Table C-11.1 - Applicable Water Quality Guidance for the Protection of Aquatic Life

Water Quality Measurement	California Toxics Rule (CTR) Freshwater dissolved metals H=ln(water hardness in mg/L as $CaCO_3$)	CTR Saltwater Dissolved metals	Ocean Plan Toxic Mat. Limits Total metals	Region 8/9 Basin Plans
Lead ug/L H=ln Hardness	4 day =[1.462-0.146H][exp(1.273H-4.705)] 1 hour =[1.462-0.146H][exp(1.273H-1.460)]	4day = 8.1 1hr = 210	Daily max = 8 Inst. max = 20	
Cadmium ug/L	4 day = [1.107-0.042H][exp(0.7852H-2.715)] 1 hour = [1.137-0.042H][exp(1.128H-3.6867)]	4day = 9.3 1hr =42	Daily max = 4 Inst. max = 10	
Hexavalent Chromium ug/L		4day = 50 1hr = 1100	Daily max = 8 Inst. max = 20	
Nickel ug/L	4 day = 0.997[exp(0.846H+0.0584)] 1 hour = 0.998[exp(0.846H + 2.255)]	4day = 8.2 1hr = 74	Daily max = 50 Inst. max = 20	
Copper ug/L	4 day = 0.96[exp(0.8545H-1.702)] 1 hour = 0.96[exp(0.9422H-1.70)]	4day = 3.1 1hr = 4.8	Daily max = 12 Inst. max = 30	
Silver ug/L	1 hour = 0.85[exp(1.72H-6.52)]	1hr = 1.9	Daily max = 2.8 Inst. max = 7	
Zinc ug/L	4 day = 0.986[exp(0.8473H+0.884)] 1 hour = 0.978[exp(0.8473H+0.884)]	4 day = 81 1 hr = 90	Daily max = 80 Inst. max = 200	
Selenium ug/L	4 day = 5 (total recoverable)	4 day = 71 1 hr = 290	Daily max = 60 Inst. max = 150	
Mercury			Daily max = 0.16 Inst. max = 0.4	
Turbidity				Natural — Max. increase 0-50 NTU — 20% over natural 50-100 NTU — 10 NTU >100 NTU — 10% over natural
pH				6.5 - 8.5 freshwater 7.0 - 9.0 saltwater (SDR) 7.0 - 8.5 saltwater (SAR)
Dissolved Oxygen				>5.0 mg/L MAR & WARM >6.0 mg/L COLD
Unionized Ammonia*				SDR = 0.025 in receiving waters SAR (See below)

$$\text{* [Unionized Ammonia]} = \frac{[NH_4\text{-}N]+[NH_3\text{-}N]}{1+10^{(pKa-pH)}} \quad \text{where} \quad pka = 0.09018 + \frac{2729.92}{T}$$

T= degrees Kelvin = C+273.16

SAR Unionized Ammonia (UIA) Criteria for waterbodies designated as WARM

Acute Objective = 0.822[0.87/FT/FPH/2] where

$FT = 10^{0.03(20-T)}$ $0 \le T \le 25^oC$

$FT = 0.7079$ $25 \le T \le 30^oC$

$FHP = [1+10^{(7.4-pH)}]/1.25$ $6.5 \le pH \le 9$

$FHP = 1$ $8 \le pH \le 9$

Chronic Objective = 0.822[0.87/FT/FHP/RATIO] where

$FT = 10^{0.03(20-T)}$ $0 \le T \le 20^oC$

$FT = 1$ $20 \le T \le 30^oC$

$FHP = [1+10^{(7.4-pH)}]/1.25$ $6.5 \le pH \le 8$

$FHP = 1$ $8 \le pH \le 9$

$$RATIO = \frac{24[10^{(7.7-pH)}]}{1+10^{(7.4-pH)}}$$ $6.5 \le pH \le 7.7$

$RATIO = 13.5$ $7.7 \le pH \le 9$

Table C-11.2 - Applicable Sediment Quality Guidelines for the Protection of Marine Aquatic Life

NOAA's Screening Concentrations

Metals (ppm) dry weight	ER-L	ER-M
Cadmium	1.2	9.6
Chromium	81	370
Copper	34	270
Lead	46.7	218
Mercury	0.15	0.71
Nickel	20.9	51.6
Silver	1.0	3.7
Zinc	150	410
Organics (ppb) dry weight		
Acenaphthene	16	500
Acenaphthylene	44	640
Anthracene	85.3	1100
Fluorene	19	540
2-Methyl naphthalene	70	670
Naphthalene	160	2100
Phenanthrene	240	1500
Low molecular weight PAHs	552	3160
Benzo(a)anthracene	261	1600
Benzo(a)pyrene	430	1600
Chrysene	384	2800
Dibenzo(a,h)anthracene	63.4	260
Fluoranthene	600	5100
Pyrene	665	2600
High molecular weight PAHs	1700	9600
Total PAHs	4022	44792
Chlordane	0.05	6
p,p' –DDD	2	20
p,p' –DDE	2.2	27
p,p' –DDT	1	7
Total DDT	1.58	46.1
Dieldrin	0.02	8.0
Total PCBs	22.7	180

ER-L - Effects Range Low

The ERL represents the concentration corresponding to the 10th percentile in toxicity testing. No effects are likely below the ER-L.

ER-M - Effects Range Median

The ERM represents the concentration corresponding to the 50th percentile or median value. Effects are likely above the ER-M.

SCCWRP Iron Normalization Regression Coefficients

Iron (% dry) Versus	Sample Size	r^2	Slope (m)	Intercept (b)	± 99% Prediction Interval
Cadmium (mg/dry g)	83	0.734	0.0978	0.0055	0.1274
Chromium (mg/dry g)	88	0.882	16.50	-0.021	11.56
Copper (mg/dry g)	96	0.833	7.40	-2.01	6.50
Lead (mg/dry g)	103	0.738	4.350	0.0836	5.199
Nickel (mg/dry g)	110	0.533	9.850	-0.407	19.596
Silver (mg/dry g)	99	0.581	0.0795	-0.0183	0.1426
Zinc (mg/dry g)	88	0.967	31.50	-1.95	15.45

Table C-11.3 - IBI Metrics Used to Characterize Communities

Metric	Description	Response to Impairment
Richness Measures		
Taxa Richness	Total number of individual taxa	Decrease
EPT Taxa	Number of taxa in the Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect orders	Decrease
Ephemeroptera Taxa	Number of taxa in the insect order Ephemeroptera (mayflies)	Decrease
Plecoptera Taxa	Number of taxa in the insect order Plecoptera (stoneflies)	Decrease
Trichoptera Taxa	Number of taxa in the insect order Trichoptera (caddisflies)	Decrease
Composition Measures		
EPT Index	Percent composition of mayfly, stonefly, and caddisfly larvae	Decrease
Sensitive EPT Index	Percent composition of mayfly, stonefly, and caddisfly larvae with tolerance values between 0 and 3	Decrease
Shannon Diversity	General measure of sample diversity that incorporates richness and evenness (Shannon and Weaver 1963)	Decrease
Tolerance/Intolerance Measures		
Tolerance Value	Value between 0 and 10 weighted for abundance of individuals designated as pollution tolerant (higher values) or intolerant (lower values)	Increase
Percent Intolerant Organisms	Percent of organisms in sample that are highly intolerant to impairment as indicated by a tolerance value of 0, 1 or 2	Decrease
Percent Tolerant Organisms	Percent of organisms in sample that are highly tolerant to impairment as indicated by a tolerance value of 8, 9 or 10	Increase
Percent Dominant Taxa	Percent composition of the single most abundant taxon	Increase
Percent Hydropsychidae	Percent of organisms in the caddisfly family Hydropsychidae	Increase
Percent Baetidae	Percent of organisms in the mayfly family Baetidae	Increase
Functional Feeding Groups (FFG)		
Percent Collector	Percent of macrobenthos that collect or gather fine particulate matter	Increase
Percent Filterers	Percent of macrobenthos that filter fine particulate matter	Increase
Percent Grazers	Percent of macrobenthos that graze upon periphyton	Variable
Percent Predators	Percent of macrobenthos that feed on other organisms	Variable
Percent Shredders	Percent of macrobenthos that shreds coarse particulate matter	Decrease
Abundance		
Estimated Abundance	Estimated number of BMIs in sample calculated by extrapolating from the proportion of organisms counted in the subsample	Variable

Table C-11.4 - IBI Scoring Ranges for the Seven Metrics Included in the IBI Values

Metric Scoring Ranges for the Southern California IBI										
Metric Score	**Coleoptera Taxa**	**EPT Taxa**		**Predator Taxa**	**% Collector Individuals**		**% Intolerant Individuals**		**% Non-Insect Taxa**	**% Tolerant Taxa**
	All Sites	**6**	**8**	**All Sites**	**6**	**8**	**6**	**8**	**All Sites**	**All Sites**
10	>5	>17	>18	>12	0-59	0-39	25-100	42-100	0-8	0-4
9		16-17	17-18	12	60-63	40-46	23-24	37-41	9-12	5-8
8	5	15	16	11	64-67	47-52	21-22	32-36	13-17	9-12
7	4	13-14	14-15	10	68-71	53-58	19-20	27-31	18-21	13-16
6		11-12	13	9	72-75	59-64	16-18	23-26	22-25	17-19
5	3	9-10	11-12	8	76-80	65-70	13-15	19-22	26-29	20-22
4	2	7-8	10	7	81-84	71-76	10-12	14-18	30-34	23-25
3		5-6	8-9	6	85-88	77-82	7-9	10-13	35-38	26-29
2	1	4	7	5	89-92	83-88	4-6	6-9	39-42	30-33
1		2-3	5-6	4	93-96	89-94	1-3	2-5	43-46	34-37
0	0	0-1	0-4	0-3	97-100	95-100	0	0-1	47-100	38-100
Cumulative IBI Scores										
Very Poor 0-19		**Poor 20-39**		**Fair 40-59**		**Good 60-79**		**Very Good 80-100**		

6 – Coastal Scrub Oak Habitat
8 – Coastal Mountains

Table C-11.5 - Decision framework for Interpreting Triad Results

	Chemistry	Toxicity	Benthic Alteration	Example Conclusions	Possible Actions or Decisions
1.	Exceedance of water quality objectives	Evidence of toxicity	Indications of alteration	Strong evidence of pollution-induced degradation	Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority
2.	No persistent exceedances of water quality objectives	No evidence of toxicity	No indications of alteration	No evidence of current pollution-induced degradation Potentially harmful pollutants not yet concentrated enough to cause visible impact	No immediate action necessary Conduct periodic broad scans for new and/or potentially harmful pollutants
3.	Exceedance of water quality objectives	No evidence of toxicity	No indications of alteration	Contaminants are not bioavailable Test organisms not sensitive to problem pollutants	TIE would not provide useful information with no evidence of toxicity Continue monitoring for toxic and benthic impacts Initiate upstream source identification as a low priority Consider whether different or additional test organisms should be evaluated
4.	No persistent exceedances of water quality objectives	Evidence of toxicity	No indications of alteration	Unmeasured contaminant(s) or conditions have the potential to cause degradation Pollutant causing toxicity at very low levels	Recheck chemical analyses; verify toxicity test results Consider additional advanced chemical analyses Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a medium priority
5.	No persistent exceedances of water quality objectives	No evidence of toxicity	Indications of alteration	Alteration may not be due to toxic contamination Test organisms not sensitive to problem pollutants	No action necessary due to toxic chemicals Initiate upstream source identification (for physical sources) as a high priority Consider whether different or additional test organisms should be evaluated

	Chemistry	Toxicity	Benthic Alteration	Example Conclusions	Possible Actions or Decisions
6.	Exceedance of water quality objectives	Evidence of toxicity	No indications of alteration	Toxic contaminants are bioavailable, but in situ effects are not demonstrable Benthic analysis not sensitive enough to detect impact Potentially harmful pollutants not yet concentrated enough to change community	Determine if chemical and toxicity tests indicate persistent degradation Recheck benthic analyses; consider additional data analyses If recheck indicates benthic alteration, perform TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority If recheck shows no effect, use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a medium priority
7.	No persistent exceedances of water quality objectives	Evidence of toxicity	Indications of alteration	Unmeasured toxic contaminants are causing degradation Pollutant causing toxicity at very low levels Benthic impact due to habitat disturbance, not toxicity	Recheck chemical analyses and consider additional advanced analyses Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority Consider potential role of physical habitat disturbance
8.	Exceedance of water quality objectives	No evidence of toxicity	Indications of alteration	Test organisms not sensitive to problem pollutants Benthic impact due to habitat disturbance, not toxicity	TIE would not provide useful information with no evidence of toxicity Initiate upstream source identification as a high priority Consider whether different or additional test organisms should be evaluated Consider potential role of physical habitat disturbance

