

## **APPENDIX B – METALS DATA**



Table B-1. Recent Surface Water Metals Data for the Bonita - Superior TPA

Waterbody Segment	Site ID	Sample Date	Organization	Hardness (mg/L)	Flow (cfs)	pH	Al (µg/L) D	Sb (µg/L) TR	As (µg/L) TR	Ba (µg/L) TR	Cd (µg/L) TR	Cu (µg/L) TR	Fe (µg/L) TR	Pb (µg/L) TR	Hg(µg/L) T	Zn (µg/L) TR
Cramer Creek	C02CRAMC02	9/14/11	DEQ	226	2.92	-	< 30	-	< 3	54	< 0.08	< 1	70	< 0.5	< 0.005	< 10
Cramer Creek	C02CRAMC02	7/21/11	DEQ	225	4.31	8.5	< 30	< 5	< 3	< 100	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Cramer Creek	C02CRAMC02	6/30/11	DEQ	205	6.26	8.6	< 30	-	3	< 100	< 0.08	< 1	70	< 0.5	< 0.005	< 10
Cramer Creek	C02CRAMC02	6/16/11	DEQ	174	9.71	8.8	40	-	< 3	70	< 0.08	< 1	200	0.5	< 0.005	< 10
Cramer Creek	C02CRAMC02	9/16/09	DEQ	223	-	8.9	< 30	-	< 3	-	< 0.08	< 1	70	< 0.5	-	< 10
Cramer Creek	C02CRAMC02	8/21/09	DEQ	221	-	8.6	-	-	< 3	-	< 0.08	< 1	<30	< 0.5	-	< 10
Cramer Creek	C02CRAMC03	9/16/09	DEQ	228	-	8.4	< 30	-	< 3	-	< 0.08	< 1	90	2.1	-	< 10
Cramer Creek	C02CRAMC03	8/21/09	DEQ	221	-	8.1	-	-	< 3	-	< 0.08	< 1	90	1.6	-	< 10
Cramer Creek	C02CRAMC04	9/14/11	DEQ	209	5.2	9.2	< 30	-	< 3	135	< 0.08	< 1	90	2.1	< 0.005	< 10
Cramer Creek	C02CRAMC04	7/21/11	DEQ	179	8.91	8.7	< 30	< 5	< 3	100	< 0.08	1	120	3.3	< 0.005	< 10
Cramer Creek	C02CRAMC04	6/30/11	DEQ	145	15.96	8.8	< 30	-	< 3	100	0.16	2	160	3.1	< 0.005	< 10
Cramer Creek	C02CRAMC04	6/16/11	DEQ	109	26.5	8.2	150	-	< 3	150	< 0.08	2	400	4.1	0.012	< 10
Cramer Creek	C02CRAMC04	9/16/09	DEQ	213	-	7.9	< 30	-	< 3	-	< 0.08	1	140	4.1	-	< 10
Cramer Creek	C02CRAMC04	8/20/09	DEQ	208	-	8.3	-	-	< 3	-	< 0.08	1	170	4.2	-	< 10
Cramer Creek	C02CRAMC06	9/14/11	DEQ	223	5.59	9.1	< 30	-	3	94	< 0.08	< 1	<50	4.8	0.0057	< 10
Cramer Creek	C02CRAMC06	7/21/11	DEQ	214	7.79	8.7	< 30	< 5	3	< 100	< 0.08	2	210	15.4	0.018	< 10
Cramer Creek	C02CRAMC06	6/30/11	DEQ	183	10.81	8.7	< 30	-	< 3	< 100	< 0.08	1	120	6.4	0.0089	< 10
Cramer Creek	C02CRAMC06	6/16/11	DEQ	156	19.11	8.5	60	-	< 3	100	< 0.08	2	310	8.5	0.0085	< 10
Cramer Creek	C02CRAMC08	7/21/11	DEQ	152	0.1	8	< 30	< 5	< 3	< 100	< 0.08	2	<50	< 0.5	< 0.005	< 10
Cramer Creek	C02CRAMC08	6/30/11	DEQ	114	0.29	8.4	90	-	3	< 100	< 0.08	2	220	< 0.5	< 0.005	< 10
Cramer Creek	C02CRAMC08	6/21/11	DEQ	91	0.72	8.6	490	-	< 3	60	< 0.08	1	470	< 0.5	< 0.005	< 10
