

**Table 1**  
**Toxic Substances Monitoring Program**  
Preliminary Summary of 1998 Data: Trace Elements in Fish and Crayfish (ppm, wet weight)

Station Number	Station Name	Species Code	Tissue	Sample Date	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
114.21.03	Laguna de Santa Rosa/Sebastopol	CP	F	08/13/98	0.069	<0.0003	0.070	0.2738	<0.0003	0.084	0.0080	0.153	<0.0013	5.46
114.21.03	Laguna de Santa Rosa/Sebastopol	RSF	F	08/13/98	0.025	0.0004	0.088	0.2364	<0.0003	0.192	0.0060	0.196	<0.0013	5.06
114.21.03	Laguna de Santa Rosa/Sebastopol	RSF	L	08/13/98	<0.017	0.0028	0.009	0.1242	<0.0003	NA	0.0020	<0.017	<0.0013	1.56
114.21.03	Laguna de Santa Rosa/Sebastopol	SBF	F	08/13/98	<0.017	<0.0003	0.083	0.2453	<0.0003	0.113	0.0030	0.130	<0.0013	4.87
114.21.03	Laguna de Santa Rosa/Sebastopol	SBF	F	08/13/98	<0.017	0.0004	0.106	0.2662	<0.0003	0.119	0.0020	0.138	<0.0013	5.57
114.21.03	Laguna de Santa Rosa/Sebastopol	SKR	F	08/13/98	0.046	<0.0003	0.080	0.2062	<0.0003	0.134	0.0020	0.170	<0.0013	2.99
114.21.04	Laguna de Santa Rosa/Occidental	BLB	F	08/13/98	<0.017	<0.0003	0.079	0.1779	<0.0003	0.137	0.0130	0.148	<0.0013	3.39
114.21.04	Laguna de Santa Rosa/Occidental	BLB	L	08/13/98	0.097	0.0197	0.108	8.1110	0.0738	NA	0.0620	1.510	0.0469	23.70
114.21.04	Laguna de Santa Rosa/Occidental	CP	F	08/13/98	0.032	<0.0003	0.055	0.2213	<0.0003	0.062	0.0100	0.143	<0.0013	4.66
114.21.04	Laguna de Santa Rosa/Occidental	CP	F	08/13/98	0.030	<0.0003	0.085	0.2727	<0.0003	0.069	0.0060	0.171	<0.0013	4.62
114.21.04	Laguna de Santa Rosa/Occidental	CCF	F	08/13/98	<0.017	<0.0003	0.137	0.2032	<0.0003	0.130	0.0030	0.117	<0.0013	5.45
114.21.04	Laguna de Santa Rosa/Occidental	CCF	L	08/13/98	0.061	0.0099	0.141	1.8100	0.0047	NA	0.0090	1.250	<0.0013	19.80
114.21.04	Laguna de Santa Rosa/Occidental	PACI	F	08/13/98	<0.017	<0.0003	0.010	0.3475	0.0023	0.053	0.0240	<0.017	<0.0013	0.73
114.21.04	Laguna de Santa Rosa/Occidental	SBF	F	08/13/98	0.028	<0.0003	0.085	0.2667	<0.0003	0.132	0.0050	0.139	<0.0013	5.27
114.21.04	Laguna de Santa Rosa/Occidental	SBF	F	08/13/98	0.034	<0.0003	0.114	0.2691	<0.0003	0.122	0.0040	0.139	<0.0013	5.09
309.10.04	Old Salinas R/Monterey Dunes Brg	HCH	F	07/15/98	0.092	0.0007	0.093	0.3304	<0.0003	0.168	0.0030	0.323	<0.0013	6.68
309.10.93	Salinas R/Davis Rd	SKR	W	07/13/98	0.124	0.0857	0.657	1.0230	0.0495	0.031	0.6160	0.499	0.0054	14.10
309.10.94	Salinas R/HWY 1 Brg	SKR	F	07/14/98	0.088	0.0014	0.071	0.3303	<0.0003	0.090	0.0880	0.536	<0.0013	4.80
309.10.95	Tembladero Sl/Castroville	GAM	W	07/14/98	0.088	0.0272	0.128	0.9605	0.0150	0.032	0.0300	0.363	0.0031	26.20
402.10.05	Ventura R/d/s OVSD Discharge	AC	W	06/26/98	0.095	0.0526	0.248	2.3400	0.0006	0.016	0.0110	1.780	0.0077	28.10
402.10.06	Ventura R/u/s OVSD Discharge	AC	W	06/26/98	0.128	0.1145	0.173	2.0060	0.0009	0.026	0.0330	1.960	0.0080	30.90
403.12.07	Conejo Creek	GAM	W	06/25/98	0.044	0.0183	0.127	0.9886	0.0051	0.021	<0.0010	0.579	0.0233	27.60
403.12.07	Conejo Creek	GAM	W	06/25/98	0.059	0.0202	0.155	1.0760	0.0062	0.026	<0.0010	0.706	0.0266	27.90
403.67.08	Arroyo Simi/Madera Rd	AC	W	06/25/98	0.138	0.0363	0.098	1.1720	0.0537	0.011	0.0550	1.590	0.0060	22.30
404.23.04	Lindero Lake	CP	F	06/24/98	0.345	0.0017	0.100	0.7774	<0.0003	0.011	0.0030	4.610	<0.0013	9.31
405.15.02	El Dorado Park Lake	LMB	F	06/23/98	0.041	<0.0003	0.070	0.2196	<0.0003	0.602	0.0040	0.107	<0.0013	4.28
405.15.02	El Dorado Park Lake	LMB	L	06/23/98	0.133	0.0227	0.100	6.1250	<0.0003	NA	0.0020	0.613	0.0026	17.50
405.15.22	McArthur Park Lake	GSF	F	06/24/98	0.048	<0.0003	0.086	0.3130	<0.0003	0.044	0.0030	1.020	<0.0013	5.95
405.15.22	McArthur Park Lake	GSF	L	06/24/98	0.128	0.0057	0.056	1.1050	0.0953	NA	0.0050	1.800	<0.0013	12.60
405.15.97	Belvedere Park Lake	LMB	W	06/24/98	0.031	0.0164	0.061	0.5067	0.0196	0.061	0.0220	0.573	0.0031	20.30