Table C-11.6. Stream Bioassessment Monitoring Sites in 2010-11

Hydrologic Unit	Station Designation	Location	Station Coordinates	Elevation
San Mateo	CC-CR	Christianitos Creek at Christianitos Road	33.460737, -117.568457	220 ft
San Clemente	SD-AP	Segunda Descheca upstream of Avenida (updated location)	33.448610, -117.611667	117 ft
San Juan Creek	SMC01257	Tijeras Creek near Tijeras Creek Golf Club	33.60842, -117.61860	661 ft
	TC-DO	Trabuco Creek at Del Obispo Rd.	33.498103, -117.665939	82 ft
	SJC-74	San Juan Creek at Highway 74	33.519255, -117.625236	163 ft
Dana Point	SC-MB	Salt Creek near intersection of Niguel Road and Beacon Hill Way (updated location)	33.505439, -117.708978	185 ft
Aliso Creek	ACJ01	Aliso Creek in Aliso/Woods Canyon Park (updated location)	33.524120, -117.738519	45 ft
Laguna	LC-133	Laguna Canyon Creek along Highway 133 upstream of Phillips Street (updated location)	33.578536, -117.761786	212 ft
	SMC01555	Laguna Canyon Creek at Fairywood Lane	33.54999, -117.77967	69 ft
Reference Sites	REF-BC	Bell Creek in the Starr Ranch Audubon Sanctuary	33.640107, -117.553453	1087 ft
	REF-TCAS	Arroyo Trabuco upstream of Alder Spring	33.674071, -117.538337	1435 ft
	REF-FC	Freemont Creek upstream of Lake View Scenic Road	33.791019, -117.719343	792 ft

Table C-11.7
Toxicity Testing of Samples from Bioassessment Sites

			Ceriodaphnia Reproduction					Ceriodaphnia Survival					Ceriodaphnia Survival 48 Hour					Hyallela Survival 96 Hour					Hyallela Surv Sed		Selenastrum Cell Density				
			Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUa	Control	100%	NOEC	IC50	TUa	Control	Sample	Control	100%	NOEC	IC50	TUc
Station	Date	Matrix	young/adult	young/adult	%conc	%conc		%	%	%conc	%conc		%	%	%conc	%conc		%	%	%conc	%conc		%	%	Cell Dt	Cell Dt	%conc	%conc	
ACJ01	6/23/11 10:00	FW	28.5	18	<50	>100	>2	100	100	100	>100	1	100	100	100	>100	0												
ACJ01	6/23/11 10:00	SED																					92.5	97.5					
LC-133	7/11/11 8:12	FW	23.5	20	50	>100	2	100	100	100	>100	1																	
REF-BC	6/16/11 10:45	FW	24	26	100	>100	1	100	100	100	>100	1	100	100	100	>100	0	100	95	100	>100	0.41			1460250	1779750	100	>100	1
REF-FC	6/14/11 12:40	FW	24.9	10.1	<50	88.25	>2	100	100	100	>100	1	100	100	100	>100	0	100	100	100	>100	0.00			1152250	1367500	100	>100	1
REF-FC	6/14/11 12:40	SED																					92.5	95					
REF-TCAS	6/14/11 8:40	FW	19.6	20.2	100	>100	1	100	100	100	>100	1	100	100	100	>100	0	100	95	100	>100	0.41			1152250	1666750	100	>100	1
SC-MB	6/23/11 8:00	FW	27.3	28.2	100	>100	1	100	100	100	>100	1	100	100	100	>100	0	100	95	100	>100	0.41			1386250	1579500	100	>100	1
SC-MB	6/23/11 8:00	SED																					92.5	90					
SDCM02	5/16/11 8:10	SED																					87.5	82.5					
SJC-74	6/16/11 8:00	FW	22.7	25.3	100	>100	1	100	100	100	>100	1	100	100	100	>100	0												
SJC-74	6/16/11 8:00	SED																					92.5	97.5					
SMC01555	6/23/11 12:15	FW	25.2	23.7	100	>100	1	100	100	100	>100	1	100	100	100	>100	0												

Table C-11.8
Aqueous Chemistry at Bioassessment Sites

Station	Date	Type	Specific Conductance	pH	WaterTemperature	Dissolved Oxygen	Specific Conductance	pH	Turbidity	Nitrate+Nitrite as NO_3	Ammonia as N	TKN	Total Phosphorus as PO_4	OrthoPhosphate as P	TSS	VSS	DOC	Chloride	Sulfate	BOD_5	COD	OilAndGrease
			uS	SU	deg C	mg/L	uS	SU	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ACJ01	6/23/11 10:00	DT	3144	7.82	20.52	9.4	3520	7.94	5.51	3.82	<0.1	0.54	0.6	0.16	6	<5		423	1030			
CC-CR	5/12/11 10:45	DT	926	7.91	23.69	8.54														<3	<4	<5
LC-133	7/11/11 8:12	DT	2173	7.91	19.49	7.17	2250	7.94	2.13	<0.4	<0.1	1.2	1.25	0.36	<5	<5		317	288			
REF-BC	6/16/11 10:45	DT	568	8.03	16.03	9.94	659	7.98	1.45	<0.4	<0.1	<0.2	0.07	<0.02	<5	<5		12.9	146	<3	<4	<5
REF-BC	6/16/11 10:45	DF															0.7					
REF-FC	6/14/11 12:40	DT	2092	7.76	28.42	9.62	2290	8.09	0.22	<0.4	<0.1	<0.2	<0.06	<0.02	<5	<5		63.5	919	<3	<4	<5
REF-FC	6/14/11 12:40	DF															2.5					
REF-TCAS	6/14/11 8:40	DT	452	7.94	15.32	9.7	513	8.04	1.03	<0.4	<0.1	<0.2	<0.06	<0.02	<5	<5		9.32	97	<3	<4	<5
REF-TCAS	6/14/11 8:40	DF															0.6					
SC-MB	6/23/11 8:00	DT	4387	7.48	18.72	6.55	4970	7.64	1.68	12.1	0.28	1.16	1.59	0.48	<5	<5		717	1380	<3	29	<5
SC-MB	6/23/11 8:00	DF															8.7					
SJC-74	6/16/11 8:00	DT	867	7.69	19.3	8.16	975	7.59	1.7	0.8	<0.1	0.21	0.11	<0.02	<5	<5		74.4	172			
SMC01257	6/16/11 13:00	DT	917	8.53	20.55	11.04	830	8.37	0.2	<0.5	<0.1	0.4	0.35	0.1	<5	<5						
SMC01257	6/16/11 13:00	DF																				
SMC01555	6/23/11 12:15	DT	1969	8.24	19.76	11.84	2200	8.28	0.2	0.77	<0.1	0.48	0.18	0.076	<5	<5						
SMC01555	6/23/11 12:15	DF																				

Table C-11.8
Aqueous Chemistry at Bioassessment Sites

Station	Date	Type	Ag	As	Cd	Cr	Cu	Fe	Ni	Pb	Se	Zn	Field Hardness	Chlorpyrifos	Diazinon	Dimethoate	Malathion	Bifenthrin	Cyfluthrin	Cypermethrin	L-Cyhalothrin	Permethrin
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
ACJ01	6/23/11 10:00	DT	<0.5	4.4	1.8	0.65	1.9	310	19	<0.5	6.9	5.7	1250					<2	<2	<2	<2	<5
CC-CR	5/12/11 10:45	DT											270									
LC-133	7/11/11 8:12	DT	<0.5	5	<0.5	<0.5	1.2	360	4.6	<0.5	<0.5	<2	685					<2	<2	<2	<2	<5
REF-BC	6/16/11 10:45	DT	<0.5	0.81	<0.5	<0.5	0.64	30	0.88	<0.5	1.8	<2	300	<10	<10	<10	<10	<2	<2	<2	<2	<5
REF-BC	6/16/11 10:45	DF	<0.5	0.76	<0.5	<0.5	0.74	<20	0.84	<0.5	1.7	3.2										
REF-FC	6/14/11 12:40	DT	<0.5	0.72	<0.5	<0.5	1.7	33	3	<0.5	<0.5	<2	435	<10	<10	<10	<10	<2	<2	<2	<2	<5
REF-FC	6/14/11 12:40	DF	<0.5	0.66	<0.5	<0.5	2.3	31	3.3	<0.5	<0.5	4										
REF-TCAS	6/14/11 8:40	DT	<0.5	2.1	<0.5	<0.5	0.97	31	1	<0.5	1.8	<2	190	<10	<10	<10	<10	<2	<2	<2	<2	<5
REF-TCAS	6/14/11 8:40	DF	<0.5	2.1	**11**	<0.5	12	<20	1.4	<0.5	1.7	13										
SC-MB	6/23/11 8:00	DT	<0.5	2	<0.5	<0.5	3.3	120	6.2	<0.5	11	12	1435	<10	<10	<10	<10	<2	<2	<2	<2	<5
SC-MB	6/23/11 8:00	DF	<0.5	2	<0.5	<0.5	2.8	36	6	<0.5	11	11										
SJC-74	6/16/11 8:00	DT	<0.5	2	<0.5	<0.5	1.2	65	1.8	<0.5	0.79	<2	325					<2	<2	<2	<2	<5
SMC01257	6/16/11 13:00	DT	<0.5	4.3	<0.5	<0.5	4.2	23	1.4	<0.5	0.66	3.3	240					<2	<2	<2	<2	<3
SMC01257	6/16/11 13:00	DF	<0.5	4.2	<0.5	<0.5	4.2	<20	1.6	<0.5	0.59	4.8										
SMC01555	6/23/11 12:15	DT	<0.5	3.1	<0.5	<0.5	1.2	<20	2.3	<0.5	0.79	2.6	605					<2	<2	<2	<2	<5
SMC01555	6/23/11 12:15	DF	<0.5	3.2	<0.5	<0.5	1.3	47	2.5	<0.5	0.78	7.9										

Apparent error considering total recoverable value

Table C-11.9
Correlations of Individual Habitat Scores
with IBI Scores measured from 2002 to 2011

Physical Habitat Variable	R
Sum of Physical Habitat Scores	0.50
Instream Cover	0.51
Channel Alteration	0.52
Sediment Deposition	0.48

Table C-11.10
Stormwater Loads at Mass Emissions Sites: 2010-11

Station	Period	Volume Sampled	Type	Nitrate As NO_3	NH_3 as N	TKN	Total Phos. as PO_4	Ortho Phos. as P	TSS	VSS	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as $CaCO_3$
		ac-ft									lbs									
ACJ01	Feb 16-20, 2011	347	Total	3123	137	798	662	82	76520	11202	2.612	2.757	11.653	1.403	20.584	0.236	31.971	2.936	2.767	477968
			Dissolved								1.177	0.236	5.629	0.236	16.532	0.236	8.953	1.98	2.623	
LCWI02	Feb 16-20, 2011	7	Total	25.07	1.32	17.85	24.32	3.23	1713	282	0.005	0.09	0.277	0.085	0.107	0.005	0.748	0.078	0.014	5369
			Dissolved								0.005	0.005	0.156	0.005	0.054	0.005	0.081	0.062	0.014	
PDCM01	Oct 4-5, 2010	2	Total	44.55	0.87	8.12	5.45	0.71	183.2	54.1	0.018	0.012	0.071	0.003	0.246	0.001	0.196	0.012	0.02	7619
			Dissolved								0.007	0.004	0.04	0.001	0.237	0.001	0.092	0.011	0.02	
	Feb 16-20, 2011	59	Total	2597	65	229	95	18	4566	1184	4.871	0.208	2.332	0.063	34.805	0.046	19.638	0.355	2.418	495426
			Dissolved								4.711	0.059	1.931	0.046	35.785	0.046	16.013	0.28	2.73	
SDCM02	Oct 4-5, 2010	1	Total	73.6	2.48	11.82	7.09	1.35	108.8	45.0	0.02	0.006	0.068	0.003	0.278	0.001	0.195	0.013	0.032	3078
			Dissolved								0.01	0.004	0.045	0.001	0.27	0.001	0.124	0.012	0.029	
	Feb 16-20, 2011	175	Total	4513	49.16	408.54	336	51.3	30445	5259.8	3.868	1.409	5.316	0.44	34.749	0.119	21.586	0.888	5.669	320604
			Dissolved								2.859	0.309	3.613	0.119	33.201	0.119	10.53	0.722	5.696	
SJNL01	Feb 16-20, 2011	499	Total	5071	124.5	1450	2434	272	417735	54635	0.339	7.039	18.9	4.339	6.434	0.339	37.257	8.626	1.191	232290
			Dissolved								0.339	0.339	7.509	0.339	1.796	0.339	2.055	4.958	0.975	
TCOL02	Feb 16-20, 2011	783	Total	6561	406.8	1994	3734	197	968628	87780	2.554	27.77	44.434	9.644	27.649	0.532	124.08	12.16	5.228	604316
			Dissolved								0.537	0.532	12.692	0.532	7.085	0.532	8.439	5.182	4.984	

