



Table H-1. Data Collected Under SWAMP in 2002 for the Carlsbad Watershed. Shaded values either exceed water quality objectives or are potentially toxic.

Analyte Group	Analyte	Units	WQO	Source	Loma Alta Creek - 904CBLAC3				Buena Vista Creek - 904CBBVR4				Buena Creek - 904CBBUR1				Agua Hedionda Creek - 904CBAQH6				San Marcos Creek - 904CBSAM3			
					March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September
Physical	Conductivity	uS/cm			3.97	4.35	4.63	4.71	2.18	2.29	2.30	2.35	1.63	1.93	1.96	1.83	2.71	2.83	2.75	3.01	1.91	2.28	1.97	2.72
Physical	Oxygen Saturation	Percent			98.1	168.7	153.2	154.3	98.3	203.2	152.4	84.3	94.6	91.1	92.5	107.7	95.8	113.6	94.9	98.9	98	92.7	96.3	94.6
Physical	Temperature	Degrees C			15.87	19.78	21.79	23.16	16.11	23.05	21.9	22.16	17.46	15.41	19.19	18.78	14.44	20.65	15.48	18.78	18.05	16.5	20.02	18.74
Physical	Turbidity	NTU	20	Basin Plan	0.87	0.8	1	2.1	3.7	2.8	2.0	0.85	NA	1.6	3.5	0.54	0.57	0.95	0.24	1.4	3.7	1.7	4.9	8.72
Physical	Velocity	FPS			0.518	NA	NA	NA	2.01	NA	NA	0	2	0.48	NA	NA	0.917	1.66	NA	1.34	1.44	0.495	NA	0.5
Physical	pH	pH units	6.5-8.5	Basin Plan	7.89	8.00	7.51	9.97	7.98	8.58	8.17	8.71	7.41	8.08	8.15	6.59	7.82	8.15	7.76	7.52	8.2	8.1	8.07	7.43
Inorganics	Alkalinity as CaCO3	mg/L			310	298	329	298	269	240	238	267	255	288	311	275	234	237	229	229	219	241	282	241
Inorganics	Ammonia as N	mg/L			0.07E	0.38	0.07E	0.11	0.07E	0.41	0.07E	0.098	0.07E	0.38	0.07E	0.069	0.07E	0.13	0.07E	0.071	0.07E	0.27	0.07E	0.081
Inorganics	Nitrate + Nitrite as N	mg/L	10	Basin Plan	0.086	0.176	0.146	0.109	0.775	0.313	0.128	0.274	15.2	16.8	19.4	10.1	1.35	1.36	1.18	0.481	0.176	0.227	0.944	0.658
Inorganics	Nitrogen, Total Kjeldahl	mg/L			0.37E	0.5	0.37E	0.47	0.37E	0.37E	0.37E	0.43	0.37E	1.44	0.37E	0.45	0.37E	0.52	0.37E	0.34	0.37E	0.37E	0.37E	0.6
Inorganics	OrthoPhosphate as P	mg/L			0.032	0.05	0.034	0.019	0.105	0.055	0.045	0.099	0.174	0.127	0.159	0.127	0.047	0.052	0.024	0.026	0.175	0.096	0.092	0.194
Inorganics	Phosphorus, Total as P	mg/L	2	USEPA Multi-Sector General Permit	0.04E	0.04E	0.04E	<0.03	0.1	0.07	0.06	0.1	0.18	0.12	0.16	0.14	0.05	0.05	0.04E	0.036	0.15	0.12	0.12	0.38
Inorganics	Sulfate	mg/L	250	Basin Plan	191	250	240	204	191	259	242	256	280	413	394	404	327	432	449	522	221	293	362	373
Metals	Aluminum	µg/L	1000	Basin Plan	1.4	5.87	1.28	<0.1	1.3	4.4	1.39	<0.1	7.49	0.676	1.86	0.805	1.21	0.998	3.65	<0.1	1.4	2.14	1.34	14.9
Metals	Arsenic	µg/L	340/50	40 CFR 131 (a)/Basin Plan	4.94	5.63	6.33	4.85	7	7.24	2.62	7.4	4.54	4.32	1.63	3.95	4.17	4.61	1.88	3.89	12.4	2.98	13.1	3.48
Metals	Cadmium	µg/L	4.3	40 CFR 131 (a)	0.012	<0.01	0.274	0.018	0.055	0.046	0.011	0.072	0.014	<0.01	0.028	0.021	0.055	0.045	0.031	0.078	0.026	0.059	0.271	0.083
Metals	Chromium	µg/L	16	40 CFR 131 (a)	1.72	0.396	1.19	0.423	1.37	0.354	0.127	0.206	2.15	0.192	0.133	0.211	1.4	0.335	0.145	0.3	1.88	0.437	1.25	0.514
Metals	Copper	µg/L	13	40 CFR 131 (a)	1.68	2.58	3.36	2.27	2.12	2.46	1.71	2.26	3.7	4.51	2.21	6.16	2.48	2.89	2.21	2.44	3.52	3.33	3.41	2.99
Metals	Lead	µg/L	65	40 CFR 131 (a)	<0.01	<0.01	2.41	0.007	<0.01	<0.01	0.015	0.036	<0.01	<0.01	<0.002	0.036	<0.01	<0.002	0.004	<0.01	0.0204	2.41	0.058	
Metals	Manganese	µg/L	50	Basin Plan	123	64.1	84.6	208	98.6	64.3	2.85	23.3	35.2	20.1	117	36.8	76.8	38.1	126	51	513	79.1	140	82.7
Metals	Nickel	µg/L	470	40 CFR 131 (a)	0.67	1.99	4.43	3.14	0.516	1.45	0.427	1.55	0.724	1.27	0.544	0.916	0.561	1.53	0.664	2.75	1.56	1.33	3.65	2.87
Metals	Selenium	µg/L	50	Basin Plan	10	12	12.7	12.3	5.53	6.08	2.54	5.25	3.59	3.67	2.05	3.22	5.82	6.52	2.14	7.74	39.7	5.56	13.6	8.31
Metals	Silver	µg/L	3.4	40 CFR 131 (a)	<0.01	<0.01	<0.008	<0.008	<0.01	<0.01	<0.008	<0.008	<0.01	<0.01	<0.008	0.014	<0.01	<0.01	0.0209	<0.008	0.01	<0.01	0.233	<0.008
Metals	Zinc	µg/L	120	40 CFR 131 (a)	1.86	<0.1	1.32	1.58	3.98	1.34	1.48	6.62	2.15	1.18	1.72	2.22	2.04	0.496	1.73	2.7	6.3	14.7	3.78	6.75
OC Pesticide	Aldrin	µg/L	3	40 CFR 131 (a)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, cis	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, trans	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, alpha	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, gamma	µg/L	2.4/0.1	40 CFR 131/Basin Plan	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDD(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
OC Pesticide	DDD(p,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDE(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDE(p,p)	µg/L			<0.001	0.005	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	0.006	0.001E	0.002	0.004	<0.001	0.003	<0.001	<0.001	<0.001	0.006	0.002	0.003
OC Pesticide	DDMU(p,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDT(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDT(p,p)	µg/L	1.1	40 CFR 131	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003E	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003E	<0.002	<0.002
OC Pesticide	Dacthal	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	0.001E	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001
OC Pesticide	Dieldrin	µg/L	0.24	40 CFR 131	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endosulfan I	µg/L	0.22	40 CFR 131	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endosulfan II	µg/L	0.22	40 CFR 131	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endosulfan sulfate	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endrin	µg/L	0.086/2	40 CFR 131/Basin Plan	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001
OC Pesticide	Endrin Aldehyde	µg/L			<0.002	0.003E	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.008	<0.002	<0.002





