392.000
GR	121.900	1400.000	119.100	1500.000	114.400	1510.000	113.500	1600.000	113.200	1632.000	1632.000
GR	117.400	1633.000	111.800	1636.000	111.900	1639.000	114.800	1640.000	113.300	1700.000	1700.000
GR	114.700	1785.000	117.500	1800.000	121.000	1870.000	122.700	1900.000	122.900	2000.000	2000.000
GR	129.300	2100.000	128.900	2200.000	128.800	2264.000	129.000	2300.000	129.000	2400.000	2400.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1630.000	1740.000
X1	4450.000	22.000	1688.000	1694.000	1000.000	1000.000	1000.000	-0.000	-0.000	-0.000	-0.000
GR	144.300	1000.000	143.600	1100.000	142.700	1200.000	141.300	1285.000	140.800	1300.000	1300.000

GR	135.300	1400.000	125.000	1500.000	125.500	1600.000	120.400	1688.000	110.400	1691.000
GR	120.200	1694.000	120.500	1700.000	120.900	1780.000	124.700	1800.000	128.200	1844.000
GR	136.400	1900.000	143.300	2000.000	144.100	2100.000	143.900	2185.000	143.100	2200.000
GR	144.100	2300.000	146.100	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1650.000	1750.000

X1	5015.000	17.000	1697.000	1703.000	565.000	565.000	565.000	-0.000	-0.000	-0.000
GR	145.500	1000.000	144.800	1100.000	143.300	1200.000	141.700	1300.000	132.300	1400.000
GR	136.600	1500.000	135.100	1600.000	128.100	1697.000	125.200	1700.000	128.100	1703.000
GR	135.100	1800.000	137.500	1900.000	140.200	2000.000	142.800	2100.000	145.400	2200.000
GR	147.900	2300.000	150.100	2400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1640.000	1760.000

X1	5040.000	0.000	-0.000	-0.000	25.000	25.000	25.000	-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
NC	.100	.100	.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1640.000	1760.000

X1	5041.300	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	17.000	1000.000	145.500	-0.000	1100.000	144.800	-0.000	1200.000	143.300	-0.000
BT	1300.000	141.700	-0.000	1400.000	139.300	-0.000	1500.000	136.600	-0.000	1600.000
BT	135.100	-0.000	1697.000	134.000	128.100	1700.000	134.000	131.100	1703.000	134.000
BT	128.100	1800.000	135.100	-0.000	1900.000	137.500	-0.000	2000.000	140.200	-0.000
BT	2100.000	142.800	-0.000	2200.000	145.400	-0.000	2300.000	147.900	-0.000	2400.000
BT	150.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1780.000

X1	5059.000	0.000	-0.000	-0.000	18.000	18.000	18.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1780.000

X1	5060.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	134.000	134.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	1600.000	1780.000

X1	5085.000	20.000	1708.000	1715.000	25.000	25.000	25.000	-0.000	-0.000	-0.000
GR	145.000	1200.000	142.300	1300.000	142.500	1400.000	137.500	1500.000	136.100	1536.000
GR	120.800	1600.000	126.900	1700.000	127.200	1708.000	125.800	1710.000	125.500	1712.000
GR	125.900	1714.000	127.000	1715.000	127.900	1800.000	134.200	1900.000	140.200	2000.000
GR	141.000	2100.000	140.700	2138.000	141.600	2200.000	145.000	2300.000	148.100	2390.000
FJ	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

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

T1 ROANOKE RAPIDS FIA STUDY - 100 YR FLOODWAY DETERMINATION
 T2 CHOCKYOTTE CREEK TRJB. - 0.34 MILE ABOVE I-95
 T3 19 JAN 1976 DLO

J1 ICHECK INO NINV IDIR STRT METRIC HVINS Q WSEL FO
 -10. 3. -0. -0. 0.000000 -0.00 -1.0 -0. 89.870 -0.000
 J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CRNTH ITRACE
 15.000 -0.000 -1.000 -0.000 -0.000 -0.000 -1.000 -0.000 -0.000 -0.000

*PROF 2

CCHVE .100 CCHVE .300
 *SECNO 1.000

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	LOSS	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= 1620.0 1710.0 TYPE= 1 TARGET= 90.000
 1.00 8.27 89.87 88.98 89.87 90.57 .70 0.00 0.00 84.60
 1290. 746. 444. 100. 308. 41. 35. 0. 0. 84.60
 3.00 2.42 10.92 2.83 .160 .040 .160 0.000 81.60 1620.00
 .010712 0. 0. 0. 0 9 1 0.00 90.00 1710.00

*SECNO 290.000

7195 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	LOSS	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= 1625.0 1710.0 TYPE= 1 TARGET= 89.000
 290.00 7.23 96.13 96.13 0.00 97.59 1.46 4.53 0.00 91.90
 1290. 674. 512. 104. 219. 34. 28. 2. 1. 91.90
 .01 3.07 14.89 3.70 .160 .040 .160 .040 88.50 1625.00
 .024854 290. 290. 290. 0 5 1 0.00 89.00 1710.00

*SECNO 340.000

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

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

SUMMARY PRINTOUT

19 JAN 1976 DLR

SECNO	XLGH	EI,TRD	ELEC	ELMIN	Q	OWSEL	DIFWSP	TOPRID	STENCL	STENCH	MV
1.00	0.00	0.00	0.00	81.60	1290.00	88.87	0.00	263.48	0.00	0.00	.6
1.00	0.00	0.00	0.00	81.60	1290.00	89.87	1.00	90.00	1620.00	1710.00	.7
* 290.00	290.00	0.00	0.00	88.90	1290.00	95.98	0.00	0.00	0.00	0.00	.8
* 290.00	290.00	0.00	0.00	88.90	1290.00	94.13	.15	0.00	1620.00	1710.00	1.4
340.00	50.00	0.00	0.00	88.90	1290.00	97.12	0.00	341.67	0.00	0.00	.2
340.00	50.00	0.00	0.00	88.90	1290.00	97.87	.75	120.00	1600.00	1720.00	.3
* 341.00	1.00	95.10	94.90	88.90	1290.00	97.36	0.00	0.00	0.00	0.00	.6
* 341.00	1.00	95.10	94.90	88.90	1290.00	98.00	.64	0.00	0.00	0.00	1.0
359.00	18.00	95.10	94.90	88.90	1290.00	97.97	0.00	412.84	0.00	0.00	.2
359.00	18.00	95.10	94.90	88.90	1290.00	98.98	1.01	150.00	1570.00	1720.00	.3
360.00	1.00	0.00	0.00	88.90	1290.00	98.10	0.00	0.00	0.00	0.00	.0
360.00	1.00	0.00	0.00	88.90	1290.00	99.25	1.15	250.00	1550.00	1760.00	.0
410.00	50.00	0.00	0.00	90.10	1290.00	98.15	0.00	484.85	0.00	0.00	.1
410.00	50.00	0.00	0.00	90.10	1290.00	99.25	1.10	150.00	1650.00	1800.00	.1
* 1100.00	690.00	0.00	0.00	98.30	1290.00	103.12	0.00	0.00	0.00	0.00	.6
* 1100.00	690.00	0.00	0.00	98.30	1290.00	103.94	.82	110.00	1530.00	1640.00	1.0
1773.00	673.00	0.00	0.00	103.90	1290.00	109.56	0.00	402.03	0.00	0.00	.0
1773.00	673.00	0.00	0.00	103.90	1290.00	110.47	.91	170.00	1570.00	1740.00	.1
* 1790.00	17.00	0.00	0.00	103.90	1290.00	112.44	0.00	148.32	0.00	0.00	1.3
* 1790.00	17.00	0.00	0.00	103.90	1290.00	112.34	.10	80.00	1665.00	1745.00	1.4
* 1791.00	1.00	113.50	111.90	103.90	1290.00	115.11	0.00	703.57	0.00	0.00	.3
* 1791.00	1.00	113.50	111.90	103.90	1290.00	115.67	.56	170.00	1690.00	1860.00	.8
1809.00	18.00	113.50	111.90	103.90	1290.00	115.39	0.00	759.05	0.00	0.00	.1
1809.00	18.00	113.50	111.90	103.90	1290.00	116.43	1.04	250.00	1650.00	1900.00	.1
1810.00	1.00	0.00	0.00	103.90	1290.00	115.50	0.00	779.60	0.00	0.00	.0
1810.00	1.00	0.00	0.00	103.90	1290.00	116.58	1.08	350.00	1600.00	1950.00	.0
1827.00	17.00	0.00	0.00	104.30	1290.00	115.59	0.00	951.72	0.00	0.00	.0
1827.00	17.00	0.00	0.00	104.30	1290.00	116.64	1.05	480.00	1600.00	2080.00	.0
3450.00	1623.00	0.00	0.00	111.80	1290.00	115.69	0.00	302.88	0.00	0.00	.3
3450.00	1623.00	0.00	0.00	111.80	1290.00	116.77	.88	150.00	1570.00	1720.00	.4
4450.00	1000.00	0.00	0.00	119.40	1290.00	124.83	0.00	290.47	0.00	0.00	.2
4450.00	1000.00	0.00	0.00	119.40	1290.00	125.72	.89	95.00	1645.00	1740.00	.4
* 5015.00	565.00	0.00	0.00	125.10	1290.00	132.94	0.00	140.11	0.00	0.00	1.3
* 5015.00	565.00	0.00	0.00	125.10	1290.00	132.77	.17	100.00	1650.00	1750.00	1.3
5040.00	25.00	0.00	0.00	125.10	1290.00	134.06	0.00	171.24	0.00	0.00	.5
5040.00	25.00	0.00	0.00	125.10	1290.00	133.94	.12	120.00	1640.00	1760.00	.5

SECNO	XLCH	ELTRD	ELLC	ELMIN	G	CWSEL	DIFHSP	TOPWID	STENCL	STENCR	HV
* 5041.00	1.00	134.00	131.10	125.10	1290.00	136.46	0.00	346.90	0.00	0.00	.6
* 5041.00	1.00	134.00	131.10	125.10	1290.00	136.51	.35	120.00	1600.00	1780.00	1.1
5059.00	18.00	134.00	131.10	125.10	1290.00	137.06	0.00	399.34	0.00	0.00	.2
5059.00	18.00	134.00	131.10	125.10	1290.00	137.97	.91	180.00	1600.00	1780.00	.2
5060.00	1.00	0.00	0.00	125.10	1290.00	137.24	0.00	412.65	0.00	0.00	.0
5060.00	1.00	0.00	0.00	125.10	1290.00	138.16	.91	180.00	1600.00	1780.00	.0
5085.00	25.00	0.00	0.00	125.50	1290.00	137.31	0.00	447.09	0.00	0.00	.0
5085.00	25.00	0.00	0.00	125.50	1290.00	138.21	.89	180.00	1600.00	1780.00	.0

FLOODWAY DATA, 19 JAN 1976 DLQ
 PROFILE NO. 2

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION		
				WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1.000	90.	384.	3.4	89.9	88.9	1.0
290.000	85.	282.	4.6	96.1	96.0	.2
* 340.000	120.	562.	2.3	97.9	97.1	.8
341.000	127.	343.	3.8	98.0	97.9	.1
* 359.000	150.	541.	2.4	99.0	98.0	1.0
* 360.000	210.	1124.	1.1	99.2	98.1	1.1
* 410.000	150.	821.	1.6	99.2	98.2	1.0
* 1100.000	110.	323.	4.0	103.9	103.1	.8
* 1773.000	170.	725.	1.8	110.5	109.6	.9
1790.000	80.	287.	4.5	112.3	112.4	-.1
1791.000	170.	378.	3.4	115.7	115.1	.6
* 1809.000	250.	717.	1.8	116.5	115.4	1.0
1810.000	350.	1571.	.8	116.6	115.5	1.1
* 1827.000	480.	3723.	.3	116.6	115.6	1.0
* 3450.000	150.	469.	2.8	116.8	115.9	.9
* 4450.000	95.	468.	2.8	125.7	124.8	.9
5015.000	100.	316.	4.1	132.8	132.9	-.2
5040.000	120.	475.	2.7	133.9	134.1	-.1
5041.000	120.	518.	4.1	136.8	136.5	.3
* 5059.000	180.	644.	2.0	138.0	137.1	.9
* 5060.000	180.	1266.	1.0	138.2	137.2	.9
5085.000	180.	1007.	.7	138.2	137.3	.9
POSSIBLE ERROR	SECNO=	340.00	PROFILE=	1 CRITICAL DEPTH ASSUMED		
POSSIBLE ERROR	SECNO=	290.00	PROFILE=	1 PROBABLE MIN SPECIFIC ENERGY		
POSSIBLE ERROR	SECNO=	290.00	PROFILE=	1 20 TRIALS REQUIRED TO ALCANDE WSEL		
POSSIBLE ERROR	SECNO=	290.00	PROFILE=	2 CRITICAL DEPTH ASSUMED		
POSSIBLE ERROR	SECNO=	341.00	PROFILE=	1 CRITICAL DEPTH ASSUMED		

 INTERACTIVE HEC2 VERSION UPDATED FEB 1976
 ERROR CORRECTIONS 01,02,03,04,09,06,07,08,09
 MODIFICATIONS 50,51,52,53,54,55,56,57,58

FIA STUDY

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCCOYOTTE CREEK TRIB. - HALE'S BRANCH
 T3 19 JAN 1976 DLN

J1	ICHECK	IGN	NINV	IDIR	STRT	METRIC	HVINS	Q	PSEL	FU
	-1.	2.	-0.	-0.	-0.000000	-0.000	-1.0	-0.	100.000	0.000
J2	NPROF	IPLUT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	-0.000	-1.000	-0.000	-0.000	-0.000	-1.000	-0.000	-0.000	-0.000
J3	-2.000	39.000	40.000	41.000	42.000	43.000	44.000	45.000	46.000	47.000
J3	28.000	10.000	11.000	120.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.160	.160	.000	.100	.300	-0.000	-0.000	-0.000	-0.000	-0.000
QT	2.000	1480.000	1480.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1165.000 1355.000
X1	1.000	18.000	1291.000	1300.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	139.600	1000.000	137.500	1020.000	135.600	1025.000	137.300	1035.000	135.600	1050.000
GR	136.500	1100.000	136.300	1105.000	135.000	1122.000	131.500	1137.000	127.100	1200.000
GR	123.400	1291.000	122.600	1295.000	123.600	1300.000	124.300	1319.000	134.100	1380.000
GR	134.900	1400.000	135.600	1445.000	139.700	1500.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1190.000 1330.000
X1	300.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	2.700
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	938.000	13.000	1596.000	1604.000	638.000	638.000	638.000	-0.000	-0.000	-0.000
GR	151.100	1200.000	148.100	1300.000	143.100	1400.000	136.300	1500.000	124.900	1592.000
GR	124.900	1596.000	124.900	1597.000	124.900	1603.000	124.900	1604.000	124.900	1605.000
GR	138.100	1700.000	143.400	1800.000	148.300	1900.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	989.000	0.000	-0.000	-0.000	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	132.800	132.800
NC	.100	.100	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1640.000 1645.000
X1	989.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	13.000	1200.000	151.100	-0.000	1300.000	148.100	-0.000	1400.000	143.300	-0.000
BT	1500.000	136.300	-0.000	1595.000	134.800	124.900	1596.000	135.600	124.900	1597.000
BT	135.800	132.800	1603.000	135.900	132.800	1604.000	135.900	124.900	1605.000	134.800
BT	124.900	1700.000	138.100	-0.000	1600.000	143.400	-0.000	1900.000	148.300	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	1011.000	0.000	-0.000	-0.000	22.000	22.000	22.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000
NC	.160	.160	.040	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	-0.000	9.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1530.000 1660.000
X1	1012.000	0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	134.800	134.800

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1500.000 1630.000

X1 1062.000 13.000 1597.000 1603.000 50.000 50.000 50.000 -0.000 -0.000 -0.000
GR 148.300 1200.000 145.600 1300.000 138.800 1400.000 133.400 1500.000 127.800 1597.000
GR 126.900 1598.000 126.900 1600.000 126.900 1602.000 128.000 1603.000 130.600 1610.000
GR 140.700 1700.000 148.300 1800.000 152.400 1900.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1510.000 1430.000

X1 2251.000 15.000 1358.000 1365.000 1188.000 1188.000 1188.000 -0.000 -0.000 -0.000
GR 161.600 900.000 157.600 1000.000 149.900 1100.000 146.800 1200.000 137.800 1300.000
GR 137.000 1358.000 135.400 1360.000 134.700 1361.000 135.300 1364.000 137.100 1365.000
GR 137.300 1400.000 137.000 1427.000 145.400 1500.000 154.900 1550.000 156.600 1600.000
GR 160.800 1700.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1730.000 1800.000

X1 5000.000 27.000 1779.000 1791.000 2750.000 2750.000 2750.000 -0.000 -0.000 -0.000
GR 200.400 1000.000 195.800 1100.000 190.600 1200.000 189.400 1261.000 185.200 1300.000
GR 177.900 1400.000 175.400 1434.000 167.900 1500.000 162.900 1600.000 158.600 1687.000
GR 158.000 1700.000 157.600 1779.000 156.300 1780.000 156.100 1785.000 156.000 1790.000
GR 157.400 1791.000 157.700 1800.000 150.300 1833.000 164.400 1840.000 173.300 1892.000
GR 174.100 1900.000 181.000 2000.000 181.200 2003.000 180.700 2100.000 180.300 2200.000
GR 175.600 2300.000 178.600 2400.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1450.000 1530.000

X1 6600.000 19.000 1476.000 1500.000 1600.000 1600.000 1600.000 -0.000 -0.000 -0.000
GR 206.900 700.000 203.800 800.000 200.700 900.000 196.800 1000.000 194.600 1100.000
GR 187.200 1200.000 181.100 1300.000 180.200 1400.000 179.800 1476.000 178.500 1489.000
GR 175.100 1500.000 179.000 1544.000 182.200 1600.000 188.600 1700.000 190.900 1750.000
GR 197.400 1752.000 195.400 1800.000 197.900 1900.000 196.400 2000.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1755.000 1835.000

