

Appendix X-A

Chemistry and Flow Data

Problem Area and discharge data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
PAMP-LA2.10		5/19/2005	41.4	3.9	3.6	362	9.0	0	64	0.87	7.36	6.86	92.00	5.69			0.43	3.41	3.66	31.83	0.00
PAMP-LA2.10		7/13/2005	15.0	3.8	3.4	486	18.0	0	73	0.71	4.23	6.47	119.00	6.19	est flow		0.13	1.17	0.76	13.16	0.00
PAMP-LA2.10		8/23/2005	5.0	3.5	3.4	793	15.0	0	72	3.75	11.30	5.09	287.00	6.19	est flow		0.23	0.31	0.68	4.33	0.00
PAMP-LA2.10		9/15/2005	3.0	3.5	3.4	490	15.0	0	72	1.20	5.88	7.42	178.00	7.10	est flow		0.04	0.27	0.21	2.60	0.00
Average			16.1	3.5					70	1.63	7.19	6.46	169.00				0.21	1.29	1.33	12.98	0.00

DMP-879	ROAD	10/23/2004	8.9	6.9	6.1	377	5.6	13	11	6.84	1.93	0.05	142.00	11.40			0.73	0.01	0.21	1.18	1.39
DMP-879	ROAD	11/18/2004	16.7	5.9	5.7	406	6.7	10	9	10.10	2.46	0.05	179.00	5.69	276		2.03	0.01	0.49	1.81	2.01
DMP-879	ROAD	12/18/2004	16.7	6.6	5.9	308	-1.1	11	-12	5.34	0.84	0.05	115.00	7.10	259		1.07	0.01	0.17	-2.41	2.21
DMP-879	ROAD	1/19/2005	21.7	6.8	6.2	285	-2.2	12	9	8.40	1.39	0.06	105.00	17.10	199		2.19	0.02	0.36	2.35	3.13
DMP-879	ROAD	2/16/2005	16.7	5.9	6.1	225	3.9	10	7	6.72	1.00	0.05	74.00	10.00	133		1.35	0.01	0.20	1.41	2.01
DMP-879	ROAD	3/22/2005	27.5	6.9	6.3	297	3.3	11	9	18.60	1.39	0.18	104.00	7.10	163		6.15	0.06	0.46	2.97	3.64
DMP-879	ROAD	4/20/2005	8.9	6.9	6.1	386	8.9	13	-16	25.80	2.01	0.28	147.00	28.60	247		2.76	0.03	0.22	-1.71	1.39
DMP-879	ROAD	5/18/2005	7.5	6.9	5.9	428	9.4	10	16	21.70	2.44	0.22	162.00	12.90	286		1.96	0.02	0.22	1.44	0.90
DMP-879	ROAD	6/22/2005	0.4	6.7	6.1	485	13.3	13	11	15.30	2.71	0.05	178.00	6.19	343		0.08	0.00	0.01	0.06	0.07
DMP-879	ROAD	7/20/2005	2.2	5.9	6.1	512	15.6	14	13	32.60	3.76	0.13	208.00	18.60	349		0.86	0.00	0.10	0.34	0.37
DMP-879	ROAD	8/24/2005	8.4	6.5	6.1	564	12.8	18	49	23.40	3.40	0.05	218.00	10.00	404		2.36	0.00	0.34	4.94	1.82
DMP-879	ROAD	9/14/2005	3.0	6.7	6.0	447	12.2	23	45	30.80	3.21	0.06	220.00	28.60	394		1.11	0.00	0.12	1.63	0.83
Average			11.6	6.1				13	13	17.13	2.21	0.10	154.33				1.89	0.01	0.24	1.17	1.65

DMP-AC3.75-1	NEEP 1	10/23/2004	6.7	5.0	4.6	108	7.8	5	11	0.19	0.09	0.39	28.00	8.60	60		0.02	0.03	0.01	0.88	0.40
DMP-AC3.75-1	NEEP 1	12/5/2004	12.0	6.6	5.1	103	5.0	6	10	0.07	0.07	0.45	29.00	5.69	69		0.01	0.06	0.01	1.44	0.87
DMP-AC3.75-1	NEEP 1	12/23/2004	41.8	3.4	3.3	299	3.3	0	50	1.24	0.37	3.07	42.00	11.40	86		0.62	1.54	0.19	25.12	0.00
DMP-AC3.75-1	NEEP 1	1/15/2005	12.0	5.0	4.8	98	3.0	5	11	0.06	0.06	0.45	27.00	5.69	74		0.01	0.06	0.01	1.59	0.72
DMP-AC3.75-1	NEEP 1	2/12/2005	6.3	4.9	5.3	87		6	6	0.05	0.05	0.22	24.00	5.69	40		0.00	0.02	0.00	0.46	0.46
DMP-AC3.75-1	NEEP 1	3/16/2005	16.0	3.1	3.0	716	0.6	0	177	1.34	2.45	22.00	169.00	5.69	351	Sampled in	0.26	4.23	0.47	34.04	0.00
DMP-AC3.75-1	NEEP 1	5/21/2005	12.0	4.2	5.0	90	6.7	7	6	1.00	0.09	0.40	25.00	8.60	54		0.14	0.06	0.01	0.87	1.01
Average			15.3	4.4				4	39	0.56	0.45	3.85	49.14				0.15	0.86	0.10	9.20	0.49

DMP-AC3.75-2	NEEP 2	10/23/2004	12.0	3.3	3.4	339	8.9	0	51	1.98	0.49	3.34	39.00	7.00	90		0.29	0.48	0.07	7.36	0.00
DMP-AC3.75-2	NEEP 2	12/5/2004	60.0	5.4	3.4	303	7.2	0	45	1.06	0.45	3.28	36.00	5.69	96		0.76	2.37	0.32	32.45	0.00
DMP-AC3.75-2	NEEP 2	12/23/2004	41.8	3.4	3.3	299	5.0	0	50	1.24	0.37	3.07	42.00	11.40	86		0.62	1.54	0.19	25.12	0.00
DMP-AC3.75-2	NEEP 2	1/15/2005	70.2	3.2	3.3	310	9.0	0	51	1.42	0.46	3.38	39.00	5.69	90		1.20	2.85	0.39	43.03	0.00
DMP-AC3.75-2	NEEP 2	2/12/2005	34.2	3.4	3.5	259	5.6	0	39	0.63	0.37	2.47	34.00	5.70	69		0.26	1.02	0.15	16.03	0.00
DMP-AC3.75-2	NEEP 2	3/17/2005	34.2	3.2	3.5	254	5.6	0	36	0.57	0.34	2.16	35.00	0.57	91		0.23	0.89	0.14	14.80	0.00
DMP-AC3.75-2	NEEP 2	4/15/2005	34.2	3.2	3.4	303	8.9	0	41	0.79	0.36	2.74	37.00	5.69	210		0.32	1.13	0.15	16.85	0.00
DMP-AC3.75-2	NEEP 2	5/21/2005	12.4	3.1	3.6	225	10.0	0	32	0.29	0.29	1.86	30.00	5.69	74		0.04	0.28	0.04	4.77	0.00
DMP-AC3.75-2	NEEP 2	6/20/2005	2.2	3.3	3.5	231	11.1	0	28	0.14	0.26	1.41	32.00	6.19	70		0.00	0.04	0.01	0.74	0.00
DMP-AC3.75-2	NEEP 2	8/22/2005		3.3	3.3	369	12.0	0	55	0.97	0.58	4.56	49.00	6.19	137		0.00	0.00	0.00	0.00	0.00
Average			33.5	3.4					43	0.91	0.40	2.83	37.30				0.37	1.06	0.15	16.12	0.00

Problem Area and discharge data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
DMP-Korb4	SPEN	10/23/2004	35.4	2.8	2.7	1570	6.1	0	398	54.30	11.30	34.40	466.00	10.00			23.11	14.64	4.81	169.35	0.00
DMP-Korb4	SPEN	11/21/2004	29.4	2.9	2.7	1510	5.6	0	428	53.09	9.78	32.40	575.00	5.70			18.76	11.45	3.46	151.25	0.00
DMP-Korb4	SPEN	12/18/2004	136.0	2.9	2.7	1530	5.6	0	394	48.60	8.33	31.10	524.00	5.69			79.45	50.84	13.62	644.08	0.00
DMP-Korb4	SPEN	1/15/2005	233.5	2.9	2.8	1350	5.6	0	327	31.80	6.12		428.00	5.69			89.25	0.00	17.18	917.78	0.00
DMP-Korb4	SPEN	2/13/2005	57.2	2.8	2.8	1370	5.6	0	344	36.20	7.05	25.50	460.00	5.69			24.89	17.53	4.85	236.52	0.00
DMP-Korb4	SPEN	3/17/2005	157.0	2.7	2.8	1460	5.0	0	343	38.40	7.90	25.60	487.00	5.69			72.47	48.31	14.91	647.29	0.00
DMP-Korb4	SPEN	4/14/2005	117.0	2.8	2.8	1400	9.0	0	307	32.90	7.20	23.50	454.00	5.69			46.27	33.05	10.13	431.75	0.00
DMP-Korb4	SPEN	5/23/2005	64.9	2.8	2.8	1530	7.0	0	359	36.70	8.09	26.40	498.00	10.00			28.63	20.59	6.31	280.06	0.00
DMP-Korb4	SPEN	6/20/2005	49.5	2.6	2.7	1640	13.0	0	388	47.30	9.89	34.10	528.00	6.19			28.14	20.29	5.88	230.86	0.00
DMP-Korb4	SPEN	7/18/2005	35.4	2.6	2.7	1550	12.0	0	413	45.60	9.09	32.30	582.00	6.19			19.40	13.74	3.87	175.73	0.00
DMP-Korb4	SPEN	8/19/2005	12.8	2.5	2.7	1600	12.0	0	436	49.10	9.81	35.70	622.00	6.19			7.55	5.49	1.51	67.08	0.00
DMP-Korb4	SPEN	9/20/2005	20.4	2.3	2.7	1800	14.0	0	450	53.50	10.60	39.40	656.00	6.19			13.12	9.66	2.60	110.34	0.00
Average			79.0		2.7			0	382	43.96	8.76	30.31					37.59	20.47	7.43	338.51	0.00

DMP-Widemire	tipple	10/23/2004	98.5	4.2	3.8	397	6.1	0	41	6.70	2.38	5.07	137.00	15.70			7.93	6.00	2.82	48.54	0.00
DMP-Widemire	tipple	11/18/2004	98.5	4.3	3.9	352	7.2	0	35	7.44	2.36	4.01	144.00	14.30	230		8.81	4.75	2.79	41.44	0.00
DMP-Widemire	tipple	12/18/2004	136.0	3.6	3.9	398	6.7	0	47	6.01	2.10	5.13	141.00	7.10	230		9.82	8.39	3.43	76.83	0.00
DMP-Widemire	tipple	1/19/2005	245.0	3.9	3.7	404	1.1	0	53	6.39	2.33	6.58	154.00	31.40	261		18.82	19.38	6.86	156.08	0.00
DMP-Widemire	tipple	2/16/2005	117.0	3.8	4.1	354	6.1	1	50	2.54	1.98	5.41	141.00	8.60	209		3.57	7.61	2.78	70.32	1.41
DMP-Widemire	tipple	3/22/2005	98.5	3.8	4.0	383	8.3	0	44	3.42	2.36	6.32	150.00	5.69	214		4.05	7.48	2.79	52.09	0.00
DMP-Widemire	tipple	4/20/2005	98.5	3.5	3.9	403	8.9	0	53	3.12	2.15	6.48	150.00	12.90	259		3.69	7.67	2.55	62.75	0.00
DMP-Widemire	tipple	5/18/2005	81.0	2.9	4.0	372	8.9	0	45	3.01	2.15	5.50	137.00	5.69	241		2.93	5.35	2.09	43.81	0.00
DMP-Widemire	tipple	6/22/2005	49.5	3.1	3.9	389	14.4	0	38	4.56	2.12	4.89	132.00	8.60	237		2.71	2.91	1.26	22.61	0.00
DMP-Widemire	tipple	7/20/2005	47.0	3.3	3.9	368	10.0	0	64	7.38	2.33	3.87	135.00	6.19	233		4.17	2.19	1.32	36.16	0.00
DMP-Widemire	tipple	8/24/2005	35.4	3.6	4.0	373	8.9	0	71	9.35	2.35	3.19	131.00	12.90	249		3.98	1.36	1.00	30.21	0.00
DMP-Widemire	tipple	9/14/2005	42.5	3.8	3.8	286	8.3	0	39	10.10	2.26	2.81	130.00	8.60	264		5.16	1.44	1.15	19.92	0.00
Average			95.6		3.9			0	48	5.84	2.24	4.94					6.30	6.21	2.57	55.06	0.12

DMP-Wildwood	WILD	10/23/2004	117.0	6.0	5.6	402	6.7	10	16	10.70	2.37	0.05	154.00	15.70			15.05	0.07	3.33	22.50	14.06
DMP-Wildwood	WILD	11/18/2004	136.0	6.3	5.5	420	6.1	9	12	10.30	2.56	0.05	185.00	10.00	296		16.84	0.08	4.18	19.62	14.71
DMP-Wildwood	WILD	12/18/2004	81.0	6.2	6.1	332	3.3	12	14	9.29	1.69	0.05	125.00	7.10	207		9.04	0.05	1.65	13.63	11.68
DMP-Wildwood	WILD	1/19/2005	178.0	6.1	6.2	288	-1.1	10	11	7.86	1.57	0.05	101.00	24.30	193		16.82	0.11	3.36	23.54	21.40
DMP-Wildwood	WILD	2/16/2005	189.0	6.1	6.2	246	5.0	10	7	4.68	0.93	0.06	69.00	8.60	137		10.63	0.14	2.11	15.90	22.72
DMP-Wildwood	WILD	3/22/2005	127.0	5.9	5.8	336	5.6	7	8	3.96	1.69	0.05	116.00	5.69	187		6.05	0.07	2.58	12.21	10.69
DMP-Wildwood	WILD	4/20/2005	81.0	5.6	5.4	425	8.9	7	14	4.30	2.38	0.05	163.00	8.60	284		4.19	0.05	2.32	13.63	6.82
DMP-Wildwood	WILD	5/18/2005	49.5	5.9	5.1	463	10.6	6	13	5.82	2.87	0.05	182.00	5.69	291		3.46	0.03	1.71	7.73	3.57
DMP-Wildwood	WILD	6/22/2005	42.4	5.9	5.9	526	12.2	9	15	9.67	3.52	0.05	204.00	7.10	354		4.93	0.02	1.79	7.64	4.59
DMP-Wildwood	WILD	7/20/2005	64.9	5.9	5.9	545	14.4	11	22	13.80	3.69	0.05	235.00	6.19	389		10.77	0.04	2.88	17.16	8.58
DMP-Wildwood	WILD	8/24/2005	42.5	5.9	5.5	592	8.9	9	50	13.80	4.67	0.05	246.00	8.60	421		7.05	0.03	2.39	25.54	4.60
DMP-Wildwood	WILD	9/14/2005	42.5	5.9	5.5	467	11.1	11	24	12.70	4.60	0.05	240.00	6.19	430		6.49	0.03	2.35	12.26	5.62
Average			95.9		5.7			9	17	8.91	2.71	0.05					9.28	0.06	2.55	15.95	10.75

Problem Area and discharge data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
DMP-Draucker1	DRAUK1	10/22/2004	35.4	2.9	2.8	223	11.0	0	645	75.30	20.80	48.50	837.00	5.69	1504		32.04	20.64	8.85	274.45	0.00
DMP-Draucker1	DRAUK1	11/18/2004	64.9	2.7	2.7	2160	12.0	0	677	103.00	24.30	59.40	1018.00	5.69	1511		80.35	46.34	18.96	528.13	0.00
DMP-Draucker1	DRAUK1	12/17/2004	178.0	2.8	2.7	2030	12.0	0	652	59.00	15.60	58.40	808.00	5.69	1217		126.23	124.95	33.38	1394.99	0.00
DMP-Draucker1	DRAUK1	1/19/2005	294.0	2.9	2.7	1870	10.0	0	519	52.90	15.60	49.40	714.00	21.40	1117		186.94	174.57	55.13	1834.08	0.00
DMP-Draucker1	DRAUK1	2/16/2005	178.0	3.1	2.7	1840	10.0	0	591	62.10	18.50	56.30	775.00	7.10	1214		132.87	120.46	39.58	1264.48	0.00
DMP-Draucker1	DRAUK1	3/18/2005	136.0	2.7	2.7	1870	11.0	0	574	67.70	20.20	52.70	832.00	10.00	1454		110.67	86.15	33.02	938.33	0.00
DMP-Draucker1	DRAUK1	4/18/2005	136.0	2.8	2.8	1830	10.0	0	546	62.30	18.50	49.80	753.00	17.10	1197		101.84	81.41	30.24	892.56	0.00
DMP-Draucker1	DRAUK1	5/23/2005	98.5	2.8	2.8	1940	11.0	0	634	70.00	18.50	49.40	875.00	7.10	1336		82.88	58.49	21.90	750.64	0.00
DMP-Draucker1	DRAUK1	6/17/2005	64.9	2.8	2.8	1990	10.0	0	650	94.00	24.60	60.80	890.00	6.19	1580		73.33	47.43	19.19	507.06	0.00
DMP-Draucker1	DRAUK1	7/15/2005	64.9	2.8	2.8	2010	9.0	0	682	94.40	25.30	69.40	984.00	6.19	1636		73.64	54.14	19.74	532.03	0.00
DMP-Draucker1	DRAUK1	8/22/2005	35.4	2.8	2.8	2030	9.0	0	647	98.80	27.10	61.80	1059.00	6.19	1533		42.04	26.30	11.53	275.30	0.00
DMP-Draucker1	DRAUK1	9/19/2005	23.4	2.8	2.8	2000	10.6	0	670	104.00	28.10	68.80	1021.00	6.19	1556		29.25	19.35	7.90	188.45	0.95
Average			109.1		2.8			0	624	78.63	21.43	57.06					89.34	71.68	24.95	781.71	0.08
DMP-Draucker2	DRAUK2	10/22/2004	178.0	4.1	4.1	505	10.0	2	21	1.76	4.36	1.01	180.00	7.10	293		3.77	2.16	9.33	44.93	4.28
DMP-Draucker2	DRAUK2	11/18/2004	136.0	3.9	3.9	490	9.0	0	26	2.19	4.34	0.92	191.00	5.69	297		3.58	1.50	7.09	42.50	0.00
DMP-Draucker2	DRAUK2	1/19/2005	370.0	4.3	4.3	509	1.0	3	18	0.76	3.40	1.31	209.00	22.90	321		3.38	5.83	15.12	80.05	13.34
DMP-Draucker2	DRAUK2A	12/17/2004	870.2	4.1	4.0	429	3.0	1	27	0.95	3.04	1.23	161.00	5.69	250		9.94	12.87	31.80	282.41	10.46
DMP-Draucker2	DRAUK2A	2/16/2005	324.0	4.2	4.1	439	2.0	1	28	1.09	3.32	1.60	164.00	11.40	247		4.24	6.23	12.93	109.05	3.89
DMP-Draucker2	DRAUK2A	3/18/2005	209.6	4.1	4.1	525	3.0	1	25	0.80	3.47	1.52	194.00	8.60	355		2.02	3.83	8.74	62.98	2.52
DMP-Draucker2	DRAUK2	4/18/2005	258.1	4.0	4.0	547	12.0	1	27	0.68	3.33	1.67	183.00	14.30	343		2.11	5.18	10.33	83.76	3.10
DMP-Draucker2	DRAUK2	5/23/2005	106.4	3.8	3.8	511	11.0	0	25	1.07	3.52	1.00	165.00	14.30	296		1.37	1.28	4.50	31.97	0.00
DMP-Draucker2	DRAUK2	6/17/2005	98.5	3.7	3.7	627	14.4	0	28	2.21	5.03	0.82	189.00	6.19	346		2.62	0.97	5.96	33.15	0.00
DMP-Draucker2	DRAUK2A	7/15/2005	49.5	3.4	3.5	685	17.0	0	43	4.42	5.07	0.47	214.00	6.19	390		2.63	0.28	3.02	25.58	0.00
DMP-Draucker2	DRAUK2A	8/22/2005	35.4	3.4	3.5	671	17.0	0	38	6.95	6.35	0.23	208.00	7.10	361		2.96	0.10	2.70	16.17	0.00
DMP-Draucker2	DRAUK2A	9/19/2005	35.4	3.4	3.5	634	15.6	0	37	5.99	5.69	0.29	225.00	6.19	357		2.55	0.12	2.42	15.74	0.24
Average			222.6		3.9			1	29	2.41	4.24	1.01					3.43	3.36	9.50	69.03	3.15
PAMP-LA3.0-3	OWENS1	10/22/2004	117.0	3.5	3.5	663	10.0	0	33	2.17	7.33	0.77	253.00	8.60	390		3.05	1.08	10.31	46.41	0.00
PAMP-LA3.0-3	OWENS1	11/18/2004	64.9	3.4	3.5	760	9.0	0	45	2.82	8.67	0.68	315.00	5.69	464		2.20	0.53	6.76	35.10	0.00
PAMP-LA3.0-3	OWENS1	12/17/2004	157.0	3.7	3.7	603	3.0	0	41	2.80	6.97	1.12	249.00	5.69	356		5.28	2.11	13.15	77.37	0.00
PAMP-LA3.0-3	OWENS1	1/19/2005	370.0	3.7	3.7	542	1.0	0	29	1.55	5.69	1.46	237.00	18.60	349		6.89	6.49	25.31	128.97	0.00
PAMP-LA3.0-3	OWENS1	2/16/2005	294.0	3.9	3.7	459	2.0	0	27	1.79	5.69	1.08	180.00	5.70	269		6.33	3.82	20.11	95.41	0.00
PAMP-LA3.0-3	OWENS1	3/18/2005	157.0	3.6	3.6	617	5.0	0	33	2.21	7.71	1.10	254.00	10.00	436		4.17	2.08	14.55	62.28	0.00
PAMP-LA3.0-3	OWENS1	4/18/2005	200.0	3.5	3.6	653	11.0	0	34	1.47	7.58	1.42	227.00	14.30	410		3.53	3.41	18.22	81.74	0.00
PAMP-LA3.0-3	OWENS1	5/23/2005	136.0	3.4	3.4	690	12.0	0	42	1.67	7.78	0.81	274.00	10.00	423		2.73	1.32	12.72	68.66	0.00
PAMP-LA3.0-3	OWENS1	6/17/2005	64.9	3.3	3.4	817	14.4	0	47	2.70	8.10	0.57	298.00	6.19	461		2.11	0.44	6.32	36.66	0.00
PAMP-LA3.0-3	OWENS1	7/15/2005	35.4	3.2	3.2	1080	19.0	0	72	5.08	12.10	0.50	399.00	6.19	614		2.16	0.21	5.15	30.64	0.00
PAMP-LA3.0-3	OWENS1	8/22/2005	23.4	3.2	3.2	1070	18.0	0	77	7.90	13.40	0.44	494.00	7.10	670		2.22	0.12	3.77	21.66	0.00
PAMP-LA3.0-3	OWENS1	9/19/2005	12.8	3.1	3.2	1220	15.6	0	76	8.23	13.70	0.45	464.00	6.19	721		1.27	0.07	2.11	11.69	0.53
Average			136.0		3.5			0	46	3.37	8.73	0.87					3.50	1.81	11.54	58.05	0.04

