

Table 1
 Toxic Substances Monitoring Program
Preliminary Summary of 1999 Data: Trace Elements in Fish and Clams (ppm, wet weight)

Station Number	Station Name	Species Code	Tissue	Sample Date	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
801.11.89	Lower Newport Bay/Rhine Ch	YFC	L	08/10/99	NA	NA	0.089	5.3300	0.1290	NA	NA	NA	0.0060	23.90
801.11.96	Peters Canyon Channel	PRS	W	08/05/99	0.179	0.0350	0.121	1.2300	0.0300	0.048	0.1370	4.110	<0.0020	45.80
801.11.96	Peters Canyon Channel	PRS	W	08/05/99	0.190	0.0360	0.171	1.2900	0.0380	0.040	0.1390	4.240	0.0030	44.70
801.11.99	Upper Newport Bay/Newport Dunes	ORC	F	08/04/99	1.300	<0.0020	NA	NA	NA	0.050	0.0170	0.760	NA	NA
801.11.99	Upper Newport Bay/Newport Dunes	ORC	L	08/04/99	NA	NA	0.088	6.2600	0.0080	NA	NA	NA	<0.0020	18.40
1 901.12.##	Aliso Cr/Pacific Park Dr	PRS	W	08/27/99	0.245	0.2240	0.110	1.3000	0.0710	<0.015	0.1950	1.610	<0.0020	32.50
2 902.11.01	Santa Margarita R/Stuart Mesa Rd	CKF	W	08/25/99	0.221	0.0050	0.050	1.1200	0.0320	<0.015	0.1900	0.248	0.0270	28.30
2 902.22.03	Rainbow Creek ✓	GSF	F	08/26/99	0.031	<0.0020	NA	NA	NA	0.051	0.0080	0.388	NA	NA
2 902.22.03	Rainbow Creek ✓	GSF	L	08/26/99	NA	NA	0.067	2.4500	0.0100	NA	NA	NA	<0.0020	16.70
2 902.32.##	Murrietta Cr/u/s Temecula Cr ✓	BLB	F	08/26/99	0.036	<0.0020	NA	NA	NA	0.059	0.0370	0.287	NA	NA
2 902.32.##	Murrietta Cr/u/s Temecula Cr ✓	BLB	L	08/26/99	NA	NA	0.100	9.2500	0.0070	NA	NA	NA	0.0290	19.20
5 904.10.##	Loma Alta Cr/College Blvd ✓	GAM	W	08/26/99	0.217	0.0220	0.236	3.6900	0.0770	0.061	0.1990	0.371	0.0340	37.70
6 904.21.02	Buena Vista Lagoon ✓	LMB	F	08/25/99	0.072	<0.0020	NA	NA	NA	0.054	0.0100	0.392	NA	NA
6 904.21.02	Buena Vista Lagoon ✓	LMB	L	08/25/99	NA	NA	0.122	3.8300	0.0210	NA	NA	NA	0.0060	21.90
7 904.31.##	Agua Hedionda Cr/El Camino Real ✓	GAM	W	08/24/99	0.386	0.0250	0.220	1.3400	0.0380	<0.015	0.1520	0.461	0.0050	25.90
8 904.51.03	San Marcos Cr ✓	LMB	F	08/24/99	0.045	<0.0020	NA	NA	NA	0.046	0.0230	0.335	NA	NA
8 904.51.03	San Marcos Cr ✓	LMB	L	08/24/99	NA	NA	0.193	3.0800	<0.0020	NA	NA	NA	<0.0020	16.00
9 904.61.07	Escondido Cr/Elfin Forest Park ✓	GSF	F	08/24/99	0.064	0.0010	NA	NA	NA	0.050	0.3410	0.496	NA	NA
9 904.61.07	Escondido Cr/Elfin Forest Park ✓	GSF	L	08/24/99	NA	NA	0.070	2.4400	0.0100	NA	NA	NA	0.0050	17.30
10 907.11.03	San Diego R/u/s Taylor St ✓	LMB	F	08/23/99	0.096	<0.0020	NA	NA	NA	0.035	0.0150	0.854	NA	NA
10 907.11.03	San Diego R/u/s Taylor St ✓	LMB	L	08/23/99	NA	NA	0.112	5.9400	0.0130	NA	NA	NA	0.0130	23.10

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit. NA = Not Analyzed.
 Species codes are listed in Table 3.