X1 8200.000 18.000 1800.000 1822.000 1600.000 1600.000 1600.000 -0.000 -0.000 -0.000
GR 214.900 1400.000 210.100 1500.000 204.500 1600.000 195.300 1700.000 193.200 1800.000
GR 192.000 1800.000 192.100 1810.000 192.100 1819.000 194.300 1822.000 194.100 1872.000
GR 196.100 1888.000 197.300 1900.000 200.900 2000.000 205.400 2076.000 206.600 2100.000
GR 211.600 2200.000 215.300 2300.000 217.200 2400.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1360.000 1405.000

X1 9100.000 15.000 1365.000 1381.000 900.000 900.000 900.000 -0.000 -0.000 -0.000
GR 223.000 1000.000 220.200 1100.000 214.800 1200.000 208.700 1300.000 207.400 1329.000
GR 206.500 1333.000 205.700 1365.000 205.300 1375.000 205.600 1381.000 205.700 1400.000
GR 206.500 1420.000 209.700 1500.000 216.500 1600.000 222.900 1700.000 224.500 1800.000
ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1650.000 1770.000

X1 9528.000 17.000 1698.000 1702.000 428.000 428.000 428.000 -0.000 -0.000 -0.000
GR 239.400 1000.000 229.100 1100.000 227.000 1200.000 224.600 1300.000 221.400 1400.000
GR 218.100 1500.000 215.400 1600.000 209.500 1698.000 207.500 1700.000 209.500 1702.000
GR 214.300 1800.000 215.900 1900.000 219.200 2000.000 223.900 2100.000 226.400 2200.000
GR 226.600 2300.000 225.900 2400.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1650.000 1770.000

X1 9541.000 0.000 0.000 0.000 13.000 13.000 13.000 -0.000 -0.000 -0.000
XJ 17.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 211.500 211.500 -0.000
NC .100 .100 .020 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000
ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1700.000 1780.000

X1 9542.000 0.000 -0.000 -0.000 1.000 1.000 1.000 -0.000 -0.000 -0.000
BT 17.000 1000.000 235.400 -0.000 1100.000 229.100 -0.000 1200.000 227.000 -0.000
BT 1300.000 224.600 -0.000 1400.000 221.400 -0.000 1500.000 218.100 -0.000 1600.000
BT 215.400 -0.000 1698.000 214.100 209.500 1700.000 214.100 211.500 1702.000 214.100
BT 209.500 1800.000 214.300 -0.000 1900.000 215.900 -0.000 2000.000 219.200 -0.000
BT 2100.000 223.900 -0.000 2200.000 226.400 -0.000 2300.000 226.600 -0.000 2400.000
BT 225.900 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000

ET -0.000 -0.000 9.100 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 1690.000 1820.000

X1 9558.000 0.000 -0.000 -0.000 16.000 16.000 16.000 -0.000 -0.000 -0.000

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

T1 ROANOKE RAPIDS FIA STUDY-100 YR FLOODWAY DETERMINATION
 T2 CHOCKOYOTTE CREEK TRIB, - HALE S BRANCH
 T3 19 JAN 1976 ULQ

J1 ICHECK IND WINV IDIR STRT METRIC HVINS 0 WSEL FQ
 -10. 3. -0. -0. 0.000000 -0.00 -1.0 -0. 134.400 -0.000
 J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNTH ITRACE
 15.000 -0.000 -1.000 -0.000 -0.000 -0.000 -1.000 -0.000 -0.000 -0.000

*PROF 2

CCHV= .100 CERV= .300
 *SECNO 1.000

SECNO	DEPTH	CWSEL	CRIRS	WSELK	EG	HV	HL	LOSS	BANK ELEV
D	DLOB	GCH	OROB	ALOB	ACH	AROB	VOL	TR/	EFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELATN	SSTA
SLOPE	XL09L	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 1165.0 1355.0 TYPE= 1 TARGET= 190.000
 1.00 14.70 134.50 125.23 134.60 134.63 .03 0.00 0.00 120.70
 1480. 798. 333. 349. 1411. 128. 618. 0. 0. 120.90
 0.00 .57 2.60 .57 .160 .040 .160 0.000 119.90 1165.00
 .000145 0. 0. 0. 0. 21 1 0.00 190.00 1355.00

*SECNO 300.000

3470 ENCROACHMENT STATIONS= 1190.0 1330.0 TYPE= 1 TARGET= 140.000
 300.00 11.97 134.57 127.93 0.00 134.64 .02 -0.00 .01 123.40
 1480. 789. 410. 281. 919. 104. 305. 0. 0. 123.60
 0.00 .86 3.96 .92 .160 .040 .160 0.000 122.60 1190.00
 .000448 0. 0. 0. 2 5 1 0.00 140.00 1330.00

*SECNO 938.000

3470 ENCROACHMENT STATIONS= 1530.0 1660.0 TYPE= 1 TARGET= 130.000
 938.00 10.01 134.91 131.04 0.00 135.19 .28 .48 .06 124.90
 1480. 501. 545. 434. 407. 80. 350. 16. 2. 124.90
 .05 1.23 6.81 1.24 .160 .040 .160 .040 124.90 1530.00
 .001556 638. 638. 638. 2 8 1 0.00 130.00 1660.00

*SECNO 988.000

3470 ENCROACHMENT STATIONS= 1530.0 1660.0 TYPE= 1 TARGET= 130.000
 988.00 10.09 134.99 132.87 0.00 135.26 .27 .08 .00 124.90
 1480. 502. 542. 436. 413. 81. 355. 17. 2. 124.90

INTERACTIVE HEC2 VERSION UPDATED FEB 1976

ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09

MODIFICATIONS 50,51,52,53,54,55,56,57,58

SUMMARY PRINTOUT

19 JAN 1976 DLQ

SECNO	XLCH	ELTRD	ELLC	ELMIN	CH	CH	CH	CH	CH	CH	CH	CH
1.00	0.00	0.00	0.00	119.90	1480.00	133.40	0.00	353.29	0.00	0.00	0.00	.0
1.00	0.00	0.00	0.00	119.90	1480.00	134.60	1.00	190.00	1165.00	1355.00		.0
300.00	1.00	0.00	0.00	122.60	1480.00	133.57	0.00	248.60	0.00	0.00	0.00	.0
300.00	1.00	0.00	0.00	122.60	1480.00	134.57	.89	130.00	1390.00	1530.00		.0
938.00	638.00	0.00	0.00	124.90	1480.00	133.91	0.00	149.92	0.00	0.00	0.00	.4
938.00	639.00	0.00	0.00	124.90	1480.00	134.91	1.00	130.00	1530.00	1660.00		.2
988.00	50.00	0.00	0.00	124.90	1480.00	134.07	0.00	152.49	0.00	0.00	0.00	.2
988.00	50.00	0.00	0.00	124.90	1480.00	134.99	.92	130.00	1530.00	1660.00		.2
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.55	0.00	241.68	0.00	0.00	0.00	1.2
* 989.00	1.00	134.80	132.80	124.90	1480.00	138.37	-.19	105.00	1540.00	1645.00		2.0
1011.00	22.00	134.80	132.80	124.90	1480.00	139.06	0.00	258.49	0.00	0.00	0.00	.8
1011.00	22.00	134.80	132.80	124.90	1480.00	140.12	1.06	130.00	1530.00	1660.00		.4
1012.00	1.00	0.00	0.00	124.90	1480.00	139.91	0.00	287.34	0.00	0.00	0.00	.0
1012.00	1.00	0.00	0.00	124.90	1480.00	140.59	.67	130.00	1530.00	1660.00		.0
1062.00	50.00	0.00	0.00	126.90	1480.00	139.93	0.00	309.83	0.00	0.00	0.00	.0
1062.00	50.00	0.00	0.00	126.90	1480.00	140.59	.66	130.00	1500.00	1630.00		.0
2250.00	1188.00	0.00	0.00	134.70	1480.00	141.01	0.00	197.48	0.00	0.00	0.00	.3
2250.00	1188.00	0.00	0.00	134.70	1480.00	141.79	.78	120.00	1310.00	1430.00		.3
5000.00	2750.00	0.00	0.00	156.00	1480.00	161.68	0.00	210.69	0.00	0.00	0.00	.4
5000.00	2750.00	0.00	0.00	156.00	1480.00	162.45	.77	70.00	1730.00	1800.00		1.0
* 6600.00	1600.00	0.00	0.00	178.50	1480.00	181.71	0.00	301.28	0.00	0.00	0.00	.8
* 6600.00	1500.00	0.00	0.00	178.50	1480.00	182.46	.75	80.00	1450.00	1530.00		1.5
8200.00	1600.00	0.00	0.00	192.00	1480.00	197.17	0.00	218.97	0.00	0.00	0.00	.5
8200.00	1600.00	0.00	0.00	192.00	1480.00	198.03	.86	80.00	1755.00	1835.00		.7
* 9100.00	900.00	0.00	0.00	205.30	1480.00	209.05	0.00	189.34	0.00	0.00	0.00	1.1
* 9100.00	900.00	0.00	0.00	205.30	1480.00	210.08	1.03	45.00	1360.00	1405.00		2.2
9528.00	428.00	0.00	0.00	207.50	1480.00	215.36	0.00	265.86	0.00	0.00	0.00	.3
9528.00	428.00	0.00	0.00	207.50	1480.00	216.23	.86	120.00	1650.00	1770.00		.2
9541.00	13.00	0.00	0.00	207.50	1480.00	215.52	0.00	280.63	0.00	0.00	0.00	.2
9541.00	13.00	0.00	0.00	207.50	1480.00	216.31	.79	120.00	1650.00	1770.00		.2
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.12	0.00	333.66	0.00	0.00	0.00	.5
* 9542.00	1.00	214.10	211.50	207.50	1480.00	216.41	.28	80.00	1700.00	1780.00		1.1
9558.00	16.00	214.10	211.50	207.50	1480.00	216.79	0.00	378.62	0.00	0.00	0.00	.1
9558.00	16.00	214.10	211.50	207.50	1480.00	217.67	.89	130.00	1690.00	1820.00		.3
9559.00	1.00	0.00	0.00	207.50	1480.00	216.90	0.00	385.80	0.00	0.00	0.00	.0
9559.00	1.00	0.00	0.00	207.50	1480.00	217.92	1.02	170.00	1630.00	1800.00		.0

SECNO	KLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	DIFWSP	TOPWID	STENCL	STENCR	HV
9572.00	13.00	0.00	0.00	208.80	1480.00	216.88	0.00	410.18	0.00	0.00	.1
9572.00	13.00	0.00	0.00	208.80	1480.00	217.80	1.01	410.18	0.00	0.00	.1

FLOODWAY DATA, 19 JAN 1976 DLD
 PROFILE NO. 2

STATION	FLOODWAY		MEAN VELOCITY	WATER SURFACE ELEVATION		DIFFERENCE
	WIDTH (FT)	SECTION AREA		WITH FLOODWAY	WITHOUT FLOODWAY	
1.000	170.	2157.	.7	134.6	133.6	1.0
* 300.000	140.	1327.	1.1	134.6	133.6	1.0
938.000	130.	837.	1.8	134.9	133.9	1.0
988.000	130.	849.	1.7	135.0	134.1	.9
989.000	105.	369.	4.0	138.4	138.6	-.2
* 1011.000	130.	752.	2.0	140.1	139.1	1.1
1012.000	130.	1575.	.9	140.6	139.9	.7
* 1062.000	130.	1307.	1.1	140.6	139.9	.7
* 2250.000	120.	558.	2.7	141.8	141.0	.8
* 5000.000	70.	350.	4.2	162.4	161.7	.8
* 6600.000	80.	252.	5.9	182.5	181.7	.8
* 9200.000	80.	371.	4.0	198.0	197.2	.9
* 9100.000	45.	201.	7.4	210.1	209.0	1.0
9528.000	120.	629.	2.4	216.2	215.4	.9
9541.000	120.	638.	2.3	216.3	215.5	.8
9542.000	70.	182.	8.1	216.4	216.1	.3
* 9558.000	130.	455.	3.3	217.7	216.8	.9
9559.000	170.	1061.	1.4	217.9	216.9	1.0
* 9572.000	170.	1044.	1.4	217.9	216.9	1.0

POSSIBLE ERROR SECNO= 989.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 989.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 6500.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 6600.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 9100.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 9100.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 9542.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 9542.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

FIA STUDY

T1 ROANOKE RAPIDS FIA STUDY-10 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB.- 0.34 MILE ABOVE 1-95
 T3 13 JAN 1976 DLQ

J1	ICHECK	INO	MINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-1.	2.	-0	-0	,015000	-0	-1.0	-0	39.500	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0
NC	.160	.160	.040	.100	.300	-0	-0	-0	-0	-0
OT	4.000	360.000	920.000	1290.000	2800.000	-0	-0	-0	-0	-0
X1	1.000	18.000	1697.000	1703.000	0	0	0	1.000	-7.300	-0
GR	100.000	1000.000	100.000	1075.000	100.000	1100.000	99.100	1200.000	99.100	1300.000
GR	97.900	1400.000	96.300	1500.000	95.100	1600.000	91.900	1697.000	68.900	1700.000
GR	91.900	1703.000	97.700	1800.000	101.500	1900.000	103.800	2000.000	104.700	2100.000
GR	105.700	2200.000	106.600	2300.000	107.100	2400.000	-0	-0	-0	-0
X1	290.000	0	-0	-0	290.000	290.000	290.000	1.000	7.300	-0
X1	340.000	0	0	0	50.000	50.000	50.000	-0	-0	-0
NC	.100	.100	.020	-0	-0	-0	-0	-0	-0	-0
X1	341.000	0	-0	-0	1.000	1.000	1.000	-0	-0	-0
BT	18.000	1000.000	100.000	-0	1075.000	100.000	-0	1100.000	100.000	-0
BT	1200.000	99.100	-0	1300.000	99.100	-0	1400.000	97.900	-0	1500.000
BT	96.300	-0	1600.000	95.100	-0	1697.000	95.800	91.900	1700.000	95.800
BT	94.900	1703.000	95.800	91.900	1800.000	97.700	-0	1900.000	101.500	-0
BT	2000.000	103.800	-0	2100.000	104.700	-0	2200.000	105.700	-0	2300.000
BT	106.600	-0	2400.000	107.100	-0	-0	-0	-0	-0	-0
X1	359.000	0	-0	-0	18.000	18.000	18.000	-0	-0	-0
X2	-0	-0	-0	-0	-0	-0	1.000	-0	-0	-0
NC	.160	.160	.040	-0	-0	-0	-0	-0	-0	-0
X1	360.000	0	-0	-0	1.000	1.000	1.000	-0	-0	-0
X3	10.000	-0	-0	-0	-0	-0	-0	95.800	95.800	-0
X1	410.000	22.000	1764.000	1768.000	50.000	50.000	50.000	-0	-0	-0
GR	100.000	1000.000	100.000	1100.000	100.000	1200.000	99.900	1300.000	98.200	1400.000
GR	98.100	1449.000	97.300	1500.000	97.800	1600.000	94.300	1700.000	92.400	1760.000
GR	90.200	1761.000	90.100	1764.000	90.700	1766.000	92.000	1768.000	94.300	1800.000
GR	98.000	1900.000	101.400	2000.000	108.700	2087.000	109.000	2100.000	110.000	2200.000
GR	112.700	2300.000	114.700	2400.000	-0	-0	-0	-0	-0	-0
X1	1100.000	27.000	1594.000	1601.000	690.000	690.000	690.000	-0	-0	-0
GR	128.000	1000.000	128.600	1079.000	126.700	1084.000	126.500	1100.000	121.600	1200.000
GR	120.200	1233.000	113.600	1300.000	108.200	1352.000	108.700	1361.000	106.900	1400.000
GR	107.400	1412.000	112.000	1425.000	101.600	1461.000	101.200	1500.000	101.100	1594.000
GR	99.300	1595.000	98.400	1597.000	98.300	1600.000	101.000	1601.000	101.800	1700.000