Problem Area and discharge data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
PAMP-LA3.0-2	OWENS2	10/22/2004	117.0	3.5	3.4	671	10.0	0	67	2.38	5.24	4.38	243.00	5.69	394		3.35	6.16	7.37	94.22	0.00
PAMP-LA3.0-2	OWENS2	11/18/2004	98.5	3.3	3.4	755	9.0	0	69	3.46	7.20	4.78	290.00	5.69	454		4.10	5.66	8.52	81.69	0.00
PAMP-LA3.0-2	OWENS2	12/17/2004	245.0	3.5	3.3	648	3.0	0	86	2.81	5.04	6.51	216.00	5.69	344	Estimated fl	8.28	19.17	14.84	253.26	0.00
PAMP-LA3.0-2	OWENS2	1/19/2005	543.0	3.5	3.5	583	2.0	0	61	1.84	4.84	5.02	220.00	18.60	331	Estimated fl	12.01	32.76	31.59	398.14	0.00
PAMP-LA3.0-2	OWENS2	2/16/2005	448.8	3.6	3.5	532	4.0	0	59	2.11	5.17	4.64	197.00	5.69	283		11.38	25.03	27.89	318.28	0.00
PAMP-LA3.0-2	OWENS2	3/18/2005	235.5	3.4	3.4	626	4.0	0	70	2.41	5.78	4.91	212.00	7.10	391		6.82	13.90	16.36	198.15	0.00
PAMP-LA3.0-2	OWENS2	4/18/2005	300.0	3.4	3.4	664	18.0	0	62	2.59	5.64	5.34	210.00	11.40	387		9.34	19.26	20.34	223.57	0.00
PAMP-LA3.0-2	OWENS2	5/23/2005	178.0	3.3	3.4	691	13.0	0	61	2.13	6.13	3.66	255.00	8.60	387		4.56	7.83	13.12	130.51	0.00
PAMP-LA3.0-2	OWENS2	6/17/2005	117.0	3.3	3.3	734	15.6	0	64	5.39	7.86	3.65	234.00	6.19	417		7.58	5.13	11.05	90.01	0.00
PAMP-LA3.0-2	OWENS2	7/15/2005	49.5	3.1	3.3	942	22.0	0	82	4.76	10.40	4.52	362.00	6.19	551		2.83	2.69	6.19	48.79	0.00
PAMP-LA3.0-2	OWENS2	8/22/2005	35.4	3.2	3.2	969	23.0	0	82	6.92	10.60	3.37	356.00	6.19	591		2.94	1.43	4.51	34.89	0.00
PAMP-LA3.0-2	OWENS2	9/19/2005	23.4	3.2	3.3	1020	18.9	0	82	9.53	12.00	2.93	406.00	6.19	697		2.68	0.82	3.38	23.06	0.00
Average			199.3		3.4			0	70	3.86	7.16	4.48					6.32	11.65	13.76	157.88	0.00
PAMP-KR1.45-1	FALL	10/23/2004	81.0	3.8	4.0	460	6.1	0	57	0.26	5.70	7.00	192.00	10.00			0.25	6.82	5.55	55.50	0.00
PAMP-KR1.45-1	FALLS	11/18/2004	81.0	3.9	4.0	407	7.2	0	47	0.20	5.53	6.31	175.00	5.69	269		0.19	6.14	5.38	45.76	0.00
PAMP-KR1.45-1	FALLS	12/18/2004	222.0	3.1	4.0	424	0.6	0	59	0.21	3.74	5.90	173.00	5.69	277		0.56	15.74	9.98	157.44	0.00
PAMP-KR1.45-1	FALLS	1/19/2005	245.0	4.1	4.0	387	0.0	0	52	0.23	4.28	6.67	167.00	17.10	266		0.68	19.64	12.60	153.13	0.00
PAMP-KR1.45-1	FALLS	2/16/2005	245.0	3.9	4.2	307	3.3	2	36	0.17	2.98	4.42	121.00	5.70	174		0.50	13.02	8.78	106.02	5.89
PAMP-KR1.45-1	FALLS	3/22/2005	245.0	3.9	4.1	366	2.8	2	45	0.27	4.10	6.43	146.00	5.69	211		0.80	18.94	12.07	132.52	5.89
PAMP-KR1.45-1	FALLS	4/20/2005	90.0	3.5	4.0	445	10.0	0	56	0.16	4.97	7.51	181.00	5.70	287		0.17	8.12	5.38	60.58	0.00
PAMP-KR1.45-1	FALLS	5/18/2005	35.4	2.7	4.0	417	9.4	0	53	0.15	4.74	6.45	159.00	5.69	277		0.06	2.74	2.02	22.55	0.00
PAMP-KR1.45-1	FALLS	6/22/2005	12.8	2.6	3.9	465	13.9	0	56	0.20	5.79	8.51	173.00	6.19	300		0.03	1.31	0.89	8.62	0.00
PAMP-KR1.45-1	FALLS	7/20/2005	23.4	2.4	3.9	439	16.7	0	57	0.31	5.19	6.52	164.00	6.19	277		0.09	1.83	1.46	16.03	0.00
PAMP-KR1.45-1	FALLS	8/24/2005	4.5	2.5	3.8	682	8.9	0	216	0.44	9.33	14.50	311.00	6.19	534		0.02	0.78	0.50	11.68	0.00
PAMP-KR1.45-1	FALLS	9/14/2005	45.0	2.3	3.8	731	13.3	0	134	0.50	9.65	15.20	324.00	6.19	593		0.27	8.22	5.22	72.48	0.00
Average			110.8		4.0			0	72	0.26	5.50	7.95					0.30	8.61	5.82	70.19	0.98
PAMP-LA4.3-1		10/23/2004	262.0	3.6	3.5	626	8.0	0	91	8.11	8.10	7.42	221.00	14.30			25.54	23.37	25.51	286.58	0.00
PAMP-LA4.3-1		11/22/2004	262.0	3.7	3.6	555	6.0	0	80	7.16	8.02	7.33	224.00	11.40			22.55	23.09	25.26	251.96	0.00
PAMP-LA4.3-1		2/9/2005		3.9	3.8	381	2.0	0	49	3.77	5.08	5.02	136.00	5.69		no flow taken-too high					
PAMP-LA4.3-1		3/16/2005		4.1	3.6	461	0.0	0	64	3.65	5.89	6.12	194.00	5.69		Ice prevented flow reading					
PAMP-LA4.3-1		4/14/2005	426.8	3.6	3.6	521	10.0	0	53	2.86	5.92	5.87	181.00	5.69			14.67	30.11	30.37	271.90	0.00
PAMP-LA4.3-1		5/18/2005	130.0	3.5	3.5	604	12.5	0	90	4.09	7.48	6.91	217.00	5.69		Flow adjust	6.39	10.80	11.69	140.63	0.00
PAMP-LA4.3-1		6/15/2005	100.0	3.0	3.2	962	19.0	0	137	8.90	11.10	9.43	339.00	6.19		Flow adjust	10.70	11.33	13.34	164.67	0.00
PAMP-LA4.3-1		7/13/2005	30.0	3.2	3.1	1210	21.0	0	183	12.60	16.20	13.10	466.00	6.19		both dischar	4.54	4.72	5.84	65.99	0.00
PAMP-LA4.3-1		8/22/2005	9.6	3.0	3.0	1300	18.0	0	234	18.60	21.30	16.80	638.00	6.19		estimated fl	2.16	1.95	2.47	27.11	0.00
PAMP-LA4.3-1		9/14/2005	10.0	3.1	3.0	1420	16.0	0	220	18.30	22.20	17.50	576.00	6.19			2.20	2.10	2.67	26.44	0.00
Average			153.8		3.4			0	120	8.80	11.13	9.55					11.09	13.43	14.64	154.41	0.00
PAMP-LA4.3-2		10/23/2004	112.0	6.1	5.9	178	9.0	8	4	0.70	0.87	0.11	43.00	12.90			0.94	0.15	1.17	5.38	10.77
PAMP-LA4.3-2		11/22/2004	91.2	6.0	6.0	153	7.0	10	4	0.62	0.69	0.09	39.00	10.00			0.68	0.10	0.76	4.38	10.96
PAMP-LA4.3-2		2/9/2005		5.9	6.0	142	3.0	8	5	9.95	0.70	1.38	36.00	22.90		No flow taken-too high					
PAMP-LA4.3-2		3/16/2005	136.2	5.8	5.5	158	3.0	8	10	0.32	0.59	0.15	41.00	5.69		Flow read w	0.52	0.25	0.97	16.37	13.10
PAMP-LA4.3-2		4/14/2005	136.2	5.5	6.0	176	11.0	6	4	0.45	0.55	0.24	45.00	5.69			0.74	0.39	0.90	6.55	9.82
PAMP-LA4.3-2		5/18/2005	64.4	5.9	5.9	167	15.0	8	7	0.41	0.74	0.14	37.00	5.69			0.32	0.11	0.57	5.42	6.19
PAMP-LA4.3-2		6/15/2005	30.2	5.8	6.3	194	18.5	9	3	0.72	1.38	0.20	49.00	6.19			0.26	0.07	0.50	1.09	3.27
PAMP-LA4.3-2		7/13/2005	15.0	5.8	6.0	242	21.0	9	6	0.50	1.99	0.12	71.00	6.19			0.09	0.02	0.36	1.08	1.63
PAMP-LA4.3-2		8/22/2005	3.0	6.0	6.2	272	20.0	9	6	1.03	2.41	0.15	75.00	6.19		estimated fl	0.04	0.01	0.09	0.22	0.32
PAMP-LA4.3-2		9/14/2005	3.0	5.8	6.3	207	21.0	11	1	1.09	1.56	0.13	67.00	6.19		estimated fl	0.04	0.00	0.06	0.04	0.40
Average			65.7		6.0			9	5	1.58	1.15	0.27					0.40	0.12	0.60	4.50	4.96

Problem Area and discharge data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
PAMP-LA3.0-4	REAS	10/22/2004	35.4	3.5	3.5	777	11.0	0	48	11.00	9.50	0.51	323.00	15.70	496		4.68	0.22	4.04	20.42	0.00
PAMP-LA3.0-4	REAS	11/18/2004	64.9	3.5	3.5	859	10.0	0	63	15.40	11.30	0.44	387.00	5.69	587		12.01	0.34	8.82	49.15	0.00
PAMP-LA3.0-4	REAS	12/17/2004	98.5	3.9	3.6	805	3.0	0	64	19.00	11.70	0.69	386.00	10.00	544		22.50	0.82	13.85	75.77	0.00
PAMP-LA3.0-4	REAS	1/19/2005	178.0	3.7	3.5	648	5.0	0	38	4.72	8.01	0.92	271.00	30.00	407		10.10	1.97	17.14	81.30	0.00
PAMP-LA3.0-4	REAS	2/16/2005	178.0	3.8	3.8	607	4.0	0	40	8.49	8.02	0.70	284.00	7.10	409		18.16	1.50	17.16	85.58	0.00
PAMP-LA3.0-4	REAS	3/18/2005	136.0	3.6	3.8	688	3.0	0	45	12.10	9.42	0.69	322.00	10.00	578		19.78	1.13	15.40	73.56	0.00
PAMP-LA3.0-4	REAS	4/18/2005	136.0	3.5	3.6	717	11.0	0	42	7.97	9.11	0.85	292.00	14.30	467		13.03	1.39	14.89	68.66	0.00
PAMP-LA3.0-4	REAS	5/23/2005	136.0	3.5	3.5	738	10.0	0	55	9.38	8.77	0.52	322.00	11.40	491		15.33	0.85	14.34	89.91	0.00
PAMP-LA3.0-4	REAS	6/17/2005	35.4	3.4	3.4	873	13.3	0	62	13.90	13.10	0.44	362.00	10.00	593		5.91	0.19	5.57	26.38	0.00
PAMP-LA3.0-4	REAS	7/15/2005	23.4	3.2	3.3	1110	18.0	0	84	11.60	13.50	0.35	437.00	6.19	670		3.26	0.10	3.80	23.63	0.00
PAMP-LA3.0-4	REAS	8/22/2005	12.8	3.2	3.2	1140	20.0	0	96	15.20	13.20	0.28	597.00	6.19	734		2.34	0.04	2.03	14.77	0.00
PAMP-LA3.0-4	REAS	9/19/2005	12.8	3.1	3.2	1250	18.9	0	101	14.60	15.00	0.31	501.00	6.19	777		2.25	0.05	2.31	15.54	0.00
Average			87.3		3.5			0	62	11.95	10.89	0.56					10.78	0.72	9.95	52.06	0.00

PAMP-LA3.0-1	SLT	12/17/2004	6.0	3.4	3.3	566	2.0	0	115	0.90	3.27	13.80	139.00	5.69	267		0.06	1.00	0.24	8.29	0.00
PAMP-LA3.0-1	SLT	1/19/2005	12.0	3.4	3.2	674	2.0	0	142	1.38	3.80	19.10	197.00	22.90	357		0.20	2.75	0.55	20.48	0.00
PAMP-LA3.0-1	SLT	2/16/2005	13.3	3.6	3.3	511	1.0	0	115	1.58	3.43	16.00	145.00	8.60	260		0.25	2.56	0.55	18.38	0.00
Average			10.4		3.3				124	1.29	3.50	16.30					0.17	2.10	0.44	15.72	0.00

Stream Monitoring Data - Raw

SMP-AC1		10/23/2004	20169.0	6.2	6.2	198	9.0	9	4	0.21	0.78	0.43	57.00	12.90			50.91	104.25	189.10	969.73	2181.88
SMP-AC1		11/22/2004	21764.3	6.3	6.2	188	7.0	8	8	0.26	0.90	0.52	62.00	10.00			68.02	136.04	235.45	2092.86	2092.86
SMP-AC1		2/9/2005	60343.9	6.4	5.8	246	1.0	7	7	1.00	1.43	1.15	74.00	8.60			725.33	834.13	1037.23	5077.34	5077.34
SMP-AC1		3/16/2005	35763.1	6.2	4.9	186	0.0	8	10	0.51	0.77	0.86	46.00	5.69			219.23	369.69	331.00	4298.72	3438.98
SMP-AC1		4/14/2005	52725.0	5.5	5.2	175	7.0	5	8	0.35	0.66	0.71	43.00	5.69			221.81	449.97	418.28	5070.04	3168.77
SMP-AC1		5/18/2005	21743.0	5.8	5.6	199	11.0	6	7	0.20	0.77	0.53	50.00	5.69	Al staining		52.27	138.52	201.24	1829.46	1568.11
SMP-AC1		6/15/2005	13705.8	6.5	6.5	181	21.0	9	2	0.16	0.56	0.13	40.00	6.19			26.36	21.42	92.26	329.49	1482.69
SMP-AC1		7/13/2005	4409.6	7.1	5.7	385	22.0	10	10	0.11	0.85	0.07	73.00	7.10			5.83	3.71	45.05	530.03	530.03
SMP-AC1		8/22/2005	2656.9	6.9	6.8	292	20.0	14	-2	0.07	0.74	0.06	69.00	7.10			2.24	1.92	23.63	-63.87	447.11
SMP-AC1		9/14/2005	3660.0	6.0	6.9	298	16.0	14	-3	0.22	0.73	0.09	96.00	7.10			9.68	3.96	32.11	-131.98	615.90
Average			23694.1		6.0			9.0	5.1	0.3	0.8	0.5					138.2	206.4	260.5	2000.2	2060.4