Table C-11.11

Flow-weighted Event Mean Concentrations at Mass Emissions Sites: 2010-11

Station	Period	Volume Sampled	Type	Nitrate As NO_3	NH_3 as N	TKN	Total Phos. as PO_4	Ortho Phos. as P	TSS	VSS	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as $CaCO_3$
		ac-ft		mg/L							ug/L									mg/L
ACJ01	Feb 16-20, 2011	347	Total	3.3	0.14	0.85	0.70	0.09	81	12	2.77	2.9	12.4	1.49	21.8	0.25	34	3.1	2.9	507
			Diss								1.25	0.3	6.0	0.25	17.5	0.25	9	2.1	2.8	
LCWI02	Feb 16-20, 2011	7	Total	1.3	0.07	0.94	1.28	0.17	90	15	0.26	4.7	14.6	4.47	5.6	0.26	39	4.1	0.7	282
			Diss								0.26	0.3	8.2	0.26	2.8	0.26	4	3.3	0.7	
PDCM01	Oct 4-5, 2010	2	Total	8.2	0.16	1.49	1.00	0.13	34	10	3.31	2.2	13.1	0.55	45.3	0.18	36	2.2	3.7	1402
			Diss								1.29	0.7	7.4	0.18	43.6	0.18	17	2.0	3.7	
	Feb 16-20, 2011	59	Total	16.2	0.40	1.43	0.59	0.11	28	7	30.37	1.3	14.5	0.39	217.0	0.29	122	2.2	15.1	3089
			Diss								29.38	0.4	12.0	0.29	223.1	0.29	100	1.7	17.0	
SDCM02	Oct 4-5, 2010	1	Total	27.1	0.91	4.35	2.61	0.50	40	17	7.36	2.2	25.0	1.10	102.3	0.37	72	4.8	11.8	1132
			Diss								3.68	1.5	16.6	0.37	99.3	0.37	46	4.4	10.7	
	Feb 16-20, 2011	175	Total	9.5	0.10	0.86	0.71	0.11	64	11	8.13	3.0	11.2	0.93	73.1	0.25	45	1.9	11.9	674
			Diss								6.01	0.6	7.6	0.25	69.8	0.25	22	1.5	12.0	
SJNL01	Feb 16-20, 2011	499	Total	3.7	0.09	1.07	1.79	0.20	308	40	0.25	5.2	13.9	3.20	4.7	0.25	27	6.4	0.9	171
			Diss								0.25	0.2	5.5	0.25	1.3	0.25	2	3.7	0.7	
TCOL02	Feb 16-20, 2011	783	Total	3.1	0.19	0.94	1.75	0.09	455	41	1.20	13.0	20.9	4.53	13.0	0.25	58	5.7	2.5	284
			Diss								0.25	0.2	6.0	0.25	3.3	0.25	4	2.4	2.3	

Table C-11.12
Aqueous Chemistry at Mass Emissions Monitoring Sites

Site	Composite Time		Samples		FieldMeasurements				TC	FC	ENT	Specific Conductance	pH	Turbidity	Nitrate as NO_3	Ammonia as N	TKN	Total Phosphate as PO_4	ortho phosphate as P	TSS	VSS	Chloride	Sulfate	Total Organic Carbon	Dissolved Organic Carbon	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as $CaCO_3$
	Begin	End	Type	#	SC	pH	TEMP	DO	CFU/100ml			uS		NTU	mg/L											ng/L				ug/L									mg/L
ACJ01	2/16/11 5:33	2/16/11 6:33	ST	6								3330	8.03	11.5	4.72	< 0.1	0.78	0.41	0.06	21	6			7.3		< 10	< 10	< 10	< 10	4.4	0.55	9.6	< 0.5	38	< 0.5	16	3.4	6.4	1120
ACJ01	2/16/11 5:33	2/16/11 6:33	SF	6																					7					3.3	< 0.5	**6.6**	< 0.5	35	< 0.5	11	2.9	6.4	
ACJ01	2/16/11 8:33	2/17/11 6:33	ST	12								1730	7.81	5.5	4.03	0.14	0.92	0.46	0.06	12	< 5			12		< 10	< 10	< 10	71	2.8	0.92	9.8	< 0.5	20	< 0.5	17	2.7	3	500
ACJ01	2/16/11 8:33	2/17/11 6:33	SF	12																					11					1.5	< 0.5	**7.1**	< 0.5	19	< 0.5	11	2.5	2.9	
ACJ01	2/17/11 9:40		SVC		2254	8.04	12.53	12.01	67000	2000	420																												
ACJ01	2/17/11 8:33	2/18/11 20:33	ST	19								2620	8.08	9.25	4.1	0.16	0.78	0.37	0.07	13	< 5			9.1		< 10	< 10	< 10	15	3.1	0.79	7.6	< 0.5	31	< 0.5	17	3.1	5.4	875
ACJ01	2/17/11 8:33	2/18/11 20:33	SF	19																					9					2.1	< 0.5	**5.8**	< 0.5	29	< 0.5	11	2.8	5.1	
ACJ01	2/19/11 10:00		SVC		1281	7.75	13.44	14.37	40000	2700	2800																												
ACJ01	2/18/11 22:33	2/20/11 8:33	ST	18								1130	7.82	71.7	2.8	0.14	0.86	0.9	0.1	126	18			5.8		< 10	< 10	< 10	23	2.6	4.3	15	2.3	18	< 0.5	45	3.2	1.8	340
ACJ01	2/18/11 22:33	2/20/11 8:33	SF	18																					5.5					0.8	< 0.5	**5.8**	< 0.5	12	< 0.5	8.5	1.7	1.7	
ACJ01	2/22/11 9:28		ST																																			
ACJ01	2/22/11 9:28		SVC		2056	7.97	11.13	11.68	3700	210	150																												
ACJ01	5/11/11 8:56	5/12/11 7:56	DT	24								3440	8.13	1.33	3.3	< 0.1	0.91	0.28	0.06	< 5	< 5	432	1090	7.8		< 10	< 10	< 10	< 10	2.5	< 0.5	11	< 0.5	29	< 0.5	6.1	3.2	6.4	1095
ACJ01	5/11/11 8:56	5/12/11 7:56	DF	24																					7.7					2.3	< 0.5	**8.5**	< 0.5	26	< 0.5	5.8	3.2	6.2	
ACJ01	5/12/11 9:25		SVC		3195	7.89	17.72	8.92	> 2600	110	90																												
ACJ01	9/6/11 10:02	9/7/11 9:02	DT	24								3420	8.39	1.44	6.4	<0.1	0.7	0.51	0.15	<5	<5	453	1080	6.6		<10	<10	<10	<10	1.6	<0.5	15	<0.5	17	<0.5	7.9	4.6	7.1	1130
ACJ01	9/6/11 10:02	9/7/11 9:02	DF	24																					6.2					1.5	<0.5	13	<0.5	16	<0.5	3.8	4.4	7.1	
ACJ01	9/7/11 10:51		SVC		3133	7.94	22.36	9.23	>3200	50	50																												
LCWI02	2/16/11 3:47	2/16/11 4:47	ST	6								1240	7.77	87.6	2.41	< 0.1	2.37	1.73	0.1	183	37			17		11	< 10	< 10	< 10	0.59	7	36	8.4	9.2	< 0.5	100	4.8	0.76	600
LCWI02	2/16/11 3:47	2/16/11 4:47	SF	6																					16					< 0.5	0.74	**22**	< 0.5	4.8	< 0.5	24	2.8	0.55	
LCWI02	2/16/11 6:47	2/17/11 4:47	ST	12								1800	8.16	3.8	1.22	0.15	1.6	2.22	0.18	35	6			10		< 10	< 10	< 10	15	< 0.5	5.5	17	6.1	7.9	< 0.5	58	5.1	1.1	
LCWI02	2/17/11 9:10		SVC		1786	8.35	11.04	14.35	2100	20	60																												
LCWI02	2/16/11 6:47	2/17/11 4:47	SF	12																					10					< 0.5	< 0.5	**8.3**	< 0.5	5.2	< 0.5	4	3.6	1.1	290
LCWI02	2/17/11 6:47	2/18/11 14:47	ST	17								1830	8.51	0.75	1.44	< 0.1	0.42	0.55	0.16	< 5	< 5			8.5		< 10	13	< 10	< 10	< 0.5	< 0.5	8.2	< 0.5	2.6	< 0.5	3.3	4	0.72	
LCWI02	2/17/11 6:47	2/18/11 14:47	SF	17																					8.2					< 0.5	< 0.5	**8**	< 0.5	2.6	< 0.5	2.5	3.8	0.72	
LCWI02	2/18/11 16:47	2/19/11 8:47	ST	9								965	8.14	140	1.34	< 0.1	1.56	1.98	0.18	305	48			10		< 10	< 10	< 10	26	< 0.5	11	25	12	9.6	< 0.5	98	4.6	0.77	
LCWI02	2/18/11 16:47	2/19/11 8:47	SF	9																					9.5					< 0.5	< 0.5	**9**	< 0.5	2.2	< 0.5	5.8	2.9	0.69	
LCWI02	2/19/11 10:33		SVC		938	8.03	12.65	14.02	15000	2000	1100																												
LCWI02	2/19/11 10:47	2/20/11 8:47	ST	12								967	8.39	42.9	1.35	< 0.1	0.56	0.88	0.18	64	10			9.7		< 10	< 10	< 10	< 10	< 0.5	4	12	2.2	4.3	< 0.5	20	3.6	0.6	265
LCWI02	2/19/11 10:47	2/20/11 8:47	SF	12																					9					< 0.5	< 0.5	**8**	< 0.5	2	< 0.5	4.6	3.1	0.54	
LCWI02	2/22/11 10:06		SVC		1419	8.39	10.3	13.51	440	40	30																												
LCWI02	5/11/11 9:07	5/12/11 8:07	DT	24								2190	8.4	0.51	1.36	< 0.1	0.51	0.37	0.1	< 5	< 5	305	338	6.9		< 10	< 10	< 10	< 10	< 0.5	< 0.5	5.8	< 0.5	4.1	< 0.5	2.4	3.1	0.98	680
LCWI02	5/11/11 9:07	5/12/11 8:07	DF	24																					6.6					< 0.5	< 0.5	**5.2**	< 0.5	3.9	< 0.5	3.3	3.1	0.87	
LCWI02	5/12/11 10:08		SVC		2072	8.38	17.83	13.14	> 410	9	170																												
LCWI02	9/6/11 9:15	9/7/11 8:15	DT	24								2240	8.48	3.06	5.7	<0.1	1	0.52	0.12	<5	<5	289	354	6.5		<10	<10	<10	<10	<0.5	0.64	8	<0.5	2.4	<0.5	6.1	3.4	1.4	635
LCWI02	9/6/11 9:15	9/7/11 8:15	DF	24																					6.3					<0.5	<0.5	5.9	<0.5	2	<0.5	3.7	3.4	1.4	
LCWI02	9/7/11 11:29		SVC		11.03	8.3	22.69	11.03	31000	3200	3600																												
PDCM01	10/4/10 14:40	10/5/10 9:40	ST	24								5300	7.78	5.8	10.7	0.21	1.95	1.31	0.17	44	13			25		< 10	< 10	< 10	< 10	4.4	3	17	0.84	59	< 0.5	47	2.8	4.9	1830
PDCM01	10/4/10 14:40	10/5/10 9:40	SF	24																					25					1.7	0.97	**9.7**	< 0.5	57	< 0.5	22	2.6	4.8	
PDCM01	10/5/10 10:10		SVC		6014	7.83	17.83	10.52	> 34000	9300	13300																												
PDCM01	2/16/11 5:26	2/16/11 6:26	ST	6								1220	7.53	29	4.14	0.11	1.28	0.68	0.12	75	21			10		< 10	< 10	< 10	70	2.6	1.5	17	< 0.5	18	< 0.5	37	1.2	1.4	305
PDCM01	2/16/11 5:26	2/16/11 6:26	SF	6																					9.5					1.9	0.7	**15**	< 0.5	17	< 0.5	25	1.2	1.2	

