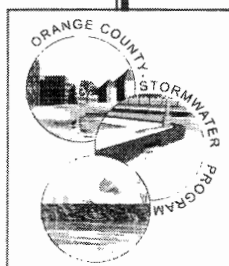


UNIFIED ANNUAL PROGRESS REPORT
PROGRAM EFFECTIVENESS ASSESSMENT
(San Diego Region)
ATTACHMENTS
2003-2004 Reporting Period



November 15, 2004



A COOPERATIVE PROJECT OF THE COUNTY OF
ORANGE, THE CITIES OF ORANGE COUNTY, AND
THE ORANGE COUNTY FLOOD CONTROL DISTRICT

File 10-6000-03 2

Attachment C-11-II

Chemistry Sampling Results for the Mass Emissions Stations

Water Chemistry at Mass Emissions Sites

								Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion										Hardness as CaCO ₃	
Site	Composite Time		Samples		SC	pH	T															DO	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As		Se
	Begin	End	Type	#																												
Aliso Creek in Aliso/Wood Canyon Park																																
ACJ01	11/1/03 2:34	11/1 3:34	SF	6																			<1	<8	4.5	<2	56	<2	13			
ACJ01	11/1/03 2:34	11/1 3:34	ST	6	1525	8.11	17.1	8.79	181	2980	7.9	11	0.495	5.1	4.91	0.671	440	74	134	<5	<5	196	40	17	49	8.8	140	<2	350		940	
ACJ01	11/1/03 5:34	11/1 23:34	SF	10																			<1	<8	6.8	<2	23	<2	22			
ACJ01	11/1/03 5:34	11/1 23:34	ST	10	2736	8	15.9	8.7	112	2240	7.9	10	0.57	4	2.46	0.322	170	36	212	<5	<5	377	7.1	<8	31	4.8	39	<2	120		660	
ACJ01	11/2/03 1:34	11/3 7:34	SF	16																			<1	<8	6.3	<2	28	<2	17			
ACJ01	11/2/03 1:34	11/3 7:34	ST	16					12	2790	8.1	6.6	0.236	2	1.54	0.403	15	<10	140	<5	<5	134	1.9	<8	7.9	<2	28	<2	26		848	
ACJ01	11/3/03 11:34	11/5 9:34	SF	24																			1.2	<8	13	<2	37	<2	22			
ACJ01	11/3/03 11:34	11/5 9:34	ST	24	2580	8.2	14.1	20.1	5.2	2820	8.2	7.5	0.188	1.2	1.29	0.307	<10	<10	128	<5	<5	144	2.4	<8	8.7	<2	38	<2	26		900	
ACJ01	2/18/04 15:51	2/18 16:51	SF	6																			1.4	<8	8.4	<2	30	<2	70			
ACJ01	2/18/04 15:51	2/18 16:51	ST	6														268	<5	<5	213	8	10	19	3.5	49		90				
ACJ01	2/18/04 18:51	2/20 4:51	SF	15																			<1	<8	5.7	<2	15	2.4	20			
ACJ01	2/18/04 18:51	2/20 4:51	ST	15	2105	7.89	13.3	13.2	36	1610	7.7	6.2	0.114	1.3	1.17	0.243	62	12	250	<5	<5	500	1.8	<8	13	2.5	21	<2	57		500	
ACJ01	2/20/04 10:51	2/22 2:51	SF	21																			<1	<8	7.6	<2	26	<2	17			
ACJ01	2/20/04 10:51	2/22 2:51	ST	21	430	8.21	12.4	12.7	6	2460	8.1	6.2	<0.05	0.69	0.829	0.229	<10	<10	48.4	<5	<5	76.8	1.6	<8	6.5	<2	24	<2	34		830	
ACJ01	2/22/04 4:51	2/24 8:51	SF	27																			<1	<8	5.9	<2	13	<2	87			
ACJ01	2/22/04 4:51	2/24 8:51	ST	27	1627	8	13.5	12.3	60	999	7.8	4.8	0.097	1.2	1.54	0.253	120	19	59.8	<5	<5	57.2	2.3	8.6	20	3.7	20	<2	61		322	
ACJ01	2/3/04 0:18	2/3 22:18	SF	10																			<1	<8	6.9	<2	11	<2	86			
ACJ01	2/3/04 0:18	2/3 22:18	ST	10	2430	7.41	11.9	10.2											<5	<5	<5	<5	3	<8	21	6.1	22	<2	110		380	
ACJ01	2/3/04 14:18	2/4 8:18	SF	10																			<1	<8	9.7	<2	15	<2	38			
ACJ01	2/3/04 14:18	2/4 8:18	ST	10	2836	7.77	12.4		15	2080	8.1	6.2	0.075	1.3	1.26	0.294	16	<10	62.1	<5	<5	<5	1.3	<8	8.2	<2	15	<2	18		608	
ACJ01	2/4/04 8:50		D		2430	7.4	11.9	10.2																								
ACJ01	2/6/04 10:00		D		2836	7.8	12.4																									
ACJ01	2/6/04 10:18	2/7 2:18	SF	9																			1	<8	4.7	<2	24	<2	12			
ACJ01	2/6/04 10:18	2/7 2:18	ST	9	2991	8.11	11.6	11.6	5.3	2980	8.1	6.2	0.054	0.83	0.798	0.207	<10	<10	58.1	<5	<5	<5	1.7	<8	6.2	<2	23	<2	17		950	
ACJ01	2/7/04 0:00		DF																				1	<8	4.7	<2	24	<2	12			
Laguna Canyon Channel at Woodland																																
LCWI02	2/18/04 14:44	2/18 15:44	SF	6																			<1	<8	91	3.7	5.4	<2	190			
LCWI02	2/18/04 14:44	2/18 15:44	ST	6	1436	8.3	11.8	18.9	762	609	7.5	6.2	<0.05	3.7	4.6	0.258	2200	210	<5	<5	<5	<1	76	83	22	63	<2	210		168		
LCWI02	2/18/04 17:44	2/19 1:44	SF	12																			<1	<8	7.8	<2	<4	<2	15			
LCWI02	2/18/04 17:44	2/19 1:44	ST	12	5788	8.15	13.1	11	30	1000	8.3	1.9	<0.05	0.93	0.798	0.213	48	<10	119	<5	<5	<5	<1	<8	8.8	<2	5.2	<2	22		320	
LCWI02	2/2/04 18:52	2/2 19:52	SF	6																			<1	<8	24	<2	4.4	<2	67			
LCWI02	2/2/04 18:52	2/2 19:52	ST	6															176	<5	<5	<5	<1	<8	37	7.2	7.6	<2	99		320	
LCWI02	2/2/04 21:52	2/3 19:52	ST	12	1574	7.87	10.1	14.6	66	762	8.1	4.1	<0.05	1.3	1.87	0.359	400	39	<5	<5	<5	<5	<1	<8	22	6.5	8.9	<2	64		200	
LCWI02	2/2/04 21:52	2/3 19:52	SF	12																			<1	<8	11	<2	<4	<2	54			
LCWI02	2/20/04 9:44	2/22 1:44	SF	21																			<1	<8	9.9	<2	<4	<2	13			
LCWI02	2/20/04 9:44	2/22 1:44	ST	21	1700	8.1	11.9	16.5	5.1	1540	8.6	0.57	<0.05	0.41	0.368	0.087	<10	<10	19.7	<5	<5	<5	<1	<8	6.6	<2	<4	<2	17		612	
LCWI02	2/22/04 3:44	2/22 13:44	SF	6																			<1	<8	10	<2	<4	<2	47			
LCWI02	2/22/04 3:44	2/22 13:44	ST	6	770	9	13.7	16.3	23	801	8.3	2.6	<0.05	0.79	1.11	0.251	36	<10	40.4	<5	<5	16.6	<1	<8	9	<2	4.7	<2	20		242	
LCWI02	2/3/04 21:52	2/4 19:52	SF	12																			<1	<8	6.8	<2	<4	<2	19			
LCWI02	2/3/04 21:52	2/4 19:52	ST	12	1839	8.41	9.31		6.7	1460	8.4	1.5	<0.05	0.55	0.706	0.171	<10	<10	27.3	<5	<5	<5	<1	<8	5.7	<2	<4	<2	<10		412	
LCWI02	2/4/04 21:52	2/7 7:52	SF	30																			<1	<8	3.1	<2	<4	<2	<10			
LCWI02	2/4/04 21:52	2/7 7:52	ST	30	2021	7.7	7.2	13.8	2	1830	8.5	0.79	<0.05	0.46	0.368	0.121	<10	<10	<5	<5	<5	<5	<1	<8	3.5	<2	<4	<2	<10		450	
LCWI02	2/7/04 0:00		DF																				<1	<8	3.1	<2	<4	<2	<10			

