

CROSS-SECTION PROPERTIES FOR: ROCKY KNOL
 SECID=001 AT DISTANCE= 2370

X-SECTION PROPERTIES DIV 1
 PART 1 OF 2

MS	A	K	ALPHA	H	B	LEM	RFM	OC
3105.0	9	198	1.00	8	9	49	57	49
3105.1	9	226	1.00	9	10	49	59	55
3105.2	10	256	1.00	9	10	49	59	62
3105.3	11	288	1.00	9	10	49	59	69
3105.4	12	322	1.00	9	11	49	59	77
3105.5	13	358	1.00	10	11	49	59	85
3105.6	14	396	1.00	10	11	49	59	94
3105.7	15	436	1.00	10	12	49	59	103
3105.8	15	478	1.00	10	12	49	59	112
3105.9	17	522	1.00	11	12	49	59	122
3106.0	18	568	1.00	11	13	49	59	132
3106.1	19	616	1.00	11	13	49	59	143
3106.2	20	667	1.00	11	13	49	59	154
3106.3	22	719	1.00	12	14	49	59	165
3106.4	23	773	1.00	13	15	49	61	176
3106.5	24	767	1.00	15	17	49	59	176
3106.6	26	803	1.00	15	18	49	64	185
3106.7	27	867	1.00	17	19	49	65	199
3106.8	30	949	1.05	31	32	34	65	165
3106.9	34	1044	1.09	33	35	33	66	185
3107.0	37	1153	1.13	34	36	32	66	207
3107.1	40	1276	1.16	35	37	32	67	232
3107.2	44	1418	1.20	37	39	31	69	258
3107.3	49	1556	1.24	38	41	30	69	289
3107.4	53	1722	1.27	47	45	29	71	350
3107.5	61	1927	1.31	58	55	26	75	350
3107.6	71	2182	1.37	100	111	27	77	392
3107.7	82	2551	1.43	113	112	24	76	358
3107.8	93	2958	1.48	131	114	24	77	436
3107.9	105	3412	1.53	133	115	25	78	517
3108.0	116	3919	1.58	115	117	24	78	600
3108.1	126	4450	1.63	118	118	23	78	716
3108.2	139	5032	1.68	117	120	22	78	816
3108.3	151	5652	1.73	117	122	21	78	912
3108.4	163	6314	1.78	121	123	20	78	1032
3108.5	175	7014	1.83	122	125	19	78	1151
3108.6	189	7751	1.88	126	126	18	78	1273
3108.7	200	8527	1.93	125	127	18	78	1400
3108.8	213	9338	1.98	127	129	17	78	1532
3108.9	228	10190	2.03	128	131	16	78	1667
3109.0	242	11092	2.08	129	132	15	78	1810
3109.1	251	12047	2.13	130	133	14	78	1950
3109.2	264	13030	2.18	131	133	14	78	2112
3109.3	277	14065	2.23	132	134	13	78	2269
3109.4	290	15120	2.28	132	135	13	78	2422

CROSS-SECTION PROPERTIES FOR: ROCKY KNOS
 SECID=DUM, 1. AT DISTANCE= 2370

X-SECTION PROPERTIES DUM 1
 PART 2 OF 2

WS	A	K	ALPHA	R	D	LEW	PEW	DC
3109.5	304	16226	1.01	133	136	12	145	2592
3109.6	317	17383	1.01	134	137	12	146	2758
3109.7	331	18645	1.01	135	137	11	146	2926
3109.8	344	19949	1.01	135	139	11	146	3096
3109.9	358	21301	1.01	136	139	10	146	3270
3110.0	371	22700	1.01	137	140	10	147	3447
3110.1	385	24142	1.01	138	141	9	147	3626
3110.2	399	25635	1.02	138	141	9	147	3808
3110.3	413	27173	1.02	139	142	8	147	3992
3110.4	427	28764	1.02	140	143	8	147	4179
3110.5	441	30406	1.03	141	144	7	148	4368
3110.6	455	32040	1.03	141	145	6	148	4562
3110.7	469	33691	1.03	142	145	6	148	4767
3110.8	483	35170	1.02	143	146	5	148	4976
3110.9	498	36787	1.02	144	147	5	149	5188
3111.0	512	38436	1.02	145	148	4	149	5403
3111.1	526	40114	1.02	145	149	4	149	5621
3111.2	541	41829	1.02	146	149	3	149	5842
3111.3	556	43572	1.02	147	150	3	150	6068
3111.4	570	45352	1.02	148	151	2	150	6296
3111.5	585	47165	1.02	148	152	2	150	6528
3111.6	599	49056	1.02	149	152	1	150	6764
3111.7	615	50984	1.02	149	153	1	150	7011
3111.8	630	52944	1.02	150	153	0	150	7257

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOR 10.50.100.2500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECT	ID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	FEW	HEW	HS ELEV	HV	HF	HE	SG	V	FR	ACC	*ID*
DUM 1	AT	2370	/	0	/	960	/	236	/	11093	/	1.03	/	15	/	144			
		3109.00	/	0.26	/		/	3109.26	/	4.05	/	0.54	/		/				*IS*
DUM 2	AT	2580	/	210	/	960	/	215	/	9435	/	1.04	/	17	/	143			
		3110.92	/	0.32	/	1.84	/	0.03	/	3111.14	/	4.47	/	0.52	/	0.009			*XS*
DUM 3	AT	2790	/	210	/	960	/	223	/	10039	/	1.03	/	16	/	144			
		3112.88	/	0.30	/	2.03	/	0.0	/	3113.18	/	4.30	/	0.59	/	0.008			*XS*
A	AT	3000	/	210	/	960	/	219	/	9788	/	1.04	/	16	/	144			
		3114.95	/	0.31	/	1.97	/	0.01	/	3115.16	/	4.38	/	0.60	/	0.006			*XS*
B	AT	3440	/	440	/	960	/	237	/	10203	/	1.06	/	26	/	176			
		3118.95	/	0.27	/	4.06	/	0.0	/	3119.22	/	4.05	/	0.55	/	0.002			*XS*
C	AT	3790	/	350	/	960	/	208	/	8742	/	1.18	/	36	/	185			
		3122.52	/	0.39	/	3.62	/	0.05	/	3122.91	/	4.61	/	0.65	/	0.010			*XS*
D	AT	4150	/	350	/	960	/	257	/	11706	/	1.04	/	28	/	178			
		3125.93	/	0.23	/	3.24	/	0.0	/	3126.15	/	3.74	/	0.52	/	0.001			*XS*

END OF THIS PROFILE

USGS STEP-BACKWATER PROGRAM - VERSION 76.170 *** PAGE COUNT= 19 DATE= 4/ 5/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOP 10, 20, 100, 500 YR FLOODS : DUM 1-D
INITIAL VALUES ARE: 0 = 960, 5 = 3109.40

SECTID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

23 DUM 2: KU/KD < 0.7 OR > 1.4

USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOP 10,50,100,500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEN	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	*ID*	
DUM 1	AT	2370	0	960	290	15128	1.01	13	145
3109.40		0.17			3109.57	3.30	0.41		*IS*
DUM 2	AT	2580	210	960	206	8939	1.04	17	143
3110.75		0.35	1.43	0.09	3111.10	4.65	0.53	0.010	*XS*
DUM 3	AT	2790	210	960	228	10367	1.03	16	144
3112.92		0.29	2.09	0.0	3113.20	4.22	0.57	0.011	*XS*
A	AT	3000	210	960	218	9703	1.04	16	144
3114.84		0.31	1.94	0.01	3115.16	4.40	0.61	0.012	*XS*
B	AT	3440	440	960	238	10266	1.05	25	176
3118.96		0.27	4.07	0.0	3119.23	4.03	0.58	0.002	*XS*
C	AT	3790	350	960	205	8704	1.18	35	185
3122.52		0.39	3.61	0.06	3122.91	4.62	0.65	0.018	*XS*
D	AT	4150	360	960	257	11743	1.04	28	179
3125.93		0.22	3.25	0.0	3125.16	3.73	0.52	0.002	*XS*

END OF THIS PROFILE

=====

WATER SURFACE PROFILE FOR: ROCKY KNOB 10.50, 100.5500 YR FLOODS DUM 1-0

PAGE 1 OF 1

=====

SECTION	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REF								
WS ELEV	HV	HF	HE	EG	V	FH	ACC	#ID#									
DUM 1	AT	2370	/	0	/	1580.	/	290.	/	15128.	/	1.01	/	13.	/	145.	
		3109.40	/	0.46	/		/	3109.95	/	5.44	/	0.57	/		/		*TS*
DUM 2	AT	2880	/	210	/	1580.	/	309.	/	16556.	/	1.01	/	12.	/	145.	
		3111.54	/	0.41	/	2.04	/	0.0	/	3111.95	/	5.12	/	0.52	/	0.003	*XS*
DUM 3	AT	2790	/	210	/	1580.	/	302.	/	16107.	/	1.01	/	12.	/	145.	
		3113.49	/	0.63	/	1.95	/	0.01	/	3113.92	/	5.23	/	0.54	/	0.003	*XS*
	AT	3000	/	210	/	1580.	/	304.	/	16224.	/	1.01	/	12.	/	145.	
		3115.50	/	0.42	/	2.01	/	0.0	/	3115.92	/	5.20	/	0.63	/	0.000	*XS*
	AT	3440	/	440	/	1580.	/	330.	/	16969.	/	1.03	/	21.	/	181.	
		3119.55	/	0.37	/	3.99	/	0.0	/	3119.92	/	4.79	/	0.60	/	0.002	*XS*
	AT	3790	/	350	/	1580.	/	290.	/	14424.	/	1.14	/	27.	/	188.	
		3123.05	/	0.53	/	3.57	/	0.05	/	3123.57	/	5.45	/	0.69	/	0.003	*XS*
	AT	4150	/	350	/	1580.	/	354.	/	18865.	/	1.03	/	18.	/	182.	
		3126.55	/	0.32	/	3.30	/	0.0	/	3126.57	/	4.46	/	0.56	/	-0.011	*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10.50.100.8500 YP FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECT	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REF
NO	FLEV	HV	HF	HE	EG	V	FN	ACC	STD*
DUM 1	AT	2370	0	1580	324	18009	1.01	12	145
		3109.65	0.37		3110.02	4.88	0.54		*IS*
DUM 2	AT	2580	210	1580	299	15812	1.01	13	145
		3111.46	0.44	1.84	0.03	3111.90	5.29	0.65	0.004 *XS*
DUM 3	AT	2790	210	1580	305	16349	1.01	12	145
		3113.51	0.42	2.03	0.0	3113.93	5.19	0.63	0.001 *XS*
A	AT	3000	210	1580	303	16164	1.01	12	145
		3115.49	0.43	1.98	0.00	3115.92	5.21	0.64	0.002 *XS*
B	AT	3440	440	1580	330	17011	1.03	21	181
		3119.56	0.37	3.99	0.0	3119.92	4.79	0.60	0.008 *XS*
C	AT	3790	350	1580	290	14409	1.14	27	188
		3123.05	0.53	3.56	0.00	3123.57	5.45	0.69	0.004 *XS*
D	AT	4150	360	1580	354	18850	1.03	18	182
		3126.65	0.32	3.31	0.0	3126.86	4.46	0.56	-0.018 *XS*

END OF THIS PROFILE

HASP-ITRMRMBQ.PRI	END JOB	3031	9.16.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II
HASP-ITRMRMBQ.PRI	END JOB	3031	9.15.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II
HASP-ITRMRMBQ.PRI	END JOB	3031	9.16.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II
HASP-ITRMRMBQ.PRI	END JOB	3031	9.16.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II
HASP-ITRMRMBQ.PRI	END JOB	3031	9.16.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II
HASP-ITRMRMBQ.PRI	END JOB	3031	9.16.19	AM	6	APR	77	BOX	0BU	AG40BURS	STYRON	RM99.PRI#A#HASP-II

USGS STEP-BACKWATER PROGRAM - VERSION 76.170 *** PAGE COUNT= 9, DATE= 4/ 5/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOE 10, 50, 100, 500 YR FLOODS DUM 1-D
INITIAL VALUES ARE: Q = 390. H = 3108.15

SECTID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

D KU/KD < 0.7 OR > 1.4

USED COMPUTED WSH

=====

WATER SURFACE PROFILE FOR: ROCKY KNIFE 10.50.100.5500 YR FLOODS DUM 1-D.

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	BEW
WS	ELEV	HV	HF	HE	FG	V	FM	ACC	*TD*
DUM 1	AT	2370	0	960	206	9929	1.04	17	143
		3108.75	0.35		3109.10	4.65	0.53		*TS*
DUM 2	AT	2580	210	960	228	10361	1.03	16	144
		3110.92	0.29	2.09	3111.20	4.21	0.57	0.010	*XS*
DUM 3	AT	2790	210	960	218	9703	1.04	16	144
		3112.84	0.31	1.93	3113.16	4.40	0.61	0.012	*XS*
A	AT	3000	210	960	221	9913	1.04	16	144
		3114.87	0.30	2.01	3115.17	4.34	0.59	0.003	*XS*
B	AT	3440	440	960	236	10113	1.06	26	176
		3118.95	0.27	4.04	3119.22	4.07	0.58	0.003	*XS*
C	AT	3790	350	960	209	8799	1.18	35	185
		3122.53	0.19	3.63	3122.91	4.59	0.65	0.013	*XS*
D	AT	4150	360	960	256	11554	1.04	28	178
		3125.92	0.23	3.24	3126.15	3.75	0.53	0.001	*XS*

=====

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10.50, 100 & 500 YR FLOODS DUM 150

PAGE 1 OF 1

=====

SECTION	AT DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEM	RFW							
	NS ELEV	HV	HF	HF	FG	V	RFW	ACC	STD						
DUM 1	AT 2370	/	0	/	760	/	205	/	8929	/	1.04	/	17	/	143
	3108.75	/	0.22	/		/	3108.97	/	3.68	/	0.42	/		/	*IS*
DUM 2	AT 2580	/	210	/	760	/	182	/	7427	/	1.06	/	19	/	142
	3110.56	/	0.29	/	1.83	/	0.03	/	3110.84	/	4.17	/	0.50	/	0.011 *XS*
DUM 3	AT 2790	/	210	/	760	/	192	/	8025	/	1.05	/	18	/	142
	3112.64	/	0.26	/	2.04	/	0.0	/	3112.89	/	3.96	/	0.47	/	0.013 *XS*
A	AT 3000	/	210	/	760	/	187	/	7723	/	1.06	/	19	/	142
	3114.60	/	0.27	/	1.96	/	0.01	/	3114.87	/	4.06	/	0.48	/	0.010 *XS*
B	AT 3440	/	440	/	760	/	201	/	8058	/	1.09	/	27	/	172
	3118.71	/	0.24	/	4.08	/	0.0	/	3118.95	/	3.77	/	0.57	/	0.003 *XS*
C	AT 3790	/	350	/	760	/	176	/	6909	/	1.21	/	40	/	181
	3122.36	/	0.35	/	3.63	/	0.06	/	3122.65	/	4.32	/	0.54	/	0.010 *XS*
D	AT 4150	/	350	/	760	/	221	/	9336	/	1.05	/	32	/	177
	3125.68	/	0.19	/	3.22	/	0.0	/	3125.98	/	3.44	/	0.51	/	0.002 *XS*

END OF THIS PROFILE

USGS STEP-BACKWATER PROGRAM - VERSION 76.170 *** PAGE COUNT= 14. DATE= 4/ 5/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOD : 10.50.100.5-00 YR FLOODS. DUM 1-0
INITIAL VALUES ARE: Q1 = 960. Q4 = 3108.35

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

DUM 2, KUZKO < 0.7 OR > 1.4

USED COMPUTED WSU

DUM 3, KUZKO < 0.7 OR > 1.4

USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOS 10.50.100.5500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECT	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
MS ELEV	HV	HF	HE	FG	V	FW	ACC	ID*	
DUM 1	AT	2370	0	960.	157.	5979.	1.10	21.	140.
3108.95		0.64			3108.99	6.11	0.797		*IS*
DUM 2	AT	2580	210	960.	268.	13324.	1.02	14.	145.
3111.23		0.20	2.43	0.0	3111.43	3.58	0.46	0.015	*XS*
DUM 3	AT	2790	210	960.	208.	9060.	1.04	17.	143.
3112.77		0.34	1.68	0.07	3113.11	4.41	0.54	0.005	*XS*
A	AT	3000	210	960.	227.	10285.	1.03	16.	144.
3114.91		0.29	2.08	0.0	3115.20	4.24	0.58	0.011	*XS*
B	AT	3440	440	960.	232.	9857.	1.06	25.	176.
3118.92		0.28	4.00	0.0	3119.20	6.14	0.60	0.004	*XS*
C	AT	3790	350	960.	211.	8921.	1.18	35.	185.
3122.54		0.38	3.67	0.05	3122.92	4.55	0.44	0.001	*XS*
D	AT	4150	360	960.	254.	11540.	1.04	28.	178.
3125.91		0.23	3.22	0.0	3126.14	3.77	0.53	0.001	*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100,6500 YR FLOODS DUM 1-0

PAGE 1 OF 1

=====

SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEM / RFW
 WS ELEV / HV / HF / HF / FG / M / FN / CG *TD*

=====

DUM 1 AT 2370 / 0 / 960. / 206. / 8929. / 1.04 / 17. / 143.
 3108.75 / 0.35 / / / 3109.10 / 4.65 / 0.53 / *IS*

DUM 2 AT 2580 / 210 / 960. / 223. / 10361. / 1.03 / 16. / 144.
 3110.92 / 0.29 / 2.09 / 0.0 / 3111.20 / 4.21 / 0.57 / 0.010 *XS*

DUM 3 AT 2790 / 210 / 960. / 218. / 9703. / 1.04 / 16. / 144.
 3112.64 / 0.31 / 1.93 / 0.01 / 3113.16 / 4.40 / 0.61 / 0.012 *XS*

