

APPENDIX A

THREE RIVERS-SECOND NATURE  
RESULTS OF CHEMICAL FIELD MEASUREMENT AND  
LABORATORY ANALYSIS OF SAMPLES COLLECTED DURING  
THE BIOASSESSMENT SURVEYS APRIL 2002

THREE RIVERS-SECOND NATURE WATER QUALITY DATA

CODE	DESCRIPTION	DATE	TIME	DEPTH	Water Temperature Deg C	Turbidity NTU	Color PT-CO Units	ORP MV	Sp Conductivity Field uhmos/cm	Sp Conductivity @25 C uhmos/cm	Dissolved Oxygen mg/l	Field pH pH Units
TRS 1 0079	SHADES RUN	4/16/2002	0930	000	11.67	0.691	5	306	1243	1134	11.42	7.54
TRS 1 0080	SANDY CREEK	4/16/2002	1100	000	16.05	0.649	2.5	277	928	937	12.34	8.27
TRS 1 0082	QUIGLEY CREEK	4/16/2002	1135	000	15	0.951	7.5	262	688	625	11.21	8.5
TRS 1 0084	INDIAN CREEK	4/16/2002	1320	000	14.4	6.12	12.5	139	745	677	11.39	7.76
TRS 1 0086	PLUM CREEK	4/16/2002	1410	000	20.42	1.35	7.5	151	895	789	10.42	8.25
TRS 1 0088	FALLING SPRINGS RUN	4/17/2002	0900	000	13.62	1.25	12.5	202	587	540	9.39	7.46
TRS 1 0090	BLACKS RUN	4/17/2002	1000	000	14.6	0.635	5	218	643	603	10.31	7.92
TRS 1 0092	PUCKETA CREEK	4/17/2002	1200	000	17.45	3.22	20	164	409	372	10.95	7.74
TRS 1 0094	LITTLE PUCKETA CREEK	4/17/2002	1300	000	20.4	0.892	5	188	427	388	12.48	9.05

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Laboratory pH pH Units 00403	Total Alkalinity as CaCO3 mg/l 00410	P. Alkalinity as CaCO3 mg/l 00415	Bicarb. Alkalinit y CaCO3 mg/l 00425	Carb. Alkalinity as CaCO3 mg/l 00430	Total Acidity as CaCO3 mg/l 00435	Total NH3-N as N mg/l 00610
TRS 1 0079	SHADES RUN	4/16/2002	0930	000	7.73	125				3.9	0.05
TRS 1 0080	SANDY CREEK	4/16/2002	1100	000	8.2	74.6				1	10.01
TRS 1 0082	QUIGLEY CREEK	4/16/2002	1135	000	8.21	74.8				1	0.02
TRS 1 0084	INDIAN CREEK	4/16/2002	1320	000	7.73	68.8				3.9	0.05
TRS 1 0086	PLUM CREEK	4/16/2002	1410	000	8.16	86.2				1.9	0.01
TRS 1 0088	FALLING SPRINGS RUN	4/17/2002	0900	000	7.47	80.5				4.9	0.02
TRS 1 0090	BLACKS RUN	4/17/2002	1000	000	7.75	121.2				3.9	0.04
TRS 1 0092	PUCKETA CREEK	4/17/2002	1200	000	7.74	69.1				2.9	0.02
TRS 1 0094	LITTLE PUCKETA CREEK	4/17/2002	1300	000	8.9	59.7	20.8	18	41.7	0	0.02