Water Chemistry at Mass Emissions Sites

								Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion									Hardness as CaCO ₃		
Site	Composite Time		Samples		SC	pH	T	DO	NTU	µS													Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	mg/L
	Begin	End	Type	#	µS	°C	mg/L	mg/L															ng/L	µg/L								
Prima Deschecha at Calle Grande Vista																																
PDCM01	11/1/03 2:20	11/1 3:20	SF	6																		1.2	<8	12	<2	60	<2	81				
PDCM01	11/1/03 2:20	11/1 3:20	ST	6					94	2050	7.7	28	2.28	9.1	0.123	0.229	68	20	445	<5	<5	3120	8.1	<8	29	4.1	69	<2	170			580
PDCM01	11/1/03 9:53	11/2 1:53	SF	10																		9.7	<8	6.3	<2	83	<2	41				
PDCM01	11/1/03 9:53	11/2 1:53	ST	10	6590	8	15.4	11.1	14	7280	8.2	18	0.062	1.7	1.32	0.306	23	<10	136	<5	<5	33.7	11	<8	10	<2	95	<2	58		2140	
PDCM01	11/2/03 3:53	11/3 7:53	SF	9																		12	<8	6	<2	91	<2	41				
PDCM01	11/2/03 3:53	11/3 7:53	ST	9					14	7340	8.1	13	<0.05	1	1.04	0.225	20	<10	130	<5	<5	<5	15	<8	11	<2	99	<2	71		2104	
PDCM01	11/3/03 9:53	11/5 7:53	ST	24	7349	8.06	14.3	11.2	27	7890	8	15	0.053	1.3	1.11	0.195	44	<10	1100	<5	<5	2450	16	<8	18	<2	120	<2	72		2388	
PDCM01	11/5/03 8:25		SF																			14	<8	10	<2	110	<2	52				
PDCM01	2/18/04 15:04	2/18 16:04	SF	6																		<1	<8	11	<2	12	<2	120				
PDCM01	2/18/04 15:04	2/18 16:04	ST	6	5788	8.15	13.1	11	320	545	7.1	5.3	0.562	4.4	3.38	0.139	1090	130	461	<5	<5	878	4.1	17	40	8.8	36	<2	210		154	
PDCM01	2/18/04 18:04	2/20 4:04	SF	18																		8.8	<8	11	<2	76	<2	66				
PDCM01	2/18/04 18:04	2/20 4:04	ST	18	5788	8.2	13.1	11	12	4670	8	15	0.115	1.4	0.921	0.19	13	<10	101	<5	<5	448	10	<8	20	2.3	84	<2	120		1408	
PDCM01	2/2/04 22:54	2/2 23:54	SF	6																		<1	<8	5.6	<2	11	<2	100				
PDCM01	2/2/04 22:54	2/2 23:54	ST	6								6.2	0.425	2.1	2.52				106	<5	<5	285	3.4	16	24	5.1	30	<2	110		218	
PDCM01	2/20/04 10:04	2/21 20:04	SF	18																		11	<8	9.8	<2	90	<2	36				
PDCM01	2/20/04 10:04	2/21 20:04	ST	18	2795	8	13.5	10.6	37	5870	8.1	14	<0.05	1	0.675	0.099	<10	<10	25.4	<5	<5	23.7	13	<8	16	<2	95	<2	69		1770	
PDCM01	2/22/04 0:04	2/22 14:04	SF	8																		5.6	<8	13	<2	55	<2	110				
PDCM01	2/22/04 0:04	2/22 14:04	ST	8	4019	7.9	13.4	11.8	33	2740	7.4	11	0.263	1.6	0.768	0.115	58	10	60.8	<5	<5	133	6.3	<8	19	<2	57	3.6	78		868	
PDCM01	2/3/04 1:54	2/3 23:54	SF	12																		6.1	<8	5.3	<2	68	<2	39				
PDCM01	2/3/04 1:54	2/3 23:54	ST	12					38	4670	7.9	18	0.509	2.5	1.11	0.207	65	13	75.9	204	<5	<5	8.7	<8	11	<2	75	<2	70		1430	
PDCM01	2/4/04 1:54	2/5 19:54	SF	22																		11	<8	5.7	<2	83	<2	58				
PDCM01	2/4/04 1:54	2/5 19:54	ST	22	7911	7.85	10.2	9.68	17	6020	8	15	0.502	3.6	0.583	0.08	22	<10	<5	<5	<5	<5	12	<8	7.9	<2	84	<2	75		1822	
PDCM01	2/4/04 9:15		D		6447	8	12.2	15.2																								
PDCM01	2/5/04 21:54	2/7 1:54	SF	15																		18	<8	14	<2	140	<2	79				
PDCM01	2/5/04 21:54	2/7 1:54	ST	15	7410	8	9.9	11.7	8.4	8450	8.1	19	0.102	1.4	0.522	0.112	13	<10	51.4	<5	<5	<5	18	<8	15	<2	130	<2	100		1764	
PDCM01	2/7/04 0:00		DF																			18	<8	14	<2	140	<2	79				
Secunda Deschecha at El Camino Real																																
SDCM02	2/20/04 8:37	2/21 18:37	SF	18																		7	<8	7.3	<2	330	<2	70				
SDCM02	2/20/04 8:37	2/21 18:37	ST	18	634	8.2	13.1	10.2	14	4230	8.2	66	0.116	0.91	0.46	0.064	34	<10	30	<5	<5	<5	24		9.4		330		110		1370	
SDCM02	2/21/04 20:37	2/22 8:37	SF	7																		2.4	<8	12	<2	54	<2	150				
SDCM02	2/21/04 20:37	2/22 8:37	ST	7	2382	8.2	12.3	10.6	106	1580	7.7	15	0.131	1.6	1.35	0.193	170	28	81.1	<5	<5	55.6	7.6	13	28	4.8	71	<2	120		456	
SDCM02	2/3/04 10:55		D		6989	8.17	13.3	10.5	219	2320	8	10	0.113	2.1	2.46	0.389	270	32	<5	<5	<5	<5	3.3	8.1	13	<2	38	<2	40			
SDCM02	2/3/04 10:55		DF																			1	<8	5.9	<2	27	<2	<10				