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit.

Species codes are listed in Table 3.

**Table 1**  
**Toxic Substances Monitoring Program**  
Preliminary Summary of 1998 Data: Trace Elements in Fish and Crayfish (ppm, wet weight)

Station Number	Station Name	Species Code	Tissue	Sample Date	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
508.10.45	Sacramento R/Keswick Dam	RBT	F	11/30/98	0.068	0.0037	0.178	0.5935	<0.0003	0.048	0.0190	0.363	<0.0013	4.94
508.10.45	Sacramento R/Keswick Dam	RBT	L	11/30/98	0.334	1.0240	0.281	112.6000	0.0057	NA	0.1400	4.450	0.2039	20.00
510.00.30	Sacramento R/Hood	WCF	F	10/27/98	0.040	0.0018	0.066	0.4423	<0.0003	0.476	<0.0010	0.163	<0.0013	4.66
510.00.30	Sacramento R/Hood	WCF	W	10/27/98	0.070	0.0426	0.276	1.2380	0.0942	0.338	0.1010	0.338	0.0054	12.40
510.00.30	Sacramento R/Hood	LMB	F	11/19/98	0.136	0.0003	0.065	0.2056	<0.0003	0.779	0.0020	0.312	<0.0013	3.18
510.00.30	Sacramento R/Hood	LMB	W	11/19/98	0.167	0.0136	0.242	0.4209	0.1944	0.326	<0.0010	0.491	<0.0013	10.80
516.31.01	Camp Far West	LMB	F	10/28/98	NA	NA	NA	NA	NA	0.338	NA	NA	NA	NA
516.31.01	Camp Far West	LMB	W	10/28/98	0.047	0.0281	0.192	1.0180	0.0541	0.275	0.0700	0.354	0.0026	13.50
535.30.02	Tuolumne R/Shilo Rd	LMB	F	09/11/98	0.046	<0.0003	0.040	0.1649	<0.0003	0.277	<0.0010	0.406	<0.0013	5.02
535.30.02	Tuolumne R/Shilo Rd	LMB	W	09/11/98	0.044	0.0037	0.146	0.3669	0.3321	0.122	<0.0010	0.476	<0.0013	13.40
535.70.03	Merced R/Hatfield St Rec Area	CCF	F	11/05/98	0.041	0.0005	0.129	0.3658	<0.0003	0.328	<0.0010	0.319	<0.0013	5.66
535.70.03	Merced R/Hatfield St Rec Area	CCF	W	11/05/98	0.082	0.0144	0.218	0.5988	0.1475	0.145	<0.0010	0.454	0.0014	16.40
535.70.03	Merced R/Hatfield St Rec Area	LMB	F	11/05/98	0.053	<0.0003	0.071	0.2095	<0.0003	0.439	<0.0010	0.521	<0.0013	4.19
535.70.03	Merced R/Hatfield St Rec Area	LMB	W	11/05/98	0.080	0.0066	0.220	1.0780	0.0385	0.113	<0.0010	0.414	0.0029	12.80
541.10.90	San Joaquin R/Vernalis	LMB	F	08/18/98	0.090	0.0003	0.058	0.2323	<0.0003	0.316	<0.0010	0.681	<0.0013	6.21
541.10.90	San Joaquin R/Vernalis	LMB	W	08/18/98	0.138	0.0031	0.135	0.4096	0.0640	0.156	<0.0010	0.663	<0.0013	12.90
541.10.90	San Joaquin R/Vernalis	WCF	F	08/26/98	0.048	0.0007	0.067	0.4002	<0.0003	0.333	0.0010	0.222	<0.0013	5.38
541.10.92	San Joaquin R/Crows Landing	LMB	F	09/11/98	0.063	0.0004	0.065	0.1808	<0.0003	0.307	0.0020	0.669	<0.0013	5.06
541.20.16	Mud Slough	WCF	F	12/17/98	0.021	0.0003	0.148	0.3474	<0.0003	0.192	0.0070	0.192	<0.0013	6.10
544.00.31	Old River/CV Pumps	WCF	F	09/03/98	0.041	<0.0003	0.063	0.3556	<0.0003	0.223	0.0040	0.177	<0.0013	3.69
551.20.00	Mendota Pool	LMB	F	11/04/98	0.125	<0.0003	0.103	0.2574	<0.0003	0.250	0.0030	0.709	<0.0013	5.97
603.10.06	Crowley Lake	RBT	F	09/23/98	0.100	<0.0003	0.122	0.4257	<0.0003	0.181	0.0020	0.222	<0.0013	4.85
603.10.06	Crowley Lake	RBT	L	09/23/98	0.218	0.0090	0.128	23.9800	<0.0003	NA	0.0140	2.090	0.1464	18.50
626.80.04	Little Rock Cr/u/s Res	STB	W	11/09/98	0.022	0.0163	0.182	1.6080	0.0897	0.037	0.0530	0.216	0.0027	28.80
632.10.05	Poison Creek	RBT	F	09/17/98	<0.017	<0.0003	0.122	0.4586	<0.0003	0.044	0.0130	0.152	<0.0013	3.84
632.10.05	Poison Creek	RBT	L	09/17/98	0.115	0.0168	0.081	25.8400	<0.0003	NA	0.0050	1.770	0.1492	17.60
634.10.02	Heavenly Valley Creek	BN	F	09/30/98	0.028	0.0006	0.060	0.2934	<0.0003	0.041	<0.0010	0.153	<0.0013	5.72
634.10.02	Heavenly Valley Creek	BN	L	09/30/98	<0.017	0.0354	0.081	17.2800	<0.0003	NA	0.0040	0.512	0.2623	22.10
634.10.07	Upper Truckee R/Tahoe Paradise	BN	F	09/30/98	0.094	<0.0001	0.259	0.5210	<0.0001	0.191	0.0060	0.203	<0.0013	4.32
634.10.07	Upper Truckee R/Tahoe Paradise	BN	L	09/30/98	0.050	0.0425	0.084	11.3500	0.0011	NA	0.0020	0.576	0.1867	13.80