A AT 3000 / 210 / 960. / 221. / 9913. / 1.04 / 16. / 144.
 3114.87 / 0.30 / 2.01 / 0.0 / 3115.17 / 4.34 / 0.59 / 0.003 *XS*

B AT 3440 / 440 / 960. / 236. / 10113. / 1.06 / 26. / 176.
 3118.95 / 0.27 / 4.04 / 0.0 / 3119.22 / 4.07 / 0.58 / 0.003 *XS*

C AT 3790 / 350 / 960. / 209. / 8799. / 1.18 / 35. / 185.
 3122.53 / 0.39 / 3.63 / 0.06 / 3122.91 / 4.59 / 0.65 / 0.013 *XS*

D AT 4150 / 360 / 960. / 256. / 11654. / 1.04 / 28. / 178.
 3125.92 / 0.23 / 3.24 / 0.0 / 3125.15 / 3.75 / 0.53 / 0.001 *XS*

END OF THIS PROFILE

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=E AT DISTANCE= 4267 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3125.0	33	1279	1.00	15	18	81	96	283
3125.5	41	1702	1.00	17	19	80	97	370
3126.0	50	2199	1.00	18	21	80	98	471
3126.5	60	2706	1.00	21	24	78	99	572
3127.0	71	3370	1.00	24	27	76	100	701
3127.5	83	4200	1.00	25	30	75	100	857
3128.0	97	5142	1.00	27	32	73	100	1032
3128.5	111	6200	1.00	29	34	71	100	1225
3129.0	126	7381	1.00	31	37	69	100	1438
3129.5	142	8773	1.00	32	39	68	100	1689
3130.0	158	10391	1.00	32	40	68	100	1983
3130.5	174	12098	1.00	32	41	68	100	2293
3131.0	190	13888	1.00	32	42	68	100	2617
3131.5	206	16956	1.00	32	43	68	100	2956
3132.0	222	20921	1.00	32	44	68	100	3307
3132.5	238	23647	1.00	32	45	68	100	3672
3133.0	254	26137	1.00	32	46	68	100	4049

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=F AT DISTANCE= 4720 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3128.5	26	716	1.00	22	23	126	149	165
3129.0	33	1236	1.02	32	34	117	149	234
3129.5	65	2172	1.17	62	64	89	150	349
3130.0	96	3710	1.07	63	65	89	151	652
3130.5	127	5699	1.02	64	67	89	152	1016
3131.0	159	8079	1.00	65	69	89	153	1421
3131.5	192	10814	1.00	66	70	89	154	1863
3132.0	225	13877	1.01	67	72	89	155	2341
3132.5	259	17813	1.00	67	73	89	156	2870
3133.0	292	22679	1.00	67	74	89	156	3452
3133.5	326	27297	1.00	67	75	89	156	4065
3133.9	353	30934	1.00	67	76	89	156	4580

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=9 AT DISTANCE= 5175 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2258	1.00	25	28	10	35	484
3134.5	69	3062	1.00	25	29	10	35	647
3135.0	82	3952	1.00	26	30	9	35	825
3135.5	95	4923	1.00	26	31	9	35	1020
3136.0	108	5972	1.00	27	33	8	35	1230
3136.5	122	7095	1.00	27	34	8	35	1454
3137.0	135	8289	1.00	28	35	7	35	1693
3137.5	149	9445	1.00	28	36	7	35	1958
3138.0	153	12685	1.00	28	37	7	35	2239
3138.4	175	14422	1.00	28	38	7	35	2473

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 "8" PAGE COUNT= 9, DATE= 6/15/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

SECID: ERROR (WARNING) MESSAGE; INTERMEDIATE RESULTS (IF ANY); ACTION TAKEN

F 1 KU/KD < 0.7 OR > 1.4

ALERTED USER

G 1 KU/KD < 0.7 OR > 1.4

ALERTED USER

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 10, DATE= 6/15/77

WATER-SURFACE PROFILE FOR: ROCKY KNDB 100-YEAR FLOODWAY E-G
PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS
*** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS FLEV	HV	HF	HE	EG	V	FN	AGC	*ID*	
E	AT	4267	0	960.	171.	11819.	1.00	68.	100.
		3130.42	0.49		3130.91	5.61	0.43		*IS*
F	AT	4720	453	880.	261.	18085.	1.00	89.	155.
		3132.53	0.18	5.79	0.0	3132.71	3.38	0.33	0.004 *XS*
G	AT	5175	455	880.	100.	5310.	1.00	8.	35.
		3135.69	0.21	3.67	0.52	3136.90	8.82	0.80	0.005 *XS*

END OF THIS PROFILE

SUMMARY OF ENCROACHMENTS FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 RESULTS OF THE FLOODWAY ANALYSIS ENTITLED 100-YEAR DISCHARGE (PROFILE
 NUMBER 1, UPSTREAM COMPUTATIONS) ARE COMPARED TO THE RESULTS OF THE
 BASE PROFILE (PROFILE NUMBER 1, UPSTREAM COMPUTATIONS). PAGE 1 OF 1

SECID	CARD 3 SEQUENCE	TYPE	ENCROACHMENT OPTION	ENCROACHMENT		SURCHARGE		CHANNEL WIDTH	
				LEFT	RIGHT	IDEAL	ACTUAL	NATURAL	FLOODWAY
E	100	1	VHD	CONS	YES	1.00	1.00	*****	32
F	110	1	VHD	YES	CONS	1.00	1.04	*****	67
G	120	0	VHD	CONS	CONS	1.00	0.67	*****	27

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
9 10005	100	VHD	100	68	100	312942		
9 10006	110	VHD	100	126	156	313149		
9 10007	120	VHD	100	7	35	313502		
9 10008		END					100-YEAR DISCHARGE	

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
5	0	5	0	5	0	5	0	5
1	1	ROCKY KNOB	100-YEAR FLOODWAY	A-0	4	1-02-05-12		
2	2	311585						
3	40	A	1 14 3 3111	3000 99 99				
4	41	960						
5	43	0	1 31178	15 1 31150	35 1 31127	48 2 31127	50 2 31096	
5	44	53	2 31096	56 2 31103	60 2 31123	64 2 31126	70 3 31136	
5	45	100	3 31133	135 3 31135	144 3 31149	150 3 31175		
6	47	1	2 045 045	4 5 060 050	1 2 045 045			
3	50	B	0 14 3 3115	3440 99 99				
5	53	0	1 31221	25 1 31191	30 1 31183	50 2 31175	60 2 31153	
5	54	61	2 31143	64 2 31139	68 2 31139	69 3 31177	100 3 31168	
5	55	140	3 31176	153 3 31182	175 3 31188	200 3 31221		
6	57	2	3 045 035	4 5 060 050	2 3 045 035			
3	60	C	0 13 3 3119	3790 99 99				
5	63	0	1 31251	30 1 31228	60 1 31213	89 2 31202	91 2 31186	
5	64	92	2 31172	95 2 31174	97 2 31177	101 3 31205	130 3 31213	
5	65	150	3 31216	184 3 31224	200 3 31251			
6	67	1	2 045 045	4 5 060 050	1 2 045 045			
3	70	D	0 12 3 3122	4150 99 99				
5	73	0	1 31276	30 1 31258	60 1 31240	87 2 31249	91 2 31207	
5	74	93	2 31201	96 2 31206	98 3 31247	103 3 31240	130 3 31239	
5	75	170	3 31244	200 3 31298				
6	77	1	2 045 045	5 6 060 050	1 2 045 045			

USGS STEP-BACKWATER PROGRAM -- VERSION 77.091 *** PAGE COUNT= 2 DATE= 6/15/77

INPUT SUMMARY FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D

4 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 4 TYPE 3 CARDS

KEPT 4 CROSS SECTIONS FOR EDITING

4 " " VALID FOR PROPERTY COMPUTATIONS

4 " " " " PROFILE " "

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=A AT DISTANCE= 3000 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	QC
3111.0	8	190	1.00	8	9	49	57	49
3111.5	13	358	1.00	10	11	49	58	85
3112.0	18	568	1.00	11	13	48	59	132
3112.5	24	767	1.00	15	17	48	63	176
3113.0	37	1153	1.10	34	36	32	66	207
3113.5	61	1927	1.20	96	99	28	135	252
3114.0	116	3910	1.19	115	117	24	138	609
3114.5	175	7014	1.07	122	125	19	141	1151
3115.0	238	11093	1.03	129	132	15	144	1910
3115.5	304	16226	1.01	133	136	12	145	2592
3116.0	371	22700	1.01	137	140	10	147	3447
3116.5	441	30406	1.03	141	144	7	148	4368
3117.0	512	38436	1.02	145	148	4	149	5403
3117.5	585	47165	1.02	148	152	2	150	6528
3117.8	630	52876	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=B AT DISTANCE= 3440 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	QC
3115.0	8	164	1.00	8	9	60	68	41
3115.5	12	304	1.00	9	11	59	68	75
3116.0	17	484	1.00	12	14	57	69	116
3116.5	23	731	1.00	14	17	55	69	172
3117.0	33	1067	1.07	33	36	52	110	178
3117.5	61	1804	1.29	78	82	50	135	260
3118.0	110	3628	1.19	111	115	37	149	567
3118.5	171	6499	1.11	135	139	29	164	1040
3119.0	244	10653	1.05	151	155	26	177	1713
3119.5	321	16269	1.03	159	162	22	180	2554
3120.0	403	24444	1.03	167	170	17	184	3492
3120.5	488	35629	1.04	175	178	13	188	4528
3121.0	577	48663	1.05	183	186	9	192	5672
3121.5	679	61268	1.05	190	195	5	195	6977
3122.0	768	75541	1.04	198	203	1	199	8415
3122.1	798	78608	1.03	200	204	0	200	8718

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=C AT DISTANCE= 3790 PART 1 OF 1

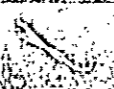
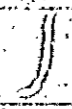
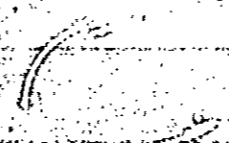
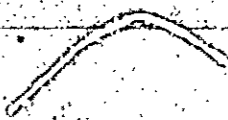
WS	A	K	ALPHA	B	P	LEW	REW	OC
3119.0	10	272	1.00	8	10	90	99	66
3119.5	15	446	1.00	10	11	90	100	105
3120.0	20	668	1.00	11	13	89	100	154
3120.5	27	972	1.06	20	22	81	101	174
3121.0	45	1571	1.31	51	53	68	119	208
3121.5	80	2724	1.45	94	96	56	150	345
3122.0	136	4989	1.30	126	128	46	172	702
3122.5	205	8554	1.18	149	151	36	185	1256
3123.0	283	13850	1.14	160	163	27	188	1990
3123.5	365	20441	1.12	170	172	21	191	2868
3124.0	452	27924	1.08	179	182	14	193	3918
3124.5	544	36561	1.06	189	191	8	196	5090
3125.0	641	46359	1.05	198	201	1	199	6385
3125.1	661	48462	1.05	200	203	0	200	6659

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=0 AT DISTANCE= 4150 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	OC
3122.0	9	252	1.00	7	8	90	97	63
3122.5	13	396	1.00	8	10	89	97	97
3123.0	17	569	1.00	8	11	89	97	138
3123.5	21	774	1.00	9	12	88	97	187
3124.0	28	1019	1.11	45	48	88	138	119
3124.5	67	1912	1.51	105	109	52	171	246
3125.0	127	4154	1.18	130	135	43	173	653
3125.5	194	7733	1.07	141	145	35	176	1253
3126.0	268	12445	1.04	152	157	27	179	1973
3126.5	347	18263	1.03	163	168	18	182	2820
3127.0	431	25400	1.03	174	179	10	184	3783
3127.5	521	33910	1.04	186	190	2	187	4861
3128.0	615	43909	1.03	190	195	0	190	6195
3128.5	711	54983	1.02	193	199	0	193	7681
3129.0	808	67121	1.01	196	202	0	196	9271
3129.5	907	80286	1.01	198	205	0	198	10961
3129.8	956	88662	1.00	200	207	0	200	12022

*** INPUT CARD PRINTOUT ***

5 1 2 3 4 5 6 7 8
0 0 0 0 0 0 0 0 0
7 10000 1
8 10001 1



*** INPUT CARD PRINTOUT ***

1 2 3 4 5 6 7 8
5 0 5 0 5 0 5 0 5 0 5 0 5 0

9 10005 40 VHD 100 48 70 311485
9 10006 50 VHD 100 50 69 311895
9 10007 60 VHD 100 89 101 312252
9 10008 70 VHD 100 87 98 312593
9 10009 END

100-YEAR DISCHARGE

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=A AT DISTANCE= 3000 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3111.0	8	198	1.00	8	9	49	57	49
3111.5	13	358	1.00	10	11	49	58	85
3112.0	18	568	1.00	11	13	48	59	132
3112.5	24	767	1.00	15	17	48	63	176
3113.0	33	1083	1.00	18	21	48	66	245
3113.5	45	1539	1.07	43	46	48	101	251
3114.0	71	2549	1.13	53	57	48	101	435
3114.5	97	4022	1.05	53	58	48	101	728
3115.0	124	5829	1.01	53	59	48	101	1065
3115.5	150	7920	1.00	53	60	48	101	1434
3116.0	177	10695	1.00	53	61	48	101	1830
3116.5	203	14045	1.01	53	62	48	101	2251
3117.0	230	17140	1.00	53	63	48	101	2710
3117.5	257	20323	1.00	53	64	48	101	3197
3117.8	273	22320	1.00	53	65	48	101	3500

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=B AT DISTANCE= 3440 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3115.0	8	164	1.00	8	9	60	68	41
3115.5	12	304	1.00	9	11	59	68	75
3116.0	17	484	1.00	12	14	57	69	116
3116.5	23	731	1.00	14	17	55	69	172
3117.0	31	1055	1.00	19	22	52	93	224
3117.5	45	1541	1.11	38	42	50	76	266
3118.0	67	2489	1.11	45	50	50	95	444
3118.5	90	3800	1.04	45	51	50	95	707
3119.0	113	5372	1.01	45	52	50	95	1003
3119.5	135	7368	1.00	45	53	50	95	1325
3120.0	158	10465	1.01	45	54	50	95	1665
3120.5	180	14063	1.02	45	55	50	95	2024
3121.0	203	16981	1.03	45	56	50	95	2405
3121.5	225	20083	1.04	45	57	50	95	2804
3122.0	248	23354	1.05	45	58	50	95	3224
3122.1	252	24027	1.05	45	59	50	95	3310

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=C AT DISTANCE= 3790 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3119.0	10	272	1.00	8	10	90	99	66
3119.5	15	446	1.00	10	11	90	100	105
3120.0	20	668	1.00	11	13	89	100	154
3120.5	26	948	1.00	12	14	89	101	216
3121.0	36	1371	1.15	30	33	89	119	212
3121.5	53	2096	1.13	32	36	89	121	358
3122.0	69	3051	1.05	32	37	89	121	555
3122.5	85	4258	1.02	32	38	89	121	774
3123.0	101	5852	1.02	32	39	89	121	1006
3123.5	117	7604	1.02	32	40	89	121	1258
3124.0	134	9240	1.02	32	41	89	121	1534
3124.5	150	10982	1.00	32	42	89	121	1825
3125.0	166	12820	1.00	32	43	89	121	2131
3125.1	169	13198	1.00	32	44	89	121	2194

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=D AT DISTANCE= 4150 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3122.0	9	252	1.00	7	8	90	97	63
3122.5	13	396	1.00	8	10	89	97	97
3123.0	17	569	1.00	8	11	89	97	138
3123.5	21	774	1.00	9	12	88	97	187
3124.0	28	1019	1.11	46	48	88	138	119
3124.5	51	1709	1.24	49	54	87	138	268
3125.0	77	2907	1.07	51	56	87	138	515
3125.5	102	4518	1.01	51	57	87	138	815
3126.0	127	6442	1.00	51	58	87	138	1143
3126.5	153	8641	1.01	51	59	87	138	1497
3127.0	178	11277	1.01	51	60	87	138	1884
3127.5	204	14354	1.00	51	61	87	138	2307
3128.0	229	17468	1.00	51	62	87	138	2750
3128.5	254	20632	1.01	51	63	87	138	3214
3129.0	280	23977	1.01	51	64	87	138	3698
3129.5	305	27490	1.02	51	65	87	138	4203
3129.8	320	29674	1.02	51	66	87	138	4515

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 9, DATE= 6/15/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 100-YEAR FLOODWAY 4-D
PROFILE NUMBER 1. UPSTREAM COMPUTATIONS

SECID; ERROR(WARNING) MESSAGE; INTERMEDIATE RESULTS(IF ANY); ACTION TAKEN

0 ; KU/KD < 0.7 OR > 1.4 ; ALERTED USER

WATER-SURFACE PROFILE FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS
*** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

SECTION	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW	WS-ELEV	HV	HF	HE	EG	V	FN	ACC	RID*
A	AT	3000	0	960	169	9794	1.00	42	101	3115.85	0.50			3116.35	5.68	0.49		31S*
B	AT	3440	440	960	155	10040	1.01	50	95	3119.94	0.60	4.12	0.05	3120.54	6.20	0.49	0.014	*XS*
C	AT	3790	350	960	124	8210	1.01	89	121	3123.69	0.95	3.91	0.17	3124.64	7.77	0.63	0.011	*XS*
D	AT	4150	360	960	195	13218	1.00	87	138	3127.32	0.38	3.06	0.0	3127.70	4.94	0.49	0.007	*XS*

END OF THIS PROFILE

SUMMARY OF ENCROACHMENTS FOR: ROCKY KNOR 100-YEAR FLOODWAY A-D
 RESULTS OF THE FLOODWAY ANALYSIS ENTITLED 100-YEAR DISCHARGE (PROFILE
 NUMBER 1, UPSTREAM COMPUTATIONS) ARE COMPARED TO THE RESULTS OF THE
 BASE PROFILE (PROFILE NUMBER 1, UPSTREAM COMPUTATIONS). PAGE 1 OF 1