Table H-1. Data Collected Under SWAMP in 2002 for the Carlsbad Watershed. Shaded values either exceed water quality objectives or are potentially toxic.

Analyte Group	Analyte	Units	WQO	Source	San Marcos Creek - 904CBSAM6				Encinitas Creek - 904CBENC2				Cottonwood Creek - 904CBCWC2				Escondido Creek - 904CBESC5				Escondido Creek - 904CBESC8			
					March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September
Physical	Conductivity	uS/cm			6.51	6.05	5.15	28.58	3.45	4.49	4.50	3.84	4.65	4.93	4.63	4.57	1.91	1.96	1.86	1.82	2.16	2.36	2.28	2.01
Physical	Oxygen Saturation	Percent			53.9	134.3	56.1	40.8	70.9	89.5	72.4	82.8	98.6	124.1	84.5	95.8	100	101.5	143.3	126.5	80.1	67.8	84.1	102.5
Physical	Temperature	Degrees C			17.19	25.06	19.08	23.4	13.23	15.83	15.8	18	18.75	20.51	19.54	21.17	12.1	16.31	21.8	19.15	15.38	15.21	18.01	18.88
Physical	Turbidity	NTU	20	Basin Plan	5.3	3.5	6.97	22	4.4	7	6.45	4.7	2	1.6	1.2	5.6	0.81	0.4	0.74	2.4	NA	6.6	6.4	9.42
Physical	Velocity	FPS			NA	NA	NA	NA	0.255	NA	NA	NA	0.707	1.08	NA	0.456	1.74	0.768	0.562	0.342	0.876	0.788	0.59	1.47
Physical	pH	pH units	6.5-8.5	Basin Plan	7.72	7.89	7.65	7.56	7.61	7.49	7.58	8.92	7.76	7.6	7.52	9.06	8.54	8.18	8.77	7.00	NA	7.68	7.97	11.62
Inorganics	Alkalinity as CaCO3	mg/L			220	234	241	205	262	268	275	259	158	154	155	154	289	295	257	286	276	285	252	248
Inorganics	Ammonia as N	mg/L			0.13	0.24	0.07E	0.11	0.07E	0.32	0.07E	0.077	0.07E	0.38	0.07E	0.2	0.07E	0.07E	0.07E	0.061	0.07E	0.07E	0.07E	0.075
Inorganics	Nitrate + Nitrite as N	mg/L	10	Basin Plan	0.274	0.245	0.333	0.239	0.298	0.513	0.442	0.413	31.4	38	40.8	40.3	6.38	6.91	6.16	7.65	2.5	2.85	1.0	1.5
Inorganics	Nitrogen, Total Kjeldahl	mg/L			0.68	0.58	0.79	0.69	0.37E	0.72	0.37E	0.64	0.37E	0.8	0.37E	0.69	0.37E	0.37E	0.57	0.38	0.37E	0.56	0.5	0.38
Inorganics	OrthoPhosphate as P	mg/L			0.186	0.19	0.221	0.207	0.116	0.161	0.215	0.32	0.126	0.139	0.136	0.148	0.12	0.074	0.025	0.0864	0.126	0.128	0.096	0.088
Inorganics	Phosphorus, Total as P	mg/L	2	USEPA Multi-Sector General Permit	0.27	0.23	0.28	0.26	0.18	0.23	0.31	0.38	0.16	0.14	0.19	0.18	0.12	0.08	0.04E	0.138	0.15	0.16	0.13	0.12
Inorganics	Sulfate	mg/L	250	Basin Plan	577	654	832	1700	683	926	938	869	418	591	542	516	326	426	390	372	332	507	454	438
Metals	Aluminum	µg/L	1000	Basin Plan	3.54	3.05	24.3	<0.1	1.1	1.57	6.2	0.427	3.02	2.82	3.62	1.57	1.04	0.852	6.81	<0.1	5.94	3.9	1	32.9
Metals	Arsenic	µg/L	340/50	40 CFR 131 (a)/Basin Plan	2.77	5.91	2.29	14	4.33	4.28	6.08	3.84	5.13	5.46	6.92	4.28	2.08	1.64	5.66	1.7	2.19	1.87	1.98	2.02
Metals	Cadmium	µg/L	4.3	40 CFR 131 (a)	0.116	<0.01	0.163	0.057	0.011	<0.01	0.048	0.03	0.093	0.053	0.083	0.039	0.016	0.059	0.046	0.046	0.048	0.017	0.065	0.065
Metals	Chromium	µg/L	16	40 CFR 131 (a)	1.95	0.443	1.89	1.58	3.99	0.465	0.37	0.503	2.41	0.684	0.334	0.736	4.58	1.38	0.396	0.93	3.8	0.431	0.118	1.19