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Station Number	Station Name	Species Code	Tissue	Sample Date	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
635.20.16	Cold Stream Cr/u/s Donner Cr	BN	F	10/15/98	0.058	<0.0003	0.127	0.4894	<0.0003	0.071	0.0020	0.136	<0.0013	4.21
635.20.16	Cold Stream Cr/u/s Donner Cr	BN	L	10/15/98	0.023	0.0473	0.119	10.4200	<0.0003	NA	<0.0010	0.577	0.2390	14.90
637.20.31	Susan R/u/s Susanville	RBT	F	10/16/98	<0.017	<0.0003	0.114	0.3884	<0.0003	0.030	0.0040	0.101	<0.0013	4.90
637.20.31	Susan R/u/s Susanville	RBT	L	10/16/98	0.049	0.0303	0.111	73.5900	<0.0003	NA	0.0100	0.907	0.3805	19.40
715.40.08	Palo Verde Outfall Drain	LMB	F	11/12/98	0.068	<0.0003	0.058	0.2224	<0.0003	NA	0.0020	0.614	<0.0013	4.66
723.10.01	Alamo R/Calipatria	CCF	F	11/11/98	0.118	<0.0003	0.110	0.2526	<0.0003	NA	<0.0010	0.786	<0.0013	4.52
723.10.02	New R/Westmorland	CCF	F	11/11/98	0.058	<0.0003	0.067	0.3041	<0.0003	0.044	0.0050	0.826	<0.0013	5.55
723.10.02	New R/Westmorland	CCF	L	11/11/98	0.129	0.0091	0.090	1.5630	0.0514	NA	0.0020	2.200	0.0023	16.70
728.00.90	Salton Sea/South	TL	F	11/11/98	1.310	<0.0003	0.084	0.2784	<0.0003	<0.005	0.0070	2.200	<0.0013	4.72
728.00.90	Salton Sea/South	TL	L	11/11/98	0.700	0.0118	0.158	0.9736	0.0148	NA	0.1480	4.150	0.0046	17.30
728.00.92	Salton Sea/North	TL	F	11/10/98	1.900	<0.0003	0.060	0.1789	<0.0003	<0.005	0.0060	2.730	<0.0013	3.75
728.00.92	Salton Sea/North	TL	L	11/10/98	0.854	0.0333	0.106	1.5690	0.0197	NA	0.2370	6.270	0.0042	19.90
801.11.05	Delhi Channel	MUL	W	06/09/98	0.882	0.0224	0.284	1.5780	0.2108	0.006	0.0870	0.949	0.0109	14.50
801.11.07	San Diego Cr/Michelson Dr	PRS	W	06/09/98	0.344	0.0915	0.200	0.9073	0.0410	0.005	0.0400	1.050	0.0052	24.50
801.11.09	San Diego Cr/Barranca Pkwy	PRS	W	06/09/98	0.200	0.1514	0.094	0.6872	0.0138	0.030	0.0050	0.971	0.0034	41.10
801.11.96	Peters Canyon Channel	PRS	W	06/09/98	0.116	0.0891	0.105	0.8800	0.0218	0.042	0.0190	1.130	0.0018	36.70
801.11.99	Upper Newport Bay/Newport Dunes	BSS	F	06/10/98	8.620	0.0028	0.171	0.3616	<0.0003	0.541	0.0040	0.301	<0.0013	3.65
801.11.99	Upper Newport Bay/Newport Dunes	BSS	L	06/10/98	7.730	0.2400	0.640	0.9350	<0.0001	0.131	<0.0002	1.950	0.0080	4.13
902.21.01	DeLuz Creek	BLB	F	07/07/98	0.023	0.0006	0.081	0.3432	<0.0003	0.047	0.0030	0.279	<0.0013	6.74
902.21.01	DeLuz Creek	BLB	F	07/07/98	<0.017	0.0007	0.065	0.3849	<0.0003	0.040	0.0040	0.316	<0.0013	6.00
902.21.01	DeLuz Creek	BLB	L	07/07/98	0.076	0.0220	0.065	4.5530	0.0023	NA	0.0040	0.853	0.0062	15.00
902.21.01	DeLuz Creek	BLB	L	07/07/98	0.079	0.0200	0.054	4.7690	0.0027	NA	0.0030	0.778	0.0082	14.20
902.22.02	Sandia Canyon Cr	BLB	F	07/07/98	0.028	0.0059	0.061	0.4965	0.0322	0.043	0.0050	0.469	<0.0013	7.28
902.22.02	Sandia Canyon Cr	BLB	L	07/07/98	0.105	0.0157	0.060	3.6490	0.0004	NA	0.0020	1.450	0.0061	14.70
905.23.01	Felicita Cr/East Fork	GAM	W	07/08/98	0.037	0.0051	0.100	0.8854	0.0016	0.034	0.0350	0.325	0.0065	24.90
909.11.09	San Diego R/d/s Alvarado Cr	GSH	W	08/08/98	0.121	0.0131	0.087	1.0460	0.0400	0.014	<0.0010	0.528	0.0026	34.30
909.12.00	F-G St Salt Marsh/Chula Vista	MOL	W	07/08/98	0.338	0.0302	0.894	4.3880	0.4719	<0.005	0.2320	0.429	0.0552	-0.003