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Total Kjeldahl Nitrogen mg/l	Total NO3+Nitrite as N mg/l	Total Phosphorus as P mg/l	Total Hardness as CaCO3 mg/l	Total Calcium mg/l	Total Magnesium mg/l	Total Sodium mg/l	Total Potassium mg/l	Total Arsenic ug/l
					00625	00630	00665	00900	00916	00927	00929	00937	01002
TRS 1 0079	SHADES RUN	4/16/2002	0930	000	0.32	2.74	0.11	415.7	120	25	94	4	L4
TRS 1 0080	SANDY CREEK	4/16/2002	1100	000	0.4	2	L0.01	139.1	79	16	80	3.3	L4
TRS 1 0082	QUIGLEY CREEK	4/16/2002	1135	000	0.32	2.7	0.04	197.6	56	12	61	2.9	L4
TRS 1 0084	INDIAN CREEK	4/16/2002	1320	000	0.4	3.48	0.04	194.7	55	14	69	2.9	L4
TRS 1 0086	PLUM CREEK	4/16/2002	1410	000	0.28	0.8	L0.01	283.7	77	18	71	3	L4
TRS 1 0088	FALLING SPRINGS RUN	4/17/2002	0900	000	0.37	0.74	0.11	161.8	43	12	46	7.9	L4
TRS 1 0090	BLACKS RUN	4/17/2002	1000	000	0.26	0.76	L0.01	192.5	53	12	57	2.5	L4
TRS 1 0092	PUCKETA CREEK	4/17/2002	1200	000	0.21	0.44	L0.01	149.5	39	9	25	1.7	L4
TRS 1 0094	LITTLE PUCKETA CREEK	4/17/2002	1300	000	0.25	0.25	L0.01	141.3	35	8.4	32	1.9	L4

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

<b>CODE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TIME</b>	<b>DEPTH</b>	Total Barium ug/l 01007	Total Beryllium ug/l 01012	Total Cadmium ug/l 01027	Total Chromium ug/l 01034	Total Copper ug/l 01042	Total Iron ug/l 01045	Total Lead ug/l 01051	Total Manganese ug/l 01055
TRS 1 0079	SHADES RUN	4/16/2002	0930	000	53	L2	L1	L3	L5	190	L3	14
TRS 1 0080	SANDY CREEK	4/16/2002	1100	000	44	L2	L1	L3	L5	40	L3	26
TRS 1 0082	QUIGLEY CREEK	4/16/2002	1135	000	46	L2	L1	L3	L5	L30	L3	L10
TRS 1 0084	INDIAN CREEK	4/16/2002	1320	000	48	L2	L1	L3	L5	190	L3	77
TRS 1 0086	PLUM CREEK	4/16/2002	1410	000	78	L2	L1	L3	L5	100	L3	110
TRS 1 0088	FALLING SPRINGS RUN	4/17/2002	0900	000	53	L2	L1	L3	L5	50	L3	3
TRS 1 0090	BLACKS RUN	4/17/2002	1000	000	53	L2	L1	L3	L5	40	L3	L3
TRS 1 0092	PUCKETA CREEK	4/17/2002	1200	000	38	L2	L1	L3	L5	330	L3	60
TRS 1 0094	LITTLE PUCKETA CREEK	4/17/2002	1300	000	36	L2	L1	L3	L5	120	L3	17

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

<b>CODE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TIME</b>	<b>DEPTH</b>	<b>Total Nickel ug/l</b> 01067	<b>Total Silver ug/l</b> 01077	<b>Total Zinc ug/l</b> 01092	<b>Total Antimony ug/l</b> 01097	<b>Total Aluminum ug/l</b> 01105	<b>Total Selenium ug/l</b> 01147	<b>Mercury T. ug/l</b> 71900
TRS 1 0079	SHADES RUN	4/16/2002	0930	000	L10	L2	L10	L5	100	L10	L0.2
TRS 1 0080	SANDY CREEK	4/16/2002	1100	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0082	QUIGLEY CREEK	4/16/2002	1135	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0084	INDIAN CREEK	4/16/2002	1320	000	L10	L2	20	L5	100	L10	L0.2
TRS 1 0086	PLUM CREEK	4/16/2002	1410	000	L10	L2	L10	L5	210	L10	L0.2
TRS 1 0088	FALLING SPRINGS RUN	4/17/2002	0900	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0090	BLACKS RUN	4/17/2002	1000	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0092	PUCKETA CREEK	4/17/2002	1200	000	L10	L2	L10	L5	250	L10	L0.2
TRS 1 0094	LITTLE PUCKETA CREEK	4/17/2002	1300	000	L10	L2	L10	L5	60	L10	L0.2

