

**From:** Matt St. John  
**To:** Sharpe, Laura  
**Date:** Tue, Nov 26, 2002 11:32 AM  
**Subject:** Fwd: TSM Data

Hi Laura:

Here is the (preliminary) fish filet mercury data for Lakes Sonoma and Lake Mendocino from September 2001. There were seven of twelve samples that exceed the US EPA Tissue Residue Criterion for mercury in Lake Sonoma, and six of ten samples that exceeded the criterion in Lake Mendocino. I am not sure when Del Rasmussen will make this preliminary data final. However, the data corroborates the previously available data. Call me if you wish to discuss.

Thanks, Matt

**CC:** Leland, David

**Table 1**  
 Toxic Substances Monitoring Program  
 Preliminary Summary of 2001 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
114.24.15	Lake Sonoma/Dry Creek Arm	LMB	F	09/25/01	0.030	<0.002	NA	NA	NA	0.88	0.006	0.30	NA	NA
114.24.15	Lake Sonoma/Dry Creek Arm	RSF	F	09/25/01	0.090	<0.002	NA	NA	NA	0.14	<0.002	0.42	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	LMB	F	09/25/01	0.030	<0.002	NA	NA	NA	0.87	<0.002	0.20	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	LMB	F	09/25/01	0.050	<0.002	NA	NA	NA	1.24	<0.002	0.24	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	LMB	F	09/25/01	0.050	<0.002	NA	NA	NA	1.22	<0.002	0.22	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	LMB	F	09/25/01	NA	NA	NA	NA	NA	1.56	NA	NA	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	LMB	F	09/25/01	NA	NA	NA	NA	NA	1.59	NA	NA	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	BCR	F	09/25/01	0.100	<0.002	NA	NA	NA	0.26	<0.002	0.19	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	BCR	F	09/25/01	0.130	<0.002	NA	NA	NA	0.24	<0.002	0.25	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	RSF	F	09/25/01	0.070	<0.002	NA	NA	NA	0.16	<0.002	0.29	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	RSF	F	09/25/01	0.130	<0.002	NA	NA	NA	0.23	<0.002	0.48	NA	NA
114.24.17	Lake Sonoma/Upper Warm Spr Arm	RSF	F	09/25/01	NA	NA	NA	NA	NA	0.60	NA	NA	NA	NA
114.32.00	Lake Mendocino	CCF	F	09/27/01	NA	NA	NA	NA	NA	0.63	NA	NA	NA	NA
114.32.00	Lake Mendocino	CCF	F	09/27/01	NA	NA	NA	NA	NA	0.09	NA	NA	NA	NA
114.32.00	Lake Mendocino	CCF	F	09/27/01	NA	NA	NA	NA	NA	0.13	NA	NA	NA	NA
114.32.00	Lake Mendocino	CCF	F	09/27/01	NA	NA	NA	NA	NA	0.40	NA	NA	NA	NA
114.32.00	Lake Mendocino	LMB	F	09/27/01	0.060	<0.002	NA	NA	NA	0.47	<0.002	0.27	NA	NA
114.32.00	Lake Mendocino	LMB	F	09/27/01	0.030	<0.002	NA	NA	NA	0.70	<0.002	0.23	NA	NA
114.32.00	Lake Mendocino	LMB	F	09/27/01	<0.025	<0.002	NA	NA	NA	0.81	<0.002	0.20	NA	NA
114.32.00	Lake Mendocino	RBT	F	09/27/01	NA	NA	NA	NA	NA	0.12	NA	NA	NA	NA
114.32.00	Lake Mendocino	RBT	F	09/27/01	NA	NA	NA	NA	NA	0.12	NA	NA	NA	NA
114.32.00	Lake Mendocino	SB	F	09/27/01	0.090	<0.002	NA	NA	NA	0.75	<0.002	0.31	NA	NA
201.12.14	Soulajule	CCF	F	09/20/01	NA	NA	NA	NA	NA	0.23	NA	NA	NA	NA
201.12.14	Soulajule	CCF	F	09/20/01	NA	NA	NA	NA	NA	0.29	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.67	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.75	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.88	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.54	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	1.45	NA	NA	NA	NA
201.12.14	Soulajule	LMB	F	09/20/01	NA	NA	NA	NA	NA	1.87	NA	NA	NA	NA

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit. NA = Not Analyzed.