C

GR	102,300	1715,000	103,200	1732,000	104,900	1741,000	108,100	1800,000	119,500	1900,000
GR	121,900	2000,000	123,600	2100,000	-0	-0	-0	-0	-0	-0
X1	1773,000	24,000	1700,000	1706,000	673,000	673,000	673,000	-0	-0	-0
GR	131,600	1000,000	128,400	1100,000	122,500	1200,000	121,400	1233,000	117,400	1241,000
GR	115,800	1300,000	114,300	1400,000	108,200	1500,000	106,600	1545,000	106,200	1600,000
GR	106,100	1700,000	104,300	1701,000	103,900	1703,000	104,500	1705,000	106,300	1703,000
GR	108,000	1800,000	109,400	1876,000	110,500	1900,000	112,000	2000,000	116,900	2080,000
GR	117,100	2100,000	118,000	2200,000	119,100	2300,000	119,200	2400,000	-0	-0
X1	1790,000	17,000	1696,000	1704,000	17,000	17,000	17,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	111,900	111,900	-0
GR	128,700	1000,000	128,500	1100,000	123,400	1200,000	120,200	1300,000	117,600	1400,000
GR	115,500	1500,000	114,600	1600,000	107,900	1696,000	103,900	1700,000	107,900	1704,000
GR	113,700	1800,000	113,800	1900,000	114,100	2000,000	114,000	2100,000	114,600	2200,000
GR	115,700	2300,000	117,200	2400,000	-0	-0	-0	-0	-0	-0
NC	,100	,100	,020	-0	-0	-0	-0	-0	-0	-0
X1	1791,000	0	-0	-0	1,000	1,000	1,000	-0	-0	-0
RT	17,000	1000,000	128,700	-0	1100,000	126,500	-0	1200,000	123,400	-0
RT	1300,000	120,200	-0	1400,000	117,600	-0	1500,000	117,500	-0	1600,000
RT	114,600	-0	1696,000	113,500	107,900	1700,000	113,500	171,900	1704,000	113,500
RT	107,900	1800,000	113,700	-0	1900,000	113,800	-0	2000,000	114,100	-0
RT	2100,000	114,000	-0	2200,000	114,600	-0	2300,000	115,700	-0	2400,000
RT	117,200	-0	-0	-0	-0	-0	-0	-0	-0	-0
X1	1809,000	0	-0	-0	18,000	18,000	18,000	-0	-0	-0
X2	-0	-0	-0	-0	-0	-0	1,000	-0	-0	-0
NC	,160	,160	,040	-0	-0	-0	-0	-0	-0	-0
X1	1810,000	0	-0	-0	1,000	1,000	1,000	-0	-0	-0
X3	10,500	-0	-0	-0	-0	-0	-0	113,500	113,500	-0
X1	1827,000	20,000	1700,000	1708,000	17,000	17,000	17,000	-0	-0	-0
GR	132,900	1000,000	129,900	1100,000	124,900	1200,000	120,200	1300,000	116,400	1400,000
GR	114,000	1500,000	112,500	1600,000	112,500	1612,000	107,400	1700,000	104,400	1701,000
GR	104,300	1704,000	104,700	1707,000	107,400	1708,000	107,300	1800,000	108,700	1900,000
GR	109,300	2000,000	111,800	2100,000	113,200	2200,000	114,300	2300,000	115,900	2400,000
X1	3450,000	25,000	1532,000	1640,000	1623,000	1623,000	1623,000	-0	-0	-0
GR	134,400	1000,000	132,500	1100,000	129,900	1200,000	125,700	1300,000	123,600	1392,000
GR	121,900	1400,000	115,100	1500,000	114,400	1510,000	113,500	1600,000	113,200	1632,000
GR	112,400	1633,000	111,800	1636,000	111,900	1639,000	114,800	1640,000	113,300	1700,000
GR	114,700	1785,000	117,500	1800,000	121,800	1870,000	122,700	1900,000	125,900	2000,000
GR	127,300	2100,000	128,900	2200,000	128,800	2284,000	129,000	2300,000	129,400	2400,000
X1	4450,000	22,000	1688,000	1694,000	1000,000	1000,000	1000,000	-0	-0	-0
GR	144,300	1000,000	143,600	1100,000	142,700	1200,000	141,300	1285,000	140,800	1300,000
GR	135,300	1400,000	125,000	1500,000	123,500	1600,000	120,400	1688,000	119,400	1691,000
GR	120,200	1694,000	120,500	1700,000	120,900	1780,000	124,700	1800,000	128,200	1844,000
GR	136,400	1900,000	143,300	2000,000	144,100	2100,000	143,900	2185,000	143,100	2200,000
GR	144,100	2300,000	146,100	2400,000	-0	-0	-0	-0	-0	-0
X1	5015,000	17,000	1697,000	1703,000	565,000	565,000	565,000	-0	-0	-0
GR	145,500	1000,000	144,800	1100,000	143,300	1200,000	141,700	1300,000	139,300	1400,000
GR	136,600	1500,000	135,100	1600,000	128,100	1697,000	125,100	1700,000	128,100	1703,000
GR	135,100	1800,000	137,500	1900,000	140,200	2000,000	142,800	2100,000	145,400	2200,000
GR	147,900	2300,000	150,100	2400,000	-0	-0	-0	-0	-0	-0
X1	5040,000	0	0	0	25,000	25,000	25,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	128,100	128,100	-0
NC	,100	,100	,020	-0	-0	-0	-0	-0	-0	-0
X1	5041,000	0	-0	-0	1,000	1,000	1,000	-0	-0	-0
BT	17,000	1000,000	145,500	-0	1100,000	144,800	-0	1200,000	143,300	-0
BT	1300,000	141,700	-0	1400,000	139,300	-0	1500,000	136,600	-0	1600,000

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-50 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB,- 0.34 MILE ABOVE I-95
 T3 13 JAN 1976 DLO

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	3.	-0	-0	.015000	-0	-1.0	-0	92.300	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCRNV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	OCH	OROB	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
1.00	6.71	88.31	88.17	92.30	89.00	.70	0	0	84.60
920.	386.	338.	196.	215.	31.	115.	0	0	84.60
0	1.79	10.81	1.71	.160	.040	.160	0	81.60	1557.72
.014903	0	0	0	0	14	6	0	207.28	1765.00

3685 20 TRIALS USED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	OCH	OROB	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
290.00	6.60	95.50	95.50	0	96.30	.80	4.63	0	91.90
920.	376.	349.	194.	200.	31.	108.	2.	1.	91.90
.01	1.88	11.42	1.79	.160	.040	.160	.040	88.90	1566.81
.017102	290.	290.	290.	30	5	1	0	196.37	1763.18

3301 HV CHANGED MORE THAN HVINS

340.00	7.65	96.55	95.48	0	96.78	.23	.42	.06	91.90
920.	456.	297.	207.	383.	37.	181.	3.	2.	91.90
.02	1.19	6.95	1.14	.160	.040	.160	.040	88.90	1484.30
.004936	50.	50.	50.	4	5	1	0	296.49	1780.79

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-100 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB. - 0.34 MILE ABOVE 1-95
 T3 13 JAN 1976 DLO

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	4.	-0	-0	-0	-0	-0	-0	94.000	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
	3.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300
 3280 CROSS SECTION 1.00 EXTENDED 1.30 FEET

SECH0	DEPTH	CWSEL	CRIS	WSELK	EG	HV	HL	LOSS	BANK ELEV
0	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
1.00	12.40	94.00	88.63	94.00	94.01	.01	0	0	84.60
1290.	870.	124.	297.	2542.	65.	801.	0	0	84.60
0	.34	1.89	.37	.160	.040	.160	0	81.60	1000.00
.000171	0	0	0	0	13	1	0	894.74	1894.74

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SFCNO	DEPTH	CWSFL	CRIS	WSELK	EG	HV	HL	LOSS	BANK ELEV
0	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
290.00	7.08	95.98	95.98	0	96.85	.87	.16	0	91.90
1290.	582.	424.	284.	272.	33.	139.	13.	4.	91.90
.01	2.14	12.68	2.04	.160	.040	.160	.040	88.90	1526.91
.018706	290.	290.	290.	0	5	1	0	244.27	1771.18

3301 HV CHANGED MORE THAN HVINS

340.00	8.22	97.12	95.95	0	97.36	.24	.45	.06	91.90
1290.	690.	308.	292.	515.	40.	228.	14.	4.	91.90
.02	1.34	7.64	1.28	.160	.040	.160	.040	58.90	1448.51

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-500 YEAR FLOOD
 T2 CHOCKYOTTE CREEK TRIB.- 0.34 MILE ABOVE I-95
 T3 13 JAN 1976 DLO

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FD
	-10.	5.	-0	-0	-0	-0	-0	-0	95.500	-0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	JRW	CHNIM	ITRACE
	15.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300
 3280 CROSS SECTION 1.50 EXTENDED 2.80 FEET

SECNO	DEPTH	WSEL	CRWS	WSELK	EG	HV	HL	LOSS	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
1.00	13.90	95.50	89.92	95.50	95.51	.01	0	0	84.60
2800.	1.52	211.	637.	3587.	74.	1133.	0	0	84.60
0	.54	2.84	.56	.160	.040	.160	0	81.60	1000.00
.000322	0	0	0	0	14	1	0	956.52	1956.52

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	WSEL	CRWS	WSELK	EG	HV	HL	LOSS	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
290.00	8.25	97.15	97.15	0	98.24	1.09	.30	0	91.90
2800.	1501.	665.	634.	521.	40.	230.	19.	4.	91.90
.01	2.88	16.42	2.75	.160	.040	.160	.040	88.90	1447.02
.024333	290.	290.	290.	0	5	1	0	343.75	1790.76

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	WSEL	CRWS	WSELK	EG	HV	HL	LOSS	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
340.00	9.70	98.60	97.20	0	98.87	.27	.55	.08	91.90
2800.	1667.	468.	665.	955.	49.	379.	20.	5.	91.90
.02	1.74	9.51	1.75	.160	.040	.160	.040	88.90	1341.64

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

13 JAN 1976 DLO

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAY EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CHSEL	CHTWS	EG	TOPWID	10K+S	TIME	VOL
1.00	0	0	0	81.60	360.00	86.94	86.94	87.60	116.19	144.10	0	0
1.00	0	0	0	81.60	920.00	88.31	88.17	89.00	207.28	149.63	0	0
1.00	0	0	0	81.60	1290.00	94.00	89.63	94.01	894.74	1.71	0	0
1.00	0	0	0	81.60	2800.00	95.50	89.92	95.51	956.52	3.22	0	0
290.00	290.00	0	0	88.90	360.00	94.15	94.15	94.91	111.91	165.28	.01	.98
290.00	290.00	0	0	88.90	920.00	95.50	95.50	96.30	196.37	171.08	.01	2.33
290.00	290.00	0	0	88.90	1290.00	95.58	95.98	96.85	244.27	187.06	.01	12.83
290.00	290.00	0	0	88.90	2800.00	97.15	97.15	98.24	343.75	243.33	.01	18.59
340.00	50.00	0	0	88.90	360.00	95.14	94.20	95.34	160.05	42.45	.02	1.22
340.00	50.00	0	0	88.90	920.00	96.55	95.48	96.78	296.49	49.36	.02	2.87
340.00	50.00	0	0	88.90	1290.00	97.12	95.95	97.38	341.85	52.91	.02	13.53
340.00	50.00	0	0	88.90	2800.00	98.60	97.20	98.87	462.05	62.94	.02	19.84
341.00	1.00	95.10	94.90	88.90	360.00	96.44	96.44	96.87	287.45	97.68	.02	1.22
341.00	1.00	95.10	94.90	88.90	920.00	97.07	97.07	97.62	337.71	150.11	.02	2.88
341.00	1.00	95.10	94.90	88.90	1290.00	97.36	97.36	97.96	360.33	173.11	.02	13.54
341.00	1.00	95.10	94.90	88.90	2800.00	98.50	98.16	98.93	471.11	134.94	.02	19.87
359.00	18.00	95.10	94.90	88.90	360.00	96.86	96.44	97.00	321.54	35.03	.02	1.34
359.00	18.00	95.10	94.90	88.90	920.00	97.62	97.07	97.81	381.06	56.61	.02	3.08
359.00	18.00	95.10	94.90	88.90	1290.00	97.97	97.36	98.17	412.35	63.25	.02	13.79
359.00	18.00	95.10	94.90	88.90	2800.00	98.87	98.16	99.13	512.03	83.25	.02	20.30
360.00	1.00	0	0	88.90	360.00	96.99	96.00	97.01	331.09	4.73	.02	1.35
360.00	1.00	0	0	88.90	920.00	97.76	95.82	97.87	392.81	14.58	.02	3.10
360.00	1.00	0	0	88.90	1290.00	98.10	96.03	98.19	427.00	20.83	.02	13.81
360.00	1.00	0	0	88.90	2800.00	98.94	97.27	99.15	519.23	47.51	.02	20.33
410.00	50.00	0	0	90.10	360.00	97.00	94.43	97.04	250.18	5.37	.03	2.11
410.00	50.00	0	0	90.10	920.00	97.80	95.77	97.92	431.33	17.38	.03	4.17
410.00	50.00	0	0	90.10	1290.00	98.15	96.27	98.33	485.96	24.48	.03	15.05
410.00	50.00	0	0	90.10	2800.00	99.09	97.92	99.42	584.73	48.80	.02	22.09
1100.00	690.00	0	0	98.30	360.00	102.18	102.18	102.54	252.36	126.00	.08	8.65
1100.00	690.00	0	0	98.30	920.00	102.82	102.82	103.35	268.10	204.90	.07	14.02
1100.00	690.00	0	0	98.30	1290.00	103.12	103.12	103.74	274.79	241.59	.07	26.52
1100.00	690.00	0	0	98.30	2800.00	104.68	103.06	105.16	289.52	168.02	.07	41.40
1773.00	673.00	0	0	103.90	360.00	107.79	107.23	107.89	276.74	54.31	.18	13.06
1773.00	673.00	0	0	103.90	920.00	108.99	107.90	109.09	367.61	45.91	.18	22.76
1773.00	673.00	0	0	103.90	1290.00	109.56	108.19	109.66	402.03	44.53	.17	37.88
1773.00	673.00	0	0	103.90	2800.00	110.95	109.10	111.08	474.91	53.61	.15	60.47
1790.00	17.00	0	0	103.90	360.00	109.84	109.84	111.87	8.00	284.33	.13	13.13
1790.00	17.00	0	0	103.90	920.00	111.90	111.90	112.93	131.57	122.36	.18	22.96
1790.00	17.00	0	0	103.90	1290.00	112.44	112.44	113.75	148.32	150.62	.17	38.13
1790.00	17.00	0	0	103.90	2800.00	114.79	114.79	115.64	639.21	101.05	.15	60.99

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	CRWS	EG	TOPWID	10K+S	TIME	VOL
1791.00	1.00	113.50	111.90	103.90	360.00	110.19	110.19	113.37	78.70	127.78	.18	13.13
1791.00	1.00	113.50	111.90	103.90	920.00	114.91	114.91	115.23	662.54	54.71	.18	22.97
1791.00	1.00	113.50	111.90	103.90	1290.00	115.11	115.11	115.46	703.57	67.21	.17	38.15
1791.00	1.00	113.50	111.90	103.90	2800.00	115.64	115.64	116.12	800.73	111.47	.15	61.01
1809.00	18.00	113.50	111.90	103.90	360.00	111.38	110.19	113.63	115.25	71.92	.18	13.14
1809.00	18.00	113.50	111.90	103.90	920.00	115.15	114.91	115.31	710.34	31.76	.18	23.26
1809.00	18.00	113.50	111.90	103.90	1290.00	115.39	115.11	115.57	759.79	37.61	.17	38.50
1809.00	18.00	113.50	111.90	103.90	2800.00	116.06	115.64	115.28	850.75	54.62	.15	61.56
1810.00	1.00	0	0	103.90	360.00	113.82	109.84	113.85	293.95	4.08	.18	13.15
1810.00	1.00	0	0	103.90	920.00	115.27	113.81	115.33	735.97	6.74	.18	23.29
1810.00	1.00	0	0	103.90	1290.00	115.50	113.54	115.58	781.75	10.60	.17	38.53
1810.00	1.00	0	0	103.90	2800.00	116.08	114.71	116.28	852.39	28.90	.15	61.60
1827.00	17.00	0	0	104.30	360.00	113.86	108.51	113.86	750.25	.23	.21	13.71
1827.00	17.00	0	0	104.30	920.00	115.33	109.34	115.33	924.18	.57	.19	24.33
1827.00	17.00	0	0	104.30	1290.00	115.59	109.65	115.59	951.94	.96	.18	39.65
1827.00	17.00	0	0	104.30	2800.00	116.30	110.47	116.31	995.92	3.03	.16	62.95
3450.00	1623.00	0	0	111.80	360.00	114.71	114.71	115.03	275.85	155.16	.34	67.49
3450.00	1623.00	0	0	111.80	920.00	115.40	115.29	115.78	293.44	190.35	.32	104.91
3450.00	1623.00	0	0	111.80	1290.00	115.89	115.59	116.23	303.10	163.08	.31	127.39
3450.00	1623.00	0	0	111.80	2800.00	117.55	116.40	117.85	336.90	110.68	.29	173.59
4450.00	1000.00	0	0	119.40	360.00	122.84	122.00	122.95	171.34	47.80	.48	73.57
4450.00	1000.00	0	0	119.40	920.00	124.27	122.83	124.43	249.16	49.08	.43	116.66
4450.00	1000.00	0	0	119.40	1290.00	124.82	123.27	125.02	289.72	54.73	.42	142.49
4450.00	1000.00	0	0	119.40	2800.00	126.29	124.57	126.60	332.73	70.90	.38	200.13
5015.00	565.00	0	0	125.10	360.00	130.70	130.70	131.59	78.04	155.00	.50	76.27
5015.00	565.00	0	0	125.10	920.00	132.27	132.27	133.46	121.48	181.65	.46	122.27
5015.00	565.00	0	0	125.10	1290.00	132.94	132.94	134.28	140.11	193.95	.44	149.63
5015.00	565.00	0	0	125.10	2800.00	134.88	134.88	136.45	173.79	210.53	.40	212.39
5040.00	25.00	0	0	125.10	360.00	131.49	130.68	131.87	100.06	61.16	.50	76.36
5040.00	25.00	0	0	125.10	920.00	133.29	132.30	133.80	149.91	73.26	.46	122.47
5040.00	25.00	0	0	125.10	1290.00	134.06	132.98	134.63	171.17	73.28	.44	149.89
5040.00	25.00	0	0	125.10	2800.00	136.26	134.99	136.85	325.76	73.43	.40	212.88
5041.00	1.00	134.00	131.10	125.10	360.00	135.52	135.52	135.90	245.80	58.08	.50	76.36
5041.00	1.00	134.00	131.10	125.10	920.00	136.13	136.13	136.75	312.00	114.24	.46	122.48
5041.00	1.00	134.00	131.10	125.10	1290.00	136.46	136.46	137.11	346.90	129.37	.44	149.90
5041.00	1.00	134.00	131.10	125.10	2800.00	137.29	137.29	138.07	416.57	175.59	.40	212.90
5059.00	18.00	134.00	131.10	125.10	360.00	135.80	135.52	136.00	274.55	33.59	.51	76.47
5059.00	18.00	134.00	131.10	125.10	920.00	136.70	136.13	136.92	370.95	43.96	.43	122.68
5059.00	18.00	134.00	131.10	125.10	1290.00	137.06	136.46	137.29	398.31	51.31	.44	150.15
5059.00	18.00	134.00	131.10	125.10	2800.00	138.00	137.29	138.32	469.79	73.12	.40	213.30

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	CRWS	EG	TOPWID	10K*S	TIME	VOL
5060.00	1.00	0	0	125.10	360.00	136.01	131.39	136.02	298.10	1.55	.51	76.48
5060.00	1.00	0	0	125.10	920.00	136.89	134.02	136.98	385.26	5.55	.46	122.70
5060.00	1.00	0	0	125.10	1290.00	137.25	134.19	137.31	413.40	8.63	.44	150.18
5060.00	1.00	0	0	125.10	2800.00	138.17	134.94	138.33	482.97	22.72	.40	213.34