SECID	CARD	SEQUENCE	TYPE	FW	ENCROACHMENT		SURCHARGE		CHANNEL WIDTH	
					OPTION	LEFT	RIGHT	IDEAL	ACTUAL	NATURAL
A	40	1	VHD	CONS	YES	1.00	1.00	*****	53	
B	50	0	VHD	CONS	YES	1.00	0.99	*****	45	
C	60	0	VHD	YES	YES	1.00	1.17	*****	32	
D	70	0	VHD	YES	YES	1.00	1.39	*****	51	

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
1	1	ROCKY KNOP	100-YEAR FLOODWAY	E-6	3	1	02	05 12
2	2	313042						
3	100	F	1 16 3 3125	4267 99 99				
4	101	D	960					
5	103		0 1 31316 30 1 31319 60 2 31293 90 2 31260 82 2 31237					
5	104		83 2 31227 88 2 31217 92 2 31219 93 2 31237 100 3 31268					
5	105		117 3 31279 145 3 31284 150 3 31285 175 3 31295 200 3 31311					
5	106		225 3 31330					
6	109	F	1 2 045 045 6 7 050 050 1 2 045 045					
3	110	F	1 17 3 3128	4720 99 99				
4	111		860					
5	112		0 1 31339 10 1 31318 50 1 31290 100 1 31292 125 2 31289					
5	113		129 2 31262 133 2 31259 135 2 31261 139 2 31278 148 2 31284					
5	114		156 3 31324 200 3 31332					
6	117	F	1 2 045 045 4 5 060 050 1 2 045 045					
3	120	G	0 14 2 3132	5175 99 99				
5	123		0 1 31379 7 1 31371 11 1 31333 14 1 31301 14 1 31297					
5	124		19 1 31302 22 1 31304 24 1 31321 29 1 31326 35 2 31340					
5	125		77 2 31344 110 2 31366 150 2 31371 200 2 31384					
6	127	F	5 6 060 050 2 3 050 045					

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 2 DATE= 6/15/77

INPUT SUMMARY FOR: ROCKY KNOR 100-YEAR FLOODWAY F-6

3 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 3 TYPE 3 CARDS

KEPT 3 CROSS SECTIONS FOR EDITING

3 " " VALID FOR PROPERTY COMPUTATIONS

3 " " " " PROFILE "

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=E AT DISTANCE= 4267 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3125.0	33	1279	1.00	15	18	81	96	283
3125.5	41	1702	1.00	17	19	80	97	370
3126.0	50	2199	1.00	18	21	80	98	471
3126.5	60	2706	1.00	21	24	78	99	572
3127.0	72	3372	1.01	27	30	75	103	661
3127.5	87	4262	1.05	36	40	75	111	750
3128.0	108	5378	1.10	50	53	73	123	860
3128.5	140	6893	1.19	79	83	71	150	972
3129.0	184	9196	1.18	93	97	69	163	1344
3129.5	234	12307	1.15	110	114	65	175	1807
3130.0	293	16516	1.12	125	129	58	183	2398
3130.5	359	21591	1.11	140	144	50	191	3096
3131.0	433	27605	1.10	155	159	43	198	3911
3131.5	514	35965	1.13	169	173	36	205	4787
3132.0	610	45997	1.22	212	216	0	212	5314
3132.5	717	56876	1.21	218	223	0	218	6709
3133.0	828	68788	1.18	225	230	0	225	8299

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=F AT DISTANCE= 4720 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3128.5	26	716	1.00	22	23	126	148	165
3129.0	38	1236	1.02	32	34	117	149	234
3129.5	53	2497	1.31	107	109	43	150	362
3130.0	139	4951	1.10	115	117	36	151	821
3130.5	190	8361	1.03	124	126	20	152	1406
3131.0	262	12663	1.01	132	134	21	153	2092
3131.5	330	17839	1.00	140	142	14	154	2877
3132.0	402	24054	1.00	146	149	9	155	3784
3132.5	476	31962	1.00	155	157	7	162	4737
3133.0	561	41601	1.03	185	187	4	189	5471
3133.5	659	52088	1.06	198	201	2	200	6628
3133.9	738	61198	1.06	200	203	0	200	7810

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=G AT DISTANCE= 5175

100-YEAR FLOODWAY F-6
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	OC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2254	1.00	25	28	10	35	484
3134.5	82	3264	1.20	69	72	10	79	460
3135.0	114	4905	1.22	77	80	9	86	750
3135.5	158	7096	1.17	85	88	9	94	1136
3136.0	203	9826	1.12	93	97	8	101	1605
3136.5	251	13109	1.09	101	105	8	109	2156
3137.0	309	15938	1.16	135	139	7	142	2462
3137.5	384	19997	1.12	162	166	3	165	3173
3138.0	471	25430	1.07	185	189	0	185	4118
3138.4	548	31748	1.07	200	205	0	200	4972

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 5 DATE= 6/15/77

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
5	0	5	0	5	0	5	0	5
7	10000			1				
8	10001			1				

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
9 10005	100	VHD	100	68	100	312942		
9 10006	110	VHD	100	126	156	313149		
9 10007	120	VHD	100	7	35	313502		
9 10008	END		100-YEAR DISCHARGE					

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
1	1	ROCKY KNOR	FLOOD PROFILES	J-K	2	4	02	05.15
2	2	313876	314149	314179	314231			
3	150	J	1	20	3	3138	5539	99.99
4	151		300	610	780	1300		
5	153		40	1	31450	40	1	31430
5	154		125	1	31385	135	2	31376
5	155		150	2	31337	157	2	31336
5	156		225	3	31407	250	3	31407
6	158	1	2	030	030	1	2	045
3	160	K	0	16	3	3140	5850	99.99
5	163		22	1	31500	0	1	31457
5	164		100	1	31415	150	1	31418
5	165		176	2	31387	179	3	31415
5	166		282	3	31500			
6	167	1	2	040	040	1	2	050

Robinson
Not used

Don't Use

INPUT SUMMARY FOR: ROCKY KNOR FLOOD PROFILES J-K

2 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 2 TYPE 3 CARDS

KEPT 2 CROSS SECTIONS FOR EDITING

2 " " VALID FOR PROPERTY COMPUTATIONS

2 " " " " PROFILE "

CROSS-SECTION PROPERTIES FOR: ROCKY KNOR
 SECID=J AT DISTANCE= 5539

FLOOD PROFILES

J-K
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	QC
3138.0	75	4633	1.01	30	33	131	161	664
3138.5	92	6093	1.04	36	39	125	161	810
3139.0	116	7895	1.13	62	65	100	162	858
3139.5	155	10518	1.22	93	97	69	162	1025
3140.0	210	14609	1.23	127	131	44	172	1379
3140.5	291	20494	1.21	158	162	29	187	1938
3141.0	391	28250	1.26	239	243	15	254	2426
3141.5	506	39023	1.25	260	264	0	260	3577
3142.0	641	52492	1.21	280	284	-12	267	5000
3142.5	786	68531	1.17	300	304	-26	273	6664
3143.0	941	87177	1.14	320	324	-39	280	8559
3143.5	1101	111309	1.11	320	325	-39	280	10982
3144.0	1261	137966	1.09	320	326	-39	280	13569
3144.5	1421	167004	1.08	320	327	-39	280	16310
3145.0	1581	198303	1.08	320	328	-39	280	19197

CROSS-SECTION PROPERTIES FOR: ROCKY KNOR
 SECID=K AT DISTANCE= 5850

FLOOD PROFILES

J-K
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	QC
3140.0	7	211	1.00	5	7	172	177	47
3140.5	10	331	1.00	6	9	172	178	74
3141.0	13	478	1.01	9	12	170	178	91
3141.5	24	772	1.44	45	49	157	203	85
3142.0	81	2143	1.62	157	161	50	207	259
3142.5	167	5694	1.14	187	191	25	212	840
3143.0	266	11421	1.03	203	207	13	217	1497
3143.5	370	19175	1.01	211	214	11	221	2756
3144.0	477	28645	1.01	218	222	8	226	3971
3144.5	598	39754	1.02	225	229	5	230	5337
3145.0	702	52526	1.02	232	236	3	235	6851
3145.5	820	66844	1.03	239	243	1	239	8503
3146.0	941	82618	1.03	245	249	-1	244	10283
3146.5	1065	99847	1.04	252	257	-3	249	12193
3147.0	1193	118525	1.04	260	264	-6	253	14225
3147.5	1325	139661	1.04	267	271	-8	258	16381
3148.0	1460	160287	1.05	274	279	-11	263	18666
3148.5	1599	183408	1.05	282	286	-13	267	21081
3149.0	1742	208028	1.05	289	294	-16	272	23625
3149.5	1888	234156	1.06	297	301	-18	277	26300
3150.0	2038	261804	1.06	304	309	-21	282	29105

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOR FLOOD PROFILES J-K
INITIAL VALUES ARE: O = 300. H = 3138.76

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

K KU/KD < 0.7 OR > 1.4

,USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K

PAGE 1 OF 1

=====

SECID	AT	DIS	LEN	DIS	AREA	CON	ALP	LEW	REW
WS	FLEV	HV	HF	HE	EG	V	EN	ACC	RID#
J	AT	5539	0	300.	103.	6941.	1.09	112.	161.
		3138.76	0.14		3138.90	2.92	0.29		815#

K	AT	5850	311	300.	42.	1100.	1.94	78.	205.
		3141.72	1.55	3.67	0.71	3143.28	7.17	1.28	-0.001

Critical =
3142.03

Super Critical

USE Sequent Depth
= 3142.59

END OF THIS PROFILE

1.0

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOR FLOOD PROFILES J-K
INITIAL VALUES ARE: Q = 610, H = 3141.49

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

K, ~~FRDN FAILURE~~ WS = 3141.83 FN = 2.02
K, ~~KU/KD < 0.7 OR > 1.4~~ USED HIGHER WS
USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOR FLOOD PROFILES J-K

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	FG	V	FN	ACC	#ID#	
J	AT	5539	0	610.	503.	38773.	1.25	0.	260.
3141.40		0.03		3141.52		1.21	0.15		*IS*

Critical =	K	AT	5850	311	610.	103.	2929.	1.40	43.	209.	
3142.30		3142.14		0.76	1.02	0.37	3142.90	5.91	1.21	-0.006	*XS*
		Super-Critical									

USE Sequent Depth
= 3/42.80'

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOL FLOOD PROFILES J-K
INITIAL VALUES ARE: Q = 780. H = 3141.79

SECID ERROR OR WARNING MESSAGE INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

K FROM FAILURE

WS = 3141.84 FN = 2.54

USED HIGHER WS

K KU/KD < 0.7 OR > 1.4

USED COMPUTED WSU

=====

WATER SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K

=====

PAGE 1 OF 1

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW	
MS ELEV	HV	HE	HE	EG	V	FN	ACC	#ID#		
U	AT	5539	0	780	583	46518	1.23	-8	264	
3141.79	0.07			3141.82	1.34	0.17		#IS#		
Critical =	K	AT	5850	311	780	149	4834	1.18	30	211
3142.45	0.51	0.84	0.24	3142.91	5.24	0.99	0.004	#XS#		

END OF THIS PROFILE

Handwritten notes: 1.00 11.00

||

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB FLOOD PROFILES J-K
INITIAL VALUES ARE: D = 1300. H = 3142.31

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

K .KUZKD < 0.7 OR > 1.4

.USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K

PAGE 1 OF 1

=====

SECID AT DISTANCE / LENGTH / DISCHARGE / AREA / CONVEYANCE / ALPHA / LEW / REW

WS ELEV / HV / HF / HE / EG / V / EN / ACC / SID*

J AT 5539 / 0 / 1300. / 729. / 62126. / 1.18 / -22. / 271.

3142.31 / 0.06 / / / 3142.37 / 1.78 / 0.21 / *IS*

K AT 5850 / 311 / 1300. / 253. / 10546. / 1.04 / 14. / 216.

3142.94 / 0.43 / 0.80 / 0.18 / 3143.36 / 5.14 / 0.83 / 0.008 *XS*

Critical = ^{DIC} K
3142.77

END OF THIS PROFILE

$$V_c = \frac{1}{2} (V_3 + V_2)$$

$$V_c = \frac{1}{2} (9.3 + 0.06) = 4.68$$

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0								
1	1	ROCKY KNOB		100-YEAR FLOODWAY		F-6		2 1 02 05 12
2	2	313242						
3	110	F	1 12	3 3128		4720 99 99		
4	111	880						
5	112	0	1 31339	10 1 31318	50 1 31290	100 1 31292	126 2 31289	
5	113	129	2 31262	133 2 31259	135 2 31261	138 2 31278	148 2 31284	
5	114	156	3 31324	200 3 31332				
6	117	1	2 045 045	4 5 060 050	1 2 045 045			
4	120	6	0 14	2 3132		5175 99 99		
5	123	0	1 31379	7 1 31371	11 1 31333	14 1 31301	14 1 31297	
5	124	19	1 31302	22 1 31304	24 1 31321	29 1 31326	35 2 31340	
5	125	77	2 31344	110 2 31366	150 2 31371	200 2 31384		
6	127	5	6 060 050	2 3 050 045				

INPUT SUMMARY FOR: ROCKY KNOB 100-YEAR FLOODWAY F-G

2 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 2 TYPE 3 CARDS

KEPT 2 CROSS SECTIONS FOR EDITING

2 " " VALID FOR PROPERTY COMPUTATIONS

2 " " " PROFILE "

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=F AT DISTANCE= 4720

100-YEAR FLOODWAY F-G
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3128.5	26	716	1.00	22	23	126	148	165
3129.0	38	1236	1.02	32	34	117	149	234
3129.5	83	2497	1.31	107	109	43	150	362
3130.0	139	4951	1.10	115	117	36	151	821
3130.5	199	8361	1.03	124	126	29	152	1406
3131.0	262	12663	1.01	132	134	21	153	2092
3131.5	330	17839	1.00	140	142	14	154	2877
3132.0	402	24054	1.00	146	149	9	155	3784
3132.5	476	31962	1.00	155	157	7	162	4737
3133.0	561	41601	1.03	185	187	4	189	5471
3133.5	659	52088	1.06	198	201	2	200	6628
3133.9	738	61198	1.06	200	203	0	200	7810

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=G AT DISTANCE= 5175

100-YEAR FLOODWAY F-G
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2258	1.00	25	28	10	35	484
3134.5	82	3264	1.20	69	72	10	79	460
3135.0	118	4905	1.22	77	80	9	86	750
3135.5	158	7096	1.17	85	88	9	94	1136
3136.0	203	9826	1.12	93	97	8	101	1605
3136.5	251	13109	1.09	101	105	8	109	2156
3137.0	309	15938	1.16	135	139	7	142	2462
3137.5	384	19997	1.12	162	166	3	165	3173
3138.0	471	25430	1.07	185	189	0	185	4118
3138.4	548	31748	1.07	200	205	0	200	4972

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0.....5.....0								
7 10000			1					
8 10001			1					

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=F AT DISTANCE= 4720
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

100-YEAR FLOODWAY F-6
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3128.5	26	716	1.00	22	23	126	148	165
3129.0	38	1236	1.02	32	34	117	149	234
3129.5	63	2225	1.21	70	72	80	150	346
3130.0	103	3935	1.08	71	74	80	151	682
3130.5	139	6180	1.02	72	76	80	152	1088
3131.0	176	8888	1.00	73	77	80	153	1542
3131.5	212	12031	1.00	74	79	80	154	2042
3132.0	249	15772	1.00	74	80	80	154	2596
3132.5	286	20511	1.00	74	81	80	154	3197
3133.0	323	25693	1.00	74	82	80	154	3833
3133.5	360	30508	1.00	74	83	80	154	4512
3133.9	390	34563	1.00	74	84	80	154	5080

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=G AT DISTANCE= 5175
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

100-YEAR FLOODWAY F-6
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2258	1.00	25	28	10	35	484
3134.5	82	3264	1.20	69	72	10	79	460
3135.0	118	4905	1.22	77	80	9	86	750
3135.5	157	7180	1.13	77	81	9	86	1189
3136.0	195	9924	1.07	77	82	9	86	1701
3136.5	234	13192	1.03	77	83	9	86	2274
3137.0	272	17392	1.01	77	84	9	86	2890
3137.5	311	22775	1.01	77	85	9	86	3524
3138.0	349	28313	1.01	77	86	9	86	4190
3138.4	380	32327	1.01	77	87	9	86	4769

USGS STEP-BACKWATER PROGRAM - VERSION 77.180 *** PAGE COUNT= 7,DATE=12/21/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 100-YEAR FLOODWAY F-6
PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

SECID: ERROR(WARNING) MESSAGE: INTERMEDIATE RESULTS(IF ANY); ACTION TAKEN

G ! KU/KD < 0.7 OR > 1.4

ALERTED USER

WATER-SURFACE PROFILE FOR: ROCKY KNOB 100-YEAR FLOODWAY F-6
PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS.
*** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

SECID	AT DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW	WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID*
F	4720	0	880.	281.	19703.	1.00	80.	154.	3132.42	0.15			3132.57	3.14	0.30		*IS*
G	5175	455	880.	134.	5766.	1.19	9.	86.	3135.20	0.80	3.10	0.32	3136.00	6.58	0.75	0.005	*XS*

END OF THIS PROFILE

SUMMARY OF ENCROACHMENTS FOR: ROCKY KNOB 100-YEAR FLOODWAY F-6
 RESULTS OF THE FLOODWAY ANALYSIS ENTITLED 100-YEAR DISCHARGE (PROFILE
 NUMBER 1, UPSTREAM COMPUTATIONS) ARE COMPARED TO THE RESULTS OF THE
 BASE PROFILE (PROFILE NUMBER 1, UPSTREAM COMPUTATIONS). PAGE 1 OF 1

SECID	CARD 3 SEQUENCE	TYPE	FW OPTION	ENCROACHMENT		SURCHARGE		CHANNEL WIDTH	
				LEFT	RIGHT	IDEAL	ACTUAL	NATURAL	FLOODWAY
F	110	1	HOR	YES	YES	*****	0.93	*****	74
G	120	0	HOR	YES	YES	*****	0.18	*****	77