TABLE 2
Toxic Substances Monitoring Program
Preliminary Summary of 1999 Data: Organic Chemicals in Fish and Clams (ppb, wet weight)

Station Number	Station Name	Species Code	Tissue Type	Sample Date	Aldrin	alpha-Chlor-dene	cis-Chlor-dane	gamma-Chlor-dene	trans-Chlor-dane	cis-Nona-chlor	trans-Nona-chlor	Oxy-chlor-dane	Total Chlor-dane	Chlor-pyrifos	Dacthal
801.11.09	San Diego Cr/Barranca Pkwy	PRS	W	08/05/99	<1.0	<1.0	4.2	<1.0	2.3	2.3	5.7	2.1	16.6	<2.0	<2.0
801.11.89	Lower Newport Bay/Rhine Ch	YFC	F	08/10/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
801.11.96	Peters Canyon Channel	PRS	W	08/05/99	<1.0	<1.0	3.2	<1.0	2.6	2.9	9.1	1.4	19.3	4.2	<2.0
801.11.96	Peters Canyon Channel	PRS	W	08/05/99	<1.0	<1.0	3.3	<1.0	2.8	3.2	9.8	1.5	20.7	5.2	<2.0
801.11.99	Upper Newport Bay/Newport Dunes	ORC	F	08/04/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.9	<1.0	1.9	<2.0	<2.0
901.12.##	Aliso Cr/Pacific Park Dr ✓	PRS	W	08/27/99	<1.0	<1.0	5.4	1.2	2.0	<2.0	5.3	3.6	17.5	4.3	4.1
902.11.01	Santa Margarita R/Stuart Mesa Rd ✓	CKF	W	08/25/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
902.22.03	Rainbow Creek ✓	GSF	F	08/26/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
902.32.##	Murrietta Cr/u/s Temecula Cr ✓	BLB	F	08/26/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	2.0	<1.0	2.0	<2.0	<2.0
904.10.##	Loma Alta Cr/College Blvd ✓	GAM	W	08/26/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.6	<1.0	1.6	<2.0	<2.0

Station Number	Dieldrin	o,p' DDD	p,p' DDD	o,p' DDE	p,p' DDE	o,p' DDT	p,p' DDT	p,p' DDMU	p,p' DDMS	Total DDT	Dicofol	Diazinon	Endo-sulfan I	Endo-sulfan II	Endo-sulfan Sulfate	Total Endo-sulfan	Endrin	Ethion
801.11.09	4.1	3.2	27.0	<2.0	139.0	<3.0	<5.0	8.9	NA	178.1	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
801.11.89	<2.0	<2.0	<2.0	<2.0	22.8	<3.0	<5.0	<3.0	NA	22.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
801.11.96	3.3	5.8	24.4	2.7	503.0	<3.0	<5.0	10.9	NA	546.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
801.11.96	3.4	5.8	25.8	2.8	516.0	3.1	<5.0	11.4	NA	564.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
801.11.99	<2.0	<2.0	6.0	<2.0	54.5	<3.0	<5.0	3.3	NA	63.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
901.12.##	8.8	<2.0	<2.0	<2.0	9.4	<3.0	<5.0	<3.0	NA	9.4	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
902.11.01	<2.0	2.6	4.8	<2.0	15.2	<3.0	<5.0	<3.0	NA	22.5	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
902.22.03	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<5.0	<3.0	NA	ND	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
902.32.##	<2.0	<2.0	<2.0	<2.0	2.9	<3.0	<5.0	<3.0	NA	2.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
904.10.##	<2.0	<2.0	<2.0	<2.0	7.6	<3.0	<5.0	<3.0	NA	7.6	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0