Water Chemistry at Mass Emissions Sites

									Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion											Hardness as CaCO ₃
Site	Composite Time		Samples		SC	pH	T	DO															Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se		
	Begin	End	Type	#																												μS	
San Juan Creek at La Novia																																	
SJNL01	11/1/03 0:45	11/1 1:45	SF	6																			<1	<8	7.2	<2	10	<2	23				
SJNL01	11/1/03 0:45	11/1 1:45	ST	6	1395	8.2	17.6	8.35	203	1440	7.5	6.2	0.669	7.5	1.44	0.376	520	140	278	<5	<5	1490	3.2	29	370	29	44	<2	540		370		
SJNL01	11/1/03 3:45	11/1 11:45	SF	16																		<1	<8	3.7	<2	8	<2	<10					
SJNL01	11/1/03 3:45	11/1 11:45	ST	16					214	2030	7.7	4	0.243	6.4	3.07	0.152	620	120	282	<5	<5	<5	2.8	13	76	9.7	28	<2	140		622		
SJNL01	11/12/03 2:16	11/12 3:16	SF	6																		<1	<8	6.4	<2	5.7	<2	43					
SJNL01	11/12/03 2:16	11/12 3:16	ST	6	1195	8.36	16.7	11.8	20	2400	7.7					0.401	130	32	48.6	<5	<5	<5	<1	<8	24	<2	9.7	<2	43				
SJNL01	11/12/03 5:16	11/13 3:16	SF	12																		<1	<8	4	<2	5	<2	42					
SJNL01	11/12/03 5:16	11/13 3:16	ST	12	1195	8.36	16.7	11.8	15	2300	7.7	2.5	0.234	1.8	2.52	0.408	50	16	45.8	<5	<5	<5	<1	<8	12	<2	6.9	<2	25				
SJNL01	11/12/03 5:56	11/13 3:56	ST	12	1195	8.36	16.7	11.8																									
SJNL01	11/13/03 11:16	11/15 9:16	SF	24																		<1	<8	<2	<2	<4	<2	<10					
SJNL01	11/13/03 11:16	11/15 9:16	ST	24	1940	8.1	15	14	4.3	2050	7.9	<0.44	0.081	0.58	0.768	0.051	15	<10	<5	<5	<5	<1	<8	3.3	<2	<4	<2	<10		718			
SJNL01	11/2/03 13:45	11/3 7:45	SF	14																		<1	<8	6.6	<2	11	<2	<10					
SJNL01	11/2/03 13:45	11/3 7:45	ST	14	2313	7.77	14.3	9.22	36	3230	8	2.9	0.211	1.7	1.29	0.24	84	22	137	<5	<5	<5	<1	<8	19	3.9	12	<2	35		892		
SJNL01	11/3/03 9:45	11/5 7:45	SF	24																		<1	<8	5.6	<2	9.8	<2	18					
SJNL01	11/3/03 9:45	11/5 7:45	ST	24	2965	7.64	14.6	9.8	16	3410	7.9	1.8	0.11	<0.2	1.47	0.212	40	<10	76.3	<5	<5	220	<1	<8	13	<2	10	<2	23		1010		
SJNL01	2/18/04 18:07	2/19 16:07	SF	12																		<1	<8	14	<2	<4	<2	38					
SJNL01	2/18/04 18:07	2/19 16:07	ST	12	1387	8	12.5	10.1	21	1250	7.9	5.3	<0.05	0.87	0.553	0.127	20	<10	70.7	<5	<5	136	<1	<8	13	6.9	<4	<2	36		380		
SJNL01	2/2/04 23:40	2/3 19:40	SF	11																		<1	<8	6.4	<2	<4	<2	18					
SJNL01	2/2/04 23:40	2/3 19:40	ST	11					39	1190	7.9	5.3	<0.05	0.91	0.952	0.205	49	10	<5	<5	<5	<1	<8	2.9	<2	<4	<2	<10		372			
SJNL01	2/20/04 9:57	2/21 1:57	SF	9																		<1	<8	5.9	<2	<4	<2	38					
SJNL01	2/20/04 9:57	2/21 1:57	ST	9	1253	7.8	13.5	10.5											19.9	<5	<5	<5	<1	<8	7.8	<2	<4	2.6	29		462		
SJNL01	2/21/04 3:57	2/22 17:57	SF	9																		<1	<8	5.3	<2	<4	<2	82					
SJNL01	2/21/04 3:57	2/22 17:57	ST	9	1186	8.1	13	13.7	70	991	7.9	7.9	<0.05	1.3	1.54	0.266	120	24	55.5	<5	161	<5	<1	<8	24	3	6.8	<2	39		312		
SJNL01	2/3/04 18:02	2/4 8:02	SF	8																		<1	<8	6.2	<2	<4	<2	<10					
SJNL01	2/3/04 18:02	2/4 8:02	ST	8	1537	7.86	9.66	15.6	8	1330	8.1	6.6	<0.05	0.66	0.614	0.142	10	<10	<5	<5	<5	<1	<8	7.3	<2	<4	<2	<10		420			
SJNL01	2/4/04 10:02	2/6 20:02	SF	30																		<1	<8	4.5	<2	<4	<2	<10					
SJNL01	2/4/04 10:02	2/6 20:02	ST	30	1497	7.9	9.4	10.9	1.9	1500	8	6.2	<0.05	0.34	0.215	0.061	<10	<10	<5	<5	<5	<1	<8	5.9	<2	<4	<2	<10		484			
SJNL01	2/4/04 9:48		D		1327	7.8	11.2	14.8																									
SJNL01	2/7/04 0:00		DF																			<1	<8	4.5	<2	<4	<2	<10					

Water Chemistry at Mass Emissions Sites

								Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion										Hardness as CaCO ₃	
Site	Composite Time		Samples		SC	pH	T															DO	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As		Se
	Begin	End	Type	#																												
Trabuco Creek at Del Obispo																																
TCOL02	10/31/03 21:13	10/31 22:31	SF	6																			<1	<8	6.7	<2	5.6	<2	39			
TCOL02	10/31/03 21:13	10/31 22:31	ST	6	1096	8.19	16.4	10.6	101	653	7.6	7	0.81	3.8	2.21	0.358	200	42	978	<5	<5	<5	<1	<8	32	12	11	<2	150			180
TCOL02	11/1/03 0:13	11/1 10:13	SF	6																			<1	<8	6.1	<2	10	<2	110			
TCOL02	11/1/03 0:13	11/1 10:13	ST	6	1710	8.22	11.1	11.1	1072	1540	7.9	6.6	0.623	4.7	2.79	0.15	5240	370	286	<5	<5	771	3.8	20	46	16	29	<2	150			478
TCOL02	11/12/03 10:24	11/13 8:24	SF	12																			<1	<8	6.4	<2	5.4	<2	30			
TCOL02	11/12/03 10:24	11/13 8:24	ST	12					19	1600	8.1	4.4	<0.05	1.1	0.982	0.113	74	11	120	<5	<5	112	<1	<8	11	<2	7.3	<2	24			548
TCOL02	11/12/03 7:24	11/12 8:24	SF	6																			<1	<8	5.2	<2	8.3	<2	32			
TCOL02	11/12/03 7:24	11/12 8:24	ST	6	1400	8	15.6	14.1				0.53	<0.05	1.3	4.91	0.026			53.5	<5	<5	<5	1.5	<8	25	2.7	26	<2	86			950
TCOL02	11/13/03 10:24	11/15 8:24	SF	24																			<1	<8	4.8	<2	5.7	<2	<10			
TCOL02	11/13/03 10:24	11/15 8:24	ST	24	1670	8.5	15.3	15.1	3.6	1660	8.4	4.8	<0.05	0.66	0.338	0.086	13	<10	166	<5	<5	<5	<1	<8	5.8	<2	6.1	<2	<10			550
TCOL02	11/3/03 8:13	11/5 8:13	SF	24																			<1	<8	7.9	<2	7	<2	<10			
TCOL02	11/3/03 8:13	11/5 8:13	ST	24	2049	8.31	18.9		4.2	2030	8.3	4.3	0.06	1.6	0.46	0.077	<10	<10	73.5	<5	<5	<5	<1	<8	6.7	<2	7.3	<2	<10			674
TCOL02	11/5/03 10:43		SF																				<1	<8	7.9	<2	7	<2	<10			
TCOL02	2/18/04 15:08	2/18 16:08	SF	6																			<1	<8	13	<2	4.1	<2	92			
TCOL02	2/18/04 15:08	2/18 16:08	ST	6								4.1	0.426	3.3	1.41				<5	<5	<5	<5	1	12	40	17	13	2.3	200			138
TCOL02	2/18/04 18:08	2/19 4:08	SF	18																			<1	<8	4.5	<2	5.4	<2	14			
TCOL02	2/18/04 18:08	2/19 4:08	ST	18	1199	8.18	12.8	16.6	189	882	7.7	4.4	0.078	1.3	1.63	0.105	440	38	207	<5	<5	380	1.8	15	23	5.4	19	<2	72			272
TCOL02	2/20/04 10:08	2/22 2:08	SF	21																			<1	<8	4.4	<2	6	<2	19			
TCOL02	2/20/04 10:08	2/22 2:08	ST	21	474	8.22	13.1	13.6	29	1540	8.3	3.3	<0.05	0.53	0.46	0.075	48	<10	50.9	<5	<5	66.9	<1	<8	7	<2	7.1	<2	19			510
TCOL02	2/22/04 4:08	2/22 14:08	SF	6																			<1	<8	7.4	<2	4.4	<2	95			
TCOL02	2/22/04 4:08	2/22 14:08	ST	6	1044	8.2	13.3	12.5	361	720	7.9	4.4	0.071	1.6	2.58	0.173	990	72	71.9	<5	<5	74.3	2.3	17	29	7.2	21	2	93			264
TCOL02	2/3/04 0:58	2/3 8:58	SF	5																			<1	<8	3.5	<2	<4	<2	<10			
TCOL02	2/3/04 0:58	2/3 8:58	ST	5					168	858	7.9	4.4	0.075	1.4	1.29	0.113	290	31	118	<5	<5	91.9	1.7	9.6	18	4.6	14	<2	64			282
TCOL02	2/4/04 10:20		D		1155	8.1	14.6	14.6																								
TCOL02	2/4/04 10:58	2/5 14:58	SF	15																			<1	<8	2.9	<2	4.2	<2	<10			
TCOL02	2/4/04 10:58	2/5 14:58	ST	15	1528	8.1	11.2	17.9	11	1410	8.3	3.7	<0.05	0.56	0.338	0.074	13	<10	47.2	<5	<5	<5	<1	<8	3.8	<2	4.2	<2	<10			430
TCOL02	2/5/04 16:58	2/6 20:58	SF	15																			<1	<8	3.7	<2	4.4	<2	<10			
TCOL02	2/5/04 16:58	2/6 20:58	ST	15	1652	8.35	9.5	12.4	1.9	1580	8.2	2.8	<0.05	0.52	0.246	0.062	<10	<10	42.9	<5	<5	<5	<1	<8	4.3	<2	4.1	<2	<10			524
TCOL02	2/7/04 0:00		DF																				<1	<8	3.7	<2	4.4	<2	<10			

