

APPENDIX A
END POINT INFORMATION AND CROSS SECTION AND DISCHARGE
NOTES

List of Endpoint Elevations and Cross-Section Lengths

All of the inlets are tied to existing vertical datum and some have horizontal coordinates at the endpoints. The field notes for establishing vertical control at the Thunder Ranch cross sections, the reset LEP on BB-IN-2, and the reset LEP on AB-OUT are provided in this appendix.

Cross Section	LEP B&C Elevation	REP B&C Elevation	Distance (ft)
TR-IN-1	4837.23	4838.81	122
TR-IN-2	4837.35	4838.46	130
TR-IN-3	4840.87	4838.90	140
TR-IN-4	4841.64	4836.47	121
TR-IN-5	4837.17	4838.46	137
TR-IN-6	4836.74	4836.88	120
TR-IN-7	4836.08	4837.15	148
TR-OUT	4834.39	4833.97	92
BB-IN-1	4708.03	4708.51	62
BB-IN-2	4709.51	4708.08	87
BB-IN-3	4707.65	4708.43	60
BB-5B	4712.58	4707.92	247
ST-OUT	4690.81	4689.31	57
BA-MON-INLET	4690.28	4688.18	60
AB-IN-1	4678.57	4678.33	55
AB-IN-2	4677.75	4676.96	82
AB-IN-3	4679.31	4678.79	40
AB-OUT	4678.35	4676.96	254

A.1

PRE-RUNOFF CROSS SECTION NOTES

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: TR-IN-1								
LEP B&C	4837.23			LEP TLP	4840.12			
REP B&C	4838.81			REP TLP	4841.91			
	HI #1 =	4844.41		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/11/2005	1	0	4837.23	7.18				
5/11/2005	1	0	4840.12	4.29				
5/11/2005	1	0	4837.12	7.29				
5/11/2005	1	8	4836.94	7.47				
5/11/2005	1	14	4836.02	8.39				FS
5/11/2005	1	24	4832.87	11.54				FS
5/11/2005	1	30	4833.01	11.40				FS
5/11/2005	1	50	4833.43	10.98				FS
5/11/2005	1	68	4833.15	11.26				FS
5/11/2005	1	74	4834.23	10.18				FS
5/11/2005	1	86	4837.65	6.76				FS
5/11/2005	1	94	4839.14	5.27				FS
5/11/2005	1	100	4839.29	5.12				FS
5/11/2005	1	122	4838.77	5.64				FS
5/11/2005	1	122	4841.91	2.50				
5/11/2005	1	122	4838.81	5.60				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-2					
LEP B&C	4837.35			LEP TLP	4839.95			
REP B&C	4838.46			REP TLP	4841.69			
	HI #1 =	4843.56		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	2	0	4837.35	6.21				
5/10/2005	2	0	4839.95	3.61				
5/10/2005	2	0	4837.41	6.15				
5/10/2005	2	10	4837.42	6.14				
5/10/2005	2	20	4836.73	6.83				
5/10/2005	2	30	4835.93	7.63				
5/10/2005	2	40	4834.92	8.64				FS
5/10/2005	2	50	4834.76	8.80				FS
5/10/2005	2	70	4834.66	8.90				FS
5/10/2005	2	80	4834.54	9.02				FS
5/10/2005	2	84	4834.59	8.97				FS
5/10/2005	2	94	4836.44	7.12				FS
5/10/2005	2	100	4837.39	6.17				FS
5/10/2005	2	110	4838.56	5.00				FS
5/10/2005	2	120	4838.72	4.84				FS
5/10/2005	2	130	4838.46	5.10				FS
5/10/2005	2	130	4841.69	1.87				
5/10/2005	2	130	4838.46	5.10				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-3					
LEP B&C	4840.87			LEP TLP	4843.73			
REP B&C	4838.90			REP TLP	4841.79			
	HI #1 =	4846.91		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	3	0	4840.87	6.04				
5/10/2005	3	0	4843.73	3.18				
5/10/2005	3	0	4840.96	5.95				FS
5/10/2005	3	10	4840.66	6.25				FS
5/10/2005	3	20	4840.21	6.70				FS
5/10/2005	3	24	4839.69	7.22				FS
5/10/2005	3	30	4838.71	8.20				FS
5/10/2005	3	40	4835.48	11.43				FS
5/10/2005	3	50	4833.54	13.37				FS
5/10/2005	3	60	4833.52	13.39				FS
5/10/2005	3	80	4833.40	13.51				FS
5/10/2005	3	92	4833.29	13.62				FS
5/10/2005	3	100	4834.25	12.66				FS
5/10/2005	3	110	4836.54	10.37				FS
5/10/2005	3	126	4839.73	7.18				FS
5/10/2005	3	130	4839.76	7.15				FS
5/10/2005	3	140	4838.95	7.96				
5/10/2005	3	140	4841.79	5.12				
5/10/2005	3	140	4838.90	8.01				

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: TR-IN-4								
LEP B&C	4841.64			LEP TLP	4843.94			
REP B&C	4836.47			REP TLP	4839.47			
	HI #1 =	4846.63		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	4	0	4841.64	4.99				
5/10/2005	4	0	4843.94	2.69				
5/10/2005	4	0	4840.77	5.86				
5/10/2005	4	10	4841.24	5.39				
5/10/2005	4	20	4840.42	6.21				
5/10/2005	4	26	4839.89	6.74				
5/10/2005	4	36	4835.22	11.41				
5/10/2005	4	46	4832.56	14.07				FS
5/10/2005	4	50	4832.51	14.12				FS
5/10/2005	4	60	4832.02	14.61				FS
5/10/2005	4	80	4832.19	14.44				FS-MOIST
5/10/2005	4	90	4831.96	14.67				FS-MOIST
5/10/2005	4	96	4831.91	14.72				FS-MOIST
5/10/2005	4	100	4832.28	14.35				FS
5/10/2005	4	107	4834.47	12.16				FS
5/10/2005	4	113	4836.11	10.52				FS
5/10/2005	4	121	4836.44	10.19				
5/10/2005	4	121	4839.47	7.16				
5/10/2005	4	121	4836.47	10.16				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-5					
LEP B&C	4837.17			LEP TLP	4839.84			
REP B&C	4838.46			REP TLP	4840.74			
	HI #1 =	4842.46		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	5	0	4837.17	5.29				
5/10/2005	5	0	4839.84	2.62				
5/10/2005	5	0	4837.16	5.30				
5/10/2005	5	10	4836.96	5.50				
5/10/2005	5	20	4836.72	5.74				
5/10/2005	5	35	4834.66	7.80				FS
5/10/2005	5	48	4833.10	9.36				FS
5/10/2005	5	50	4833.00	9.46				FS
5/10/2005	5	60	4832.95	9.51				FS
5/10/2005	5	80	4832.99	9.47				FS
5/10/2005	5	87	4833.15	9.31				FS
5/10/2005	5	95	4834.63	7.83				FS
5/10/2005	5	100	4835.35	7.11				FS
5/10/2005	5	120	4837.86	4.60				
5/10/2005	5	124	4838.80	3.66				
5/10/2005	5	130	4838.50	3.96				
5/10/2005	5	137	4838.83	3.63				
5/10/2005	5	137	4840.74	1.72				
5/10/2005	5	137	4838.46	4.00				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: TR-IN-6						
LEP B&C	4836.74			LEP TLP	4839.30			
REP B&C	4836.88			REP TLP	4839.84			
	HI #1 =	4842.17		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	6	0	4836.74	5.43				
5/10/2005	6	0	4839.30	2.87				
5/10/2005	6	0	4836.70	5.47				
5/10/2005	6	10	4836.74	5.43				
5/10/2005	6	16	4836.96	5.21				
5/10/2005	6	24	4834.76	7.41				S
5/10/2005	6	37	4831.70	10.47				FS
5/10/2005	6	50	4831.77	10.40				FS
5/10/2005	6	70	4831.36	10.81				FS
5/10/2005	6	81	4831.42	10.75				FS
5/10/2005	6	90	4833.24	8.93				
5/10/2005	6	100	4836.42	5.75				
5/10/2005	6	110	4836.56	5.61				
5/10/2005	6	120	4836.93	5.24				
5/10/2005	6	120	4839.84	2.33				
5/10/2005	6	120	4836.88	5.29				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION:		TR-IN-7				
LEP B&C	4836.08			LEP TLP	4838.72			
REP B&C	4837.15			REP TLP	4838.95			
	HI #1 =	4842.84		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	7	0	4836.08	6.76				
5/10/2005	7	0	4838.72	4.12				
5/10/2005	7	0	4836.09	6.75				
5/10/2005	7	6	4836.43	6.41				
5/10/2005	7	16	4836.18	6.66				
5/10/2005	7	18	4839.06	3.78				
5/10/2005	7	22	4839.36	3.48				
5/10/2005	7	26	4838.66	4.18				S
5/10/2005	7	30	4836.76	6.08				FS
5/10/2005	7	40	4833.44	9.40				FS
5/10/2005	7	46	4831.79	11.05				FS
5/10/2005	7	50	4831.94	10.90				FS
5/10/2005	7	60	4831.68	11.16				FS
5/10/2005	7	70	4831.71	11.13				FS
5/10/2005	7	80	4831.60	11.24				FS-MOIST
5/10/2005	7	90	4831.39	11.45				FS-MOIST
5/10/2005	7	89	4831.48	11.36				FS
5/10/2005	7	100	4832.39	10.45				FS
5/10/2005	7	110	4836.24	6.60				FS
5/10/2005	7	114	4838.03	4.81				
5/10/2005	7	120	4837.23	5.61				
5/10/2005	7	130	4837.20	5.64				
5/10/2005	7	140	4837.30	5.54				
5/10/2005	7	148	4837.25	5.59				
5/10/2005	7	148	4838.95	3.89				
5/10/2005	7	148	4837.15	5.69				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-OUT					
LEP B&C	4834.39			LEP TLP	4837.01			
REP B&C	4833.97			REP TLP	4836.60			
	HI #1 =	4838.09		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/10/2005	OUT	0	4834.39	3.70				
5/10/2005	OUT	0	4837.01	1.08				
5/10/2005	OUT	0	4834.43	3.66				
5/10/2005	OUT	10	4834.68	3.41				
5/10/2005	OUT	17	4834.57	3.52				
5/10/2005	OUT	20	4833.09	5.00				SFD
5/10/2005	OUT	25	4831.68	6.41				SFD
5/10/2005	OUT	30	4830.50	7.59				FS
5/10/2005	OUT	32	4829.65	8.44	0.0			FS
5/10/2005	OUT	35	4829.15		0.5			0.2F
5/10/2005	OUT	40	4828.85		0.8			FS
5/10/2005	OUT	45	4828.95		0.7			FS
5/10/2005	OUT	50	4829.03		0.6			FS
5/10/2005	OUT	55	4829.23		0.4			FS
5/10/2005	OUT	60	4829.33		0.3			FS
5/10/2005	OUT	61	4829.63	8.46	0.0			FS
5/10/2005	OUT	65	4830.84	7.25				FSD
5/10/2005	OUT	71	4832.71	5.38				FDS
5/10/2005	OUT	80	4833.09	5.00				
5/10/2005	OUT	90	4833.94	4.15				
5/10/2005	OUT	92	4834.17	3.92				
5/10/2005	OUT	92	4836.60	1.49				
5/10/2005	OUT	92	4833.97	4.12				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: BB-IN-1						
LEP B&C	4708.03			LEP TLP				
REP B&C	4708.51			REP TLP				
	HI #1 =	4714.09		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/11/2005	1	0	4708.03	6.06				
5/11/2005	1	0	4711.10	2.99				
5/11/2005	1	0	4708.08	6.01				
5/11/2005	1	10	4708.74	5.35				
5/11/2005	1	18	4708.56	5.53				
5/11/2005	1	24	4707.39	6.70				
5/11/2005	1	30	4705.85	8.24				
5/11/2005	1	32	4705.26	8.83				
5/11/2005	1	34	4705.87	8.22				
5/11/2005	1	40	4707.68	6.41				
5/11/2005	1	48	4709.31	4.78				
5/11/2005	1	50	4709.53	4.56				
5/11/2005	1	60	4709.13	4.96				
5/11/2005	1	62	4708.85	5.24				
5/11/2005	1	62	4711.37	2.72				
5/11/2005	1	62	4708.51	5.58				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: BB-IN-2					
LEP B&C	4709.51			LEP TLP				
REP B&C	4708.08			REP TLP				
	HI #1 =	4716.73		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/11/2005	2	0	4709.51	7.22				
5/11/2005	2	0	4712.21	4.52				
5/11/2005	2	0	4709.64	7.09				
5/11/2005	2	10	4711.62	5.11				S
5/11/2005	2	15	4712.29	4.44				S
5/11/2005	2	20	4710.48	6.25				S
5/11/2005	2	30	4710.04	6.69				S
5/11/2005	2	35	4707.40	9.33				S
5/11/2005	2	40	4705.90	10.83				S
5/11/2005	2	46	4704.22	12.51				S
5/11/2005	2	50	4704.27	12.46				S
5/11/2005	2	58	4706.86	9.87				S
5/11/2005	2	64	4709.02	7.71				
5/11/2005	2	70	4710.63	6.10				
5/11/2005	2	76	4711.21	5.52				
5/11/2005	2	80	4710.95	5.78				
5/11/2005	2	86	4709.54	7.19				
5/11/2005	2	91	4708.24	8.49				
5/11/2005	2	91	4711.33	5.40				
5/11/2005	2	91	4708.08	8.65				