Table C-11.12
Aqueous Chemistry at Mass Emissions Monitoring Sites

Site	Composite Time		Samples		FieldMeasurements				TC	FC	ENT	Specific Conductance	pH	Turbidity	Nitrate as NO_3	Ammonia as N	TKN	Total Phosphate as PO_4	ortho phosphate as P	TSS	VSS	Chloride	Sulfate	Total Organic Carbon	Dissolved Organic Carbon	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as $CaCO_3$
	Begin	End	Type	#	SC	pH	TEMP	DO	CFU/100ml			uS		NTU	mg/L											ng/L				ug/L									mg/L
PDCM01	2/16/11 8:26	2/17/11 6:26	ST	12								8870	7.85	3.1	14.9	0.1	1.08	0.52	0.11	18	< 5			13		< 10	< 10	< 10	14	26	1.1	19	< 1	220	< 1	93	1.5	12	2760
PDCM01	2/16/11 8:26	2/17/11 6:26	SF	12																					13					25	< 1	**15**	< 1	**230**	< 1	**140**	1.4	22	
PDCM01	2/17/11 10:30		SVC		10091	7.87	12.66	13.18	>8500	230	2800																												
PDCM01	2/17/11 8:26	2/19/11 10:26	ST	18								11600	8.14	16.1	18.8	0.55	1.58	0.52	0.1	27	8			14		< 10	460	< 10	< 10	38	0.9	13	< 0.5	260	< 0.5	130	2.3	19	3780
PDCM01	2/17/11 8:26	2/19/11 10:26	SF	18																					13					37	< 0.5	**11**	< 0.5	**270**	< 0.5	**100**	1.8	20	
PDCM01	2/19/11 10:19		SVC		4461	7.93	13.43	12.89	28000	4900	3200																												
PDCM01	2/19/11 12:26	2/20/11 10:26	ST	12								5000	8.03	34.1	9.82	0.17	1.2	0.82	0.15	37	8			11		< 10	14	< 10	14	12	2.5	16	0.74	98	< 0.5	120	2.4	6.1	1390
PDCM01	2/19/11 12:26	2/20/11 10:26	SF	12																					11					11	0.62	**13**	< 0.5	**91**	< 0.5	77	1.8	6	
PDCM01	2/22/11 9:01		SVC		4687	7.82	11.63	14.84	27000	2100	1900																												
PDCM01	5/11/11 9:44	5/12/11 8:44	DT	24								9520	8.03	40.3	10.1	< 0.1	1.5	0.73	0.14	55	7	1190	3950	14		< 10	< 10	< 10	< 10	12	2.3	10	0.55	110	< 0.5	35	2.2	11	2980
PDCM01	5/11/11 9:44	5/12/11 8:44	DF	24																					14					11	< 0.5	**12**	< 0.5	**100**	< 0.5	26	1.6	11	
PDCM01	5/12/11 9:56		SVC		10444	7.89	16.91	11.47	> 7700	830	2500																												
PDCM01	9/6/11 9:34	9/7/11 8:34	DT	24								7870	8.12	2.03	7.5	<0.1	1.5	0.68	0.2	<5	<5	1110	3340	14		<10	<10	<10	<10	9.2	<0.5	11	<0.5	80	<0.5	27	3.2	11	2390
PDCM01	9/6/11 9:34	9/7/11 8:34	DF	24																					13					8.9	<0.5	11	<0.5	79	<0.5	22	3.2	11	
PDCM01	9/7/11 10:24		SVC		4954	7.97	21.01	15.74	>28000	3100	2300																												
SDCM02	10/4/10 10:09	10/5/10 9:09	ST	24								3090	7.67	7.8	19.6	0.66	3.15	1.89	0.36	29	12			46		< 10	< 10	< 10	< 10	5.2	1.7	18	0.75	74	< 0.5	52	3.4	8.4	820
SDCM02	10/4/10 10:09	10/5/10 9:09	SF	24																					41					2.6	1	**12**	< 0.5	72	< 0.5	33	3.1	7.8	
SDCM02	10/5/10 10:32		SVC		3546	7.9	17.69	11.69	>72000	5300	10100																												
SDCM02	2/16/11 3:16	2/16/11 4:16	ST	6								3920	7.64	97.6	17.8	0.29	6.08	2.68	0.03	240	76			25		< 10	< 10	< 10	< 10	23	4.9	34	5.6	160	< 0.5	260	3.4	19	1610
SDCM02	2/16/11 3:16	2/16/11 4:16	SF	6																					23					9.6	0.83	**16**	< 0.5	**110**	< 0.5	79	1.6	19	
SDCM02	2/16/11 6:16	2/17/11 4:16	ST	12								2270	7.83	7.9	9.82	0.1	1.26	0.64	0.12	24	5			13		< 10	< 10	< 10	< 10	9.2	2	12	0.57	75	< 0.5	43	1.8	9.5	610
SDCM02	2/16/11 6:16	2/17/11 4:16	SF	12																					12					6.9	1	**11**	< 0.5	65	< 0.5	29	1.4	8.3	
SDCM02	2/17/11 9:55		SVC		3784	8.15	11.51	12.77	>7300	410	680																												
SDCM02	2/17/11 6:16	2/17/11 14:16	ST	17								5240	8.43	1.12	16.8	< 0.1	0.82	0.32	0.08	< 5	< 5			13		< 10	< 10	< 10	< 10	13	0.6	7	< 0.5	130	< 0.5	34	1.8	24	1500
SDCM02	2/17/11 6:16	2/17/11 14:16	SF	17																					13					11	0.54	**6.8**	< 0.5	**130**	< 0.5	30	1.8	24	
SDCM02	2/18/11 16:16	2/19/11 8:16	ST	9								1090	7.63	62.4	4.12	0.19	0.87	0.97	0.11	122	19			7.9		< 10	< 10	< 10	< 10	5	4.8	14	1.5	34	< 0.5	58	1.8	3.9	300
SDCM02	2/18/11 16:16	2/19/11 8:16	SF	9																					7.1					2.5	0.64	**7.2**	< 0.5	30	< 0.5	17	1.2	4.3	
SDCM02	2/19/11 9:53		SVC		1538	8.11	12.55	12.93	33000	2800	6600																												
SDCM02	2/19/11 10:16	2/20/11 2:16	ST	9								1320	7.98	66.7	5.34	< 0.1	0.64	0.93	0.15	88	14			7.6		< 10	< 10	< 10	< 10	4.1	4.4	13	1.2	36	< 0.5	41	2.1	5	360
SDCM02	2/19/11 10:16	2/20/11 2:16	SF	9																					7.3					2.7	0.71	**8.1**	< 0.5	32	< 0.5	13	1.6	5.1	
SDCM02	2/22/11 8:50		SVC		3617	8.07	9.73	14.99	3500	330	320																												
SDCM02	5/11/11 9:16	5/12/11 8:16	DT	24								6100	8	1.62	24.6	< 0.1	1.35	0.4	0.09	< 5	< 5	822	2100	17		< 10	< 10	< 10	< 10	9.6	< 0.5	8.1	< 0.5	130	< 0.5	23	1.9	23	1740
SDCM02	5/11/11 9:16	5/12/11 8:16	DF	24																					17					8.6	< 0.5	**7.6**	< 0.5	**130**	< 0.5	21	1.9	24	
SDCM02	5/12/11 10:18		SVC		5648	8.15	19.1	14.86	> 4600	1760	3000																												
SDCM02	9/7/11 11:30		DT		6884	8.79	23.41	16.1	>3800	950	360	5410	8.78	11.2	20	<0.1	1.8	0.65	0.13	28	23		2060			<10	<10	<10	<10	8.3	<0.5	6.5	0.55	130	<0.5	18	2.9	32	1715
SDCM02	9/7/11 11:30		DF																						14					4.6	<0.5	5.3	<0.5	20	<0.5	9	2.6	31	
SJNL01	2/16/11 14:34	2/16/11 15:34	ST	6								985	8.13	51.9	3.5	< 0.1	1.62	1.02	0.06	126	23			5.3		21	< 10	< 10	170	< 0.5	1.4	9.5	0.71	3.6	< 0.5	9.3	6.3	1.2	400
SJNL01	2/16/11 14:34	2/16/11 15:34	SF	6																					5.1					< 0.5	< 0.5	**7**	< 0.5	1.4	< 0.5	< 2	3.4	0.73	
SJNL01	2/17/11 10:56		SVC		936	8.07	13.71	11.42	800	220	30																												
SJNL01	2/16/11 17:34	2/17/11 15:34	ST	12								1000	7.97	6.6	1.74	0.15	0.52	0.52	0.08	37	10			5.3		< 10	< 10	< 10	< 10	< 0.5	0.55	5.7	< 0.5	1.5	< 0.5	4.8	4.5	0.67	320
SJNL01	2/16/11 17:34	2/17/11 15:34	SF	12																					4.5					< 0.5	< 0.5	**5.2**	< 0.5	1.2	< 0.5	2.2	3.6	0.64	
SJNL01	2/18/11 11:20		SVC		883	7.68	15.42	13.43																														