Attachment C-11-III

Time-Weighted Event Mean Concentrations of Dissolved
Metals for Sampled Storms 2003-2004

Time-Weighted Event Mean Concentrations for Dissolved Metals for Sampled Storms 2003-2004

Station	Period	Weather	Sample	Cd	Cr	Cu	Ni	Pb	Zn
			Length						
			Days	µg/L					
ACJ01	Nov 1-5, 2003	Storm	4.3	0.6	<8	9.6s	31.7s	<2	20.4
	Feb 18-24, 2004	Storm	5.7	0.0	<8	6.4s	18.0s	<2	45.8
LCWI02	Feb 2-7, 2004	Storm	4.5	<1	<8	5.8s	0.0	<2	16.7
PDCM01	Nov 1-3, 2003	Storm	4.2	10.8fs	<8	6.2s	87.1s	<2	41.7
	Feb 2-7, 2004	Storm	4.1	13.4fs	<8	8.9s	103.6s	<2	66.0
	Feb 18-22, 2004	Storm	4.0	9.0f	<8	10.9s	77.2s	<2	62.3
SDCM02	Feb 20-22, 2004	Storm	2.0	5.7	<8	8.7s	249.5fs	<2	93.3s
SJNL01	Nov 12-15, 2003	Storm	3.3	<1	<8	0.8	1.0	<2	8.0
	Feb 2-6, 2004	Storm	3.8	<1	<8	5.1s	<4	<2	3.9
	Feb 18-22, 2004	Storm	4.0	<1	<8	7.5s	<4	<2	56.4
TCOL02	Nov 12-15, 2003	Storm	3.0	<1	<8	5.1s	5.7	<2	6.2
Saltwater CTR Chronic Criterion				9.3	50.0	3.1	8.2	8.1	81.0
Freshwater CTR Chronic Criterion @ 400 mg/L Hardness				6.3		29.3	168.0	10.9	382.4

Values exceeding freshwater chronic CTR limit in bold with f appended

Values exceeding saltwater chronic CTR limit in bold with s appended

Table C-11.19. Toxicity Testing Results at the Ambient Coastal Monitoring Stations

Station	Event	Chronic Sea Urchin Fertilization			Chronic Sea Urchin Development			Chronic Mysidopsis Bahia Survival and Growth						Storm
								Survival			Growth			Sample
		NOEC	96 hr IC50	TUc	NOEC	96 hr IC50	TUc	NOEC	96hr IC50	TUa	NOEC	96hr IC50	Tuc	
ACM-1	1/21/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	>100.00	0.96	100.00	>100.00	1.00	DW
ACM-1	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	25.00	61.91	1.62	50.00	82.54	2.00	SW
ACM-1	4/2/04	25.00	>100.00	4.00	100.00	>100.00	1.00	100.00	>100.00	0.59	100.00	>100.00	1.00	SW
ACM-1	4/13/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.00	100.00	>100.00	1.00	DW
DAPTEB	2/25/04	50.00	>100.00	2.00	50.00	76.27	2.00	100.00	>100.00	0.59	100.00	>100.00	1.00	SW
DAPTEB	2/27/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.51	100.00	>100.00	1.00	SW
DAPTWB	2/25/04	50.00	>100.00	2.00	50.00	>100.00	2.00	100.00	>100.00	0.00	100.00	>100.00	1.00	SW
DAPTWB	2/27/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SW
DAPTDC	2/25/04	25.00	>100.00	4.00	25.00	63.60	4.00	100.00	>100.00	0.00	100.00	>100.00	1.00	SW
DAPTDC	2/27/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SW
DAPTLR	2/25/04	50.00	>100.00	2.00	50.00	75.10	2.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SW
DAPTLR	2/27/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SW
LB-2	1/21/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	>100.00	0.99	100.00	>100.00	1.00	DW
LB-2	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	70.33	1.42	25.00	61.00	4.00	SW
LB-2	4/13/04	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.41	100.00	>100.00	1.00	DW
LB-3	1/21/04	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	DW
LB-3	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	79.97	1.25	100.00	>100.00	1.00	SW
LB-3	4/13/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	72.06	1.39	50.00	75.00	2.00	DW
SCM-1	1/21/04	50.00	>100.00	2.00	100.00	>100.00	1.00	50.00	73.61	1.36	50.00	63.88	2.00	DW
SCM-1	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	25.00	34.60	2.89	25.00	38.92	2.00	SW
SCM-1	4/2/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	97.22	1.03	50.00	71.37	2.00	SW
SCM-1	4/13/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.51	100.00	>100.00	1.00	DW
SJC-1	1/21/04	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.51	100.00	>100.00	1.00	DW
SJC-1	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	>100.00	0.93	100.00	>100.00	1.00	SW
SJC-1	4/2/04	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SW
SJC-1	4/13/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	>100.00	0.77	100.00	>100.00	1.00	DW

Table C-11.20. Chemistry Monitoring Results at the Ambient Coastal Monitoring Stations With CTR Exceedances in Bold

		Type	Field Measurements				Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion										Hardness as CaCO ₃													
			EC	pH	TEMP	DO																																					
Location	Date		μS		C	mg/L															NTU	μS	mg/L						ng/L						μg/L						mg/L		
ACM-1	7/10/03	DT																																									
ACM-1	7/30/03	DT	6573	7.42	23.02	6.87	16	7250	7.9	2.6	0.142	0.81	0.52	0.159	15	<10	<5	<5	<5	<5	<1	<8	31	2.6	14	<2	32			1362													
ACM-1	1/21/04	ST	10509	7.89	14.02	10.34	1.9	12080	8	3.6	<0.05	0.53	0.307	0.11	<10	<10	<5	<5	<5	<5	1.1	<8	2.3	<2	17	<2	<10			1886													
ACM-1	1/21/04	SF	10509	7.89	14.02	10.34															1.1	<8	3	<2	17	<2	27			1886													
ACM-1	1/28/04	DT					2.6	4730	8.2	2.3	<0.05	0.57	0.43	0.106	<10	<10	<5	<5	<5	<5	<1	<8	2.2	<2	16	<2	<10																
ACM-1	1/28/04	DF																			<1	<8	3.6	<2	15	2.6	25																
ACM-1	2/3/04	DT																			1.4	<8	11	3.1	13	<2	45																
ACM-1	2/3/04	DF																			<1	<8	3.1	<2	8.3	<2	12																
ACM-1	4/2/04	DT					16	2130	7.2	15	0.5	2.9	0.706	0.135	18	<10	123	<5	<5	162	1.7	<8	37	<2	25	<2	33																
ACM-1	4/2/04	DF																			<1	<8	6.5	<2	23	<2	89																
ACM-1	4/13/04	DT	3408	7.72	18.84	10.05	1.3	4350	8	2.8	<0.05	0.96	0.553	0.184	<10	<10	38	<5	<5	<5									1140														
DAPTBD	12/11/03	DT	51148	8.16	15.94	11.49	1.9	49000	8.1	<0.44	<0.05	0.69	<0.0305	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	9.1	<2	6.5	<2	<10																
DAPTBD	12/11/03	DF																			<1	<8	5.7	<2	10	<2	<10																
DAPTBD	5/21/04	DT																																									
DAPTBD	5/24/04	DT					3.5	47100	8.1	<0.44	<0.05	0.2	0.0921	<0.01	<10	<10	<5	<5	<5	<5																							
DAPTBD	6/2/04	DT	52180	8.1	21.06	7.56	2	46700	8.1	<0.44	<0.05	0.22	<0.0305	0.01	<10	<10	<5	<5	<5	<5	<1	<8	6	<2	11	<2	11																
DAPTBD	6/2/04	DF																			<1	<8	6.7	<2	9	<2	10																
DAPTDC	12/11/03	DT	51139	8.11	15.94	10.37	1.4	49000	8.1	<0.44	<0.05	0.54	<0.0305	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	8.6	<2	5.8	<2	<10																
DAPTDC	12/11/03	DF																			<1	<8	5.8	<2	4.6	<2	<10																
DAPTDC	2/25/04	DT	42402	8.1	14.39	3.59																																					
DAPTDC	2/27/04	DT	53040	8.02	14.46	2.223															<1	<8	4.7	<2	12	<2	11																
DAPTDC	2/27/04	DF																			<1	<8	2.7	<2	11	<2	<10																
DAPTDC	5/21/04	DT																																									
DAPTDC	5/24/04	DT					2.6	46800	8.1	<0.44	<0.05	0.29	0.123	<0.01	<10	<10	<5	<5	<5	<5																							
DAPTDC	6/2/04	DT	52240	8.08	20.61	7.35	1.4	46800	8.1	<0.44	<0.05	0.23	0.0307	0.013	<10	<10	<5	<5	<5	<5	<1	<8	6.4	<2	8.8	<2	<10																
DAPTDC	6/2/04	DF																			<1	<8	9.8	2.1	9	<2	17																