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: BB-IN-3								
LEP B&C	4707.65			LEP TLP				
REP B&C	4708.43			REP TLP				
	HI #1 =	4714.18		delta =	-0.01			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/11/2005	3	0	4707.65	6.53				
5/11/2005	3	0	4710.77	3.41				
5/11/2005	3	0	4707.90	6.28				
5/11/2005	3	10	4709.26	4.92				
5/11/2005	3	18	4709.00	5.18				
5/11/2005	3	24	4707.84	6.34				
5/11/2005	3	30	4705.36	8.82				
5/11/2005	3	33	4703.94	10.24				
5/11/2005	3	36	4703.96	10.22				
5/11/2005	3	40	4706.98	7.20				
5/11/2005	3	48	4709.28	4.90				
5/11/2005	3	50	4709.53	4.65				
5/11/2005	3	60	4708.52	5.66				
5/11/2005	3	60	4711.78	2.40				
5/11/2005	3	60	4708.42	5.76				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: BB-5B						
LEP B&C	4712.58			LEP TLP				
REP B&C	4708.05			REP TLP				
	HI #1 =	4716.12		delta =	LOOP CLOSED			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/11/2005	5B	0	4712.58	3.54				
5/11/2005	5B	0	4715.59	0.53				
5/11/2005	5B	0	4712.42	3.70				
5/11/2005	5B	10	4711.91	4.21				
5/11/2005	5B	28	4710.92	5.20				
5/11/2005	5B	44	4710.47	5.65				
5/11/2005	5B	50	4710.55	5.57				
5/11/2005	5B	58	4710.22	5.90				
5/11/2005	5B	60	4709.91	6.21				
5/11/2005	5B	70	4708.35	7.77				
5/11/2005	5B	90	4705.54	10.58				
5/11/2005	5B	100	4704.84	11.28				
5/11/2005	5B	120	4705.59	10.53				
5/11/2005	5B	150	4704.98	11.14				
5/11/2005	5B	190	4705.06	11.06				
5/11/2005	5B	200	4705.70	10.42				
5/11/2005	5B	210	4706.68	9.44				
5/11/2005	5B	224	4707.33	8.79				
5/11/2005	5B	240	4707.73	8.39				
5/11/2005	5B	246	4708.04	8.08				
5/11/2005	5B	246	4710.23	5.89				
5/11/2005	5B	246	4707.92	8.20				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: ST-OUT					
LEP B&C	4690.81			LEP TLP				
REP B&C	4689.31			REP TLP				
	HI #1 =	4694.97		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/18/2005	OUT	0	4690.81	4.16				
5/18/2005	OUT	-4	4694.02	0.95				
5/18/2005	OUT	0	4690.63	4.34				
5/18/2005	OUT	10	4689.60	5.37				
5/18/2005	OUT	20	4689.54	5.43				
5/18/2005	OUT	30	4689.04	5.93				
5/18/2005	OUT	40	4685.46	9.51				FS
5/18/2005	OUT	48	4686.74	8.23				
5/18/2005	OUT	52	4688.92	6.05				
5/18/2005	OUT	57	4689.25	5.72				
5/18/2005	OUT	57	4693.47	1.50				
5/18/2005	OUT	57	4689.31	5.66				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: BA-MON-INLET						
LEP B&C	4690.28			LEP TLP				
REP B&C	4688.18			REP TLP				
	HI #1 =	4694.51		delta =	0.01			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/18/2005	MON INLET	0	4690.28	4.23				
5/18/2005	MON INLET	0	4692.49	2.02				
5/18/2005	MON INLET	0	4690.19	4.32				S
5/18/2005	MON INLET	10	4688.45	6.06				S
5/18/2005	MON INLET	18	4682.03	12.48				S
5/18/2005	MON INLET	23	4681.59	12.92				SF
5/18/2005	MON INLET	24	4680.68	13.83				SF
5/18/2005	MON INLET	34	4681.52	12.99				SF
5/18/2005	MON INLET	40	4683.14	11.37				S
5/18/2005	MON INLET	46	4683.57	10.94				S
5/18/2005	MON INLET	50	4686.28	8.23				
5/18/2005	MON INLET	56	4688.12	6.39				
5/18/2005	MON INLET	60	4688.18	6.33				
5/18/2005	MON INLET	60	4690.43	4.08				
5/18/2005	MON INLET	60	4688.19	6.32				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: AB-IN-1					
LEP B&C	4678.57			LEP TLP				
REP B&C	4678.34			REP TLP				
	HI #1 =	4682.94		delta =	-0.03			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/17/2005	1	0	4678.57	4.37				
5/17/2005	1	0	4681.30	1.64				
5/17/2005	1	0	4678.46	4.48				
5/17/2005	1	10	4678.58	4.36				
5/17/2005	1	17	4677.84	5.10				
5/17/2005	1	18	4675.70	7.24				FS
5/17/2005	1	26	4674.94	8.00				FS
5/17/2005	1	32	4675.61	7.33				FS
5/17/2005	1	36	4676.53	6.41				FS
5/17/2005	1	39	4679.06	3.88				
5/17/2005	1	50	4678.93	4.01				
5/17/2005	1	55	4678.29	4.65				
5/17/2005	1	55	4681.40	1.54				
5/17/2005	1	55	4678.31	4.63				