SUMMARY OF ENCROACHMENTS FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 RESULTS OF THE FLOODWAY ANALYSIS ENTITLED 100-YEAR DISCHARGE (PROFILE
 NUMBER 1, UPSTREAM COMPUTATIONS) ARE COMPARED TO THE RESULTS OF THE
 BASE PROFILE (PROFILE NUMBER 1, UPSTREAM COMPUTATIONS), PAGE 1 OF 1

SECID	CARD 3 SEQUENCE	TYPE	FW OPTION	ENCROACHMENT		SURCHARGE		CHANNEL WIDTH	
				LEFT	RIGHT	IDEAL	ACTUAL	NATURAL	FLOODWAY
F	100	1	VHD	CONS	YES	1.00	1.00	*****	32
F	110	1	HOR	YES	YES	*****	0.93	*****	74
G	120	0	HOR	YES	YES	*****	0.46	*****	26

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 10, DATE= 6/16/77

WATER-SURFACE PROFILE FOR: ROCKY KNOB 100-YEAR FLOODWAY E-0

PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

*** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

```
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
WS-ELEV / HV / HF / HE / EG / V / FN / ACC *ID*
=====
E AT 4267 / 0 / 960. / 171. / 11819. / 1.00 / 68. / 100.
3130.42 / 0.49 / / / 3130.91 / 5.61 / 0.43 / *IS*
-----
F AT 4720 / 453 / 880. / 281. / 19703. / 1.00 / 80. / 154.
3132.42 / 0.15 / 1.65 / 0.0 / 3132.57 / 3.14 / 0.30 / 0.016 *XS*
-----
G AT 5175 / 455 / 880. / 94. / 4890. / 1.00 / 9. / 35.
3135.48 / 1.36 / 3.66 / 0.60 / 3136.84 / 9.34 / 0.87 / 0.004 *XS*
=====
```

END OF THIS PROFILE

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 9, DATE= 6/16/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB . 100-YEAR FLOODWAY E-G
PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

SECID: ERROR (WARNING) MESSAGE: INTERMEDIATE RESULTS (IF ANY): ACTION TAKEN

F : KU/KD < 0.7 OR > 1.4

ALERTED USER

G : KU/KD < 0.7 OR > 1.4

ALERTED USER

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-6
 SECID=0 AT DISTANCE= 5175 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2258	1.00	25	28	10	35	484
3134.5	69	3062	1.00	25	29	10	35	647
3135.0	82	3952	1.00	26	30	9	35	825
3135.5	95	4934	1.00	26	31	9	35	1026
3136.0	108	5986	1.00	26	32	9	35	1244
3136.5	121	7091	1.00	26	33	9	35	1476
3137.0	134	8446	1.00	26	34	9	35	1720
3137.5	147	10573	1.00	26	35	9	35	1977
3138.0	160	12808	1.00	26	36	9	35	2245
3138.4	170	14021	1.00	26	37	9	35	2468

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-G
 SECID=E AT DISTANCE= 4267 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3125.0	33	1279	1.00	15	18	81	96	283
3125.5	41	1702	1.00	17	19	80	97	370
3126.0	50	2199	1.00	18	21	80	98	471
3126.5	60	2706	1.00	21	24	78	99	572
3127.0	71	3370	1.00	24	27	76	100	701
3127.5	83	4200	1.00	25	30	75	100	857
3128.0	97	5142	1.00	27	32	73	100	1032
3128.5	111	6200	1.00	29	34	71	100	1225
3129.0	126	7381	1.00	31	37	69	100	1438
3129.5	142	8773	1.00	32	39	68	100	1689
3130.0	158	10391	1.00	32	40	68	100	1983
3130.5	174	12098	1.00	32	41	68	100	2293
3131.0	190	13888	1.00	32	42	68	100	2617
3131.5	206	16956	1.00	32	43	68	100	2956
3132.0	222	20921	1.00	32	44	68	100	3307
3132.5	238	23647	1.00	32	45	68	100	3672
3133.0	254	26137	1.00	32	46	68	100	4049

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY E-G
 SECID=F AT DISTANCE= 4720 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3129.5	26	716	1.00	22	23	126	148	165
3129.0	38	1236	1.02	32	34	117	149	234
3129.5	68	2225	1.21	70	72	80	150	346
3130.0	103	3935	1.08	71	74	80	151	682
3130.5	139	6180	1.02	72	76	80	152	1088
3131.0	176	8888	1.00	73	77	80	153	1542
3131.5	212	12031	1.00	74	79	80	154	2042
3132.0	249	15772	1.00	74	80	80	154	2596
3132.5	286	20511	1.00	74	81	80	154	3197
3133.0	323	25693	1.00	74	82	80	154	3833
3133.5	360	30508	1.00	74	83	80	154	4512
3133.9	390	34563	1.00	74	84	80	154	5080

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....
9 10005	100 VHD	100 68	100 312942					
9 10006	110 HOR	100 80	154 313149					
9 10007	120 HOR	100 9	35 313502					
9 10008	END		100-YEAR DISCHARGE					

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=G AT DISTANCE= 5175

100-YEAR FLOODWAY

E-G
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3132.0	19	569	1.00	12	14	12	24	133
3132.5	25	781	1.00	16	18	12	28	180
3133.0	34	1157	1.00	19	22	11	31	260
3133.5	45	1652	1.00	22	25	11	33	362
3134.0	56	2258	1.00	25	28	10	35	484
3134.5	82	3264	1.20	59	72	10	79	460
3135.0	110	4905	1.22	77	80	9	86	750
3135.5	158	7096	1.17	85	88	9	94	1136
3136.0	203	9826	1.12	93	97	8	101	1605
3136.5	251	13109	1.09	101	105	8	109	2156
3137.0	309	15938	1.16	135	139	7	142	2462
3137.5	384	19997	1.12	162	166	3	165	3173
3138.0	471	25430	1.07	185	189	0	185	4118
3138.A	548	31748	1.07	200	205	0	200	4972

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=E AT DISTANCE= 4267

100-YEAR FLOODWAY
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3125.0	33	1279	1.00	15	18	81	96	283
3125.5	41	1702	1.00	17	19	80	97	370
3126.0	50	2199	1.00	18	21	80	98	471
3126.5	60	2706	1.00	21	24	78	99	572
3127.0	72	3372	1.01	27	30	76	103	661
3127.5	87	4262	1.05	36	40	75	111	750
3128.0	108	5378	1.10	50	53	73	123	860
3128.5	140	6893	1.19	79	83	71	150	972
3129.0	184	9196	1.19	93	97	69	163	1344
3129.5	234	12307	1.15	110	114	65	175	1807
3130.0	293	16516	1.12	125	129	58	183	2398
3130.5	359	21591	1.11	140	144	50	191	3096
3131.0	433	27605	1.10	155	159	43	198	3911
3131.5	514	35965	1.13	169	173	36	205	4787
3132.0	610	45997	1.22	212	216	0	212	5314
3132.5	717	56876	1.21	218	223	0	218	6709
3133.0	828	68788	1.18	225	230	0	225	8299

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=F AT DISTANCE= 4720

100-YEAR FLOODWAY
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3128.0	17	453	1.00	14	16	127	141	106
3128.5	26	716	1.00	22	23	126	148	165
3129.0	38	1236	1.02	32	34	117	149	234
3129.5	83	2497	1.31	107	109	43	150	362
3130.0	139	4951	1.10	115	117	36	151	821
3130.5	199	8361	1.03	124	126	29	152	1406
3131.0	262	12663	1.01	132	134	21	153	2092
3131.5	330	17839	1.00	140	142	14	154	2877
3132.0	402	24054	1.00	146	149	9	155	3784
3132.5	476	31962	1.00	155	157	7	162	4737
3133.0	561	41601	1.03	185	187	4	189	5471
3133.5	659	52088	1.06	198	201	2	200	6628
3133.9	738	61198	1.06	200	203	0	200	7810

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 2 DATE= 6/16/77

INPUT SUMMARY FOR: ROCKY-KNOB 100-YEAR-FLOODWAY E-G

3 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 3 TYPE 3 CARDS

KEPT 3 CROSS SECTIONS FOR EDITING

3 " " VALID FOR PROPERTY COMPUTATIONS

3 " " " " PROFILE "

SUMMARY OF ENCROACHMENTS FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 RESULTS OF THE FLOODWAY ANALYSIS ENTITLED 100-YEAR DISCHARGE (PROFILE
 NUMBER 1, UPSTREAM COMPUTATIONS) ARE COMPARED TO THE RESULTS OF THE
 BASE PROFILE (PROFILE NUMBER 1, UPSTREAM COMPUTATIONS). PAGE 1 OF 1

SECID	CARD 3 SEQUENCE	FW TYPE	FW OPTION	ENCROACHMENT		SURCHARGE		CHANNEL WIDTH	
				LEFT	RIGHT	IDEAL	ACTUAL	NATURAL	FLOODWAY
A	40	1	VHD	CONS	YES	1.00	1.00	*****	53
B	50	0	VHD	CONS	YES	1.00	0.99	*****	45
C	60	0	HOR	YES	YES	*****	0.77	*****	45
D	70	0	HOR	YES	YES	*****	0.77	*****	68

WATER-SURFACE PROFILE FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

*** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID*	
A	AT	3000	0	960.	169.	9794.	1.00	48.	101.
3115.85	0.50			3116.35	5.68	0.49		*IS*	
B	AT	3440	440	960.	155.	10040.	1.01	50.	95.
3119.94	0.60	4.12	0.05	3120.54	6.20	0.49	0.014	*XS*	
C	AT	3790	350	960.	145.	9405.	1.07	80.	125.
3123.29	0.73	3.42	0.07	3124.02	6.63	0.62	0.000	*XS*	
D	AT	4150	360	960.	199.	11599.	1.02	70.	138.
3126.70	0.37	3.04	0.0	3127.07	4.83	0.55	0.003	*XS*	

END OF THIS PROFILE

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=C AT DISTANCE= 3790 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3119.0	10	272	1.00	8	10	90	99	66
3119.5	15	446	1.00	10	11	90	100	105
3120.0	20	668	1.00	11	13	89	100	154
3120.5	27	972	1.06	20	22	81	101	174
3121.0	42	1553	1.21	39	42	80	119	225
3121.5	64	2558	1.18	45	49	80	125	401
3122.0	87	3933	1.08	45	50	80	125	655
3122.5	109	5667	1.05	45	51	80	125	942
3123.0	132	7913	1.06	45	52	80	125	1243
3123.5	154	10414	1.06	45	53	80	125	1568
3124.0	177	12848	1.05	45	54	80	125	1936
3124.5	199	15462	1.04	45	55	80	125	2326
3125.0	222	18242	1.04	45	56	80	125	2737
3125.1	226	18816	1.04	45	56	80	125	2821

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=D AT DISTANCE= 4150 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3122.0	9	252	1.00	7	8	90	97	63
3122.5	13	396	1.00	8	10	89	97	97
3123.0	17	569	1.00	8	11	89	97	138
3123.5	21	774	1.00	9	12	88	97	187
3124.0	28	1019	1.11	45	48	88	138	119
3124.5	52	1714	1.25	54	59	75	138	257
3125.0	83	3032	1.13	68	74	70	138	491
3125.5	117	5020	1.05	68	75	70	138	850
3126.0	151	7483	1.03	68	76	70	138	1263
3126.5	185	10353	1.02	68	77	70	138	1719
3127.0	219	13794	1.01	68	78	70	138	2216
3127.5	253	17808	1.02	68	79	70	138	2750
3128.0	287	21947	1.02	68	80	70	138	3323
3128.5	321	26210	1.01	68	81	70	138	3933
3129.0	355	30737	1.01	68	82	70	138	4576
3129.5	389	35509	1.01	68	83	70	138	5250
3129.8	410	38483	1.01	68	84	70	138	5667

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=A AT DISTANCE= 3000 PART 1 OF 2
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3111.0	8	198	1.00	8	9	49	57	49
3111.5	13	358	1.00	10	11	49	58	85
3112.0	18	560	1.00	11	13	48	59	132
3112.5	24	767	1.00	15	17	48	63	176
3113.0	33	1083	1.00	18	21	48	66	245
3113.5	45	1539	1.07	43	46	48	101	251
3114.0	71	2549	1.13	53	57	48	101	435
3114.5	97	4022	1.05	53	58	48	101	728
3115.0	124	5829	1.01	53	59	48	101	1065
3115.5	150	7920	1.00	53	60	48	101	1434
3116.0	177	10695	1.00	53	61	48	101	1830
3116.5	203	14045	1.01	53	62	48	101	2251
3117.0	230	17140	1.00	53	63	48	101	2710
3117.5	257	20323	1.00	53	64	48	101	3197
3117.8	273	22320	1.00	53	65	48	101	3500

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=B AT DISTANCE= 3440 PART 1 OF 1
 *** FLOODWAY ANALYSIS *** 100-YEAR DISCHARGE

WS	A	K	ALPHA	B	P	LEW	REW	QC
3115.0	8	164	1.00	8	9	60	68	41
3115.5	12	304	1.00	9	11	59	68	75
3116.0	17	484	1.00	12	14	57	69	116
3116.5	23	731	1.00	14	17	55	69	172
3117.0	31	1055	1.00	19	22	52	93	228
3117.5	45	1541	1.11	38	42	50	76	266
3118.0	67	2489	1.11	45	50	50	95	444
3118.5	90	3800	1.04	45	51	50	95	707
3119.0	113	5372	1.01	45	52	50	95	1003
3119.5	135	7368	1.00	45	53	50	95	1325
3120.0	158	10465	1.01	45	54	50	95	1665
3120.5	180	14063	1.02	45	55	50	95	2024
3121.0	203	16981	1.03	45	56	50	95	2405
3121.5	225	20083	1.04	45	57	50	95	2805
3122.0	248	23354	1.05	45	58	50	95	3224
3122.1	252	24027	1.05	45	59	50	95	3310

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....	0.....5.....
7 10000			1					
8 10001			1					

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=C AT DISTANCE= 3790 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3119.0	10	272	1.00	8	10	90	99	66
3119.5	15	446	1.00	10	11	90	100	105
3120.0	20	668	1.00	11	13	89	100	154
3120.5	27	972	1.06	20	22	81	101	174
3121.0	45	1571	1.31	51	53	68	119	208
3121.5	80	2724	1.45	94	96	56	150	345
3122.0	136	4989	1.30	126	128	46	172	702
3122.5	205	8554	1.18	149	151	36	185	1256
3123.0	283	13850	1.14	160	163	27	188	1990
3123.5	365	20441	1.12	170	172	21	191	2868
3124.0	452	27924	1.08	179	182	14	193	3918
3124.5	544	36561	1.06	189	191	8	196	5090
3125.0	641	46359	1.05	198	201	1	199	6385
3125.1	661	48462	1.05	200	203	0	200	6659

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=D AT DISTANCE= 4150 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3122.0	9	252	1.00	7	8	90	97	63
3122.5	13	396	1.00	8	10	89	97	97
3123.0	17	569	1.00	7	11	89	97	138
3123.5	21	774	1.00	9	12	88	97	187
3124.0	28	1019	1.11	45	48	88	138	119
3124.5	67	1912	1.51	105	109	52	171	246
3125.0	127	4154	1.18	130	135	43	173	653
3125.5	194	7733	1.07	141	146	35	176	1253
3126.0	268	12445	1.04	152	157	27	179	1977
3126.5	347	18263	1.03	163	168	18	182	2820
3127.0	431	25400	1.03	174	179	10	184	3783
3127.5	521	33910	1.04	186	190	2	187	4861
3128.0	615	43909	1.03	190	195	0	190	6195
3128.5	711	54983	1.02	193	199	0	193	7681
3129.0	808	67121	1.01	196	202	0	196	9271
3129.5	907	80286	1.01	198	204	0	198	10961
3129.6	966	88662	1.00	200	207	0	200	12022

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=A AT DISTANCE= 3000 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3111.0	8	198	1.00	8	9	49	57	49
3111.5	13	358	1.00	10	11	49	58	85
3112.0	18	568	1.00	11	13	48	59	132
3112.5	24	767	1.00	15	17	48	63	176
3113.0	37	1153	1.10	34	36	32	66	207
3113.5	61	1927	1.20	96	99	28	135	252
3114.0	116	3910	2.19	115	117	24	138	609
3114.5	175	7014	1.07	122	125	19	141	1151
3115.0	238	11093	1.03	129	132	15	144	1810
3115.5	304	16226	1.01	133	136	12	145	2592
3116.0	371	22700	1.01	137	140	10	147	3447
3116.5	441	30406	1.03	141	144	7	148	4368
3117.0	512	38436	1.02	145	148	4	149	5403
3117.5	585	47165	1.02	148	152	2	150	6528
3117.8	630	52876	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D
 SECID=B AT DISTANCE= 3440 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3115.0	8	164	1.00	8	9	60	68	41
3115.5	12	304	1.00	9	11	59	68	75
3116.0	17	484	1.00	12	14	57	69	116
3116.5	23	731	1.00	14	17	55	69	172
3117.0	33	1067	1.07	33	36	52	110	178
3117.5	61	1804	1.20	78	82	50	135	268
3118.0	110	3628	1.19	111	115	37	149	567
3118.5	171	6499	1.11	135	139	29	164	1040
3119.0	244	10653	1.05	151	155	26	177	1713
3119.5	321	16269	1.03	159	162	22	180	2554
3120.0	403	24444	1.03	167	170	17	184	3492
3120.5	488	35629	1.04	175	178	13	188	4528
3121.0	577	48663	1.05	183	186	9	192	5672
3121.5	670	61268	1.05	190	195	5	195	6977
3122.0	768	75541	1.04	198	203	1	199	8415
3122.1	788	78608	1.03	200	204	0	200	8718