SMP-AC2		10/23/2004	18029.0	4.8	4.6	173	9.0	5	12	0.12	1.01	0.78	48.00	8.60			26.01	169.03	218.88	2600.50	1083.54
SMP-AC2		11/22/2004	17101.6	5.2	4.8	165	7.0	6	11	0.12	1.04	0.79	55.00	5.69			24.67	162.39	213.78	2261.17	1233.37
SMP-AC2		2/9/2005	52041.1	5.1	4.7	219	2.0	5	12	0.63	1.34	1.00	67.00	5.69			394.09	625.53	838.22	7506.41	3127.67
SMP-AC2		3/16/2005	32916.8	5.0	4.6	153	1.0	6	14	0.38	0.68	0.87	40.00	5.69			150.35	344.22	269.05	5539.24	2373.96
SMP-AC2		4/14/2005	43021.1	4.5	4.7	155	8.0	5	10	0.29	0.67	0.84	36.00	5.69			149.96	434.38	346.47	5171.14	2585.57
SMP-AC2		5/18/2005	14932.0	4.6	4.6	171	11.5	5	13	0.09	0.88	0.80	40.00	5.69	moved upst		16.15	143.59	157.94	2333.27	897.41
SMP-AC2		6/10/2005		4.5	4.5	153	25.0	8	5	0.09	0.74	0.50	33.00	6.19	no flow taken						
SMP-AC2		6/15/2005	10000.0	4.3	4.7	154	20.5	5	8	0.40	0.68	0.48	32.00	6.19			48.08	57.70	81.74	961.60	601.00
SMP-AC2		7/13/2005	4499.0	4.5	4.4	248	22.0	4	15	0.11	1.20	0.82	52.00	6.19			5.95	44.34	64.89	811.17	216.31
SMP-AC2		8/22/2005	2276.1	4.4	4.4	230	19.5	4	13	0.09	1.17	0.76	53.00	7.10			2.46	20.79	32.01	355.66	109.43
SMP-AC2		9/14/2005	2220.5	4.3	4.4	234	15.0	4	12	0.07	1.22	0.95	68.00	6.19			1.87	25.36	32.56	320.28	106.76
Average			19703.7		4.6			5.2	11.4	0.2	1.0	0.8					82.0	202.7	225.6	2786.0	1233.5

Stream Monitoring Data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
SMP-AC3		10/23/2004	16492.0	4.7	4.7	177	8.0	5	11	0.20	1.02	0.73	50.00	8.60			39.65	144.71	202.20	2180.57	991.17
SMP-AC3		11/23/2004	15146.4	4.9	4.9	166	5.0	5	10	0.23	1.08	0.77	52.00	5.69			41.87	140.19	196.62	1820.60	910.30
SMP-AC3		2/10/2005		5.2	5.1	117	1.5	6	8	0.63	0.75	0.66	31.00	18.60			0.00	0.00	0.00	0.00	0.00
SMP-AC3		3/16/2005	32652.9	4.6	4.8	156	1.0	5	12	0.48	0.76	0.84	41.00	5.69			188.39	329.69	298.29	4709.85	1962.44
SMP-AC3		4/15/2005	43364.4	4.5	4.7	153	7.5	5	9	0.43	0.70	0.84	38.00	10.00			224.13	437.84	364.87	4691.16	2606.20
SMP-AC3		5/19/2005	15682.9	4.7	4.7	167	10.0	5	12	0.10	0.83	0.72	42.00	5.69			18.85	135.73	156.46	2262.10	942.54
SMP-AC3		6/16/2005	22817.4	4.6	4.8	185	18.0	5	9	0.29	0.79	0.42	41.00	8.60			79.54	115.19	216.67	2468.39	1371.33
SMP-AC3		7/13/2005	4568.3	4.4	4.4	223	25.0	4	15	0.10	1.30	0.81	54.00	6.19	when comir		5.49	44.48	71.38	823.67	219.65
SMP-AC3		8/22/2005	2584.9	4.3	4.4	245	22.0	3	13	0.13	1.62	0.92	63.00	6.19			4.04	28.58	50.33	403.92	93.21
SMP-AC3		9/15/2005	1397.1	4.4	4.4	230	18.0	4	12	0.05	1.25	0.80	65.00	6.19			0.84	13.43	20.99	201.52	67.17
Average			17189.60		4.69			4.70	11.10	0.26	1.01	0.75					60.28	138.98	157.78	1956.18	916.40

SMP-AC4		10/23/2004	6898.0	6.7	6.4	102	10.0	10	2	0.17	0.04	0.05	22.00	10.00			14.10	4.06	3.32	165.83	829.14
SMP-AC4		11/23/2004	8026.8	6.6	6.5	99	7.0	10	2	0.19	0.04	0.05	22.00	5.70			18.33	4.73	3.86	192.96	964.82
SMP-AC4		2/9/2005	41749.2	6.1	6.1	85	2.0	8	6	0.20	0.15	0.23	19.00	11.40			100.37	115.42	75.27	3010.95	4014.60
SMP-AC4		3/16/2005	12060.4	6.1	6.3	112	0.3	7	4	0.18	0.14	0.15	21.00	5.69			26.09	21.74	20.30	579.86	1014.76
SMP-AC4		4/15/2005	16950.5	6.3	6.5	118	14.0	8	2	0.20	0.08	0.16	19.00	8.60			40.75	32.60	16.30	407.49	1629.96
SMP-AC4		5/19/2005	6057.0	6.7	6.4	112	14.0	9	4	0.12	0.03	0.05	19.00	5.69			8.74	3.57	2.18	291.22	655.25
SMP-AC4		6/16/2005	21327.0	6.5	6.7	125	21.0	9	1	0.15	0.04	0.05	17.00	10.00			38.45	12.56	10.25	256.35	2307.15
SMP-AC4		7/14/2005	1382.9	6.4	6.9	132	21.0	13	-1	0.08	0.03	0.05	20.00	6.19			1.33	0.81	0.50	-16.62	216.09
SMP-AC4		8/23/2005	1139.1	6.7	6.9	138	17.0	14	-2	0.07	0.02	0.05	18.00	6.19			0.96	0.67	0.27	-27.38	191.69
SMP-AC4		9/15/2005	1117.9	6.4	7.0	130	19.0	14	-4	0.05	0.02	0.05	18.00	6.19			0.67	0.66	0.27	-53.75	188.11
Average			11670.9		6.6			10.2	1.4	0.1	0.1	0.1					25.0	19.7	13.3	480.7	1201.2

SMP-BR1		10/22/2004	3630.0	6.7	6.6	298	10.0	12	0	0.91	1.36	0.28	108.00	10.00			39.71	12.22	59.34	0.00	523.59
SMP-BR1		11/22/2004	1775.8	6.9	6.4	328	7.0	14	1	1.31	1.49	0.14	133.00	7.10			27.96	2.99	31.80	21.34	298.83
SMP-BR1		2/9/2005	7195.2	5.9	6.4	393	2.0	15	2	1.28	3.07	1.40	153.00	5.69			110.70	121.08	265.51	172.97	1297.29
SMP-BR1		3/16/2005	4638.4	6.3	6.2	310	0.0	16	2	0.84	1.27	0.81	111.00	5.69			46.83	45.16	70.81	111.51	892.05
SMP-BR1		4/14/2005	4167.7	6.0	6.6	345	8.0	10	2	1.00	1.76	0.63	117.00	5.69			50.10	31.56	88.17	100.19	500.95
SMP-BR1		5/18/2005	1271.0	6.7	6.3	389	9.5	14	2	1.64	1.32	0.29	132.00	5.69			25.05	4.43	20.17	30.55	213.88
SMP-BR1		6/15/2005	1060.6	6.1	6.7	348	17.0	14	-1	1.59	0.72	0.08	112.00	6.19			20.27	1.02	9.18	-12.75	178.48
SMP-BR1		7/13/2005	512.6	6.2	6.6	431	17.5	18	-4	2.46	1.05	0.05	148.00	6.19			15.16	0.30	6.47	-24.64	110.90
SMP-BR1		8/22/2005	328.6	6.6	6.5	447	16.0	19	-6	3.82	1.47	0.05	162.00	6.19			15.09	0.19	5.81	-23.70	75.05
SMP-BR1		9/14/2005	258.6	6.2	6.5	490	13.0	19	-5	5.27	1.77	0.05	210.00	8.60			16.38	0.15	5.50	-15.54	59.05
Average			2483.83		6.48			15.10	-0.70	2.01	1.53	0.38					36.72	21.91	56.28	35.99	415.01

SMP-BR2		10/22/2004	2869.0	6.5	6.6	288	9.0	12	0	0.26	1.22	0.24	105.00	8.60			8.97	8.28	42.07	0.00	413.82
SMP-BR2		11/22/2004	1637.8	6.9	6.4	319	7.0	13	2	0.22	1.30	0.15	130.00	7.10	no visible ir		4.33	2.95	25.59	39.37	255.92
SMP-BR2		2/9/2005	5491.5	6.1	6.4	384	2.0	13	1	0.36	2.53	1.00	159.00	5.69			23.76	66.01	167.00	66.01	858.10
SMP-BR2		3/16/2005	5431.8	6.5	6.4	323	0.0	16	2	0.43	1.47	0.86	127.00	5.69			28.07	56.15	95.98	130.58	1044.65
SMP-BR2		4/14/2005	4039.2	6.3	6.7	343	9.0	10	2	0.40	1.89	0.70	126.00	5.69			19.42	33.99	91.76	97.10	485.51
SMP-BR2		5/18/2005	1195.4	6.8	6.4	372	10.5	12	3	0.51	1.25	0.38	128.00	5.70			7.33	5.46	17.96	43.11	172.42
SMP-BR2		6/15/2005	732.6	6.3	6.8	313	18.0	11	1	0.22	0.31	0.19	97.00	6.19			1.94	1.67	2.73	8.81	96.87
SMP-BR2		7/13/2005	563.9	6.5	6.8	377	18.0	14	1	0.13	0.25	0.07	126.00	6.19			0.88	0.47	1.69	6.78	94.89
SMP-BR2		8/22/2005	124.8	6.6	6.5	347	17.0	10	3	0.14	0.20	0.07	118.00	6.19			0.21	0.10	0.30	4.50	15.00
SMP-BR2		9/14/2005	131.7	6.2	6.5	399	14.0	9	2	0.06	0.08	0.05	164.00	6.19			0.09	0.08	0.13	3.17	14.25
Average			2221.8		6.6			12.0	1.7	0.3	1.1	0.4					9.5	17.5	44.5	39.9	345.1

Stream Monitoring Data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
SMP-BR3		10/22/2004	675.0	4.4	4.5	434	10.0	4	20	0.41	5.45	1.29	178.00	8.60			3.33	10.47	44.22	162.27	32.45
SMP-BR3		11/22/2004	529.1	5.5	4.7	438	7.0	6	16	0.36	5.68	1.18	198.00	5.70		very silty	2.29	7.51	36.13	101.76	38.16
SMP-BR3		2/9/2005	2150.0	4.5	4.4	549	0.0	3	30	0.73	8.75	3.18	270.00	5.69			18.87	82.18	226.12	775.28	77.53
SMP-BR3		3/16/2005	829.4	4.7	4.4	453	0.0	6	24	0.39	5.34	2.32	201.00	5.69			3.89	23.13	53.24	239.26	59.82
SMP-BR3		4/14/2005	901.6	4.1	4.3	551	14.0	3	26	0.34	6.04	2.40	234.00	5.69		trees down	3.68	26.01	65.46	281.78	32.51
SMP-BR3		5/18/2005	519.5	4.1	4.1	599	13.0	2	35	0.57	9.77	2.67	289.00	5.69			3.56	16.67	61.00	218.54	12.49
SMP-BR3		6/15/2005	241.4	4.0	4.0	552	23.0	1	27	1.41	8.15	0.74	217.00	6.19			4.09	2.15	23.65	78.34	2.90
SMP-BR3		7/13/2005	104.3	5.4	4.7	515	26.0	6	20	3.72	6.97	0.16	195.00	14.30			4.67	0.20	8.74	25.08	7.53
SMP-BR3		8/22/2005	43.6	6.5	6.5	5.2	20.0	26	1	3.95	6.07	0.05	190.00	8.60			2.07	0.03	3.18	0.52	13.63
SMP-BR3		9/14/2005	29.3	6.4	5.9	656	16.0	10	6	1.00	9.46	0.11	312.00	6.19			0.35	0.04	3.33	2.11	3.52
Average			602.32		4.75			6.70	20.50	1.29	7.17	1.41					4.68	16.84	52.51	188.50	28.05

SMP-BR4		11/22/2004	175.0	6.1	5.7	218	7.5	8	7	1.19	1.23	0.36	62.00	7.10		estimated fl	2.50	0.76	2.59	14.72	16.83
SMP-BR4		2/9/2005		5.5	5.5	288	4.0	7	10	2.05	1.59	2.21	95.00	27.10			0.00	0.00	0.00	0.00	0.00
SMP-BR4		3/16/2005	326.4	5.6	4.9	238	4.0	6	14	0.53	1.05	1.00	70.00	5.69			2.08	3.92	4.12	54.93	23.54
SMP-BR4		4/14/2005	255.1	5.0	5.0	279	12.0	6	12	0.51	1.30	1.37	78.00	5.69			1.56	4.20	3.99	36.80	18.40
SMP-BR4		5/18/2005	55.9	5.8	5.7	191	15.0	6	8	0.55	0.76	0.25	37.00	5.69			0.37	0.17	0.51	5.38	4.03
SMP-BR4		6/15/2005	76.7	5.6	6.8	176	17.0	9	3	0.71	0.68	0.14	32.00	6.19			0.65	0.13	0.63	2.77	8.30
SMP-BR4		7/13/2005	16.2	6.2	6.1	220	23.5	10	4	1.26	0.80	0.14	34.00	6.19			0.24	0.03	0.16	0.78	1.94
SMP-BR4		8/22/2005	10.0	6.0	6.4	198	24.0	13	0	3.47	0.75	1.03	26.00	7.10		estimated fl	0.42	0.12	0.09	0.00	1.56
SMP-BR4		9/14/2005	12.0	6.4	6.4	205	23.0	13	0	1.47	0.68	0.08	31.00	6.19		estimated fl	0.21	0.01	0.10	0.00	1.88
Average			115.9		5.8			8.7	6.4	1.3	1.0	0.7					0.9	1.0	1.4	12.8	8.5

SMP-FR1		10/22/2004	631.0	7.1	7.3	521	10.0	44	0	0.35	1.15	0.26	200.00	8.60			2.65	1.97	8.72	0.00	333.72
SMP-FR1		11/22/2004	433.8	7.1	6.9	529	7.0	45	0	0.24	1.00	0.17	222.00	7.10			1.25	0.89	5.21	0.00	234.65
SMP-FR1		2/9/2005	1909.2	6.6	6.9	402	2.0	33	-20	0.39	0.88	0.39	154.00	5.69			8.95	8.95	20.19	-458.97	757.30
SMP-FR1		3/16/2005	726.9	7.1	7.2	511	0.5	54	-40	0.29	1.07	0.31	220.00	5.69			2.53	2.71	9.35	-349.51	471.84
SMP-FR1		4/14/2005	845.5	6.6	7.5	539	10.0	43	-29	0.28	1.06	0.33	6.00	5.69			2.85	3.35	10.77	-294.74	437.03
SMP-FR1		5/18/2005	289.0	7.3	6.9	604	13.0	51	-37	0.31	1.08	0.19	229.00	5.69			1.08	0.66	3.75	-128.54	177.18
SMP-FR1		6/15/2005	204.6	6.8	7.5	595	19.0	49	-36	0.27	0.66	0.13	219.00	6.19			0.66	0.32	1.62	-88.53	120.50
SMP-FR1		7/13/2005	147.6	7.0	7.4	600	20.0	57	-41	0.60	0.47	0.12	222.00	6.19			1.06	0.21	0.83	-72.72	101.10
SMP-FR1		8/22/2005	77.4	7.2	7.4	529	18.5	60	-45	0.69	0.26	0.05	179.00	6.19			0.64	0.05	0.24	-41.84	55.79
SMP-FR1		9/14/2005	55.9	7.1	7.3	506	14.0	55	-42	4.00	0.32	0.25	181.00	6.19			2.69	0.17	0.21	-28.21	36.94
Average			532.09		7.23			49.10	-29.00	0.74	0.80	0.22					2.44	1.93	6.09	-146.31	272.61

SMP-HR1		10/22/2004	413.0	5.8	6.0	122	10.0	8	4	0.26	0.33	0.20	30.00	14.30			1.29	0.99	1.64	19.86	39.71
SMP-HR1		11/22/2004	345.8	5.8	5.9	120	7.0	9	5	0.30	0.30	0.16	28.00	7.10			1.25	0.67	1.25	20.78	37.41
SMP-HR1		2/9/2005	857.2	5.6	5.9	117	3.0	8	4	0.26	0.25	0.26	25.00	5.69			2.68	2.68	2.58	41.21	82.43
SMP-HR1		3/16/2005	798.1	6.1	5.8	124	2.0	10	8	0.15	0.24	0.20	28.00	5.69			1.44	1.92	2.30	76.75	95.94
SMP-HR1		4/14/2005	775.3	5.4	5.9	127	8.0	7	5	0.10	0.24	0.15	25.00	5.69			0.93	1.40	2.24	46.60	65.23
SMP-HR1		5/18/2005	279.4	5.7	5.7	144	10.0	7	7	0.10	0.37	0.16	32.00	5.69			0.34	0.54	1.24	23.51	23.51
SMP-HR1		6/15/2005	151.9	5.6	5.9	151	15.5	9	4	0.19	0.38	0.16	29.00	6.19			0.35	0.29	0.69	7.30	16.43
SMP-HR1		7/13/2005	51.6	6.1	6.0	160	19.0	8	6	0.30	0.35	0.15	28.00	6.19			0.19	0.09	0.22	3.72	4.96
SMP-HR1		8/22/2005	28.6	6.5	6.1	159	17.0	9	6	0.51	0.42	0.18	28.00	6.19			0.18	0.06	0.14	2.06	3.10
SMP-HR1		9/14/2005	23.7	6.6	6.3	152	14.0	9	3	0.24	0.36	0.11	32.00	6.19			0.07	0.03	0.10	0.85	2.56
Average			372.5		6.0			8.4	5.2	0.2	0.3	0.2					0.9	0.9	1.2	24.3	37.1