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: AB-IN-2								
LEP B&C	4677.75			LEP TLP				
REP B&C	4676.95			REP TLP				
	HI #1 =	4681.74		delta =	-0.02			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/17/2005	2	0	4677.75	3.99				
5/17/2005	2	0	4680.53	1.21				
5/17/2005	2	0	4677.75	3.99				
5/17/2005	2	10	4677.04	4.70				
5/17/2005	2	20	4675.48	6.26				
5/17/2005	2	30	4676.26	5.48				
5/17/2005	2	40	4676.33	5.41				
5/17/2005	2	50	4677.19	4.55				
5/17/2005	2	52	4677.00	4.74				
5/17/2005	2	56	4676.29	5.45				
5/17/2005	2	60	4676.63	5.11				
5/17/2005	2	70	4677.25	4.49				
5/17/2005	2	80	4677.17	4.57				
5/17/2005	2	82	4676.98	4.76				
5/17/2005	2	82	4679.76	1.98				
5/17/2005	2	82	4676.93	4.81				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: AB-IN-3						
LEP B&C	4679.31			LEP TLP				
REP B&C	4678.78			REP TLP				
	HI #1 =	4684.08		delta =	0.01			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/18/2005	3	0	4679.31	4.77				
5/18/2005	3	0	4682.35	1.73				
5/18/2005	3	0	4679.28	4.80				
5/18/2005	3	8	4679.06	5.02				
5/18/2005	3	10	4678.87	5.21				S
5/18/2005	3	18	4675.40	8.68				S
5/18/2005	3	22	4675.27	8.81				S
5/18/2005	3	29	4675.10	8.98				S
5/18/2005	3	33	4676.68	7.40				S
5/18/2005	3	36	4678.70	5.38				
5/18/2005	3	41	4678.80	5.28				
5/18/2005	3	41	4682.00	2.08				
5/18/2005	3	41	4678.79	5.29				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: AB-OUT						
LEP B&C	4678.35			LEP TLP				
REP B&C	4676.96			REP TLP				
	HI #1 =	4679.68		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
5/18/2005	OUT	0	4678.35	1.33				
5/18/2005	OUT	0	4682.97	-3.29				
5/18/2005	OUT	0	4678.30	1.38				
5/18/2005	OUT	10	4675.94	3.74				
5/18/2005	OUT	20	4674.60	5.08				
5/18/2005	OUT	50	4674.61	5.07				
5/18/2005	OUT	100	4674.43	5.25				
5/18/2005	OUT	130	4674.67	5.01				
5/18/2005	OUT	160	4675.07	4.61				
5/18/2005	OUT	200	4676.10	3.58				
5/18/2005	OUT	205	4677.45	2.23				
5/18/2005	OUT	*205*	4677.77	1.91				
5/18/2005	OUT	210	4676.36	3.32				
5/18/2005	OUT	220	4673.49	6.19				
5/18/2005	OUT	222	4672.48	7.20				
5/18/2005	OUT	230	4672.65	7.03				
5/18/2005	OUT	234	4673.50	6.18				
5/18/2005	OUT	240	4674.78	4.90				
5/18/2005	OUT	250	4676.89	2.79				
5/18/2005	OUT	254	4676.80	2.88				
5/18/2005	OUT	254	4679.56	0.12				
5/18/2005	OUT	254	4676.96	2.72				

A.2
14,000 CFS DISCHARGE NOTES

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-1										
Date:	5/19/2005										
Time:	13:35										
Water Surface Elevation in Notch = 4834.52											
Water Surface Elevation in River = 4834.52											
Notes: Water in notch but no detectable velocity											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
STATION	REPRESENTING	DISTANCE	DEPTH		MEASURE	DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
	FROM	TO	(FT)	(FT)		(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-2										
Date:	5/19/2005										
Time:	13:50										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4834.08											
Notes: No water in notch											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-3										
Date:	5/19/2005										
Time:	14:15										
Water Surface Elevation in Notch = 4834.05											
Water Surface Elevation in River = 4834.06											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
46	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
55	46	60	14	0.7	0.6	0.4		0.20	0.20		1.96
65	60	70	10	0.7	0.6	0.4		0.36	0.36		2.52
75	70	80	10	0.7	0.6	0.4		0.42	0.42		2.94
85	80	90	10	0.7	0.6	0.4		0.58	0.58		4.06
95	90	100	10	0.7	0.6	0.4		0.37	0.37		2.59
100	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	14.07
										AVERAGE VELOCITY=	0.39

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-4										
Date:	5/19/2005										
Time:	14:45										
Water Surface Elevation in Notch = 4831.88											
Water Surface Elevation in River = 4831.88											
Notes: Water backing up from high ground on inland side of notch											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-5										
Date:	5/19/2005										
Time:	15:00										
Water Surface Elevation in Notch = 4833.27											
Water Surface Elevation in River = 4833.29											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
46	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
50	46	55	9	0.3	0.6	0.2		0.11	0.11		0.30
60	55	65	10	0.4	0.6	0.2		0.21	0.21		0.84
70	65	75	10	0.3	0.6	0.2		0.13	0.13		0.39
80	75	88	13	0.4	0.6	0.2		0.23	0.23		1.20
88	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	2.72
										AVERAGE VELOCITY=	0.17

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-6										
Date:	5/19/2005										
Time:	15:40										
Water Surface Elevation in Notch = 4832.89											
Water Surface Elevation in River = 4832.90											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
32	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
36	32	40	8	1.0	0.6	0.6		-0.04	-0.04		-0.32
45	40	50	10	1.3	0.6	0.8		-0.03	-0.03		-0.39
55	50	60	10	1.2	0.6	0.7		0.00	0.00		0.00
65	60	70	10	1.6	0.6	1.0		0.01	0.01		0.16
75	70	80	10	1.7	0.6	1.0		0.44	0.44		7.48
84	80	88	8	1.1	0.6	0.7		0.77	0.77		6.78
88	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	13.71
										AVERAGE VELOCITY=	0.19

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-7										
Date:	5/19/2005										
Time:	16:15										
Water Surface Elevation in Notch = 4833.75											
Water Surface Elevation in River = 4833.75											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
38	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
44	38	50	12	1.5	0.6	0.9		-0.07	-0.07		-1.26
55	50	60	10	2.1	0.2	0.4		0.17			
55	50	60	10	2.1	0.8	1.7		-0.01	0.08		1.68
65	60	70	10	2.0	0.2	0.4		-0.11			
65	60	70	10	2.0	0.8	1.6		-0.04	-0.08		-1.50
75	70	80	10	2.0	0.2	0.4		0.04			
75	70	80	10	2.0	0.8	1.6		0.02	0.03		0.60
85	80	90	10	2.3	0.2	0.5		0.03			
85	80	90	10	2.3	0.8	1.8		0.10	0.07		1.50
97	90	104	14	2.3	0.2	0.5		0.64			
97	90	104	14	2.3	0.8	1.8		0.71	0.68		21.74
104	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	22.75
										AVERAGE VELOCITY=	0.12

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-OUT										
Date:	5/19/2005										
Time:	11:40										
Water Surface Elevation in Notch = 4832.01											
Water Surface Elevation in River = 4832.01											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
24	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
30	24	36	12	1.4	0.6	0.8		1.02	1.02		17.14
42	36	48	12	3.1	0.2	0.6		1.37			
42	36	48	12	3.1	0.8	2.5		0.50	0.94		34.78
54	48	60	12	3.0	0.2	0.6		0.31			
54	48	60	12	3.0	0.8	2.4		0.59	0.45		16.20
66	60	70	10	1.3	0.6	0.8		0.25	0.25		3.25
70	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	71.37
										AVERAGE VELOCITY=	0.66

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-1										
Date:	5/19/2005										
Time:	18:40										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4705.07											
Notes: No water in notch											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-2										
Date:	5/19/2005										
Time:	18:30										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4704.96											
Notes: Water just starting to tickle into notch											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-3										
Date:	5/19/2005										
Time:	18:05										
Water Surface Elevation in Notch = 4704.74											
Water Surface Elevation in River = 4704.89											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
32	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
32.5	32	33	1	0.9	0.6	0.5		1.27	1.27		1.14
33.5	33	34	1	0.9	0.6	0.5		1.92	1.92		1.73
34.5	34	35	1	1.0	0.6	0.6		1.90	1.90		1.90
35.5	35	36	1	0.6	0.6	0.4		-0.05	-0.05		-0.03
36	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	4.74
										AVERAGE VELOCITY=	1.26

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-5B										
Date:	5/19/2005										
Time:	18:50										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4705.52											
Notes: No water in notch											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	ST-OUT										
Date:	5/20/2005										
Time:	11:40										
Water Surface Elevation in Notch = 4687.10											
Water Surface Elevation in River = 4687.10											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH		AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	ANGLE	(FPS)	(FPS)	(FPS)	(CFS)
34	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
36	34	37.5	3.5	1.4	0.6	0.8		0.46	0.46		2.25
39	37.5	40.5	3	1.7	0.6	1.0		0.49	0.49		2.50
42	40.5	43.5	3	0.9	0.6	0.5		0.16	0.16		0.43
45	43.5	47	3.5	0.7	0.6	0.4		0.18	0.18		0.44
47	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	5.63
										AVERAGE VELOCITY=	0.32