		Type					Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion										Hardness as CaCO ₃													
			Field Measurements																																								
Location	Date		EC	pH	TEMP	DO																															Cd	Cr	Cu	Pb	Ni	Ag	Zn
DAPTEB	12/11/03	DT	51135	8.03	15.57	9.27	2.6	48800	8	<0.44	<0.05	0.61	<0.0305	<0.01	<10	<10	<5	<5	<5	<5	1.9	<8	21	<2	6.2	<2	42																
DAPTEB	12/11/03	DF																			<1	<8	11	<2	9.6	<2	32																
DAPTEB	2/25/04	DT	39841	8.1	14.46	3.6																																					
DAPTEB	2/27/04	DT	51611	7.98	14.72	1.65															<1	<8	11	<2	14	<2	29																
DAPTEB	2/27/04	DF																			<1	<8	9	<2	13	<2	26																
DAPTEB	5/21/04	DT																																									
DAPTEB	5/24/04	DT					3.1	46500	8.1	<0.44	<0.05	0.2	0.154	0.02	<10	<10	<5	<5	<5	<5	<1	<8	15	<2	10	<2	32																
DAPTEB	6/2/04	DT	52150	8.01	20.75	7.68	1.4	46100	8.1	<0.44	<0.05	0.85	<0.0305	0.013	<10	<10	<5	<5	<5	<5	<1	<8	11	<2	9.5	<2	21																
DAPTEB	6/2/04	DF																			<1	<8	11	<2	9.5	<2	21																
DAPTLR	12/11/03	DT	51132	8.12	15.82	10.04	1.7	48900	8.1	<0.44	<0.05	0.61	0.123	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	13	<2	5.5	<2	19																
DAPTLR	12/11/03	DF																			<1	<8	4.2	<2	5.6	<2	23																
DAPTLR	2/25/04	DT	39900	8.09	14.32	3.03																																					
DAPTLR	2/27/04	DT	52699	7.97	14.52	2.17															<1	<8	5.9	<2	11	<2	11																
DAPTLR	2/27/04	DF																			<1	<8	3.7	<2	9	<2	12																
DAPTLR	5/21/04	DT																																									
DAPTLR	5/24/04	DT					4.8	46900	8.1	<0.44	<0.05	0.24	0.123	<0.01	11	<10	<5	<5	<5	<5	<1	<8	5.7	<2	7.9	<2	<10																
DAPTLR	6/2/04	DT	52240	8.1	21.16	7.86	2	46700	8.1	<0.44	<0.05	0.2	<0.0305	0.012	<10	<10	<5	<5	<5	<5	<1	<8	8.6	<2	9.5	<2	14																
DAPTLR	6/2/04	DF																			<1	<8	8.6	<2	9.5	<2	14																
DAPTWB	12/11/03	DT	51052	8.07	15.57	9.35	3.7	48800	8	<0.44	0.061	0.64	<0.0305	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	24	<2	6.7	<2	33																
DAPTWB	12/11/03	DF																			<1	<8	10	<2	7.7	<2	27																
DAPTWB	2/25/04	DT	43090	8.11	14.49	3.62																																					
DAPTWB	2/27/04	DT	52355	7.99	14.64	2.35															<1	<8	6.4	<2	12	<2	19																
DAPTWB	2/27/04	DF																			<1	<8	6.9	<2	10	<2	20																
DAPTWB	5/21/04	DT																																									
DAPTWB	5/24/04	DT					3.6	46700	8.1	<0.44	<0.05	0.2	0.123	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	15	<2	9.3	<2	40																
DAPTWB	6/2/04	DT	52190	8.06	20.7	7.98	1.3	46700	8.1	<0.44	<0.05	0.23	<0.0305	0.011	<10	<10	<5	<5	<5	<5	<1	<8	11	<2	8.9	<2	19																
DAPTWB	6/2/04	DF																			<1	<8	11	<2	8.9	<2	19																
LB-2	1/21/04	ST	3043	8.08	17.49	11.05	5.2	3080	8.1	6.6	<0.05	0.88	0.829	0.254	<10	<10	<5	<5	<5	<5	<1	<8	9.2	<2	<4	<2	27			560													
LB-2	1/21/04	SF	3043	8.08	17.49	11.05															<1	<8	6.3	<2	<4	<2	32			560													

		Type					Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion										Hardness as CaCO ₃														
			Field Measurements																																									
Location	Date		EC	pH	TEMP	DO																															Cd	Cr	Cu	Pb	Ni	Ag	Zn	As
LB-2	1/28/04	DT					6.1	2710	8	7.5	<0.05	1.1	0.952	0.289	<10	<10	<5	<5	<5	<5	<1	<8	15	<2	<4	<2	26																	
LB-2	1/28/04	DF																			<1	<8	17	<2	<4	<2	29																	
LB-2	2/3/04	DT																			<1	<8	6.4	<2	<4	<2	22																	
LB-2	2/3/04	DF																			<1	<8	8.2	<2	<4	<2	34																	
LB-2	4/13/04	DT	2534	7.79	18.17	9.16	1.9	3020	8	5.3	<0.05	1.3	1.47	0.403	<10	<10	<5	<5	<5	<5										524														
LB-3	1/21/04	ST	17875	8.24	13.19	11.37	1.5	19940	8.2	0.62	<0.05	0.38	0.215	0.095	<10	<10	<5	<5	<5	<5	<1	<8	2.2	<2	6.5	<2	18			2496														
LB-3	1/21/04	SF	17875	8.24	13.19	11.37															<1	<8	2.7	<2	7.6	<2	27			2496														
LB-3	1/28/04	DT					4.2	2530	8.6	0.97	<0.05	0.48	0.338	0.095	<10	<10	<5	<5	<5	<5	<1	<8	3.2	<2	<4	<2	25																	
LB-3	1/28/04	DF																			<1	<8	3.2	<2	<4	<2	19																	
LB-3	2/3/04	DT																			<1	<8	4.2	<2	<4	<2	<10																	
LB-3	2/3/04	DF																			<1	<8	3.3	<2	<4	<2	15																	
LB-3	4/13/04	DT	3006	8.31	16.28	12.3	0.9	3010	8.2	0.75	<0.05	0.68	0.123	0.08	<10	<10	<5	<5	<5	<5									824															
SCM-1	7/30/03	DT	411	7.82	22.12	8.86	82	449	7.2	7.9	0.943	3.5	1.93	0.336	140	27	239	<5	<5	2310	<1	11	40	5.4	17	<2	160			102														
SCM-1	7/30/03	DF																			<1	<8	21	<2	5.9	<2	100																	
SCM-1	1/21/04	ST	3635	7.78	14.02	12.53	10	4070	7.9	15	0.114	1.5	1.17	0.14	11	<10	217	<5	<5	163	3.8	<8	13	<2	29	<2	48			1136														
SCM-1	1/21/04	SF	3635	7.78	14.02	12.53															1.7	<8	8.9	<2	30	<2	46			1136														
SCM-1	1/28/04	DT					9.1	2340	7.9	9.7	0.066	0.98	1.01	0.275	<10	<10	175	<5	<5	244	<1	<8	5.8	<2	9.9	<2	15																	
SCM-1	1/28/04	DF																			<1	<8	6.1	<2	11	<2	38																	
SCM-1	2/3/04	DT																			<1	<8	6.5	<2	12	<2	20																	
SCM-1	2/3/04	DF																			<1	<8	4.4	<2	11	<2	48																	
SCM-1	4/2/04	DT					6.5	3340	7.5	16	0.176	1.7	1.32	0.324	10	<10	52.7	<5	<5	211	1.5	<8	11	<2	19	<2	39																	
SCM-1	4/2/04	DF																			1.2	<8	9.5	<2	19	<2	63																	
SCM-1	4/13/04	DT	3582	7.76	16.46	9.85	5.9	4010	8	0.88	<0.05	0.65	0.154	0.037	13	<10	31.2	<5	<5	<5									1142															
SJC-1	7/30/03	DT	3845	7.45	23.25	6.54	41	4390	7.6	4.8	0.328	2	0.857	0.117	64	14	76	<5	<5	482	1.5	<8	9.5	2.8	7.6	<2	57			758														
SJC-1	7/30/03	DF																			<1	<8	3.5	<2	5.7	<2	78																	
SJC-1	1/21/04	ST	2461	8.17	13.91	14.61	1.4	2330	8.2	1.4	<0.05	0.49	0.338	<0.01	<10	<10	<5	<5	<5	<5	1.6	<8	<2	<2	14	<2	<10			748														
SJC-1	1/21/04	SF	2461	8.17	13.91	14.61															1.6	<8	8.7	<2	14	<2	24			748														
SJC-1	1/28/04	DT					4.9	2320	7.8	2.5	<0.05	0.63	0.0921	0.014	<10	<10	85.7	<5	<5	256	<1	<8	2.2	<2	<4	<2	<10																	
SJC-1	1/28/04	DF																			<1	<8	3.5	<2	<4	<2	33																	