Species codes are listed in Table 2.

**Table 1**  
 Toxic Substances Monitoring Program  
 Preliminary Summary of 2001 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
201.13.06	Nicasio Reservoir	BG	F	09/19/01	NA	NA	NA	NA	NA	0.21	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	BG	F	09/19/01	NA	NA	NA	NA	NA	0.16	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	BG	F	09/19/01	NA	NA	NA	NA	NA	0.13	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	LMB	F	09/19/01	NA	NA	NA	NA	NA	0.17	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	LMB	F	09/19/01	NA	NA	NA	NA	NA	0.37	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	LMB	F	09/19/01	NA	NA	NA	NA	NA	1.29	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	CP	F	09/19/01	NA	NA	NA	NA	NA	0.21	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	CP	F	09/19/01	NA	NA	NA	NA	NA	0.29	NA	NA	NA	NA
201.13.06	Nicasio Reservoir	CP	F	09/19/01	NA	NA	NA	NA	NA	0.25	NA	NA	NA	NA
201.13.18	Bon Tempe Reservoir	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.90	NA	NA	NA	NA
201.13.18	Bon Tempe Reservoir	LMB	F	09/20/01	NA	NA	NA	NA	NA	0.54	NA	NA	NA	NA
205.30.30	Anderson Reservoir	BCR	F	09/13/01	NA	NA	NA	NA	NA	0.09	NA	NA	NA	NA
205.30.30	Anderson Reservoir	BCR	F	09/13/01	NA	NA	NA	NA	NA	0.25	NA	NA	NA	NA
205.30.30	Anderson Reservoir	BCR	F	09/13/01	NA	NA	NA	NA	NA	0.38	NA	NA	NA	NA
205.30.30	Anderson Reservoir	LMB	F	09/13/01	NA	NA	NA	NA	NA	0.68	NA	NA	NA	NA
205.30.30	Anderson Reservoir	LMB	F	09/13/01	NA	NA	NA	NA	NA	1.17	NA	NA	NA	NA
205.30.30	Anderson Reservoir	LMB	F	09/13/01	NA	NA	NA	NA	NA	1.46	NA	NA	NA	NA
205.30.30	Anderson Reservoir	CP	F	09/13/01	NA	NA	NA	NA	NA	0.40	NA	NA	NA	NA
205.30.30	Anderson Reservoir	CP	F	09/13/01	NA	NA	NA	NA	NA	0.46	NA	NA	NA	NA
205.30.30	Anderson Reservoir	CP	F	09/13/01	NA	NA	NA	NA	NA	0.43	NA	NA	NA	NA
307.00.01	Carmel Lagoon	STB	W	08/23/01	0.290	0.058	0.14	3.88	0.018	0.09	<0.002	0.67	0.029	37.9
307.00.01	Carmel Lagoon	STB	W	08/23/01	0.280	0.059	0.11	3.66	0.017	0.10	<0.002	0.65	0.029	41.0
310.13.00	San Simeon Creek Lagoon	STB	W	08/22/01	0.210	0.018	0.17	2.94	0.010	0.22	<0.002	0.37	0.003	29.4
310.14.09	Santa Rosa Cr/Soto Ranch	STB	W	08/22/01	0.160	0.018	0.27	1.63	0.013	0.09	0.175	1.73	0.005	35.0
310.17.01	Whale Rock Res	SKR	F	08/21/01	0.190	<0.002	NA	NA	NA	0.10	<0.002	1.95	NA	NA
310.22.01	Chorro Cr/Lower	SFM	W	08/22/01	0.060	0.012	0.14	1.65	0.015	0.04	<0.002	0.83	0.002	27.0
310.24.00	San Luis Obispo Creek Lagoon	SSP	W	08/09/01	0.530	0.032	0.69	0.72	0.028	<0.003	0.195	0.40	0.006	17.0
310.26.01	Pismo Creek	PCP	W	08/09/01	0.210	0.018	0.24	1.22	0.026	0.05	0.026	2.28	<0.002	14.2
310.31.00	Arroyo Grande Creek Lagoon	LMB	W	08/08/01	0.080	0.021	0.13	0.49	0.005	0.04	<0.002	1.10	<0.002	19.9
310.31.10	Lake Lopez	LMB	F	08/21/01	0.240	<0.002	NA	NA	NA	0.06	<0.002	1.30	NA	NA