Metals	Copper	µg/L	13	40 CFR 131 (a)	4.03	3.14	4.25	8.92	3.3	3.7	4.31	3.6	3.49	4.16	4.76	4.04	3.02	3.33	4.18	2.72	2.94	3.17	2.06	2.45
Metals	Lead	µg/L	65	40 CFR 131 (a)	0.497	<0.01	0.279	0.011	<0.01	<0.01	0.072	0.054	0.018	0.045	0.044	0.059	0.013	<0.01	0.052	0.036	<0.01	<0.01	<0.002	0.027
Metals	Manganese	µg/L	50	Basin Plan	46.7	496	30.2	594	246	278	86.7	205	125	21.5	68.7	11.4	13	2.65	95	14.9	131	153	116	88
Metals	Nickel	µg/L	470	40 CFR 131 (a)	1.37	2.55	2.12	1.97	2.2	3.45	2.17	4.05	2.23	3.02	2.17	2.25	0.698	0.686	2.48	1.84	0.638	1.19	0.594	2.13
Metals	Selenium	µg/L	50	Basin Plan	4.89	15.8	3.7	57.2	10.5	10.2	8.09	8.89	17.7	19.5	6.62	15.2	5.65	4.36	7.66	5.08	5.46	5.09	1.72	5.55
Metals	Silver	µg/L	3.4	40 CFR 131 (a)	<0.01	<0.01	0.049	0.0218	<0.01	0.0176	<0.008	<0.008	<0.01	<0.01	<0.008	0.016	<0.01	<0.01	<0.008	<0.008	<0.01	<0.01	<0.008	<0.008
Metals	Zinc	µg/L	120	40 CFR 131 (a)	27.9	3.69	15.9	7.16	12.3	11.6	4.22	16.6	13.5	7.48	3.42	8.83	9.74	4.67	3.75	4.38	3.14	2.29	1.39	2.75
OC Pesticide	Aldrin	µg/L	3	40 CFR 131 (a)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, cis	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, trans	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, alpha	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Chlordane, gamma	µg/L	2.4/0.1	40 CFR 131/Basin Plan	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006
OC Pesticide	DDD(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDD(p,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001
OC Pesticide	DDE(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDE(p,p)	µg/L			<0.001	0.002	<0.001	<0.001	<0.001	0.01	<0.001	<0.001	<0.001	<0.001	0.002	<0.001E	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDMU(p,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDT(o,p)	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	DDT(p,p)	µg/L	1.1	40 CFR 131	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003E	<0.002	0.003E	<0.002	<0.002	<0.002	0.003E	<0.002	<0.002	<0.002	0.003E	<0.002
OC Pesticide	Dacthal	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001
OC Pesticide	Dieldrin	µg/L	0.24	40 CFR 131	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endosulfan I	µg/L	0.22	40 CFR 131	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endosulfan II	µg/L	0.22	40 CFR 131	<0.001	<0.001	<0.001	0.006	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	0.004
OC Pesticide	Endosulfan sulfate	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001E	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endrin	µg/L	0.086/2	40 CFR 131/Basin Plan	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
OC Pesticide	Endrin Aldehyde	µg/L			<0.002	0.003E	<0.002	<0.002	<0.002	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
OC Pesticide	Endrin Ketone																							