Station Number	alpha-HCH	beta-HCH	delta-HCH	gamma-HCH (Lindane)	Total HCH	Hepta-chlor	Hepta-chlor-epoxide	Hexa-chloro-benzene	Methoxy-chlor	Oxa-diazon	Ethyl Para-thion	Methyl Para-thion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
801.11.09	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.7	<5.0	329.0	<2.0	<4.0	<25.0	71.0	14.0	85.0	81.4	102.1
801.11.89	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	39.0	<10.0	39.0	<20.0	ND
801.11.96	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.6	<5.0	59.6	<2.0	<4.0	<25.0	26.0	15.0	41.0	72.0	94.6
801.11.96	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.6	<5.0	62.7	<2.0	<4.0	<25.0	29.0	15.0	44.0	80.5	104.6
801.11.99	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	21.0	<10.0	21.0	<20.0	1.9
901.12.##	<1.0	<2.0	<2.0	<1.0	ND	<2.0	2.9	0.4	<5.0	41.9	<2.0	<4.0	<25.0	22.0	<10.0	22.0	<20.0	29.2
902.11.01	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	5.2	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	ND
902.22.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	ND
902.32.##	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	2.0
904.10.##	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	4.9	<2.0	<4.0	<25.0	21.0	<10.0	21.0	<20.0	1.6

NA Means that the sample was not analyzed for the chemical.

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TABLE 2
Toxic Substances Monitoring Program
Preliminary Summary of 1999 Data: Organic Chemicals in Fish and Clams (ppb, wet weight)

Station Number	Station Name	Species Code	Tissue Type	Sample Date	Aldrin	alpha-Chlor-dene	cis-Chlor-dane	gamma-Chlor-dene	trans-Chlor-dane	cis-Nona-chlor	trans-Nona-chlor	Oxy-chlor-dane	Total Chlor-dane	Chlor-pyrifos	Dacthal
904.21.02	Buena Vista Lagoon	LMB	F	08/25/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
904.31.##	Agua Hedionda Cr/El Camino Real	GAM	W	08/24/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	4.7	2.6	7.2	<2.0	<2.0
904.51.03	San Marcos Cr	LMB	F	08/24/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
904.61.07	Escondido Cr/Elfin Forest Park	GSF	F	08/24/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
907.11.03	San Diego R/u/s Taylor St.	LMB	F	08/23/99	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	3.0	<1.0	3.0	<2.0	<2.0

Station Number	Dieldrin	o,p' DDD	p,p' DDD	o,p' DDE	p,p' DDE	o,p' DDT	p,p' DDT	p,p' DDMU	p,p' DLMS	Total DDT	Dicofol	Diazinon	Endo-sulfan I	Endo-sulfan II	Endo-sulfan Sulfate	Total Endo-sulfan	Endrin	Ethion
904.21.02	<2.0	<2.0	<2.0	<2.0	2.2	<3.0	<5.0	<3.0	NA	2.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
904.31.##	<2.0	<2.0	3.3	<2.0	42.8	<3.0	<5.0	<3.0	NA	46.1	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
904.51.03	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<5.0	<3.0	NA	ND	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
904.61.07	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<5.0	<3.0	NA	ND	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
907.11.03	<2.0	<2.0	<2.0	<2.0	4.8	<3.0	<5.0	<3.0	NA	4.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0

Station Number	alpha-HCH	beta-HCH	delta-HCH	gamma-HCH (Lindane)	Total HCH	Hepta-chlor	Hepta-chlor-epoxide	Hexa-chloro-benzene	Methoxy-chlor	Oxa-diazon	Ethyl Para-thion	Methyl Para-thion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
904.21.02	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	ND
904.31.##	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	7.2
904.51.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	ND
904.61.07	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	ND
907.11.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<25.0	18.0	<10.0	18.0	<20.0	3.0

NA Means that the sample was not analyzed for the chemical.