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310.31.10	Lake Lopez	LMB	L	08/21/01	NA	NA	0.15	4.98	<0.002	NA	NA	NA	<0.002	20.7
310.32.01	Oso Flaco Lake	HCH	F	08/09/01	0.110	<0.002	NA	NA	NA	0.04	0.020	0.61	NA	NA
402.10.05	Ventura R/d/s OVSD Discharge	AC	W	07/18/01	0.200	0.045	0.19	1.65	0.007	<0.003	<0.002	2.82	0.007	31.3
402.10.06	Ventura R/u/s OVSD Discharge	AC	W	07/18/01	0.200	0.157	0.21	1.47	0.028	<0.003	<0.002	2.84	0.006	32.7
403.11.00	Santa Clara River Estuary	AC	W	07/18/01	0.170	0.075	0.24	2.86	<0.002	0.04	<0.002	1.65	0.013	35.8
403.12.06	Calleguas Creek	AC	W	07/19/01	0.180	0.035	1.09	1.36	0.144	<0.003	0.515	0.97	0.018	31.9
403.12.06	Calleguas Creek	BLB	F	07/19/01	<0.025	0.002	NA	NA	NA	0.03	0.011	0.26	NA	NA
403.12.06	Calleguas Creek	BLB	L	07/19/01	NA	NA	0.29	13.80	0.018	NA	NA	NA	0.165	23.8
403.21.09	Santa Paula Cr/d/s Stekel Park	AC	W	07/17/01	0.090	0.301	0.27	1.94	0.013	0.05	<0.002	2.79	0.004	43.6
403.31.08	Sespe Overflow Channel	STB	W	07/17/01	0.220	0.102	0.19	1.34	0.025	<0.003	<0.002	2.58	0.004	40.5
403.41.03	Piru Creek	STB	W	07/17/01	0.210	0.099	0.31	1.67	0.025	0.04	<0.002	1.14	0.005	33.8
403.64.03	Arroyo Conejo/d/s Forks	GSF	F	07/19/01	0.060	<0.002	NA	NA	NA	0.05	0.004	0.95	NA	NA
403.64.03	Arroyo Conejo/d/s Forks	GSF	L	07/19/01	NA	NA	0.22	2.54	0.020	NA	NA	NA	<0.002	17.6
403.64.03	Arroyo Conejo/d/s Forks	BLB	F	07/19/01	<0.025	<0.002	NA	NA	NA	0.03	0.002	0.30	NA	NA