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
1.000	360.000	86.943	0	0	0	116.190	0	0
1.000	920.000	88.307	1.365	0	0	207.282	-91.092	0
1.000	1290.000	94.000	5.693	0	0	894.737	-778.547	0
1.000	2800.000	95.500	1.500	0	0	956.522	-840.332	0
290.000	360.000	94.152	0	7.209	0	111.909	0	290.000
290.000	920.000	95.498	1.347	7.191	0	196.372	-84.463	290.000
290.000	1290.000	95.977	.479	1.977	0	244.271	-132.362	290.000
290.000	2800.000	97.148	1.171	1.648	0	343.747	-231.838	290.000
340.000	360.000	95.135	0	.984	0	160.051	0	50.000
340.000	920.000	96.552	1.416	1.053	0	296.492	-136.442	50.000
340.000	1290.000	97.122	.570	1.145	0	341.849	-181.798	50.000
340.000	2800.000	98.599	1.477	1.451	0	482.052	-322.002	50.000
341.000	360.000	96.437	0	1.302	0	287.452	0	1.000
341.000	920.000	97.072	.634	.520	0	337.714	-50.262	1.000
341.000	1290.000	97.357	.285	.235	0	360.326	-72.874	1.000
341.000	2800.000	98.498	1.141	-.101	0	471.112	-183.660	1.000
359.000	360.000	96.864	0	.427	0	321.538	0	18.000
359.000	920.000	97.618	.754	.546	0	381.062	-59.524	18.000
359.000	1290.000	97.968	.350	.611	0	412.354	-90.816	18.000
359.000	2800.000	98.867	.899	.369	0	512.031	-190.494	18.000
360.000	360.000	96.988	0	.124	0	331.087	0	1.000
360.000	920.000	97.760	.772	.142	0	392.812	-61.725	1.000
360.000	1290.000	98.098	.338	.130	0	427.001	-95.914	1.000
360.000	2800.000	98.939	.841	.073	0	519.234	-188.147	1.000
410.000	360.000	97.001	0	.013	0	250.178	0	50.000
410.000	920.000	97.796	.795	.036	0	431.333	-181.155	50.000
410.000	1290.000	98.152	.356	.054	0	485.964	-235.786	50.000
410.000	2800.000	99.092	.940	.153	0	584.726	-334.548	50.000
1100.000	360.000	102.179	0	5.177	0	252.362	0	690.000
1100.000	920.000	102.822	.644	5.026	0	268.101	-15.739	690.000
1100.000	1290.000	103.122	.299	4.970	0	274.790	-22.428	690.000
1100.000	2800.000	104.675	1.553	5.583	0	289.520	-37.159	690.000
1773.000	360.000	107.789	0	5.611	0	276.736	0	673.000
1773.000	920.000	108.995	1.206	6.172	0	367.615	-90.879	673.000
1773.000	1290.000	109.563	.569	6.442	0	402.029	-125.293	673.000
1773.000	2800.000	110.951	1.387	6.275	0	474.906	-198.170	673.000
1790.000	360.000	109.842	0	2.053	0	8.000	0	17.000
1790.000	920.000	111.902	2.060	2.907	0	131.572	-123.572	17.000
1790.000	1290.000	112.444	.542	2.881	0	148.320	-140.320	17.000
1790.000	2800.000	114.794	2.350	3.843	0	639.206	-631.206	17.000
1791.000	360.000	110.190	0	.348	0	78.703	0	1.000
1791.000	920.000	114.910	4.720	3.008	0	662.535	-583.833	1.000
1791.000	1290.000	115.113	.203	2.669	0	703.573	-624.870	1.000

1791.000	2800.000	115,637	.524	.842	0	800,729	-722,028	1,000
1809.000	360.000	111,379	0	1,189	0	115,249	0	18,000
1809.000	920.000	115,152	3,773	.243	0	710,339	-595,090	18,000
1809.000	1290.000	115,394	.242	.281	0	759,787	-644,539	18,000
1809.000	2800.000	116,063	.670	.427	0	850,754	-735,506	18,000
1810.000	360.000	113,816	0	2,437	0	293,948	0	1,000
1810.000	920.000	115,274	1,458	.122	0	735,967	-442,019	1,000
1810.000	1290.000	115,499	.225	.106	0	781,754	-487,806	1,000
1810.000	2800.000	116,083	.583	.019	0	852,393	-558,445	1,000
1827.000	360.000	113,857	0	.041	0	750,249	0	17,000
1827.000	920.000	115,332	1,475	.058	0	924,180	-173,931	17,000
1827.000	1290.000	115,587	.255	.088	0	951,936	-201,687	17,000
1827.000	2800.000	116,302	.715	.219	0	995,918	-245,669	17,000
3450.000	360.000	114,710	0	.853	0	275,847	0	1623.000
3450.000	920.000	115,404	.694	.072	0	293,441	-17,594	1623.000
3450.000	1290.000	115,892	.488	.305	0	303,104	-27,257	1623.000
3450.000	2800.000	117,551	1,658	1,249	0	336,900	-61,053	1623.000
4450.000	360.000	122,835	0	8,125	0	171,337	0	1000.000
4450.000	920.000	124,269	1,433	8,865	0	249,161	-77,824	1000.000
4450.000	1290.000	124,820	.552	8,928	0	289,719	-118,382	1000.000
4450.000	2800.000	126,293	1,472	8,742	0	332,729	-161,392	1000.000
5015.000	360.000	130,699	0	7,864	0	78,040	0	565.000
5015.000	920.000	132,267	1,568	7,998	0	121,484	-43,444	565.000
5015.000	1290.000	132,939	.672	8,119	0	140,105	-62,065	565.000
5015.000	2800.000	134,876	1,937	8,583	0	193,789	-115,749	565.000
5040.000	360.000	131,494	0	.795	0	100,083	0	25.000
5040.000	920.000	133,291	1,797	1,024	0	149,908	-49,825	25.000
5040.000	1290.000	134,060	.769	1,121	0	171,166	-71,083	25.000
5040.000	2800.000	136,264	2,204	1,388	0	325,756	-225,673	25.000
5041.000	360.000	135,523	0	4,029	0	245,800	0	1,000
5041.000	920.000	136,134	.611	2,843	0	312,003	-66,203	1,000
5041.000	1290.000	136,456	.322	2,396	0	346,904	-101,104	1,000
5041.000	2800.000	137,287	.831	1,023	0	416,572	-170,772	1,000
5059.000	360.000	135,798	0	.275	0	274,552	0	18,000
5059.000	920.000	136,703	.905	.569	0	379,952	-96,400	18,000
5059.000	1290.000	137,056	.353	.600	0	398,309	-123,757	18,000
5059.000	2800.000	138,000	.944	.713	0	469,795	-195,242	18,000
5060.000	360.000	136,006	0	.208	0	298,103	0	1,000
5060.000	920.000	136,892	.886	.189	0	385,258	-87,155	1,000
5060.000	1290.000	137,246	.354	.191	0	413,403	-115,300	1,000
5060.000	2800.000	138,169	.923	.170	0	482,975	-184,871	1,000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE	ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1		0	0	35,795	0
2		0	0	44,994	9,199
3		0	0	50,090	14,295
4		0	0	55,729	19,934

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

FIA STUDY

T1 ROANOKE RAPIDS FIA STUDY-10 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB, -BELL S BRANCH AND NASH CREEK
 T3 13 JAN 1976 DLO

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-1.	2.	-0	+0	.005000	-0	-0	-0	113,500	-0
J2	NPROF	IPLDT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
	1.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0
NC	.160	.160	.040	.100	.300	-0	-0	-0	-0	-0
QT	4,000	1150,000	2830,000	4080,000	8600,000	-0	-0	-0	-0	-0
X1	1000,000	17,000	1367,000	1378,000	0	0	0	1,000	-3,000	-0
GR	138,200	1000,000	130,600	1100,000	129,300	1122,000	126,500	1135,000	118,400	1200,000
GR	116,900	1215,000	114,200	1300,000	114,300	1367,000	113,100	1368,000	112,600	1373,000
GR	112,600	1377,000	113,800	1378,000	114,500	1400,000	114,500	1500,000	114,500	1510,000
GR	131,300	1600,000	141,900	1700,000	-0	-0	-0	-0	-0	-0
X1	1550,000	0	-0	-0	550,000	550,000	500,000	1,000	3,000	-0
X1	2500,000	15,000	1191,000	1207,000	950,000	950,000	950,000	-0	-0	-0
GR	149,400	1000,000	121,000	1100,000	118,100	1115,000	117,700	1171,000	118,600	1191,000
GR	115,300	1192,000	115,500	1200,000	116,500	1205,000	118,000	1207,000	117,200	1268,000
GR	117,400	1300,000	118,000	1400,000	118,200	1433,000	126,100	1500,000	144,900	1600,000
X1	3050,000	13,000	1233,000	1247,000	550,000	550,000	550,000	-0	-0	-0
GR	144,400	1000,000	130,500	1100,000	119,900	1164,000	120,000	1200,000	120,100	1233,000
GR	118,200	1234,000	118,200	1240,000	118,600	1246,000	119,800	1247,000	119,800	1278,000
GR	124,100	1300,000	136,300	1400,000	143,300	1500,000	-0	-0	-0	-0
X1	3629,000	23,000	1361,000	1380,000	579,000	579,000	579,000	-0	-0	-0
GR	139,300	1000,000	133,700	1100,000	132,700	1128,000	130,000	1139,000	130,800	1154,000
GR	129,700	1169,000	130,500	1176,000	127,800	1200,000	123,200	1300,000	122,700	1361,000
GR	119,900	1362,000	120,900	1367,000	121,700	1373,000	123,700	1380,000	123,400	1400,000
GR	123,200	1445,000	126,500	1455,000	131,100	1500,000	134,000	1562,000	132,200	1569,000
GR	131,400	1600,000	136,400	1700,000	143,800	1800,000	-0	-0	-0	-0
X1	3679,000	25,000	1485,000	1515,000	50,000	50,000	50,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	127,500	127,500	-0
GR	141,100	1000,000	136,300	1100,000	132,500	1200,000	130,300	1300,000	129,600	1400,000
GR	120,300	1484,000	120,300	1485,000	120,300	1486,000	120,300	1490,000	119,800	1494,000
GR	119,800	1495,000	119,800	1496,000	119,300	1500,000	120,000	1534,000	120,000	1505,000
GR	120,000	1506,000	120,700	1510,000	120,800	1514,000	120,800	1515,000	120,800	1516,000
GR	129,900	1600,000	130,600	1700,000	131,600	1800,000	133,700	1900,000	137,500	2000,000
NC	.100	.100	.015	-0	-0	-0	-0	-0	-0	-0
X1	3680,000	0	-0	-0	1,000	1,000	1,000	-0	-0	-0
BT	22,000	1000,000	141,100	-0	1100,000	136,300	-0	1200,000	132,300	-0
BT	1300,000	130,300	-0	1400,000	129,600	-0	1484,000	129,600	120,300	1485,000
BT	129,600	120,300	1486,000	129,600	127,300	1494,000	129,600	127,300	1495,000	129,600

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-50 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB. BELL'S BRANCH AND NASH CREEK
 T3 13 JAN 1976 DLO

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	-0	-0	.005000	-0	-0	-0	115,000	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CRNTH	ITRACE
	2,000	-0	-1,000	-0	-0	-0	-1,000	-0	-0	-0

CCHV= .100 CEHV= .300

SECNO	DEPTH	WSEL	CRHS	WSELK	EG	HV	HL	OCROSS	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	TORWID	ENDST

1000.00	6.52	116.12	114.26	115.00	116.37	.25	0	0	111.30
2880.	1103.	575.	1202.	654.	69.	475.	0	0	110.80
0	1.69	8.36	1.78	.160	.040	.160	0	109.60	1194.22
.005020	0	0	0	0	15	4	0	340.53	1534.75

1550.00	6.37	118.97	117.28	0	119.25	.28	2.87	.01	114.30
2880.	1095.	584.	1201.	628.	67.	651.	17.	4.	113.80
.05	1.74	8.70	1.85	.160	.040	.160	.037	112.60	1195.44
.005617	550.	500.	550.	3	5	1	0	338.50	1533.94

2500.00	7.39	122.69	120.15	0	122.84	.16	3.59	.01	118.60
2880.	538.	667.	1675.	411.	108.	1218.	51.	12.	118.00
.15	1.31	6.16	1.38	.160	.040	.160	.039	115.30	1094.07
.002700	950.	950.	950.	3	8	1	0	376.97	1471.04

3301 HV CHANGED MORE THAN HVINS

3050.00	6.56	124.76	124.08	0	125.95	1.19	2.79	.31	120.10
2880.	1107.	1177.	596.	399.	89.	217.	66.	16.	119.80
.18	2.77	13.28	2.75	.160	.040	.160	.039	118.20	1134.69
.012744	550.	550.	550.	3	11	1	0	170.68	1305.37

3301 HV CHANGED MORE THAN HVINS

3629.00	7.14	129.04	126.62	0	129.40	.35	3.37	.08	122.70
2880.	1107.	1071.	703.	733.	142.	442.	80.	19.	123.70
.22	1.51	7.55	1.59	.160	.040	.160	.039	119.90	1188.93

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-100 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB, BELL'S BRANCH AND NASH CREEK
 T3 13 JAN 1976 DLD

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQR
	-10.	4.	-0	-0	.005000	-0	-0	-0	117.000	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
	3.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300

SECNO	DEPTH	WSEL	CRTWS	WSELK	EG	HV	HL	OCLOSS	BANK ELEV
0	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	ORAR	TOPWID	ENDST
1000.00	7.56	117.16	114.82	117.00	117.46	.30	0	0	111.30
4080.	1626.	746.	1708.	838.	80.	841.	0	0	110.80
.0	1.94	9.30	2.03	.160	.040	.160	0	109.60	1185.87
.005061	0	0	0	0	19	23	0	354.46	1540.33
1550.00	7.41	120.01	117.83	0	120.33	.32	2.86	.01	114.30
4080.	1618.	755.	1707.	811.	79.	816.	22.	4.	113.80
.04	2.00	9.61	2.09	.160	.040	.160	.037	112.60	1187.08
.005550	550.	500.	550.	3	5	1	0	352.44	1539.52
2500.00	8.50	123.80	120.67	0	123.99	.19	3.65	.01	118.60
4080.	796.	875.	2409.	520.	126.	1515.	64.	13.	118.00
.14	1.53	6.95	1.59	.160	.040	.160	.039	115.30	1090.17
.002816	950.	950.	950.	3	8	1	0	390.24	1480.41

3301 HV CHANGED MORE THAN HVINS

3050.00	7.63	125.83	125.03	0	127.27	1.44	2.90	.37	120.10
4080.	1625.	1599.	896.	508.	104.	284.	83.	16.	119.80
.16	3.20	15.04	3.15	.160	.040	.160	.039	118.20	1123.22
.013264	550.	550.	550.	3	11	1	0	185.94	1314.15

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-500 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB. - BELL S BRANCH AND NASH CREEK
 T3 13 JAN 1976 DLG

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	5.	-0	-0	.005000	-0	-0	-0	120,000	-0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15,000	-0	-1,000	-0	-0	-0	-1,000	-0	-0	-0

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	BANK ELEV
Q	QLOS	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VL09	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1000.00	10.62	120.22	116.44	120.00	120.64	.42	0	0	111.30
8600.	3662.	1334.	3604.	1429.	114.	1362.	0	0	110.80
0	2.56	11.72	2.65	.160	.040	.160	0	109.60	1161.34
.005037	0		0	0	23	3	0	395.37	1556.70

1550.00	10.14	123.04	119.45	0	123.48	.44	2.83	.01	114.30
8600.	3652.	1344.	3604.	1392.	112.	1329.	36.	5.	113.80
.04	2.62	12.02	2.71	.160	.040	.160	.037	112.60	1162.81
.005428	550.	550.	550.	3	5	1	0	392.91	1555.72

2500.00	11.67	126.97	122.25	0	127.26	.29	3.77	.02	118.60
8600.	1791.	1596.	5213.	858.	177.	2426.	103.	14.	118.00
.11	2.09	9.02	2.15	.160	.040	.160	.039	115.30	1078.98
.003024	950.	950.	950.	4	5	1	0	425.64	1504.62

3301 HV CHANGED MORE THAN HVINS

3050.00	10.58	128.78	127.83	0	130.98	2.20	3.14	.57	120.10
8600.	3611.	2863.	2126.	843.	145.	518.	136.	18.	119.80
.13	4.28	19.76	4.11	.160	.040	.160	.039	118.20	1110.42
.014646	550.	550.	550.	3	11	1	0	227.88	1338.31