Table C-11.15. Toxicity Test Results for Mass Loading Stations

Station	Event	Chronic Sea Urchin Fertilization			Chronic Sea Urchin Development			Chronic Mysidopsis Bahia Survival and Growth						Storm Sample
		NOEC	96 hr IC50	TUc	NOEC	96 hr IC50	TUc	Survival			Growth			
								NOEC	96hr IC50	TUa	NOEC	96hr IC50	Tuc	
ACJ01	11/1/03	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	FF
ACJ01	11/13/03	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	SNA
ACJ01	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.51	100.00	>100.00	1.00	SF
ACJ01	2/18/04	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	0.23	100.00	>100.00	1.00	SF
LCWI02	11/1/03	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	FF-NR
LCWI02	11/13/03	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	SF-NR
LCWI02	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	80.44	1.24	100.00	>100.00	1.00	SF
LCWI02	2/18/04	50.00	>100.00	2.00	50.00	>100.00	2.00	100.00	>100.00	0.65	100.00	>100.00	1.00	SF
PDCM01	11/1/03	25.00	73.89	4.00	50.00	>100.00	2.00	<50.00	33.93	2.95	<50.00	73.11	>2.00	FF
PDCM01	11/13/03	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	SNA
PDCM01	2/3/04	50.00	>100.00	2.00	50.00	>100.00	2.00	50.00	100.00	1.00	100.00	>100.00	1.00	SF
PDCM01	2/18/04	12.50	72.69	8.00	50.00	80.14	2.00	100.00	>100.00	0.00	100.00	>100.00	1.00	SF
SJNL01	11/1/03	50.00	>100.00	2.00	100.00	>100.00	1.00	<50.00	58.70	1.70	50.00	75.00	2.00	FF
SJNL01	11/13/03	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	1.00	SF
SJNL01	2/3/04	100.00	>100.00	1.00	100.00	>100.00	1.00	50.00	95.46	1.05	100.00	>100.00	1.00	SF
SJNL01	2/18/04	50.00	>100.00	2.00	100.00	>100.00	1.00	50.00	>100.00	0.65	500.00	>100.00	2.00	SF
TCOL02	11/1/03	25.00	61.04	4.00	100.00	>100.00	1.00	50.00	>100.00	0.89	100.00	>100.00	1.00	FF
TCOL02	11/13/03	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	1.00	100.00	>100.00	1.00	SF
TCOL02	2/3/04	50.00	>100.00	2.00	100.00	>100.00	1.00	100.00	>100.00	0.87	100.00	>100.00	1.00	SF
TCOL02	2/18/04	25.00	80.92	4.00	100.00	>100.00	1.00	100.00	>100.00	0.41	100.00	>100.00	1.00	SF

Table C-11.8. Stream Bioassessment Monitoring Sites

Stream Bioassessment Monitoring Sites, Orange County

Hydrologic Unit	Station Designation	Location	Station Coordinates	Elevation
San Mateo	CC-CR	Christianitos Creek at Christianitos Road	33° 27.996' 117° 34.085'	240
San Clemente	SD-AP	Segunda Descheca upstream of Avenida Presidio	33° 26.618' 117° 36.918'	110
San Juan Creek	TC-AP	Trabuco Creek at the end of Avery Parkway	33° 32.385' 117° 39.783'	230
	TC-DO	Trabuco Creek at Del Obispo Rd.	33° 29.865' 117° 39.966'	80
	SJC-74	San Juan Creek at Highway 74	33° 31.156' 117° 37.514'	160
	SJC-CC	San Juan Creek between Camino Capistrano and I-5	33° 29.519' 117° 39.774'	70
Dana Point	SC-MB	Salt Creek at Monarch Beach Golf Links	33° 28.991' 117° 43.204'	60
Aliso Creek	AC-CCR	Aliso Creek at Country Club Rd	33° 30.749' 117° 44.959'	15
	ACJ01	Aliso Creek in Aliso/Woods Canyon Park	33° 32.610' 117° 43.950'	75
	AC-PPD	Aliso Creek at Pacific Park Dr.	33° 34.369' 117° 42.984'	195
	EC-MD	English Creek at Madero Dr.	33° 37.650' 117° 40.823'	430
Laguna	LC-133	Laguna Canyon Creek along Highway 133	33° 34.421' 117° 45.786'	175
Reference Sites	REF-CS	San Juan Creek at Cold Spring	33° 34.967' 117° 31.409'	605
	REF-BC [†]	Bell Creek in the Starr Ranch Audubon Sanctuary	33° 38.168' 117° 33.349'	1015
	REF-TCAS	Arroyo Trabuco upstream of Alder Spring	33° 40.451' 117° 32.058'	1510
	REF-SVC*	Silverado Canyon downstream of Belha Way	33° 44.751' 117° 36.092'	1590

*Site sampled in October 2003 only

[†] Site sampled in May 2004 only

Table C-11.9. Toxicity Test Results for the 2003 / 2004 Bioassessment Sampling Periods

Station	Date	Acute Hyallella Azteca Survival		Chronic Selenastrum Algae Growth			Chronic Ceriodaphnia Survival and Reproduction					
		96-hr		96-hr			7-day Survival			7-day Reproduction		
		% survival in 100%	TUa	NOEC	IC50	TUc	NOEC	IC50	TUa	NOEC	IC50	TUc
ACJ01	10/15/03	85	0.69	100.00	>100.00	1.00	50.00	87.50	1.09	50.00	78.08	2.00
AC-CCR	10/23/03	90	0.59	100.00	>100.00	1.00	100.00	>100.00	0.59	100.00	>100.00	1.00
AC-PPD	10/15/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.59	<50.00	>100.00	>2.00
CC-CR	10/28/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.00	100.00	>100.00	1.00
EC-MD	10/15/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.59	<50.00	>100.00	>2.00
LC-133	10/24/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
REF-CS	10/28/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
SC-MB	10/15/03	45	1.02	100.00	>100.00	1.00	100.00	>100.00	0	50.00	>100.00	2.00
SD-AP	10/10/03											
SJC-CC	10/10/03											
SJC-74	10/28/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
TC-AP	10/28/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
TC-DO												
REF-TCAS	10/23/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.59	50.00	88.24	2.00
REF-SVC	10/23/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.77	100.00	>100.00	1.00

ACJ01	5/26/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.77	100.00	>100.00	1.00
AC-CCR	5/25/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.77	100.00	>100.00	1.00
AC-PPD	5/26/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
CC-CR	5/13/04	95	0.41	NS	NS	NS	100.00	>100.00	0	100.00	>100.00	1.00
EC-MD	5/25/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
LC-133	5/25/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
REF-BC	5/5/04	100	0.00	NA	NA	NA	100.00	>100.00	0	100.00	>100.00	1.00
REF-CS	5/26/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
REF-TCAS	5/5/04	100	0.00	NA	NA	NA	100.00	>100.00	0	100.00	>100.00	1.00
SC-MB	5/25/04	95	0.41	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
SD-AP	5/13/04	100	0.00	NA	NA	NA	50.00	>100.00	0	50.00	80.37	2.00
SJC-CC	5/13/04	100	0.00	NA	NA	NA	100.00	>100.00	0	100.00	>100.00	1.00
SJC-74	5/26/04	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
TC-AP	5/5/04	100	0.00	NA	NA	NA	100.00	>100.00	0	100.00	>100.00	1.00
TC-DO	5/13/04	100	0.00	NA	NA	NA	100.00	>100.00	0	100.00	>100.00	1.00

Table C-11.10. Toxicity Test Results for the Spring (June) 2003 Bioassessment Sampling Period