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit.

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**TABLE 2**  
**Toxic Substances Monitoring Program**  
**Preliminary Summary of 1998 Data: Organic Chemicals in Fish and Crayfish (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
114.21.03	Laguna de Santa Rosa/Sebastopol	CP	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
114.21.03	Laguna de Santa Rosa/Sebastopol	RSF	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
114.21.03	Laguna de Santa Rosa/Sebastopol	SBF	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.0	<1.0	1.0	<2.0	<2.0
114.21.03	Laguna de Santa Rosa/Sebastopol	SBF	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.7	<1.0	1.7	<2.0	<2.0
114.21.03	Laguna de Santa Rosa/Sebastopol	SKR	F	08/13/98	<1.0	<1.0	2.1	<1.0	<2.0	<2.0	2.3	<1.0	4.4	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	BLB	F	08/13/98	<1.0	<1.0	3.5	<1.0	<2.0	<2.0	5.0	<1.0	8.4	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	CP	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	CP	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	CCF	F	08/13/98	<1.0	<1.0	2.6	<1.0	<2.0	<2.0	4.4	<1.0	7.0	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	PACI	F	08/13/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<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
114.21.03	<2.0	<2.0	3.0	<2.0	9.1	<3.0	<5.0	<3.0	NA	12.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.03	<2.0	<2.0	<2.0	<2.0	2.0	<3.0	<5.0	<3.0	NA	2.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.03	<2.0	<2.0	3.2	<2.0	11.7	<3.0	<5.0	<3.0	NA	14.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.03	<2.0	2.0	4.7	<2.0	16.2	<3.0	<5.0	<3.0	NA	22.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.03	<2.0	<2.0	3.6	<2.0	13.3	<3.0	<5.0	<3.0	NA	16.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<2.0	<2.0	7.9	<2.0	38.9	<3.0	<5.0	<3.0	NA	46.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<2.0	<2.0	<2.0	<2.0	9.2	<3.0	<5.0	<3.0	NA	9.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<2.0	<2.0	<2.0	<2.0	9.0	<3.0	<5.0	<3.0	NA	9.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<2.0	<2.0	4.0	<2.0	21.2	<3.0	<5.0	<3.0	NA	25.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<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

  

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 Parathion	Methyl Parathion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
114.21.03	<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
114.21.03	<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
114.21.03	<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	1.0
114.21.03	<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	1.7
114.21.03	<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	4.4
114.21.04	<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	<10.0	<10.0	ND	<20.0	8.4
114.21.04	<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
114.21.04	<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
114.21.04	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	4.8	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	7.0
114.21.04	<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

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

ND Means that the chemical was not detected.

&lt; Means that the chemical was not detected above the indicated limit of detection.

F = Filet.

W = Whole Body.

Species codes are listed in Table 3.