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 2, DATE= 6/16/77

INPUT SUMMARY FOR: ROCKY KNOB 100-YEAR FLOODWAY A-D

4 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 4 TYPE 3 CARDS

KEPT 4 CROSS SECTIONS FOR EDITING

4 " " VALID FOR PROPERTY COMPUTATIONS

4 " " " " PROFILE "

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 13 DATE= 6/16/77

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K
PAGE 1 OF 1, PROFILE NUMBER 4, UPSTREAM COMPUTATIONS

SECID	AT	WS ELEV	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
		HV	HF	HE	EG	V	FN	ACC	*ID*
J	AT	5539	0	1300.	729.	62126.	1.18	-22.	271.
		3142.31	0.06		3142.37	1.78	0.21		*IS*
J+0.1	AT	5550	11	1300.	701.	58987.	1.19	-19.	270.
		3142.31	0.06	0.01	0.00	3142.37	1.85	0.22	-0.004 *XS*
K-2.7	AT	5666	116	1300.	721.	54795.	1.02	3.	236.
		3142.38	0.05	0.06	0.0	3142.43	1.80	0.19	-0.000 *XS*
K-1FT	AT	5782	116	1300.	369.	19141.	1.01	11.	221.
		3142.50	0.20	0.19	0.07	3142.69	3.52	0.49	0.000 *XS*
K	AT	5850	68	1300.	256.	10727.	1.04	14.	216.
		3142.95	0.42	0.56	0.11	3143.37	5.08	0.81	0.002 *XS*

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB FLOOD PROFILES J-K
PROFILE NUMBER 4, UPSTREAM COMPUTATIONS

SECID: ERROR (WARNING) MESSAGE: INTERMEDIATE RESULTS (IF ANY): ACTION TAKEN

K-1FT: KU/KD < 0.7 OR > 1.4

ALERTED USER

K : KU/KD < 0.7 OR > 1.4

ALERTED USER

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K
 PAGE 1 OF 1, PROFILE NUMBER 3, UPSTREAM COMPUTATIONS

SECT	AT	D	STN	LEN	DIS	AREA	CONV	ALPHA	LEW	REW
NO	ELEV	HV	HF	HE	EQ	V	FN	ACC	ID	
J	AT	5539	0	780.	583.	46518.	1.23	-8.	264.	
	3141.79	0.03			3141.82	1.34	0.17		*IS*	
J+0.1	AT	5550	11	780.	557.	43874.	1.24	-5.	263.	
	3141.79	0.04	0.00	0.00	3141.83	1.40	0.17	-0.003	*XS*	
K-2.7	AT	5666	116	780.	597.	40736.	1.02	5.	231.	
	3141.84	0.03	0.04	0.0	3141.87	1.31	0.15	0.000	*XS*	
K-1FT	AT	5712	116	780.	254.	10627.	1.04	14.	216.	
	3141.94	0.15	0.16	0.06	3142.09	3.07	0.49	0.000	*XS*	
K	AT	5850	68	780.	169.	5771.	1.14	25.	212.	
	3142.51	0.38	0.67	0.11	3142.89	4.62	0.85	0.005	*XS*	

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB FLOOD PROFILES J-K
PROFILE NUMBER 3, UPSTREAM COMPUTATIONS

SECID; ERROR (WARNING) MESSAGE; INTERMEDIATE RESULTS (IF ANY); ACTION TAKEN

K-1FT; KU/KD < 0.7 OR > 1.4 ; 0 ; ALERTED USER

K ; FRDN FAILURE ; WS = 3141.85 & FR = 2.60 ; USED HIGHER WS

K ; KU/KD < 0.7 OR > 1.4 ; ; ALERTED USER

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K
PAGE 1 OF 1, PROFILE NUMBER 2, UPSTREAM COMPUTATIONS

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID*	
J	AT	5539	0	610.	503.	38773.	1.25	0.	260.
3141.49	0.03			3141.52	1.21	0.15		*IS*	
J+0.1	AT	5550	11	610.	478.	36445.	1.26	3.	259.
3141.49	0.03	0.00	0.00	3141.52	1.28	0.16	-0.002	*XS*	
K-2.7	AT	5666	16	610.	529.	33701.	1.02	6.	228.
3141.54	0.02	0.04	0.0	3141.56	1.15	0.14	0.000	*XS*	
K-1FT	AT	5782	16	610.	195.	7063.	1.10	18.	213.
3141.64	0.17	0.18	0.07	3141.81	3.13	0.55	-0.001	*XS*	
K	AT	5850	68	610.	141.	4502.	1.20	32.	211.
3142.36	0.35	0.80	0.09	3142.71	4.32	0.83	0.010	*XS*	

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB FLOOD PROFILES J-K
PROFILE NUMBER 2. UPSTREAM COMPUTATIONS

SECID: ERROR (WARNING) MESSAGE: INTERMEDIATE RESULTS (IF ANY): ACTION TAKEN

K-1FT: KU/KD < 0.7 OR > 1.4

K 1 FRDN FAILURE

ALERTED USER

WS = 3141.74 & FR = 2.63

K 1 KU/KD < 0.7 OR > 1.4

USED HIGHER WS

ALERTED USER

WATER-SURFACE PROFILE FOR: ROCKY KNOB FLOOD PROFILES J-K
 PAGE 1 OF 1, PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

SEGID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID	
J	AT	5539	0	300.	103.	6941.	1.09	112.	161.
3138.76	0.14			3138.90	2.92	0.29			*IS*
J+0.1	AT	5550	11	300.	98.	6608.	1.07	117.	161.
3138.76	0.16	0.02	0.01	3138.92	3.06	0.30	-0.020		*XS*
K-2.7	AT	5666	116	300.	91.	2466.	1.51	47.	208.
3139.36	0.26	0.64	0.05	3139.62	3.31	0.69	0.009		*XS*
K-1FT	AT	5782	116	300.	92.	2506.	1.50	47.	208.
3141.07	0.25	1.69	0.0	3141.32	3.27	0.68	0.010		*XS*
K	AT	5850	68	300.	90.	2456.	1.51	47.	208.
3142.06	0.26	0.99	0.01	3142.32	3.33	0.69	0.001		*XS*

END OF THIS PROFILE

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 6, DATE= 6/16/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB FLOOD PROFILES J-K
PROFILE NUMBER 1, UPSTREAM COMPUTATIONS

SECTION: ERROR (WARNING) MESSAGE; INTERMEDIATE RESULTS (IF ANY); ACTION TAKEN

K-2.7: KU/KD < 0.7 OR > 1.4

ALERTED USER

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
SECID=K-1FT AT DISTANCE= 5782

FLOOD PROFILES

J-K
PART 2 OF 2

WS	A	K	ALPHA	B	P	LEW	REW	QC
3147.0	1460	160287	1.05	274	279	-11	263	18666
3147.5	1599	183408	1.05	282	286	-13	267	21081
3148.0	1742	208028	1.05	289	294	-16	272	23625
3148.5	1888	234156	1.06	297	301	-18	277	26300
3149.0	2038	261804	1.06	304	309	-21	282	29105

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
SECID=K AT DISTANCE= 5850

FLOOD PROFILES

J-K
PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3140.0	7	211	1.00	5	7	172	177	47
3140.5	10	331	1.00	6	9	172	178	74
3141.0	13	478	1.01	9	12	170	178	91
3141.5	24	772	1.44	45	49	157	203	85
3142.0	81	2133	1.62	157	161	50	207	259
3142.5	167	5694	1.14	187	191	25	212	840
3143.0	266	11421	1.03	203	207	13	217	1697
3143.5	370	19175	1.01	211	214	11	221	2756
3144.0	477	28645	1.01	218	222	8	226	3971
3144.5	580	39754	1.02	225	229	5	230	5337
3145.0	702	52526	1.02	232	236	3	235	6851
3145.5	820	68844	1.03	238	243	1	239	8503
3146.0	941	93618	1.03	245	249	-1	244	10283
3146.5	1065	122847	1.04	252	257	-3	248	12193
3147.0	1193	158525	1.04	260	264	-6	253	14225
3147.5	1325	213856	1.04	267	271	-8	258	16381
3148.0	1460	286287	1.05	274	279	-11	263	18666
3148.5	1599	383408	1.05	282	286	-13	267	21081
3149.0	1742	508028	1.05	289	294	-16	272	23625
3149.5	1888	684156	1.06	297	301	-18	277	26300
3150.0	2038	931804	1.06	304	309	-21	282	29105

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB FLOOD PROFILES J-K
 SECID=K-2.7 AT DISTANCE= 5666 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3136.0	1	15	1.00	4	4	172	176	4
3136.5	3	71	1.00	5	6	172	177	16
3137.0	6	153	1.00	5	7	172	177	35
3137.5	8	259	1.00	6	8	172	178	58
3138.0	11	388	1.00	6	9	172	178	87
3138.5	16	563	1.09	14	17	165	179	90
3139.0	40	1057	1.92	106	109	60	205	100
3139.5	114	3341	1.32	169	173	40	209	460
3140.0	206	7653	1.08	199	203	15	214	1142
3140.5	307	14319	1.02	206	210	12	219	2104
3141.0	412	22771	1.01	214	218	9	223	3226
3141.5	521	32905	1.02	221	225	7	228	4503
3142.0	633	44585	1.02	228	232	4	232	5929
3142.5	749	58080	1.02	235	239	2	237	7498
3143.0	868	73008	1.03	241	245	0	241	9204
3143.5	990	89341	1.03	248	252	-2	246	11034
3144.0	1116	107165	1.04	255	259	-4	250	12997
3144.5	1245	126406	1.04	263	267	-7	255	15074
3145.0	1378	147136	1.05	270	274	-9	260	17282
3145.5	1515	169358	1.05	277	282	-12	265	19619
3146.0	1656	193076	1.05	285	289	-14	269	20085
3146.5	1800	218297	1.05	292	297	-17	274	24682
3147.0	1948	245029	1.06	300	304	-19	279	27408
3147.3	2038	261801	1.06	304	309	-21	282	29108

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB FLOOD PROFILES J-K
 SECID=K-1FT AT DISTANCE= 5782 PART 1 OF 2

WS	A	K	ALPHA	B	P	LEW	REW	QC
3140.0	13	478	1.01	9	12	170	178	91
3140.5	24	772	1.44	45	49	157	203	85
3141.0	81	2143	1.62	157	161	50	207	259
3141.5	167	5694	1.14	187	191	25	212	840
3142.0	266	11421	1.03	203	207	13	217	1697
3142.5	370	19175	1.01	211	214	11	221	2756
3143.0	477	28645	1.01	218	222	8	226	3971
3143.5	588	39754	1.02	225	229	5	230	5337
3144.0	702	52526	1.02	232	236	3	235	6851
3144.5	820	66844	1.03	238	243	1	239	8503
3145.0	941	82618	1.03	245	249	-1	244	10283
3145.5	1065	99847	1.04	252	257	-3	248	12193
3146.0	1193	118525	1.04	260	264	-6	253	14225
3146.5	1325	138661	1.04	267	271	-8	258	16381

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=J AT DISTANCE= 5539

FLOOD PROFILES

J-K
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3138.0	75	4633	1.01	30	33	131	161	664
3138.5	92	6093	1.04	36	39	125	161	810
3139.0	116	7895	1.13	62	65	100	162	850
3139.5	155	10510	1.22	93	97	69	162	1025
3140.0	210	14609	1.23	127	131	44	172	1379
3140.5	281	20494	1.21	158	162	29	187	1938
3141.0	381	28256	1.26	239	243	15	254	2426
3141.5	506	39023	1.25	260	264	0	260	3577
3142.0	641	52492	1.21	280	284	-12	267	5000
3142.5	786	68531	1.17	300	304	-26	273	6664
3143.0	941	87177	1.14	320	324	-39	280	8558
3143.5	1101	111309	1.11	320	325	-39	280	10982
3144.0	1261	137966	1.09	320	326	-39	280	13569
3144.5	1421	167004	1.08	320	327	-39	280	16310
3145.0	1581	198303	1.08	320	328	-39	280	19197

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB
 SECID=J+0.1 AT DISTANCE= 5550

FLOOD PROFILES

J-K
 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3138.0	72	4386	1.01	29	32	132	161	641
3138.5	88	5792	1.04	35	38	126	161	780
3139.0	110	7493	1.11	56	60	105	161	829
3139.5	146	9922	1.20	87	90	75	162	977
3140.0	198	13643	1.23	121	125	47	168	1289
3140.5	266	19203	1.21	152	156	32	184	1815
3141.0	357	26439	1.25	235	239	18	253	2231
3141.5	480	36676	1.26	257	261	3	260	3322
3142.0	614	49648	1.22	277	281	-10	266	4699
3142.5	757	65211	1.18	296	300	-23	272	6324
3143.0	910	83375	1.15	316	320	-36	279	8183
3143.5	1070	106441	1.12	320	325	-39	280	10509
3144.0	1230	132623	1.10	320	326	-39	280	13066
3144.5	1390	161212	1.08	320	327	-39	280	15779
3145.0	1550	192084	1.08	320	328	-39	280	18638
3145.1	1582	198513	1.08	320	328	-39	280	19226

USGS STEP-BACKWATER PROGRAM - VERSION 77.091 *** PAGE COUNT= 2, DATE= 6/16/77

INPUT SUMMARY FOR: ROCKY KNOB FLOOD PROFILES J-K

5 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 5 TYPE 3 CARDS

KEPT 5 CROSS SECTIONS FOR EDITING

5 " " VALID FOR PROPERTY COMPUTATIONS

5 " " " " PROFILE "

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
1	1	ROCKY KNOB	FLOOD PROFILES	J-K	5	4	02	05 12
2	2	313876	314149	314179	314231			
3	150	J	1 20	3 3138	5539	99	99	
4	151	300	610	780	1300			
5	153	-40	1 31450	-40	1 31430	0	1 31415	50 1 31398 100 1 31390
5	154	125	1 31385	135	2 31376	140	2 31360	147 2 31352 149 2 31340
5	155	150	2 31337	157	2 31336	158	2 31340	162 3 31397 200 3 31409
5	156	225	3 31407	250	3 31407	260	3 31415	280 3 31430 280 3 31450
6	156	1	2 030 030	1 2 045 045	1 2 040 040			
3	159	J+0.1	0 20	3 3138	5550	99	99	08
5	160	-40	1 31450	-40	1 31431	0	1 31416	50 1 31399 100 1 31391
5	161	125	1 31386	135	2 31377	140	2 31361	147 2 31353 149 2 31340
5	162	150	2 31338	157	2 31337	158	2 31341	162 3 31398 200 3 31410
5	163	225	3 31408	250	3 31408	261	3 31416	280 3 31431 280 3 31451
6	165	1	2 030 030	1 2 045 045	1 2 040 040			
3	180	K-2.7	0 16	3 3136	5666	99	99	
5	181	-22	1 31473	0	1 31430	5	1 31418	15 1 31400 50 1 31393
5	182	100	1 31388	150	1 31391	172	2 31382	172 2 31358 174 2 31355
5	183	176	2 31360	179	3 31388	200	3 31385	225 3 31412 250 3 31440
5	184	282	3 31473					
6	185	1	2 040 040	1 2 050 050	1 2 045 045			
3	200	K-1FT	0 16	3 3140	5782	99	99	
5	201	-22	1 31490	0	1 31447	5	1 31435	15 1 31417 50 1 31410
5	202	100	1 31405	150	1 31408	172	2 31399	172 2 31376 174 2 31372
5	203	176	2 31377	179	3 31405	200	3 31402	225 3 31429 250 3 31457
5	204	282	3 31490					
6	205	1	2 040 040	1 2 050 050	1 2 045 045			
3	260	K	0 16	3 3140	5850	99	99	
5	263	-22	1 31500	0	1 31457	5	1 31445	15 1 31427 50 1 31420
5	264	100	1 31415	150	1 31418	172	2 31409	172 2 31386 174 2 31382
5	265	176	2 31387	179	3 31415	200	3 31412	225 3 31439 250 3 31467
5	266	282	3 31500					
6	267	1	2 040 040	1 2 050 050	1 2 045 045			

ROCKY KNOB

CULVERT I-J

BASE ELEVATION = 33.00

Z = 0.40

Q	ELEV H1	ELEV H4	D2	D3	TYPE	C	C ADJUSTED
300.0	38.79	*****	4.57	3.30	2	0.96	0.97
300.0	38.76	37.15	4.59	4.15	3	0.96	0.97
300.0	40.71	39.70	6.50	6.50	4	0.87	0.87
610.0	TYPE.. 2	ENERGY EQUATIONS NOT BALANCED					
610.0	43.88	39.70	6.50	6.50	4	0.87	0.87
780.0	TYPE.. 2	ENERGY EQUATIONS NOT BALANCED					
780.0	45.36	*****	*****	*****	5	0.52	0.52
780.0	45.13	*****	*****	*****	6	0.87	0.87
780.0	46.53	39.70	6.50	6.50	4	0.87	0.87
1300.0	58.29	*****	*****	*****	5	0.60	0.60
1300.0	56.35	*****	*****	*****	6	0.87	0.87
1300.0	58.68	39.70	6.50	6.50	4	0.87	0.87

$h_4 = 4.15$
 $h_c = 3.30$
 $h_c > h_4$
 Type 2 H. pipe

ROCKY KNOB

CULVERT I-J

BASE ELEVATION = 33.00

Z = 0.40

BARREL DEPTH	AREA	CONVEYANCE	TOP WIDTH	WETTED PERIMETER
0.0	0.0	0.0	0.0	
0.260	0.96	13.8	5.53	5.57
0.520	2.71	61.8	7.79	7.89
0.780	4.92	150.6	8.99	9.20
1.040	7.34	277.8	9.55	9.96
1.300	9.87	437.1	9.89	10.59
1.560	12.47	623.8	10.11	11.15
1.820	15.11	833.3	10.22	11.68
2.080	17.77	1020.8	10.21	12.92
2.340	20.42	1253.1	10.15	13.45
2.600	23.05	1494.6	10.07	13.97
2.860	25.66	1742.4	9.96	14.51
3.120	28.23	1993.9	9.81	15.04
3.380	30.76	2246.4	9.64	15.59
3.640	33.24	2497.2	9.44	16.15
3.900	35.66	2743.7	9.20	16.72
4.160	38.02	2983.1	8.93	17.31
4.420	40.30	3212.6	8.61	17.92
4.680	42.49	3429.2	8.25	18.55
4.940	44.59	3629.6	7.85	19.21
5.200	46.57	3810.2	7.38	19.91
5.460	48.42	3966.8	6.84	20.66
5.720	50.12	4094.2	6.21	21.48
5.980	51.64	4185.3	5.46	22.39
6.240	52.94	4229.5	4.53	23.46
6.500	53.96	4204.8	3.26	24.82