403.64.03	Arroyo Conejo/d/s Forks	BLB	L	07/19/01	NA	NA	0.31	21.40	0.013	NA	NA	NA	0.476	27.2
403.67.04	Arroyo Simi	AC	W	07/19/01	0.090	0.018	0.43	2.59	0.013	0.05	<0.002	2.33	0.102	38.9
405.12.09	Dominguez Channel/Avalon Blvd	GAM	W	08/07/01	0.140	0.011	0.34	1.65	0.408	<0.003	0.133	0.36	0.011	35.0
510.00.20	Prospect Sl/Liberty Island	LMB	F	11/18/01	NA	NA	NA	NA	NA	0.69	NA	NA	NA	NA
510.00.30	Sacramento R/Hood	SMB	F	11/15/01	NA	NA	NA	NA	NA	0.95	NA	NA	NA	NA
515.40.00	Feather R/u/s Yuba River	LMB	F	11/27/01	NA	NA	NA	NA	NA	0.18	NA	NA	NA	NA
545.20.90	San Joaquin R/HWY 99	LMB	F	11/13/01	0.030	<0.002	NA	NA	NA	0.06	0.007	0.13	NA	NA
545.20.90	San Joaquin R/HWY 99	LMB	L	11/13/01	NA	NA	0.15	1.89	0.002	NA	NA	NA	<0.002	17.5
551.20.00	Mendota Pool	LMB	F	11/07/01	NA	NA	NA	NA	NA	0.25	NA	0.80	NA	NA
551.90.10	Kings R/Jackson Ave	LMB	F	11/06/01	0.040	<0.002	NA	NA	NA	0.16	<0.002	0.15	NA	NA
551.90.10	Kings R/Jackson Ave	LMB	L	11/06/01	NA	NA	0.14	31.80	0.004	NA	NA	NA	0.122	28.4
552.33.13	Wishon Res/N.F./Kings River	RBT	F	08/29/01	0.260	<0.002	NA	NA	NA	<0.003	0.004	0.27	NA	NA
552.33.13	Wishon Res/N.F./Kings River	RBT	L	08/29/01	NA	NA	0.21	67.20	<0.002	NA	NA	NA	0.012	34.6
552.33.17	Courtright Res/Dusy Cr	RBT	F	08/29/01	0.260	<0.002	NA	NA	NA	<0.003	0.013	0.27	NA	NA
552.33.17	Courtright Res/Dusy Cr	RBT	L	08/29/01	NA	NA	0.19	70.60	<0.002	NA	NA	NA	0.020	27.1
553.44.01	Lake Kaweah	LMB	F	11/06/01	0.170	<0.002	NA	NA	NA	0.52	0.025	0.19	NA	NA