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BA-MON-INLET										
Date:	5/20/2005										
Time:	12:40										
Water Surface Elevation in Notch = 4683.32											
Water Surface Elevation in River = 4683.32											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
18	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
21	18	24	6	1.7	0.6	1.0		0.13	0.13		1.33
27	24	30	6	3.2	0.2	0.6		0.29			
27	24	30	6	3.2	0.6	1.9		0.34			
27	24	30	6	3.2	0.8	2.6		0.28	0.30		5.82
33	30	37	7	2.1	0.2	0.4		0.18			
33	30	37	7	2.1	0.6	1.3		0.16			
33	30	37	7	2.1	0.8	1.7		0.18	0.17		2.55
37	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	9.70
										AVERAGE VELOCITY=	0.20

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-1										
Date:	5/20/2005										
Time:	10:35										
Water Surface Elevation in Notch = 4676.90											
Water Surface Elevation in River = 4677.02											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
17	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
20	17	22	5	1.3	0.6	0.8		1.09	1.09		7.09
24	22	26	4	2.2	0.2	0.4		2.02			
24	22	26	4	2.2	0.6	1.3		1.79			
24	22	26	4	2.2	0.8	1.8		0.69	1.50		13.20
28	26	30	4	3.2	0.2	0.6		1.94			
28	26	30	4	3.2	0.6	1.9		1.84			
28	26	30	4	3.2	0.8	2.6		1.86	1.88		24.06
32	30	35	5	1.3	0.6	0.8		1.33	1.33		8.65
35	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	52.99
										AVERAGE VELOCITY=	1.45

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-2										
Date:	5/20/2005										
Time:	10:10										
Water Surface Elevation in Notch = 4676.66											
Water Surface Elevation in River = 4676.73											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
54	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
55	54	55.5	1.5	0.4	0.6	0.2		0.71	0.71		0.43
56	55.5	56.5	1	0.4	0.6	0.2		0.38	0.38		0.15
57	56.5	58	1.5	0.3	0.6	0.2		0.27	0.27		0.12
58	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	0.70
										AVERAGE VELOCITY=	0.45

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-3										
Date:	5/20/2005										
Time:	9:45										
Water Surface Elevation in Notch = 4674.09											
Water Surface Elevation in River =											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
17	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
19	17	21	4	0.2	0.6	0.1		0.14	0.14		0.11
23	21	25	4	0.3	0.6	0.2	0.524	0.83	0.83	0.72	0.86
27	25	29	4	0.6	0.6	0.4		1.20	1.20		2.88
29	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	3.85
										AVERAGE VELOCITY=	0.69

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-OUT										
Date:	5/20/2005										
Time:	7:50										
Water Surface Elevation in Notch = 4676.30											
Water Surface Elevation in River = 4677.36											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
212	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
215	212	218	6	0.9	0.6	0.5		0.74	0.74		4.00
221	218	224	6	2.9	0.2	0.6		1.44			
221	218	224	6	2.9	0.6	1.7		1.50			
221	218	224	6	2.9	0.8	2.3		1.06	1.33		23.20
227	224	230	6	2.3	0.2	0.5		0.58			
227	224	230	6	2.3	0.6	1.4		0.67			
227	224	230	6	2.3	0.8	1.8		0.60	0.62		8.51
233	230	236	6	2.6	0.2	0.5		0.23			
233	230	236	6	2.6	0.6	1.6		0.24			
233	230	236	6	2.6	0.8	2.1		0.24	0.24		3.69
239	236	245	9	1.6	0.6	1.0		0.58	0.58		8.35
245	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	47.75
										AVERAGE VELOCITY=	0.70

A.3
20,000 CFS DISCHARGE NOTES

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-1										
Date:	5/24/2005										
Time:	10:25										
Water Surface Elevation in Notch = 4835.97											
Water Surface Elevation in River = 4835.97											
Notes: Water in notch is moving slowly into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
12	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
18	12	25	13	1.2	0.6	0.7		-0.02	-0.02		-0.31
32	25	38	13	2.6	0.2	0.5		-0.02			
32	25	38	13	2.6	0.6	1.6		0.00			
32	25	38	13	2.6	0.8	2.1		-0.04	-0.02		-0.68
46	38	51	13	2.3	0.2	0.5		-0.01			
46	38	51	13	2.3	0.6	1.4		0.08			
46	38	51	13	2.3	0.8	1.8		0.05	0.04		1.20
60	51	64	13	2.2	0.2	0.4		0.58			
60	51	64	13	2.2	0.6	1.3		0.34			
60	51	64	13	2.2	0.8	1.8		0.34	0.42		12.01
74	64	80	16	1.7	0.6	1.0		0.35	0.35		9.52
80	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	21.74
										AVERAGE VELOCITY=	0.15

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-2										
Date:	5/24/2005										
Time:	11:50										
Water Surface Elevation in Notch = 4835.57											
Water Surface Elevation in River = 4835.57											
Notes: Water flowing into bottomland slowly											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
33	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
39	33	44	11	0.6	0.6	0.4		0.07	0.07		0.46
50	44	55	11	0.9	0.6	0.5		0.11	0.11		1.09
61	55	66	11	1.0	0.6	0.6		0.18	0.18		1.98
72	66	77	11	1.0	0.6	0.6		0.06	0.06		0.66
83	77	90	13	1.1	0.6	0.7		0.12	0.12		1.72
90	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	5.91
										AVERAGE VELOCITY=	0.11

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-3										
Date:	5/24/2005										
Time:	12:25										
Water Surface Elevation in Notch = 4835.53											
Water Surface Elevation in River = 4835.56											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
39	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
46	39	52	13	1.4	0.6	0.8		0.42	0.42		7.64
59	52	65	13	1.0	0.6	0.6		1.04	1.04		13.52
72	65	78	13	0.9	0.6	0.5		1.41	1.41		16.50
85	78	91	13	1.0	0.6	0.6		1.34	1.34		17.42
98	91	106	15	1.4	0.6	0.8		1.58	1.58		33.18
106	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	88.26
										AVERAGE VELOCITY=	1.16

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-4										
Date:	5/24/2005										
Time:	12:55										
Water Surface Elevation in Notch = 4835.35											
Water Surface Elevation in River = 4835.35											
Notes: Water moving slowly out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
36	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
43	36	51	15	2.4	0.2	0.5		-0.23			
43	36	51	15	2.4	0.6	1.4		-0.20			
43	36	51	15	2.4	0.8	1.9		-0.19	-0.21		-7.44
58	51	66	15	3.2	0.2	0.6		-0.06			
58	51	66	15	3.2	0.6	1.9		-0.05			
58	51	66	15	3.2	0.8	2.6		-0.07	-0.06		-2.88
73	66	81	15	2.1	0.2	0.4		0.08			
73	66	81	15	2.1	0.6	1.3		0.08			
73	66	81	15	2.1	0.8	1.7		0.04	0.07		2.10
88	81	96	15	1.6	0.6	1.0		0.58	0.58		13.92
103	96	110	14	1.9	0.6	1.1		0.62	0.62		16.49
110	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	-10.32
										AVERAGE VELOCITY=	0.20

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-5										
Date:	5/24/2005										
Time:	14:30										
Water Surface Elevation in Notch = 4834.68											
Water Surface Elevation in River = 4834.77											
Notes: Water flowing into bottomland, much faster along right bank											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
34	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
40	34	46	12	0.8	0.6	0.5		0.41	0.41		3.94
52	46	58	12	1.7	0.6	1.0		0.78	0.78		15.91
64	58	70	12	1.9	0.6	1.1		1.82	1.82		41.50
76	70	82	12	1.9	0.6	1.1		2.09	2.09		47.65
88	82	94	12	2.3	0.2	0.5		1.69			
88	82	94	12	2.3	0.6	1.4		2.26			
88	82	94	12	2.3	0.8	1.8		2.25	2.07		57.04
94	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	166.04
										AVERAGE VELOCITY=	1.43

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-6										
Date:	5/24/2005										
Time:	15:15										
Water Surface Elevation in Notch = 4834.34											
Water Surface Elevation in River = 4834.53											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
25	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
31	25	39	14	1.4	0.6	0.8		-0.13	-0.13		-2.55
45	39	53	14	2.1	0.2	0.4		0.51			
45	39	53	14	2.1	0.6	1.3		0.61			
45	39	53	14	2.1	0.8	1.7		0.41	0.51		14.99
59	53	67	14	1.4	0.6	0.8		1.11	1.11		21.76
73	67	81	14	2.8	0.2	0.6		1.85			
73	67	81	14	2.8	0.6	1.7		1.96			
73	67	81	14	2.8	0.8	2.2		1.98	1.93		75.66
87	81	93	12	2.5	0.2	0.5		2.59			
87	81	93	12	2.5	0.6	0.0		2.83			
87	81	93	12	2.5	0.8	0.0		2.43	2.62		78.50
93	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	188.36
										AVERAGE VELOCITY=	1.21