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

13 JAN 1976 DLO

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	CRIMS	EG	TOPWID	TDK*5	TIME	VOL
1000.00	0	0	112.5	0	109.60	1150.00	114.13	113.11	114.32	311.42	50.32	0
1000.00	0	0	115.0	0	109.60	2880.00	116.12	114.26	116.37	340.53	50.20	0
1000.00	0	0	117.0	0	109.60	4080.00	117.16	114.82	117.46	354.46	50.61	0
1000.00	0	0	120.0	0	109.60	8600.00	120.22	116.44	120.64	395.37	50.37	0
1550.00	500.00	0	0	0	112.60	1150.00	117.02	116.13	117.23	309.56	58.41	.05
1550.00	500.00	0	0	0	112.60	2880.00	118.97	117.28	119.25	338.50	56.17	.05
1550.00	500.00	0	0	0	112.60	4080.00	120.01	117.83	120.33	352.44	55.50	.04
1550.00	500.00	0	0	0	112.60	8600.00	123.04	119.45	123.48	392.91	54.28	.04
2500.00	950.00	0	0	0	115.30	1150.00	120.57	119.15	120.68	350.95	24.54	.19
2500.00	950.00	0	0	0	115.30	2880.00	122.69	120.15	122.84	376.97	27.09	.15
2500.00	950.00	0	0	0	115.30	4080.00	123.80	120.67	123.99	390.24	28.16	.14
2500.00	950.00	0	0	0	115.30	8600.00	126.97	122.25	127.26	425.64	30.24	.11
3050.00	550.00	0	0	0	118.20	1150.00	122.65	122.24	123.39	145.21	114.70	.21
3050.00	550.00	0	0	0	118.20	2880.00	124.76	124.08	125.95	170.68	127.44	.18
3050.00	550.00	0	0	0	118.20	4080.00	125.83	125.03	127.27	185.94	132.64	.16
3050.00	550.00	0	0	0	118.20	8600.00	128.78	127.83	130.98	227.88	146.46	.13
3629.00	579.00	0	0	0	119.90	1150.00	126.49	125.08	126.75	226.61	34.12	.26
3629.00	579.00	0	0	0	119.90	2880.00	129.04	126.62	129.40	290.97	33.14	.22
3629.00	579.00	0	0	0	119.90	4080.00	130.35	127.42	130.75	337.91	32.62	.20
3629.00	579.00	0	0	0	119.90	8600.00	133.96	129.72	134.44	555.06	29.96	.17
3679.00	50.00	0	0	0	119.30	1150.00	126.43	123.66	127.00	30.00	28.47	.26
3679.00	50.00	0	0	0	119.30	2880.00	128.95	126.68	129.64	185.19	24.65	.22
3679.00	50.00	0	0	0	119.30	4080.00	130.12	127.52	131.07	306.73	29.54	.20
3679.00	50.00	0	0	0	119.30	8600.00	133.80	131.53	134.71	736.73	25.12	.17
3680.00	1.00	129.60	127.50	119.30	1150.00	126.32	123.92	127.05	137.25	4.88	26	43.22
3680.00	1.00	129.60	127.50	119.30	2880.00	127.13	127.13	130.71	152.08	20.32	22	81.01
3680.00	1.00	129.60	127.50	119.30	4080.00	132.11	132.11	133.46	606.51	27.82	20	102.31
3680.00	1.00	129.60	127.50	119.30	8600.00	133.90	133.90	135.53	742.29	35.78	17	171.82
3720.00	40.00	129.60	127.50	119.30	1150.00	126.34	123.92	127.07	137.76	4.81	27	43.37
3720.00	40.00	129.60	127.50	119.30	2880.00	127.53	127.13	130.85	159.43	41.96	22	81.18
3720.00	40.00	129.60	127.50	119.30	4080.00	132.82	132.11	133.60	667.33	16.50	20	103.69
3720.00	40.00	129.60	127.50	119.30	8600.00	134.75	133.90	135.71	786.95	21.47	17	174.40
3721.00	1.00	0	0	119.30	1150.00	126.53	123.66	127.09	30.00	27.06	27	43.38
3721.00	1.00	0	0	119.30	2880.00	130.79	126.67	131.15	439.41	10.96	22	81.20
3721.00	1.00	0	0	119.30	4080.00	133.42	129.66	133.66	710.72	6.66	20	103.75
3721.00	1.00	0	0	119.30	8600.00	135.25	131.55	135.75	613.11	13.85	17	174.49
3771.00	50.00	0	127.1	0	119.90	1150.00	127.07	125.04	127.24	244.75	20.87	.27
3771.00	50.00	0	121.1	0	119.90	2880.00	131.08	126.67	131.23	365.20	11.40	.23
3771.00	50.00	0	123.6	0	119.90	4080.00	133.58	127.45	133.70	529.74	7.82	.21
3771.00	50.00	0	125.6	0	119.90	8600.00	135.56	129.64	135.85	616.38	16.65	.18

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	CRWS	EG	TOPWID	10K+S	TIME	VOL
750.00	700.00	0	0	122.40	830.00	128.43	126.70	128.52	298.88	15.15	.38	56.86
750.00	700.00	0	0	122.40	2130.00	131.87	127.87	131.95	343.11	8.80	.34	114.59
750.00	700.00	0	0	122.40	3020.00	134.14	128.51	134.21	371.73	6.36	.33	154.10
750.00	700.00	0	0	122.40	6350.00	136.70	129.92	136.85	408.90	11.45	.26	243.49
1800.00	1050.00	0	0	125.00	830.00	130.73	129.07	130.87	206.20	35.74	.50	73.34
1800.00	1050.00	0	0	125.00	2130.00	133.33	130.40	133.54	268.14	29.87	.44	151.90
1800.00	1050.00	0	0	125.00	3020.00	135.18	131.11	135.37	297.72	21.39	.44	207.49
1800.00	1050.00	0	0	125.00	6350.00	138.31	133.04	138.61	338.47	25.12	.34	320.91
2800.00	1000.00	0	0	131.10	830.00	135.35	134.64	135.70	210.83	66.70	.57	84.26
2800.00	1000.00	0	0	131.10	2130.00	137.25	136.01	137.74	238.15	60.26	.51	174.83
2800.00	1000.00	0	0	131.10	3020.00	138.24	136.65	138.81	252.32	58.91	.50	239.21
2800.00	1000.00	0	0	131.10	6350.00	141.40	138.53	142.13	339.11	48.24	.39	374.38
5300.00	2500.00	0	0	136.80	830.00	142.36	140.91	142.41	404.38	14.31	1.09	125.27
5300.00	2500.00	0	0	136.80	2130.00	144.39	141.65	144.46	418.60	15.02	.93	252.00
5300.00	2500.00	0	0	136.80	3020.00	145.47	142.12	145.56	426.14	15.24	.88	336.33
5300.00	2500.00	0	0	136.80	6350.00	148.40	143.30	148.52	637.13	15.57	.72	545.68

Moody
Creek

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
1000.000	1150.000	114.132	0	0	0	311.424	0	0
1000.000	2880.000	116.120	1,988	0	0	340.530	-29.105	0
1000.000	4080.000	117.161	1,041	0	0	354.456	-43.032	0
1000.000	8600.000	120.218	3,057	0	0	395.368	-83.943	0
1550.000	1150.000	117.019	0	2,886	0	309.556	0	500.000
1550.000	2880.000	118.968	1,950	2,848	0	338.497	-28.941	500.000
1550.000	4080.000	120.010	1,042	2,849	0	352.436	-42.880	500.000
1550.000	8600.000	123.035	3,025	2,817	0	392.913	-83.357	500.000
2500.000	1150.000	120.573	0	3,555	0	350.955	0	950.000
2500.000	2880.000	122.686	2,112	3,717	0	376.968	-26.013	950.000
2500.000	4080.000	123.799	1,114	3,789	0	390.240	-39.286	950.000
2500.000	8600.000	126.970	3,170	3,934	0	425.644	-74.689	950.000
3050.000	1150.000	122.653	0	2,079	0	145.214	0	550.000
3050.000	2880.000	124.756	2,103	2,070	0	170.677	-25.464	550.000
3050.000	4080.000	125.829	1,073	2,030	0	185.938	-40.724	550.000
3050.000	8600.000	128.777	2,948	1,807	0	227.883	-82.669	550.000
3629.000	1150.000	126.495	0	3,842	0	226.607	0	579.000
3629.000	2880.000	129.044	2,550	4,288	0	290.974	-64.367	579.000
3629.000	4080.000	130.350	1,306	4,521	0	337.906	-111.298	579.000
3629.000	8600.000	133.964	3,614	5,187	0	555.055	-328.448	579.000
3679.000	1150.000	126.429	0	-,066	0	30.000	0	50.000
3679.000	2880.000	128.945	2,516	-,099	0	185.194	-155.194	50.000
3679.000	4080.000	130.124	1,179	-,226	0	306.733	-276.733	50.000
3679.000	8600.000	133.804	3,680	-,160	0	736.731	-706.731	50.000
3680.000	1150.000	126.318	0	-,111	0	137.252	0	1,000
3680.000	2880.000	127.128	,810	-1,817	0	152.078	-14.826	1,000
3680.000	4080.000	132.109	4,782	1,989	0	606.511	-469.259	1,000
3680.000	8600.000	133.904	1,794	,100	0	742.293	-605.042	1,000
3720.000	1150.000	126.344	0	,027	0	137.758	0	40,000
3720.000	2880.000	127.530	1,186	,402	0	159.425	-21.668	40,000
3720.000	4080.000	132.823	5,293	,713	0	667.331	-529.573	40,000

3720.000	8600.000	134,752	1,929	,848	0	786,852	-649,095	407,000
3721.000	1150.000	126,534	0	,190	0	30,000	0	1,000
3721.000	2880.000	130,786	4,252	3,256	0	439,408	-409,408	1,000
3721.000	4080.000	133,418	2,632	,596	0	710,725	-680,725	1,000
3721.000	8600.000	135,249	1,831	,497	0	813,114	-783,114	1,000
3771.000	1150.000	127,072	0	,538	0	244,748	0	50,000
3771.000	2880.000	131,080	4,008	,294	0	365,199	-120,452	50,000
3771.000	4080.000	133,582	2,502	,164	0	529,741	-284,993	50,000
3771.000	8600.000	135,562	1,980	,313	0	616,382	-371,635	50,000
750.000	830.000	128,433	0	1,160	0	298,077	0	700,000
750.000	2130.000	131,874	3,442	,194	0	343,115	-44,238	700,000
750.000	3020.000	134,144	2,269	,562	0	371,728	-72,851	700,000
750.000	6350.000	138,703	2,560	1,142	0	408,900	-110,023	700,000
1800.000	830.000	130,726	0	2,293	0	206,196	0	1050,000
1800.000	2130.000	133,334	2,609	1,460	0	268,134	-61,940	1050,000
1800.000	3020.000	135,176	1,842	1,033	0	297,717	-91,521	1050,000
1800.000	6350.000	138,307	3,130	1,604	0	338,469	-132,273	1050,000
2800.000	830.000	135,350	0	4,625	0	210,832	0	1000,000
2800.000	2130.000	137,252	1,902	3,918	0	238,145	-27,313	1000,000
2800.000	3020.000	138,239	,987	3,063	0	252,323	-41,491	1000,000
2800.000	6350.000	141,404	3,165	3,097	0	339,106	-128,274	1000,000
5300.000	830.000	142,363	0	7,013	0	404,378	0	2500,000
5300.000	2130.000	144,392	2,029	7,139	0	418,601	-14,223	2500,000
5300.000	3020.000	145,470	1,078	7,231	0	426,139	-21,761	2500,000
5300.000	6350.000	148,397	2,927	6,994	0	637,130	-232,752	2500,000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE	ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1		0	0	50,045	0
2		0	0	57,206	7,161
3		0	0	62,455	12,410
4		0	0	78,555	28,510

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

FIA STUDY

T1 ROANOKE RAPIDS FIA STUDY-10 YEAR FLOOD
 T2 CHOCKYOTTE CREEK TRIB.-HALE S. BRANCH
 T3 13 JAN 1976 DLQ

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FQ
	-1.	2.	-0	-0	-0	-0	-1.0	-0	127.100	-0
J2	NPROF	IPLDT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	TYRAC
	1.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0
NC	.160	.160	.040	.100	.300	-0	-0	-0	-0	-0
QT	4.000	410.000	1030.000	1480.000	3200.000	-0	-0	-0	-0	-0
X1	1.000	18.000	1291.000	1300.000	0	0	0	1.000	-2.700	-0
GR	139.600	1000.000	137.500	1020.000	135.600	1025.000	137.300	1030.000	137.600	1050.000
GR	136.500	1100.000	136.300	1105.000	135.000	1122.000	131.500	1137.000	127.100	1200.000
GR	123.400	1291.000	122.600	1295.000	123.600	1300.000	124.300	1319.000	134.100	1380.000
GR	134.900	1400.000	135.600	1445.000	139.700	1500.000	-0	-0	-0	-0
X1	300.000	0	-0	-0	-0	-0	-0	1.000	2.700	-0
X1	938.000	13.000	1596.000	1604.000	638.000	638.000	638.000	-0	-0	-0
GR	151.100	1200.000	148.100	1300.000	143.100	1400.000	136.300	1500.000	124.900	1595.000
GR	124.900	1596.000	124.900	1597.000	124.900	1603.000	124.900	1604.000	124.900	1605.000
GR	138.100	1700.000	143.400	1800.000	148.300	1900.000	-0	-0	-0	-0
X1	968.000	0	-0	-0	50.000	50.000	50.000	-0	-0	-0
X3	10.000	-0	-0	-0	-0	-0	-0	132.800	132.800	-0
NC	.100	.100	.015	-0	-0	-0	-0	-0	-0	-0
X1	989.000	0	-0	-0	1.000	1.000	1.000	-0	-0	-0
BT	13.000	1200.000	151.100	-0	1300.000	148.100	-0	1400.000	143.300	-0
BT	1500.000	136.300	-0	1595.000	134.800	124.900	1596.000	135.800	124.900	1597.000
BT	135.800	132.800	1603.000	135.900	132.800	1604.000	135.900	124.900	1605.000	134.800
BT	124.900	1700.000	138.100	-0	1800.000	143.400	-0	1900.000	148.300	-0
X1	1011.000	0	-0	-0	22.000	22.000	22.000	-0	-0	-0
X2	-0	-0	-0	-0	-0	-0	1.000	-0	-0	-0
NC	.160	.160	.040	-0	-0	-0	-0	-0	-0	-0
X1	1012.000	0	-0	-0	1.000	1.000	1.000	-0	-0	-0
X3	10.000	-0	-0	-0	-0	-0	-0	134.800	134.800	-0
X1	1062.000	13.000	1597.000	1603.000	50.000	50.000	50.000	-0	-0	-0
GR	148.300	1200.000	145.600	1300.000	138.800	1400.000	133.400	1500.000	127.800	1597.000
GR	126.900	1598.000	126.900	1600.000	126.900	1602.000	128.000	1603.000	130.600	1610.000
GR	140.700	1700.000	148.300	1800.000	152.400	1900.000	-0	-0	-0	-0
X1	2250.000	16.000	1358.000	1365.000	1188.000	1188.000	1188.000	-0	-0	-0
GR	161.600	900.000	157.600	1000.000	149.900	1100.000	146.800	1200.000	137.800	1300.000
GR	137.000	1358.000	135.400	1360.000	134.700	1361.000	135.300	1364.000	137.100	1365.000

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-50 YEAR FLOOD
 T2 CHOCKOYTIE CREEK TRIB.-HALE S BRANCH
 T3 13 JAN 1976 DLO

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-10.	3.	-0	-0	-0	-0	-1.0	-0	131.100	-0
J2	NPROF	IPL0J	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	-0	-1.900	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CR1WS	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
1.00	11.20	131.10	124.62	131.10	131.13	.03	0	0	120.70
1030.	551.	254.	225.	1073.	97.	468.	0	0	120.90
0	.51	2.63	.48	.160	.040	.160	0	119.90	1127.14
.000216	0	0	0	0	17	1	0	250.99	1378.13
-300.00	8.46	131.06	127.34	0	131.15	.09	-0	.02	123.40
1030.	506.	305.	219.	641.	72.	277.	0	0	123.60
0	.75	4.24	.79	.160	.040	.160	0	122.60	1143.33
.000835	-0	-0	-0	2	5	1	0	217.75	1361.06

3301 HV CHANGED MORE THAN HVINS

938.00	6.83	131.73	130.03	0	132.34	.61	1.04	.16	124.90
1030.	289.	490.	251.	202.	55.	175.	10.	2.	124.90
.04	1.43	8.96	1.43	.160	.040	.160	.040	124.90	1538.02
.004479	638.	638.	638.	2	8	1	0	116.19	1654.21

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CR1WS	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

 HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-100 YEAR FLOOD
 T2 CHOCKOYOTTE CREEK TRIB.-HALE S BRANCH
 T3 13 JAN 1976 DLQ

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HWINS	Q	WSEL	EQ
	-10.	4.	-0	-0	-0	-0	1.0	-0	133.600	-0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	TBW	CHNIM	ITRACE
	3.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300

3265 DIVIDED FLOW

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	DLOSS	BANK ELEV
Q	DLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XL0BL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.00	13.70	133.60	125.23	133.60	133.63	.03	0	0	120.70
1480.	808.	318.	355.	1505.	119.	754.	0	0	120.90
0	.54	2.66	.47	.160	.040	.160	0	119.90	1023.16
.000138	0	0	0	0	21	1	0	353.29	1454.39
300.00	10.97	133.57	127.95	0	133.64	.07	-0	.01	123.40
1480.	788.	370.	322.	1036.	95.	450.	0	0	123.60
0	.76	3.90	.72	.160	.040	.160	0	122.60	1128.12
.000492	-0	-0	-0	2	5	1	0	248.60	1376.72
938.00	9.01	133.91	131.04	0	134.38	.47	.62	.12	124.90
1480.	467.	609.	405.	347.	72.	301.	17.	3.	124.90
.04	1.34	8.44	1.34	.160	.040	.160	.040	124.90	1519.92
.002755	.638.	.638.	.638.	2	8	1	0	149.92	1669.84
988.00	9.17	134.07	132.85	0	134.52	.44	.13	.00	124.90
1480.	470.	602.	408.	360.	73.	312.	18.	3.	124.90
.04	1.31	8.21	1.31	.160	.040	.160	.040	124.90	1518.54
.002540	.50.	.50.	.50.	2	11	1	0	152.49	1671.03

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

HEC2 VERSION UPDATED JAN 1976
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
 MODIFICATIONS 52,53,54,55,56,57,58,59

T1 ROANOKE RAPIDS FIA STUDY-500 YEAR FLOOD
 T2 CHOCKYOTTE CREEK TRIB.-HALE S BRANCH
 T3 13 JAN 1976 DLQ

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	5.	-0	-0	-0	-0	-1.0	-0	135.600	-0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
	15.000	-0	-1.000	-0	-0	-0	-1.000	-0	-0	-0