Table C-11.12
Aqueous Chemistry at Mass Emissions Monitoring Sites

Site	Composite Time		Samples		FieldMeasurements				TC	FC	ENT	Specific Conductance	pH	Turbidity	Nitrate as NO_3	Ammonia as N	TKN	Total Phosphate as PO_4	ortho phosphate as P	TSS	VSS	Chloride	Sulfate	Total Organic Carbon	Dissolved Organic Carbon	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se	Hardness as $CaCO_3$
	Begin	End	Type	#	SC	pH	TEMP	DO	CFU/100ml			uS		NTU	mg/L											ng/L				ug/L									mg/L
SJNL01	2/17/11 17:34	2/18/11 9:34	ST	9								963	8.19	6.25	1.71	< 0.1	0.35	0.22	0.05	15	< 5			4.2		< 10	< 10	< 10	< 10	< 0.5	< 0.5	7.5	< 0.5	1.5	< 0.5	3.9	3.3	0.95	330
SJNL01	2/17/11 17:34	2/18/11 9:34	SF	9																					4.1					< 0.5	< 0.5	**5.8**	< 0.5	1.4	< 0.5	2.5	2.8	0.84	
SJNL01	2/18/11 11:34	2/19/11 7:34	ST	11								772	7.95	307	6.38	0.16	1.94	3.35	0.33	582	75			8		76	< 10	< 10	41	< 0.5	9	17	5.8	8	< 0.5	48	9.2	1	
SJNL01	2/18/11 11:34	2/19/11 7:34	SF	11																					7					< 0.5	< 0.5	4.3	< 0.5	1.6	< 0.5	2	4.4	0.7	
SJNL01	2/19/11 9:15		SVC		705	7.98	12.64	11.53	25000	2700	7200																												
SJNL01	2/19/11 9:34	2/20/11 13:34	ST	15								692	8.18	143	3.08	< 0.1	0.83	1.48	0.18	265	34			5.8		15	< 10	< 10	< 10	< 0.5	4.9	15	2.9	4.2	< 0.5	25	5.7	0.85	205
SJNL01	2/19/11 9:34	2/20/11 13:34	SF	15																					5.7					< 0.5	< 0.5	**6.2**	< 0.5	1.2	< 0.5	< 2	3.4	0.73	
SJNL01	2/22/11 9:50		SVC		879	8.04	10.7	13.88	>340	70	60																												
SJNL01	5/11/11 10:41	5/12/11 9:14	DT	24								923	8.23	1.11	< 0.4	< 0.1	0.3	0.21	0.04	< 5	< 5	76.2	190	3.7		< 10	< 10	< 10	< 10	< 0.5	< 0.5	4.3	< 0.5	1.7	< 0.5	< 2	2.9	0.74	305
SJNL01	5/11/11 10:41	5/12/11 9:14	DF	24																					3.7					< 0.5	< 0.5	3.8	< 0.5	1.8	< 0.5	< 2	2.8	0.84	
SJNL01	5/12/11 9:56		SVC		895	7.86	18.22	10.2	> 310	30	20																												
TCOL02	2/16/11 8:10	2/16/11 9:10	ST	6								2140	8.08	76.5	2.73	< 0.1	2.33	1.05	< 0.02	199	27			6.4		< 10	< 10	< 10	< 10	0.72	2.7	11	1.3	9.9	< 0.5	18	5.4	3.8	820
TCOL02	2/16/11 8:10	2/16/11 9:10	SF	6																					5.8					0.72	< 0.5	**9.6**	< 0.5	4.4	< 0.5	5.5	3.4	3.3	
TCOL02	2/16/11 11:10	2/17/11 9:10	ST	12								1380	7.85	27	3.01	0.13	0.91	0.86	0.06	187	20			8		< 10	< 10	< 10	35	0.85	5.9	13	1.4	10	< 0.5	19	4.8	4.1	465
TCOL02	2/16/11 11:10	2/17/11 9:10	SF	12																					8					< 0.5	< 0.5	**6.7**	< 0.5	6.3	< 0.5	3.5	3	3.9	
TCOL02	2/17/11 10:25		SVC		1291	8.24	14.51	12.05	24000	3800	2400																												
TCOL02	2/17/11 11:10	2/18/11 15:10	ST	15								1400	8.29	3.35	3.84	< 0.1	0.5	0.25	0.06	< 5	< 5			6		< 10	< 10	< 10	11	0.5	< 0.5	7.1	< 0.5	4.3	< 0.5	3.7	3.4	5.6	490
TCOL02	2/17/11 11:10	2/18/11 15:10	SF	15																					4.8					< 0.5	< 0.5	**6.4**	< 0.5	4.2	< 0.5	2.8	3.1	5.5	
TCOL02	2/19/11 9:05		SVC		612	7.81	12.86	12.59	36000	16000	8800																												
TCOL02	2/18/11 17:10	2/20/11 9:10	ST	21								694	8.04	272	3.05	0.21	0.96	1.99	0.1	526	47			4		< 10	< 10	< 10	19	1.3	15	23	5.3	14	< 0.5	68	6	2	240
TCOL02	2/18/11 17:10	2/20/11 9:10	SF	21																					3.6					< 0.5	< 0.5	**5.8**	< 0.5	2.8	< 0.5	4.1	2.3	1.9	
TCOL02	2/22/11 8:45		SVC		879	8.04	10.7	13.88	4800	2300	2500																												
TCOL02	5/11/11 11:15	5/12/11 10:15	DT	24								1820	8.3	1.09	< 0.4	< 0.1	0.36	0.07	< 0.02	< 5	< 5	187	500	4.3		< 10	< 10	< 10	< 10	< 0.5	< 0.5	5	< 0.5	3.7	< 0.5	< 2	2.7	2.6	615
TCOL02	5/11/11 11:15	5/12/11 10:15	DF	24																					4.1					< 0.5	< 0.5	4.6	< 0.5	3.4	< 0.5	< 2	2.7	2.6	
TCOL02	5/12/11 10:45		SVC		1788	8.42	22.21	11.96	> 220	40	30																												
TCOL02	9/6/11 8:59	9/7/11 7:59	DT	24								2270	8.19	2.74	<0.4	<0.1	0.4	<0.06	<0.02	<5	<5	283	655	4.5		<10	<10	<10	<10	<0.5	<0.5	8.2	<0.5	3.4	<0.5	3.1	3.4	2.5	745
TCOL02	9/6/11 8:59	9/7/11 7:59	DF	24																					5.8					<0.5	<0.5	7.8	<0.5	3.2	<0.5	3	3.4	2.2	
TCOL02	9/7/11 10:07		SVC		2554	8.03	25.3	11.99	>570	20	30																												

Table C-11.13
Water Quality at Mass Emissions Sites Relative to CTR Criteria

			Exceeded Freshwater Acute CTR Criteria										Exceeded Saltwater CTR Acute Criteria									
	Samples		Cd		Cu		Ni		Zn		Se^{+}		Cd		Cu		Ni		Zn		Se	
Site	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St
ACJ01	2	4	0	0	0	0	0	0	0	0	2	2	0	0	2	4	0	0	0	0	0	0
LCWI02	2	5	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0
PDCM01	2	5	0	2	0	0	0	0	0	0	2	3	0	0	2	5	2	3	0	2	0	0
SDCM02	2	6	0	0	0	0	0	0	0	0	2	4	0	0	2	6	1	2	0	0	0	0
SJNL01	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
TCOL02	2	4	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	0	0	0	0

Comparisons to CTR criteria for saltwater were only performed on channels discharging directly to saltwater
*Concentration Maximum Criterion (acute) for dissolved metals
$^{+}$Concentration Continuous Criterion (chronic) for total recoverable Selenium

Table C-11.14a
Aqueous Toxicity Testing at Mass Emissions Sites

			Ceriodaphnia Reproduction					Ceriodaphnia Survival					Ceriodaphnia Survival 48 Hour					Selenastrum Cell Density					Hyallela Survival 96 Hour					
	Composite		Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUa	Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC25	IC50	TUa
Station	Begin	End	young/adult	young/adult	%Conc	%Conc		%	%	%Conc	%Conc		%	%	%Conc	%Conc		Cell Dt	Cell Dt	%Conc	%Conc		%	%	%Conc	%Conc	%Conc	
ACJ01	2/16/11 8:33	2/17/11 6:33						100	100	100	>100	1											95	100	100	>100	>100	0
ACJ01	5/11/11 8:56	5/12/11 7:56	25.7	21.3	100	>100	1	100	100	100	>100	1	100	100	100	>100	0.00	1113000	1209750	100	>100	1	100	100	100	>100	>100	0
LCWI02	2/16/11 6:47	2/17/11 4:47						100	100	100	>100	1											95	100	100	>100	>100	0
LCWI02	5/11/11 9:07	5/12/11 8:07	26.4	27.7	100	>100	1	90	100	100	>100	1	90	100	100	>100	0.00	1113000	1411000	100	>100	1	100	100	100	>100	>100	0
PDCM01	10/4/10 14:40	10/5/10 9:40																										
PDCM01	2/16/11 8:26	2/17/11 6:26						100	90	100	>100	1											100	100	100	>100	>100	0
PDCM01	5/11/11 9:44	5/12/11 8:44	23.1	0.1	12.5	31.01	8	100	0	25	42.86	4	100	10	50	77.78	1.29	1113000	1119500	100	>100	1	100	100	100	>100	>100	0
SDCM02	10/4/10 10:09	10/5/10 9:09																					100	100	100	>100	>100	0
SDCM02	2/16/11 6:16	2/17/11 4:16						100	90	100	>100	1											100	80	50	>100	>100	0.77
SDCM02	5/11/11 9:16	5/12/11 8:16	26	0.3	6.25	36.59	16	100	20	50	78.57	2	100	100	100	>100	0.00	1113000	1124500	100	>100	1	100	100	100	>100	>100	0
SJNL01	2/16/11 17:34	2/17/11 15:34						100	100	100	>100	1											100	100	100	>100	>100	0
SJNL01	5/11/11 10:41	5/12/11 9:14	25.9	23.3	100	>100	1	100	90	100	>100	1	100	90	100	>100	0.59	1113000	1350750	100	>100	1	100	100	100	>100	>100	0
TCOL02	2/16/11 11:10	2/17/11 9:10						100	100	100	>100	1											100	100	100	>100	>100	0
TCOL02	5/11/11 11:15	5/12/11 10:15	25.7	18.4	50	>100	2	100	100	100	>100	1	100	100	100	>100	0.00	1113000	1296500	100	>100	1	100	100	100	>100	>100	0

Table C-11.14a
Aqueous Toxicity Testing at Mass Emissions Sites

			Mysidopsis Growth						Mysidopsis Survival					Mysidopsis Survival 48 Hour					Sea Urchin Fertilization				
	Composite		Control	100%	NOEC	IC25	IC50	TUc	Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUa	Control	100%	NOEC	IC50	TUc
Station	Begin	End	mg/ind	mg/ind	%Conc	%Conc	%Conc		%	%	%Conc	%Conc		%	%	%Conc	%Conc				%Conc	%Conc	
ACJ01	2/16/11 8:33	2/17/11 6:33	0.508	0.722	100	>100	>100	1	85	72.5	100	>100	1	95	85	100	>100	0.69	0.962	0.975	100	>100	1
ACJ01	5/11/11 8:56	5/12/11 7:56																					
LCWI02	2/16/11 6:47	2/17/11 4:47	0.288	0.185	100	79.042	>100	1	85	80	100	>100	1	90	87.5	100	>100	0.65	0.97	0.972	100	>100	1
LCWI02	5/11/11 9:07	5/12/11 8:07																					
PDCM01	10/4/10 14:40	10/5/10 9:40							95	85		>100							0.97	1	100	>100	1
PDCM01	2/16/11 8:26	2/17/11 6:26	0.288	0.211	100	19.874	>100	1	85	80	100	>100	1	90	97.5	100	>100	0.23	0.97	0.97	100	>100	1
PDCM01	5/11/11 9:44	5/12/11 8:44																					
SDCM02	10/4/10 10:09	10/5/10 9:09	0.278	0.363	100	>100	>100	1	87.5	20	25	68.75	4	97.5	95	100	>100	0.41	0.945	0.785	50	>100	2
SDCM02	2/16/11 6:16	2/17/11 4:16	0.288	0.21	100	88.636	>100	1	85	67.5	100	>100	1	90	92.5	100	>100	0.51	0.972	0.972	100	>100	1
SDCM02	5/11/11 9:16	5/12/11 8:16																					
SJNL01	2/16/11 17:34	2/17/11 15:34	0.235	0.198	100	>100	>100	1	90	87.5	100	>100	1	92.5	92.5	100	>100	0.51	0.95	0.968	100	>100	1
SJNL01	5/11/11 10:41	5/12/11 9:14																					
TCOL02	2/16/11 11:10	2/17/11 9:10	0.36	0.932	100	>100	>100	1	80	82.5	100	>100	1	97.5	100	100	>100	0	0.965	0.972	100	>100	1
TCOL02	5/11/11 11:15	5/12/11 10:15																					

Table C-11.14b
Synthetic Pyrethroid Pesticides at Mass Loading Sites

					Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin	Esfenvalerate	L-Cyhalothrin	Permethrin	Prallethrin
Site	Begin	End	#	Type	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
ACJ01	2/16/11 5:33	2/16/11 6:33	6	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
ACJ01	2/16/11 8:33	2/17/11 6:33	12	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
LCWI02	2/16/11 3:47	2/16/11 4:47	6	S	<2	<2	<2	6.2	<2	<2	<2	<5	<2
LCWI02	2/16/11 6:47	2/17/11 4:47	12	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
PDCM01	10/4/10 14:40		1	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
PDCM01	2/16/11 5:26	2/16/11 6:26	6	S	<2	11	<2	17	<2	<2	<2	8.7	<2
PDCM01	2/16/11 8:26	2/17/11 6:26	12	S	<2	5.2	<2	<2	<2	<2	<2	<5	<2
PDCM01	5/11/11 9:44	5/12/11 8:44	12	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
SDCM02	10/4/10 10:09	10/5/10 9:09	24	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
SDCM02	2/16/11 3:16	2/16/11 4:16	6	S	<2	11	<2	9.3	<2	<2	17	24	<2
SDCM02	2/16/11 6:16	2/17/11 4:16	12	S	<2	2.4	<2	<2	<2	<2	<2	<5	<2
SDCM02	5/11/11 9:16	5/12/11 8:16	24	D	<2	<2	<2	<2	<2	<2	<2	<5	<2
SJNL01	2/16/11 14:34	2/16/11 15:34	6	S	<2	2	<2	<2	<2	<2	<2	<5	<2
SJNL01	2/16/11 17:34	2/17/11 15:34	12	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
TCOL02	2/16/11 8:10	2/16/11 9:10	6	S	<2	<2	<2	<2	<2	<2	<2	<5	<2
TCOL02	2/16/11 11:10	2/17/11 9:10	12	S	<2	2	<2	<2	<2	<2	<2	<5	<2