ROCKY KNOB

CULVERT I-J

BASE ELEVATION = 33.00

Z = 0.40

APPROACH ELEVATION	AREA	CONVEYANCE	ALPHA	TOP WIDTH	QC
33.40	0.0	0.0	0.0	0.0	0.0
33.95	2.4	32.4	1.000	8.7	6.96
34.50	7.6	200.1	1.000	10.2	37.22
35.05	13.6	475.1	1.000	11.5	83.56
35.60	20.8	789.8	1.000	15.6	136.16
36.15	30.8	1288.2	1.000	20.0	216.54
36.70	42.3	2040.0	1.000	22.1	332.47
37.25	55.0	2961.9	1.000	24.2	471.21
37.80	69.1	4118.6	1.005	27.9	617.03
38.35	85.2	5621.9	1.033	34.4	774.61
38.90	110.0	7473.6	1.112	56.4	871.68
39.45	150.0	10201.1	1.209	89.9	1099.08
40.00	209.7	14597.0	1.228	127.4	1527.28
40.55	289.0	21161.8	1.205	161.0	2197.78
41.10	404.7	30169.9	1.266	243.2	2961.78
41.65	544.7	42758.0	1.238	266.0	4423.71
42.20	697.1	58555.0	1.193	288.0	6154.18
42.75	861.5	77475.8	1.156	310.0	8150.03
43.30	1036.3	101287.6	1.122	320.0	10581.93
43.85	1212.3	129649.0	1.098	320.0	13385.13
44.40	1388.3	160941.3	1.085	320.0	16408.23
44.95	1564.3	194997.6	1.078	320.0	19625.34
45.50	1740.3	231677.8	1.074	320.0	23028.90
46.05	1916.3	270861.9	1.071	320.0	26609.25
46.60	2092.3	312443.8	1.070	320.0	30358.00

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB X-SECTION PROPERTIES
 SECID=J AT DISTANCE= 5539 PART 2 OF 2

WS	A	K	ALPHA	B	P	LEW	REW	QC
3142.5	786	68551	1.17	300	304	-26	273	6664
3142.6	816	72044	1.16	304	308	-28	275	7024
3142.7	846	75671	1.16	308	312	-31	276	7394
3142.8	877	79394	1.15	312	316	-34	277	7773
3142.9	909	83233	1.15	316	320	-36	279	8162
3143.0	941	87177	1.14	320	324	-39	280	8559
3143.1	973	91787	1.13	320	324	-39	280	9029
3143.2	1005	96514	1.13	320	324	-39	280	9508
3143.3	1037	101334	1.12	320	325	-39	280	9992
3143.4	1069	106270	1.12	320	325	-39	280	10483
3143.5	1101	111309	1.11	320	325	-39	280	10982
3143.6	1133	116435	1.11	320	325	-39	280	11486
3143.7	1165	121675	1.10	320	325	-39	280	11998
3143.8	1197	126999	1.10	320	326	-39	280	12515
3143.9	1229	132434	1.10	320	326	-39	280	13039
3144.0	1261	137966	1.09	320	326	-39	280	13569
3144.1	1293	143579	1.09	320	326	-39	280	14105
3144.2	1325	149299	1.09	320	326	-39	200	14647
3144.3	1357	155099	1.09	320	327	-39	280	15195
3144.4	1389	161006	1.09	320	327	-39	280	15750
3144.5	1421	167004	1.08	320	327	-39	280	16310
3144.6	1453	173077	1.08	320	327	-39	280	16875
3144.7	1485	179255	1.08	320	327	-39	280	17447
3144.8	1517	185507	1.08	320	328	-39	280	18024
3144.9	1549	191861	1.08	320	328	-39	280	18607
3145.0	1581	198303	1.08	320	328	-39	280	19197

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB X-SECTION PROPERTIES J
 SECID=J AT DISTANCE= 5539 PART 1 OF 2

WS	A	K	ALPHA	B	P	LEW	REW	QC
3138.0	75	4633	1.01	30	33	131	161	664
3138.1	78	4903	1.02	31	34	129	161	690
3138.2	81	5183	1.03	33	36	128	161	718
3138.3	85	5474	1.03	34	37	127	161	747
3138.4	88	5777	1.04	35	38	126	161	777
3138.5	92	6093	1.04	36	39	125	161	810
3138.6	95	6396	1.06	41	44	120	161	800
3138.7	100	6730	1.08	46	50	115	161	801
3138.8	105	7089	1.09	51	55	110	161	810
3138.9	110	7477	1.11	56	60	105	161	827
3139.0	116	7895	1.13	62	65	100	162	850
3139.1	122	8336	1.15	68	71	94	162	870
3139.2	130	8817	1.17	74	78	88	162	898
3139.3	137	9338	1.19	80	84	81	162	933
3139.4	146	9905	1.20	87	90	75	162	975
3139.5	155	10518	1.22	93	97	69	162	1025
3139.6	164	11180	1.22	99	103	63	162	1082
3139.7	174	11896	1.23	106	110	56	162	1145
3139.8	186	12698	1.24	115	119	50	165	1201
3139.9	197	13623	1.23	121	125	47	168	1287
3140.0	210	14609	1.23	127	131	44	172	1379
3140.1	223	15654	1.22	133	137	41	175	1478
3140.2	237	16764	1.22	140	143	38	178	1583
3140.3	251	17938	1.21	146	149	35	181	1694
3140.4	266	19182	1.21	152	156	32	184	1813
3140.5	281	20494	1.21	158	162	29	187	1938
3140.6	297	21875	1.20	164	168	26	190	2070
3140.7	314	23331	1.20	170	174	24	194	2209
3140.8	334	24756	1.23	215	219	21	251	2131
3140.9	357	26416	1.25	235	239	18	252	2230
3141.0	381	28250	1.26	239	243	15	254	2426
3141.1	405	30189	1.27	243	247	12	255	2633
3141.2	429	32239	1.27	247	251	9	256	2852
3141.3	454	34389	1.26	252	255	6	257	3082
3141.4	480	36650	1.26	256	260	3	259	3324
3141.5	506	39023	1.25	260	264	0	260	3577
3141.6	532	41508	1.24	264	268	-2	261	3841
3141.7	558	44102	1.23	268	272	-4	263	4116
3141.8	585	46792	1.23	272	276	-7	264	4400
3141.9	613	49591	1.22	276	280	-10	265	4695
3142.0	641	52492	1.21	280	284	-12	267	5000
3142.1	669	55489	1.20	284	288	-15	268	5313
3142.2	697	58596	1.19	288	292	-18	269	5637
3142.3	726	61799	1.19	292	296	-20	271	5969
3142.4	756	65113	1.18	296	300	-23	272	6312

ROCKY KNOB

CULVERT H-I

BASE ELEVATION = 31.50

Z = 0.50

Q	ELEV H1	ELEV H4	D2	D3	TYPE	C	C ADJUSTED
300.0	37.15	*****	4.02	3.40	2	0.96	0.97
300.0	38.50	37.59	5.83	6.09	3	0.93	0.94
300.0	38.77	37.84	6.10	6.34	3	0.93	0.93
300.0	40.40	39.34	6.35	6.35	4	0.87	0.87

610.0 TYPE.. 2 ENERGY EQUATIONS NOT BALANCED

TYPE.. 5 H NOT IN THE RANGE OF H5...H= 10.0250

610.0	42.13	*****	*****	*****	5	0.49	0.49
610.0	43.74	39.34	6.35	6.35	4	0.87	0.87

780.0 TYPE.. 2 ENERGY EQUATIONS NOT BALANCED

TYPE.. 5 H NOT IN THE RANGE OF H5...H= 10.0250

780.0	45.43	*****	*****	*****	5	0.55	0.55
780.0	43.74	*****	*****	*****	6	0.87	0.87
780.0	46.54	39.34	6.35	6.35	4	0.87	0.87

1300.0 TYPE.. 2 ENERGY EQUATIONS NOT BALANCED

TYPE.. 5 H NOT IN THE RANGE OF H5...H= 10.0250

1300.0	61.44	*****	*****	*****	5	0.61	0.61
1300.0	55.25	*****	*****	*****	6	0.87	0.87
1300.0	59.33	39.34	6.35	6.35	4	0.87	0.87

ROCKY KNOB

CULVERT H-1

BASE ELEVATION = 31.50

Z = 0.50

BARREL DEPTH	AREA	CONVEYANCE	TOP WIDTH	WETTED PERIMETER
0.0	0.0	0.0	0.0	
0.254	0.93	15.6	5.46	5.49
0.508	2.61	69.8	7.61	7.71
0.762	4.67	169.5	8.47	8.71
1.016	6.89	307.8	8.95	9.41
1.270	9.20	479.0	9.25	10.00
1.524	11.58	678.1	9.44	10.54
1.778	13.99	900.3	9.53	11.06
2.032	16.41	1109.4	9.52	12.05
2.286	18.82	1356.3	9.47	12.56
2.540	21.22	1612.4	9.39	13.08
2.794	23.59	1874.5	9.28	13.59
3.048	25.93	2139.7	9.14	14.12
3.302	28.23	2405.0	8.97	14.66
3.556	30.48	2667.6	8.77	15.20
3.810	32.68	2924.4	8.53	15.76
4.064	34.81	3172.5	8.26	16.34
4.318	36.87	3408.5	7.94	16.94
4.572	38.85	3629.0	7.58	17.57
4.826	40.72	3830.3	7.16	18.22
5.080	42.48	4007.9	6.68	18.92
5.334	44.10	4156.7	6.12	19.68
5.588	45.58	4270.0	5.45	20.52
5.842	46.86	4337.9	4.63	21.48
6.096	47.91	4343.1	3.57	22.66
6.350	48.62	4232.5	1.86	24.45

ROCKY KNOB

CULVERT H-1

BASE ELEVATION = 31.50

Z = 0.50

APPROACH ELEVATION	AREA	CONVEYANCE	ALPHA	TOP WIDTH	QC
32.00	0.0	0.0	0.0	0.0	0.0
32.53	4.0	92.0	1.000	10.1	14.48
33.06	9.9	361.4	1.000	11.8	51.13
33.59	16.6	776.2	1.000	13.5	104.19
34.12	24.2	1334.7	1.000	15.1	173.14
34.65	32.6	2041.8	1.000	16.7	258.23
35.18	41.9	2899.8	1.000	18.3	359.40
35.71	52.0	3914.8	1.000	19.9	477.09
36.24	63.0	5093.7	1.000	21.5	611.79
36.77	74.8	6443.5	1.000	23.1	764.01
37.30	87.5	7971.5	1.000	24.7	934.30
37.83	101.0	9684.7	1.000	26.3	1123.16
38.36	121.6	12713.6	1.000	28.0	1459.27
38.89	149.8	16621.1	1.000	29.8	1856.72
39.42	187.1	21467.6	1.000	31.7	2337.34
39.95	231.3	27337.2	1.000	33.6	2910.75
40.48	280.4	34315.9	1.000	35.6	3572.84
41.01	334.9	42527.6	1.000	37.6	4324.22
41.54	391.8	52077.9	1.000	39.7	5165.54
42.07	451.9	63073.8	1.000	41.8	6097.21
42.60	514.2	75618.5	1.000	44.0	7220.74
43.13	585.2	89858.6	1.000	46.3	8546.93
43.66	664.3	105972.2	1.000	48.7	10076.70
44.19	751.4	124121.2	1.000	51.2	11920.73
44.72	847.5	144535.7	1.000	53.8	14090.64

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB X-SECTION PROPERTIES I-APP
 SECID=1-APP AT DISTANCE= 5372 PART 2 OF 2

WS	A	K	ALPHA	B	D	LEW	REW	QC
3139.5	267	11672	1.00	253	257	76	328	1556
3139.6	293	13228	1.00	264	268	66	330	1749
3139.7	320	14910	1.00	275	279	56	331	1955
3139.8	348	16803	1.00	284	288	49	333	2183
3139.9	377	18821	1.00	292	296	42	334	2424
3140.0	406	20960	1.00	301	305	35	336	2678
3140.1	437	23216	1.00	309	313	28	337	2944
3140.2	468	25602	1.00	318	322	21	339	3223
3140.3	500	28108	1.00	326	330	14	340	3514
3140.4	533	30748	1.00	335	339	7	342	3819
3140.5	567	33521	1.00	343	347	0	343	4137
3140.6	602	36634	1.00	348	352	-3	345	4488
3140.7	637	39882	1.00	353	357	-6	346	4851
3140.8	673	43251	1.00	359	362	-10	348	5225
3140.9	709	46756	1.00	364	367	-13	349	5612
3141.0	745	50391	1.00	369	372	-17	351	6011
3141.1	782	54145	1.00	374	378	-21	352	6421
3141.2	820	58039	1.00	379	383	-24	354	6844
3141.3	858	62052	1.00	384	388	-28	355	7278
3141.4	897	66205	1.00	389	393	-31	357	7724
3141.5	936	70489	1.00	394	398	-35	358	8183
3141.6	976	74894	1.00	399	403	-39	360	8652
3141.7	1016	79441	1.00	404	408	-42	361	9134
3141.8	1057	84109	1.00	409	413	-46	363	9627
3141.9	1098	88921	1.00	414	418	-49	364	10134
3142.0	1140	93867	1.00	420	423	-53	366	10652
3142.1	1182	98944	1.00	425	428	-57	367	11182
3142.2	1224	104165	1.00	430	433	-60	368	11725
3142.3	1268	109507	1.00	435	439	-64	370	12278
3142.4	1311	114999	1.00	440	444	-67	371	12845
3142.5	1356	120627	1.00	445	449	-71	373	13424
3142.6	1400	126378	1.00	450	454	-75	374	14014
3142.7	1446	132281	1.00	455	459	-78	376	14617
3142.8	1491	138308	1.00	460	464	-82	377	15231
3142.9	1538	144489	1.00	465	469	-85	379	15859
3143.0	1584	150812	1.00	470	474	-89	380	16499
3143.1	1631	158286	1.00	470	474	-89	380	17238
3143.2	1678	165920	1.00	470	474	-89	380	17989
3143.3	1725	173676	1.00	470	474	-89	380	18748
3143.4	1772	181590	1.00	470	475	-89	380	19520
3143.5	1819	189641	1.00	470	475	-89	380	20303
3143.6	1866	197809	1.00	470	475	-89	380	21093
3143.7	1913	206131	1.00	470	475	-89	380	21896
3143.8	1960	214566	1.00	470	475	-89	380	22707
3143.9	2007	223155	1.00	470	476	-89	380	23529

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB X-SECTION PROPERTIES I-APP
 SECID=I-APP AT DISTANCE= 5372 PART 1 OF 2

WS	A	K	ALPHA	B	P	LEW	REW	QC
3135.0	24	1316	1.00	15	16	124	139	171
3135.1	26	1406	1.00	16	17	124	139	185
3135.2	27	1562	1.00	16	17	124	140	200
3135.3	29	1693	1.00	16	18	124	140	216
3135.4	30	1830	1.00	17	18	124	140	233
3135.5	32	1973	1.00	17	18	123	140	250
3135.6	34	2121	1.00	17	19	123	141	267
3135.7	35	2275	1.00	18	19	123	141	285
3135.8	37	2434	1.00	18	20	123	141	304
3135.9	39	2599	1.00	18	20	123	141	324
3136.0	41	2771	1.00	19	20	123	142	344
3136.1	43	2948	1.00	19	21	123	142	354
3136.2	45	3131	1.00	19	21	123	142	386
3136.3	47	3320	1.00	20	22	123	142	408
3136.4	49	3515	1.00	20	22	122	142	430
3136.5	51	3717	1.00	20	22	122	143	453
3136.6	53	3925	1.00	21	23	122	143	477
3136.7	55	4139	1.00	21	23	122	143	502
3136.8	57	4359	1.00	21	24	122	143	527
3136.9	59	4586	1.00	22	24	122	144	553
3137.0	61	4819	1.00	22	24	122	144	579
3137.1	63	5059	1.00	22	25	122	144	606
3137.2	66	5305	1.00	23	25	122	144	634
3137.3	68	5558	1.00	23	26	121	145	662
3137.4	70	5818	1.00	23	26	121	145	692
3137.5	73	6085	1.00	24	26	121	145	722
3137.6	75	6357	1.00	24	27	121	145	752
3137.7	78	6638	1.00	24	27	121	145	783
3137.8	80	6925	1.00	25	28	121	146	815
3137.9	83	7219	1.00	25	28	121	146	848
3138.0	85	7521	1.00	25	28	121	146	881
3138.1	88	7829	1.00	26	29	121	146	915
3138.2	91	7103	1.00	33	36	120	215	849
3138.3	94	6706	1.00	41	44	120	220	815
3138.4	99	6523	1.00	48	51	120	225	804
3138.5	106	5201	1.00	83	86	120	258	682
3138.6	115	5320	1.00	99	102	120	271	706
3138.7	126	5599	1.00	115	118	120	285	749
3138.8	138	6216	1.00	123	127	120	291	828
3138.9	151	6693	1.00	139	142	120	297	894
3139.0	166	7288	1.00	154	158	120	303	974
3139.1	182	7996	1.00	170	173	119	309	1068
3139.2	200	8822	1.00	185	189	119	315	1176
3139.3	220	9353	1.00	216	220	95	321	1257
3139.4	242	10380	1.00	237	240	85	327	1392

```

=====
WATER-SURFACE PROFILE FOR: ROCKY KNOB      10,50,100,500 YR FLOODS DUM 1-D
PAGE 1 OF 1
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
WS ELEV / HV / HF / HE / EG / V / FN / ACC *ID*
=====
DUM 1 AT 2370 / 0 / 1580. / 324. / 18008. / 1.01 / 12. / 146.
3109.65 / 0.37 / / 3110.02 / 4.88 / 0.58 / *IS*
-----
DUM 2 AT 2580 / 210 / 1580. / 299. / 15812. / 1.01 / 13. / 145.
3111.46 / 0.44 / 1.84 / 0.03 / 3111.90 / 5.29 / 0.65 / 0.004 *XS*
-----
DUM 3 AT 2790 / 210 / 1580. / 305. / 16349. / 1.01 / 12. / 145.
3113.51 / 0.42 / 2.03 / 0.0 / 3113.93 / 5.18 / 0.63 / 0.001 *XS*
-----
A AT 3000 / 210 / 1580. / 303. / 16164. / 1.01 / 12. / 145.
3115.49 / 0.43 / 1.98 / 0.00 / 3115.92 / 5.21 / 0.64 / 0.002 *XS*
-----
B AT 3440 / 440 / 1580. / 330. / 17011. / 1.03 / 21. / 181.
3119.56 / 0.37 / 3.99 / 0.0 / 3119.92 / 4.78 / 0.60 / 0.003 *XS*
-----
C AT 3790 / 350 / 1580. / 290. / 14409. / 1.14 / 27. / 188.
3123.05 / 0.53 / 3.56 / 0.08 / 3123.57 / 5.45 / 0.69 / 0.004 *XS*
-----
D AT 4150 / 360 / 1580. / 354. / 18850. / 1.03 / 18. / 182.
3126.55 / 0.32 / 3.31 / 0.0 / 3126.86 / 4.46 / 0.56 / -0.018 *XS*
=====