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-7										
Date:	5/24/2005										
Time:	15:55										
Water Surface Elevation in Notch = 4835.28											
Water Surface Elevation in River = 4835.28											
Notes: Water flowing out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
34	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
41	34	49	15	2.4	0.2	0.5		-0.05			
41	34	49	15	2.4	0.6	1.4		-0.04			
41	34	49	15	2.4	0.8	1.9		-0.02	-0.04		-1.32
56	49	61	12	3.4	0.2	0.7		-0.03			
56	49	61	12	3.4	0.6	2.0		-0.01			
56	49	61	12	3.4	0.8	2.7		-0.01	-0.02		-0.68
71	61	76	15	3.3	0.2	0.7		-0.35			
71	61	76	15	3.3	0.6	2.0		-0.31			
71	61	76	15	3.3	0.8	2.6		-0.30	-0.32		-15.84
86	76	91	15	2.7	0.2	0.5		-0.63			
86	76	91	15	2.7	0.6	1.6		-0.61			
86	76	91	15	2.7	0.8	2.2		-0.48	-0.57		-23.22
101	91	108	17	2.8	0.2	0.6		-0.30			
101	91	108	17	2.8	0.6	1.7		-0.35			
101	91	108	17	2.8	0.8	2.2		-0.41	-0.35		-16.82
108	REW		0	0.0	0	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	-57.88
										AVERAGE VELOCITY=	-0.26

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-OUT										
Date:	5/24/2005										
Time:	17:12										
Water Surface Elevation in Notch = 4833.63											
Water Surface Elevation in River =											
Notes: Water flowing out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
19	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
25	19	32	13	2.1	0.2	0.4		1.00			
25	19	32	13	2.1	0.6	1.3		1.06			
25	19	32	13	2.1	0.8	1.7		0.94	1.00		27.30
38	32	45	13	4.6	0.2	0.9		1.98			
38	32	45	13	4.6	0.6	2.8		2.08			
38	32	45	13	4.6	0.8	3.7		2.13	2.06		123.39
51	45	58	13	3.8	0.2	0.8		2.51			
51	45	58	13	3.8	0.6	2.3		2.48			
51	45	58	13	3.8	0.8	3.0		2.27	2.42		119.55
64	58	71	13	3.4	0.2	0.7		1.05			
64	58	71	13	3.4	0.6	2.0		1.35			
64	58	71	13	3.4	0.8	2.7		0.87	1.09		48.18
77	71	82	11	1.1	0.6	0.7		0.05	0.05		0.61
82	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	319.02
										AVERAGE VELOCITY=	1.64

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-1										
Date:	5/25/2005										
Time:	9:35										
Water Surface Elevation in Notch = 4706.41											
Water Surface Elevation in River = 4706.90											
Notes: Water flowing inot bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
28	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
29.5	28	30	2	0.3	0.6	0.2		0.17	0.17		0.10
31	30	33	3	1.5	0.6	0.9		1.68	1.68		7.56
34	33	36	3	0.6	0.6	0.4		0.06	0.06		0.11
36	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	7.77
										AVERAGE VELOCITY=	0.64

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-2										
Date:	5/25/2005										
Time:	10:10										
Water Surface Elevation in Notch = 4706.40											
Water Surface Elevation in River = 4706.63											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
30	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
33	30	36	6	0.8	0.6	0.5	0.524	1.22	1.22	1.06	5.07
38	36	41	5	0.8	0.6	0.5	0.524	0.77	0.77	0.67	2.67
43	41	46	5	1.8	0.6	1.1	0.349	1.29	1.29	1.21	10.91
48	46	51	5	3.4	0.2	0.7		3.55			
48	46	51	5	3.4	0.6	2.0		3.27			
48	46	51	5	3.4	0.8	2.7		2.84	3.22		54.74
53	51	57	6	1.7	0.6	1.0		0.87	0.87		8.87
57	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	82.26
										AVERAGE VELOCITY=	1.41

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-3										
Date:	5/25/2005										
Time:	10:45										
Water Surface Elevation in Notch = 4706.57											
Water Surface Elevation in River = 4706.65											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
28	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
30	28	31	3	1.0	0.6	0.6		1.08	1.08		3.24
32	31	33	2	1.3	0.6	0.8		1.59	1.59		4.13
34	33	35	2	2.9	0.2	0.6		1.97			
34	33	35	2	2.9	0.6	1.7		1.97			
34	33	35	2	2.9	0.8	2.3		1.73	1.89		10.96
36	35	37	2	2.7	0.2	0.5		2.21			
36	35	37	2	2.7	0.6	1.6		0.34			
36	35	37	2	2.7	0.8	2.2		0.85	1.13		6.12
38	37	40	3	1.7	0.6	1.0		1.55	1.55		7.91
40	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	32.36
										AVERAGE VELOCITY=	1.45

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-5B										
Date:	5/25/2005										
Time:	8:30										
Water Surface Elevation in Notch = 4707.56											
Water Surface Elevation in River = 4707.38											
Notes: Water is flowing out of bottomland											
	REPRESENTING		DISTANCE	DEPTH		OBSERVATION		VELOCITY	MEAN	ADJUSTED	
STATION	FROM	TO	(FT)	(FT)	MEASURE	DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
						(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
74	LEW		0	0.0	0.6	0.0		0	0.00		0.00
81	74	88	14	1.0	0.6	0.6		0.05	0.05		0.70
96	88	103	15	2.6	0.2	0.5		0.79			
96	88	103	15	2.6	0.6	1.6		0.79			
96	88	103	15	2.6	0.8	2.1		0.47	0.68		26.65
111	103	118	15	2.3	0.2	0.5		0.34			
111	103	118	15	2.3	0.6	1.4		0.31			
111	103	118	15	2.3	0.8	1.8		0.15	0.27		9.20
126	118	133	15	2.0	0.2	0.4		0.34			
126	118	133	15	2.0	0.6	1.2		0.33			
126	118	133	15	2.0	0.8	1.6		0.23	0.30		9.00
141	133	148	15	2.1	0.2	0.4		0.74			
141	133	148	15	2.1	0.6	1.3		0.63			
141	133	148	15	2.1	0.8	1.7		0.09	0.49		15.33
156	148	163	15	2.6	0.2	0.5		0.68			
156	148	163	15	2.6	0.6	1.6		0.36			
156	148	163	15	2.6	0.8	2.1		0.05	0.36		14.17
171	163	178	15	2.2	0.2	0.4		0.56			
171	163	178	15	2.2	0.6	1.3		0.46			
171	163	178	15	2.2	0.8	1.8		0.09	0.37		12.21
186	178	193	15	2.6	0.2	0.5		0.95			
186	178	193	15	2.6	0.6	1.6		0.70			
186	178	193	15	2.6	0.8	2.1		0.20	0.62		24.05
201	193	208	15	1.6	0.6	1.0		0.04	0.04		0.96
216	208	222	14	0.5	0.6	0.3		0.02	0.02		0.14
222	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	112.41
										AVERAGE VELOCITY=	0.32

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	ST-OUT										
Date:	5/25/2005										
Time:	18:25										
Water Surface Elevation in Notch = 4689.05											
Water Surface Elevation in River = 4689.05											
Notes: Water flowing slowly into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
30	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
33	30	35	5	1.5	0.6	0.9		0.02	0.02		0.15
37	35	39	4	3.4	0.2	0.7		0.24			
37	35	39	4	3.4	0.6	2.0		0.26			
37	35	39	4	3.4	0.8	2.7		0.20	0.23		3.17
41	39	43	4	3.0	0.2	0.6		0.29			
41	39	43	4	3.0	0.6	1.8		0.25			
41	39	43	4	3.0	0.8	2.4		0.12	0.22		2.64
45	43	47	4	2.2	0.2	0.4		0.13			
45	43	47	4	2.2	0.6	1.3		0.14			
45	43	47	4	2.2	0.8	1.8		0.09	0.12		1.06
49	47	52	5	1.5	0.6	0.9		-0.02	-0.02		-0.15
52	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	6.87
										AVERAGE VELOCITY=	0.11

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BA-MON-INLET										
Date:	5/25/2005										
Time:	17:35										
Water Surface Elevation in Notch = 4685.29											
Water Surface Elevation in River = 4685.32											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
16	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
19	16	23	7	2.1	0.2	0.4		0.20			
19	16	23	7	2.1	0.6	1.3		0.39			
19	16	23	7	2.1	0.8	1.7		0.24	0.28		4.07
26	23	30	7	3.4	0.2	0.7		0.70			
26	23	30	7	3.4	0.6	2.0		0.74			
26	23	30	7	3.4	0.8	2.7		0.77	0.74		17.53
33	30	37	7	2.8	0.2	0.6		0.23			
33	30	37	7	2.8	0.6	1.7		0.25			
33	30	37	7	2.8	0.8	2.2		0.45	0.31		6.08
40	37	44	7	1.7	0.6	1.0		-0.10	-0.10		-1.19
47	44	49	5	1.3	0.6	0.8		-0.11	-0.11		-0.72
49	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	25.77
										AVERAGE VELOCITY=	0.22

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-1										
Date:	5/25/2005										
Time:	13:30										
Water Surface Elevation in Notch = 4678.61											
Water Surface Elevation in River = 4678.66											
Notes: Water flowing into bottomland, most of overbank areas are flooded											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH		AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	ANGLE	(FPS)	(FPS)	(FPS)	(CFS)
13	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
15	13	18	5	0.6	0.6	0.4		1.29	1.29		3.87
20	18	23	5	3.1	0.2	0.6		2.07			
20	18	23	5	3.1	0.6	1.9		1.47			
20	18	23	5	3.1	0.8	2.5		1.20	1.58		24.49
25	23	28	5	4.9	0.2	1.0		1.99			
25	23	28	5	4.9	0.6	2.9		2.52			
25	23	28	5	4.9	0.8	3.9		2.21	2.24		54.88
30	28	33	5	4.7	0.2	0.9		2.38			
30	28	33	5	4.7	0.6	2.8		2.54			
30	28	33	5	4.7	0.8	3.8		2.36	2.43		57.03
35	33	38	5	2.4	0.2	0.5		1.52			
35	33	38	5	2.4	0.6	1.4		0.53			
35	33	38	5	2.4	0.8	1.9		0.53	0.86		10.32
38	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	150.59
										AVERAGE VELOCITY=	1.68