ND Means that the chemical was not detected.

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F = Filet.

W = Whole Body.

Species codes are listed in Table 3.

TABLE 3
 Toxic Substances Monitoring Program
 1999 Species Code List

Freshwater Fish *

Species Code	Common Name	Species Name	Family Name
AC	Arroyo Chub	<i>Gila orcutti</i>	Cyprinidae
BB	Brown Bullhead	<i>Ameiurus nebulosus</i>	Ictaluridae
BCR	Black Crappie	<i>Pomoxis nigromaculatus</i>	Centrarchidae
BG	Bluegill	<i>Lepomis macrochirus</i>	Centrarchidae
BK	Brook Trout	<i>Salvelinus fontinalis</i>	Salmonidae
BLB	Black Bullhead	<i>Ameiurus melas</i>	Ictaluridae
BN	Brown Trout	<i>Salmo trutta</i>	Salmonidae
CCF	Channel Catfish	<i>Ictalurus punctatus</i>	Ictaluridae
CP	Carp	<i>Cyprinus carpio</i>	Cyprinidae
GAM	Mosquitofish	<i>Gambusia affinis</i>	Poeciliidae
GSF	Green Sunfish	<i>Lepomis cyanellus</i>	Centrarchidae
LMB	Largemouth Bass	<i>Micropterus salmoides</i>	Centrarchidae
PCP	Prickly Sculpin	<i>Cottus asper</i>	Cottidae
PRS	Red Shiner	<i>Cyprinella lutrensis</i>	Cyprinidae
RBT	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Salmonidae
RCH	California Roach	<i>Hesperoleucus symmetricus</i>	Cyprinidae
SKR	Sucker	<i>Catostomus sp.</i>	Catostomidae
SPM	Sacramento Pike Minnow	<i>Ptychocheilus grandis</i>	Cyprinidae
STB	Threespine Stickleback	<i>Gasterosteus aculeatus</i>	Gasterosteidae
TL	Tilapia	<i>Tilapia sp.</i>	Cichlidae

Marine Fish *

Species Code	Common Name	Species Name	Family Name
CKF	California Killifish	<i>Fundulus parvipinnis</i>	Cyprinodontidae
ORC	Orangemouth Corvina	<i>Cynoscion xanthulus</i>	Sciaenidae
SSP	Shiner Perch	<i>Cymatogaster aggregata</i>	Embiotocidae
STF	Starry Flounder	<i>Platichthys stellatus</i>	Pleuronectidae
YFC	Yellowfin Croaker	<i>Umbrina roncador</i>	Sciaenidae

Non-Fish

Species Code	Common Name	Species Name	Family Name
TFC	Asiatic Clam (transplant)	<i>Corbicula manilensis</i>	Corbiculidae

* Common and scientific fish names were obtained from Robins, C.R., R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott. 1991. Common and Scientific Names of Fishes from the United States and Canada. American Fisheries Society Special Publication 20, Bethesda, Maryland.