```

END OF THIS PROFILE

```

=====
WATER-SURFACE PROFILE FOR: ROCKY KNOB      10,50,100, & 500 YR FLOODS  DUM 1-D
PAGE 1 OF 1
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
  WS ELEV /   HV /   HF /   HE /   EG /   V /   FN /   ACC  *ID*
=====
DUM 1 AT  2370 /    0 /  1580. /  290. /  15128. / 1.01 /  13. / 145.
  3109.40 /  0.46 /           / 3109.86 /  5.44 /  0.67/   *IS*
-----
DUM 2 AT  2580 /  210 /  1580. /  309. /  16656. / 1.01 /  12. / 145.
  3111.54 /  0.41 /  2.08 /  0.0 / 3111.95 /  5.12 /  0.62 / 0.003 *XS*
-----
DUM 3 AT  2790 /  210 /  1580. /  302. /  16107. / 1.01 /  12. / 145.
  3113.49 /  0.43 /  1.95 /  0.01 / 3113.92 /  5.23 /  0.64 / 0.006 *XS*
-----
A   AT  3000 /  210 /  1580. /  304. /  16224. / 1.01 /  12. / 145.
  3115.50 /  0.42 /  2.01 /  0.0 / 3115.92 /  5.20 /  0.63 / 0.000 *XS*
-----
B   AT  3440 /  440 /  1580. /  330. /  16969. / 1.03 /  21. / 181.
  3119.55 /  0.37 /  3.99 /  0.0 / 3119.92 /  4.79 /  0.60 / 0.008 *XS*
-----
C   AT  3790 /  350 /  1580. /  290. /  14424. / 1.14 /  27. / 188.
  3123.05 /  0.53 /  3.57 /  0.08 / 3123.57 /  5.95 /  0.69 / 0.003 *XS*
-----
D   AT  4150 /  360 /  1580. /  354. /  18865. / 1.03 /  18. / 182.
  3126.55 /  0.32 /  3.30 /  0.0 / 3126.87 /  4.46 /  0.56 / -0.011 *XS*
=====

```

END OF THIS PROFILE

```

=====
WATER-SURFACE PROFILE FOR: ROCKY KNOB      10,50,100, & 500 YR FLOODS  DUM 1-D
PAGE 1 OF 1
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
WS ELEV. / HV / HF / HE / EG / V / FN / ACC *ID*
=====
DUM 1 AT 2370 / 0 / 960. / 290. / 15128. / 1.01 / 13. / 145.
3109.40 / 0.17 / / 3109.57 / 3.30 / 0.41 / *IS*
-----
DUM 2 AT 2580 / 210 / 960. / 206. / 8939. / 1.04 / 17. / 143.
3110.75 / 0.35 / 1.43 / 0.09 / 3111.10 / 4.65 / 0.53 / 0.010 *XS*
-----
DUM 3 AT 2790 / 210 / 960. / 228. / 10357. / 1.03 / 16. / 144.
3112.92 / 0.29 / 2.09 / 0.0 / 3113.20 / 4.22 / 0.57 / 0.011 *XS*
-----
A AT 3000 / 210 / 960. / 218. / 9703. / 1.04 / 16. / 144.
3114.84 / 0.31 / 1.93 / 0.01 / 3115.16 / 4.40 / 0.61 / 0.012 *XS*
-----
B AT 3440 / 440 / 960. / 238. / 10266. / 1.06 / 26. / 176.
3118.96 / 0.27 / 4.07 / 0.0 / 3119.23 / 4.03 / 0.58 / 0.002 *XS*
-----
C AT 3790 / 350 / 960. / 208. / 8704. / 1.18 / 36. / 185.
3122.52 / 0.39 / 3.61 / 0.06 / 3122.91 / 4.62 / 0.65 / 0.008 *XS*
-----
D AT 4150 / 360 / 960. / 257. / 11743. / 1.04 / 28. / 179.
3125.93 / 0.22 / 3.25 / 0.0 / 3126.16 / 3.73 / 0.52 / 0.002 *XS*
=====

```

END OF THIS PROFILE

USGS STEP-BACKWATER PROGRAM - VERSION 76.170 *** PAGE COUNT= 19, DATE= 4/ 5/77

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 10, 50, 100, & 500 YR FLOODS DUM 1-D
INITIAL VALUES ARE: Q = 960. H = 3109.40

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

DUM 2, KU/KD < 0.7 OR > 1.4

, USED COMPUTED WSU

```

=====
WATER-SURFACE PROFILE FOR: ROCKY KNOB      10,50,100, & 500 YR FLOODS  DUM 1-D
PAGE 1 OF 1
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
WS ELEV / HV / HF / HE / EG / V / FN / ACC *ID*
=====
DUM 1 AT 2370 / 0 / 960. / 238. / 11093. / 1.03 / 15. / 144.
3109.00 / 0.26 / / 3109.26 / 4.03 / 0.54 / *IS*
-----
DUM 2 AT 2580 / 210 / 960. / 215. / 9485. / 1.04 / 17. / 143.
3110.82 / 0.32 / 1.84 / 0.03 / 3111.14 / 4.47 / 0.62 / 0.009 *XS*
-----
DUM 3 AT 2790 / 210 / 960. / 223. / 10039. / 1.03 / 16. / 144.
3112.88 / 0.30 / 2.03 / 0.0 / 3113.18 / 4.30 / 0.59 / 0.008 *XS*
-----
A AT 3000 / 210 / 960. / 219. / 9788. / 1.04 / 16. / 144.
3114.85 / 0.31 / 1.97 / 0.01 / 3115.16 / 4.38 / 0.60 / 0.006 *XS*
-----
B AT 3440 / 440 / 960. / 237. / 10203. / 1.06 / 26. / 176.
3118.95 / 0.27 / 4.06 / 0.0 / 3119.22 / 4.05 / 0.58 / 0.002 *XS*
-----
C AT 3790 / 350 / 960. / 208. / 8742. / 1.18 / 36. / 185.
3122.52 / 0.39 / 3.62 / 0.06 / 3122.91 / 4.61 / 0.65 / 0.010 *XS*
-----
D AT 4150 / 360 / 960. / 257. / 11706. / 1.04 / 28. / 178.
3125.93 / 0.23 / 3.24 / 0.0 / 3126.15 / 3.74 / 0.52 / 0.001 *XS*
=====

```

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY-KNOB 10,50,100, & 500 YR FLOODS - DUM 1-D

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS	ELEV	HV	HF	HE	EG	V	FN	ACC	ID*
DUM 1	AT	2370	0	960.	206.	8929.	1.04	17.	143.
		3108.75	0.35		3109.10	4.65	0.53		*IS*
DUM 2	AT	2580	210	960.	228.	10361.	1.03	16.	144.
		3110.92	0.29	2.09	3111.20	4.21	0.57	0.010	*XS*
DUM 3	AT	2790	210	960.	218.	9703.	1.04	16.	144.
		3112.84	0.31	1.93	3113.16	4.40	0.61	0.012	*XS*
A	AT	3000	210	960.	221.	9913.	1.04	16.	144.
		3114.87	0.30	2.01	3115.17	4.34	0.59	0.003	*XS*
B	AT	3440	440	960.	236.	10113.	1.06	26.	176.
		3118.95	0.27	4.04	3119.22	4.07	0.58	0.003	*XS*
C	AT	3790	350	960.	209.	8799.	1.18	35.	185.
		3122.53	0.39	3.63	3122.91	4.59	0.65	0.013	*XS*
D	AT	4150	360	960.	256.	11654.	1.04	28.	178.
		3125.92	0.23	3.24	3126.15	3.75	0.53	0.001	*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNDB 10,50,100, & 500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID*	
DUM 1	AT	2370	0	960	157	5978	1.10	21	140
3108.35		0.64			3108.99	6.11	0.78		*IS*
DUM 2	AT	2580	210	960	268	13324	1.02	14	145
3111.23		0.20	2.43	0.0	3111.43	3.58	0.46	0.015	*XS*
DUM 3	AT	2790	210	960	208	9060	1.04	17	143
3112.77		0.34	1.60	0.07	3113.11	4.61	0.64	0.005	*XS*
A	AT	3000	210	960	227	10285	1.03	16	144
3114.91		0.29	2.08	0.0	3115.20	4.24	0.58	0.011	*XS*
B	AT	3440	440	960	232	9857	1.06	26	176
3118.92		0.28	4.00	0.0	3119.20	4.14	0.60	0.004	*XS*
C	AT	3790	350	960	211	8921	1.18	35	185
3122.54		0.38	3.67	0.05	3122.92	4.55	0.64	0.001	*XS*
D	AT	4150	360	960	254	11540	1.04	28	178
3125.91		0.23	3.22	0.0	3126.14	3.77	0.53	0.001	*XS*

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 10, 50, 100, & 500 YR FLOODS DUM 1-D
INITIAL VALUES ARE: Q = 960, H = 3108.35

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

DUM 2, KU/KD < 0.7 OR > 1.4

,USED COMPUTED WSU

DUM 3, KU/KD < 0.7 OR > 1.4

,USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW

WS ELEV / HV / HF / HE / EG / V / FN / ACC *ID*

DUM 1 AT 2370 / 0 / 760. / 206. / 8929. / 1.04 / 17. / 143.

3108.75 / 0.22 / / 3108.97 / 3.68 / 0.42 / *IS*

DUM 2 AT 2580 / 210 / 760. / 182. / 7427. / 1.06 / 19. / 142.

3110.56 / 0.29 / 1.83 / 0.03 / 3110.84 / 4.17 / 0.50 / 0.011 *XS*

DUM 3 AT 2790 / 210 / 760. / 192. / 8025. / 1.05 / 18. / 142.

3112.64 / 0.26 / 2.04 / 0.0 / 3112.89 / 3.96 / 0.47 / 0.013 *XS*

A AT 3000 / 210 / 760. / 187. / 7723. / 1.06 / 19. / 142.

3114.60 / 0.27 / 1.96 / 0.01 / 3114.87 / 4.06 / 0.48 / 0.010 *XS*

B AT 3440 / 440 / 760. / 201. / 8058. / 1.09 / 27. / 172.

3118.71 / 0.24 / 4.08 / 0.0 / 3118.95 / 3.77 / 0.57 / 0.003 *XS*

C AT 3790 / 350 / 760. / 176. / 6909. / 1.21 / 40. / 181.

3122.30 / 0.135 / 3.63 / 0.06 / 3122.65 / 4.32 / 0.54 / 0.010 *XS*

D AT 4150 / 360 / 760. / 221. / 9335. / 1.05 / 32. / 177.

3125.68 / 0.19 / 3.22 / 0.0 / 3125.88 / 3.44 / 0.51 / 0.002 *XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100, & 500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID	IS
DUM 1	AT	2370	0	760	175	7014	1.07	19	141
3108.50	0.31			3108.81	4.34	0.53			*IS*
DUM 2	AT	2580	210	760	196	8288	1.05	18	143
3110.67	0.25	2.09	0.0	3110.91	3.87	0.45	0.015		*XS*
DUM 3	AT	2790	210	760	186	7646	1.06	19	142
3112.59	0.28	1.91	0.02	3112.86	4.09	0.49	0.017		*XS*
A	AT	3000	210	760	190	7882	1.06	18	142
3114.62	0.26	2.01	0.0	3114.88	4.01	0.48	0.006		*XS*
B	AT	3440	440	760	199	7941	1.09	28	171
3118.70	0.25	4.06	0.0	3118.95	3.81	0.57	0.003		*XS*
C	AT	3790	350	760	177	6977	1.21	40	181
3122.31	0.35	3.65	0.05	3122.66	4.28	0.54	0.011		*XS*
D	AT	4150	360	760	220	9271	1.05	32	177
3125.68	0.20	3.21	0.0	3125.87	3.46	0.51	0.002		*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-0

PAGE 1 OF 1

=====

SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID	
DUM 1	AT	2370	0	390.	133.	4736.	1.14	22.	139.
3108.15		0.15			3108.30	2.92	0.39		*IS*
DUM 2	AT	2580	210	390.	111.	3692.	1.20	24.	138.
3109.96		0.23	1.83	0.04	3110.19	3.51	0.50	0.019	*XS*
DUM 3	AT	2790	210	390.	123.	4214.	1.17	23.	139.
3112.06		0.18	2.05	0.0	3112.24	3.18	0.44	0.001	*XS*
A	AT	3000	210	390.	116.	3889.	1.19	24.	138.
3114.00		0.21	1.95	0.01	3114.21	3.37	0.48	0.003	*XS*
B	AT	3440	440	390.	123.	4212.	1.16	35.	151.
3118.12		0.18	4.09	0.0	3118.30	3.17	0.43	0.005	*XS*
C	AT	3790	350	390.	100.	3472.	1.42	52.	163.
3121.70		0.33	3.64	0.08	3122.03	3.89	0.54	0.019	*XS*
D	AT	4150	360	390.	142.	4905.	1.14	41.	174.
3125.12		0.13	3.21	0.0	3125.25	2.74	0.46	0.004	*XS*

END OF THIS PROFILE

PAGE 1 OF PROFILE NOTES FOR: ROCKY KNOB 10, 50, 100, & 500 YR FLOODS DUM-1-D
INITIAL VALUES ARE: Q = 390 H = 3108.15

SECID, ERROR OR WARNING MESSAGE, INTERMEDIATE RESULTS (IF ANY), ACTION TAKEN

D , KU/KD < 0.7 OR > 1.4

, USED COMPUTED WSU

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100, & 500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

	SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	R/W	WS ELEV	HV	HF	HE	EG	V	FN	ACC	ID
DUM 1	AT	2370	0	390	105	3412	1.22	25	138		3107.90	0.26			3108.16	3.72	0.54		*IS*
DUM 2	AT	2580	210	390	128	4480	1.15	23	139		3110.11	0.17	2.09	0.0	3110.27	3.04	0.42	0.018	*XS*
DUM 3	AT	2790	210	390	113	3766	1.20	24	138		3111.97	0.22	1.89	0.03	3112.19	3.45	0.49	0.001	*XS*
A	AT	3000	210	390	121	4157	1.17	23	139		3114.05	0.19	2.04	0.0	3114.23	3.21	0.45	0.000	*XS*
B	AT	3440	440	390	118	3995	1.17	36	150		3118.07	0.20	4.03	0.01	3118.27	3.30	0.45	0.003	*XS*
C	AT	3790	350	390	104	3602	1.41	51	164		3121.73	0.31	3.70	0.06	3122.04	3.77	0.52	0.010	*XS*
D	AT	4150	360	390	139	4760	1.14	42	174		3125.10	0.14	3.19	0.0	3125.24	2.80	0.48	0.004	*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100, & 500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

	SECID	AT DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW
WS ELEV	HV	HF	HE	EG	V	FN	ACC	*TD*	
=====									
DUM 1 AT	2370	0	1580.7	308.	16560.	1.01	12.	145.	
3109.53	0.41			3109.94	5.13	0.62			*IS*

DUM 2 AT	2580	210	1580.	303.	16126.	1.01	12.	145.	
3111.49	0.43	1.96	0.01	3111.92	5.22	0.64	0.005		*XS*

DUM 3 AT	2790	210	1580.	303.	16126.	1.01	12.	145.	
3113.49	0.43	2.02	0.0	3113.92	5.22	0.64	-0.016		*XS*

A AT	3000	210	1580.	303.	16126.	1.01	12.	145.	
3115.49	0.43	2.02	0.0	3115.92	5.22	0.64	-0.016		*XS*

B AT	3440	440	1580.	331.	17041.	1.03	21.	181.	
3119.56	0.37	4.00	0.0	3119.93	4.78	0.60	0.009		*XS*

C AT	3790	350	1580.	290.	14400.	1.14	27.	188.	
3123.04	0.53	3.56	0.08	3123.57	5.45	0.69	0.906		*XS*

D AT	4150	360	1580.	355.	18938.	1.03	17.	182.	
3126.55	0.32	3.30	0.0	3126.87	4.45	0.56	0.001		*XS*

0 END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10,50,100,500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