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-2										
Date:	5/25/2005										
Time:	14:35										
Water Surface Elevation in Notch = 4678.31											
Water Surface Elevation in River = 4678.49											
Notes: Water flowing into bottomland; water is over REP & LEP											
	REPRESENTING		DISTANCE	DEPTH		OBSERVATION		VELOCITY	MEAN	ADJUSTED	
STATION	FROM	TO	(FT)	(FT)	MEASURE	DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
						(FT)		(FPS)	(FPS)	(FPS)	(CFS)
0	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
4	0	8	8	0.7	0.6	0.4		0.20	0.20		1.12
12	8	16	8	1.7	0.6	1.0		0.04	0.04		0.54
20	16	24	8	2.8	0.2	0.6		0.06			
20	16	24	8	2.8	0.6	1.7		0.05			
20	16	24	8	2.8	0.8	2.2		0.04	0.05		1.12
28	24	32	8	2.3	0.2	0.5		0.05			
28	24	32	8	2.3	0.6	1.4		0.00			
28	24	32	8	2.3	0.8	1.8		0.00	0.02		0.31
36	32	40	8	2.1	0.2	0.4		0.08			
36	32	40	8	2.1	0.6	1.3		0.07			
36	32	40	8	2.1	0.8	1.7		0.03	0.06		1.01
44	40	48	8	1.8	0.6	1.1		0.12	0.12		1.73
52	48	54	6	1.2	0.6	0.7		0.20	0.20		1.44
56	54	58	4	1.9	0.6	1.1		2.60	2.60		19.76
60	58	64	6	1.0	0.6	0.6		0.49	0.49		2.94
68	64	72	8	0.9	0.6	0.5		0.15	0.15		1.08
76	72	82	10	0.8	0.6	0.5		0.07	0.07		0.56
82	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	31.61
										AVERAGE VELOCITY=	0.36

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-3										
Date:	5/25/2005										
Time:	15:30										
Water Surface Elevation in Notch = 4677.97											
Water Surface Elevation in River = 4678.29											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH		AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	ANGLE	(FPS)	(FPS)	(FPS)	(CFS)
11	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
13	11	15	4	1.4	0.6	0.8		0.19	0.19		1.06
17	15	19	4	2.8	0.2	0.6		1.24			
17	15	19	4	2.8	0.6	1.7		2.23			
17	15	19	4	2.8	0.8	2.2		2.52	2.00		22.36
21	19	23	4	3.0	0.2	0.6		2.90			
21	19	23	4	3.0	0.6	1.8		2.78			
21	19	23	4	3.0	0.8	2.4		2.54	2.74		32.88
25	23	27	4	3.2	0.2	0.6		0.20			
25	23	27	4	3.2	0.6	1.9		1.67			
25	23	27	4	3.2	0.8	2.6		2.09	1.32		16.90
29	27	32	5	2.5	0.2	0.5		0.58			
29	27	32	5	2.5	0.6	1.5		1.07			
29	27	32	5	2.5	0.8	2.0		0.85	0.83		10.42
32	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
TOTAL DISCHARGE=											83.62
AVERAGE VELOCITY=											1.42

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-OUT										
Date:	5/25/2005										
Time:	16:30										
Water Surface Elevation in Notch = 4677.73											
Water Surface Elevation in River = 4677.55											
Notes: Water flowing out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
205	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
209	205	215	10	1.0	0.6	0.6	1.57	0.85	0.85	0.00	8.50
219	215	225	10	3.8	0.2	0.8		1.36			
219	215	225	10	3.8	0.6	2.3		1.58			
219	215	225	10	3.8	0.8	3.0		2.00	1.65		62.57
229	225	235	10	5.5	0.2	1.1		1.13			
229	225	235	10	5.5	0.6	3.3		1.42			
229	225	235	10	5.5	0.8	4.4		1.53	1.36		74.80
239	235	245	10	3.6	0.2	0.7		1.61			
239	235	245	10	3.6	0.6	2.2		1.89			
239	235	245	10	3.6	0.8	2.9		1.84	1.78		64.08
249	245	254	9	0.9	0.6	0.5	0.785	1.64	1.64	1.16	13.28
254	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	223.24
										AVERAGE VELOCITY=	1.46

A.4
17,000 CFS DISCHARGE NOTES

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-1										
Date:	5/30/2005										
Time:	9:20										
Water Surface Elevation in Notch = 4835.15											
Water Surface Elevation in River = 4835.16											
Notes: Water in notch is moving out slowly											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
17	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
23	17	29	12	1.8	0.6	1.1		-0.08	-0.08		-1.73
35	29	41	12	1.3	0.6	0.8		0.01	0.01		0.16
47	41	53	12	1.1	0.6	0.7		0.02	0.02		0.26
59	53	65	12	1.1	0.6	0.7		0.00	0.00		0.00
71	65	77	12	0.3	0.6	0.2		0.00	0.00		0.00
77	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	-1.31
										AVERAGE VELOCITY=	-0.02

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-2										
Date:	5/30/2005										
Time:	9:50										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4834.77											
Notes: No water in notch, some ponding											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-3										
Date:	5/30/2005										
Time:	10:10										
Water Surface Elevation in Notch = 4834.74											
Water Surface Elevation in River = 4834.74											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
42	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
46	42	51	9	0.4	0.6	0.2		0.49	0.49		1.76
51	REW BAR		0	0.0	0.6	0.0		0.00	0.00		0.00
77	LEW BAR		0	0.0	0.6	0.0		0.00	0.00		0.00
83	77	85.5	8.5	0.7	0.6	0.4	0.349	1.20	1.20	1.13	6.71
88	85.5	90.5	5	1.0	0.6	0.6	0.349	1.34	1.34	1.26	6.30
93	90.5	95.5	5	1.3	0.6	0.8		1.46	1.46		9.49
98	95.5	100.5	5	1.4	0.6	0.8		1.45	1.45		10.15
103	100.5	105	4.5	0.8	0.6	0.5		1.66	1.66		5.98
105	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	40.39
										AVERAGE VELOCITY=	1.24

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-4										
Date:	5/30/2005										
Time:	10:45										
Water Surface Elevation in Notch = 4834.54											
Water Surface Elevation in River = 4834.54											
Notes: Some water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
38	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
43	38	48	10	1.8	0.6	1.1		-0.34	-0.34		-6.12
53	48	58	10	2.1	0.2	0.4		0.04			
53	48	58	10	2.1	0.6	1.3		-0.03			
53	48	58	10	2.1	0.8	1.7		-0.14	-0.04		-0.91
63	58	68	10	1.2	0.6	0.7		0.59	0.59		7.08
73	68	78	10	0.5	0.6	0.3		0.35	0.35		1.75
83	78	88	10	0.4	0.6	0.2		0.51	0.51		2.04
88	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	3.84
										AVERAGE VELOCITY=	0.21

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-5										
Date:	5/30/2005										
Time:	11:15										
Water Surface Elevation in Notch = 4833.86											
Water Surface Elevation in River = 4833.88											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
42	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
48	42	53	11	0.6	0.6	0.4		0.23	0.23		1.52
58	53	63	10	0.8	0.6	0.5		0.26	0.26		2.08
68	63	73	10	0.6	0.6	0.4		0.55	0.55		3.30
78	73	83	10	1.0	0.6	0.6		0.85	0.85		8.50
88	83	93	10	1.7	0.6	1.0		0.95	0.95		16.15
93	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	31.55
										AVERAGE VELOCITY=	0.57

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-6										
Date:	5/30/2005										
Time:	11:45										
Water Surface Elevation in Notch = 4833.49											
Water Surface Elevation in River = 4833.51											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
31	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
34	31	37	6	0.7	0.6	0.4		0.83	0.83		3.49
40	37	43	6	0.7	0.6	0.4		0.69	0.69		2.90
46	43	49	6	0.2	0.6	0.1		0.35	0.35		0.42
49	REW BAR		0	0.0	0.6	0.0		0.00	0.00		0.00
63	LEW BAR		0	0.0	0.6	0.0		0.00	0.00		0.00
67	63	70	7	0.8	0.6	0.5		0.47	0.47		2.63
74	70	77	7	0.8	0.6	0.5		0.57	0.57		3.19
81	77	84	7	1.1	0.6	0.7		0.90	0.90		6.93
88	84	91	7	1.1	0.6	0.7		1.07	1.07		8.24
91	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	27.80
										AVERAGE VELOCITY=	0.70

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-IN-7										
Date:	5/30/2005										
Time:	12:15										
Water Surface Elevation in Notch = 4834.37											
Water Surface Elevation in River = 4834.37											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
37	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
44	37	51	14	2.2	0.2	0.4		0.23			
44	37	51	14	2.2	0.6	1.3		0.10			
44	37	51	14	2.2	0.8	1.8		0.18	0.17		5.24
58	51	65	14	0.8	0.6	0.5		1.05	1.05		11.76
72	65	79	14	0.9	0.6	0.5		1.12	1.12		14.11
86	79	93	14	0.9	0.6	0.5		1.29	1.29		16.25
100	93	106	13	2.3	0.2	0.5		1.09			
100	93	106	13	2.3	0.6	1.4		1.02			
100	93	106	13	2.3	0.8	1.8		1.40	1.17		34.98
106	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	82.35
										AVERAGE VELOCITY=	0.96