Stream Monitoring Data - Raw

Sample ID	ACWA ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Notes	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Alkalinity Loading lbs/day
SMP-KR1		10/22/2004	6802.0	6.5	7.1	279	9.0	26	0	0.50	0.65	0.16	82.00	11.40			40.88	13.08	53.14	0.00	2125.76
SMP-KR1		11/22/2004	3853.6	7.0	6.6	309	7.0	27	0	0.71	0.72	0.09	103.00	8.60		heavy iron s	32.89	4.17	33.35	0.00	1250.64
SMP-KR1		2/9/2005	11416.4	6.6	6.6	346	1.0	22	-7	0.95	1.24	0.71	101.00	8.60			130.36	97.43	170.16	-960.58	3018.95
SMP-KR1		3/16/2005	7561.4	7.1	6.5	298	0.0	18	0	1.65	1.09	0.83	85.00	5.70			149.96	75.44	99.07	0.00	1635.98
SMP-KR1		4/14/2005	7293.0	5.9	6.9	320	7.5	17	-5	0.90	1.05	0.46	98.00	5.69			78.90	40.32	92.04	-438.31	1490.25
SMP-KR1		5/18/2005	2308.7	6.8	6.7	374	9.5	25	-10	0.76	0.78	0.08	114.00	5.69			21.09	2.22	21.65	-277.51	693.78
SMP-KR1		6/15/2005	1847.0	5.9	7.3	380	18.5	34	-23	0.74	0.35	0.05	104.00	6.19			16.43	1.11	7.77	-510.62	754.83
SMP-KR1		7/13/2005	1055.9	6.1	7.2	482	19.0	42	-28	1.21	0.27	0.06	129.00	10.00			15.36	0.76	3.43	-355.36	533.04
SMP-KR1		8/22/2005	863.3	6.4	7.1	473	17.5	47	-33	1.53	0.24	0.05	141.00	6.19			15.88	0.51	2.49	-342.44	487.72
SMP-KR1		9/14/2005	833.6	6.2	7.2	509	14.0	46	-35	1.70	0.30	0.05	176.00	7.10			17.03	0.49	3.01	-350.71	460.93
Average			4383.5		6.9			30.4	-14.1	1.1	0.7	0.3					51.9	23.6	48.6	-323.6	1245.2
SMP-KR2		10/22/2004	1923.0	7.0	7.2	251	10.0	36	0	0.33	0.09	0.06	52.00	8.60			7.63	1.39	2.08	0.00	832.12
SMP-KR2		11/22/2004	1079.4	7.1	6.8	273	7.0	42	0	0.40	0.10	0.05	63.00	5.70			5.19	0.64	1.30	0.00	544.90
SMP-KR2		2/9/2005	4992.0	6.3	6.7	265	2.0	29	-14	0.82	0.18	0.38	42.00	5.69			49.20	22.80	10.80	-840.05	1740.11
SMP-KR2		3/16/2005	2030.4	6.9	6.8	349	1.5	34	-20	0.38	0.16	0.12	70.00	5.69			9.27	2.93	3.90	-488.10	829.77
SMP-KR2		4/14/2005	1834.9	6.4	7.4	311	9.5	31	-20	0.32	0.11	0.11	71.00	5.69		algae	7.06	2.43	2.43	-441.11	683.73
SMP-KR2		5/18/2005	504.2	7.4	6.9	360	13.0	49	-33	0.43	0.10	0.06	75.00	5.69			2.61	0.36	0.61	-200.01	296.98
SMP-KR2		6/15/2005	370.3	6.7	7.6	439	20.0	60	-48	0.47	0.20	0.06	87.00	6.19			2.09	0.27	0.89	-213.63	267.03
SMP-KR2		7/13/2005	168.9	6.9	7.6	537	21.5	70	-56	0.49	0.15	0.08	99.00	6.19		several sma	0.99	0.16	0.30	-113.71	142.14
SMP-KR2		8/22/2005	83.9	7.4	7.7	490	19.0	82	-64	0.41	0.10	0.07	83.00	7.10			0.41	0.07	0.10	-64.52	82.67
SMP-KR2		9/14/2005	105.2	6.9	7.7	520	16.0	91	-73	0.40	0.07	0.08	96.00	6.19			0.51	0.10	0.09	-92.33	115.09
Average			1309.22		7.24			52.40	-32.80	0.45	0.13	0.11					8.50	3.11	2.25	-245.35	553.45
SMP-LA1		10/23/2004	4061.0	3.9	4.6	571	9.0	5	18	0.27	4.80	1.18	259.00	8.60			13.18	57.60	234.30	878.64	244.07
SMP-LA1		11/23/2004	2299.7	3.9	3.8	554	5.0	0	42	4.34	4.84	3.11	237.00	5.69			119.97	85.97	133.79	1160.96	0.00
SMP-LA1		2/10/2005	19858.5	4.5	4.3	273	1.0	3	19	1.98	2.73	1.88	90.00	14.30			472.62	448.75	651.65	4535.28	716.10
SMP-LA1		3/16/2005	4960.1	3.8	3.8	567	1.0	0	42	4.24	5.44	4.18	250.00	5.69			252.79	249.22	324.34	2504.08	0.00
SMP-LA1		4/15/2005	4974.5	3.5	3.7	554	10.0	0	46	3.89	4.57	4.12	209.00	5.70			232.60	246.35	273.26	2750.50	0.00
SMP-LA1		5/19/2005	2149.2	3.7	3.7	543	9.5	0	48	0.10	0.80	3.83	195.00	5.69			2.58	98.94	20.67	1240.01	0.00
SMP-LA1		6/16/2005	2250.1	3.6	3.5	701	17.0	0	49	4.18	6.54	3.13	262.00	11.40			113.05	84.65	176.88	1325.26	0.00
SMP-LA1		7/13/2005	706.5	3.8	3.4	746	18.5	0	71	8.21	6.11	4.39	264.00	7.10			69.72	37.28	51.89	602.96	0.00
SMP-LA1		8/23/2005	240.3	3.6	3.4	724	14.0	0	81	17.50	8.76	5.13	284.00	8.60			50.55	14.82	25.31	233.99	0.00
SMP-LA1		9/15/2005	365.1	3.5	3.3	731	14.5	0	83	16.90	7.65	5.22	335.00	10.00			74.16	22.91	33.57	364.20	0.00
Average			4186.5		3.8			0.8	49.9	6.2	5.2	3.6					140.1	134.6	192.6	1559.6	96.0
SMP-LA2		10/23/2004	847.0	4.5	4.3	403	8.0	3	27	2.41	3.25	2.26	155.00	14.30			24.54	23.01	33.09	274.89	30.54
SMP-LA2		11/22/2004	888.1	4.7	4.5	378	6.8	5	25	2.58	3.36	2.42	164.00	10.00			27.54	25.83	35.87	266.87	53.37
SMP-LA2		2/9/2005	4556.2	5.1	4.8	325	1.0	5	21	2.38	3.74	2.36	111.00	5.69			130.34	129.25	204.82	1150.08	273.83
SMP-LA2		3/16/2005		4.6	4.1	399	0.0	4	34	1.90	4.27	2.87	158.00	5.69		Ice prevented flow reading					
SMP-LA2		4/14/2005	1530.9	4.3	4.2	428	10.0	2	23	1.19	3.84	2.24	160.00	5.69			21.90	41.22	70.66	423.22	36.80
SMP-LA2		5/18/2005	626.1	4.4	4.1	411	14.0	1	34	1.74	3.55	2.32	155.00	5.69			13.09	17.46	26.72	255.86	7.53
SMP-LA2		6/15/2005	289.5	3.6	3.6	616	19.0	0	49	3.34	5.13	3.86	230.00	6.19			11.62	13.43	17.85	170.50	0.00
SMP-LA2		7/13/2005	102.5	3.7	3.6	733	20.0	0	56	2.79	7.19	4.41	281.00	6.19			3.44	5.43	8.86	69.00	0.00
SMP-LA2		8/22/2005	28.9	3.5	3.4	429	19.0	0	70	0.94	4.96	6.45	121.00	6.19			0.33	2.24	1.72	24.32	0.00
SMP-LA2		9/14/2005	26.8	3.5	3.5	873	16.0	0	73	3.77	14.00	5.93	370.00	6.19			1.22	1.91	4.51	23.53	0.00
Average			988		4			2	41	2	5	4					26	29	45	295	45

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-879	0.42	15.30	0.08	2.71	0.01	0.05	0.00	11	0.06	13	0.07	Low
DMP-879	2.19	32.60	0.86	3.76	0.10	0.13	0.00	13	0.34	14	0.37	Low
DMP-879	3.01	30.80	1.11	3.21	0.12	0.06	0.00	-45	-1.64	23	0.83	Low
DMP-879	7.50	21.70	1.96	2.44	0.22	0.22	0.02	16	1.44	10	0.90	Low
DMP-879	8.39	23.40	2.36	3.40	0.34	0.049	0.00	49	4.94	18	1.82	Medium
DMP-879	8.89	6.84	0.73	1.93	0.21	0.049	0.01	11	1.18	13	1.39	Medium
DMP-879	8.90	25.80	2.76	2.01	0.22	0.28	0.03	-16	-1.71	13	1.39	Medium
DMP-879	16.70	10.10	2.03	2.46	0.49	0.049	0.01	9	1.81	10	2.01	Medium
DMP-879	16.70	5.34	1.07	0.84	0.17	0.049	0.01	-12	-2.41	11	2.21	Medium
DMP-879	16.70	6.72	1.35	1.00	0.20	0.049	0.01	7	1.41	10	2.01	Medium
DMP-879	21.70	8.40	2.19	1.39	0.36	0.06	0.02	9	2.35	12	3.13	High
DMP-879	27.50	18.60	6.15	1.39	0.46	0.18	0.06	9	2.97	11	3.64	High
DMP-AC3.75-1	6.32	0.05	0.00	0.05	0.00	0.22	0.02	6	0.46	6	0.46	Low
DMP-AC3.75-1	6.67	0.19	0.02	0.09	0.01	0.39	0.03	11	0.88	5	0.40	Low
DMP-AC3.75-1	12.00	0.07	0.01	0.07	0.01	0.45	0.06	10	1.44	6	0.87	Medium
DMP-AC3.75-1	12.00	0.06	0.01	0.06	0.01	0.45	0.06	11	1.59	5	0.72	Medium
DMP-AC3.75-1	12.00	1.00	0.14	0.09	0.01	0.4	0.06	6	0.87	7	1.01	Medium
DMP-AC3.75-1	16.00	1.34	0.26	2.45	0.47	22	4.23	18	3.40	0	0.00	High
DMP-AC3.75-1	41.80	1.24	0.62	0.37	0.19	3.07	1.54	50	25.12	0	0.00	High
DMP-AC3.75-2	2.20	0.14	0.00	0.26	0.01	1.41	0.04	28	0.74	0	0.00	Low
DMP-AC3.75-2	12.00	1.98	0.29	0.49	0.07	3.34	0.48	51	7.36	0	0.00	Low
DMP-AC3.75-2	12.40	0.29	0.04	0.29	0.04	1.86	0.28	32	4.77	0	0.00	Low
DMP-AC3.75-2	34.20	0.63	0.26	0.37	0.15	2.47	1.02	39	16.03	0	0.00	Medium
DMP-AC3.75-2	34.20	0.57	0.23	0.34	0.14	2.16	0.89	36	14.80	0	0.00	Medium
DMP-AC3.75-2	34.20	0.79	0.32	0.36	0.15	2.74	1.13	41	16.85	0	0.00	Medium
DMP-AC3.75-2	41.80	1.24	0.62	0.37	0.19	3.07	1.54	50	25.12	0	0.00	High
DMP-AC3.75-2	60.00	1.06	0.76	0.45	0.32	3.28	2.37	45	32.45	0	0.00	High
DMP-AC3.75-2	70.20	1.42	1.20	0.46	0.39	3.38	2.85	51	43.03	0	0.00	High
DMP-AC3.75-2		0.97		0.58		4.56		55		0		No flow

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-AC3.75-3	4.30	2.70	0.14	3.45	0.18	21.7	1.12	201	10.39	0	0.00	Low
DMP-AC3.75-3	7.50	1.68	0.15	3.34	0.30	23.6	2.13	208	18.75	0	0.00	Low
DMP-AC3.75-3	8.57	1.33	0.14	3.06	0.32	22.4	2.31	172	17.72	0	0.00	Medium
DMP-AC3.75-3	15.00	1.37	0.25	2.08	0.38	22.1	3.98	193	34.80	0	0.00	Medium
DMP-AC3.75-3	15.00	1.55	0.28	2.73	0.49	23.6	4.26	182	32.81	0	0.00	Medium
DMP-AC3.75-3	24.00	1.06	0.31	1.95	0.56	18.8	5.42	172	49.62	0	0.00	High
DMP-AC3.75-3	55.00	1.26	0.83	1.91	1.26	21.8	14.41	163	107.76	0	0.00	High
DMP-AC3.75-3		13.50		7.41		33.2		271		0		No flow

DMP-BR3.9	1.33	1.00	0.02	3.76	0.06	0.3	0.00	10	0.16	4	0.06	Low
DMP-BR3.9	4.20	2.41	0.12	3.01	0.15	0.12	0.01	10	0.50	9	0.45	Low
DMP-BR3.9	12.00	0.44	0.06	3.96	0.57	0.71	0.10	15	2.16	3	0.43	Low
DMP-BR3.9	20.00	0.93	0.22	3.32	0.80	0.95	0.23	12	2.88	5	1.20	Medium
DMP-BR3.9	20.00	1.66	0.40	3.08	0.74	1	0.24	16	3.85	6	1.44	Medium
DMP-BR3.9	20.00	4.35	1.05	3.34	0.80	0.58	0.14	13	3.13	9	2.16	Medium
DMP-BR3.9	30.00	0.65	0.23	2.37	0.85	1.19	0.43	16	5.77	5	1.80	Medium
DMP-BR3.9	60.00	0.51	0.37	2.88	2.08	1.02	0.74	17	12.26	5	3.61	High
DMP-BR3.9	60.00	0.56	0.40	2.67	1.93	1.46	1.05	16	11.54	5	3.61	High
DMP-BR3.9	60.00	1.64	1.18	2.32	1.67	0.95	0.69	15	10.82	5	3.61	High
DMP-BR3.9		0.75		3.70		0.31		10		4		No flow

DMP-BR4.0	1.25	12.40	0.19	17.70	0.27	9.96	0.15	96	1.44	0	0.00	Low
DMP-BR4.0	3.00	7.60	0.27	15.80	0.57	10.2	0.37	96	3.46	0	0.00	Low
DMP-BR4.0	8.50	7.81	0.80	16.60	1.70	10.3	1.05	100	10.22	0	0.00	Low
DMP-BR4.0	20.00	18.90	4.54	27.10	6.51	12.5	3.01	144	34.62	0	0.00	Low
DMP-BR4.0	20.00	10.10	2.43	21.20	5.10	10.3	2.48	97	23.32	0	0.00	Low
DMP-BR4.0	20.00	2.14	0.51	13.20	3.17	9.38	2.25	87	20.91	0	0.00	Low
DMP-BR4.0	30.00	8.83	3.18	19.20	6.92	10.3	3.71	104	37.50	0	0.00	Medium
DMP-BR4.0	30.00	6.36	2.29	17.90	6.45	9.46	3.41	80	28.85	0	0.00	Medium
DMP-BR4.0	60.00	7.34	5.29	20.80	15.00	11.4	8.22	116	83.66	0	0.00	High
DMP-BR4.0	60.00	6.01	4.33	21.20	15.29	11.6	8.37	122	87.99	0	0.00	High
DMP-BR4.0	100.00	5.64	6.78	21.90	26.32	12.2	14.66	108	129.82	0	0.00	High
DMP-BR4.0		2.91		16.30		5.61		72		0		No flow

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-BR4.5	16.00	3.08	0.59	20.30	3.90	7.7	1.48	109	20.96	0	0.00	Low
DMP-BR4.5	20.00	11.50	2.76	24.80	5.96	9.04	2.17	116	27.89	0	0.00	Low
DMP-BR4.5	20.00	19.00	4.57	25.10	6.03	8.34	2.00	119	28.61	0	0.00	Low
DMP-BR4.5	25.00	17.90	5.38	29.90	8.98	11.5	3.46	119	35.76	0	0.00	Medium
DMP-BR4.5	26.00	7.39	2.31	22.30	6.97	8.45	2.64	117	36.56	0	0.00	Medium
DMP-BR4.5	60.00	22.80	16.44	24.00	17.31	9.09	6.56	104	75.00	0	0.00	Medium
DMP-BR4.5	120.00	15.60	22.50	21.10	30.43	9.85	14.21	107	154.34	0	0.00	High
DMP-BR4.5	150.00	24.90	44.89	24.10	43.45	7.65	13.79	146	263.24	1	1.80	High
DMP-BR4.5	250.00	8.68	26.08	22.90	68.81	9.05	27.20	97	291.49	0	0.00	High
DMP-BR4.5		14.20		21.90		8.97		118		0		No flow
DMP-BR4.5		4.83		23.10		8.22		110		0		No flow

DMP-KORB1	0.04	6.05	0.00	1.40	0.00	23.8	0.01	189	0.09	0	0.00	Low
DMP-KORB1	0.50	3.10	0.02	1.30	0.01	20.3	0.12	162	0.97	0	0.00	Medium
DMP-KORB1	1.33	12.60	0.20	1.51	0.02	32.2	0.52	277	4.44	0	0.00	Medium
DMP-KORB1	12.00	12.80	1.85	1.02	0.15		0.00	251	36.20	0	0.00	High

DMP-KORB2	10.20	38.50	4.72	2.60	0.32	54.5	6.68	480	58.85	0	0.00	Low
DMP-KORB2	10.20	36.50	4.48	2.74	0.34	53.4	6.55	537	65.84	0	0.00	Low
DMP-KORB2	20.00	57.80	13.90	4.17	1.00	80.6	19.38	583	140.15	0	0.00	Low
DMP-KORB2	20.40	36.30	8.90	2.44	0.60	51.5	12.63	498	122.11	0	0.00	Medium
DMP-KORB2	20.40	29.70	7.28	2.28	0.56	46.7	11.45	461	113.04	0	0.00	Medium
DMP-KORB2	71.45	33.50	28.77	2.25	1.93	46.5	39.94	411	352.98	0	0.00	Medium
DMP-KORB2	71.45	25.00	21.47	1.91	1.64	36.2	31.09	389	334.08	0	0.00	Medium
DMP-KORB2	71.45	24.10	20.70	1.80	1.55	35.2	30.23	344	295.44	0	0.00	Medium
DMP-KORB2	125.50	25.00	37.71	1.88	2.84	37.4	56.42	353	532.50	0	0.00	High
DMP-KORB2	259.00	18.40	57.28	1.21	3.77		0.00	301	937.07	0	0.00	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-KORB3	0.50	5.90	0.04	1.95	0.01	15	0.09	160	0.96	0	0.00	Low
DMP-KORB3	0.50	3.90	0.02	1.31	0.01	10.3	0.06	134	0.81	0	0.00	Low
DMP-KORB3	1.00	6.64	0.08	1.45	0.02	12.9	0.16	142	1.71	0	0.00	Low
DMP-KORB3	1.33	5.51	0.09	1.67	0.03	15.6	0.25	140	2.24	0	0.00	Medium
DMP-KORB3	3.00	8.63	0.31	1.48	0.05	16.4	0.59	143	5.16	0	0.00	Medium
DMP-KORB3	4.00	4.59	0.22	1.66	0.08	21.8	1.05	181	8.70	0	0.00	Medium
DMP-KORB3	4.00	4.78	0.23	1.63	0.08	19	0.91	158	7.60	0	0.00	Medium
DMP-KORB3	7.50	3.93	0.35	1.32	0.12	15.6	1.41	140	12.62	0	0.00	High
DMP-KORB3	12.00	2.89	0.42	1.19	0.17			141	20.34	0	0.00	High
DMP-KORB3	N/A	5.13		1.35		13.4		131		0		No flow

DMP-LA5.9-1	8.89	3.63	0.39	4.67	0.50	2.99	0.32	45	4.81	0	0.00	Low
DMP-LA5.9-1	8.89	0.42	0.04	8.27	0.88	2.41	0.26	25	2.67	5	0.53	Low
DMP-LA5.9-1	14.60	0.05	0.01	8.66	1.52	2.62	0.46	30	5.26	7	1.23	Medium
DMP-LA5.9-1	16.70	0.05	0.01	8.62	1.73	2.5	0.50	36	7.23	3	0.60	Medium
DMP-LA5.9-1	27.50	0.05	0.02	8.64	2.86	2.44	0.81	26	8.59	3	0.99	High
DMP-LA5.9-1	50.30	0.05	0.03	10.80	6.53			32	19.35	3	1.81	High