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Water Temperature Deg C	Turbidity NTU	Color PT-CO Units	ORP MV	Conductivity Field uhmos/c	Conductivity @25 C uhmos/c	Dissolved Oxygen mg/l	Field pH
					00403	00410	00415	00425	00430	00435	00610	00625
TRS 1 0096	CHARTIERS RUN	4/17/2002	1410	000	18.1	2.37	10	188	275	264	10.68	8.54
TRS 1 0098	LITTLE BULL RUN	4/24/2002	1000	000	8.2	0.837	2.5	120	467	439	13.51	7.91
TRS 1 0100	BULL CREEK	4/24/2002	1030	000	8.79	4.72	25	146	548	477	12.7	7.57
TRS 1 0102	BUFFALO CREEK	4/24/2002	1215	000	10.26	1.52	5	123	309	274	13.57	8.15
TRS 1 0104	BAILEY RUN	4/17/2002	1515	000	17.73	0.836	7.5	116	499	421	11.83	7.82
TRS 1 0106	CRAWFORD RUN	4/18/2002	0905	000	13.83	0.92	10	178	693	650	12.18	7.89
TRS 1 0108	RIDDLE RUN	4/18/2002	1030	000	15.56	0.786	5	176	447	414	11.53	8.24
TRS 1 0110	TAWNEY RUN	4/18/2002	1100	000	16.2	0.809	7.5	185	1535	491	11.1	8.3
TRS 1 0112	DEER CREEK (UPPER)	4/18/2002	1330	000	18.3	1.66	12.5	182	487	489	11.42	8.42
TRS 1 0114	LITTLE DEER CREEK	4/18/2002	1415	000	19.58	1.51	10	193	989	907	10.37	8.37
TRS 1 0116	DEER CREEK	4/18/2002	1500	000	20.2	1.82	10	192	786	746	10.63	8.08

THREE RIVERS-SECOND NATURE WATER QUALITY DATA

CODE	DESCRIPTION	DATE	TIME	DEPTH	Laboratory pH pH Units	Total Alkalinity as CaCO3 mg/l	P.Alkalinit y as CaCO3 mg/l	Bicarb.Alka linity CaCO3 mg/l	Carb.Alkali nity as CaCO3 mg/l	Total Acidity as CaCO3 mg/l	Total NH3-N as N mg/l	Total Kjeldahl Nitrogen mg/l
					00403	00410	00415	00425	00430	00435	00610	00625
TRS 1 0096	CHARTIERS RUN	4/17/2002	1410	000	8.09	37.4				1.9	0.02	0.41
TRS 1 0098	LITTLE BULL RUN	4/24/2002	1000	000	7.7	57.4				2.9	0.01	0.23
TRS 1 0100	BULL CREEK	4/24/2002	1030	000	7.52	60.2				3.9	0.04	0.31
TRS 1 0102	BUFFALO CREEK	4/24/2002	1215	000	7.71	34.9				2	0.02	0.3
TRS 1 0104	BAILEY RUN	4/17/2002	1515	000	9.02	132.6	36	60.6	72	0	0.01	0.29
TRS 1 0106	CRAWFORD RUN	4/18/2002	0905	000	7.57	157.2				4.9	0.01	0.32
TRS 1 0108	RIDDLE RUN	4/18/2002	1030	000	7.92	68.2				3.9	0.02	0.23
TRS 1 0110	TAWNEY RUN	4/18/2002	1100	000	8.3	100.4				0	0.03	0.2
TRS 1 0112	DEER CREEK (UPPER)	4/18/2002	1330	000	8.3	75.8				0	0.05	0.25
TRS 1 0114	LITTLE DEER CREEK	4/18/2002	1415	000	8.65	144				0	0.06	0.27
TRS 1 0116	DEER CREEK	4/18/2002	1500	000	8.03	138.2				2.9	0.04	0.28