Station	Date	Acute Hyallella Azteca Survival		Chronic Selenastrum Algae Growth			Chronic Ceriodaphnia Survival and Reproduction					
		96-hr		96-hr			7-day Survival			7-day Reproduction		
		% survival in 100%	TUa	NOEC	IC50	TUc	NOEC	IC50	TUa	NOEC	IC50	TUc
ACJ01	6/12/03	90	0.59	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
AC-CCR	6/25/03	95	0.41	100.00	>100.00	1.00	100.00	>100.00	0.77	100.00	>100.00	1.00
AC-PPD	6/12/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
CC-CR	6/17/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
LC-133	6/25/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
PD-CGV	6/10/03	100	0.00	100.00	>100.00	1.00	25.00	33.33	1.18	12.50	31.81	8.00
REF-BC	6/10/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0.59	100.00	>100.00	1.00
REF-CS	6/18/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
REF-TCAS	6/18/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
SC-MB	6/25/03	90	0.59	100.00	>100.00	1.00	50.00	74.14	1.18	50.00	70.47	2.00
SD-AP	6/10/03	100	0.00	100.00	>100.00	1.00	50.00	66.67	1.18	12.50	23.53	8.00
SJC-CC	6/12/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
SJC-74	6/25/03	95	0.41	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
TC-AP	6/17/03	100	0.00	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00
TC-DO	6/12/03	95	0.41	100.00	>100.00	1.00	100.00	>100.00	0	100.00	>100.00	1.00

Table C-11.11. Chemistry Sampling Results for the Bioassessment Sampling Periods

Location	Date	Type	Field Measurements				Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as CaCO ₃	
			EC	pH	TEMP	DO																									
			μS		C	mg/L	NTU	μS		mg/L							ng/L				μg/L								mg/L		
AC-CCR	10/23/2003	DT	3183	8.4	20.1	8.9	12	3310	8.4	6.6	0.074	0.91	0.952	0.237	25	<10	<5	<5	<5	<5	<1	<8	<2	3.6	13	<2	<10				
AC-CCR	10/23/2003	DF																			<1	<8	8.3	4.4	12	<2	11				
AC-CCR	5/25/2004	DT	3156	7.9	19.74	7.15	2.3	3060	8.2	0.92	<0.05	0.69	0.645	0.162	<10	<10	28.4	<5	<5	<5	<1	<8	3.3	<2	19	<2	12				1048
AC-CCR	5/25/2004	DF																			<1	<8	2.2	<2	17	<2	40				
ACJ01	10/15/2003	DT	3279	8.17	20.81	10.04	3.8	3370	8.1	7.5	0.053	1	0.921	0.278	<10	<10	67.9	<5	<5	<5	2.2	<8	3.7	<2	26	<2	11				
ACJ01	10/15/2003	DF	3279	8.17	20.81	10.04															1.5	<8	2.1	<2	24	<2	22				
ACJ01	5/26/2004	DT					1.7	3150	8.2	4.4	<0.05	1.1	1.01	0.26	<10	<10	18.5	<5	<5	<5	2.1	<8	3.1	3	25	<2	23				
ACJ01	5/26/2004	DF																			<1	<8	<2	<2	<4	<2	18				
ACJ01	10/5/2004	DT					1.1	2670	8.1	5.7	0.059	0.6	1.11	0.36	<10	<10	28.5	<5	<5	<5											
AC-PPD	10/15/2003	DT					4.2	2840	8.1	4.8	0.157	0.99	0.522	0.121	<10	<10	104	<5	<5	<5	<1	<8	3	<2	<4	<2	<10				
AC-PPD	10/15/2003	DF																			<1	<8	3	<2	4.2	<2	20				
AC-PPD	5/26/2004	DT					1.6	2750	8.1	3.1	<0.05	0.69	0.491	0.108	<10	<10	13.3	<5	<5	<5	<1	<8	3.6	<2	7.1	<2	26				
AC-PPD	5/26/2004	DF																			<1	<8	2.5	<2	24	<2	31				
AC-PPD	10/5/2004	DT					1.9	2300	8.1	3.7	0.1	0.64	0.583	0.17	<10	<10	17.8	<5	<5	<5											
CC-CR	10/28/2003	DT	990	7.8	13.4	10.2	12	1290	7.9	<0.44	<0.05	0.25	<0.0305	<0.01	50	11	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10				
CC-CR	10/28/2003	DF																			<1	<8	<2	<2	<4	<2	<10				
CC-CR	5/13/2004	DT					7.6	1350	7.8	<0.44	<0.05	0.47	0.0307	<0.01	26	<10	<5	<5	<5	<5	<1	<8	3.8	<2	<4	<2	17				
CC-CR	5/13/2004	DF																			<1	<8	2.2	<2	<4	<2	44				
EC-MD	10/15/2003	DT	1929	8.53	20.27	11.54	3.7	1990	8.5	3.8	0.122	1.1	0.645	0.176	<10	<10	13.5	<5	<5	<5	<1	<8	2.4	<2	<4	<2	<10				
EC-MD	10/15/2003	DF	1929	8.53	20.27	11.54															<1	<8	2.1	<2	<4	<2	15				
EC-MD	5/25/2004	DT	2071	8.53	17.43	12.39	0.75	2040	8.5	<0.44	<0.05	0.74	0.43	0.11	<10	<10	29.7	<5	<5	<5	<1	<8	3.8	<2	6.5	<2	13				616
EC-MD	5/25/2004	DF																			<1	<8	3.1	<2	6.1	<2	25				
EC-MD	10/5/2004	DT					2.7	1730	8.2	<0.44	<0.05	0.38	0.645	0.19	11	<10	<5	<5	<5	<5	<1	<8	4.2	<2	<4	<2	<10				
LC-133	10/23/2003	DT	1516	8	18.4	7	7.7	2000	8.1	0.88	<0.05	0.48	0.768	0.215	13	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10				
LC-133	10/23/2003	DF																			<1	<8	<2	<2	<4	<2	<10				
LC-133	5/25/2004	DT	1929	7.91	16.77	7.29	2.2	1880	8	0.66	<0.05	0.49	0.829	0.222	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	4.4	<2	<10				616
LC-133	5/25/2004	DF																			<1	<8	3.5	<2	4.1	<2	39				
REF-BC	5/5/2004	DT					0.4	824	8	<0.44	<0.05	<0.2	0.0921	0.016	<10	<10	<5	<5	<5	<5	<1	<8	2	<2	<4	<2	18				
REF-BC	5/5/2004	DF																			<1	<8	2.6	<2	<4	<2	41				
REF-BC	10/5/2004	DT					1.1	782	7.5	<0.44	<0.05	<0.2	0.089	<0.01	<10	<10	<5	<5	<5	<5											
REF-CS	10/28/2003	DT	603	8.6	17.8	10.9	2.2	617	8.4	<0.44	<0.05	0.26	0.154	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10				
REF-CS	10/28/2003	DF																			<1	<8	<2	<2	<4	<2	<10				