DMP-LA5.9-2	0.42	0.27	0.00	5.22	0.03	0.82	0.00	14	0.07	5	0.03	Low
DMP-LA5.9-2	2.19	0.17	0.00	4.30	0.11	0.86	0.02	17	0.45	4	0.11	Low
DMP-LA5.9-2	2.20	0.15	0.00	4.16	0.11	1	0.03	18	0.48	6	0.16	Low
DMP-LA5.9-2	3.83	1.02	0.05	4.19	0.19	1.18	0.05	16	0.74	4	0.18	Medium
DMP-LA5.9-2	6.10	0.06	0.00	3.96	0.29	1.03	0.08	16	1.17	4	0.29	Medium
DMP-LA5.9-2	8.89	0.06	0.01	4.83	0.52	1.25	0.13	19	2.03	4	0.43	Medium
DMP-LA5.9-2	16.70	0.05	0.01	4.29	0.86	1.02	0.20	16	3.21	7	1.41	Medium
DMP-LA5.9-2	21.70	0.05	0.01	4.64	1.21	1.27	0.33	24	6.26	4	1.04	High
DMP-LA5.9-2	85.80	1.03	1.06	4.81	4.96			17	17.53	5	5.16	High
DMP-LA5.9-2	267.00	1.44	4.62	4.40	14.12	1.31	4.20	14	44.93	5	16.05	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-KORB4	12.80	49.10	7.55	9.81	1.51	35.7	5.49	436	67.08	0	0.00	Low
DMP-KORB4	20.40	53.50	13.12	10.60	2.60	39.4	9.66	450	110.34	0	0.00	Low
DMP-KORB4	29.40	53.09	18.76	9.78	3.46	32.4	11.45	428	151.25	0	0.00	Low
DMP-KORB4	35.40	54.30	23.11	11.30	4.81	34.4	14.64	398	169.35	0	0.00	Low
DMP-KORB4	35.40	45.60	19.40	9.09	3.87	32.3	13.74	413	175.73	0	0.00	Low
DMP-KORB4	49.50	47.30	28.14	9.89	5.88	34.1	20.29	388	230.86	0	0.00	Medium
DMP-KORB4	57.20	36.20	24.89	7.05	4.85	25.5	17.53	344	236.52	0	0.00	Medium
DMP-KORB4	64.90	36.70	28.63	8.09	6.31	26.4	20.59	359	280.06	0	0.00	Medium
DMP-KORB4	117.00	32.90	46.27	7.20	10.13	23.5	33.05	307	431.75	0	0.00	High
DMP-KORB4	136.00	48.60	79.45	8.33	13.62	31.1	50.84	394	644.08	0	0.00	High
DMP-KORB4	157.00	38.40	72.47	7.90	14.91	25.6	48.31	343	647.29	0	0.00	High
DMP-KORB4	233.50	31.80	89.25	6.12	17.18			327	917.78	0	0.00	High

DMP-Widemire	35.40	9.35	3.98	2.35	1.00	3.19	1.36	71	30.21	0	0.00	Low
DMP-Widemire	42.50	10.10	5.16	2.26	1.15	2.81	1.44	39	19.92	0	0.00	Low
DMP-Widemire	47.00	7.38	4.17	2.33	1.32	3.87	2.19	64	36.16	0	0.00	Low
DMP-Widemire	49.50	4.56	2.71	2.12	1.26	4.89	2.91	38	22.61	0	0.00	Low
DMP-Widemire	81.00	3.01	2.93	2.15	2.09	5.5	5.35	45	43.81	0	0.00	Medium
DMP-Widemire	98.50	6.70	7.93	2.38	2.82	5.07	6.00	41	48.54	0	0.00	Medium
DMP-Widemire	98.50	7.44	8.81	2.36	2.79	4.01	4.75	35	41.44	0	0.00	Medium
DMP-Widemire	98.50	3.42	4.05	2.36	2.79	6.32	7.48	44	52.09	0	0.00	Medium
DMP-Widemire	98.50	3.12	3.69	2.15	2.55	6.48	7.67	53	62.75	0	0.00	Medium
DMP-Widemire	117.00	2.54	3.57	1.98	2.78	5.41	7.61	50	70.32	1	1.41	High
DMP-Widemire	136.00	6.01	9.82	2.10	3.43	5.13	8.39	47	76.83	0	0.00	High
DMP-Widemire	245.00	6.39	18.82	2.33	6.86	6.58	19.38	53	156.08	0	0.00	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-Wildwood	42.40	9.67	4.93	3.52	1.79	0.049	0.02	15	7.64	9	4.59	Low
DMP-Wildwood	42.50	13.80	7.05	4.67	2.39	0.05	0.03	50	25.54	9	4.60	Low
DMP-Wildwood	42.50	12.70	6.49	4.60	2.35	0.049	0.03	24	12.26	11	5.62	Low
DMP-Wildwood	49.50	5.82	3.46	2.87	1.71	0.049	0.03	13	7.73	6	3.57	Low
DMP-Wildwood	64.90	13.80	10.77	3.69	2.88	0.049	0.04	22	17.16	11	8.58	Medium
DMP-Wildwood	81.00	9.29	9.04	1.69	1.65	0.049	0.05	14	13.63	12	11.68	Medium
DMP-Wildwood	81.00	4.30	4.19	2.38	2.32	0.049	0.05	14	13.63	7	6.82	Medium
DMP-Wildwood	117.00	10.70	15.05	2.37	3.33	0.049	0.07	16	22.50	10	14.06	Medium
DMP-Wildwood	127.00	3.96	6.05	1.69	2.58	0.049	0.07	8	12.21	7	10.69	High
DMP-Wildwood	136.00	10.30	16.84	2.56	4.18	0.049	0.08	12	19.62	9	14.71	High
DMP-Wildwood	178.00	7.86	16.82	1.57	3.36	0.05	0.11	11	23.54	10	21.40	High
DMP-Wildwood	189.00	4.68	10.63	0.93	2.11	0.06	0.14	7	15.90	10	22.72	High

DMP-Draucker1	23.40	104.00	29.25	28.10	7.90	68.8	19.35	670	188.45	0	0.00	Low
DMP-Draucker1	35.40	75.30	32.04	20.80	8.85	48.5	20.64	645	274.45	0	0.00	Low
DMP-Draucker1	35.40	98.80	42.04	27.10	11.53	61.8	26.30	647	275.30	0	0.00	Low
DMP-Draucker1	64.90	103.00	80.35	24.30	18.96	59.4	46.34	677	528.13	0	0.00	Low
DMP-Draucker1	64.90	94.00	73.33	24.60	19.19	60.8	47.43	650	507.06	0	0.00	Low
DMP-Draucker1	64.90	94.40	73.64	25.30	19.74	69.4	54.14	682	532.03	0	0.00	Low
DMP-Draucker1	98.50	70.00	82.88	18.50	21.90	49.4	58.49	634	750.64	0	0.00	Medium
DMP-Draucker1	136.00	67.70	110.67	20.20	33.02	52.7	86.15	574	938.33	0	0.00	Medium
DMP-Draucker1	136.00	62.30	101.84	18.50	30.24	49.8	81.41	546	892.56	0	0.00	Medium
DMP-Draucker1	178.00	59.00	126.23	15.60	33.38	58.4	124.95	652	1394.99	0	0.00	High
DMP-Draucker1	178.00	62.10	132.87	18.50	39.58	56.3	120.46	591	1264.48	0	0.00	High
DMP-Draucker1	294.00	52.90	186.94	15.60	55.13	49.4	174.57	519	1834.08	0	0.00	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
DMP-Draucker2	35.40	6.95	2.96	6.35	2.70	0.23	0.10	38	16.17	0	0.00	Low
DMP-Draucker2	35.40	5.99	2.55	5.69	2.42	0.29	0.12	37	15.74	0	0.00	Low
DMP-Draucker2	49.50	4.42	2.63	5.07	3.02	0.47	0.28	43	25.58	0	0.00	Low
DMP-Draucker2	98.50	2.21	2.62	5.03	5.96	0.82	0.97	28	33.15	0	0.00	Low
DMP-Draucker2	106.40	1.07	1.37	3.52	4.50	1	1.28	25	31.97	0	0.00	Medium
DMP-Draucker2	136.00	2.19	3.58	4.34	7.09	0.92	1.50	26	42.50	0	0.00	Medium
DMP-Draucker2	178.00	1.76	3.77	4.36	9.33	1.01	2.16	21	44.93	2	4.28	Medium
DMP-Draucker2	209.60	0.80	2.02	3.47	8.74	1.52	3.83	25	62.98	1	2.52	Medium
DMP-Draucker2	258.10	0.68	2.11	3.33	10.33	1.67	5.18	27	83.76	1	3.10	High
DMP-Draucker2	324.00	1.09	4.24	3.32	12.93	1.6	6.23	28	109.05	1	3.89	High
DMP-Draucker2	370.00	0.76	3.38	3.40	15.12	1.31	5.83	18	80.05	3	13.34	High
DMP-Draucker2	870.20	0.95	9.94	3.04	31.80	1.23	12.87	27	282.41	1	10.46	High

PAMP-LA3.0-3	23.40	8.23	2.31	13.70	3.85	0.45	0.13	76	21.38	0	0.00	Low
PAMP-LA3.0-3	35.40	7.90	3.36	13.40	5.70	0.44	0.19	77	32.76	0	0.00	Low
PAMP-LA3.0-3	49.50	5.08	3.02	12.10	7.20	0.5	0.30	72	42.84	0	0.00	Low
PAMP-LA3.0-3	98.50	2.82	3.34	8.67	10.27	0.68	0.81	45	53.28	0	0.00	Low
PAMP-LA3.0-3	98.50	2.70	3.20	8.10	9.59	0.57	0.67	47	55.65	0	0.00	Low
PAMP-LA3.0-3	106.40	1.67	2.14	7.78	9.95	0.81	1.04	42	53.71	0	0.00	Medium
PAMP-LA3.0-3	117.00	2.17	3.05	7.33	10.31	0.77	1.08	33	46.41	0	0.00	Medium
PAMP-LA3.0-3	209.60	2.21	5.57	7.71	19.42	1.1	2.77	33	83.14	0	0.00	Medium
PAMP-LA3.0-3	245.00	2.80	8.25	6.97	20.53	1.12	3.30	41	120.74	0	0.00	High
PAMP-LA3.0-3	258.10	1.47	4.56	7.58	23.52	1.42	4.41	34	105.48	0	0.00	High
PAMP-LA3.0-3	324.00	1.79	6.97	5.69	22.16	1.08	4.21	27	105.15	0	0.00	High
PAMP-LA3.0-3	370.00	1.55	6.89	5.69	25.31	1.46	6.49	29	128.97	0	0.00	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
PAMP-LA3.0-2	35.40	6.92	2.94	10.60	4.51	3.37	1.43	82	34.89	0	0.00	Low
PAMP-LA3.0-2	35.40	9.53	4.06	12.00	5.11	2.93	1.25	82	34.89	0	0.00	Low
PAMP-LA3.0-2	49.50	4.76	2.83	10.40	6.19	4.52	2.69	82	48.79	0	0.00	Low
PAMP-LA3.0-2	117.00	5.39	7.58	7.86	11.05	3.65	5.13	64	90.01	0	0.00	Low
PAMP-LA3.0-2	136.00	3.46	5.66	7.20	11.77	4.78	7.81	69	112.80	0	0.00	Medium
PAMP-LA3.0-2	178.00	2.38	5.09	5.24	11.21	4.38	9.37	67	143.35	0	0.00	Medium
PAMP-LA3.0-2	178.00	2.13	4.56	6.13	13.12	3.66	7.83	61	130.51	0	0.00	Medium
PAMP-LA3.0-2	235.50	2.41	6.82	5.78	16.36	4.91	13.90	70	198.15	0	0.00	Medium
PAMP-LA3.0-2	300.00	2.59	9.34	5.64	20.34	5.34	19.26	62	223.57	0	0.00	High
PAMP-LA3.0-2	448.80	2.11	11.38	5.17	27.89	4.64	25.03	59	318.28	0	0.00	High
PAMP-LA3.0-2	543.00	1.84	12.01	4.84	31.59	5.02	32.76	61	398.14	0	0.00	High
PAMP-LA3.0-2	870.00	2.81	29.39	5.04	52.71	6.51	68.08	86	899.34	0	0.00	High

PAMP-KR1.45-1	4.50	0.44	0.02	9.33	0.50	14.5	0.78	216	11.68	0	0.00	Low
PAMP-KR1.45-1	12.80	0.20	0.03	5.79	0.89	8.51	1.31	56	8.62	0	0.00	Low
PAMP-KR1.45-1	23.40	0.31	0.09	5.19	1.46	6.52	1.83	57	16.03	0	0.00	Low
PAMP-KR1.45-1	35.40	0.15	0.06	4.74	2.02	6.45	2.74	53	22.55	0	0.00	Low
PAMP-KR1.45-1	45.00	0.50	0.27	9.65	5.22	15.2	8.22	134	72.48	0	0.00	Medium
PAMP-KR1.45-1	81.00	0.26	0.25	5.70	5.55	7	6.82	57	55.50	0	0.00	Medium
PAMP-KR1.45-1	81.00	0.20	0.19	5.53	5.38	6.31	6.14	47	45.76	0	0.00	Medium
PAMP-KR1.45-1	90.00	0.16	0.17	4.97	5.38	7.51	8.12	56	60.58	0	0.00	Medium
PAMP-KR1.45-1	222.00	0.21	0.56	3.74	9.98	5.9	15.74	59	157.44	0	0.00	High
PAMP-KR1.45-1	245.00	0.23	0.68	4.28	12.60	6.67	19.64	52	153.13	0	0.00	High
PAMP-KR1.45-1	245.00	0.17	0.50	2.98	8.78	4.42	13.02	36	106.02	2	5.89	High
PAMP-KR1.45-1	245.00	0.27	0.80	4.10	12.07	6.43	18.94	45	132.52	2	5.89	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
PAMP-LA4.3-1	9.64	18.60	2.16	21.30	2.47	16.8	1.95	234	27.11	0	0.00	Low
PAMP-LA4.3-1	25.00	18.30	5.50	22.20	6.67	17.5	5.26	220	66.11	0	0.00	Low
PAMP-LA4.3-1	40.80	12.60	6.18	16.20	7.95	13.1	6.42	183	89.75	0	0.00	Low
PAMP-LA4.3-1	143.34	8.90	15.33	11.10	19.12	9.43	16.25	137	236.04	0	0.00	Medium
PAMP-LA4.3-1	170.54	4.09	8.38	7.48	15.33	6.91	14.17	90	184.49	0	0.00	Medium
PAMP-LA4.3-1	262.00	8.11	25.54	8.10	25.51	7.42	23.37	91	286.58	0	0.00	High
PAMP-LA4.3-1	262.02	7.16	22.55	8.02	25.26	7.33	23.09	80	251.96	0	0.00	High
PAMP-LA4.3-1	426.81	2.86	14.67	5.92	30.37	5.87	30.11	53	271.90	0	0.00	High

PAMP-LA4.3-2	5.00	1.03	0.06	2.41	0.14	0.15	0.01	6	0.36	9	0.54	Low
PAMP-LA4.3-2	10.00	1.09	0.13	1.56	0.19	0.13	0.02	1	0.12	11	1.32	Low
PAMP-LA4.3-2	15.03	0.50	0.09	1.99	0.36	0.12	0.02	6	1.08	9	1.63	Low
PAMP-LA4.3-2	30.24	0.72	0.26	1.38	0.50	0.2	0.07	3	1.09	9	3.27	Medium
PAMP-LA4.3-2	64.40	0.41	0.32	0.74	0.57	0.14	0.11	7	5.42	8	6.19	Medium
PAMP-LA4.3-2	91.18	0.62	0.68	0.69	0.76	0.09	0.10	4	4.38	10	10.96	Medium
PAMP-LA4.3-2	112.00	0.70	0.94	0.87	1.17	0.11	0.15	4	5.38	8	10.77	High
PAMP-LA4.3-2	136.20	0.32	0.52	0.59	0.97	0.15	0.25	10	16.37	8	13.10	High
PAMP-LA4.3-2	136.20	0.45	0.74	0.55	0.90	0.24	0.39	4	6.55	6	9.82	High
PAMP-LA4.3-2	Very High	9.95		0.70		1.38		5		8		No flow

PAMP-LA3.0-4	12.80	15.20	2.34	13.20	2.03	0.28	0.04	96	14.77	0	0.00	Low
PAMP-LA3.0-4	12.80	14.60	2.25	15.00	2.31	0.31	0.05	101	15.54	0	0.00	Low
PAMP-LA3.0-4	23.40	11.60	3.26	13.50	3.80	0.35	0.10	84	23.63	0	0.00	Low
PAMP-LA3.0-4	35.40	11.00	4.68	9.50	4.04	0.51	0.22	48	20.42	0	0.00	Low
PAMP-LA3.0-4	35.40	13.90	5.91	13.10	5.57	0.44	0.19	62	26.38	0	0.00	Low
PAMP-LA3.0-4	64.90	15.40	12.01	11.30	8.82	0.44	0.34	63	49.15	0	0.00	Medium
PAMP-LA3.0-4	98.50	19.00	22.50	11.70	13.85	0.69	0.82	64	75.77	0	0.00	Medium
PAMP-LA3.0-4	136.00	12.10	19.78	9.42	15.40	0.69	1.13	45	73.56	0	0.00	Medium
PAMP-LA3.0-4	136.00	7.97	13.03	9.11	14.89	0.85	1.39	42	68.66	0	0.00	Medium
PAMP-LA3.0-4	136.00	9.38	15.33	8.77	14.34	0.52	0.85	55	89.91	0	0.00	Medium
PAMP-LA3.0-4	178.00	4.72	10.10	8.01	17.14	0.92	1.97	38	81.30	0	0.00	High
PAMP-LA3.0-4	178.00	8.49	18.16	8.02	17.16	0.7	1.50	40	85.58	0	0.00	High

Discharge Chemistry by Flow

Sample ID	Flow GPM	Iron mg/L	Fe Loading lbs/day	Manganese mg/L	Mn Loading lbs/day	Aluminum mg/L	Al Loading lbs/day	Acidity mg/L	Acidity Loading lbs/day	Alkalinity mg/L	Alkalinity Loading lbs/day	Relative Flow
PAMP-LA3.0-1	6.00	0.90	0.06	3.27	0.24	13.8	1.00	115	8.29	0	0.00	Low
PAMP-LA3.0-1	12.00	1.38	0.20	3.80	0.55	19.1	2.75	142	20.48	0	0.00	Medium
PAMP-LA3.0-1	13.30	1.58	0.25	3.43	0.55	16	2.56	115	18.38	0	0.00	High
PAMP-LA2.10	3.00	1.20	0.04	5.88	0.21	7.42	0.27	72	2.60	0	0.00	Low
PAMP-LA2.10	5.00	3.75	0.23	11.30	0.68	5.09	0.31	72	4.33	0	0.00	Medium
PAMP-LA2.10	15.00	0.71	0.13	4.23	0.76	6.47	1.17	73	13.16	0	0.00	Medium
PAMP-LA2.10	41.38	0.87	0.43	7.36	3.66	6.86	3.41	64	31.83	0	0.00	High