Table C-11.15a
Proportion of Analyses of Surfzone Samples with Exceedances of
AB411 Single Sample Standards

Site	All Data					AB411				
	Days	Samples	Tests	>Std	%	Days	Samples	Tests	>Std	%
ELMORO	8	9	27	0	0.00	9	9	27	0	0.00
EMRLD	40	43	129	0	0.00	26	26	78	0	0.00
HEISLR	37	38	114	1	0.01	26	26	78	0	0.00
MAINBC	39	55	165	1	0.01	25	29	87	0	0.00
VICTRA	40	42	126	1	0.01	26	26	78	0	0.00
CLEO	34	43	129	0	0.00	23	25	75	0	0.00
BLUBRD	40	54	162	3	0.02	26	29	87	1	0.01
PEARL	36	36	108	1	0.01	22	22	66	0	0.00
DUMOND	38	38	114	0	0.00	26	26	78	0	0.00
BLULGN	17	19	57	0	0.00	6	7	21	0	0.00
ACM1	40	45	135	1	0.01	26	30	90	1	0.01
WEST	40	40	120	0	0.00	26	26	78	0	0.00
SCM1	40	79	237	7	0.03	26	51	153	2	0.01
DSB5	40	40	120	22	0.18	26	26	78	7	0.09
SJC1	42	70	210	63	0.30	27	41	123	23	0.19
DSB4	42	42	125	21	0.17	27	27	80	12	0.15
DSB1	42	42	126	6	0.05	27	27	81	2	0.02
CSBMP1	41	42	126	12	0.10	27	27	81	6	0.07
CSBBR1	41	41	123	6	0.05	27	27	81	4	0.05
POCHE	42	81	243	24	0.10	27	52	156	22	0.14
SCCS52	37	38	114	1	0.01	26	26	78	0	0.00
SCCS17	36	38	114	1	0.01	23	23	69	0	0.00
PICO	42	46	138	2	0.01	27	27	81	1	0.01
MARIPO	34	34	102	0	0.00	22	22	66	0	0.00
LINDAL	42	42	126	0	0.00	27	27	81	0	0.00
PIER	42	45	135	1	0.01	27	30	90	1	0.01
TRFCYN	42	48	144	1	0.01	27	28	84	1	0.01
RIVERA	30	30	90	1	0.01	25	25	75	0	0.00

Table C-11.15b
Proportion of Analyses of Surfzone Samples with Exceedances of
AB411 Single Sample Standards when Outfall Discharge Reached Ocean

	All Data					AB411				
Site	Days	Samples	Tests	>Std	%	Days	Samples	Tests	>Std	%
ELMORO	1	2	6	0	0.00	1	2	6	0	0.00
EMRLD	0	0	0	0	NA	0	0	0	0	NA
HEISLR	2	3	9	0	0.00	0	0	0	0	NA
MAINBC	17	33	99	1	0.01	4	8	24	0	0.00
VICTRA	3	4	12	0	0.00	0	0	0	0	NA
CLEO	9	18	54	0	0.00	2	4	12	0	0.00
BLUBRD	14	28	84	2	0.02	3	6	18	0	0.00
PEARL	0	0	0	0	NA	0	0	0	0	NA
DUMOND	0	0	0	0	NA	0	0	0	0	NA
BLULGN	1	2	6	0	0.00	1	2	6	0	0.00
ACM1	22	26	78	0	0.00	16	19	57	0	0.00
WEST	0	0	0	0	NA	0	0	0	0	NA
SCM1	38	76	228	7	0.03	24	48	144	2	0.01
DSB5	0	0	0	0	NA	0	0	0	0	NA
SJC1	26	52	156	55	0.35	13	26	78	19	0.24
DSB4	0	0	0	0	NA	0	0	0	0	NA
DSB1	0	0	0	0	NA	0	0	0	0	NA
CSBMP1	1	2	6	0	0.00	0	0	0	0	NA
CSBBR1	0	0	0	0	NA	0	0	0	0	NA
POCHE	37	73	219	20	0.09	23	46	138	20	0.14
SCCS52	1	2	6	1	0.17	0	0	0	0	NA
SCCS17	1	2	6	0	0.00	0	0	0	0	NA
PICO	13	17	51	0	0.00	3	3	9	0	0.00
MARIPO	0	0	0	0	NA	0	0	0	0	NA
LINDAL	0	0	0	0	NA	0	0	0	0	NA
PIER	1	2	6	0	0.00	1	2	6	0	0.00
TRFCYN	6	12	36	0	0.00	1	2	6	0	0.00
RIVERA	0	0	0	0	NA	0	0	0	0	NA

Table C-11.16
Numbers of Days in which the Surfzone Contained at Least One Indicator above an Ocean Water Contact Standard

Site	Oct 2010 - Sep 2011				AB411 Season Only			
	Site Visits	Site Visits with indicator(s) > std(s)	Site Visits with Flow to Ocean	Flow to Ocean and indicator(s) > std(s)	Site Visits	Site Visits with indicator(s) > std(s)	Site Visits with Flow to Ocean	Flow to Ocean and indicator(s) > std(s)
ELMORO	8	0	1	0	8	0	1	0
EMRLD	40	0	0	0	26	0	0	0
HEISLR	37	1	2	0	26	0	0	0
MAINBC	39	1	17	1	25	0	4	0
VICTRA	40	1	3	0	26	0	0	0
CLEO	34	0	9	0	23	0	2	0
BLUBRD	40	2	14	1	26	1	3	0
PEARL	36	1	0	0	22	0	0	0
DUMOND	40	0	0	0	26	0	0	0
BLULGN	17	0	1	0	6	0	1	0
ACM1	40	1	22	0	26	1	16	0
WEST	40	0	0	0	26	0	0	0
SCM1	40	5	38	5	26	2	24	2
DSB5	40	18	0	0	26	7	0	0
SJC1	42	29	26	24	27	14	13	11
DSB4	42	20	0	0	27	12	0	0
DSB1	42	6	0	0	27	2	0	0
CSBMP1	41	12	1	0	27	6	0	0
CSBBR1	41	6	0	0	27	4	0	0
POCHE	42	16	37	13	27	15	23	13
SCCS52	37	1	1	1	26	0	0	0
SCCS17	36	1	1	0	23	0	0	0
PICO	42	2	13	0	27	1	3	0
MARIPO	34	0	0	0	22	0	0	0
LINDAL	42	0	0	0	27	0	0	0
PIER	42	1	1	0	27	1	1	0
TRFCYN	42	1	6	0	27	1	1	0
LADERA								
RIVERA	30	1	0	0	25	0	0	0

Table C-11.17
Average Estimated Flowrates at Coastal Stormdrain Sites

Station Code	Pipe Discharge Rate	Relative Flow rate
ACM1	51.867	High
BLUBRD	0.168	Low
BLULGN	0.010	Low
DSB5	0.011	Low
CSBBR1	0.017	Low
CSBMP1	0.142	Low
DUMOND	0.096	Low
ELMORO	0.260	Low
EMRLD	0.239	Low
HEISLR	0.034	Low
LINDAL	0.040	Low
MAINBC	1.792	Medium
MARIPO	0.005	Low
PEARL	0.026	Low
PICO	0.723	Low
PIER	0.013	Low
RIVERA	0.044	Low
SCCS17	0.025	Low
SCCS52	0.007	Low
SCM1	3.155	Medium
SJC1	73.528	High
TRFCYN	0.189	Low
VICTRA	0.022	Low
WEST	0.040	Low

**Discharge average calculated using data for the day that the pipes flowed*

Flowrate (cfs)	Category
< 1	Low
1 - 3.99	Medium
> 4	High

Table C11.18a
Coastal Stormdrain Sites Ranked in Terms of Significance of Regression Slopes
of All Bacterial indicators, Based on Data from the Entire Year

Enterococcus			Fecal Coliform			Total Coliform		
Rank	**Station**	**P-Value**	**Rank**	**Station**	**P-Value**	**Rank**	**Station**	**P-Value**
2	ACM1	0.0135	14	ACM1	0.4061	18	ACM1	1
3	BLUBRD	0.0147	6	BLUBRD	0.0619	18	BLUBRD	1
16	BLULGN	0.3809	16	BLULGN	0.4647	2	BLULGN	0.0002
18	CLEO	1	15	CLEO	0.4161	13	CLEO	0.3488
7	CSBBR1	0.058	17	CSBBR1	1	18	CSBBR1	1
18	CSBMP1	1	12	CSBMP1	0.2941	16	CSBMP1	0.4473
9	DSB5	0.0749	17	DSB5	1	18	DSB5	1
15	DUMOND	0.3151	11	DUMOND	0.1861	7	DUMOND	0.0966
1	ELMORO	< 0.0001	1	ELMORO	< 0.0001	14	ELMORO	0.3604
18	EMRLD	1	3	EMRLD	0.0284	12	EMRLD	0.3161
18	HEISLR	1	17	HEISLR	1	4	HEISLR	0.0272
11	LINDAL	0.1721	7	LINDAL	0.0756	8	LINDAL	0.1706
4	MAINBC	0.0189	5	MAINBC	0.0546	3	MAINBC	0.0131
10	MARIPO	0.0803	17	MARIPO	1	18	MARIPO	1
18	PEARL	1	17	PEARL	1	15	PEARL	0.4328
13	PICO	0.2473	2	PICO	0.0267	6	PICO	0.0703
8	PIER	0.0705	17	PIER	1	17	PIER	0.4777
1	POCHE	< 0.0001	1	POCHE	< 0.0001	1	POCHE	0.0001
12	RIVERA	0.2185	8	RIVERA	0.1029	18	RIVERA	1
18	SCCS17	1	9	SCCS17	0.1721	9	SCCS17	0.1765
17	SCCS52	0.4184	17	SCCS52	1	18	SCCS52	1
14	SCM1	0.2815	4	SCM1	0.033	5	SCM1	0.0473
6	SJC1	0.0398	10	SJC1	0.1758	10	SJC1	0.1891
5	TRFCYN	0.0215	17	TRFCYN	1	18	TRFCYN	1
18	VICTRA	1	13	VICTRA	0.3717	18	VICTRA	1
18	WEST	1	17	WEST	1	11	WEST	0.2749

Greater P values - less likelihood that concentrations in surfzone and stormdrain are related

significant relationship surfzone and stormdrain concentrations

Table C-11.18b
Coastal Stormdrain Sites Ranked in Terms of Significance of Regression Slopes
of All Bacterial indicators, Based on Data from the AB411 Season

Enterococcus			Fecal Coliform			Total Coliform		
Rank	**Station**	**P-Value**	**Rank**	**Station**	**P-Value**	**Rank**	**Station**	**P-Value**
7	ACM1	0.0697	14	ACM1	1	12	ACM1	1
1	BLUBRD	< 0.0001	1	BLUBRD	< 0.0001	12	BLUBRD	1
12	BLULGN	0.2541	14	BLULGN	1	2	BLULGN	0.0058
15	CLEO	1	14	CLEO	1	12	CLEO	1
5	CSBBR1	0.0378	14	CSBBR1	1	12	CSBBR1	1
15	CSBMP1	1	10	CSBMP1	0.3629	5	CSBMP1	0.1986
10	DSB5	0.2291	9	DSB5	0.3362	12	DSB5	1
9	DUMOND	0.1141	12	DUMOND	0.3639	9	DUMOND	0.3078
1	ELMORO	< 0.0001	1	ELMORO	< 0.0001	10	ELMORO	0.3604
15	EMRLD	1	3	EMRLD	0.0201	12	EMRLD	1
6	LINDAL	0.0424	7	LINDAL	0.1328	7	LINDAL	0.2551
15	MAINBC	1	6	MAINBC	0.1168	12	MAINBC	1
15	MARIPO	1	14	MARIPO	1	8	MARIPO	0.2975
15	PEARL	1	14	PEARL	1	12	PEARL	1
15	PICO	1	8	PICO	0.2175	3	PICO	0.0847
3	PIER	0.0173	14	PIER	1	6	PIER	0.2134
2	POCHE	0.0008	2	POCHE	0.0023	1	POCHE	0.0047
4	RIVERA	0.0278	5	RIVERA	0.1142	12	RIVERA	1
14	SCM1	0.3732	4	SCM1	0.1092	4	SCM1	0.1855
11	SJC1	0.2362	13	SJC1	0.4148	11	SJC1	0.4326
8	TRFCYN	0.0791	14	TRFCYN	1	12	TRFCYN	1
15	VICTRA	1	14	VICTRA	1	12	VICTRA	1
13	WEST	0.2598	11	WEST	0.3632	12	WEST	1