**TABLE 2**  
**Toxic Substances Monitoring Program**  
**Preliminary Summary of 1998 Data: Organic Chemicals in Fish and Crayfish (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
114.21.04	Laguna de Santa Rosa/Occidental	SBF	F	08/13/98	<1.0	<1.0	2.3	<1.0	<2.0	<2.0	2.5	<1.0	4.8	<2.0	<2.0
114.21.04	Laguna de Santa Rosa/Occidental	SBF	F	08/13/98	<1.0	<1.0	2.5	<1.0	<2.0	<2.0	2.6	<1.0	5.0	<2.0	<2.0
309.10.04	Old Salinas R/Monterey Dunes Brg	HCH	F	07/15/98	<1.0	<1.0	7.1	<1.0	4.8	3.7	8.4	1.2	25.2	2.6	326.0
309.10.93	Salinas R/Davis Rd	SKR	W	07/13/98	<1.0	<1.0	3.0	<1.0	<2.0	<2.0	4.0	1.2	8.1	6.8	165.0
309.10.94	Salinas R/HWY 1 Brg	SKR	F	07/14/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	28.2
309.10.95	Tembladero Sl/Castroville	GAM	W	07/14/98	<1.0	<1.0	<2.0	<1.0	<2.0	4.7	14.4	6.4	25.4	13.8	244.0
402.10.05	Ventura R/d/s OVSD Discharge	AC	W	06/26/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	6.1	2.3	8.4	<2.0	<2.0
402.10.06	Ventura R/u/s OVSD Discharge	AC	W	06/26/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	4.4	1.3	5.8	<2.0	<2.0
403.12.07	Conejo Creek	GAM	W	06/25/98	<1.0	<1.0	3.9	<1.0	2.7	6.3	19.3	9.9	42.1	4.2	11.7
403.12.07	Conejo Creek	GAM	W	06/25/98	<1.0	<1.0	4.8	<1.0	3.2	<2.0	21.2	10.6	39.7	4.2	11.4

  

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
114.21.04	<2.0	2.4	5.5	<2.0	32.7	<3.0	<5.0	<3.0	NA	40.7	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
114.21.04	<2.0	2.6	5.8	<2.0	32.8	<3.0	<5.0	<3.0	NA	41.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
309.10.04	67.9	38.6	129.0	18.9	1130.0	5.6	14.3	23.3	NA	1359.7	NA	<20.0	<2.0	<10.0	<10.0	ND	5.7	<6.0
309.10.93	12.3	5.8	29.6	2.1	320.0	6.3	53.8	8.1	NA	425.7	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
309.10.94	3.1	2.9	17.2	<2.0	98.8	<3.0	20.3	3.1	NA	142.3	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
309.10.95	287.0	34.4	219.0	20.2	1570.0	4.2	241.0	61.1	NA	2149.9	NA	<20.0	<2.0	<10.0	13.9	13.9	3.6	<6.0
402.10.05	2.4	<2.0	<2.0	<2.0	20.1	<3.0	<5.0	<3.0	NA	20.1	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
402.10.06	<2.0	<2.0	<2.0	<2.0	20.0	<3.0	<5.0	<3.0	NA	20.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
403.12.07	16.5	8.3	34.6	9.7	844.0	<3.0	94.0	11.4	NA	1002.0	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
403.12.07	17.2	8.1	33.9	10.2	932.0	<3.0	100.0	<3.0	NA	1084.2	NA	<20.0	<2.0	<10.0	<10.0	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 Parathion	Methyl Parathion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
114.21.04	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	3.1	2.2	<4.0	<25.0	<10.0	<10.0	ND	<20.0	4.8
114.21.04	<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	5.0
309.10.04	<1.0	<2.0	<2.0	<1.0	ND	<2.0	1.7	1.4	<5.0	4.3	<2.0	<4.0	<25.0	71.0	26.2	97.2	478.0	578.5
309.10.93	<1.0	<2.0	<2.0	<1.0	ND	<2.0	1.1	0.6	<5.0	<3.0	<2.0	<4.0	<25.0	56.2	<10.0	56.2	147.0	168.6
309.10.94	<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	35.8	38.9
309.10.95	<1.0	<2.0	<2.0	<1.0	ND	<2.0	2.5	0.3	<5.0	14.4	<2.0	<4.0	<25.0	114.0	20.9	134.9	356.0	688.4
402.10.05	<1.0	<2.0	<2.0	5.8	5.8	<2.0	<1.0	0.6	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	<20.0	16.6
402.10.06	<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	5.8
403.12.07	<1.0	<2.0	<2.0	4.0	4.0	<2.0	1.1	0.7	<5.0	4.9	<2.0	<4.0	<25.0	20.3	<10.0	20.3	819.0	882.6
403.12.07	<1.0	<2.0	<2.0	4.0	4.0	<2.0	1.1	0.7	<5.0	5.2	<2.0	<4.0	<25.0	22.0	<10.0	22.0	874.0	936.0