Discharge Loadings in Pounds per Day at Low, Medium, and High Flow

Monitoring Point	Fe Load Low	Fe Load Med	Fe Load High	Mn Load Low	Mn Load Med	Mn Load High	Al Load Low	Al Load Med	Al Load High	Acidity Load Low	Acidity Load Med	Acidity Load High
DMP-879	1.0	1.7	4.2	0.1	0.3	0.4	0.0	0.0	0.0	-3.6	0.9	2.7
DMP-AC3.75-1	0.0	0.1	0.4	0.0	0.0	0.3	0.0	0.1	2.9	0.7	1.3	29.6
DMP-AC3.75-2	0.1	0.3	0.9	0.0	0.1	0.3	0.3	1.0	2.3	4.3	15.9	33.5
DMP-AC3.75-3	0.1	0.2	0.6	0.2	0.4	0.9	1.6	3.5	9.9	14.6	28.4	78.7
DMP-BR3.9	0.1	0.5	0.7	0.3	0.8	1.9	0.0	0.3	0.8	0.9	3.9	11.5
DMP-BR4.0	1.5	2.7	5.5	2.9	6.7	18.9	1.6	3.6	10.4	15.7	33.2	100.5
DMP-BR4.5	2.6	8.0	31.2	5.3	11.1	47.6	1.9	4.2	18.4	25.8	49.1	236.4
DMP-KORB1	0.0	0.1	1.8	0.0	0.0	0.1	0.0	0.3	0.0	0.1	2.7	36.2
DMP-Korb2	7.7	17.4	47.5	0.6	1.3	3.3	10.9	25.1	28.2	88.3	243.5	734.8
DMP-Korb3	0.0	0.2	0.4	0.0	0.1	0.1	0.1	0.7	1.4	1.2	5.9	16.5
DMP-LA5.9-1	0.2	0.0	0.0	0.7	1.6	4.7	0.3	0.5	0.8	3.7	6.2	14.0
DMP-LA5.9-2	0.0	0.0	1.9	0.1	0.5	6.8	0.0	0.1	2.3	0.3	1.8	22.9
DMP-KORB4	16.4	27.2	71.9	3.2	5.7	14.0	11.0	19.5	44.1	134.8	249.1	660.2
DMP-Widemire	4.0	5.5	10.7	1.2	2.6	4.4	2.0	6.3	11.8	27.2	49.7	101.1
DMP-Wildwood	5.5	9.8	12.6	2.1	2.5	3.1	0.0	0.1	0.1	13.3	16.7	17.8
DMP-Draucker1	55.1	98.5	148.7	14.4	28.4	42.7	35.7	75.3	140.0	384.2	860.5	1497.9
DMP-Draucker2	2.7	2.7	4.9	3.5	7.4	17.5	0.4	2.2	7.5	22.7	45.6	138.8
PAMP-LA3.0-3	3.0	3.6	6.7	7.3	13.2	22.9	0.4	1.6	4.6	41.2	61.1	115.1
PAMP-LA3.0-2	4.4	5.5	15.5	6.7	13.1	33.1	2.6	9.7	36.3	52.1	146.2	459.8
PA-KR1.45-1	0.1	0.2	0.6	1.2	5.4	10.9	1.7	7.3	16.8	14.7	58.6	137.3
PMP-LA4.3-1	4.6	11.9	20.9	5.7	17.2	27.0	4.5	15.2	25.5	61.0	210.3	270.1
PMP-LA4.3-2	4.4	0.4	0.7	6.7	0.6	1.0	2.6	0.1	0.3	52.1	3.6	9.4
PAMP-LA3.0-4	3.7	16.5	14.1	3.6	13.5	17.1	0.1	0.9	1.7	20.1	71.4	83.4
PAMP-LA3.0-1	0.1	0.2	0.3	0.2	0.5	0.5	1.0	2.8	2.6	8.3	20.5	18.4
PAMP-LA2.10	0.0	0.2	0.4	0.2	0.7	3.7	0.3	0.7	3.4	2.6	8.7	31.8

Iron Loading at Low, Medium, and High Flow

	Fe Load lbs/day Low Flow		Fe Load lbs/day Med Flow		Fe Load lbs/day High Flow
DMP-Drauker1	55.1	DMP-Drauker1	98.5	DMP-Drauker1	148.7
DMP-KORB4	16.4	DMP-KORB4	27.2	DMP-KORB4	71.9
DMP-Korb2	7.7	DMP-Korb2	17.4	DMP-Korb2	47.5
DMP-Wildwood	5.5	PAMP-LA3.0-4	16.5	DMP-BR4.5	31.2
PMP-LA4.3-1	4.6	PMP-LA4.3-1	11.9	PMP-LA4.3-1	20.9
PAMP-LA3.0-2	4.4	DMP-Wildwood	9.8	PAMP-LA3.0-2	15.5
PMP-LA4.3-2	4.4	DMP-BR4.5	8.0	PAMP-LA3.0-4	14.1
DMP-Widemire	4.0	PAMP-LA3.0-2	5.5	DMP-Wildwood	12.6
PAMP-LA3.0-4	3.7	DMP-Widemire	5.5	DMP-Widemire	10.7
PAMP-LA3.0-3	3.0	PAMP-LA3.0-3	3.6	PAMP-LA3.0-3	6.7
DMP-Drauker2	2.7	DMP-BR4.0	2.7	DMP-BR4.0	5.5
DMP-BR4.5	2.6	DMP-Drauker2	2.7	DMP-Drauker2	4.9
DMP-BR4.0	1.5	DMP-879	1.7	DMP-879	4.2
DMP-879	1.0	DMP-BR3.9	0.5	DMP-LA5.9-2	1.9
DMP-LA5.9-1	0.2	PMP-LA4.3-2	0.4	DMP-KORB1	1.8
DMP-AC3.75-3	0.1	DMP-AC3.75-2	0.3	DMP-AC3.75-2	0.9
DMP-AC3.75-2	0.1	PA-KR1.45-1	0.2	PMP-LA4.3-2	0.7
DMP-BR3.9	0.1	DMP-AC3.75-3	0.2	DMP-BR3.9	0.7
PAMP-LA3.0-1	0.1	DMP-Korb3	0.2	PA-KR1.45-1	0.6
PA-KR1.45-1	0.1	PAMP-LA3.0-1	0.2	DMP-AC3.75-3	0.6
DMP-Korb3	0.0	PAMP-LA2.10	0.2	DMP-AC3.75-1	0.4
DMP-AC3.75-1	0.0	DMP-KORB1	0.1	PAMP-LA2.10	0.4
DMP-LA5.9-2	0.0	DMP-AC3.75-1	0.1	DMP-Korb3	0.4
DMP-KORB1	0.0	DMP-LA5.9-2	0.0	PAMP-LA3.0-1	0.3
PAMP-LA2.10	0.0	DMP-LA5.9-1	0.0	DMP-LA5.9-1	0.0

Aluminum Loading at Low, Medium, and High Flow

	Al Load lbs/day Low Flow		Al Load lbs/day Med Flow		Al Load lbs/day High Flow
DMP-Drauker1	35.7	DMP-Drauker1	75.3	DMP-Drauker1	140.0
DMP-KORB4	11.0	DMP-Korb2	25.1	DMP-KORB4	44.1
DMP-Korb2	10.9	DMP-KORB4	19.5	PAMP-LA3.0-2	36.3
PMP-LA4.3-1	4.5	PMP-LA4.3-1	15.2	DMP-Korb2	28.2
PAMP-LA3.0-2	2.6	PAMP-LA3.0-2	9.7	PMP-LA4.3-1	25.5
PMP-LA4.3-2	2.6	PA-KR1.45-1	7.3	DMP-BR4.5	18.4
DMP-Widemire	2.0	DMP-Widemire	6.3	PA-KR1.45-1	16.8
DMP-BR4.5	1.9	DMP-BR4.5	4.2	DMP-Widemire	11.8
PA-KR1.45-1	1.7	DMP-BR4.0	3.6	DMP-BR4.0	10.4
DMP-AC3.75-3	1.6	DMP-AC3.75-3	3.5	DMP-AC3.75-3	9.9
DMP-BR4.0	1.6	PAMP-LA3.0-1	2.8	DMP-Drauker2	7.5
PAMP-LA3.0-1	1.0	DMP-Drauker2	2.2	PAMP-LA3.0-3	4.6
PAMP-LA3.0-3	0.4	PAMP-LA3.0-3	1.6	PAMP-LA2.10	3.4
DMP-Drauker2	0.4	DMP-AC3.75-2	1.0	DMP-AC3.75-1	2.9
DMP-LA5.9-1	0.3	PAMP-LA3.0-4	0.9	PAMP-LA3.0-1	2.6
PAMP-LA2.10	0.3	PAMP-LA2.10	0.7	DMP-LA5.9-2	2.3
DMP-AC3.75-2	0.3	DMP-Korb3	0.7	DMP-AC3.75-2	2.3
PAMP-LA3.0-4	0.1	DMP-LA5.9-1	0.5	PAMP-LA3.0-4	1.7
DMP-Korb3	0.1	DMP-KORB1	0.3	DMP-Korb3	1.4
DMP-BR3.9	0.0	DMP-BR3.9	0.3	DMP-BR3.9	0.8
DMP-Wildwood	0.0	DMP-LA5.9-2	0.1	DMP-LA5.9-1	0.8
DMP-AC3.75-1	0.0	PMP-LA4.3-2	0.1	PMP-LA4.3-2	0.3
DMP-LA5.9-2	0.0	DMP-AC3.75-1	0.1	DMP-Wildwood	0.1
DMP-KORB1	0.0	DMP-Wildwood	0.1	DMP-879	0.0
DMP-879	0.0	DMP-879	0.0	DMP-KORB1	0.0

Acidity Loading at Low, Medium, and High Flow

	Acidity Load lbs/day Low Flow		Acidity Load lbs/day Med Flow		Acidity Load lbs/day High Flow
DMP-Drauker1	384.2	DMP-Drauker1	860.5	DMP-Drauker1	1497.9
DMP-KORB4	134.8	DMP-KORB4	249.1	DMP-Korb2	734.8
DMP-Korb2	88.3	DMP-Korb2	243.5	DMP-KORB4	660.2
PMP-LA4.3-1	61.0	PMP-LA4.3-1	210.3	PAMP-LA3.0-2	459.8
PAMP-LA3.0-2	52.1	PAMP-LA3.0-2	146.2	PMP-LA4.3-1	270.1
PMP-LA4.3-2	52.1	PAMP-LA3.0-4	71.4	DMP-BR4.5	236.4
PAMP-LA3.0-3	41.2	PAMP-LA3.0-3	61.1	DMP-Drauker2	138.8
DMP-Widemire	27.2	PA-KR1.45-1	58.6	PA-KR1.45-1	137.3
DMP-BR4.5	25.8	DMP-Widemire	49.7	PAMP-LA3.0-3	115.1
DMP-Drauker2	22.7	DMP-BR4.5	49.1	DMP-Widemire	101.1
PAMP-LA3.0-4	20.1	DMP-Drauker2	45.6	DMP-BR4.0	100.5
DMP-BR4.0	15.7	DMP-BR4.0	33.2	PAMP-LA3.0-4	83.4
PA-KR1.45-1	14.7	DMP-AC3.75-3	28.4	DMP-AC3.75-3	78.7
DMP-AC3.75-3	14.6	PAMP-LA3.0-1	20.5	DMP-KORB1	36.2
DMP-Wildwood	13.3	DMP-Wildwood	16.7	DMP-AC3.75-2	33.5
PAMP-LA3.0-1	8.3	DMP-AC3.75-2	15.9	PAMP-LA2.10	31.8
DMP-AC3.75-2	4.3	PAMP-LA2.10	8.7	DMP-AC3.75-1	29.6
DMP-LA5.9-1	3.7	DMP-LA5.9-1	6.2	DMP-LA5.9-2	22.9
PAMP-LA2.10	2.6	DMP-Korb3	5.9	PAMP-LA3.0-1	18.4
DMP-Korb3	1.2	DMP-BR3.9	3.9	DMP-Wildwood	17.8
DMP-BR3.9	0.9	PMP-LA4.3-2	3.6	DMP-Korb3	16.5
DMP-AC3.75-1	0.7	DMP-KORB1	2.7	DMP-LA5.9-1	14.0
DMP-LA5.9-2	0.3	DMP-LA5.9-2	1.8	DMP-BR3.9	11.5
DMP-KORB1	0.1	DMP-AC3.75-1	1.3	PMP-LA4.3-2	9.4
DMP-879	-3.6	DMP-879	0.9	DMP-879	2.7

Manganese Loading at Low, Medium, and High Flow

	Mn Load lb/day Low Flow		Mn Load lb/day Med Flow		Mn Load lb/day High Flow
DMP-Drauker1	14.4	DMP-Drauker1	28.4	DMP-BR4.5	47.6
PAMP-LA3.0-3	7.3	PMP-LA4.3-1	17.2	DMP-Drauker1	42.7
PAMP-LA3.0-2	6.7	PAMP-LA3.0-4	13.5	PAMP-LA3.0-2	33.1
PMP-LA4.3-2	6.7	PAMP-LA3.0-3	13.2	PMP-LA4.3-1	27.0
PMP-LA4.3-1	5.7	PAMP-LA3.0-2	13.1	PAMP-LA3.0-3	22.9
DMP-BR4.5	5.3	DMP-BR4.5	11.1	DMP-BR4.0	18.9
PAMP-LA3.0-4	3.6	DMP-Drauker2	7.4	DMP-Drauker2	17.5
DMP-Drauker2	3.5	DMP-BR4.0	6.7	PAMP-LA3.0-4	17.1
DMP-KORB4	3.2	DMP-KORB4	5.7	DMP-KORB4	14.0
DMP-BR4.0	2.9	PA-KR1.45-1	5.4	PA-KR1.45-1	10.9
DMP-Wildwood	2.1	DMP-Widemire	2.6	DMP-LA5.9-2	6.8
PA-KR1.45-1	1.2	DMP-Wildwood	2.5	DMP-LA5.9-1	4.69
DMP-Widemire	1.2	DMP-LA5.9-1	1.6	DMP-Widemire	4.4
DMP-LA5.9-1	0.7	DMP-Korb2	1.3	PAMP-LA2.10	3.66
DMP-Korb2	0.6	DMP-BR3.9	0.8	DMP-Korb2	3.3
DMP-BR3.9	0.3	PAMP-LA2.10	0.72	DMP-Wildwood	3.1
DMP-AC3.75-3	0.2	PMP-LA4.3-2	0.6	DMP-BR3.9	1.9
PAMP-LA3.0-1	0.24	PAMP-LA3.0-1	0.5	PMP-LA4.3-2	1.0
PAMP-LA2.10	0.21	DMP-LA5.9-2	0.5	DMP-AC3.75-3	0.9
DMP-879	0.1	DMP-AC3.75-3	0.4	PAMP-LA3.0-1	0.55
DMP-LA5.9-2	0.08	DMP-879	0.3	DMP-879	0.4
DMP-AC3.75-2	0.0	DMP-AC3.75-2	0.1	DMP-AC3.75-1	0.3
DMP-Korb3	0.0	DMP-Korb3	0.1	DMP-AC3.75-2	0.3
DMP-AC3.75-1	0.0	DMP-KORB1	0.0	DMP-KORB1	0.1
DMP-KORB1	0.0	DMP-AC3.75-1	0.0	DMP-Korb3	0.1

Load Rankings for Discharge Points

Ranking by Iron Loading

	<i>Fe</i> <i>Loading</i> <i>lbs/day</i>	<i>Rank</i>
DMP-Drauker1	89.34	1
DMP-KORB4	37.59	2
DMP-KORB2	20.52	3
DMP-BR4.5	13.95	4
PAMP-LA4.3	12.24	5
PAMP-LA3.0-4	10.78	6
DMP-Wildwood	9.28	7
DMP-Widemire	6.30	8
PAMP-LA3.0	4.08	9
DMP-Drauker2	3.43	10
DMP-BR4.0	2.78	11
DMP-879	1.89	12
DMP-LA5.9-2	0.58	13
DMP-KORB1	0.52	14
DMP-AC3.75-2	0.42	15
DMP-BR3.9	0.41	16
PAMP-KR1.45-1	0.30	17
DMP-AC3.75-3	0.30	18
PAMP-LA2.10	0.21	19
DMP-KORB3	0.20	20
PAMP-LA3.0-1	0.17	21
DMP-AC3.75-1	0.15	22
DMP-LA5.9-1	0.08	23

Ranking by Aluminum Loading

	<i>Al</i> <i>Loading</i> <i>lbs/day</i>	<i>Rank</i>
DMP-Drauker1	71.68	1
DMP-KORB4	22.33	2
DMP-KORB2	21.44	3
PAMP-LA4.3	14.95	4
PAMP-LA3.0	14.10	5
PAMP-KR1.45-1	8.61	6
DMP-BR4.5	8.17	7
DMP-Widemire	6.21	8
DMP-AC3.75-3	4.80	9
DMP-BR4.0	4.33	10
DMP-Drauker2	3.36	11
PAMP-LA3.0-1	2.10	12
PAMP-LA2.10	1.29	13
DMP-AC3.75-2	1.18	14
DMP-AC3.75-1	0.86	15
PAMP-LA3.0-4	0.72	16
DMP-KORB3	0.56	17
DMP-LA5.9-2	0.56	18
DMP-LA5.9-1	0.47	19
DMP-BR3.9	0.36	20
DMP-KORB1	0.16	21
DMP-Wildwood	0.06	22
DMP-879	0.01	23

Ranking by Manganese Loading

	<i>Mn</i> <i>Loading</i> <i>lbs/day</i>	<i>Rank</i>
DMP-Drauker1	24.95	1
DMP-BR4.5	21.32	2
PAMP-LA4.3	16.07	3
PAMP-LA3.0-4	9.95	4
DMP-Drauker2	9.50	5
DMP-BR4.0	7.94	6
DMP-KORB4	7.43	7
PAMP-KR1.45-1	5.82	8
PAMP-LA3.0	3.67	9
DMP-Widemire	2.57	10
DMP-Wildwood	2.55	11
DMP-LA5.9-1	2.34	12
DMP-LA5.9-2	2.24	13
DMP-KORB2	1.45	14
PAMP-LA2.10	1.33	15
DMP-BR3.9	0.97	16
DMP-AC3.75-3	0.50	17
PAMP-LA3.0-1	0.44	18
DMP-879	0.24	19
DMP-AC3.75-2	0.16	20
DMP-AC3.75-1	0.10	21
DMP-KORB3	0.06	22
DMP-KORB1	0.04	23

Ranking by Acidity Loading

	<i>Acidity</i> <i>Loading</i> <i>lbs/day</i>	<i>Rank</i>
DMP-Drauker1	781.71	1
DMP-KORB4	338.51	2
DMP-KORB2	295.21	3
PAMP-LA4.3	172.32	4
PAMP-LA3.0	148.60	5
DMP-BR4.5	103.76	6
PAMP-KR1.45-1	70.19	7
DMP-Drauker2	69.03	8
DMP-Widemire	55.06	9
PAMP-LA3.0-4	52.06	10
DMP-BR4.0	41.98	11
DMP-AC3.75-3	38.84	12
DMP-AC3.75-2	17.91	13
DMP-Wildwood	15.95	14
PAMP-LA3.0-1	15.72	15
PAMP-LA2.10	12.98	16
DMP-KORB1	10.43	17
DMP-AC3.75-1	9.20	18
DMP-LA5.9-1	7.99	19
DMP-LA5.9-2	7.69	20
DMP-KORB3	6.68	21
DMP-BR3.9	5.31	22
DMP-879	-0.33	23

Ranking by Alkalinity Loading

	<i>Alkalinity Loading lbs/day</i>	<i>Rank</i>
DMP-Wildwood	10.75	1
DMP-Drauker2	3.13	2
DMP-LA5.9-2	2.48	3
DMP-BR3.9	1.84	4
DMP-879	1.65	5
PAMP-KR1.45-1	0.98	6
DMP-LA5.9-1	0.86	7
DMP-AC3.75-1	0.49	8
DMP-BR4.5	0.20	9
DMP-Widemire	0.12	10
DMP-AC3.75-2	0.00	11
DMP-AC3.75-3	0.00	11
DMP-BR4.0	0.00	11
DMP-KORB2	0.00	11
DMP-KORB3	0.00	11
DMP-KORB4	0.00	11
DMP-Drauker1	0.00	11
PAMP-LA3.0	0.00	11
PAMP-LA4.3	0.00	11
PAMP-LA3.0-4	0.00	11
PAMP-LA3.0-1	0.00	11
PAMP-LA2.10	0.00	11
DMP-KORB1	0.00	11