Sampling Date	Station Name	Station ID	Hydrologic Subarea	Detection Limit	Station Location	Ammonia-N	Nitrate as N	Nitrite-N	Total Kjeldahl Nitrogen	Orthophosphate-P	Total Phosphate as P (revised)	Total Phosphate as PO ₄	Total Dissolved Solids	Turbidity, NTU	Calcium	Sodium	Magnesium	Potassium	Chloride	Sulfate	Total Hardness	Ecumhos	Antimony	Arsenic
						0.14	0.20	0.01	0.1	0.02	5.0		10.0	0.10	0.25	0.15	0.56	1.0	40.0	1.0		0.005	0.0	
5/20/98	LAC-CB-T1	DFG-978-300	-		Loma Alta Creek at College Blvd ✓	0.23	0.61	0.04	0.70	0.12	0.40		2800	0.98										
5/20/98	BVC-SVW-T3	DFG-978-301	-		Buena Vista Creek at South Vista Way	<.14	2.50	0.02	0.42	0.22	0.22		1378	0.79										
5/20/98	SLRR-FR-T1	DFG-978-302	✓		San Luis Rey River at Foussat Road	<.14	2.40	0.01	0.39	0.58	0.24		850	5.10										
5/20/98	LAC-ECR-A	DFG-978-303	✓		Loma Alta Creek at El Camino Real ✓	<.14	0.27	0.00	0.36	0.44	0.14		2459	0.58										
6/2/98	SR-79	DFG-978-304	✓		Sweetwater River at Hwy 79 near Interstate 8	<.14	0.33	0.00	0.29	0.13	0.13		224	1.90										
6/2/98	SR-94	DFG-978-305	✓		Sweetwater River upstream of Hwy 94 (Campo Road)	<.14	0.36	0.01	0.16	0.07	0.06		397	2.80										
6/2/98	SR-WS	DFG-978-306	✓		Sweetwater River downstream of Willow Street	<.14	0.35	0.01	0.40	0.05	0.20		825	0.76										
6/2/98	SDR-MD	DFG-978-307	7.11	✓	San Diego River up stream of Mission Dam	0.19	0.35	0.02	0.38	0.22	0.09		1038	3.70										
6/2/98	SDR-MT	DFG-978-308	7.11	✓	San Diego River at Mission Trails Regional Park	<.14	0.28	0.01	0.49	0.14	0.05		1046	0.77										
6/2/98	SDR-FVR	DFG-978-309	7.11	✓	San Diego River at Fashion Valley Road	<.14	0.23	0.00	0.42	0.23	0.06		1217	5.00										
6/3/98	LPC-BMR	DFG-978-310	-		Los Penasquitos Creek upstream of Black Mountain Road	<.14	0.34	0.01	0.76	0.30	0.55		1678	0.67										
6/3/98	LPC-CCR	DFG-978-311	✓		Los Penasquitos Creek at Cobblestone Creek Road.	<.14	1.10	0.03	1.90	0.17	0.55		1633	3.80										
6/3/98	RC-HP	DFG-978-312	6.20	-	Rattlesnake Creek at Hilleary Park, off Community Road	<.14	1.50	0.02	1.50	0.46	0.67		1412	0.54										
6/3/98	EC-HRB	DFG-978-313	4.60	✓	Escondido Creek below Harmony Grove Bridge.	<.14	7.20	0.07	0.46	0.46	0.37		1196	0.99										
6/3/98	EC-EF	DFG-978-314	4.60	✓	Escondido Creek at intersection Elfin Forest and Harmony Grove (end of Elfin Forest Resort).	<.14	6.90	0.02	0.55	0.77	0.29		1145	0.38									ND	3.8
6/3/98	EC-LCA	DFG-978-315	-		Encinitas Creek at Green Valley Road	<.14	0.34	<.01	0.54	0.34	0.32		2082	3.70										
6/3/98	SMC-RSFR	DFG-978-316	4.51	-	San Marcos Creek at Rancho Santa Fe Road	<.14	0.00	0.01	0.60	0.42	0.52		780	0.99										
6/3/98	SMC-M	DFG-978-317	4.51	✓	San Marcos Creek at McMahr	<.14	6.20	0.04	0.62	0.49	0.56		1346	13.80										
6/9/98	MC-WB	DFG-978-318	✓		Murrieta Creek at Calle Del Oso Rd	<.14	1.29	<.01	0.31	0.21	0.28		709	0.38									ND	3.0
6/9/98	MC-GS	DFG-978-319	✓		Murrieta Ck behind cement factory	<.14	0.32	0.01	0.44	0.09	0.06		753	2.31									ND	3.1
6/9/98	TC-115	DFG-978-320	✓		Temecula Ck east of confluence, west of I-15	<.14	1.40	0.01	0.44	0.30	0.17		840	0.67									ND	3.1