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRHWS	WSELK	EG	HV	HL	LOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VRDB	XNL	XNGH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	YDC	ICONT	CORAR	TOPWID	ENDST
1.00	15.70	135.66	126.95	135.66	135.67	.07	0	0	120.70
3200.	1747.	615.	838.	1985.	137.	1090.	0	0	120.90
0	.88	4.48	.77	.160	.040	.160	0	119.90	1012.38
.000395	0	0	0	0	17	1	0	488.84	1481.22
300.00	12.94	135.54	129.67	0	135.70	.16	-0	.03	123.40
3200.	1744.	716.	740.	1365.	112.	640.	0	0	123.60
0	1.28	6.37	1.16	.160	.040	.160	0	122.60	1114.99
.001043	-0	-0	-0	2	5	1	0	325.93	1440.91

3301 HV CHANGED MORE THAN HVINS

938.00	11.31	136.21	133.64	0	137.15	.94	1.22	.23	124.90
3200.	1098.	1150.	952.	545.	97.	472.	24.	4.	124.90
.03	2.02	12.71	2.02	.160	.040	.160	.040	124.90	1500.73
.004608	638.	638.	638.	2	11	1	0	185.59	1686.42
988.00	11.65	136.55	133.66	0	137.38	.83	.21	.01	124.90
3200.	1119.	1124.	957.	577.	93.	500.	25.	4.	124.90
.03	1.94	12.06	1.91	.160	.040	.160	.040	124.90	1496.33
.003991	50.	50.	50.	2	5	1	0	192.51	1688.84

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

13 JAN 1976 DLO

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	CR1WS	EG	YOPWD	10K+S	TIME	VOL
1.00		0	0	0	119.90	410.00	127.10	123.14	127.13	191.89	2.88	0
1.00		0	0	0	119.90	1030.00	131.10	124.62	131.13	250.97	2.16	0
1.00		0	0	0	119.90	1480.00	133.60	125.23	133.63	353.29	1.68	0
1.00		0	0	0	119.90	3200.00	135.60	126.95	135.67	468.84	3.95	0
300.00		-0	0	0	122.60	410.00	126.95	125.84	127.19	131.84	38.14	0
300.00		-0	0	0	122.60	1030.00	131.06	127.34	131.15	217.73	8.35	0
300.00		-0	0	0	122.60	1480.00	133.57	127.95	133.64	248.60	4.92	0
300.00		-0	0	0	122.60	3200.00	135.54	129.67	135.70	325.93	10.48	0
938.00	638.00	0	0	0	124.90	410.00	129.39	128.07	129.78	79.81	41.64	.04
938.00	638.00	0	0	0	124.90	1030.00	131.73	130.03	132.34	116.19	44.79	.04
938.00	638.00	0	0	0	124.90	1480.00	133.91	131.04	134.38	149.92	27.55	.04
938.00	638.00	0	0	0	124.90	3200.00	136.21	133.64	137.15	185.69	46.08	.03
988.00	50.00	0	0	0	124.90	410.00	129.22	129.22	131.41	8.00	232.60	.04
988.00	50.00	0	0	0	124.90	1030.00	132.81	132.81	133.18	132.91	23.68	.04
988.00	50.00	0	0	0	124.90	1480.00	134.07	132.85	134.52	152.49	29.40	.04
988.00	50.00	0	0	0	124.90	3200.00	136.55	133.66	137.38	192.51	39.91	.03
989.00	1.00	134.80	132.80	124.90	410.00	129.63	129.63	132.01	83.44	23.53	.04	3.59
989.00	1.00	134.80	132.80	124.90	1030.00	132.80	132.80	138.19	132.69	26.84	.04	10.99
989.00	1.00	134.80	132.80	124.90	1480.00	138.55	138.55	139.80	241.68	28.62	.04	17.71
989.00	1.00	134.80	132.80	124.90	3200.00	140.33	140.33	141.87	301.35	39.00	.03	24.95
1011.00	22.00	134.80	132.80	124.90	410.00	130.21	129.63	132.10	92.42	16.02	.04	3.60
1011.00	22.00	134.80	132.80	124.90	1030.00	132.89	132.80	138.27	134.02	62.06	.04	11.02
1011.00	22.00	134.80	132.80	124.90	1480.00	139.06	138.55	139.89	258.49	19.70	.05	18.05
1011.00	22.00	134.80	132.80	124.90	3200.00	140.95	140.33	141.99	321.86	26.96	.03	25.55
1012.00	1.00	0	0	0	124.90	410.00	131.14	129.22	132.19	8.00	83.83	.04
1012.00	1.00	0	0	0	124.90	1030.00	138.77	132.91	138.81	248.75	1.71	.04
1012.00	1.00	0	0	0	124.90	1480.00	139.91	134.87	139.97	287.34	2.32	.05
1012.00	1.00	0	0	0	124.90	3200.00	141.95	134.82	142.08	355.73	5.52	.03
1062.00	50.00	0	0	0	126.90	410.00	132.19	131.08	132.55	103.32	43.80	.05
1062.00	50.00	0	0	0	126.90	1030.00	138.78	132.80	138.82	282.56	3.29	.05
1062.00	50.00	0	0	0	126.90	1480.00	139.93	133.96	139.98	309.83	4.04	.06
1062.00	50.00	0	0	0	126.90	3200.00	142.02	135.62	142.12	364.83	3.12	.04
2250.00	1188.00	0	0	0	134.70	410.00	139.00	138.57	139.25	157.78	74.81	.16
2250.00	1188.00	0	0	0	134.70	1030.00	139.52	139.50	140.28	167.79	224.21	.11
2250.00	1188.00	0	0	0	134.70	1480.00	141.01	140.00	141.39	197.48	91.12	.14
2250.00	1188.00	0	0	0	134.70	3200.00	143.90	141.26	144.24	254.65	58.11	.13
5000.00	2750.00	0	0	0	156.00	410.00	159.34	158.99	159.71	148.97	73.73	.34
5000.00	2750.00	0	0	0	156.00	1030.00	161.41	160.04	161.67	204.77	38.94	.35
5000.00	2750.00	0	0	0	156.00	1480.00	161.68	160.62	162.13	210.69	63.32	.33
5000.00	2750.00	0	0	0	156.00	3200.00	163.26	162.13	164.03	245.42	90.17	.27

SECTION DISCHARGE CWSEL CRWS 10K*S HV QLOB RCH GROB CL CL WSELK

712615.000	61000.00	83.97	83.97	0.00	.92	.04	72.74	60843.40	83.86	85.30	85.30	86.00
712615.000	261000.00	85.16	85.16	0.00	1.87	.10	1338.01298161.90	1500.00	84.80	84.80	84.80	85.30
712615.000	330000.00	90.76	90.76	0.00	.93	.12	2058.55325723.88	2217.97	84.80	84.80	84.80	85.30
712615.000	24500.00	55.63	55.63	0.00	.33	.01	20.93	24454.95	24.13	84.80	84.80	85.30
712615.000	35000.00	58.28	58.28	0.00	.39	.01	41.20	34911.31	47.49	84.80	84.80	85.30
712615.000	190000.00	79.80	79.80	0.00	.73	.07	780.88188322.59	896.53	84.80	84.80	84.80	85.30
714120.000	61000.00	64.00	64.00	0.00	.92	.04	72.74	60843.40	83.86	85.30	85.30	86.00
714120.000	261000.00	85.30	85.30	0.00	1.26	.13	1075.82258690.57	1233.99	85.30	85.30	85.30	86.00
714120.000	330000.00	90.90	90.90	0.00	1.28	.15	1710.93326379.70	1909.37	85.30	85.30	85.30	86.00
714120.000	24500.00	55.69	55.69	0.00	.89	.03	6.50	24486.00	7.50	85.30	85.30	86.00
714120.000	35000.00	58.36	58.36	0.00	.95	.03	18.88	34959.79	21.53	85.30	85.30	86.00
714120.000	190000.00	79.91	79.91	0.00	1.10	.09	603.12188701.98	699.29	85.30	85.30	85.30	86.00
716615.000	61000.00	64.31	64.31	0.00	3.26	.15	16.36	60964.78	18.86	86.00	86.00	88.60
716615.000	261000.00	85.67	85.67	0.00	2.39	.20	722.76259444.03	833.21	86.00	86.00	86.00	88.60
716615.000	330000.00	91.26	91.26	0.00	2.25	.22	1192.13327435.18	1372.68	86.00	86.00	86.00	88.60
716615.000	24500.00	55.60	55.60	0.00	2.19	.64	0.00	24500.00	0.00	86.00	86.00	88.60
716615.000	35000.00	58.04	58.04	32.58	3.66	1.08	.00	35000.00	.00	86.00	86.00	88.60
716615.000	190000.00	80.25	80.25	0.00	2.32	.16	397.77189143.68	458.58	86.00	86.00	86.00	88.60
720190.000	61000.00	64.17	64.17	0.00	7.31	2.74	0.00	61000.00	0.00	88.60	88.60	90.00
720190.000	261000.00	86.84	86.84	0.00	7.08	.48	330.88260287.67	381.45	88.60	88.60	88.60	90.00
720190.000	330000.00	92.32	92.32	0.00	5.82	.46	635.50328631.89	732.61	88.60	88.60	88.60	90.00
720190.000	24500.00	56.36	56.36	0.00	2.13	.65	0.00	24500.00	0.00	88.60	88.60	90.00
720190.000	35000.00	59.26	59.26	0.00	3.45	1.15	0.00	35000.00	0.00	88.60	88.60	90.00
720190.000	190000.00	81.42	81.42	0.00	8.17	.50	126.22189728.28	145.51	88.60	88.60	88.60	90.00

SECTION DISCHARGE CWSEL CWSEL DIFF CWSEL DIFF CWSEL-WSELK TOPWID T.W. DIFF LENGTH
 NUMBER CFS EACH Q EACH SECTION

SECTION DISCHARGE CWSL CRINS 10K+S HV OLOR OCH QROB CL CL WSELK
SECTION DISCHARGE CWSL

707730.000	261000.00	80.70	80.70	0.00	3.30	.63	24601.57215885.02	20613.59	81.60	81.60	84.00
707730.000	330000.00	85.37	85.37	0.00	3.45	.75	33551.46266783.65	29664.89	81.60	81.60	84.00
707730.000	24500.00	52.98	52.98	0.00	2.76	.12	3.85 24496.16	0.00	81.60	81.60	84.00
707730.000	35000.00	55.61	55.61	0.00	2.75	.16	130.02 34869.48	.50	81.60	81.60	84.00
707730.000	190000.00	76.58	76.58	0.00	2.67	.45	16226.28160984.99	12788.74	81.60	81.60	84.00
711670.000	61000.00	62.99	62.99	0.00	9.09	.36	1165.91 59728.65	105.40	84.00	84.00	84.80
711670.000	261000.00	82.57	82.57	0.00	9.06	.85	45050.00212871.36	3078.64	84.00	84.00	84.80
711670.000	330000.00	87.30	87.30	0.00	8.95	.95	66551.47258770.73	4677.80	84.00	84.00	84.80
711670.000	24500.00	54.92	54.92	0.00	12.59	.22	0.00 24500.00	0.00	84.00	84.00	84.80
711670.000	35000.00	57.48	57.48	0.00	11.42	.28	.62 34997.27	2.11	84.00	84.00	84.80
711670.000	190000.00	78.13	78.13	0.00	8.00	.65	26941.52161231.66	1825.82	84.00	84.00	84.80
711720.000	61000.00	63.04	63.04	0.00	9.02	.36	1181.77 59711.61	106.62	84.80	84.80	84.80
711720.000	261000.00	82.62	82.62	0.00	9.03	.85	45116.69212799.77	3083.54	84.80	84.80	84.80
711720.000	330000.00	87.35	87.35	0.00	8.91	.95	66625.28258687.19	4687.53	84.80	84.80	84.80
711720.000	24500.00	54.98	54.98	0.00	12.30	.22	0.00 24500.00	0.00	84.80	84.80	84.80
711720.000	35000.00	57.54	57.54	0.00	11.23	.28	.80 34996.91	2.29	84.80	84.80	84.80
711720.000	190000.00	78.17	78.17	0.00	7.97	.65	26989.09161180.95	1829.96	84.80	84.80	84.80
711721.000	61000.00	62.73	62.73	0.00	47.21	.81	0.00 61000.00	0.00	84.80	84.80	84.80
711721.000	261000.00	81.12	81.12	0.00	166.02	3.00	0.00261000.00	0.00	84.80	84.80	84.80
711721.000	330000.00	85.27	85.27	0.00	354.11	3.92	1.983.52318016.48	0.00	84.80	84.80	84.80
711721.000	24500.00	54.80	54.80	0.00	42.76	.49	0.00 24500.00	0.00	84.80	84.80	84.80
711721.000	35000.00	57.30	57.30	0.00	45.67	.62	0.00 35000.00	0.00	84.80	84.80	84.80
711721.000	190000.00	77.26	77.26	0.00	77.58	1.95	0.00190000.00	0.00	84.80	84.80	84.80
711759.000	61000.00	62.93	62.93	0.00	45.58	.79	0.00 61000.00	0.00	84.80	84.80	84.80
711759.000	261000.00	81.79	81.79	0.00	178.18	2.98	0.00261000.00	0.00	84.80	84.80	84.80
711759.000	330000.00	87.69	87.69	0.00	246.61	2.73	27718.51301790.99	490.50	84.80	84.80	84.80
711759.000	24500.00	54.98	54.98	0.00	40.48	.47	0.00 24500.00	0.00	84.80	84.80	84.80
711759.000	35000.00	57.50	57.50	0.00	43.91	.60	0.00 35000.00	0.00	84.80	84.80	84.80
711759.000	190000.00	77.61	77.61	0.00	75.23	1.90	0.00190000.00	0.00	84.80	84.80	84.80
711760.000	61000.00	63.35	63.35	0.00	10.45	.40	1468.26 59401.28	130.46	84.80	84.80	84.80
711760.000	261000.00	84.22	84.22	0.00	9.14	.77	52394.51205006.99	3598.49	84.80	84.80	84.80
711760.000	330000.00	89.81	89.81	0.00	8.31	.80	77303.41246779.18	5917.40	84.80	84.80	84.80
711760.000	24500.00	55.22	55.22	0.00	14.10	.25	0.00 24500.00	0.00	84.80	84.80	84.80
711760.000	35000.00	57.81	57.81	0.00	12.93	.31	2.20 34994.18	3.62	84.80	84.80	84.80
711760.000	190000.00	78.99	78.99	0.00	8.71	.64	30949.87156952.07	2098.06	84.80	84.80	84.80
711810.000	61000.00	63.48	63.48	0.00	8.32	.82	1311.72 59676.07	12.21	84.80	84.80	84.80
711810.000	261000.00	84.35	84.35	0.00	7.17	.70	45180.51213232.35	2587.14	84.80	84.80	84.80
711810.000	330000.00	89.91	89.91	0.00	6.63	.74	67216.50258170.91	4617.58	84.80	84.80	84.80
711810.000	24500.00	55.33	55.33	0.00	11.47	.21	0.00 24500.00	0.00	84.80	84.80	84.80
711810.000	35000.00	57.93	57.93	0.00	10.64	.25	1.36 34998.64	0.00	84.80	84.80	84.80
711810.000	190000.00	79.12	79.12	0.00	6.83	.56	26635.73162132.46	1231.81	84.80	84.80	84.80

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K+S	HV	QLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL	CWSEL									
697310.000	61000.00	58.83	58.83	0.00	2.94	.14	8.79	60854.05	137.16	80.00	80.00	80.00
697310.000	330000.00	82.23	82.23	0.00	2.77	.22	4514.27246945	9540.74	80.00	80.00	80.00	80.00
697310.000	24500.00	48.52	48.52	0.00	10.23	.24	0.00	24500.00	0.00	80.00	80.00	80.00
697310.000	35000.00	51.91	51.91	0.00	5.79	.21	0.50	35000.00	0.00	80.00	80.00	80.00
697310.000	190000.00	74.09	74.09	0.00	2.19	.15	2739.19181622	5638.46	80.00	80.00	80.00	80.00
697311.000	61000.00	58.75	58.75	0.00	5.47	.26	0.00	61000.00	0.00	80.00	80.00	80.00
697311.000	261000.00	77.28	77.28	0.00	7.73	.66	0.00	261000.00	0.00	80.00	80.00	80.00
697311.000	330000.00	81.84	81.84	0.00	8.20	.78	0.00	330000.00	0.00	80.00	80.00	80.00
697311.000	24500.00	48.44	48.44	0.00	18.82	.36	0.00	24500.00	0.00	80.00	80.00	80.00
697311.000	35000.00	51.85	51.85	0.00	10.24	.30	0.00	35000.00	0.00	80.00	80.00	80.00
697311.000	190000.00	73.88	73.88	0.00	5.79	.46	0.00	190000.00	0.00	80.00	80.00	80.00
697349.000	61000.00	58.77	58.77	0.00	5.45	.26	0.00	61000.00	0.00	80.00	80.00	80.00
697349.000	261000.00	77.32	77.32	0.00	7.71	.66	0.00	261000.00	0.00	80.00	80.00	80.00
697349.000	330000.00	81.88	81.88	0.00	8.18	.78	0.00	330000.00	0.00	80.00	80.00	80.00
697349.000	24500.00	48.52	48.52	0.00	18.13	.35	0.00	24500.00	0.00	80.00	80.00	80.00
697349.000	35000.00	51.89	51.89	0.00	10.12	.30	0.00	35000.00	0.00	80.00	80.00	80.00
697349.000	190000.00	73.90	73.90	0.00	5.78	.45	0.00	190000.00	0.00	80.00	80.00	80.00
697350.000	61000.00	58.89	58.89	0.00	2.90	.15	9.28	60848.72	142.00	80.00	80.00	80.00
697350.000	261000.00	77.82	77.82	0.00	2.61	.20	4556.02246792	9651.09	80.00	80.00	80.00	80.00
697350.000	330000.00	82.49	82.49	0.00	2.51	.22	6812.88308046	15140.69	80.00	80.00	80.00	80.00
697350.000	24500.00	48.65	48.65	0.00	9.68	.23	0.00	24500.00	0.00	80.00	80.00	80.00
697350.000	35000.00	51.99	51.99	0.00	5.65	.20	0.00	35000.00	0.00	80.00	80.00	80.00
697350.000	190000.00	74.23	74.23	0.00	2.15	.15	2763.00181547	5689.58	80.00	80.00	80.00	80.00
697400.000	61000.00	58.91	58.91	0.00	2.89	.15	9.44	60847.01	143.55	80.00	80.00	80.00
697400.000	261000.00	77.85	77.85	0.00	2.61	.20	4556.02246792	9651.09	80.00	80.00	80.00	80.00
697400.000	330000.00	82.50	82.50	0.00	2.51	.22	6812.88308046	15140.69	80.00	80.00	80.00	80.00
697400.000	24500.00	48.71	48.71	0.00	9.44	.23	0.00	24500.00	0.00	80.00	80.00	80.00
697400.000	35000.00	52.02	52.02	0.00	5.58	.20	0.00	35000.00	0.00	80.00	80.00	80.00
697400.000	190000.00	74.24	74.24	0.00	2.15	.15	2766.31181536	5696.74	80.00	80.00	80.00	80.00
699400.000	61000.00	59.49	59.49	0.00	2.96	.15	8.56	60856.79	134.66	80.00	80.00	80.80
699400.000	261000.00	78.36	78.36	0.00	2.66	.20	4524.93246906	9568.42	80.00	80.00	80.80	80.80
699400.000	330000.00	83.01	83.01	0.00	2.55	.22	6775.83308189	15035.02	80.00	80.00	80.80	80.80
699400.000	24500.00	50.31	50.31	0.00	6.47	.18	0.00	24500.00	0.00	80.00	80.00	80.80
699400.000	35000.00	53.09	53.09	0.00	4.98	.18	0.00	35000.00	0.00	80.00	80.00	80.80
699400.000	190000.00	74.66	74.68	0.00	2.23	.16	2721.04181678	5600.14	80.00	80.00	80.80	80.80
702730.000	61000.00	60.31	60.31	0.00	2.20	.20	1986.28	58516.57	497.15	80.80	80.80	81.60
702730.000	261000.00	79.05	79.05	0.00	3.32	.63	24473.93215950	20575.37	80.80	80.80	81.60	81.60
702730.000	330000.00	83.62	83.62	0.00	3.50	.76	33479.77266956	29564.19	80.80	80.80	81.60	81.60
702730.000	24500.00	51.66	51.66	0.00	2.53	.11	6.07	24493.93	0.00	80.80	80.80	81.60
702730.000	35000.00	54.29	54.29	0.00	2.57	.15	154.26	34844.96	.78	80.80	80.80	81.60
702730.000	190000.00	75.28	75.28	0.00	2.58	.44	16352.75160686	43	12960.82	80.80	80.80	81.60