Stream Flow Loading

Sample ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Flow Category
SMP-AC1	10/23/2004	20169.0	6.2	6.2	198	9.0	9	4	0.21	0.78	0.43	57	12.90		50.91	104.25	189.10	969.73	Medium
SMP-AC1	11/22/2004	21764.3	6.3	6.2	188	7.0	8	8	0.26	0.90	0.52	62	10.00		68.02	136.04	235.45	2092.86	Medium
SMP-AC1	2/9/2005	60343.9	6.4	5.8	246	1.0	7	7	1.00	1.43	1.15	74	8.60		725.33	834.13	1037.23	5077.34	High
SMP-AC1	3/16/2005	35763.1	6.2	4.9	186	0.0	8	10	0.51	0.77	0.86	46	5.69		219.23	369.69	331.00	4298.72	High
SMP-AC1	4/14/2005	52725.0	5.5	5.2	175	7.0	5	8	0.35	0.66	0.71	43	5.69		221.81	449.97	418.28	5070.04	High
SMP-AC1	5/18/2005	21743.0	5.8	5.6	199	11.0	6	7	0.20	0.77	0.53	50	5.69		52.27	138.52	201.24	1829.46	Medium
SMP-AC1	6/15/2005	13705.8	6.5	6.5	181	21.0	9	2	0.16	0.56	0.13	40	6.19		26.36	21.42	92.26	329.49	Medium
SMP-AC1	7/13/2005	4409.6	7.1	5.7	385	22.0	10	10	0.11	0.85	0.07	73	7.10		5.83	3.71	45.05	530.03	Low
SMP-AC1	8/22/2005	2656.9	6.9	6.8	292	20.0	14	-2	0.07	0.74	0.06	69	7.10		2.24	1.92	23.63	-63.87	Low
SMP-AC1	9/14/2005	3660.0	6.0	6.9	298	16.0	14	-3	0.22	0.73	0.09	96	7.10		9.68	3.96	32.11	-131.98	Low

SMP-AC2	10/23/2004	18029.0	4.8	4.6	173	9.0	5	12	0.12	1.01	0.78	48	8.60		26.01	169.03	218.88	2600.50	Medium
SMP-AC2	11/22/2004	17101.6	5.2	4.8	165	7.0	6	11	0.12	1.04	0.79	55	5.69		24.67	162.39	213.78	2261.17	Medium
SMP-AC2	2/9/2005	52041.1	5.1	4.7	219	2.0	5	12	0.63	1.34	1	67	5.69		394.09	625.53	838.22	7506.41	High
SMP-AC2	3/16/2005	32916.8	5.0	4.6	153	1.0	6	14	0.38	0.68	0.87	40	5.69		150.35	344.22	269.05	5539.24	High
SMP-AC2	4/14/2005	43021.1	4.5	4.7	155	8.0	5	10	0.29	0.67	0.84	36	5.69		149.96	434.38	346.47	5171.14	High
SMP-AC2	5/18/2005	14932.0	4.6	4.6	171	11.5	5	13	0.09	0.88	0.8	40	5.69		16.15	143.59	157.94	2333.27	Medium
SMP-AC2	6/15/2005	10000.0	4.3	4.7	154	20.5	5	8	0.40	0.68	0.48	32	6.19		48.08	57.70	81.74	961.60	Medium
SMP-AC2	7/13/2005	4499.0	4.5	4.4	248	22.0	4	15	0.11	1.20	0.82	52	6.19		5.95	44.34	64.89	811.17	Low
SMP-AC2	8/22/2005	2276.1	4.4	4.4	230	19.5	4	13	0.09	1.17	0.76	53	7.10		2.46	20.79	32.01	355.66	Low
SMP-AC2	9/14/2005	2220.5	4.3	4.4	234	15.0	4	12	0.07	1.22	0.95	68	6.19		1.87	25.36	32.56	320.28	Low

SMP-AC3	10/23/2004	16492.0	4.7	4.7	177	8.0	5	11	0.20	1.02	0.73	50	8.60		39.65	144.71	202.20	2180.57	Medium
SMP-AC3	11/23/2004	15146.4	4.9	4.9	166	5.0	5	10	0.23	1.08	0.77	52	5.69		41.87	140.19	196.62	1820.60	Medium
SMP-AC3	2/10/2005		5.2	5.1	117	1.5	6	8	0.63	0.75	0.66	31	18.60						
SMP-AC3	3/16/2005	32652.9	4.6	4.8	156	1.0	5	12	0.48	0.76	0.84	41	5.69		188.39	329.69	298.29	4709.85	High
SMP-AC3	4/15/2005	43364.4	4.5	4.7	153	7.5	5	9	0.43	0.70	0.84	38	10.00		224.13	437.84	364.87	4691.16	High
SMP-AC3	5/19/2005	15682.9	4.7	4.7	167	10.0	5	12	0.10	0.83	0.72	42	5.69		18.85	135.73	156.46	2262.10	Medium
SMP-AC3	6/16/2005	22817.4	4.6	4.8	185	18.0	5	9	0.29	0.79	0.42	41	8.60		79.54	115.19	216.67	2468.39	High
SMP-AC3	7/13/2005	4568.3	4.4	4.4	223	25.0	4	15	0.10	1.30	0.81	54	6.19		5.49	44.48	71.38	823.67	Low
SMP-AC3	8/22/2005	2584.9	4.3	4.4	245	22.0	3	13	0.13	1.62	0.92	63	6.19		4.04	28.58	50.33	403.92	Low
SMP-AC3	9/15/2005	1397.1	4.4	4.4	230	18.0	4	12	0.05	1.25	0.8	65	6.19		0.84	13.43	20.99	201.52	Low

SMP-AC4	10/23/2004	6898.0	6.7	6.4	102	10.0	10	2	0.17	0.04	0.049	22	10.00		14.10	4.06	3.32	165.83	Medium
SMP-AC4	11/23/2004	8026.8	6.6	6.5	99	7.0	10	2	0.19	0.04	0.049	22	5.70		18.33	4.73	3.86	192.96	Medium
SMP-AC4	2/9/2005	41749.2	6.1	6.1	85	2.0	8	6	0.20	0.15	0.23	19	11.40		100.37	115.42	75.27	3010.95	High
SMP-AC4	3/16/2005	12060.4	6.1	6.3	112	0.3	7	4	0.18	0.14	0.15	21	5.69		26.09	21.74	20.30	579.86	Medium
SMP-AC4	4/15/2005	16950.5	6.3	6.5	118	14.0	8	2	0.20	0.08	0.16	19	8.60		40.75	32.60	16.30	407.49	High
SMP-AC4	5/19/2005	6057.0	6.7	6.4	112	14.0	9	4	0.12	0.03	0.049	19	5.69		8.74	3.57	2.18	291.22	Medium
SMP-AC4	6/16/2005	21327.0	6.5	6.7	125	21.0	9	1	0.15	0.04	0.049	17	10.00		38.45	12.56	10.25	256.35	High
SMP-AC4	7/14/2005	1382.9	6.4	6.9	132	21.0	13	-1	0.08	0.03	0.049	20	6.19		1.33	0.81	0.50	-16.62	Low
SMP-AC4	8/23/2005	1139.1	6.7	6.9	138	17.0	14	-2	0.07	0.02	0.049	18	6.19		0.96	0.67	0.27	-27.38	Low
SMP-AC4	9/15/2005	1117.9	6.4	7.0	130	19.0	14	-4	0.05	0.02	0.049	18	6.19		0.67	0.66	0.27	-53.75	Low

Stream Flow Loading

Sample ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Flow Category
SMP-BR1	10/22/2004	3630.0	6.7	6.6	298	10.0	12	0	0.91	1.36	0.28	108	10.00		39.71	12.22	59.34	0.00	Medium
SMP-BR1	11/22/2004	1775.8	6.9	6.4	328	7.0	14	1	1.31	1.49	0.14	133	7.10		27.96	2.99	31.80	21.34	Medium
SMP-BR1	2/9/2005	7195.2	5.9	6.4	393	2.0	15	2	1.28	3.07	1.4	153	5.69		110.70	121.08	265.51	172.97	High
SMP-BR1	3/16/2005	4638.4	6.3	6.2	310	0.0	16	2	0.84	1.27	0.81	111	5.69		46.83	45.16	70.81	111.51	High
SMP-BR1	4/14/2005	4167.7	6.0	6.6	345	8.0	10	2	1.00	1.76	0.63	117	5.69		50.10	31.56	88.17	100.19	High
SMP-BR1	5/18/2005	1271.0	6.7	6.3	389	9.5	14	2	1.64	1.32	0.29	132	5.69		25.05	4.43	20.17	30.55	Medium
SMP-BR1	6/15/2005	1060.6	6.1	6.7	348	17.0	14	-1	1.59	0.72	0.08	112	6.19		20.27	1.02	9.18	-12.75	Medium
SMP-BR1	7/13/2005	512.6	6.2	6.6	431	17.5	18	-4	2.46	1.05	0.049	148	6.19		15.16	0.30	6.47	-24.64	Low
SMP-BR1	8/22/2005	328.6	6.6	6.5	447	16.0	19	-6	3.82	1.47	0.049	162	6.19		15.09	0.19	5.81	-23.70	Low
SMP-BR1	9/14/2005	258.6	6.2	6.5	490	13.0	19	-5	5.27	1.77	0.049	210	8.60		16.38	0.15	5.50	-15.54	Low

SMP-BR2	10/22/2004	2869.0	6.5	6.6	288	9.0	12	0	0.26	1.22	0.2	105	8.60		8.97	8.28	42.07	0.00	Medium
SMP-BR2	11/22/2004	1637.8	6.9	6.4	319	7.0	13	2	0.22	1.30	0.15	130	7.10		4.33	2.95	25.59	39.37	Medium
SMP-BR2	2/9/2005	5491.5	6.1	6.4	384	2.0	13	1	0.36	2.53	1	159	5.69		23.76	66.01	167.00	66.01	High
SMP-BR2	3/16/2005	5431.8	6.5	6.4	323	0.0	16	2	0.43	1.47	0.86	127	5.69		28.07	56.15	95.98	130.58	High
SMP-BR2	4/14/2005	4039.2	6.3	6.7	343	9.0	10	2	0.40	1.89	0.7	126	5.69		19.42	33.99	91.76	97.10	High
SMP-BR2	5/18/2005	1195.4	6.8	6.4	372	10.5	12	3	0.51	1.25	0.38	128	5.70		7.33	5.46	17.96	43.11	Medium
SMP-BR2	6/15/2005	732.6	6.3	6.8	313	18.0	11	1	0.22	0.31	0.19	97	6.19		1.94	1.67	2.73	8.81	Medium
SMP-BR2	7/13/2005	563.9	6.5	6.8	377	18.0	14	1	0.13	0.25	0.07	126	6.19		0.88	0.47	1.69	6.78	Low
SMP-BR2	8/22/2005	124.8	6.6	6.5	347	17.0	10	3	0.14	0.20	0.07	118	6.19		0.21	0.10	0.30	4.50	Low
SMP-BR2	9/14/2005	131.7	6.2	6.5	399	14.0	9	2	0.06	0.08	0.049	164	6.19		0.09	0.08	0.13	3.17	Low

SMP-BR3	10/22/2004	675.0	4.4	4.5	434	10.0	4	20	0.41	5.45	1.29	178	8.60		3.33	10.47	44.22	162.27	Medium
SMP-BR3	11/22/2004	529.1	5.5	4.7	438	7.0	6	16	0.36	5.68	1.18	198	5.70		2.29	7.51	36.13	101.76	Medium
SMP-BR3	2/9/2005	2150.0	4.5	4.4	549	0.0	3	30	0.73	8.75	3.18	270	5.69		18.87	82.18	226.12	775.28	High
SMP-BR3	3/16/2005	829.4	4.7	4.4	453	0.0	6	24	0.39	5.34	2.32	201	5.69		3.89	23.13	53.24	239.26	High
SMP-BR3	4/14/2005	901.6	4.1	4.3	551	14.0	3	26	0.34	6.04	2.4	234	5.69		3.68	26.01	65.46	281.78	High
SMP-BR3	5/18/2005	519.5	4.1	4.1	599	13.0	2	35	0.57	9.77	2.67	289	5.69		3.56	16.67	61.00	218.54	Medium
SMP-BR3	6/15/2005	241.4	4.0	4.0	552	23.0	1	27	1.41	8.15	0.74	217	6.19		4.09	2.15	23.65	78.34	Medium
SMP-BR3	7/13/2005	104.3	5.4	4.7	515	26.0	6	20	3.72	6.97	0.16	195	14.30		4.67	0.20	8.74	25.08	Low
SMP-BR3	8/22/2005	43.6	6.5	6.5	5.2	20.0	26	1	3.95	6.07	0.05	190	8.60		2.07	0.03	3.18	0.52	Low
SMP-BR3	9/14/2005	29.3	6.4	5.9	656	16.0	10	6	1.00	9.46	0.11	312	6.19		0.35	0.04	3.33	2.11	Low

SMP-BR4	11/22/2004	175.0	6.1	5.7	218	7.5	8	7	1.19	1.23	0.36	62	7.10		2.50	0.76	2.59	14.72	High
SMP-BR4	2/9/2005		5.5	5.5	288	4.0	7	10	2.05	1.59	2.21	95	27.10		0.00	0.00	0.00	0.00	
SMP-BR4	3/16/2005	326.4	5.6	4.9	238	4.0	6	14	0.53	1.05	1	70	5.69		2.08	3.92	4.12	54.93	High
SMP-BR4	4/14/2005	255.1	5.0	5.0	279	12.0	6	12	0.51	1.30	1.37	78	5.69		1.56	4.20	3.99	36.80	High
SMP-BR4	5/18/2005	55.9	5.8	5.7	191	15.0	6	8	0.55	0.76	0.25	37	5.69		0.37	0.17	0.51	5.38	Medium
SMP-BR4	6/15/2005	76.7	5.6	6.8	176	17.0	9	3	0.71	0.68	0.14	32	6.19		0.65	0.13	0.63	2.77	Medium
SMP-BR4	7/13/2005	16.2	6.2	6.1	220	23.5	10	4	1.26	0.80	0.14	34	6.19		0.24	0.03	0.16	0.78	Low
SMP-BR4	8/22/2005	10.0	6.0	6.4	198	24.0	13	0	3.47	0.75	1.03	26	7.10		0.42	0.12	0.09	0.00	Low
SMP-BR4	9/14/2005	12.0	6.4	6.4	205	23.0	13	0	1.47	0.68	0.08	31	6.19		0.21	0.01	0.10	0.00	Low

Stream Flow Loading

Sample ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Flow Category
SMP-FR1	10/22/2004	631.0	7.1	7.3	521	10.0	44	0	0.35	1.15	0.26	200	8.60		2.65	1.97	8.72	0.00	Medium
SMP-FR1	11/22/2004	433.8	7.1	6.9	529	7.0	45	0	0.24	1.00	0.17	222	7.10		1.25	0.89	5.21	0.00	Medium
SMP-FR1	2/9/2005	1909.2	6.6	6.9	402	2.0	33	-20	0.39	0.88	0.39	154	5.69		8.95	8.95	20.19	-458.97	High
SMP-FR1	3/16/2005	726.9	7.1	7.2	511	0.5	54	-40	0.29	1.07	0.31	220	5.69		2.53	2.71	9.35	-349.51	High
SMP-FR1	4/14/2005	845.5	6.6	7.5	539	10.0	43	-29	0.28	1.06	0.33	6	5.69		2.85	3.35	10.77	-294.74	High
SMP-FR1	5/18/2005	289.0	7.3	6.9	604	13.0	51	-37	0.31	1.08	0.19	229	5.69		1.08	0.66	3.75	-128.54	Medium
SMP-FR1	6/15/2005	204.6	6.8	7.5	595	19.0	49	-36	0.27	0.66	0.13	219	6.19		0.66	0.32	1.62	-88.53	Medium
SMP-FR1	7/13/2005	147.6	7.0	7.4	600	20.0	57	-41	0.60	0.47	0.12	222	6.19		1.06	0.21	0.83	-72.72	Low
SMP-FR1	8/22/2005	77.4	7.2	7.4	529	18.5	60	-45	0.69	0.26	0.05	179	6.19		0.64	0.05	0.24	-41.84	Low
SMP-FR1	9/14/2005	55.9	7.1	7.3	506	14.0	55	-42	4.00	0.32	0.25	181	6.19		2.69	0.17	0.21	-28.21	Low

SMP-HR1	10/22/2004	413.0	5.8	6.0	122	10.0	8	4	0.26	0.33	0.2	30	14.30		1.29	0.99	1.64	19.86	Medium
SMP-HR1	11/22/2004	345.8	5.8	5.9	120	7.0	9	5	0.30	0.30	0.16	28	7.10		1.25	0.67	1.25	20.78	Medium
SMP-HR1	2/9/2005	857.2	5.6	5.9	117	3.0	8	4	0.26	0.25	0.26	25	5.69		2.68	2.68	2.58	41.21	High
SMP-HR1	3/16/2005	798.1	6.1	5.8	124	2.0	10	8	0.15	0.24	0.2	28	5.69		1.44	1.92	2.30	76.75	High
SMP-HR1	4/14/2005	775.3	5.4	5.9	127	8.0	7	5	0.10	0.24	0.15	25	5.69		0.93	1.40	2.24	46.60	High
SMP-HR1	5/18/2005	279.4	5.7	5.7	144	10.0	7	7	0.10	0.37	0.16	32	5.69		0.34	0.54	1.24	23.51	Medium
SMP-HR1	6/15/2005	151.9	5.6	5.9	151	15.5	9	4	0.19	0.38	0.16	29	6.19		0.35	0.29	0.69	7.30	Medium
SMP-HR1	7/13/2005	51.6	6.1	6.0	160	19.0	8	6	0.30	0.35	0.15	28	6.19		0.19	0.09	0.22	3.72	Low
SMP-HR1	8/22/2005	28.6	6.5	6.1	159	17.0	9	6	0.51	0.42	0.18	28	6.19		0.18	0.06	0.14	2.06	Low
SMP-HR1	9/14/2005	23.7	6.6	6.3	152	14.0	9	3	0.24	0.36	0.11	32	6.19		0.07	0.03	0.10	0.85	Low

SMP-KR1	10/22/2004	6802.0	6.5	7.1	279	9.0	26	0	0.50	0.65	0.2	82	11.40		40.88	13.08	53.14	0.00	Medium
SMP-KR1	11/22/2004	3853.6	7.0	6.6	309	7.0	27	0	0.71	0.72	0.09	103	8.60		32.89	4.17	33.35	0.00	Medium
SMP-KR1	2/9/2005	11416.4	6.6	6.6	346	1.0	22	-7	0.95	1.24	0.71	101	8.60		130.36	97.43	170.16	-960.58	High
SMP-KR1	3/16/2005	7561.4	7.1	6.5	298	0.0	18	0	1.65	1.09	0.83	85	5.70		149.96	75.44	99.07	0.00	High
SMP-KR1	4/14/2005	7293.0	5.9	6.9	320	7.5	17	-5	0.90	1.05	0.46	98	5.69		78.90	40.32	92.04	-438.31	High
SMP-KR1	5/18/2005	2308.7	6.8	6.7	374	9.5	25	-10	0.76	0.78	0.08	114	5.69		21.09	2.22	21.65	-277.51	Medium
SMP-KR1	6/15/2005	1847.0	5.9	7.3	380	18.5	34	-23	0.74	0.35	0.05	104	6.19		16.43	1.11	7.77	-510.62	Medium
SMP-KR1	7/13/2005	1055.9	6.1	7.2	482	19.0	42	-28	1.21	0.27	0.06	129	10.00		15.36	0.76	3.43	-355.36	Low
SMP-KR1	8/22/2005	863.3	6.4	7.1	473	17.5	47	-33	1.53	0.24	0.049	141	6.19		15.88	0.51	2.49	-342.44	Low
SMP-KR1	9/14/2005	833.6	6.2	7.2	509	14.0	46	-35	1.70	0.30	0.049	176	7.10		17.03	0.49	3.01	-350.71	Low