	SECID	AT	DISTANCE	LENGTH	DISCHARGE	AREA	CONVEYANCE	ALPHA	LEW	REW							
	WS ELEV	HV	HF	HE	EG	V	FN	ACC	#ID*								
DUM 1	AT	2370	/	0	/	960.	/	223.	/	10016.	/	1.03	/	16.	/	144.	
		3108.88	/	0.30	/		/	3109.16	/	4.31	/	0.59	/		/		*IS*
DUM 2	AT	2580	/	210	/	960.	/	219.	/	9795.	/	1.04	/	16.	/	144.	
		3110.85	/	0.31	/	1.97	/	0.00	/	3111.16	/	4.38	/	0.60	/	0.006	*XS*
DUM 3	AT	2790	/	210	/	960.	/	219.	/	9795.	/	1.04	/	16.	/	144.	
		3112.85	/	0.31	/	2.02	/	0.0	/	3113.16	/	4.38	/	0.60	/	-0.018	*XS*
A	AT	3000	/	210	/	960.	/	219.	/	9795.	/	1.04	/	16.	/	144.	
		3114.85	/	0.31	/	2.02	/	0.0	/	3115.16	/	4.38	/	0.60	/	-0.018	*XS*
B	AT	3440	/	440	/	960.	/	237.	/	10199.	/	1.06	/	26.	/	176.	
		3118.95	/	0.27	/	4.06	/	0.0	/	3119.22	/	4.05	/	0.58	/	0.002	*XS*
C	AT	3790	/	350	/	960.	/	208.	/	8747.	/	1.18	/	36.	/	185.	
		3122.52	/	0.39	/	3.62	/	0.06	/	3122.91	/	4.61	/	0.65	/	0.011	*XS*
D	AT	4150	/	360	/	960.	/	257.	/	11701.	/	1.04	/	28.	/	178.	
		3125.93	/	0.23	/	3.24	/	0.0	/	3126.15	/	3.74	/	0.52	/	0.001	*XS*

END OF THIS PROFILE

=====

WATER-SURFACE PROFILE FOR: ROCKY KNOB 10.50, 100, & 500 YR FLOODS DUM 1-D

PAGE 1 OF 1

=====

SECID	AT	DISTANCE / WS ELEV	LENGTH / HV	DISCHARGE / HF	AREA / HE	CONVEYANCE / EG	ALPHA / V	LEW / FN	REW / ACC	ID
DUM 1	AT	2370 / 3108.63	0 / 0.26	760. /	191. / 3108.89	7979. / 3.97	1.06 / 0.47	18. /	142. /	*IS*
DUM 2	AT	2580 / 3110.60	210 / 0.27	760. / 1.97	187. / 0.01 / 3110.87	7736. / 4.06	1.06 / 0.48	18. / 0.009	142. /	*XS*
DUM 3	AT	2790 / 3112.61	210 / 0.27	760. / 2.00	189. / 0.0 / 3112.88	7823. / 4.03	1.06 / 0.48	18. / 0.002	142. /	*XS*
A	AT	3000 / 3114.61	210 / 0.27	760. / 1.98	189. / 0.0 / 3114.88	7823. / 4.03	1.06 / 0.48	18. / 0.018	142. /	*XS*
B	AT	3440 / 3118.70	440 / 0.24	760. / 4.07	200. / 0.0 / 3118.95	7984. / 3.80	1.09 / 0.57	27. / 0.003	172. /	*XS*
C	AT	3790 / 3122.31	350 / 0.35	760. / 3.64	177. / 0.05 / 3122.65	6953. / 4.30	1.21 / 0.54	40. / 0.012	181. /	*XS*
D	AT	4150 / 3125.68	360 / 0.20	760. / 3.22	220. / 0.0 / 3125.87	9293. / 3.45	1.05 / 0.51	32. / 0.001	177. /	*XS*

END OF THIS PROFILE

```

=====
WATER-SURFACE PROFILE FOR: ROCKY KNOB      10,50,100,500 YR FLOODS  DUM 1-0
PAGE 1 OF 1
=====
SECID AT DISTANCE/ LENGTH/DISCHARGE/ AREA /CONVEYANCE/ ALPHA/ LEW / REW
WS ELEV / HV / HF / HE / EG / V / FN / ACC *ID*
=====
DUM 1 AT 2370 / 0 / 390. / 120. / 4067. / 1.18 / 23. / 138.
3108.03 / 0.19 / / / 3108.22 / 3.26 / 0.46 / *IS*
-----
DUM 2 AT 2580 / 210 / 390. / 117. / 3973. / 1.18 / 24. / 138.
3110.01 / 0.20 / 1.98 / 0.00 / 3110.21 / 3.32 / 0.47 / 0.009 *XS*
-----
DUM 3 AT 2790 / 210 / 390. / 118. / 4016. / 1.18 / 24. / 138.
3112.02 / 0.20 / 2.00 / 0.0 / 3112.22 / 3.29 / 0.46 / 0.003 *XS*
-----
A AT 3000 / 210 / 390. / 118. / 4016. / 1.18 / 24. / 138.
3114.02 / 0.20 / 1.98 / 0.0 / 3114.22 / 3.29 / 0.46 / 0.020 *XS*
-----
B AT 3440 / 440 / 390. / 121. / 4104. / 1.17 / 35. / 151.
3118.10 / 0.19 / 4.06 / 0.0 / 3118.28 / 3.24 / 0.44 / 0.006 *XS*
-----
C AT 3790 / 350 / 390. / 102. / 3535. / 1.42 / 52. / 163.
3121.71 / 0.32 / 3.67 / 0.07 / 3122.04 / 3.83 / 0.53 / 0.015 *XS*
-----
D AT 4150 / 360 / 390. / 141. / 4833. / 1.14 / 42. / 174.
3125.11 / 0.14 / 3.20 / 0.0 / 3125.24 / 2.77 / 0.47 / 0.004 *XS*
=====

```

END OF THIS PROFILE

USE

CROSS-SECTION PROPERTIES FOR: ROCKY KNOR 10,50,100, & 500 YR FLOODS: DUM 1-D
 SECID=0 AT DISTANCE= 4150 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3122.0	9	252	1.00	7	8	90	97	63
3122.5	13	396	1.00	8	10	89	97	97
3123.0	17	569	1.00	8	11	89	97	138
3123.5	21	774	1.00	9	12	88	97	187
3124.0	28	1019	1.11	45	48	88	138	119
3124.5	67	1912	1.51	105	109	52	171	246
3125.0	127	4154	1.18	130	135	43	173	653
3125.5	194	7733	1.07	141	146	35	176	1253
3126.0	268	12445	1.04	152	157	27	179	1977
3126.5	347	18263	1.03	163	168	18	182	2820
3127.0	431	25400	1.03	174	179	10	184	3783
3127.5	521	33910	1.04	186	190	2	187	4861
3128.0	615	43909	1.03	190	195	0	190	6195
3128.5	711	54983	1.02	193	199	0	193	7681
3129.0	808	67121	1.01	196	202	0	196	9271
3129.5	907	80286	1.01	198	205	0	198	10961
3129.8	966	88662	1.00	200	207	0	200	12022

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=B AT DISTANCE= 3440 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3115.0	8	164	1.00	8	9	60	68	41
3115.5	12	304	1.00	9	11	59	68	75
3116.0	17	484	1.00	12	14	57	69	116
3116.5	23	731	1.00	14	17	55	69	172
3117.0	33	1067	1.07	33	36	52	110	178
3117.5	61	1804	1.29	78	82	50	135	268
3118.0	110	3628	1.19	111	115	37	149	567
3118.5	171	6499	1.11	135	139	29	164	1040
3119.0	244	10653	1.05	151	155	26	177	1713
3119.5	321	16269	1.03	159	162	22	180	2554
3120.0	403	24444	1.03	167	170	17	184	3492
3120.5	488	35629	1.04	175	178	13	188	4528
3121.0	577	48663	1.05	183	186	9	192	5672
3121.5	670	61268	1.05	190	195	5	195	6977
3122.0	768	75541	1.04	198	203	1	199	8415
3122.1	788	78608	1.03	200	204	0	200	8718

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=C AT DISTANCE= 3790 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3119.0	10	272	1.00	8	10	90	99	66
3119.5	15	446	1.00	10	11	90	100	105
3120.0	20	668	1.00	11	13	89	100	154
3120.5	27	972	1.06	20	22	81	101	174
3121.0	45	1571	1.31	51	53	68	119	208
3121.5	80	2724	1.45	94	96	56	150	345
3122.0	136	4989	1.30	126	128	46	172	702
3122.5	205	8554	1.18	149	151	36	185	1256
3123.0	283	13850	1.14	160	163	27	188	1990
3123.5	365	20441	1.12	170	172	21	191	2868
3124.0	452	27924	1.08	179	182	14	193	3918
3124.5	544	36561	1.06	189	191	8	196	5090
3125.0	641	46359	1.05	198	201	1	199	6385
3125.1	661	48462	1.05	200	203	0	200	6659

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=DUM 3 AT DISTANCE= 2790 PART 1 OF 1

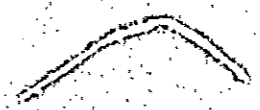
WS	A	K	ALPHA	B	P	LEW	RFW	QC
3109.0	8	198	1.00	8	9	49	57	49
3109.5	13	358	1.00	10	11	49	58	85
3110.0	18	568	1.00	11	13	48	59	132
3110.5	24	767	1.00	15	17	48	63	176
3111.0	37	1153	1.10	34	36	32	66	207
3111.5	61	1927	1.20	96	99	28	135	252
3112.0	116	3910	1.19	115	117	24	138	609
3112.5	175	7014	1.07	122	125	19	141	1151
3113.0	238	11093	1.03	129	132	15	144	1810
3113.5	304	16226	1.01	133	136	12	145	2592
3114.0	371	22700	1.01	137	140	10	147	3447
3114.5	441	30406	1.03	141	144	7	148	4368
3115.0	512	38436	1.02	145	148	4	149	5403
3115.5	585	47165	1.02	148	152	2	150	6528
3115.8	630	52876	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=A AT DISTANCE= 3000 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	RFW	QC
3111.0	8	198	1.00	8	9	49	57	49
3111.5	13	358	1.00	10	11	49	58	85
3112.0	18	568	1.00	11	13	48	59	132
3112.5	24	767	1.00	15	17	48	63	176
3113.0	37	1153	1.10	34	36	32	66	207
3113.5	61	1927	1.20	96	99	28	135	252
3114.0	116	3910	1.19	115	117	24	138	609
3114.5	175	7014	1.07	122	125	19	141	1151
3115.0	238	11093	1.03	129	132	15	144	1810
3115.5	304	16226	1.01	133	136	12	145	2592
3116.0	371	22700	1.01	137	140	10	147	3447
3116.5	441	30406	1.03	141	144	7	148	4368
3117.0	512	38436	1.02	145	148	4	149	5403
3117.5	585	47165	1.02	148	152	2	150	6528
3117.8	630	52876	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10, 50, 100, & 500 YR FLOODS DUM 1-0
 SECID=DUM 1 AT DISTANCE= 237.0 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3105.0	8	198	1.00	8	9	49	57	49
3105.5	13	358	1.00	10	11	49	58	85
3106.0	18	568	1.00	11	13	48	59	132
3106.5	24	767	1.00	15	17	48	63	176
3107.0	37	1153	1.10	34	36	32	66	207
3107.5	61	1927	1.20	96	99	28	135	252
3108.0	116	3910	1.19	115	117	24	138	609
3108.5	175	7014	1.07	122	125	19	141	1151
3109.0	238	11093	1.03	129	132	15	144	1810
3109.5	304	16226	1.01	133	136	12	145	2592
3110.0	371	22700	1.01	137	140	10	147	3447
3110.5	441	30406	1.03	141	144	7	148	4368
3111.0	512	38436	1.02	145	148	4	149	5403
3111.5	585	47165	1.02	148	152	2	150	6528
3111.8	630	52876	1.02	150	154	0	150	7256



CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10, 50, 100, & 500 YR FLOODS DUM 1-0
 SECID=DUM 2 AT DISTANCE= 258.0 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3107.0	8	198	1.00	8	9	49	57	49
3107.5	13	358	1.00	10	11	49	58	85
3108.0	18	568	1.00	11	13	48	59	132
3108.5	24	767	1.00	15	17	48	63	176
3109.0	37	1153	1.10	34	36	32	66	207
3109.5	61	1927	1.20	96	99	28	135	252
3110.0	116	3910	1.19	115	117	24	138	609
3110.5	175	7014	1.07	122	125	19	141	1151
3111.0	238	11093	1.03	129	132	15	144	1810
3111.5	304	16226	1.01	133	136	12	145	2592
3112.0	371	22700	1.01	137	140	10	147	3447
3112.5	441	30406	1.03	141	144	7	148	4368
3113.0	512	38436	1.02	145	148	4	149	5403
3113.5	585	47165	1.02	148	152	2	150	6528
3113.8	630	52876	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=DUM 1 AT DISTANCE= 2370 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3105.0	8	198	1.00	8	9	49	57	49
3105.5	13	358	1.00	10	11	49	58	85
3106.0	18	568	1.00	11	13	48	59	132
3106.5	24	767	1.00	15	17	48	63	176
3107.0	37	1153	1.10	34	36	32	66	207
3107.5	61	1927	1.20	96	99	28	135	252
3108.0	116	3910	1.19	115	117	24	138	609
3108.5	175	7014	1.07	122	125	19	141	1151
3109.0	238	11093	1.03	129	132	15	144	1810
3109.5	304	16226	1.01	133	136	12	145	2592
3110.0	371	22700	1.01	137	140	10	147	3447
3110.5	441	30406	1.03	141	144	7	148	4368
3111.0	512	38436	1.02	145	148	4	149	5403
3111.5	585	47165	1.02	148	152	2	150	6528
3111.8	630	52576	1.02	150	154	0	150	7256

CROSS-SECTION PROPERTIES FOR: ROCKY KNOB 10,50,100,&500 YR FLOODS DUM 1-D
 SECID=DUM 2 AT DISTANCE= 2580 PART 1 OF 1

WS	A	K	ALPHA	B	P	LEW	REW	QC
3107.0	8	198	1.00	8	9	49	57	49
3107.5	13	358	1.00	10	11	49	58	85
3108.0	18	568	1.00	11	13	48	59	132
3108.5	24	767	1.00	15	17	48	63	176
3109.0	37	1153	1.10	34	36	32	66	207
3109.5	61	1927	1.20	96	99	28	135	252

USGS STEP-BACKWATER PROGRAM - VERSION 76.170 *** PAGE COUNT= 2, DATE= 4/ 5/77

INPUT SUMMARY FOR: ROCKY KNOB 10,50,100, & 500 YR FLOODS DUM 1-D

7 CROSS SECTIONS SPECIFIED (OR ASSUMED)

FOUND 7 TYPE 3 CARDS

KEPT 7 CROSS SECTIONS FOR EDITING

7 " " VALID FOR PROPERTY COMPUTATIONS

7 " " " " PROFILE "

*** INPUT CARD PRINTOUT ***

	1	2	3	4	5	6	7	8
1	ROCKY KNOR	10.50	100.6000	YR FLOODS	DUM 1-D	7 14	02 05	15
2	310790	310803	310815	310850	310863	310875	310835	310875 310888 310900
3	310940	310940	310953	310965				
5	DUM 1	1 14	3 3105	2370	99 99			
6	390	390	390	760	760	760	960	960 960 960
7	960	1580	1580	1580				
8	0	1 31118	15 1 31090	35 1 31067	48 2 31067	50 2 31036		
9	53	2 31036	56 2 31043	60 2 31063	64 2 31066	70 3 31076		
10	100	3 31073	135 3 31075	144 3 31089	150 3 31115			
12	1 2 045	045 4 5 060	050 1 2 045	045				
20	DUM 2	0 14	3 3107	2580	99 99			
23	0	1 31138	15 1 31110	35 1 31087	48 2 31087	50 2 31056		
24	53	2 31056	56 2 31063	60 2 31083	64 2 31086	70 3 31096		
25	100	3 31093	135 3 31095	144 3 31109	150 3 31135			
27	1 2 045	045 4 5 060	050 1 2 045	045				
30	DUM 3	0 14	3 3109	2790	99 99			
33	0	1 31158	15 1 31130	35 1 31107	48 2 31107	50 2 31076		
34	53	2 31076	56 2 31083	60 2 31103	64 2 31106	70 3 31116		
35	100	3 31113	135 3 31115	144 3 31129	150 3 31155			
37	1 2 045	045 4 5 060	050 1 2 045	045				
40	A 0	14 3 3111	3000	99 99				
43	0	1 31178	15 1 31150	35 1 31127	48 2 31127	50 2 31096		
44	53	2 31096	56 2 31103	60 2 31123	64 2 31126	70 3 31136		
45	100	3 31133	135 3 31135	144 3 31149	150 3 31175			
47	1 2 045	045 4 5 060	050 1 2 045	045				
50	B 0	14 3 3115	3440	99 99				
53	0	1 31221	25 1 31191	30 1 31183	50 2 31175	60 2 31153		
54	61	2 31143	64 2 31139	68 2 31139	69 3 31177	100 3 31168		
55	140	3 31176	153 3 31182	175 3 31188	200 3 31221			
57	2 3 045	035 4 5 060	050 2 3 045	035				
60	C 0	13 3 3119	3790	99 99				
63	0	1 31251	30 1 31228	60 1 31213	89 2 31202	91 2 31186		
64	92	2 31172	95 2 31174	97 2 31177	101 3 31205	130 3 31213		
65	160	3 31216	184 3 31224	200 3 31251				
67	1 2 045	045 4 5 060	050 1 2 045	045				
70	D 0	12 3 3122	4150	99 99				
73	0	1 31276	30 1 31258	60 1 31240	87 2 31249	91 2 31207		
74	93	2 31201	96 2 31206	98 3 31247	103 3 31240	130 3 31239		
75	170	3 31244	200 3 31298					
77	1 2 045	045 5 6 060	050 1 2 045	045				

Rocky Knob
Chickamauga