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K+S	HV	QLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL	CWSEL									
693940.000	61000.00	57.86	57.88	0.00	1.96	.25	193.12	60806.88	0.00	77.70	77.70	78.50
693940.000	261000.00	75.87	75.87	0.00	4.72	.75	1198.96248356.31	654.73		77.70	77.70	78.50
693940.000	330000.00	80.79	80.79	0.00	5.70	.75	1198.96248356.31	654.73		77.70	77.70	78.50
693940.000	24500.00	45.51	45.51	0.00	2.69	.16	0.00	24500.00	0.00	77.70	77.70	78.50
693940.000	35000.00	50.49	50.49	0.00	2.00	.18	.28	34999.72	0.00	77.70	77.70	78.50
693940.000	190000.00	72.82	72.82	0.00	3.41	.52	6395.05183534.30	70.64		77.70	77.70	78.50
695201.000	61000.00	58.28	58.28	0.00	2.03	.11	51.23	60663.81	284.96	78.50	78.50	79.00
695201.000	261000.00	76.89	76.89	0.00	2.23	.18	4816.24245822.94	16360.82		78.50	78.50	79.00
695201.000	330000.00	81.49	81.49	0.00	2.20	.20	7074.01307039.80	15886.19		78.50	78.50	79.00
695201.000	24500.00	46.05	46.05	0.00	11.10	.26	0.00	24500.00	0.00	78.50	78.50	79.00
695201.000	35000.00	50.86	50.86	0.00	3.96	.16	0.00	35000.00	0.00	78.50	78.50	79.00
695201.000	190000.00	73.55	73.55	0.00	1.76	.23	3023.17180690.81	6286.02		78.50	78.50	79.00
697201.000	61000.00	58.74	58.74	0.00	3.00	.16	8.17	60861.35	130.46	79.00	79.00	80.00
697201.000	261000.00	77.36	77.36	0.00	2.76	.21	4465.58247119.49	9414.94		79.00	79.00	80.00
697201.000	330000.00	81.95	81.95	0.00	2.65	.23	6700.15308480.51	14819.34		79.00	79.00	80.00
697201.000	24500.00	48.30	48.30	0.00	11.42	.26	0.00	24500.00	0.00	79.00	79.00	80.00
697201.000	35000.00	51.78	51.78	0.00	6.04	.21	0.00	35000.00	0.00	79.00	79.00	80.00
697201.000	190000.00	73.92	73.92	0.00	2.24	.16	2711.10181708.97	5579.93		79.00	79.00	80.00
697251.000	61000.00	58.75	58.75	0.00	2.99	.16	8.25	60860.38	131.37	80.00	80.00	80.00
697251.000	261000.00	77.38	77.38	0.00	2.75	.21	4468.07247110.59	9421.34		80.00	80.00	80.00
697251.000	330000.00	81.96	81.96	0.00	2.65	.23	6702.70308470.71	14826.60		80.00	80.00	80.00
697251.000	24500.00	48.36	48.36	0.00	11.09	.26	0.00	24500.00	0.00	80.00	80.00	80.00
697251.000	35000.00	51.82	51.82	0.00	6.00	.21	0.00	35000.00	0.00	80.00	80.00	80.00
697251.000	190000.00	73.93	73.93	0.00	2.24	.16	2712.80181703.84	5583.37		80.00	80.00	80.00
697252.000	61000.00	58.67	58.67	0.00	5.56	.27	0.00	61000.00	0.00	80.00	80.00	80.00
697252.000	261000.00	77.05	77.05	0.00	7.91	.67	0.00	261000.00	0.00	80.00	80.00	80.00
697252.000	330000.00	81.57	81.57	0.00	8.39	.79	0.00	330000.00	0.00	80.00	80.00	80.00
697252.000	24500.00	48.28	48.28	0.00	20.38	.38	0.00	24500.00	0.00	80.00	80.00	80.00
697252.000	35000.00	51.75	51.75	0.00	10.57	.31	0.00	35000.00	0.00	80.00	80.00	80.00
697252.000	190000.00	73.72	73.72	0.00	5.89	.46	0.00	190000.00	0.00	80.00	80.00	80.00
697290.000	61000.00	58.70	58.70	0.00	5.54	.27	0.00	61000.00	0.00	80.00	80.00	80.00
697290.000	261000.00	77.09	77.09	0.00	7.89	.67	0.00	261000.00	0.00	80.00	80.00	80.00
697290.000	330000.00	81.60	81.60	0.00	8.37	.79	0.00	330000.00	0.00	80.00	80.00	80.00
697290.000	24500.00	48.36	48.36	0.00	19.54	.37	0.00	24500.00	0.00	80.00	80.00	80.00
697290.000	35000.00	51.79	51.79	0.00	10.44	.30	0.00	35000.00	0.00	80.00	80.00	80.00
697290.000	190000.00	73.75	73.75	0.00	5.88	.46	0.00	190000.00	0.00	80.00	80.00	80.00
697291.000	61000.00	58.82	58.82	0.00	2.95	.15	8.74	60854.69	136.57	80.00	80.00	80.00
697291.000	261000.00	77.60	77.60	0.00	2.68	.21	4512.28246952.12	9535.59		80.00	80.00	80.00
697291.000	330000.00	82.23	82.23	0.00	2.58	.22	6758.17308257.15	14984.66		80.00	80.00	80.00
697291.000	24500.00	46.50	48.50	0.00	10.36	.24	0.00	24500.00	0.00	80.00	80.00	80.00
697291.000	35000.00	51.90	51.90	0.00	5.82	.21	0.00	35000.00	0.00	80.00	80.00	80.00
697291.000	190000.00	74.08	74.08	0.00	2.20	.15	2737.90181626.38	5635.71		80.00	80.00	80.00

565

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K*S	HV	QLOB	QCH	QROB	CL	CL	HSELK
SECTION	DISCHARGE	CWSEL										
686657.000	61000.00	57.18	57.18	0.00	.51	.08	1382.67	59617.33	0.00	74.10	74.10	74.10
686657.000	261000.00	73.65	73.65	0.00	3.88	.38	26292.53	230196.15	4511.33	74.10	74.10	74.10
686657.000	330000.00	77.92	77.92	0.00	5.06	.49	41054.70	200813.00	8132.29	74.10	74.10	74.10
686657.000	24500.00	44.87	44.87	0.00	.36	.05	82.35	24417.65	0.00	74.10	74.10	74.10
686657.000	35000.00	49.89	49.89	0.00	.39	.06	270.15	34729.85	0.00	74.10	74.10	74.10
686657.000	190000.00	71.31	71.31	0.00	1.28	.26	13339.17	174758.15	1902.68	74.10	74.10	74.10
685920												
686663.000	61000.00	57.18	57.18	0.00	.51	.08	1382.73	59617.27	0.00	74.10	74.10	75.80
686663.000	261000.00	73.65	73.65	0.00	3.88	.38	26294.86	230193.00	4512.25	74.10	74.10	75.80
686663.000	330000.00	77.92	77.92	0.00	5.06	.49	41058.52	200808.00	8133.48	74.10	74.10	75.80
686663.000	24500.00	44.87	44.87	0.00	.36	.05	82.36	24417.64	0.00	74.10	74.10	75.80
686663.000	35000.00	49.89	49.89	0.00	.39	.06	270.15	34729.85	0.00	74.10	74.10	75.80
686663.000	190000.00	71.31	71.31	0.00	1.28	.26	13339.59	174757.59	1902.81	74.10	74.10	75.80
686664.000	61000.00	57.19	57.19	0.00	.97	.07	2063.21	58936.79	0.00	75.80	75.80	75.80
686664.000	261000.00	73.75	73.75	0.00	3.26	.29	30668.62	225064.73	5266.66	75.80	75.80	75.80
686664.000	330000.00	78.08	78.08	0.00	3.62	.24	44990.46	276313.35	8696.20	75.80	75.80	75.80
686664.000	24500.00	44.88	44.88	0.00	.71	.04	115.82	24384.18	0.00	75.80	75.80	75.80
686664.000	35000.00	49.90	49.90	0.00	.75	.05	391.41	34608.59	0.00	75.80	75.80	75.80
686664.000	190000.00	71.39	71.39	0.00	2.13	.18	20246.68	166602.82	3150.50	75.80	75.80	75.80
686714.000	61000.00	57.20	57.20	0.00	.97	.07	2054.37	58935.63	0.00	75.80	75.80	75.80
686714.000	261000.00	73.77	73.77	0.00	3.25	.29	30689.73	225036.67	5273.60	75.80	75.80	75.80
686714.000	330000.00	78.10	78.10	0.00	3.61	.34	45020.16	276273.92	8705.92	75.80	75.80	75.80
686714.000	24500.00	44.88	44.88	0.00	.70	.04	115.89	24384.11	0.00	75.80	75.80	75.80
686714.000	35000.00	49.90	49.90	0.00	.75	.05	391.81	34608.19	0.00	75.80	75.80	75.80
686714.000	190000.00	71.40	71.40	0.00	2.13	.18	20254.33	166592.66	3153.32	75.80	75.80	75.80
688200.000	61000.00	57.35	57.35	0.00	1.70	.11	928.29	60771.71	0.00	75.80	75.80	76.20
688200.000	261000.00	74.27	74.27	0.00	4.91	.41	25172.30	232366.70	3461.00	75.80	75.80	76.20
688200.000	330000.00	78.66	78.66	0.00	5.26	.47	38622.98	284768.50	6608.52	75.80	75.80	76.20
688200.000	24500.00	45.01	45.01	0.00	1.45	.07	13.59	24486.41	0.00	75.80	75.80	76.20
688200.000	35000.00	50.03	50.03	0.00	1.41	.08	171.36	34829.64	0.00	75.80	75.80	76.20
688200.000	190000.00	71.73	71.73	0.00	3.33	.27	15991.25	172257.30	1751.45	75.80	75.80	76.20
689700.000	61000.00	57.52	57.52	0.00	.77	.11	647.83	60352.17	0.00	76.20	76.20	76.50
689700.000	261000.00	74.77	74.77	0.00	2.50	.45	18833.73	239490.04	2676.24	76.20	76.20	76.50
689700.000	330000.00	79.19	79.19	0.00	2.76	.50	29242.89	295659.81	5097.30	76.20	76.20	76.50
689700.000	24500.00	45.15	45.15	0.00	.63	.06	10.33	24489.68	0.00	76.20	76.20	76.50
689700.000	35000.00	50.16	50.16	0.00	.62	.08	118.17	34881.83	0.00	76.20	76.20	76.50
689700.000	190000.00	72.07	72.07	0.00	1.68	.28	11787.85	176871.88	1340.27	76.20	76.20	76.50
691940.000	61000.00	57.71	57.71	0.00	.90	.13	543.00	60457.00	0.00	76.50	76.50	77.70
691940.000	261000.00	75.37	75.37	0.00	2.72	.46	18028.21	240564.68	2407.11	76.50	76.50	77.70
691940.000	330000.00	79.85	79.85	0.00	2.98	.53	28372.65	296825.25	4802.10	76.50	76.50	77.70
691940.000	24500.00	45.31	45.31	0.00	.78	.07	2.54	24497.46	0.00	76.50	76.50	77.70
691940.000	35000.00	50.32	50.32	0.00	.75	.09	84.93	34915.07	0.00	76.50	76.50	77.70
691940.000	190000.00	72.47	72.47	0.00	1.67	.30	11043.74	177852.09	1104.18	76.50	76.50	77.70

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K*5	HV	QLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL										
686026.000	61000.00	57.12	57.12	0.00	.66	.09	.89	60987.20	11.91	73.50	73.50	73.50
686026.000	261000.00	73.43	73.43	0.00	2.37	.41	961.72259651.28	387.00	73.50	73.50	73.50	73.50
686026.000	330000.00	77.62	77.62	0.00	2.71	.51	1915.76327388.24	696.02	73.50	73.50	73.50	73.50
686026.000	24500.00	44.83	44.83	0.00	.62	.05	0.00	24500.00	0.00	73.50	73.50	73.50
686026.000	35000.00	49.85	49.85	0.00	.56	.06	0.00	34999.91	.09	73.50	73.50	73.50
686026.000	190000.00	71.18	71.18	0.00	1.52	.25	503.97189261.03	235.00	73.50	73.50	73.50	73.50
686027.000	61000.00	57.10	57.10	0.00	.79	.11	.96	60990.15	8.89	73.50	73.50	73.50
686027.000	261000.00	73.35	73.35	0.00	3.38	.52	1160.57259550.89	288.54	73.50	73.50	73.50	73.50
686027.000	330000.00	77.46	77.46	0.00	8.84	.74	3260.76326195.99	543.25	73.50	73.50	73.50	73.50
686027.000	24500.00	44.82	44.82	0.00	.73	.06	0.00	24500.00	0.00	73.50	73.50	73.50
686027.000	35000.00	49.84	49.84	0.00	.67	.07	0.00	34999.93	.07	73.50	73.50	73.50
686027.000	190000.00	71.14	71.14	0.00	1.88	.32	599.56189223.44	177.01	73.50	73.50	73.50	73.50
686033.000	61000.00	57.10	57.10	0.00	.79	.11	.96	60990.15	8.89	73.50	73.50	74.10
686033.000	261000.00	73.35	73.35	0.00	3.38	.52	1160.81259550.65	288.55	73.50	73.50	73.50	74.10
686033.000	330000.00	77.46	77.46	0.00	8.84	.74	3261.98326194.73	543.29	73.50	73.50	73.50	74.10
686033.000	24500.00	44.82	44.82	0.00	.73	.06	0.00	24500.00	0.00	73.50	73.50	74.10
686033.000	35000.00	49.84	49.84	0.00	.67	.07	0.00	34999.93	.07	73.50	73.50	74.10
686033.000	190000.00	71.14	71.14	0.00	1.88	.32	599.63189223.35	177.02	73.50	73.50	73.50	74.10
686034.000	61000.00	57.12	57.12	0.00	.66	.09	.89	60987.19	11.92	74.10	74.10	74.10
686034.000	261000.00	73.47	73.47	0.00	2.36	.41	967.91259643.42	388.67	74.10	74.10	74.10	74.10
686034.000	330000.00	77.73	77.73	0.00	2.69	.50	1933.58327364.47	701.94	74.10	74.10	74.10	74.10
686034.000	24500.00	44.83	44.83	0.00	.62	.05	0.00	24500.00	0.00	74.10	74.10	74.10
686034.000	35000.00	49.85	49.85	0.00	.56	.06	0.00	34999.91	.09	74.10	74.10	74.10
686034.000	190000.00	71.21	71.21	0.00	1.51	.25	505.80189258.70	235.50	74.10	74.10	74.10	74.10
686084.000	61000.00	57.13	57.13	0.00	.66	.09	.90	60987.18	11.93	74.10	74.10	74.10
686084.000	261000.00	73.49	73.49	0.00	2.36	.41	969.74259641.09	389.17	74.10	74.10	74.10	74.10
686084.000	330000.00	77.74	77.74	0.00	2.68	.50	1937.25327359.59	703.17	74.10	74.10	74.10	74.10
686084.000	24500.00	44.84	44.84	0.00	.62	.05	0.00	24500.00	0.00	74.10	74.10	74.10
686084.000	35000.00	49.86	49.86	0.00	.56	.06	0.00	34999.91	.09	74.10	74.10	74.10
686084.000	190000.00	71.22	71.22	0.00	1.51	.25	506.34189258.02	235.65	74.10	74.10	74.10	74.10
686606.000	61000.00	57.18	57.18	0.00	.44	.07	1490.27	59509.73	0.00	74.10	74.10	74.10
686606.000	261000.00	73.68	73.68	0.00	1.61	.32	23095.24234231.17	3673.60	74.10	74.10	74.10	74.10
686606.000	330000.00	77.98	77.98	0.00	1.83	.39	34194.09289682.27	6123.64	74.10	74.10	74.10	74.10
686606.000	24500.00	44.87	44.87	0.00	.31	.04	82.04	24417.97	0.00	74.10	74.10	74.10
686606.000	35000.00	49.89	49.89	0.00	.33	.05	279.09	34720.92	0.00	74.10	74.10	74.10
686606.000	190000.00	71.34	71.34	0.00	1.04	.20	15168.71172644.79	2186.50	74.10	74.10	74.10	74.10
686656.000	61000.00	57.19	57.19	0.00	.43	.07	1490.90	59509.10	0.00	74.10	74.10	74.10
686656.000	261000.00	73.69	73.69	0.00	1.61	.32	23104.66234218.95	3676.39	74.10	74.10	74.10	74.10
686656.000	330000.00	77.98	77.98	0.00	1.83	.39	34206.72289665.91	6127.38	74.10	74.10	74.10	74.10
686656.000	24500.00	44.87	44.87	0.00	.31	.04	82.08	24417.92	0.00	74.10	74.10	74.10
686656.000	35000.00	49.90	49.90	0.00	.33	.05	279.17	34720.83	0.00	74.10	74.10	74.10
686656.000	190000.00	71.34	71.34	0.00	1.04	.20	15173.26172638.89	2187.85	74.10	74.10	74.10	74.10