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	TR-OUT										
Date:	5/30/2005										
Time:	13:20										
Water Surface Elevation in Notch = 4832.49											
Water Surface Elevation in River =											
Notes: Water flowing out of bottomland; south levee has breached, water balance will be off											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
22	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
27	22	32	10	1.4	0.6	0.8		0.62	0.62		8.68
37	32	42	10	3.5	0.2	0.7		0.90			
37	32	42	10	3.5	0.6	2.1		0.97			
37	32	42	10	3.5	0.8	2.8		0.97	0.95		33.13
47	42	52	10	3.0	0.2	0.6		1.06			
47	42	52	10	3.0	0.6	1.8		1.05			
47	42	52	10	3.0	0.8	2.4		0.79	0.97		29.00
57	52	62	10	2.6	0.2	0.5		0.99			
57	52	62	10	2.6	0.6	1.6		0.98			
57	52	62	10	2.6	0.8	2.1		0.81	0.93		24.09
67	62	71	9	1.6	0.6	1.0		0.34	0.34		4.90
71	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	99.80
										AVERAGE VELOCITY=	0.76

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-1										
Date:	5/30/2005										
Time:	17:35										
Water Surface Elevation in Notch =											
Water Surface Elevation in River = 4706.01											
Notes: Notch disconnected											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
			0			0.0					0.00
										TOTAL DISCHARGE=	0.00

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-2										
Date:	5/30/2005										
Time:	17:50										
Water Surface Elevation in Notch = 4705.24											
Water Surface Elevation in River = 4705.60											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
42	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
44	42	46	4	0.7	0.6	0.4	0.436	0.13	0.13	0.12	0.33
48	46	50	4	2.3	0.2	0.5		3.49			
48	46	50	4	2.3	0.6	1.4		2.30			
48	46	50	4	2.3	0.8	1.8		1.10	2.30		21.13
52	50	54	4	1.2	0.6	0.7		0.13	0.13		0.62
54	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	22.08
										AVERAGE VELOCITY=	0.85

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-IN-3										
Date:	5/30/2005										
Time:	18:10										
Water Surface Elevation in Notch = 4705.53											
Water Surface Elevation in River =											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
29	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
31	29	33	4	0.5	0.6	0.3		0.53	0.53		1.06
35	33	37	4	2.1	0.2	0.4		1.63			
35	33	37	4	2.1	0.6	1.3		1.80			
35	33	37	4	2.1	0.8	1.7		1.51	1.65		13.83
38	37	40	3	0.9	0.6	0.5		1.44	1.44		3.89
40	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	18.78
										AVERAGE VELOCITY=	1.21

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BB-5B										
Date:	5/30/2005										
Time:	17:00										
Water Surface Elevation in Notch = 4706.67											
Water Surface Elevation in River = 4706.44											
Notes: Water is flowing out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
80	LEW		0	0.0	0.6	0.0		0	0.00		0.00
92	80	98	18	1.5	0.6	0.9		0.19	0.19		5.13
104	98	111	13	1.7	0.6	1.0		0.08	0.08		1.77
118	111	124	13	1.2	0.6	0.7		0.18	0.18		2.81
130	124	136	12	1.2	0.6	0.7		0.09	0.09		1.30
142	136	148	12	1.3	0.6	0.8		0.03	0.03		0.47
154	148	160	12	1.6	0.6	1.0		0.08	0.08		1.54
166	160	172	12	1.3	0.6	0.8		0.05	0.05		0.78
178	172	184	12	1.5	0.6	0.9		0.07	0.07		1.26
190	184	196	12	1.8	0.6	1.1		0.18	0.18		3.89
202	196	208	12	0.7	0.6	0.4		-0.01	-0.01		-0.08
208	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	18.85
										AVERAGE VELOCITY=	0.09

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	ST-OUT										
Date:	5/30/2005										
Time:	15:50										
Water Surface Elevation in Notch = 4687.96											
Water Surface Elevation in River = 4687.96											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
32	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
34	32	36	4	1.7	0.6	1.0		0.09	0.09		0.61
38	36	40	4	2.4	0.2	0.5		0.12			
38	36	40	4	2.4	0.6	1.4		0.22			
38	36	40	4	2.4	0.8	1.9		0.03	0.12		1.18
41	40	43	3	1.6	0.6	1.0		0.19	0.19		0.91
44	43	46	3	1.2	0.6	0.7		0.03	0.03		0.11
47	46	49	3	1.0	0.6	0.6		0.02	0.02		0.06
49	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	2.88
										AVERAGE VELOCITY=	0.09

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	BA-MON-INLET										
Date:	5/31/2005										
Time:	11:20										
Water Surface Elevation in Notch = 4684.14											
Water Surface Elevation in River = 4684.14											
Notes: Water flowing into bottomland											
	REPRESENTING		DISTANCE	DEPTH		OBSERVATION		VELOCITY	MEAN	ADJUSTED	
STATION	FROM	TO	(FT)	(FT)	MEASURE	DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
						(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
17	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
20	17	23	6	0.5	0.6	0.3		0.19	0.19		0.57
26	23	29	6	1.2	0.6	0.7		0.35	0.35		2.52
32	29	35	6	0.8	0.6	0.5		0.33	0.33		1.58
38	35	41	6	0.3	0.6	0.2		-0.08	-0.08		-0.14
44	41	47	6	0.5	0.6	0.3		0.00	0.00		0.00
47	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	4.53
										AVERAGE VELOCITY=	0.16

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-1										
Date:	5/31/2005										
Time:	8:50										
Water Surface Elevation in Notch = 4677.78											
Water Surface Elevation in River =											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
17	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
19	17	22	5	1.9	0.6	1.1		1.06	1.06		10.07
24	22	26	4	3.8	0.2	0.8		1.50			
24	22	26	4	3.8	0.6	2.3		1.58			
24	22	26	4	3.8	0.8	3.0		1.43	1.50		22.85
28	26	30	4	3.9	0.2	0.8		1.67			
28	26	30	4	3.9	0.6	2.3		1.70			
28	26	30	4	3.9	0.8	3.1		1.55	1.64		25.58
33	30	36	6	2.0	0.2	0.4		1.59			
33	30	36	6	2.0	0.6	1.2		1.33			
33	30	36	6	2.0	0.8	1.6		0.92	1.28		15.36
36	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	73.86
										AVERAGE VELOCITY=	1.37

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-2										
Date:	5/31/2005										
Time:	9:30										
Water Surface Elevation in Notch = 4677.24											
Water Surface Elevation in River = 4677.49											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
53	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
55	53	56	3	1.1	0.6	0.7		2.47	2.47		8.15
58	56	59	3	0.6	0.6	0.4		0.08	0.08		0.14
61	59	62	3	0.6	0.6	0.4		0.70	0.70		1.26
63	62	65	3	0.7	0.6	0.4		0.63	0.63		1.32
65	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	10.88
										AVERAGE VELOCITY=	0.97

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-IN-3										
Date:	5/31/2005										
Time:	9:50										
Water Surface Elevation in Notch = 4676.86											
Water Surface Elevation in River = 4677.27											
Notes: Water flowing into bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
13	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
15	13	17	4	1.2	0.6	0.7		0.55	0.55		2.64
19	17	21	4	1.8	0.6	1.1		1.57	1.57		11.30
23	21	25	4	1.9	0.6	1.1		1.18	1.18		8.97
27	25	29	4	2.0	0.2	0.4		0.35			
27	25	29	4	2.0	0.6	1.2		0.40			
27	25	29	4	2.0	0.8	1.6		0.36	0.37		2.96
30	29	32	3	1.1	0.6	0.7		0.08	0.08		0.26
32	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	26.14
										AVERAGE VELOCITY=	0.75

Calculating Discharge from Marsh McBirney Meter											
x sect. #:	AB-OUT										
Date:	5/31/2005										
Time:	10:30										
Water Surface Elevation in Notch = 4676.72											
Water Surface Elevation in River = 4677.65											
Notes: Water flowing out of bottomland											
						OBSERVATION		VELOCITY	MEAN	ADJUSTED	
	REPRESENTING	DISTANCE	DEPTH			DEPTH	ANGLE	AT POINT	VELOCITY	FOR ANGLE	DISCHARGE
STATION	FROM	TO	(FT)	(FT)	MEASURE	(FT)	(RAD)	(FPS)	(FPS)	(FPS)	(CFS)
209	LEW		0	0.0	0.6	0.0		0.00	0.00		0.00
212	209	216	7	1.1	0.6	0.7		-0.26	-0.26		-2.00
220	216	224	8	3.6	0.2	0.7		0.36			
220	216	224	8	3.6	0.6	2.2		1.60			
220	216	224	8	3.6	0.8	2.9		1.79	1.25		36.00
228	224	232	8	4.4	0.2	0.9		1.56			
228	224	232	8	4.4	0.6	2.6		1.20			
228	224	232	8	4.4	0.8	3.5		1.05	1.27		44.70
236	232	240	8	2.9	0.2	0.6		1.14			
236	232	240	8	2.9	0.6	1.7		0.99			
236	232	240	8	2.9	0.8	2.3		0.59	0.91		21.03
244	240	248	8	1.3	0.6	0.8		0.44	0.44		4.58
248	REW		0	0.0	0.6	0.0		0.00	0.00		0.00
										TOTAL DISCHARGE=	104.31
										AVERAGE VELOCITY=	0.72