Wallace Creek	C02WALCC02	7/5/11	DEQ	67	2.61	8.5	< 30	-	< 3	200	< 0.08	4	220	0.6	-	< 10
Wallace Creek	C02WALCC02	6/2/10	DEQ	55	1.26	-	< 30	-	< 3	-	< 0.08	5	220	0.6	-	< 10
Wallace Creek	C02WALCC03	10/1/10	DEQ	85	0.27	8.5	< 30	-	< 3	-	< 0.08	2	110	< 0.5	-	< 10
Wallace Creek	C02WALCC03	6/2/10	DEQ	50	2.12	-	50	-	< 3	-	< 0.08	5	230	0.5	-	< 10
Wallace Creek	C02WALCC04	10/1/10	DEQ	87	0.35	8.3	< 30	-	< 3	-	< 0.08	5	240	< 0.5	-	< 10
Wallace Creek	C02WALCC04	6/2/10	DEQ	51	2.52	-	50	-	< 3	-	< 0.08	6	250	0.6	-	< 10
Wallace Creek	C02WALCC05	7/5/11	DEQ	127	0.52	8.5	< 30	-	< 3	500	< 0.08	< 1	<50	< 0.5	-	< 10
Wallace Creek	C02WALCC05	6/2/10	DEQ	93	0.21	-	< 30	-	< 3	-	< 0.08	2	80	< 0.5	-	< 10
Flat Creek	C04FLATC01	9/15/11	DEQ	177	2.18	8.4	< 30	37	7	-	0.92	< 1	<50	14.6	0.0086	160
Flat Creek	C04FLATC01	8/18/11	DEQ	170	4.27	8.7	< 30	30	6	-	0.78	< 1	<50	12.9	< 0.005	150
Flat Creek	C04FLATC01	7/20/11	DEQ	156	7.42	8.7	< 30	20	6	-	0.68	< 1	<50	19.5	0.0074	130
Flat Creek	C04FLATC01	6/28/11	DEQ	143	20.9	8.5	< 30	25	17	-	1.11	1	600	153	0.124	210
Flat Creek	C04FLATC01	6/14/11	DEQ	147	36.42	8.5	< 30	39	45	-	2.51	4	1,690	498	0.425	560
Flat Creek	C04FLATC01	9/17/09	DEQ	188	-	7.9	< 30	-	8	-	0.96	< 1	<30	11.4	-	180
Flat Creek	C04FLATC01	8/22/09	DEQ	173	-	8.2	< 30	-	8	-	0.95	< 1	<30	11.7	-	150
Flat Creek	C04FLATC03	9/15/11	DEQ	149	2.13	8.6	< 30	< 3	< 3	-	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC03	8/18/11	DEQ	147	3.73	8.8	< 30	< 5	< 3	-	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC03	7/20/11	DEQ	134	7.35	8.5	< 30	< 5	< 3	-	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC03	6/28/11	DEQ	121	17.47	8.6	< 30	< 5	< 3	-	< 0.08	< 1	150	0.6	< 0.005	< 10
Flat Creek	C04FLATC03	6/14/11	DEQ	131	33.01	8.4	< 30	< 5	< 3	-	< 0.08	1	570	2.2	< 0.005	< 10
Flat Creek	C04FLATC03	9/17/09	DEQ	159	-	8.1	< 30	-	< 3	-	< 0.08	< 1	<30	< 0.5	-	< 10
Flat Creek	C04FLATC03	8/23/09	DEQ	142	-	8.4	< 30	-	< 3	-	< 0.08	< 1	<30	< 0.5	-	< 10
Flat Creek	C04FLATC04	9/15/11	DEQ	164	2.81	8.6	< 30	11	4	-	0.83	< 1	<50	8.9	< 0.005	180
Flat Creek	C04FLATC04	8/18/11	DEQ	160	4.46	8.7	< 30	8	3	-	0.6	< 1	<50	7.6	< 0.005	150
Flat Creek	C04FLATC04	7/20/11	DEQ	144	8.74	8.6	< 30	5	< 3	-	0.5	1	80	12.2	0.0207	110
Flat Creek	C04FLATC04	6/28/11	DEQ	129	18.04	8.6	< 30	< 5	4	-	0.46	< 1	220	33.7	0.0254	110