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Station Number	Station Name	Species Code	Tissue	Sample Date	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
553.44.01	Lake Kaweah	LMB	L	11/06/01	NA	NA	0.12	6.36	0.018	NA	NA	NA	0.013	20.2
601.00.07	Rush Creek	BN	F	10/08/01	0.130	<0.002	NA	NA	NA	0.04	<0.002	1.14	NA	NA
601.00.07	Rush Creek	BN	L	10/08/01	NA	NA	0.16	162.00	0.008	NA	NA	NA	1.970	32.3
601.00.92	June Lake	RBT	F	10/09/01	0.840	<0.002	NA	NA	NA	0.06	<0.002	0.58	NA	NA
601.00.92	June Lake	RBT	L	10/09/01	NA	NA	0.12	32.50	0.004	NA	NA	NA	0.045	24.4
601.00.92	June Lake	SKR	F	10/09/01	0.170	<0.002	NA	NA	NA	0.09	<0.002	0.78	NA	NA
603.10.06	Crowley Lake	RBT	F	10/10/01	0.140	<0.002	NA	NA	NA	0.41	<0.002	0.49	NA	NA
603.10.06	Crowley Lake	RBT	L	10/10/01	NA	NA	0.20	69.70	<0.002	NA	NA	NA	0.766	44.5
603.20.42	Horton Creek	BN	F	10/09/01	0.120	<0.002	NA	NA	NA	0.06	<0.002	0.62	NA	NA
603.20.42	Horton Creek	BN	L	10/09/01	NA	NA	0.32	111.00	<0.002	NA	NA	NA	1.560	28.5
603.20.43	Pine Cr/Bishop	BN	F	10/09/01	0.060	0.007	NA	NA	NA	<0.003	<0.002	0.56	NA	NA
603.20.43	Pine Cr/Bishop	BN	L	10/09/01	NA	NA	0.19	41.60	<0.002	NA	NA	NA	0.257	31.0
628.20.02	Silverwood Lake	LMB	F	10/24/01	0.290	<0.002	NA	NA	NA	0.24	<0.002	0.67	NA	NA
628.20.02	Silverwood Lake	LMB	L	10/24/01	NA	NA	0.11	11.50	<0.002	NA	NA	NA	<0.002	23.6
628.20.29	Deep Cr/u/s Mojave River	GSF	F	10/24/01	0.070	<0.002	NA	NA	NA	0.26	0.081	0.16	NA	NA
628.20.29	Deep Cr/u/s Mojave River	GSF	L	10/24/01	NA	NA	0.17	1.90	<0.002	NA	NA	NA	<0.002	16.0
628.20.41	Lake Gregory	BLB	F	10/23/01	0.100	<0.002	NA	NA	NA	0.03	<0.002	0.40	NA	NA
628.20.41	Lake Gregory	BLB	L	10/23/01	NA	NA	0.16	5.95	0.029	NA	NA	NA	<0.002	17.5
632.10.14	Heenan Lake	LCT	F	11/05/01	<0.025	<0.002	NA	NA	NA	0.04	<0.002	0.11	NA	NA
632.10.14	Heenan Lake	LCT	L	11/05/01	NA	NA	0.13	63.90	<0.002	NA	NA	NA	0.189	19.0
632.10.15	Silver Creek	RBT	F	10/04/01	0.060	<0.002	NA	NA	NA	0.05	<0.002	0.23	NA	NA
632.10.15	Silver Creek	RBT	L	10/04/01	NA	NA	0.23	23.50	<0.002	NA	NA	NA	0.206	26.4
632.10.33	Wolf Creek	BN	F	10/04/01	<0.025	<0.002	NA	NA	NA	0.10	<0.002	0.03	NA	NA
632.10.33	Wolf Creek	BN	L	10/04/01	NA	NA	0.18	57.10	<0.002	NA	NA	NA	0.292	19.9
634.10.95	Taylor Creek	BN	F	10/17/01	0.120	<0.002	NA	NA	NA	0.04	<0.002	0.56	NA	NA
634.10.95	Taylor Creek	BN	L	10/17/01	NA	NA	0.19	101.00	<0.002	NA	NA	NA	0.203	27.6
634.20.01	Ward Creek	RBT	F	10/17/01	0.100	<0.002	NA	NA	NA	0.05	<0.002	0.45	NA	NA
634.20.01	Ward Creek	RBT	L	10/17/01	NA	NA	0.19	4.14	<0.002	NA	NA	NA	0.024	21.8
637.20.25	Susan R/d/s Piute Creek	BN	F	10/15/01	<0.025	<0.002	NA	NA	NA	0.19	<0.002	0.02	NA	NA
637.20.25	Susan R/d/s Piute Creek	BN	L	10/15/01	NA	NA	0.14	38.70	<0.002	NA	NA	NA	0.103	22.6