A.5
POST-RUNOFF CROSS SECTION NOTES

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: TR-IN-1								
LEP B&C	4837.23			LEP TLP	4840.12			
REP B&C	4838.81			REP TLP	4841.91			
	HI #1 =	4844.57		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	1	0	4837.23	7.34				
8/11/2005	1	0	4840.12	4.45				
8/11/2005	1	0	4837.13	7.44				
8/11/2005	1	2	4837.11	7.46				
8/11/2005	1	10	4836.62	7.95				
8/11/2005	1	14	4835.75	8.82				S
8/11/2005	1	24	4833.26	11.31				S
8/11/2005	1	34	4833.68	10.89				S
8/11/2005	1	50	4834.22	10.35				S
8/11/2005	1	62	4834.17	10.40				S
8/11/2005	1	70	4834.80	9.77				S
8/11/2005	1	78	4835.39	9.18				S
8/11/2005	1	92	4838.87	5.70				
8/11/2005	1	104	4839.33	5.24				
8/11/2005	1	122	4838.79	5.78				
8/11/2005	1	122	4841.91	2.66				
8/11/2005	1	122	4838.81	5.76				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-2					
LEP B&C	4837.35			LEP TLP	4839.95			
REP B&C	4838.46			REP TLP	4841.69			
	HI #1 =	4844.16		delta =	0.01			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	2	0	4837.35	6.81				
8/11/2005	2	0	4839.94	4.22				
8/11/2005	2	0	4837.34	6.82				
8/11/2005	2	10	4837.24	6.92				
8/11/2005	2	20	4836.69	7.47				
8/11/2005	2	30	4835.92	8.24				
8/11/2005	2	38	4835.19	8.97				S
8/11/2005	2	50	4834.78	9.38				S
8/11/2005	2	70	4834.66	9.5				S
8/11/2005	2	85	4834.65	9.51				S
8/11/2005	2	88	4834.94	9.22				S
8/11/2005	2	98	4836.93	7.23				
8/11/2005	2	104	4838.02	6.14				
8/11/2005	2	120	4838.80	5.36				
8/11/2005	2	130	4838.50	5.66				
8/11/2005	2	130	4841.70	2.46				
8/11/2005	2	130	4838.47	5.69				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-3					
LEP B&C	4840.87			LEP TLP	4843.73			
REP B&C	4838.90			REP TLP	4841.79			
	HI #1 =	4844.37		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	3	0	4840.87	3.50				
8/11/2005	3	0	4843.72	0.65				
8/11/2005	3	0	4840.87	3.50				
8/11/2005	3	10	4840.69	3.68				
8/11/2005	3	22	4840.01	4.36				
8/11/2005	3	29	4838.99	5.38				
8/11/2005	3	32	4834.61	9.76				S
8/11/2005	3	50	4834.73	9.64				S
8/11/2005	3	70	4834.60	9.77				S
8/11/2005	3	85	4833.96	10.41				S
8/11/2005	3	95	4833.39	10.98				S
8/11/2005	3	102	4833.12	11.25				S
8/11/2005	3	120	4838.63	5.74				S
8/11/2005	3	132	4839.71	4.66				
8/11/2005	3	140	4838.84	5.53				
8/11/2005	3	140	4841.79	2.58				
8/11/2005	3	140	4838.90	5.47				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION:		TR-IN-4				
LEP B&C	4841.64			LEP TLP	4843.94			
REP B&C	4836.47			REP TLP	4839.47			
	HI #1 =	4846.24		delta =	0.01			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	4	0	4841.64	4.60				
8/11/2005	4	0	4843.95	2.29				
8/11/2005	4	0	4841.64	4.60				
8/11/2005	4	4	4841.50	4.74				
8/11/2005	4	26	4839.24	7.00				
8/11/2005	4	38	4834.43	11.81				
8/11/2005	4	44	4833.00	13.24				S
8/11/2005	4	60	4833.89	12.35				S
8/11/2005	4	80	4834.14	12.10				S
8/11/2005	4	97	4834.24	12.00				S
8/11/2005	4	108	4834.58	11.66				S
8/11/2005	4	113	4836.12	10.12				
8/11/2005	4	121	4836.53	9.71				
8/11/2005	4	121	4839.49	6.75				
8/11/2005	4	121	4836.48	9.76				

			GREEN RIVER, UT					
			CROSS SECTION SURVEY NOTE REDUCTION					
			CROSS SECTION: TR-IN-5					
LEP B&C	4837.17			LEP TLP	4839.84			
REP B&C	4838.46			REP TLP	4840.74			
	HI #1 =	4843.62		delta =	-0.02			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	5	0	4837.17	6.45				
8/11/2005	5	0	4839.84	3.78				
8/11/2005	5	0	4837.16	6.46				
8/11/2005	5	10	4837.06	6.56				
8/11/2005	5	26	4836.00	7.62				
8/11/2005	5	34	4834.69	8.93				S
8/11/2005	5	46	4833.40	10.22				S
8/11/2005	5	55	4833.02	10.60				S
8/11/2005	5	68	4833.40	10.22				S
8/11/2005	5	78	4833.22	10.40				S
8/11/2005	5	91	4833.10	10.52				S
8/11/2005	5	95	4834.65	8.97				S
8/11/2005	5	102	4835.55	8.07				
8/11/2005	5	118	4836.31	7.31				
8/11/2005	5	126	4838.92	4.70				
8/11/2005	5	137	4838.46	5.16				
8/11/2005	5	137	4840.72	2.90				
8/11/2005	5	137	4838.44	5.18				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION: TR-IN-6						
LEP B&C	4836.74			LEP TLP	4839.30			
REP B&C	4836.88			REP TLP	4839.84			
	HI #1 =	4841.72		delta =	0.00			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	6	0	4836.74	4.98				
8/11/2005	6	0	4839.30	2.42				
8/11/2005	6	0	4836.75	4.97				
8/11/2005	6	10	4836.76	4.96				
8/11/2005	6	19	4836.60	5.12				
8/11/2005	6	31	4832.86	8.86				S
8/11/2005	6	42	4833.26	8.46				S
8/11/2005	6	58	4833.52	8.20				S
8/11/2005	6	72	4833.03	8.69				S
8/11/2005	6	80	4832.48	9.24				S
8/11/2005	6	88	4832.09	9.63				S
8/11/2005	6	94	4834.82	6.90				S
8/11/2005	6	102	4836.22	5.50				
8/11/2005	6	120	4836.80	4.92				
8/11/2005	6	120	4839.83	1.89				
8/11/2005	6	120	4836.88	4.84				

			GREEN RIVER, UT					
		CROSS SECTION SURVEY NOTE REDUCTION						
		CROSS SECTION:		TR-IN-7				
LEP B&C	4836.08			LEP TLP	4838.72			
REP B&C	4837.15			REP TLP	4838.95			
	HI #1 =	4842.49		delta =	-0.02			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	7	0	4836.08	6.41				
8/11/2005	7	0	4838.72	3.77				
8/11/2005	7	0	4836.07	6.42				
8/11/2005	7	12	4836.13	6.36				
8/11/2005	7	30	4836.82	5.67				
8/11/2005	7	40	4833.70	8.79				S
8/11/2005	7	70	4833.34	9.15				S
8/11/2005	7	92	4833.19	9.30				S
8/11/2005	7	97	4832.44	10.05				S
8/11/2005	7	102	4832.15	10.34				S
8/11/2005	7	108	4834.69	7.80				S
8/11/2005	7	114	4837.11	5.38				
8/11/2005	7	148	4837.14	5.35				
8/11/2005	7	148	4839.93	2.56				
8/11/2005	7	148	4837.13	5.36				

GREEN RIVER, UT								
CROSS SECTION SURVEY NOTE REDUCTION								
CROSS SECTION: TR-OUT								
LEP B&C	4834.39			LEP TLP	4837.01			
REP B&C	4833.97			REP TLP	4836.60			
	HI #1 =	4837.71		delta =	-0.02			
DATE	LINE #	STATION	ELEVATION	ROD	DEPTH	WSEL	HAB	BED
8/11/2005	OUT	0	4834.39	3.32				
8/11/2005	OUT	0	4837.01	0.70				
8/11/2005	OUT	0	4834.38	3.33				
8/11/2005	OUT	16	4834.66	3.05				
8/11/2005	OUT	30	4830.53	7.18				SF
8/11/2005	OUT	34	4829.30	8.41				SF
8/11/2005	OUT	40	4829.01	8.70				SF
8/11/2005	OUT	50	4829.71	8.00				SF
8/11/2005	OUT	60	4829.81	7.90				SF
8/11/2005	OUT	63	4829.73	7.98				SF
8/11/2005	OUT	69	4831.45	6.26				SF
8/11/2005	OUT	72	4832.54	5.17				SF
8/11/2005	OUT	85	4833.46	4.25				
8/11/2005	OUT	92	4833.96	3.75				
8/11/2005	OUT	92	4836.58	1.13				
8/11/2005	OUT	92	4833.95	3.76				