Sampling Date	Station Name	Station ID	Hydrologic Subarea	Station Location	Beryllium	Cadmium	Chromium, Total	Chromium, Dissolved	Copper	Lead, Total	Lead, Dissolved	Mercury	Nickel	Selenium	Silver	Thallium	Zinc, Total	Zinc, Dissolved	Ceriodaphnia-survival	Ceriodaphnia-reproduction	Pimephales-survival	Pimephales-growth
5/20/98	LAC-CB-T1	DFG-978-300		Loma Alta Creek at College Blvd																		
5/20/98	BVC-SVW-T3	DFG-978-301		Buena Vista Creek at South Vista Way																		
5/20/98	SLRR-FR-T1	DFG-978-302		San Luis Rey River at Foussat Road																		
5/20/98	LAC-ECR-A	DFG-978-303		Loma Alta Creek at El Camino Real																		
6/2/98	SR-79	DFG-978-304		Sweetwater River at Hwy 79 near Interstate 8																		
6/2/98	SR-94	DFG-978-305		Sweetwater River upstream of Hwy 94 (Campo Road)																		
6/2/98	SR-WS	DFG-978-306		Sweetwater River downstream of Willow Street																		
6/2/98	SDR-MD	DFG-978-307	7.11	San Diego River up stream of Mission Dam																		
6/2/98	SDR-MT	DFG-978-308	7.11	San Diego River at Mission Trails Regional Park																		
6/2/98	SDR-FVR	DFG-978-309	7.11	San Diego River at Fashion Valley Road																		
6/3/98	LPC-BMR	DFG-978-310		Los Penasquitos Creek upstream of Black Mountain Road																		
6/3/98	LPC-CCR	DFG-978-311		Los Penasquitos Creek at Cobblestone Creek Road.																		
6/3/98	RC-HP	DFG-978-312	6.20	Rattlesnake Creek at Hilleary Park, off Community Road																		
6/3/98	EC-HRB	DFG-978-313	4.60	Escondido Creek below Harmony Grove Bridge.																		
6/3/98	EC-EF	DFG-978-314	4.60	Escondido Creek at intersection Elfin Forest and Harmony Grove (end of Elfin Forest Resort).	ND	ND	11.0		13.7	150		ND	2.4	ND	ND	ND	72.8					
6/3/98	EC-LCA	DFG-978-315		Encinitas Creek at Green Valley Road																		
6/3/98	SMC-RSFR	DFG-978-316	4.51	San Marcos Creek at Rancho Santa Fe Road	These are in units of mg/kg wet weight.																	
6/3/98	SMC-M	DFG-978-317	4.51	San Marcos Creek at McMahr																		
6/9/98	MC-WB	DFG-978-318		Murrieta Creek at Calle Del Oso Rd	ND	1.1	16.2		26.3	36.7		0.068	9.4	ND	ND	ND	182					
6/9/98	MC-GS	DFG-978-319		Murrieta Ck behind cement factory	ND	ND	2.8		6.1	9.2		ND	1.9	ND	ND	3.0	53.8					
6/9/98	TC-I15	DFG-978-320		Temecula Ck east of confluence, west of I-15																		