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637.20.27	Piute Creek	BN	F	10/15/01	<0.025	0.002	NA	NA	NA	0.10	<0.002	0.10	NA	NA
637.20.27	Piute Creek	BN	L	10/15/01	NA	NA	0.190	132.00	<0.002	NA	NA	NA	0.525	30.0
637.32.09	Eagle Lake	ELT	F	11/08/01	<0.025	<0.002	NA	NA	NA	0.07	<0.002	0.10	NA	NA
637.32.09	Eagle Lake	ELT	L	11/08/01	NA	NA	0.140	60.80	<0.002	NA	NA	NA	0.201	29.6
715.40.08	Palo Verde Outfall Drain	LMB	F	11/23/01	0.070	<0.002	NA	NA	NA	0.03	<0.002	0.51	NA	NA
715.40.08	Palo Verde Outfall Drain	LMB	L	11/23/01	NA	NA	0.150	3.06	0.005	NA	NA	NA	0.002	17.4
715.50.90	Colorado R/u/s Imperial Dam	LMB	F	11/22/01	0.060	<0.002	NA	NA	NA	0.04	<0.002	2.14	NA	NA
715.50.90	Colorado R/u/s Imperial Dam	LMB	L	11/22/01	NA	NA	0.120	6.08	0.009	NA	NA	NA	<0.002	20.1
719.47.00	Coachella Valley Stormwater Ch	PRS	W	11/19/01	0.090	0.005	0.220	0.74	0.025	0.07	<0.002	0.99	<0.002	57.6
723.10.02	New R/Westmorland	CCF	F	11/21/01	0.040	<0.002	NA	NA	NA	0.11	<0.002	0.50	NA	NA
723.10.02	New R/Westmorland	CCF	L	11/21/02	NA	NA	0.110	1.87	0.114	NA	NA	NA	<0.002	18.2
723.10.30	Central Drain	MOL	W	11/21/01	0.540	0.033	1.550	5.68	0.700	<0.003	0.648	1.43	0.088	16.1
723.10.32	Barbara Worth Drain	MOL	W	11/19/01	0.440	0.068	1.590	10.80	0.623	<0.003	0.653	1.26	0.063	15.0
723.10.38	Rice Drain	GAM	W	11/21/01	0.300	0.008	0.260	1.56	0.092	0.05	<0.002	2.92	0.033	37.1
723.10.47	Alamo R/Inter Boundary	MOL	W	11/19/01	0.510	0.012	1.230	3.74	0.620	<0.003	0.511	1.84	0.035	22.5
723.10.48	Greeson Drain	MOL	W	11/20/01	0.380	0.012	0.840	4.39	0.471	<0.003	0.236	1.36	0.055	18.2
723.10.91	Fig Drain	MOL	W	11/20/01	0.440	0.036	1.800	4.96	0.622	<0.003	0.784	0.87	0.041	16.2
801.11.05	Delhi Channel	FHM	W	07/12/01	0.270	0.015	0.230	2.18	0.178	0.02	0.023	2.50	0.009	33.5
801.11.07	San Diego Cr/Michelson Dr	PRS	W	07/12/01	0.230	0.049	0.250	1.90	0.015	0.03	<0.002	2.57	0.008	42.2
801.11.09	San Diego Cr/Barranca Pkwy	FHM	W	07/12/01	0.540	0.044	0.400	1.00	0.086	<0.003	0.056	2.13	0.010	28.8
801.11.09	San Diego Cr/Barranca Pkwy	FHM	W	07/12/01	0.600	0.050	0.510	1.12	0.108	<0.003	0.059	2.28	0.012	34.1
801.11.88	Upper Newport Bay/Ecolog Reserve	RSR	F	08/07/01	3.190	0.005	NA	NA	NA	0.09	0.083	0.81	NA	NA
801.11.88	Upper Newport Bay/Ecolog Reserve	RSR	L	08/07/01	NA	NA	0.690	4.15	0.006	NA	NA	NA	0.023	10.8
801.11.96	Peters Canyon Channel	FHM	W	07/12/01	0.140	0.017	0.290	1.95	0.055	0.05	<0.002	1.37	0.002	43.0
801.71.07	Big Bear Lk/Dam	LMB	F	07/10/01	0.080	<0.002	NA	NA	NA	0.60	0.028	0.12	NA	NA
801.71.07	Big Bear Lk/Dam	LMB	L	07/10/01	NA	NA	0.440	10.70	<0.002	NA	NA	NA	0.004	20.7
801.71.10	Big Bear Lake	LMB	F	07/10/01	0.050	<0.002	NA	NA	NA	0.09	0.012	0.11	NA	NA
801.71.10	Big Bear Lake	LMB	L	07/10/01	NA	NA	0.270	3.02	<0.002	NA	NA	NA	<0.002	26.1
801.71.12	Big Bear Lk/Rathbone Creek	CP	F	07/10/01	0.100	<0.002	NA	NA	NA	0.15	0.008	0.15	NA	NA
802.31.00	Lake Elsinore	CP	F	07/11/01	0.170	<0.002	NA	NA	NA	0.04	0.005	0.22	NA	NA