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Total NO3+Nitrite as N mg/l	Total Phosphorus as P mg/l	Total Hardness as CaCO3 mg/l	Total Calcium mg/l	Total Magnesium mg/l	Total Sodium mg/l	Total Potassium mg/l	Total Arsenic ug/l
TRS 1 0096	CHARTIERS RUN	4/17/2002	1410	000	0.39	0.02	79.9	22	6.3	19	1.8	L4
TRS 1 0098	LITTLE BULL RUN	4/24/2002	1000	000	0.7	L0.01	196.7	37	12	37	2.3	L4
TRS 1 0100	BULL CREEK	4/24/2002	1030	000	0.78	L0.01	144	37	12	55	2.3	L4
TRS 1 0102	BUFFALO CREEK	4/24/2002	1215	000	1.14	L0.01	117.2	29	9.5	12	2.9	L4
TRS 1 0104	BAILEY RUN	4/17/2002	1515	000	0.15	L0.01	155.6	37	11	35	2.2	L4
TRS 1 0106	CRAWFORD RUN	4/18/2002	0905	000	0.71	L0.01	221.2	51	15	66	3.3	L4
TRS 1 0108	RIDDLE RUN	4/18/2002	1030	000	0.56	L0.01	168.9	46	9.9	21	3	L4
TRS 1 0110	TAWNEY RUN	4/18/2002	1100	000	0.24	L0.01	199.7	52	13	35	2.5	L4
TRS 1 0112	DEER CREEK (UPPER)	4/18/2002	1330	000	0.44	L0.01	147.4	36	9.5	40	2.1	L4
TRS 1 0114	LITTLE DEER CREEK	4/18/2002	1415	000	0.31	L0.01	188.4	45	15	140	3.3	L4
TRS 1 0116	DEER CREEK	4/18/2002	1500	000	0.3	L0.01	163.8	44	12	99	2.7	L4

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese
					ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
					01007	01012	01027	01034	01042	01045	01051	01055
TRS 1 0096	CHARTIERS RUN	4/17/2002	1410	000	27	L2	L1	L3	L5	220	L3	27
TRS 1 0098	LITTLE BULL RUN	4/24/2002	1000	000	41	L2	L1	L3	L5	120	L3	44
TRS 1 0100	BULL CREEK	4/24/2002	1030	000	43	L2	L1	L3	L5	670	L3	110
TRS 1 0102	BUFFALO CREEK	4/24/2002	1215	000	57	L2	L1	L3	L5	150	L3	46
TRS 1 0104	BAILEY RUN	4/17/2002	1515	000	33	L2	L1	L3	L5	240	L3	38
TRS 1 0106	CRAWFORD RUN	4/18/2002	0905	000	48	L2	L1	L3	L5	90	L3	22
TRS 1 0108	RIDDLE RUN	4/18/2002	1030	000	26	L2	L1	L3	L5	60	L3	5
TRS 1 0110	TAWNEY RUN	4/18/2002	1100	000	35	L2	L1	L3	L5	60	L3	34
TRS 1 0112	DEER CREEK (UPPER)	4/18/2002	1330	000	40	L2	L1	L3	L5	100	L3	23
TRS 1 0114	LITTLE DEER CREEK	4/18/2002	1415	000	33	L2	L1	L3	L5	320	L3	66
TRS 1 0116	DEER CREEK	4/18/2002	1500	000	38	L2	L1	L3	L5	350	L3	71

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Total Nickel	Total Silver	Total Zinc	Total Antimony	Total Aluminum	Total Selenium	Mercury
					ug/l	ug/l	ug/l	ug/l	ug/l	T. ug/l	
					01067	01077	01092	01097	01105	01147	71900
TRS 1 0096	CHARTIERS RUN	4/17/2002	1410	000	L10	L2	L10	L5	100	L10	L0.2
TRS 1 0098	LITTLE BULL RUN	4/24/2002	1000	000	L10	L2	L10	L5	70	L10	L0.2
TRS 1 0100	BULL CREEK	4/24/2002	1030	000	L10	L2	L10	L5	70	L10	L0.2
TRS 1 0102	BUFFALO CREEK	4/24/2002	1215	000	L10	L2	L10	L5	70	L10	L0.2
TRS 1 0104	BAILEY RUN	4/17/2002	1515	000	L10	L2	L10	L5	170	L10	L0.2
TRS 1 0106	CRAWFORD RUN	4/18/2002	0905	000	L10	L2	L10	L5	120	L10	L0.2
TRS 1 0108	RIDDLE RUN	4/18/2002	1030	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0110	TAWNEY RUN	4/18/2002	1100	000	L10	L2	L10	L5	110	L10	L0.2
TRS 1 0112	DEER CREEK (UPPER)	4/18/2002	1330	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0114	LITTLE DEER CREEK	4/18/2002	1415	000	L10	L2	L10	L5	200	L10	L0.2
TRS 1 0116	DEER CREEK	4/18/2002	1500	000	L10	L2	L10	L5	120	L10	L0.2