Sampling Date	Station Name	Station ID	Hydrologic Subarea	Station Location	Ammonia-N	Nitrate, as N	Nitrite-N	Total Kjeldahl Nitrogen	Orthophosphate-P	Total Phosphate as P (revised)	Total Phosphate as PO ₄	Total Dissolved Solids	Turbidity, NTU	Calcium	Sodium	Magnesium	Potassium	Chloride	Sulfate	Total Hardness	Ec, umhos	Antimony	Arsenic
6/9/98	RC-WGR	DFG-978-321	✓	Rainbow Creek at Willow Glen Rd	<.14	11.47	0.02	0.44	0.95	0.77		810	0.30										
6/9/98	SMR-WGR	DFG-978-322	—	Santa Margarita at Willow Glen Rd (Stage Coach Ln)	<.14	3.76	0.02	0.47	0.11	0.62		913	0.46										
6/9/98	SMR-SCD	DFG-978-323	✓	SMR at DeLuz/ Pico Rd near Sandia Ck	<.14	4.69	0.01	0.34	0.18	0.35		923	0.50										
6/9/98	SC-SCR	DFG-978-324	—	Sandia Ck at Sandia Ck Rd, 0.5 to 1 mile above confluence	<.14	5.83	0.01	0.17	0.24	0.30		817	1.80									ND	7.8
6/9/98	SMR-CP	DFG-978-325	✓	Santa Margarita River below diversion weir on Camp Pendleton	<.14	2.71	0.01	0.34	0.23	0.41		667	3.77									ND	5.9
6/9/98	SMR-SMB	DFG-978-326	✓	SMR at Stuart Mesa Rd bridge on Camp Pendleton	<.14	1.63	0.01	0.28	0.23	0.35		713	3.60									ND	2.3
6/10/98	BVR-ED	DFG-978-327	✓	San Marcos Creek at Rancheros Drive	<.14	14.70	0.05	0.53	0.14	0.95		1372	0.49										
6/10/98	AHC-SA	DFG-978-328	—	Agua Hedionda Ck at Sycamore Ave	0.17	15.30	0.08	0.58	1.00	0.90		1144	1.10										
6/10/98	SMC-SP	DFG-978-329	✓	Buena Vista Ck at Wildwood Park	0.23	3.40	0.09	0.62	0.12	0.75		1360	1.70										
6/10/98	AC-CCR	DFG-978-330	—	Aliso Ck along Country Club Rd	3.30	3.10	1.00	0.81	1.10	0.93		1712	4.10									ND	1.2
6/10/98	AC-PPD	DFG-978-331	✓	Aliso Ck at Pacific Park Dr/ Oso Pkwy	0.18	1.00	0.03	0.56	0.15	0.81		1961	1.10										
6/10/98	AHC-ECR	DFG-978-332	✓	Agua Hedionda Ck at El Camino Real	<.14	5.80	0.02	0.53	0.44	0.61		1716	0.55										
6/11/98	SLRR-395	DFG-978-333	✓	San Luis Rey River at old Hwy 395 (Couser Canyon Rd)	<.14	4.20	0.03	0.42	0.75	0.99		970	3.73										
6/29/98		LLP-978-405-BUV	✓	Buena Vista Creek	<.14	1.20	0.02	0.64	0.83		7.1	1133	1.3	120	254	80.7	3.6	454	281	570	1965	ND	ND
6/29/98		LLP-978-405-AGH	✓	Agua Hedionda Creek	<.14	4.50	0.03	0.76	0.25		4.2	1624	0.6	168	255	97.9	3.3	465	363	745	2300	ND	ND
6/29/98		LLP-978-405-ESC	✓	Escondido Creek	<.14	3.60	0.01	0.76	0.25		4.6	1382	4.4	109	251	87.5	3.4	322	342	570	1969	ND	ND