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

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**TABLE 2**  
**Toxic Substances Monitoring Program**  
**Preliminary Summary of 1998 Data: Organic Chemicals in Fish and Crayfish (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
403.67.08	Arroyo Simi/Madera Rd	AC	W	06/25/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	2.5	<1.0	2.5	2.3	9.2
404.23.04	Lindero Lake	CP	F	06/24/98	<1.0	<1.0	5.0	1.6	2.9	<2.0	5.6	<1.0	15.1	<2.0	<2.0
405.15.02	El Dorado Park Lake	LMB	F	06/23/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
405.15.22	McArthur Park Lake	GSF	F	06/24/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
405.15.97	Belvedere Park Lake	LMB	W	06/24/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.7	<1.0	1.7	<2.0	<2.0
510.00.30	Sacramento R/Hood	WCF	F	10/27/98	<1.0	<1.0	3.4	<1.0	2.2	2.3	7.3	<1.0	15.1	<2.0	<2.0
510.00.30	Sacramento R/Hood	WCF	W	10/27/98	<1.0	<1.0	8.2	<1.0	5.2	6.0	19.7	1.1	40.3	<2.0	<2.0
510.00.30	Sacramento R/Hood	LMB	F	11/19/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
510.00.30	Sacramento R/Hood	LMB	W	11/19/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	3.1	<1.0	3.1	<2.0	<2.0
535.30.02	Tuolumne R/Shilo Rd	LMB	F	09/11/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<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
403.67.08	<2.0	<2.0	<2.0	<2.0	38.0	<3.0	<5.0	<3.0	NA	38.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
404.23.04	<2.0	<2.0	5.8	<2.0	13.5	<3.0	<5.0	<3.0	NA	19.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
405.15.02	<2.0	<2.0	<2.0	<2.0	4.2	<3.0	<5.0	<3.0	NA	4.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
405.15.22	<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
405.15.97	<2.0	<2.0	<2.0	<2.0	9.3	<3.0	<5.0	<3.0	NA	9.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
510.00.30	<2.0	<2.0	12.9	<2.0	125.0	<3.0	<5.0	3.7	NA	141.6	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
510.00.30	3.3	2.1	28.9	<2.0	349.0	<3.0	7.0	8.4	NA	395.4	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
510.00.30	<2.0	<2.0	<2.0	<2.0	5.9	<3.0	<5.0	<3.0	NA	5.9	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
510.00.30	2.6	<2.0	3.9	<2.0	49.2	<3.0	<5.0	<3.0	NA	53.1	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
535.30.02	<2.0	<2.0	<2.0	<2.0	14.6	<3.0	<5.0	<3.0	NA	14.6	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
403.67.08	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	6.7	<2.0	<4.0	<25.0	29.1	<10.0	29.1	<20.0	2.5
404.23.04	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.3	<5.0	28.8	<2.0	<4.0	<25.0	<10.0	<10.0	ND	26.2	41.3
405.15.02	<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
405.15.22	<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
405.15.97	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.5	<5.0	<3.0	<2.0	<4.0	<25.0	31.0	<10.0	31.0	<20.0	1.7
510.00.30	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.4	<5.0	<3.0	<2.0	<4.0	89.3	83.8	30.2	203.3	42.8	58.0
510.00.30	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.7	<5.0	3.6	<2.0	<4.0	123.0	189.0	61.0	373.0	60.5	104.0
510.00.30	<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
510.00.30	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.4	<5.0	<3.0	<2.0	<4.0	<25.0	24.1	29.1	53.2	20.6	26.3
535.30.02	<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

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

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**Toxic Substances Monitoring Program**  
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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
535.30.02	Tuolumne R/Shilo Rd	LMB	W	09/11/98	<1.0	<1.0	4.7	<1.0	2.0	3.3	11.3	2.2	23.5	36.8	<2.0
535.70.03	Merced R/Hatfield St Rec Area	CCF	F	11/05/98	<1.0	<1.0	5.1	<1.0	3.0	3.2	9.9	1.7	22.8	<2.0	2.3
535.70.03	Merced R/Hatfield St Rec Area	CCF	W	11/05/98	<1.0	<1.0	5.3	<1.0	3.1	3.3	12.2	1.9	25.9	2.1	3.0
535.70.03	Merced R/Hatfield St Rec Area	LMB	F	11/05/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.2	<1.0	1.2	<2.0	<2.0
535.70.03	Merced R/Hatfield St Rec Area	LMB	W	11/05/98	<1.0	<1.0	4.2	<1.0	<2.0	3.8	11.9	2.7	22.6	7.7	3.0
541.10.90	San Joaquin R/Vernalis	LMB	F	08/18/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	1.0	<1.0	1.0	<2.0	<2.0
541.10.90	San Joaquin R/Vernalis	LMB	W	08/18/98	<1.0	<1.0	5.4	<1.0	2.2	5.2	15.6	2.0	30.5	19.7	2.1
541.10.90	San Joaquin R/Vernalis	WCF	F	08/26/98	<1.0	<1.0	2.7	<1.0	<2.0	2.2	6.9	<1.0	11.9	3.8	<2.0
541.10.92	San Joaquin R/Crows Landing	LMB	F	09/11/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
541.20.16	Mud Slough	WCF	F	12/17/98	<1.0	<1.0	7.5	<1.0	3.0	3.8	9.8	1.6	25.7	3.7	6.2

  

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
535.30.02	3.8	4.8	22.8	3.8	347.0	<3.0	18.1	6.4	NA	402.9	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
535.70.03	4.2	2.4	26.1	2.7	465.0	<3.0	27.4	6.2	NA	529.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
535.70.03	4.8	2.3	27.3	2.8	438.0	<3.0	20.7	6.9	NA	498.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
535.70.03	<2.0	<2.0	<2.0	<2.0	40.6	<3.0	<5.0	<3.0	NA	40.6	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
535.70.03	9.9	4.2	19.8	3.7	476.0	4.1	30.3	5.1	NA	543.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
541.10.90	<2.0	<2.0	2.1	<2.0	42.7	<3.0	<5.0	<3.0	NA	44.8	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
541.10.90	13.5	8.5	30.5	7.3	632.0	5.3	47.5	8.6	NA	739.6	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
541.10.90	2.5	<2.0	11.4	<2.0	262.0	<3.0	17.5	3.4	NA	294.3	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
541.10.92	<2.0	<2.0	<2.0	<2.0	18.5	<3.0	<5.0	<3.0	NA	18.5	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
541.20.16	12.7	3.9	33.9	3.3	320.0	<3.0	6.2	8.4	NA	375.7	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 Parathion	Methyl Parathion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
535.30.02	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.8	<5.0	<3.0	<2.0	<4.0	35.1	45.9	41.8	122.8	68.8	96.2
535.70.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	4.3	<5.0	<3.0	<2.0	<4.0	<25.0	62.1	23.8	85.9	130.0	157.0
535.70.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	5.6	<5.0	<3.0	<2.0	<4.0	<25.0	63.9	22.9	86.8	94.9	125.6
535.70.03	<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	1.2
535.70.03	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.8	<5.0	<3.0	<2.0	<4.0	<25.0	27.0	<10.0	27.0	103.0	135.5
541.10.90	<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	29.9	30.9
541.10.90	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.9	<5.0	<3.0	<2.0	<4.0	<25.0	40.0	20.5	60.5	407.0	451.0
541.10.90	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	<0.3	<5.0	<3.0	<2.0	<4.0	<50.0	16.0	<10.0	16.0	122.0	136.3
541.10.92	<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
541.20.16	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.8	<5.0	<3.0	<2.0	<4.0	<25.0	63.8	18.7	82.5	152.0	190.4