Greater P values - less likelihood that concentrations in surfzone and stormdrain are related

significant relationship surfzone and stormdrain concentrations

Table C11.18c
Coastal Stormdrain Sites Ranked in Terms of Significance of Regression Slopes of All Bacterial indicators, Based on Data from the Entire Year when Pipes Flow to Ocean

Enterococcus			Fecal Coliform			Total Coliform		
Rank	Station	P-Value	Rank	Station	P-Value	Rank	Station	P-Value
3	ACM1	0.0059	7	ACM1	0.2908	9	ACM1	1
2	BLUBRD	0.0013	4	BLUBRD	0.0156	9	BLUBRD	1
10	CLEO	1	8	CLEO	1	7	CLEO	0.2667
9	EMRLD	0.2639	8	EMRLD	1	4	EMRLD	0.0506
4	MAINBC	0.0212	5	MAINBC	0.0301	2	MAINBC	0.0051
7	PICO	0.0907	2	PICO	0.0081	6	PICO	0.2325
1	POCHE	< 0.0001	1	POCHE	< 0.0001	1	POCHE	< 0.0001
5	SCM1	0.0456	3	SCM1	0.0109	3	SCM1	0.0445
8	SJC1	0.1229	6	SJC1	0.1471	5	SJC1	0.0713
6	TRFCYN	0.0597	8	TRFCYN	1	8	TRFCYN	0.2911
10	VICTRA	1	8	VICTRA	1	9	VICTRA	1

Greater P values - less likelihood that concentrations in surfzone and stormdrain are related
significant relationship surfzone and stormdrain concentrations

Table C-11.18d
Coastal Stormdrain Sites Ranked in Terms of Significance of Regression Slopes of All Bacterial indicators, Based on Data from the AB411 Season when Pipes Flow to Ocean

Enterococcus			Fecal Coliform			Total Coliform		
Rank	Station	P-Value	Rank	Station	P-Value	Rank	Station	P-Value
3	ACM1	0.0543	5	ACM1	1	6	ACM1	1
4	BLUBRD	1	5	BLUBRD	1	2	BLUBRD	0.11
4	CLEO	1	5	CLEO	1	6	CLEO	1
4	MAINBC	1	3	MAINBC	0.0685	3	MAINBC	0.1507
1	POCHE	0.0003	1	POCHE	0.003	1	POCHE	0.0022
2	SCM1	0.0342	2	SCM1	0.0292	4	SCM1	0.2061
4	SJC1	1	4	SJC1	0.4651	5	SJC1	0.2316

Greater P values - less likelihood that concentrations in surfzone and stormdrain are related
significant relationship surfzone and stormdrain concentrations

Table C-11.19
Conditions at Drains of Highest Concern

Drain	Exceedances (proportion)				Regression (p value)				Characteristics of Flow & Features at Mouth of Drain	Features in the Watershed
	All Data		Flows to Ocean		All Data		When Drain Flows to Ocean			
	Year	AB411	Year	AB411	Year	AB411	Year	AB411		
Poche Beach POCHE	0.100	0.140	0.900	0.140	<0.0001E <0.0001F 0.0001T	0.0008E 0.0023F 0.0047T	<0.0001E <0.0001F <0.0001T	0.0003F 0.003F 0.0022	Discharge from drain collects in a large stagnant scour pond on the beach. The outflow from the pond regularly reaches the surfzone	Residential area and golf course immediately upstream of outlet, Prima Deshecha landfill upstream
Salt Creek SCM1	0.300	0.010	0.030	0.010	0.2815E 0.033F 0.0473T	0.3732E 0.1092F 0.1855T	0.0456E 0.0109F 0.0445T	0.0342E 0.0292F 0.2061T	Underground (beneath section of golf course) drain discharges to concrete apron; flow from apron diverted to ozone treatment plant; outlet from plant discharge to end of apron through rocky area before reaching beach to form a large stagnant scour pond. Many birds have been observed during each sampling.	Primarily residential/commercial; Golf course immediately upstream of mouth.
San Juan Crk SJC1	0.300	0.190	0.350	0.240	0.0398E 0.1758F 0.1891T	0.2362E 0.4148F 0.4326T	0.1229E 0.1471F 0.0713T	1E 0.4651F 0.2316T	Highest estimated flowrate of any sampled drain. Flow to ocean occassionally blocked by sand berms during the summer. Impacts to the surfzone may be influenced by other drains in the immediate area (Doheny State Beach).	Large watershed extending into the Cleveland National Forest. Mixed landuses. Sewage Treatment Plants u/s mouth. Bird refuge at the mouth with as many as 2000 observed during any one sampling.

[1] Exceedance proportion calculated as #AB411 exceedances / # total tests. Totals tests per day of sampling = 2 samples (upcoast & downcoast) x 3 indicators = 6.
E,F, and T in the Regression column refer, respectively, to Entercoccus, Fecal coliforms and Total coliforms.

Table C-11.20
Aqueous Chemistry in Ambient Coastal Receiving Waters

		Field Measurements					Laboratory Measurements																					
Location	Date	Type	EC	pH	TEMP	DO	Specific Conductance	pH	Turbidity	Nitrate as NO_3	Ammonia as N	TKN	Total Phosphate as PO_4	ortho phosphate as P	TSS	VSS	Diazinon	Chlorpyrifos	Dimethoate	Malathion	Cd	Cr	Cu	Pb	Ni	Ag	Zn	As	Se
			uS		C	mg/L	uS		NTU	mg/L							ug/L				ug/L								
AB-2	4/19/11 7:45	DT	3010	7.45	19.39	2.74	3100	7.43	1.1	22.7	< 0.1	0.37	0.11	< 0.02	60	< 5					< 0.5	0.9	1.5	< 0.5	3.5	< 0.5	< 2	< 0.5	2
ACM1d	9/29/10 11:25	DT	52541	8	20.79	9.88	54300	8.32	7.38	0.94	0.12	0.35	0.14	< 0.02	22	6	< 10	< 10	< 10	< 10	0.1	1.4	1.7	0.14	0.79	< 0.05	3.9	1.2	< 0.1
ACM1d	9/29/10 11:25	DF																			0.16	0.3	1.4	0.022	0.48	< 0.05	4	1	< 0.1
ACM1d	10/6/10 10:56	ST	31859	7.95	18.54	9.33	34200	8.02	123	3.92	0.32	0.92	1.53	0.11	246	40	< 10	< 10	< 10	19	5.1	5.6	18	2.8	28	< 0.05	71	3	0.85
ACM1d	10/6/10 10:56	SF																			0.31	< 0.3	1.8	0.045	14	< 0.05	5.1	1.6	0.32
ACM1d	2/26/11 10:44	ST	41793	7.97	13.67	6.86	35200	7.68	200	0.84	< 0.1	0.94	1.2	0.07	300	43	< 10	< 10	< 10	13	1.2	14	73	3.8	8.2	< 0.05	43	4.8	0.33
ACM1d	2/26/11 10:44	SF																			0.22	< 0.3	2.6	0.09	2.9	< 0.05	3.5	0.86	0.1
ACM1d	5/11/11 11:30	DT	48136	7.99	18.09	7.21	53000	8.12	2.66	< 0.4	< 0.1	0.26	0.1	< 0.02	< 5	< 5	< 10	< 10	< 10	< 10	0.081	0.35	0.79	0.059	0.82	< 0.05	< 0.2	1.1	< 0.1
ACM1d	5/11/11 11:30	DF																			0.61	< 0.3	0.98	0.044	0.74	< 0.05	1.1	1.1	< 0.1
LB2d	9/29/10 12:00	DT	52668	8.01	21.91	8.24	53400	8.3	4.03	1.29	0.26	0.26	0.09	< 0.02	10	< 5	< 10	< 10	< 10	< 10	0.1	0.93	2.8	0.19	0.68	< 0.05	3.1	1	< 0.1
LB2d	9/29/10 12:00	DF																			0.19	< 0.3	2.4	0.051	0.56	< 0.05	5.2	0.98	< 0.1
LB2d	5/10/11 10:15	DT	46877	8.17	17.65	8.49	53300	8.18	2.31	< 0.4	< 0.1	0.74	0.17	< 0.02	< 5	< 5	< 10	< 10	< 10	< 10	0.039	0.38	1.6	0.1	0.38	< 0.05	4.3	1	< 0.1
LB2d	5/10/11 10:15	DF																			0.033	< 0.3	1	0.025	0.3	< 0.05	0.43	0.95	< 0.1
LB3d	2/26/11 11:30	ST	41068	7.99	13.9	5.65	48400	7.77	13.7	< 0.4	< 0.1	0.52	0.22	0.04	20	< 5	< 10	< 10	< 10	< 10	0.054	1.5	1.8	0.72	0.8	< 0.05	4.8	1.3	< 0.1
LB3d	2/26/11 11:30	SF																			0.058	< 0.3	0.88	0.024	0.44	< 0.05	1.7	0.95	< 0.1
LB3u	10/6/10 11:40	ST	36819	7.97	18.99	8.75	41400	8.14	39.06	2.09	0.11	1.04	0.82	0.15	56	13	< 10	< 10	< 10	14	0.29	2.3	11	1.8	3.8	< 0.05	35	1.7	0.13
LB3u	10/6/10 11:40	SF																			0.11	0.33	2.3	0.069	1.6	< 0.05	5.9	1.4	< 0.1
NI1d	2/26/11 9:33	ST	49717	7.57	14.25	7.13	52600	7.62	3.54	< 0.4	< 0.1	0.52	0.12	0.02	11	< 5	< 10	< 10	< 10	< 10	0.089	0.86	1.1	0.13	0.61	< 0.05	2.4	1.1	< 0.1
NI1d	2/26/11 9:33	SF																			0.078	< 0.3	1	0.022	0.5	< 0.05	2.1	0.93	< 0.1
NI1d	5/10/11 9:30	DT	49765	8.06	17.72	6.81	54200	8.25	5.2	< 0.4	< 0.1	0.54	0.12	< 0.02	7	< 5	< 10	< 10	< 10	< 10	0.059	0.61	1.1	0.13	0.54	< 0.05	< 0.2	1.1	< 0.1
NI1d	5/10/11 9:30	DF																			0.086	< 0.3	0.91	0.04	0.38	< 0.05	< 0.2	1	< 0.1
SCM1	11/20/10 12:10	S	788	7.93	16.49	10.91																							
SCM1	2/16/11 9:08	S	1919	7.76	14.42	11.54											< 10	< 10	< 10	390									
SCM1d	9/29/10 10:15	DT	51776	7.85	20.9	9.33	53900	8.29	1.24	1.15	0.17	0.28	< 0.06	< 0.02	< 5	< 5	< 10	< 10	< 10	< 10	0.076	0.69	3.7	0.19	0.98	< 0.05	4	1.2	< 0.1
SCM1d	9/29/10 10:15	DF																			0.1	< 0.3	0.71	0.024	0.46	< 0.05	1.6	1.1	< 0.1
SCM1d	10/6/10 10:05	ST	35903	7.84	17.39	8.64	31400	7.82	16.25	4.22	0.32	0.88	1.24	0.31	32	8	< 10	< 10	< 10	41	0.48	2	12	0.9	6.1	< 0.05	44	1.4	0.24
SCM1d	10/6/10 10:05	SF																			0.1	0.36	3.7	0.07	3.8	< 0.05	11	1.1	0.18
SCM1d	2/26/11 10:13	ST	25464	7.94	12.97	9.81																							
SJC1d	2/26/11 8:50	ST	10542	7.44	11.97	12.24	9960	7.38	1020	1.26	0.34	4.37	6.39	0.15	2200	246	14	< 10	< 10	25	1.9	69	49	15	16	0.2	77	23	1.1
SJC1d	2/26/11 8:50	SF																			0.15	< 0.3	1.7	0.037	1.9	< 0.05	1.9	1.6	0.17
SJC1d	5/11/11 10:30	DT	46219	7.95	18.93	6.74	49200	7.98	8.8	< 0.4	< 0.1	0.65	0.17	0.03	18	< 5	< 10	< 10	< 10	< 10	0.22	0.37	2	0.093	1.3	< 0.05	0.67	1.3	0.1
SJC1d	5/11/11 10:30	DF																			0.28	< 0.3	1.9	0.028	1.2	< 0.05	1.9	1.3	< 0.1
SCM1d	6/23/11 9:40	D	45975	7.99	18.7	7.92	53900	7.84	2.24	< 0.4	< 0.1	0.5	0.11	< 0.02	< 5	< 5													