SMP-KR2	10/22/2004	1923.0	7.0	7.2	251	10.0	36	0	0.33	0.09	0.06	52	8.60		7.63	1.39	2.08	0.00	High
SMP-KR2	11/22/2004	1079.4	7.1	6.8	273	7.0	42	0	0.40	0.10	0.049	63	5.70		5.19	0.64	1.30	0.00	Medium
SMP-KR2	2/9/2005	4992.0	6.3	6.7	265	2.0	29	-14	0.82	0.18	0.38	42	5.69		49.20	22.80	10.80	-840.05	High
SMP-KR2	3/16/2005	2030.4	6.9	6.8	349	1.5	34	-20	0.38	0.16	0.12	70	5.69		9.27	2.93	3.90	-488.10	High
SMP-KR2	4/14/2005	1834.9	6.4	7.4	311	9.5	31	-20	0.32	0.11	0.11	71	5.69		7.06	2.43	2.43	-441.11	Medium
SMP-KR2	5/18/2005	504.2	7.4	6.9	360	13.0	49	-33	0.43	0.10	0.06	75	5.69		2.61	0.36	0.61	-200.01	Medium
SMP-KR2	6/15/2005	370.3	6.7	7.6	439	20.0	60	-48	0.47	0.20	0.06	87	6.19		2.09	0.27	0.89	-213.63	Medium
SMP-KR2	7/13/2005	168.9	6.9	7.6	537	21.5	70	-56	0.49	0.15	0.08	99	6.19		0.99	0.16	0.30	-113.71	Low
SMP-KR2	8/22/2005	83.9	7.4	7.7	490	19.0	82	-64	0.41	0.10	0.07	83	7.10		0.41	0.07	0.10	-64.52	Low
SMP-KR2	9/14/2005	105.2	6.9	7.7	520	16.0	91	-73	0.40	0.07	0.08	96	6.19		0.51	0.10	0.09	-92.33	Low

Stream Flow Loading

Sample ID	Sample Date	Flow GPM	pH Field	pH Lab	Cond. Umhos	Temp C	Alkalinity mg/L	Acidity mg/L	Iron mg/L	Manganese mg/L	Aluminum mg/L	Sulfate mg/L	Susp. Solids mg/L	TDS mg/L	Fe Loading lbs/day	Al Loading lbs/day	Mn Loading lbs/day	Acidity Loading lbs/day	Flow Category
SMP-LA1	10/23/2004	4061.0	3.9	4.6	571	9.0	5	18	0.27	4.80	1.18	259	8.60		13.18	57.60	234.30	878.64	Medium
SMP-LA1	11/23/2004	2299.7	3.9	3.8	554	5.0	0	42	4.34	4.84	3.11	237	5.69		119.97	85.97	133.79	1160.96	Medium
SMP-LA1	2/10/2005	19858.5	4.5	4.3	273	1.0	3	19	1.98	2.73	1.88	90	14.30		472.62	448.75	651.65	4535.28	High
SMP-LA1	3/16/2005	4960.1	3.8	3.8	567	1.0	0	42	4.24	5.44	4.18	250	5.69		252.79	249.22	324.34	2504.08	High
SMP-LA1	4/15/2005	4974.5	3.5	3.7	554	10.0	0	46	3.89	4.57	4.12	209	5.70		232.60	246.35	273.26	2750.50	High
SMP-LA1	5/19/2005	2149.2	3.7	3.7	543	9.5	0	48	0.10	0.80	3.83	195	5.69		2.58	98.94	20.67	1240.01	Medium
SMP-LA1	6/16/2005	2250.1	3.6	3.5	701	17.0	0	49	4.18	6.54	3.13	262	11.40		113.05	84.65	176.88	1325.26	Medium
SMP-LA1	7/13/2005	706.5	3.8	3.4	746	18.5	0	71	8.21	6.11	4.39	264	7.10		69.72	37.28	51.89	602.96	Low
SMP-LA1	8/23/2005	240.3	3.6	3.4	724	14.0	0	81	17.50	8.76	5.13	284	8.60		50.55	14.82	25.31	233.99	Low
SMP-LA1	9/15/2005	365.1	3.5	3.3	731	14.5	0	83	16.90	7.65	5.22	335	10.00		74.16	22.91	33.57	364.20	Low

SMP-LA2	10/23/2004	847.0	4.5	4.3	403	8.0	3	27	2.41	3.25	2.26	155	14.30		24.54	23.01	33.09	274.89	Medium	
SMP-LA2	11/22/2004	888.1	4.7	4.5	378	6.8	5	25	2.58	3.36	2.42	164	10.00		27.54	25.83	35.87	266.87	High	
SMP-LA2	2/9/2005	4556.2	5.1	4.8	325	1.0	5	21	2.38	3.74	2.36	111	5.69		130.34	129.25	204.82	1150.08	High	
SMP-LA2	3/16/2005		4.6	4.1	399	0.0	4	34	1.90	4.27	2.87	158	5.69							
SMP-LA2	4/14/2005	1530.9	4.3	4.2	428	10.0	2	23	1.19	3.84	2.24	160	5.69		21.90	41.22	70.66	423.22	High	
SMP-LA2	5/18/2005	626.1	4.4	4.1	411	14.0	1	34	1.74	3.55	2.32	155	5.69		13.09	17.46	26.72	255.86	Medium	
SMP-LA2	6/15/2005	289.5	3.6	3.6	616	19.0	0	49	3.34	5.13	3.86	230	6.19		11.62	13.43	17.85	170.50	Medium	
SMP-LA2	7/13/2005	102.5	3.7	3.6	733	20.0	0	56	2.79	7.19	4.41	281	6.19		3.44	5.43	8.86	69.00	Low	
SMP-LA2	8/22/2005	28.9	3.5	3.4	429	19.0	0	70	0.94	4.96	6.45	121	6.19		0.33	2.24	1.72	24.32	Low	
SMP-LA2	9/14/2005	26.8	3.5	3.5	873	16.0	0	73	3.77	14.00	5.93	370	6.19		1.22	1.91	4.51	23.53	Low	

SMP-LA3	10/23/2004	N/A	6.3	6.3	349	8.0	10	3	0.45	1.56	0.1	123	7.10							
SMP-LA3	11/22/2004		6.4	6.3	336	6.0	12	3	0.49	0.84	0.07	138	5.70							
SMP-LA3	2/9/2005		5.9	6.2	298	0.0	10	3	1.89	2.40	1	96	14.30							
SMP-LA3	3/16/2005		6.3	5.8	351	0.0	12	6	0.33	2.35	0.15	140	5.69							
SMP-LA3	4/14/2005	1016.5	5.5	6.1	401	10.0	7	6	0.46	2.98	0.21	151	5.69		5.62	2.57	36.41	73.31	High	
SMP-LA3	5/18/2005	490.2	6.0	5.9	346	13.0	8	8	0.48	1.74	0.13	118	5.69		2.83	0.77	10.25	47.13	High	
SMP-LA3	6/15/2005	166.1	5.6	6.2	441	19.0	8	4	0.50	0.93	0.1	171	6.19		1.00	0.20	1.86	7.98	Medium	
SMP-LA3	7/13/2005	69.4	5.6	5.8	543	20.0	8	8	0.55	2.31	0.09	223	6.19		0.46	0.08	1.93	6.68	Medium	
SMP-LA3	8/22/2005	15.6	5.9	6.2	473	18.0	10	5	1.18	7.37	0.16	183	6.19		0.22	0.03	1.38	0.93	Low	
SMP-LA3	9/14/2005	35.0	5.5	5.6	655	16.0	8	16	1.90	12.20	0.51	316	6.19		0.80	0.21	5.13	6.73	Low	

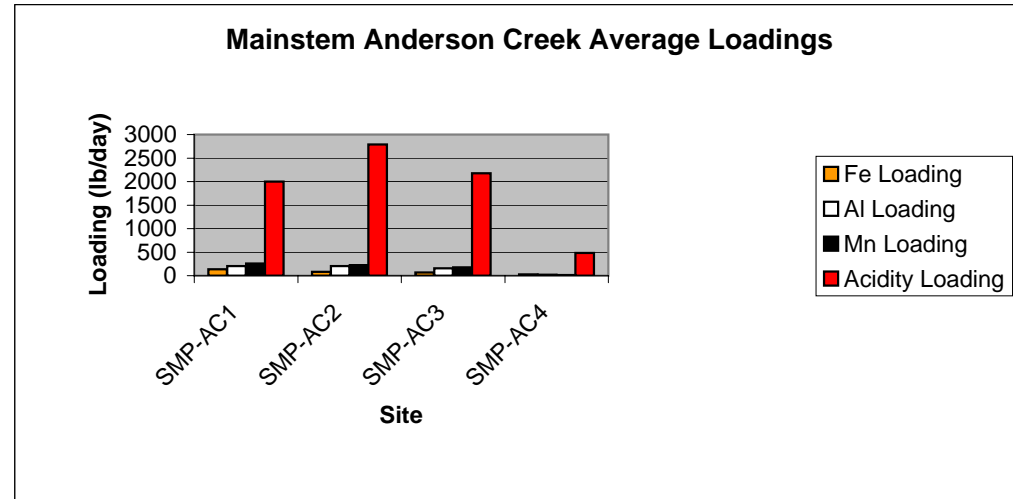
SMP-LA4	4/14/2005	686.1	5.9	6.2	453	13.0	8	4	0.67	3.92	0.19	190	5.69		5.53	1.57	32.33	32.99	High
SMP-LA4	5/18/2005	349.3	6.4	6.3	402	16.5	12	4	0.77	3.21	0.08	157	5.69		3.23	0.34	13.48	16.80	Medium
SMP-LA4	6/15/2005	587.1	6.2	7.0	522	21.0	22	-10	0.80	3.51	0.07	206	6.19		5.65	0.49	24.77	-70.57	Low
SMP-LA4	9/14/2005	30.0	5.3	5.1	720	18.0	7	20	0.56	15.80	0.42	360	6.19		0.20	0.15	5.70	7.21	Low

SMP-RR1	11/23/2004	794.3	5.2	4.7	748	6.0	5	17	1.00	8.70	1.11	376	5.69		9.55	10.60	83.07	162.31	Medium
SMP-RR1	2/9/2005	6428.1	5.4	5.1	364	1.0	6	11	1.09	4.21	1.1	156	12.90		84.22	84.99	325.29	849.92	High
SMP-RR1	3/16/2005	1943.1	5.4	4.9	704	1.0	6	15	1.09	7.15	1.45	344	5.69		25.46	33.87	167.00	350.34	High
SMP-RR1	4/15/2005	1570.4	4.9	4.8	692	12.0	6	14	0.76	6.36	1.47	328	5.69		14.35	27.75	120.05	264.26	High
SMP-RR1	5/19/2005	488.7	5.1	4.7	705	11.0	5	18	5.04	4.88	1.17	323	5.69		29.61	6.87	28.67	105.74	Medium
SMP-RR1	6/16/2005	900.5	4.9	4.6	839	21.0	5	14	1.16	9.55	0.77	343	8.60		12.56	8.33	103.37	151.53	Medium
SMP-RR1	7/13/2005	182.0	5.0	4.3	798	21.0	4	15	1.51	7.88	0.54	349	6.19		3.30	1.18	17.24	32.82	Low
SMP-RR1	8/23/2005	113.5	5.4	4.5	810	15.0	7	23	3.68	9.25	0.32	456	7.10		5.02	0.44	12.62	31.38	Low
SMP-RR1	9/15/2005	78.5	5.5	4.2	758	16.0	2	12	4.01	6.74	0.29	364	7.10		3.79	0.27	6.36	11.33	Low

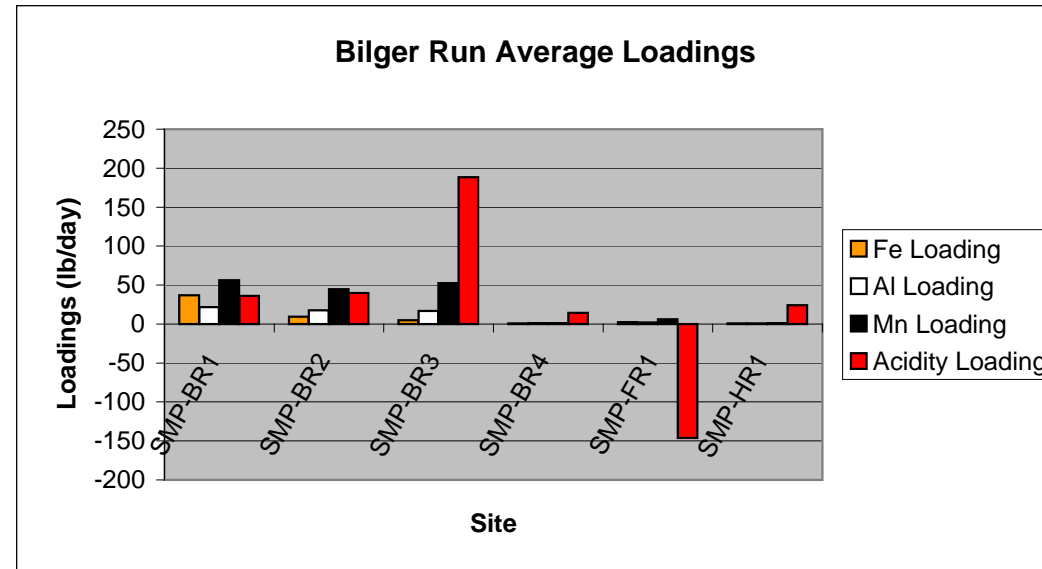
Stream Pollution Loadings at Low, Medium, and High Flow

Monitoring Point	pH Low	pH Medium	pH High	Fe Load Low	Fe Load Med	Fe Load High	Al Load Low	Al Load Med	Al Load High	Mn Load Low	Mn Load Med	Mn Load High	Acidity Load Low	Acidity Load Med	Acidity Load High
SMP-AC1	6.5	6.1	5.3	5.9	49.4	388.8	3.2	100.1	551.3	33.6	179.5	595.5	111.4	1305.4	4815.4
SMP-AC2	4.4	4.7	4.7	3.4	28.7	231.5	30.2	133.2	468.0	43.2	168.1	484.6	495.7	2039.1	6072.3
SMP-AC3	4.4	4.8	4.8	3.5	33.5	164.0	28.8	140.2	294.2	47.6	185.1	293.3	476.4	2087.8	3956.5
SMP-AC4	6.9	6.4	6.4	1.0	16.8	59.9	0.7	8.5	33.9	0.3	7.4	33.9	-32.6	307.5	1224.9
SMP-BR1	6.5	6.5	6.4	15.5	28.2	69.2	0.2	5.2	65.9	5.9	30.1	141.5	-21.3	9.8	128.2
SMP-BR2	6.6	6.6	6.5	0.4	5.6	23.8	0.2	4.6	52.0	0.7	22.1	118.2	4.8	22.8	97.9
SMP-BR3	5.7	4.3	4.4	2.4	3.3	8.8	0.1	9.2	43.8	5.1	41.2	114.9	9.2	140.2	432.1
SMP-BR4	5.7	6.3	5.2	0.3	0.5	2.0	0.1	0.1	3.0	0.1	0.6	3.6	0.3	4.1	35.5
SMP-FR1	7.4	7.2	7.2	1.5	1.4	4.8	0.1	1.0	5.0	0.4	4.8	13.4	-47.6	-54.3	-367.7
SMP-HR1	6.1	5.9	5.9	0.1	0.8	1.7	0.1	0.6	2.0	0.2	1.2	2.4	2.2	17.9	54.9
SMP-KR1	7.2	6.9	6.7	16.1	27.8	119.7	0.6	5.1	71.1	3.0	29.0	120.4	-349.5	-197.0	-466.3
SMP-KR2	7.7	7.2	6.9	0.6	4.2	22.0	0.1	0.9	9.0	0.2	1.3	5.6	-90.2	-213.7	-442.7
SMP-LA1	3.4	3.9	3.9	64.8	62.2	319.3	25.0	81.8	314.8	36.9	141.4	416.4	400.4	1151.2	3263.3
SMP-LA2	3.5	4.0	4.5	1.7	16.4	59.9	3.2	18.0	65.4	5.0	25.9	103.8	39.0	233.7	613.4
SMP-LA3	5.9	6.0	6.0	0.5	0.7	4.2	0.1	0.1	1.7	3.3	1.9	23.3	3.8	7.3	60.2
SMP-LA4	6.1	6.3	6.2	2.9	3.2	5.5	0.3	0.3	1.6	15.2	13.5	32.3	-31.7	16.8	33.0
SMP-RR1	4.3	4.7	4.9	4.0	17.2	41.3	0.6	8.6	48.9	12.1	71.7	204.1	25.2	139.9	488.2

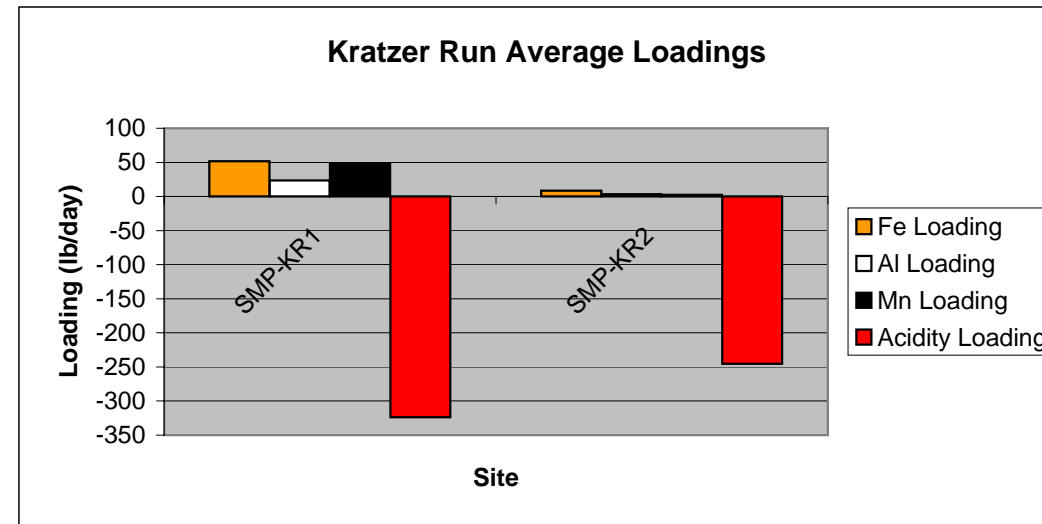
Monitoring Pt.	Fe Loading	Al Loading	Mn Loading	Acidity Loading
SMP-AC1	138.17	206.36	260.53	2000.18
SMP-AC2	81.96	202.73	225.55	2786.04
SMP-AC3	66.98	154.43	175.31	2173.53
SMP-AC4	24.98	19.68	13.25	480.69



Monitoring Pt.	Fe Loading	Al Loading	Mn Loading	Acidity Loading
SMP-BR1	36.72	21.91	56.28	35.99
SMP-BR2	9.68	3.96	32.11	-131.98
SMP-BR3	2.46	20.79	32.01	355.66
SMP-BR4	4.04	28.58	50.33	403.92
SMP-FR1	0.96	0.67	0.27	-27.38
SMP-HR1	15.09	0.19	5.81	-23.70



Monitoring Pt.	Fe Loading	Al Loading	Mn Loading	Acidity Loading
SMP-KR1	100.37	115.42	75.27	3010.95
SMP-KR2	110.70	121.08	265.51	172.97



Monitoring Pt.	Fe Loading	Al Loading	Mn Loading	Acidity Loading
SMP-LA1	18.85	135.73	156.46	2262.10
SMP-LA2	8.74	3.57	2.18	291.22
SMP-LA3	25.05	4.43	20.17	30.55
SMP-LA4	0.00	0.00	0.00	0.00
SMP-RR1	9.50	17.52	44.52	39.94

<i>Column1</i>	
Mean	1262.73502
Standard Error	720.692232
Median	165.803868
Mode	0
Standard Deviation	2279.028945
Sample Variance	5193972.933
Kurtosis	6.195523617
Skewness	2.417051943
Range	7253.33678
Minimum	0
Maximum	7253.33678
Sum	12627.3502
Count	10