THREE RIVERS-SECOND NATURE WATER QUALITY DATA

CODE	DESCRIPTION	DATE	TIME	DEPTH	Water Temperature Deg C	Turbidity NTU	Color PT-CO Units	ORP MV	Sp Conductivity Field uhmos/cm	Sp Conductivity @25 C uhmos/cm	Dissolved Oxygen mg/l	Field pH pH Units
TRS 1 0118	GUYS RUN	4/18/2002	1230	000	19.05	1.27	7.5	192	1624	1475	10.25	8.42
TRS 1 0120	POWERS RUN	4/24/2002	1440	000	14.18	1220	1600	168	653	484	12.75	7.82
TRS 1 0122	SQUAW RUN	4/24/2002	1330	000	13.92	1.7	5	160	775	703	14.2	8.62

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

CODE	DESCRIPTION	DATE	TIME	DEPTH	Laboratory pH pH Units	Total Alkalinity as CaCO <sub>3</sub> mg/l	P. Alkalinity as CaCO <sub>3</sub> mg/l	Bicarb. Alkalinity CaCO <sub>3</sub> mg/l	Carb. Alkalinity as CaCO <sub>3</sub> mg/l	Total Acidity as CaCO <sub>3</sub> mg/l	Total NH <sub>3</sub> -N as N mg/l	Total Kjeldahl Nitrogen mg/l
					00403	00410	00415	00425	00430	00435	00610	00625
TRS 1 0118	GUYS RUN	4/18/2002	1230	000	8.52	253.7	18.8	216.2	37.6	0	0.07	0.32
TRS 1 0120	POWERS RUN	4/24/2002	1440	000	7.53	54.5				2.9	0.14	2.86
TRS 1 0122	SQUAW RUN	4/24/2002	1330	000	8.6	88	7.6	72.7	15.3	0	0.02	0.34

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

<b>CODE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TIME</b>	<b>DEPTH</b>	Total NO3+Nitrite as N mg/l	Total Phosphorus as P mg/l	Total Hardness as CaCO3 mg/l	Total Calcium mg/l	Total Magnesium mg/l	Total Sodium mg/l	Total Potassium mg/l	Total Arsenic ug/l
					00630	00665	00900	00916	00927	00929	00937	01002
TRS 1 0118	GUYS RUN	4/18/2002	1230	000	0.46	L0.01	196.4	44	19	280	4.9	L4
TRS 1 0120	POWERS RUN	4/24/2002	1440	000	0.97	0.7	133.1	42	12	58	7.6	13
TRS 1 0122	SQUAW RUN	4/24/2002	1330	000	0.63	L0.01	203.6	59	13	74	2.7	L4

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

<b>CODE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TIME</b>	<b>DEPTH</b>	Total Barium ug/l 01007	Total Beryllium ug/l 01012	Total Cadmium ug/l 01027	Total Chromium ug/l 01034	Total Copper ug/l 01042	Total Iron ug/l 01045	Total Lead ug/l 01051	Total Manganese ug/l 01055
TRS 1 0118	GUYS RUN	4/18/2002	1230	000	22	L2	L1	L3	L5	150	L3	14
TRS 1 0120	POWERS RUN	4/24/2002	1440	000	250	L2	3	29	49	35000	66	1300
TRS 1 0122	SQUAW RUN	4/24/2002	1330	000	51	L2	L1	L3	L5	60	L3	18

**THREE RIVERS-SECOND NATURE WATER QUALITY DATA**

<b>CODE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TIME</b>	<b>DEPTH</b>	Total Nickel ug/l	Total Silver ug/l	Total Zinc ug/l	Total Antimony ug/l	Total Aluminum ug/l	Total Selenium ug/l	Mercury T. ug/l
					01067	01077	01092	01097	01105	01147	71900
TRS 1 0118	GUYS RUN	4/18/2002	1230	000	L10	L2	L10	L5	L50	L10	L0.2
TRS 1 0120	POWERS RUN	4/24/2002	1440	000	40	L2	250	L5	22000	L10	L0.2
TRS 1 0122	SQUAW RUN	4/24/2002	1330	000	L10	L2	L10	L5	60	L10	L0.2