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K+S	HV	QLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL										
685655.000	61000.00	57.08	57.08	0.00	.69	.10	2.47	59051.81	1945.72	72.00	72.00	73.50
685655.000	261000.00	73.28	73.28	0.00	2.32	.35	2337.00	235090.94	23572.07	72.00	72.00	73.50
685655.000	330000.00	77.37	77.37	0.00	2.64	.42	3683.21	292593.84	33522.95	72.00	72.00	73.50
685655.000	24500.00	44.80	44.80	0.00	.56	.06	0.00	24490.79	9.21	72.00	72.00	73.50
685655.000	35000.00	49.81	49.81	0.00	.57	.08	0.00	34857.48	142.52	72.00	72.00	73.50
685655.000	190000.00	71.09	71.09	0.00	1.50	.22	1418.10	172665.40	15916.49	72.00	72.00	73.50
685855.000	61000.00	57.09	57.09	0.00	.69	.10	2.54	59047.81	1949.65	73.50	73.50	73.50
685855.000	261000.00	73.32	73.32	0.00	2.32	.35	2345.17	235048.19	23606.63	73.50	73.50	73.50
685855.000	330000.00	77.42	77.42	0.00	2.62	.42	3894.70	292538.55	33566.76	73.50	73.50	73.50
685855.000	24500.00	44.81	44.81	0.00	.55	.06	0.00	24490.73	9.27	73.50	73.50	73.50
685855.000	35000.00	49.82	49.82	0.00	.57	.08	0.00	34856.39	143.61	73.50	73.50	73.50
685855.000	190000.00	71.12	71.12	0.00	1.49	.22	1421.89	172644.32	15933.80	73.50	73.50	73.50
685856.000	61000.00	57.07	57.07	0.00	1.18	.12	0.00	61000.00	0.00	73.50	73.50	73.50
685856.000	261000.00	73.15	73.15	0.00	5.31	.59	0.00	260998.32	1.68	73.50	73.50	73.50
685856.000	330000.00	77.11	77.11	0.00	16.75	.86	0.00	328564.10	1435.90	73.50	73.50	73.50
685856.000	24500.00	44.80	44.80	0.00	.80	.07	0.00	24500.00	0.00	73.50	73.50	73.50
685856.000	35000.00	49.81	49.81	0.00	.86	.08	0.00	35000.00	0.00	73.50	73.50	73.50
685856.000	190000.00	71.02	71.02	0.00	3.29	.36	0.00	190000.00	0.00	73.50	73.50	73.50
	684780											
685884.000	61000.00	57.07	57.07	0.00	1.18	.12	0.00	61000.00	0.00	73.50	73.50	73.50
685884.000	261000.00	73.17	73.17	0.00	5.30	.59	0.00	260998.17	1.83	73.50	73.50	73.50
685884.000	330000.00	77.16	77.16	0.00	16.75	.86	0.00	328529.19	1470.81	73.50	73.50	73.50
685884.000	24500.00	44.80	44.80	0.00	.80	.07	0.00	24500.00	0.00	73.50	73.50	73.50
685884.000	35000.00	49.82	49.82	0.00	.86	.08	0.00	35000.00	0.00	73.50	73.50	73.50
685884.000	190000.00	71.03	71.03	0.00	3.29	.36	0.00	190000.00	0.00	73.50	73.50	73.50
685885.000	61000.00	57.10	57.10	0.00	.69	.10	2.61	59179.67	1817.72	73.50	73.50	73.50
685885.000	261000.00	73.43	73.43	0.00	2.32	.35	2380.47	236477.73	22141.80	73.50	73.50	73.50
685885.000	330000.00	77.64	77.64	0.00	2.62	.42	3974.87	294444.78	31580.35	73.50	73.50	73.50
685885.000	24500.00	44.81	44.81	0.00	.55	.06	0.00	24491.38	8.62	73.50	73.50	73.50
685885.000	35000.00	49.82	49.82	0.00	.57	.08	0.00	34866.43	133.57	73.50	73.50	73.50
685885.000	190000.00	71.18	71.18	0.00	1.50	.22	1438.80	173640.88	14920.32	73.50	73.50	73.50
685935.000	61000.00	57.11	57.11	0.00	.69	.10	2.63	59178.51	1818.86	73.50	73.50	73.50
685935.000	261000.00	73.45	73.45	0.00	2.32	.35	2383.92	236460.75	22155.34	73.50	73.50	73.50
685935.000	330000.00	77.66	77.66	0.00	2.61	.42	3977.91	294431.00	31591.09	73.50	73.50	73.50
685935.000	24500.00	44.81	44.81	0.00	.55	.06	0.00	24491.37	8.63	73.50	73.50	73.50
685935.000	35000.00	49.83	49.83	0.00	.57	.08	0.00	34866.15	133.85	73.50	73.50	73.50
685935.000	190000.00	71.19	71.19	0.00	1.50	.22	1440.35	173632.75	14926.90	73.50	73.50	73.50
685976.000	61000.00	57.11	57.11	0.00	.66	.09	.89	60987.22	11.90	73.50	73.50	73.50
685976.000	261000.00	73.41	73.41	0.00	2.37	.41	960.22	259653.18	386.59	73.50	73.50	73.50
685976.000	330000.00	77.61	77.61	0.00	2.71	.51	1913.48	327391.25	695.27	73.50	73.50	73.50
685976.000	24500.00	44.83	44.83	0.00	.63	.05	0.00	24500.00	0.00	73.50	73.50	73.50
685976.000	35000.00	49.85	49.85	0.00	.56	.06	0.00	34999.91	.09	73.50	73.50	73.50
685976.000	190000.00	71.17	71.17	0.00	1.52	.25	503.49	189261.64	234.87	73.50	73.50	73.50

ROANOKE RIVER - SUMMARY F: A STUDY

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

ROANOKE RIVER DLO JU

SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K+S	HV	DLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL										
100YR - 681120.000	61000.00	56.75	56.75	0.00	1.99	.06	2217.20	58048.11	734.69	1	1	72.00
1940 - 681120.000	261000.00	72.37	72.37	0.00	2.00	.18	18106.47233257.47	9636.06	90.00	90.00	90.00	72.00
SFF - 681120.000	330000.00	76.38	76.38	0.00	2.00	.22	24166.59292279.12	13554.29	90.00	90.00	90.00	72.00
10YR - 681120.000	24500.00	44.50	44.50	0.00	1.09	.07	0.00	24481.18	18.82	90.00	90.00	72.00
50YR - 681120.000	35000.00	49.50	49.50	0.00	1.63	.09	18.50	34851.85	129.65	90.00	90.00	72.00
500YR - 681120.000	190000.00	70.50	70.50	0.00	1.35	.11	12771.40170634.56	6594.04	90.00	90.00	90.00	72.00
681121.000	61000.00	56.74	56.74	0.00	.79	.07	1313.18	59284.61	402.21	72.00	72.00	72.00
679733 681121.000	261000.00	72.37	72.37	0.00	2.23	.19	19777.67231523.31	9699.02	72.00	72.00	72.00	72.00
681121.000	330000.00	76.38	76.38	0.00	2.44	.22	27812.26287786.81	14400.93	72.00	72.00	72.00	72.00
661545 681121.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681121.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.46	73.42	72.00	72.00	72.00
681121.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.29170043.44	6427.28	72.00	72.00	72.00	72.00
681123.000	61000.00	56.74	56.74	0.00	.79	.07	1313.26	59284.51	402.23	72.00	72.00	72.00
681123.000	261000.00	72.37	72.37	0.00	2.23	.19	19777.93231522.86	9699.21	72.00	72.00	72.00	72.00
679733 681123.000	330000.00	76.38	76.38	0.00	2.44	.22	27812.54287786.31	14401.15	72.00	72.00	72.00	72.00
681123.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681123.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.46	73.42	72.00	72.00	72.00
681123.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.42170046.20	6427.38	72.00	72.00	72.00	72.00
681130.000	61000.00	56.74	56.74	0.00	.79	.07	1313.41	59284.32	402.28	72.00	72.00	72.00
681130.000	261000.00	72.37	72.37	0.00	2.23	.19	19778.89231521.20	9699.91	72.00	72.00	72.00	72.00
679730 681130.000	330000.00	76.38	76.38	0.00	2.44	.22	27813.63287784.37	14402.00	72.00	72.00	72.00	72.00
681130.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681130.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.45	73.42	72.00	72.00	72.00
681130.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.91170045.36	6427.73	72.00	72.00	72.00	72.00
681500.000	61000.00	56.77	56.77	0.00	.79	.07	1293.89	59309.84	396.26	72.00	72.00	72.00
681500.000	261000.00	72.45	72.45	0.00	2.23	.19	19766.18231539.82	9692.00	72.00	72.00	72.00	72.00
681500.000	330000.00	76.47	76.47	0.00	2.45	.22	27807.55287795.23	14397.22	72.00	72.00	72.00	72.00
681500.000	24500.00	44.52	44.52	0.00	.63	.07	0.00	24489.77	10.23	72.00	72.00	72.00
681500.000	35000.00	49.52	49.52	0.00	.67	.09	6.62	34920.96	72.42	72.00	72.00	72.00
681500.000	190000.00	70.55	70.55	0.00	1.43	.12	13503.79170085.01	6411.20	72.00	72.00	72.00	72.00
682000.000	61000.00	56.81	56.81	0.00	.80	.08	1277.24	59331.58	391.18	72.00	72.00	72.00
682000.000	261000.00	72.56	72.56	0.00	2.23	.19	19775.23231527.57	9697.21	72.00	72.00	72.00	72.00
682000.000	330000.00	76.59	76.59	0.00	2.44	.21	27821.63287770.08	14408.29	72.00	72.00	72.00	72.00
682000.000	24500.00	44.55	44.55	0.00	.64	.07	0.00	24490.17	9.83	72.00	72.00	72.00
682000.000	35000.00	49.55	49.55	0.00	.67	.09	6.22	34922.25	71.53	72.00	72.00	72.00
682000.000	190000.00	70.62	70.62	0.00	1.44	.12	13489.81170108.98	6401.21	72.00	72.00	72.00	72.00
683160.000	61000.00	56.90	56.90	0.00	.82	.08	1220.16	59405.71	374.13	72.00	72.00	72.00
683160.000	261000.00	72.82	72.82	0.00	2.24	.19	19750.06231571.31	9678.63	72.00	72.00	72.00	72.00
683160.000	330000.00	76.88	76.88	0.00	2.44	.22	27811.11287788.38	14400.02	72.00	72.00	72.00	72.00
683160.000	24500.00	44.63	44.63	0.00	.66	.08	0.00	24491.44	8.56	72.00	72.00	72.00
683160.000	35000.00	49.63	49.63	0.00	.69	.09	5.14	34926.29	68.57	72.00	72.00	72.00
683160.000	190000.00	70.79	70.79	0.00	1.46	.12	13424.05170221.64	6354.30	72.00	72.00	72.00	72.00

ROANOKE RIVER - SUMMARY
FIA STUDY

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

ROANOKE RIVER		DLO		JU								
SECTION	DISCHARGE	CWSEL	CWSEL	CRWS	10K+S	HV	QLOB	QCH	QROB	CL	CL	WSELK
SECTION	DISCHARGE	CWSEL										
100 YR - 681120.000	61000.00	56.75	56.75	0.00	1.99	.05	2217.20	58048.11	734.69	1	1	72.00
1940 - 681120.000	261000.00	72.37	72.37	0.00	2.00	.18	18106.47	233257.47	9636.06	90.00	90.00	72.00
SFF - 681120.000	330000.00	76.38	76.38	0.00	2.00	.22	24166.59	292279.12	13554.29	90.00	90.00	72.00
10 YR - 681120.000	24500.00	44.50	44.50	0.00	1.09	.07	0.00	24481.18	18.82	90.00	90.00	72.00
50 YR - 681120.000	35000.00	49.50	49.50	0.00	1.63	.09	18.50	34851.85	129.65	90.00	90.00	72.00
500 YR - 681120.000	190000.00	70.50	70.50	0.00	1.35	.11	12771.40	170634.56	6594.04	90.00	90.00	72.00
681121.000	61000.00	56.74	56.74	0.00	.79	.07	1313.18	59284.61	402.21	72.00	72.00	72.00
681121.000	261000.00	72.37	72.37	0.00	2.23	.19	19777.67	231523.31	9699.02	72.00	72.00	72.00
681121.000	330000.00	76.38	76.38	0.00	2.44	.22	27812.26	287786.81	14400.93	72.00	72.00	72.00
6615152 681121.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681121.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.46	73.42	72.00	72.00	72.00
681121.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.29	170046.44	6427.28	72.00	72.00	72.00
681123.000	61000.00	56.74	56.74	0.00	.79	.07	1313.26	59284.51	402.23	72.00	72.00	72.00
681123.000	261000.00	72.37	72.37	0.00	2.23	.19	19777.93	231522.86	9699.21	72.00	72.00	72.00
681123.000	330000.00	76.38	76.38	0.00	2.44	.22	27812.54	287786.31	14401.15	72.00	72.00	72.00
681123.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681123.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.46	73.42	72.00	72.00	72.00
681123.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.42	170046.20	6427.38	72.00	72.00	72.00
681130.000	61000.00	56.74	56.74	0.00	.79	.07	1313.41	59284.32	402.28	72.00	72.00	72.00
681130.000	261000.00	72.37	72.37	0.00	2.23	.19	19778.89	231521.20	9699.91	72.00	72.00	72.00
681130.000	330000.00	76.38	76.38	0.00	2.44	.22	27813.63	287784.37	14402.00	72.00	72.00	72.00
681130.000	24500.00	44.50	44.50	0.00	.63	.07	0.00	24489.32	10.68	72.00	72.00	72.00
681130.000	35000.00	49.50	49.50	0.00	.66	.09	7.13	34919.45	73.42	72.00	72.00	72.00
681130.000	190000.00	70.50	70.50	0.00	1.43	.12	13526.91	170045.36	6427.73	72.00	72.00	72.00
681500.000	61000.00	56.77	56.77	0.00	.79	.07	1293.89	59309.84	396.26	72.00	72.00	72.00
681500.000	261000.00	72.45	72.45	0.00	2.23	.19	19768.18	231539.82	9692.00	72.00	72.00	72.00
681500.000	330000.00	76.47	76.47	0.00	2.45	.22	27807.55	287795.23	14397.22	72.00	72.00	72.00
681500.000	24500.00	44.52	44.52	0.00	.63	.07	0.00	24489.77	10.23	72.00	72.00	72.00
681500.000	35000.00	49.52	49.52	0.00	.67	.09	6.62	34920.96	72.42	72.00	72.00	72.00
681500.000	190000.00	70.55	70.55	0.00	1.43	.12	13503.79	170085.01	6411.20	72.00	72.00	72.00
682000.000	61000.00	56.81	56.81	0.00	.80	.08	1277.24	59331.58	391.18	72.00	72.00	72.00
682000.000	261000.00	72.56	72.56	0.00	2.23	.19	19775.23	231527.57	9697.21	72.00	72.00	72.00
682000.000	330000.00	76.59	76.59	0.00	2.44	.21	27821.63	287770.08	14408.29	72.00	72.00	72.00
682000.000	24500.00	44.55	44.55	0.00	.64	.07	0.00	24490.17	9.83	72.00	72.00	72.00
682000.000	35000.00	49.55	49.55	0.00	.67	.09	6.22	34922.25	71.53	72.00	72.00	72.00
682000.000	190000.00	70.62	70.62	0.00	1.44	.12	13489.81	170108.98	6401.21	72.00	72.00	72.00
683160.000	61000.00	56.90	56.90	0.00	.82	.08	1220.16	59405.71	374.13	72.00	72.00	72.00
683160.000	261000.00	72.82	72.82	0.00	2.24	.19	19750.06	231571.31	9678.63	72.00	72.00	72.00
683160.000	330000.00	76.88	76.88	0.00	2.44	.22	27811.11	287788.88	14400.02	72.00	72.00	72.00
683160.000	24500.00	44.63	44.63	0.00	.66	.08	0.00	24491.44	8.56	72.00	72.00	72.00
683160.000	35000.00	49.63	49.63	0.00	.69	.09	5.14	34926.29	58.57	72.00	72.00	72.00
683160.000	190000.00	70.79	70.79	0.00	1.46	.12	13424.05	170221.64	6354.30	72.00	72.00	72.00