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit. NA = Not Analyzed.

Species codes are listed in Table 2.

**Table 1**  
 Toxic Substances Monitoring Program  
 Preliminary Summary of 2001 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
904.10.06	Loma Alta Cr/College Blvd	PROI	F	06/21/01	0.310	0.005	0.190	6.94	0.005	0.03	0.034	0.28	0.033	13.7
904.51.03	San Marcos Cr	LMB	F	06/21/01	<0.025	<0.002	NA	NA	NA	0.46	0.058	0.56	NA	NA
904.51.03	San Marcos Cr	LMB	L	06/21/01	NA	NA	0.200	5.18	0.009	NA	NA	NA	0.006	19.7
904.61.02	Escondido Cr	CP	W	06/20/01	0.230	0.013	0.220	0.82	0.043	<0.003	<0.002	0.61	0.008	36.6
904.62.04	Escondido Cr/Country Club Dr	PROI	F	06/20/01	0.190	0.007	0.280	9.47	0.158	<0.003	0.145	0.39	0.029	14.9
906.10.01	Penasquitos Lagoon	STG	W	06/20/01	0.500	0.022	0.280	1.35	0.034	<0.003	<0.002	0.57	0.006	13.3
906.40.01	Rose Cr/d/s Mission Bay Dr	GAM	W	06/19/01	0.210	0.005	0.200	2.52	0.098	0.04	<0.002	0.42	0.018	35.6
906.40.04	San Clemente Canyon Cr/Regents	GAM	W	06/19/01	0.230	0.006	0.220	1.71	0.030	0.02	<0.002	0.32	0.014	30.0
906.50.00	Tecolote Creek Estuary	CKF	W	06/19/01	0.960	<0.002	0.330	2.30	0.182	<0.003	<0.002	0.82	0.018	35.3

L = Liver. F = Filet. W = Whole Body. < = Below Indicated Detection Limit. NA = Not Analyzed.  
 Species codes are listed in Table 2.

**TABLE 2**  
 Toxic Substances Monitoring Program  
 2001 Species Code List for Trace Elements

**Freshwater Fish \***

Species Code	Common Name	Species Name	Family Name
AC	Arroyo Chub	<i>Gila orcutti</i>	Cyprinidae
BCR	Black Crappie	<i>Pomoxis nigromaculatus</i>	Centrarchidae
BG	Bluegill	<i>Lepomis macrochirus</i>	Centrarchidae
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
ELT	Eagle Lake Trout	<i>Oncorhynchus mykiss aquilarum</i>	Salmonidae
FHM	Fathead Minnow	<i>Pimephales promelas</i>	Cyprinidae
HCH	Hitch	<i>Lavinia exilicauda</i>	Cyprinidae
GAM	Mosquitofish	<i>Gambusia affinis</i>	Poeciliidae
GSF	Green Sunfish	<i>Lepomis cyanellus</i>	Centrarchidae
LCT	Lahontan Cutthroat Trout	<i>Oncorhynchus clarki henshawi</i>	Salmonidae
LMB	Largemouth Bass	<i>Micropterus salmoides</i>	Centrarchidae
MOL	Sailfin Molly	<i>Poecilia latipinna</i>	Poeciliidae
PCP	Prickly Sculpin	<i>Cottus asper</i>	Cottidae
PRS	Red Shiner	<i>Cyprinella lutrensis</i>	Cyprinidae
RBT	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Salmonidae
RSF	Redear Sunfish	<i>Lepomis microlophus</i>	Centrarchidae
SB	Striped Bass	<i>Morone saxatilis</i>	Percichthyidae
SKR	Sucker	<i>Catostomus sp.</i>	Catostomidae
SMB	Smallmouth Bass	<i>Micropterus dolomieu</i>	Centrarchidae
SPM	Sacramento Pike Minnow	<i>Ptychocheilus grandis</i>	Cyprinidae
SSP	Shiner Perch	<i>Cymatogaster aggregata</i>	Embiotocidae
STB	Threespine Stickleback	<i>Gasterosteus aculeatus</i>	Gasterosteidae

**Marine Fish \***

Species Code	Common Name	Species Name	Family Name
CKF	California Killifish	<i>Fundulus parvipinnis</i>	Cyprinodontidae
RSR	Round Stingray	<i>Urolophus halleri</i>	Urolophidae
STG	Pacific Staghorn Sculpin	<i>Leptocottus armatus</i>	Cottidae

**Non-Fish**

Species Code	Common Name	Species Name	Family Name
PROI	Red Swamp Crayfish	<i>Procambarus clarki</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.