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

ND Means that the chemical was not detected.

&lt; Means that the chemical was not detected above the indicated limit of detection.

F = Filet.

W = Whole Body.

Species codes are listed in Table 3.

**TABLE 2**  
**Toxic Substances Monitoring Program**  
**Preliminary Summary of 1998 Data: Organic Chemicals in Fish and Crayfish (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
544.00.31	Old River/CV Pumps	WCF	F	09/03/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	3.8	<1.0	3.8	3.5	<2.0
632.10.05	Poison Creek	RBT	F	09/17/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
634.10.02	Heavenly Valley Creek	BN	F	09/30/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
715.40.08	Palo Verde Outfall Drain	LMB	F	11/12/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	5.1
723.10.01	Alamo R/Calipatria	CCF	F	11/11/98	<1.0	<1.0	3.3	<1.0	<2.0	2.3	5.1	<1.0	10.8	194.0	2040.0
723.10.02	New R/Westmorland	CCF	F	11/11/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	2.6	<1.0	2.6	12.5	440.0
728.00.90	Salton Sea/South	TL	F	11/11/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	7.3
728.00.92	Salton Sea/North	TL	F	11/10/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
801.11.05	Delhi Channel	MUL	W	06/09/98	<1.0	<1.0	12.8	1.2	4.9	6.3	17.1	1.9	44.1	<2.0	<2.0
801.11.07	San Diego Cr/Michelson Dr	PRS	W	06/09/98	<1.0	<1.0	3.3	<1.0	<2.0	<2.0	3.8	1.1	8.1	5.4	4.0

  

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
544.00.31	<2.0	<2.0	6.3	<2.0	192.0	<3.0	<5.0	<3.0	NA	198.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
632.10.05	<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
634.10.02	<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
715.40.08	<2.0	<2.0	<2.0	<2.0	25.3	<3.0	<5.0	<3.0	NA	25.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
723.10.01	33.4	16.7	38.0	11.3	870.0	<3.0	9.9	13.2	NA	959.1	NA	<20.0	4.7	<10.0	<10.0	4.7	3.0	<6.0
723.10.02	5.0	<2.0	6.1	<2.0	210.0	<3.0	<5.0	3.6	NA	219.6	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
728.00.90	<2.0	<2.0	<2.0	<2.0	36.4	<3.0	<5.0	<3.0	NA	36.4	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
728.00.92	<2.0	<2.0	<2.0	<2.0	6.7	<3.0	<5.0	<3.0	NA	6.7	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
801.11.05	8.7	5.4	37.2	<2.0	213.0	3.5	28.1	10.4	NA	297.6	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
801.11.07	5.7	4.0	12.1	2.4	179.0	<3.0	<5.0	6.1	NA	203.5	NA	<20.0	3.2	<10.0	<10.0	3.2	3.4	<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 Parathion	Methyl Parathion	PCB 1248	PCB 1254	PCB 1260	Total PCB	Toxaphene	Chemical Group A
544.00.31	<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	44.4	48.2
632.10.05	<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
634.10.02	<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
715.40.08	<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
723.10.01	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	2.2	<5.0	<3.0	<2.0	<4.0	<25.0	<10.0	<10.0	ND	563.0	614.8
723.10.02	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	1.9	<5.0	<3.0	<2.0	<4.0	<25.0	26.3	51.3	77.6	64.5	72.1
728.00.90	<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
728.00.92	<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
801.11.05	<1.0	<2.0	<2.0	<1.0	ND	<2.0	1.3	0.4	<5.0	18.2	<2.0	<4.0	<50.0	44.0	15.0	59.0	104.0	158.1
801.11.07	<1.0	<2.0	<2.0	<1.0	ND	<2.0	1.5	0.4	<5.0	101.0	2.5	<4.0	<25.0	<10.0	<10.0	ND	83.0	104.8

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

ND Means that the chemical was not detected.

&lt; Means that the chemical was not detected above the indicated limit of detection.

F = Filet.

W = Whole Body.

Species codes are listed in Table 3.