Table C-11.21
Pyrethroid Pesticides in Ambient Coastal Receiving Waters

			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin	Esfenvalerate	L-Cyhalothrin	Permethrin	Prallethrin
Site	Date		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
ACM1d	10/6/10 10:56	ST	<2	<2	<2	<2	<2	<2	<2	<5	<2
ACM1d	2/26/11 10:44	ST	<2	2.9	<2	2.7	<2	<2	<2	<5	<2
LB3d	2/26/11 11:30	ST	<2	<2	<2	<2	<2	<2	<2	<5	<2
LB3u	10/6/10 11:40	ST	<2	<2	<2	<2	<2	<2	<2	<5	<2
NI1d	2/26/11 9:33	ST	<2	<2	<2	<2	<2	<2	<2	<5	<2
SCM1	2/16/11 9:08	ST	<2	3.3	<2	<2	<2	<2	<2	<5	<2
SCM1d	10/6/10 10:05	ST	<2	<2	<2	<2	<2	<2	<2	<5	<2
SCM1d	2/26/11 10:13	ST	<2	2.2	<2	<2	<2	<2	<2	<5	<2
SCM1d	6/23/11 9:40	D	<2	<2	<2	<2	<10	<2	<2	<5	<2
SJC1d	2/26/11 8:50	ST	<2	4.5	<2	<2	<2	<2	<2	<5	<2

Table C-11.22
Toxicity Testing of Ambient Coastal Receiving Waters

					Mysidopsis Growth					Mysidopsis Survival					Mysidopsis Survival 48 Hour					Sea Urchin Fertilization				
					Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUc	Control	100%	NOEC	IC50	TUa	Control	100%	NOEC	IC50	TUc
Station		Date	Matrix	Type	mg/ind	mg/ind	%conc	%conc		%	%	%conc	%conc		%	%	%conc	%conc		%	%	%conc	%conc	
ACM1d	Surfzone	10/6/10 10:56	SW	ST	0.272	0.085	50	56.548	2	87.5	7.5	25	42.354	4	97.5	100	100	>100	0	0.968	0.952	100	>100	1
ACM1d	Surfzone	2/26/11 10:44	SW	ST	0.11	0.137	100	>100	1	67.5	80	100	>100	1	97.5	95	100	>100	0.41	0.862	0.878	87	>87	<1.149
ACM1d	Surfzone	5/11/11 11:30	SW	DT	0.134	0.146	100	>100	1	80	82.5	100	>100	1	85	92.5	100	>100	0.51	0.942	0.948	100	>100	1
LB2d	Surfzone	5/10/11 10:15	SW	DT	0.3	0.336	100	>100	1	90	92.5	100	>100	1	100	100	100	>100	0	0.955	0.94	100	>100	1
LB3d	Surfzone	2/26/11 11:30	SW	ST	0.11	0.163	100	>100	1	67.5	75	100	>100	1	97.5	97.5	100	>100	0.23	0.884	0.866	87	>87	<1.149
LB3u	Surfzone	10/6/10 11:40	SW	ST	0.272	0.338	100	>100	1	87.5	85	100	>100	1	97.5	97.5	100	>100	0.23	0.955	0.975	100	>100	1
NI1d	Surfzone	2/26/11 9:33	SW	ST	0.071	0.08	100	>100	1	57.5	37.5	100	>100	1	97.5	95	100	>100	0.41	0.946	0.964	100	>100	1
NI1d	Surfzone	5/10/11 9:30	SW	DT	0.271	0.246	100	>100	1	92.5	97.5	100	>100	1	100	100	100	>100	0	0.952	0.942	100	>100	1
SCM1	Outlet	11/20/10 12:10	FW	DT	0.193	0.127	25	>100	4	92.5	55	50	>100	2	100	90	100	>100	0.59	0.728	0.648	50	>58	2
SCM1	Outlet	2/16/11 9:08	FW	ST	0.192	0.101	50	>100	2	97.5	55	50	>100	2	100	90	100	>100	0.59					
SCM1d	Surfzone	10/6/10 10:05	SW	ST	0.306	0.337	100	>100	1	90	72.5	100	>100	1	97.5	100	100	>100	0	0.945	0.975	100	>100	1
SCM1d	Surfzone	2/26/11 10:13	SW	ST	0.11	0.138	100	>100	1	67.5	67.5	100	>100	1	97.5	92.5	100	>100	0.51					
SCM1d	Surfzone	6/23/11 9:40	SW	DT	0.358	0.314	100	>100	1	95	97.5	100	>100	1	100	100	100	>100	0	1	1	100	>100	1
SJC1d	Surfzone	2/26/11 8:50	SW	ST	0.083	0.144	100	>100	1	55	70	100	>100	1	100	100	100	>100	0	0.936	0.64	12.5	>64	8
SJC1d	Surfzone	5/11/11 10:30	SW	DT	0.132	0.137	100	>100	1	85	87.5	100	>100	1	85	95	100	>100	0.41	0.958	0.938	100	>100	1

Table C-11.23
Stormwater Action Levels Monitoring Program

Location	Begin	End	hours	Storm Count	Type	Turbidity	Nitrate + Nitrite as N	Total Phosphate as P	Cd	Cu	Pb	Ni	Zn
						NTU	mg/L		µg/L				
				SAL		126	2.6	1.46	3.0	127	250	54	976
IRVCOVE	11/20/10 10:25	11/20/10 14:25	4.0	1	ST	41.55	0.78	0.32	0.51	160	10	6.3	91
IRVCOVE	12/16/10 23:26	12/17/10 22:26	23.0	2	ST	51.3	1.08	0.395	<0.5	73	3.9	8.6	55
IRVCOVE	2/16/11 14:24	2/16/11 21:54	7.5	3	ST	5.05	1.05	0.18	<0.5	46	<0.5	2.5	16
J01P08	12/29/10 8:48	12/29/10 13:48	5.0	1	ST	34.4	0.60	0.339	1.0	19	1.0	2.6	25
J01P08	1/2/11 15:24	1/2/11 22:54	7.5	2	ST	17.4	0.687	0.365	1.3	42	0.78	3.3	26
K01P07	12/17/10 15:30	12/18/10 2:30	11.0	1	ST	11.7	0.929	0.453	<0.5	25	0.59	3	30
K01P07	12/29/10 6:34	12/29/10 12:34	6.0	2	ST	34.6	0.538	0.509	<0.5	33	0.88	5.9	35
L01TBN1	11/21/10 8:00	11/21/10 11:00	3.0	1	ST	189	0.26	3.27	1.3	31	3.4	13	81
L01TBN1	12/17/10 13:22	12/17/10 20:52	7.5	2	ST	4.04	1.225	0.248	<0.5	19	0.55	3.1	20
L01TBN1	2/16/11 6:25	2/16/11 12:55	6.5	3	ST	47.1	2.00	0.71	1.7	50	1.6	15	52
L02P32	2/16/11 9:27	2/16/11 16:57	7.5	1	ST	17.4	1.44	0.49	<0.5	53	0.98	2.0	45
L02P32	2/25/11 21:40	2/26/11 9:10	11.5	2	ST	18.8	0.74	0.32	<0.5	18	0.9	1.3	30
L02TBN2	12/29/10 7:35	12/29/10 13:05	5.5	1	ST	146	0.554	0.724	<0.5	33	3.6	6.7	49
L02TBN2	1/2/11 16:03	1/3/11 2:33	10.5	2	ST	43.7	0.691	0.551	<0.5	30	1.5	4.0	30
L02TBN2	2/25/11 22:05	2/26/11 7:35	9.5	3	ST	95	0.52	0.56	<0.5	29	3.0	5.0	48
L03P09	2/16/11 3:52	2/16/11 9:22	5.5	1	ST	30.6	1.09	0.54	1.7	56	1.3	9.6	57
L03P09	2/25/11 21:34	2/26/11 9:04	11.5	2	ST	38.7	0.53	0.40	1.1	32	9.1	6.6	71
L08TBN1	12/29/10 7:09	12/29/10 12:09	5.0	1	ST	35.1	0.287	0.60	<0.5	23	1.0	1.6	20
L08TBN1	1/2/11 15:05	1/2/11 20:35	5.5	2	ST	18.9	0.294	0.528	<0.5	35	0.68	2.2	27
LADERA	2/16/11 3:48	2/16/11 8:18	4.5	1	ST	12.1	0.98	0.86	<0.5	66	1.0	2.4	62
LADERA	2/25/11 21:35	2/26/11 7:05	9.5	2	ST	24.7	0.65	0.57	<0.5	41	3.2	3.4	97
M03P01	11/20/10 11:42	11/21/10 7:42	20.0	1	ST	9.2	3.03	0.79	0.72	25	<0.5	7.6	21
M03P01	12/17/10 13:21	12/17/10 20:21	7.0	2	ST	21.8	0.621	0.40	0.86	25	1.7	9.8	41
M03P01	2/16/11 5:20	2/17/11 2:50	21.5	3	ST	3.85	0.81	0.23	<0.5	22	<0.5	1.9	20
M00P01	11/20/10 11:00	11/20/10 18:00	7.0	1	ST	17.71	1.20	0.43	2.5	37	2.1	28	57
M00P01	12/17/10 14:01	12/18/10 1:31	11.5	2	ST	18.9	0.958	0.545	<0.5	28	0.72	3.3	26
VICTRA	11/20/10 4:46	11/20/10 14:46	10.0	1	ST	29.86	1.24	0.57	<0.5	87	3.4	7.0	170
VICTRA	12/16/10 23:25	12/17/10 10:25	11.0	2	ST	32.1	1.012	0.447	<0.5	82	3.8	6.1	110

Table C-11.24
Water Quality across the Region Relative to CTR Criteria

				Exceeded Freshwater Acute CTR Criteria*										Exceeded Saltwater CTR Acute Criteria*									
		Samples		Cd		Cu		Ni		Zn		Se^{+}		Cd		Cu		Ni		Zn		Se	
Site	Program	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St
ACJ01	Mass Emissions	2	4	0	0	0	0	0	0	0	0	2	2	0	0	2	4	0	0	0	0	0	0
LCWI02	Mass Emissions	2	5	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0
PDCM01	Mass Emissions	2	5	0	2	0	0	0	0	0	0	2	3	0	0	2	5	2	3	0	2	0	0
SDCM02	Mass Emissions	2	6	0	0	0	0	0	0	0	0	2	4	0	0	2	6	1	2	0	0	0	0
SJNL01	Mass Emissions	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
TCOL02	Mass Emissions	2	4	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	0	0	0	0
ACJ01	Bioassessment	1		0		0		0		0		1											
CC-CR	Bioassessment	1		0		0		0		0		0											
LC-133	Bioassessment	1		0		0		0		0		0											
REF-BC	Bioassessment	1		0		0		0		0		0											
REF-FC	Bioassessment	1		0		0		0		0		0											
REF-TCAS	Bioassessment	1		0		0		0		0		0											
SC-MB	Bioassessment	1		0		0		0		0		0											
SJC-74	Bioassessment	1		0		0		0		0		0											
SMC01257	Bioassessment	1		0		0		0		0		0											
SMC01555	Bioassessment	1		0		0		0		0		0											
ACM1d	ACRW	2	1											0	0	0	0	0	0	0	0	0	0
LB3u	ACRW		1												0		0		0		0		0
LB2d	ACRW	2	1											0	0	0	0	0	0	0	0	0	0
NI1d	ACRW	1	1											0	0	0	0	0	0	0	0	0	0
SCM1d	ACRW	1	1											0	0	0	0	0	0	0	0	0	0
SJC1d	ACRW	1	1											0	0	0	0	0	0	0	0	0	0

Comparisons to CTR criteria for saltwater were only performed on samples of ocean waters or regional channels discharging directly to saltwater

*Concentration Maximum Criterion (acute) for dissolved metals

$^{+}$Concentration Continuous Criterion (chronic) for total recoverable Selenium