Location	Date	Type	Field Measurements				Turbidity	Specific Conductance	pH	Nitrate as NO ₃	Ammonia as N	TKN	Tot Phosphate as PO ₄	Ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as CaCO ₃
			EC	pH	TEMP	DO																								
REF-CS	5/26/2004	DT					110	621	8.1	<0.44	<0.05	<0.2	0.0614	<0.01	520	140	<5	<5	<5	37.5	<1	<8	<2	<2	<4	<2	17			
REF-CS	5/26/2004	DF																			<1	<8	<2	<2	<4	<2	<10			
REF-SVC	10/23/2003	DT	1093	8.2	16.2	8.3	1.5	1270	8.2	<0.44	<0.05	0.31	<0.0305	0.011	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	14			
REF-SVC	10/23/2003	DF																			<1	<8	<2	<2	<4	<2	10			
REF-TCAS	10/23/2003	DT	834	7.9	15.2	7.5	1	858	8	<0.44	<0.05	<0.2	0.184	0.013	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			
REF-TCAS	10/23/2003	DF																			<1	<8	<2	3.8	<4	<2	<10			
REF-TCAS	5/5/2004	DT					0.35	664	8.2	<0.44	<0.05	<0.2	<0.0305	0.142	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			
REF-TCAS	5/5/2004	DF																			<1	<8	2	<2	<4	<2	29			
SC-MB	10/15/2003	DT	3543	7.99	18.97	9.38	33	3660	8.1	7.9	0.231	1.8	2.67	0.577	63	11	159	<5	<5	<5	<1	<8	7.2	<2	11	<2	14			
SC-MB	10/15/2003	DF	3543	7.99	18.97	9.38															<1	<8	4.7	<2	10	<2	23			
SC-MB	5/25/2004	DT	3583	7.79	17.42	8.06	7.4	3490	7.9	7.9	0.17	1.7	1.81	0.5	14	<10	67.6	<5	<5	<5	<1	<8	8.5	3.3	13	<2	25			1136
SC-MB	5/25/2004	DF																			<1	<8	5.7	<2	12	<2	51			
SD-AP	10/10/2003	DT	4743	8	17.8	8.49	6.2	4800	8.1	12	<0.05	1.4	1.63	0.485	18	<10	48.6	<5	<5	<5	2	<8	4.7	<2	34	<2	<10			1430
SD-AP	10/10/2003	DF																			<1	<8	3.7	<2	33	<2	12			
SD-AP	5/13/2004	DT					4.5	4960	8	7.5	<0.05	1.4	0.952	0.233	15	<10	<5	<5	<5	<5	2.7	<8	4.3	<2	57	<2	16			
SD-AP	5/13/2004	DF																			2	<8	5	<2	47	<2	57			
SD-AP	10/4/2004	DT					0.8	4910	8.1	13	<0.05	0.83	1.23	0.4	<10	<10	83.5	<5	<5	<5										
SD-AP	10/4/2004	DF	4133	8.12	14.19	14.38																								1564
SJC-74	10/28/2003	DT	1712	7.28	19.79	6.68	5.4	1730	7.2	<0.44	<0.05	0.32	0.491	0.037	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			
SJC-74	10/28/2003	DF																			<1	<8	<2	<2	<4	<2	<10			
SJC-74	5/26/2004	DT					13	1520	7.4	<0.44	<0.05	0.42	0.675	0.013	23	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	29			
SJC-74	5/26/2004	DF																			<1	<8	15	<2	<4	<2	32			
SJC-CC	10/10/2003	DT	2462	7.45	19.03	6	7.3	2440	7.2	1.3	0.071	0.84	0.276	<0.01	<10	<10	22.7	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			798
SJC-CC	10/10/2003	DF																			<1	<8	<2	<2	<4	<2	<10			
SJC-CC	5/13/2004	DT					9.1	2420	7.4	1.3	0.072	0.58	0.215	0.024	<10	<10	<5	<5	<5	<5	<1	<8	2.6	<2	8.4	<2	16			
SJC-CC	5/13/2004	DF																			<1	<8	4.1	<2	11	<2	49			
TC-AP	10/28/2003	DT	1179	8.2	15.27	9.5	7.1	1220	8.2	<0.44	<0.05	0.27	0.276	0.068	20	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			
TC-AP	10/28/2003	DF																			<1	<8	<2	7.9	<4	<2	<10			
TC-AP	5/5/2004	DT					2.6	1170	8	<0.44	<0.05	0.3	0.399	0.087	<10	<10	<5	<5	<5	<5	<1	<8	<2	<2	<4	<2	<10			
TC-AP	5/5/2004	DF																			<1	<8	<2	<2	<4	<2	36			
TC-AP	10/4/2004	DT	1134	8.03	18.42	15.38	1.7	1270	8.2	<0.44	<0.05	<0.2	0.0921	0.076	<10	<10	<5	<5	<5	<5										464
TC-AP	10/4/2004	DF	1134	8.03	18.42	15.36																								464
TC-DO	10/10/2003	DT	2298	8.23	20.04	11.55	1.3	2300	8.2	<0.44	<0.05	0.56	<0.0305	<0.01	<10	<10	28.1	<5	<5	<5	<1	<8	2.2	<2	<4	<2	<10			810
TC-DO	10/10/2003	DF																			<1	<8	3.2	<2	<4	<2	<10			
TC-DO	5/13/2004	DT					0.7	3050	8.7	<0.44	0.061	0.94	<0.0305	<0.01	<10	<10	<5	<5	<5	<5	<1	<8	3.2	<2	8.6	<2	<10			
TC-DO	5/13/2004	DF																			<1	<8	6.2	<2	8.7	<2	19			

Table C-11.12. Mass Loads from Sampled Storms 2003-2004

Station	Period	Weather	Volume	Type	Nitrate	NH ₃	Total		Ortho	TSS	VSS	Cd	Cr	Cu	Pb	Ni	Ag	Zn	Hardness		
			Sampled		As	NO ₃	as N	TKN	as PO ₄										as P	as CaCO ₃	as CaCO ₃
			ac-ft		lbs														tons	lbs	
ACJ01	Nov 1-5, 2003	Storm	142Total	3538	183	1295	840	128	24.53	5.33	2.2	1.5	9.6	1.5	14.4	0.4	36.6	137.8			
			Dissolved									0.2	1.5	2.9	0.4	9.8	0.4	8.2			
	Feb 3-7, 2004	Storm	390Total								2.9	4.2	19.7	5.5	23.1	1.1	99.7	244.3			
			Dissolved									0.6	4.2	7.2	1.1	13.6	1.1	79.1			
	Feb 18-24, 2004	Storm	1667Total	22,509	439	5381	6542	1118	242.1	39.28	10.4	35.4	84.4	15.7	93.8	4.5	273.5	801.1			
			Dissolved									2.3	18.1	26.9	4.5	62.6	5.5	339.2			
SJNL01	Nov 1-5, 2003	Storm	3Total	28	2	43	20	1	2.03	0.40	0	0.1	0.6	0.1	0.2	0	1	2.181			
			Dissolved									0	0	0	0	0.1	0	0			
	Nov 12-15, 2003	Storm	1Total	3	0	3	4	0	0.037	0.012	0	0	0	0	0	0	0	0.881			
			Dissolved										0	0	0	0	0	0.1			
	Feb 2-6, 2004	Storm	83Total	1308	6	156	150	34	3.04	0.86	0.1	0.9	1	0.2	0.5	0.2	1.1	45.96			
			Dissolved									0.1	0.9	1.3	0.2	0.5	0.2	2.7			
	Feb 18-22, 2004	Storm	46Total	562	2	92	90	17	3.04	0.63	0.1	0.5	1.9	0.5	0.5	0.2	4.4	23.95			
			Dissolved									0.1	0.5	1	0.1	0.3	0.1	6.7			
	TCOL02	Nov 12-15, 2003	Storm	70Total	861	5	175	147	19	4.47	0.79	0.1	0.8	1.7	0.2	1.4	0.2	3.2	75.39		
				Dissolved									0.1	0.8	1.1	0.2	1.1	0.2	3.7		
Feb 3-6, 2004		Storm	172Total	1873	25	478	401	44	38.8	4.54	0.5	3.3	5.5	1.4	4.5	0.5	17.7	83.79			
			Dissolved									0.2	1.9	1.6	0.5	1.4	0.5	2.3			
Feb 18-22, 2004		Storm	353Total	3925	58	1160	1628	120	267.6	20.6	1.6	12.2	20.2	4.7	15.8	1.4	63.2	160.3			
			Dissolved									0.5	3.8	5.4	1	4.9	1	46.8			

Table 11-13. Flow-Weighted Event Mean Concentrations for Sampled Storms 2003-2004

Station	Period	Volume Sampled ac-ft	Nitrate as NO ₃	NH ₃ as N	TKN	Total	Ortho	Total Recoverable Metals								
						Phos. as PO ₄	Phos. as P	TSS	VSS	Cd	Cr	Cu	Pb	Ni	Ag	Zn
						mg/L				µg/L						
ACJ01	Nov 1-5, 2003	142	9.17	0.47	3.36	2.18	0.33	127	28	5.7	3.9	24.9	3.9	37.3	1.04	94.8
	Feb 18-24, 2004	1667	4.97	0.10	1.19	1.44	0.25	107	17	2.3	7.8	18.6	3.5	20.7	0.99	60.4
SJNL01	Nov 1-5, 2003	3	3.43	0.25	5.27	2.45	0.12	499	98	0.0	12.3	73.6	12.3	24.5	0.00	123
	Feb 2-6, 2004	83	5.80	0.03	0.69	0.66	0.15	29	8	0.4	4.0	4.4	0.9	2.2	0.89	4.9
	Feb 18-22, 2004	46	4.49	0.02	0.74	0.72	0.14	49	10	0.8	4.0	15.2	4.0	4.0	1.60	35.2
TCOL02	Nov 12-15, 2003	70	4.53	0.03	0.92	0.77	0.10	47	8	0.5	4.2	8.9	1.1	7.4	1.05	16.8
	Feb 3-6, 2004	172	4.01	0.05	1.02	0.86	0.09	166	19	1.1	7.1	11.8	3.0	9.6	1.07	37.9
	Feb 18-22, 2004	353	4.09	0.06	1.21	1.70	0.13	558	43	1.7	12.7	21.1	4.9	16.5	1.46	65.9