Table H-2. Data Collected Under SWAMP in 2002 for the Los Peñasquitos Watershed. Shaded values either exceed water quality objectives or are potentially toxic.

Analyte Group	Analyte	Units	WQO	Source	Los Peñasquitos Creek - 906LPLC6				Soledad Canyon Creek - 906LPSOL2				Poway Creek - 906LPLPOW2				Rose Canyon Creek - 906LPLRSC4				Tecolote Creek - 906LPLTEC3			
					March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September	March	April	June	September
PCBs	PCB 087	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	Dry, no sample
PCBs	PCB 095	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 097	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 099	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 101	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 105	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 110	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 114	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 118	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 128	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 137	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 138	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 141	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 149	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 151	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 153	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 156	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 157	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 158	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 170	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 174	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 177	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 180	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 183	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 187	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 189	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 194	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 195	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 200	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 201	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 203	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 206	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
PCBs	PCB 209	µg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Toxicity	Ceriodaphnia dubia Survival	Percent			100	80	90	90	100	80	100	90	100	100	100	90	100	0	90	90	70	40	40	
Toxicity	Ceriodaphnia dubia Reproduction	Num/Female			32	31	20	13	27	35	13 (b)	8	33	26	16	16	34	NA	16	17	27	8	5	
Toxicity	Hyalella azteca Survival	Percent			88	90	95	73	64	39	90	53	25	60	79 (c)	60 (b)	NS	74	90	NS	NS	81 (c)	93	
Toxicity	Hyalella azteca Growth	mg/ind			0.209 (c)	0.251	0.176 (c)	0.288	0.266 (c)	0.114	0.208 (c)	0.235	0.293 (c)	0.178	0.156	0.223 (c)	NS	0.151	0.176	NS	NS	0.209	0.139	
Toxicity	Selenastrum capricornutum Growth	cells/ml			3608000	6128000	1150000	5268000	4008000	5883000	1587500	4698000	3973000	2888000	780000	4343000	4508000	6613000	1837500	5603000	2368000	688000	205000	

Notes:  
 Concentrations noted with E are estimated as midway between the MDL and the RL.  
 (a) WQO for metals based on hardness of 100 mg/L CaCO3  
 (b) Below threshold value, but not significantly different from negative control.  
 (c) Above threshold value, but significantly different from negative control.  
 Shaded toxicity results are both significantly different from negative control and below threshold value.