**TABLE 2**  
**Toxic Substances Monitoring Program**  
**Preliminary Summary of 1998 Data: Organic Chemicals in Fish and Crayfish (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	06/09/98	<1.0	<1.0	3.9	<1.0	<2.0	2.8	7.1	<1.0	13.8	<2.0	3.0
801.11.96	Peters Canyon Channel	PRS	W	06/09/98	<1.0	<1.0	10.4	<1.0	6.8	7.5	26.9	3.2	54.8	16.5	6.3
801.11.99	Upper Newport Bay/Newport Dunes	BSS	F	06/10/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
902.21.01	DeLuz Creek	BLB	F	07/07/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
902.21.01	DeLuz Creek	BLB	F	07/07/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
902.22.02	Sandia Canyon Cr	BLB	F	07/07/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	ND	<2.0	<2.0
905.23.01	Felicita Cr/East Fork	GAM	W	07/08/98	<1.0	<1.0	<2.0	<1.0	<2.0	2.3	8.9	4.0	15.2	<2.0	<2.0
909.11.09	San Diego R/d/s Alvarado Cr	GSH	W	08/08/98	<1.0	2.7	15.0	1.6	10.7	6.9	18.6	2.6	58.1	<2.0	<2.0
909.12.00	F-G St Salt Marsh/Chula Vista	MOL	W	07/08/98	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	2.4	<1.0	2.4	<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	3.2	4.9	16.5	2.9	420.0	<3.0	6.6	7.8	NA	458.8	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
801.11.96	12.5	36.8	63.7	15.6	1980.0	19.3	13.9	38.9	NA	2168.2	NA	<20.0	5.4	<10.0	<10.0	5.4	2.0	<6.0
801.11.99	<2.0	<2.0	<2.0	<2.0	28.4	<3.0	<5.0	<3.0	NA	28.4	NA	<20.0	<2.0	<10.0	<10.0	ND	<2.0	<6.0
902.21.01	<2.0	<2.0	<2.0	<2.0	2.6	<3.0	<5.0	<3.0	NA	2.6	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
902.21.01	<2.0	<2.0	<2.0	<2.0	2.8	<3.0	<5.0	<3.0	NA	2.8	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
902.22.02	<2.0	<2.0	<2.0	<2.0	3.0	<3.0	<5.0	<3.0	NA	3.0	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
905.23.01	3.4	<2.0	<2.0	<2.0	10.2	<3.0	<5.0	<3.0	NA	10.2	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
909.11.09	5.1	<2.0	4.8	<2.0	16.5	<3.0	<5.0	<3.0	NA	21.3	NA	<20.0	<2.0	NA	NA	ND	<2.0	<6.0
909.12.00	2.6	<2.0	9.5	<2.0	32.7	<3.0	<5.0	<3.0	NA	42.2	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	0.3	<5.0	85.0	<2.0	<4.0	<25.0	33.6	27.1	60.7	91.6	108.5
801.11.96	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.8	<5.0	53.6	<2.0	<4.0	<25.0	43.3	36.1	79.4	330.0	404.8
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	<50.0	<10.0	<10.0	ND	<20.0	ND
902.21.01	<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
902.21.01	<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
902.22.02	<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
905.23.01	<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	18.6
909.11.09	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.3	<5.0	16.9	<2.0	<4.0	<25.0	41.2	<10.0	41.2	<20.0	63.2
909.12.00	<1.0	<2.0	<2.0	<1.0	ND	<2.0	<1.0	0.3	<5.0	<3.0	4.7	<4.0	195.0	204.0	53.7	452.7	<20.0	5.0

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

ND Means that the chemical was not detected.

&lt; Means that the chemical was not detected above the indicated limit of detection.

F = Filet.

W = Whole Body.

Species codes are listed in Table 3.

**TABLE 3**  
Toxic Substances Monitoring Program

**1998 Freshwater Fish Code List\***

Species Code	Common Name	Species Name	Family Name
AC	Arroyo Chub	<i>Gila orcutti</i>	Cyprinidae
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
GSH	Golden Shiner	<i>Notemigonus crysoleucas</i>	Cyprinidae
HCH	Hitch	<i>Lavinia exilicauda</i>	Cyprinidae
LMB	Largemouth Bass	<i>Micropterus salmoides</i>	Centrarchidae
MOL	Sailfin Molly	<i>Poecilia latipinna</i>	Poeciliidae
PRS	Red Shiner	<i>Cyprinella lutrensis</i>	Cyprinidae
RBT	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Salmonidae
RSF	Redear Sunfish	<i>Lepomis microlophus</i>	Centrarchidae
SBF	Sacramento Blackfish	<i>Orthodon microlepidotus</i>	Cyprinidae
SKR	Sucker	<i>Catostomus sp.</i>	Catostomidae
STB	Threespine Stickleback	<i>Gasterosteus aculeatus</i>	Gasterosteidae
TL	Tilapia	<i>Tilapia sp.</i>	Cichlidae
WCF	White Catfish	<i>Ameiurus catus</i>	Ictaluridae

**1998 Marine Fish Code List\***

Species Code	Common Name	Species Name	Family Name
BSS	Brown Smoothhound Shark	<i>Mustelus henlei</i>	Carcharhinidae
MUL	Striped Mullet	<i>Mugil cephalus</i>	Mugilidae

**1998 Non-Fish Code List**

Species Code	Common Name	Species Name	Family Name
PACI	Crayfish	<i>Pacifastacus leniusculus</i>	Astacidae

\* 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.