**Table B-1. Recent Surface Water Metals Data for the Bonita - Superior TPA**

Waterbody Segment	Site ID	Sample Date	Organization	Hardness (mg/L)	Flow (cfs)	pH	Al (µg/L) D	Sb (µg/L) TR	As (µg/L) TR	Ba (µg/L) TR	Cd (µg/L) TR	Cu (µg/L) TR	Fe (µg/L) TR	Pb (µg/L) TR	Hg(µg/L) T	Zn (µg/L) TR
Flat Creek	C04FLATC04	6/14/11	DEQ	135	30.8	8.4	< 30	5	7	-	0.91	2	810	99.2	< 0.005	180
Flat Creek	C04FLATC04	9/17/09	DEQ	176	-	8.1	< 30	-	5	-	1.04	< 1	<30	11.3	-	250
Flat Creek	C04FLATC04	8/22/09	DEQ	156	-	8.2	< 30	-	5	-	0.84	< 1	<30	9.7	-	180
Flat Creek	C04FLATC05	9/15/11	DEQ	< 1	0.1		< 30	< 3	< 3	-	< 0.08	< 1	<50	< 0.5		< 10
Flat Creek	C04FLATC05	9/15/11	DEQ	7	1	8.3	< 30	< 3	< 3	-	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC05	8/18/11	DEQ	7	0.1	9.6	< 30	< 5	< 3	-	< 0.08	< 1	<50	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC05	7/20/11	DEQ	7	0.05	7.7	< 30	< 5	< 3	-	< 0.08	< 1	480	< 0.5	< 0.005	< 10
Flat Creek	C04FLATC05	9/18/09	DEQ	8	-	8.1	< 30	-	< 3	-	< 0.08	1	40	1.2	-	< 10
Flat Creek	C04FLATC05	8/23/09	DEQ	7	-	-	< 30	-	< 3	-	< 0.08	< 1	1,100	< 0.5	-	< 10
Hall Gulch	C04HALLG02	8/8/12	DEQ	509	0.1	8.3	< 30	19	118	-	0.2	< 1	220	5.3	< 0.005	4,410
Hall Gulch	C04HALLG02	7/17/12	DEQ	515	0.1	8.19	< 30	-	18	-	0.12	< 1	360	< 0.5	0.0116	2,890
Hall Gulch	C04HALLG02	6/29/12	DEQ	491	0.1	8	< 30	14	27	-	0.12	< 1	510	< 0.5	< 0.005	5,350
Hall Gulch	C04HALLG02	9/15/11	DEQ	487	0.1	8.2	< 30	16	42	-	0.13	< 1	420	< 0.5	< 0.005	5,310
Hall Gulch	C04HALLG02	8/18/11	DEQ	507	0.1	-	< 30	17	34	-	0.13	< 1	270	0.5	< 0.005	3,550
Hall Gulch	C04HALLG02	7/20/11	DEQ	469	0.1	8.2	< 30	18	23	-	0.12	< 1	340	< 0.5	< 0.005	3,690
Hall Gulch	C04HALLG02	6/28/11	DEQ	465	0.1	8.3	< 30	18	31	-	0.11	< 1	3,280	0.7	< 0.005	2,160
Hall Gulch	C04HALLG02	6/14/11	DEQ	512	0.1	8.3	< 30	37	317	-	0.43	1	560	22.7	< 0.005	5,310
Hall Gulch	C04HALLG02	9/17/09	DEQ	525	0.1	-	< 30	-	58	-	0.14	< 1	70	< 0.5	-	5,930

**Table B-2. Recent Sediment Metals Data for the Bonita - Superior TPA**

Waterbody Segment	Site ID	Sample Date	Organization	Al (µg/g)	Sb (µg/g)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cu (µg/g)	Fe (µg/g)	Pb (µg/g)	Hg(µg/g)	Zn (µg/g)
Cramer Creek	C02CRAMC02	8/21/09	DEQ	-	-	7	-	0.4	18	12,500	59	0.084	194
Cramer Creek	C02CRAMC02	9/16/09	DEQ	-	-	8	-	0.3	17	12,100	62	0.092	198
Cramer Creek	C02CRAMC03	8/21/09	DEQ	-	-	18	-	0.3	24	12,000	264	0.29	137
Cramer Creek	C02CRAMC03	9/16/09	DEQ	-	-	16	-	0.3	26	12,800	304	0.42	156
Cramer Creek	C02CRAMC04	8/20/09	DEQ	-	-	9	-	< 0.2	32	13,700	207	0.43	76
Cramer Creek	C02CRAMC04	9/16/09	DEQ	-	-	7	-	0.3	31	12,300	197	0.46	72
Wallace Creek	C02WALCC02	7/5/11	DEQ	-	-	14	-	0.5	114	-	71	< 0.74	130
Flat Creek	C04FLATC01	8/22/09	DEQ	-	-	633	-	18.6	36	23,500	3,810	6.4	4,180
Flat Creek	C04FLATC01	9/17/09	DEQ	-	-	709	-	20.7	38	26,600	4,200	8.6	4,700
Flat Creek	C04FLATC03	8/23/09	DEQ	-	-	15	-	0.5	16	16,400	47	0.092	149
Flat Creek	C04FLATC03	9/17/09	DEQ	-	-	20	-	0.4	16	16,500	52	0.12	160
Flat Creek	C04FLATC04	8/22/09	DEQ	-	-	679	-	17.9	41	22,700	5,570	14	3,750
Flat Creek	C04FLATC04	9/17/09	DEQ	-	-	741	-	19.8	44	24,400	5,660	11	4,130
Flat Creek	C04FLATC05	8/23/09	DEQ	-	-	3	-	< 0.2	< 20	<10,000	15	< 0.05	130
Flat Creek	C04FLATC05	9/18/09	DEQ	-	-	< 8	-	0.3	< 20	8,820	19	< 0.05	112
Hall Gulch	C04HALLG02	9/17/09	DEQ	-	-	16,100	-	15.3	39	178,000	1,370	2.9	115,000