These are

Sampling Date	Station Name	Station ID	Hydrologic Subarea	Station Location	Beryllium	Cadmium	Chromium, Total	Chromium, Dissolved	Copper	Lead, Total	Lead, Dissolved	Mercury	Nickel	Selenium	Silver	Thallium	Zinc, Total	Zinc, Dissolved	Ceriodaphnia-survival	Ceriodaphnia-reproduction	Pimephales-survival	Pimephales-growth
					0.0005	0.0005	0.4	0.01	0.01	0.001	0.001	0.0005	0.01	0.002	0.01	0.001	0.01	0.01				
6/9/98	RC-WGR	DFG-978-321		Rainbow Creek at Willow Glen Rd																		
6/9/98	SMR-WGR	DFG-978-322		Santa Margarita at Willow Glen Rd (Stage Coach Ln).																		
6/9/98	SMR-SCD	DFG-978-323		SMR at DeLuz/ Pico Rd near Sandia Ck																		
6/9/98	SC-SCR	DFG-978-324		Sandia Ck at Sandia Ck Rd, 0.5 to 1 mile above confluence	ND	ND	17.0		20.0	1.7		ND	7.7	ND	ND	ND	26.2					
6/9/98	SMR-CP	DFG-978-325		Santa Margarita River below diversion weir on Camp Pendleton	ND	ND	5.7		4.0	6.7		ND	2.8	ND	ND	1.5	24.3					
6/9/98	SMR-SMB	DFG-978-326		SMR at Stuart Mesa Rd bridge on Camp Pendleton	ND	0.44	14.7		9.1	12.3		ND	5.5	ND	ND	ND	81.1					
6/10/98	BVR-ED	DFG-978-327		San Marcos Creek at Rancheros Drive																		
6/10/98	AHC-SA	DFG-978-328		Agua Hedionda Ck at Sycamore Ave																		
6/10/98	SMC-SP	DFG-978-329		Buena Vista Ck at Wildwood Park																		
6/10/98	AC-CCR	DFG-978-330		Aliso Ck along Country Club Rd	ND	ND	7.6		2.2	ND		ND	3.4	ND	ND	1.2	16.0					
6/10/98	AC-PPD	DFG-978-331		Aliso Ck at Pacific Park Dr/ Oso Pkwy																		
6/10/98	AHC-ECR	DFG-978-332		Agua Hedionda Ck at El Camino Real																		
6/11/98	SLRR-395	DFG-978-333		San Luis Rey River at old Hwy 395 (Couser Canyon Rd)	are in units of milligrams per liter.																	
6/29/98		LLP-978-405-BUV		Buena Vista Creek	ND	ND	0.0	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.04	0.02	No Difference			
6/29/98		LLP-978-405-AGH		Agua Hedionda Creek	ND	ND	0.0	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.03	0.02	No Difference			
6/29/98		LLP-978-405-ESC		Escondido Creek	ND	ND	0.0	0.01	ND	ND	0.002	ND	ND	ND	ND	ND	0.06	0.04	No Difference			

From: Linda Pardy
To: Tracy_Weddle@nps.gov
Date: 3/5/01 2:45PM
Subject: Re: Cabrillo National Monument Water Quality Data

Tracy, FYI. In reply to your email:

The source of 1998 water quality data was the San Diego Regional Water Quality Control Board (Regional Board). The Regional Board collected water samples at selected sites throughout the Region to scan sites for elevated levels of the sampled parameters. The June 1998 sampling was limited to those samples/constituents shown. The samples were delivered to the lab by the Regional Board. The contract lab which did the analyses was Truesdail Laboratories, Inc is located at 14201 Franklin Ave, Tustin, CA 92780-7008. The project manager at that time for the testing was Divina B. Pascual. Their phone number was 714 730-6239. -Linda

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Linda Pardy, Environmental Specialist
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The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>

>>> <Tracy_Weddle@nps.gov> 03/05/01 10:18AM >>>
 Ms. Pardy,

I am currently establishing a baseline water quality report for Cabrillo National Monument for the National Park Service. I am taking over the work of Brett Atkinson, whom you spoke to previously. Brett prepared the data which you sent him for these reports, but there is one bit of information missing before these reports can be completed and the data uploaded to the EPA database STORET. A paragraph description is needed, describing the source of data and purpose for data collection and monitoring. I have looked on your agency's website to try and determine this, but there are so many projects that I could not determine where the data you sent came from. Could you please describe to me what the monitoring was for, the extent of monitoring, and any other information you feel is significant? I am attaching a copy of the data you sent in case you are unsure about what data I'm referring to. Thank you for your help!

Sincerely,

Tracy Weddle
 Water Quality Data Analyst
 National Park Service
 Water Resources Division
 1201 Oakridge Drive, Suite 250
 Fort Collins, CO 80525



A WATER QUALITY INVENTORY SERIES
BIOLOGICAL AND PHYSICAL/ HABITAT ASSESSMENT OF
CALIFORNIA WATER BODIES

San Diego Regional Water Quality Control Board:
1999 Biological Assessment Annual Report

File in SD River Folder

California Department of Fish and Game
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