

## **APPENDIX J**

**Summary of 1993-95 Data  
Trace Elements in Mussels and Sediment  
(ppm, wet weight)**

## APPENDIX J

### State Mussel Watch Program

#### Summary of 1993-95 Data: Trace Elements in Mussels and Sediment (ppm, wet weight)

Station Number	Station Name	Sample Type*	Sample Date**	Aluminum	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Zinc
10.0	Trinidad Head	RCM	10/14/93	200.0	1.6	1.6	1.00	1.40	0.30	3.50	0.036	0.83	0.27	0.006	28.0
10.0	Trinidad Head	RCM	11/28/94	160.0	NA	1.0	9.70	1.70	0.21	3.70	0.024	NA	NA	0.006	26.0
100.0	Mad River Slough	TCM	02/24/94	140.0	1.3	1.0	0.43	1.30	0.28	2.60	0.032	1.10	0.24	0.004	32.0
101.0	Samoa Bridge/West	TCM	02/24/94	380.0	1.6	1.1	0.95	1.70	0.28	4.90	0.042	1.50	0.35	0.008	36.0
103.0	Eureka Channel	TCM	02/24/94	340.0	1.4	1.1	0.85	1.60	0.38	4.20	0.033	1.20	0.26	0.006	33.0
202.0	Bodega Head	RCM	09/16/93	64.0	NA	1.9	0.27	1.10	0.25	1.50	0.037	NA	NA	0.019	24.0
202.0	Bodega Head	RCM	09/19/94	29.0	1.6	2.9	1.40	1.10	0.19	1.00	0.036	1.20	0.20	0.013	29.0
308.0	San Francisco Bay/Hunter's Point	TCM	01/15/88	400.0	NA	1.3	2.60	3.30	0.53	4.70	0.067	NA	0.49	0.097	38.0
309.0	San Mateo Bridge/8B	TCM	02/12/85	350.0	NA	1.3	1.80	3.50	0.28	12.00	0.089	NA	0.43	0.092	34.0
313.0	San Francisco Bay/near Redwood Cr	TCM	02/12/85	400.0	NA	1.5	4.20	2.90	0.26	11.00	0.100	NA	0.42	0.180	31.0
313.0	San Francisco Bay/near Redwood Cr	TCM	01/15/88	130.0	NA	1.4	3.20	4.00	0.18	4.20	0.067	NA	0.60	0.470	30.0
321.0	Dumbarton Bridge/Channel Marker 14	TCM	02/12/85	370.0	NA	1.3	3.50	2.10	0.29	8.30	0.075	NA	0.30	0.130	32.0
404.0	Sandholdt Bridge	TCM	03/07/94	250.0	NA	1.0	0.36	1.70	0.26	3.10	0.041	NA	NA	0.007	42.0
404.0	Sandholdt Bridge	TCM	02/22/95	190.0	NA	1.2	0.69	1.50	0.30	2.70	0.037	NA	NA	0.003	41.0
414.0	Pacific Grove	RCM	04/14/94	19.0	NA	1.4	0.11	0.91	0.52	0.67	0.025	NA	NA	0.040	41.0
414.0	Pacific Grove	RCM	04/19/95	42.0	NA	1.2	1.50	1.30	0.42	1.10	0.024	NA	NA	0.016	31.0
420.0	Monterey Harbor/Coast Guard Jetty	TCM	05/26/94	11.0	NA	2.4	0.08	1.50	0.56	0.93	0.021	NA	NA	0.026	29.0
420.3	Monterey Harbor/C G Jetty/Inner	TCM	05/26/94	13.0	NA	2.3	0.06	2.10	1.10	0.86	0.026	NA	NA	0.017	34.0
421.0	Monterey Harbor/Slag Pile	TCM	05/26/94	52.0	NA	1.7	0.26	3.60	3.30	0.86	0.043	NA	NA	0.032	52.0
507.3	Mugu Lagoon/Calleguas Creek	TCM	02/08/94	140.0	1.5	1.7	0.26	1.70	0.34	3.50	0.029	0.37	0.51	0.028	31.0
508.1	Mugu Drainage 1	SED	01/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.55	NA	NA
601.0	LA Harbor/National Steel	SED	11/09/93	17000.0	NA	1.0	47.00	58.00	40.00	370.00	0.220	23.00	0.20	0.230	140.0
601.0	LA Harbor/National Steel	TCM	02/08/94	140.0	NA	1.4	0.38	5.50	1.50	5.70	0.039	0.27	0.27	0.020	60.0
601.0	LA Harbor/National Steel	TCM	01/31/95	57.0	NA	1.7	0.75	1.50	1.00	2.30	0.034	NA	0.20	0.007	53.0
602.0	LA Harbor/West Basin	TCM	02/08/94	80.0	1.3	1.6	0.28	3.90	0.86	3.00	0.034	0.24	0.28	0.014	44.0
605.0	LA Harbor/Cabrillo Pier	SED	11/09/93	13000.0	NA	1.0	43.00	74.00	18.00	220.00	0.110	23.00	0.41	0.240	78.0
605.0	LA Harbor/Cabrillo Pier	TCM	02/08/94	160.0	NA	0.9	0.35	3.20	0.96	4.40	0.032	0.26	0.74	0.022	39.0
605.0	LA Harbor/Cabrillo Pier	TCM	01/31/95	120.0	NA	0.9	NA	2.20	NA	4.50	0.026	NA	0.46	0.033	41.0
616.0	LA Harbor/Consolidated Slip	SED	11/09/93	11000.0	NA	5.7	47.00	65.00	56.00	220.00	0.130	21.00	0.20	0.380	240.0
616.0	LA Harbor/Consolidated Slip	TCM	02/08/94	130.0	NA	1.8	0.39	3.40	2.30	3.70	0.033	0.28	0.43	0.014	59.0
616.0	LA Harbor/Consolidated Slip	TCM	01/31/95	96.0	NA	1.6	2.10	1.70	1.50	3.40	0.028	NA	ND	0.010	60.0
618.0	LA Harbor/Angels Gate	RCM	02/08/94	170.0	1.3	0.2	0.26	2.10	0.31	2.80	0.015	0.16	0.80	0.012	20.0
618.0	LA Harbor/Angels Gate	RCM	01/31/95	130.0	NA	0.4	NA	1.70	NA	2.90	0.014	NA	0.50	0.009	17.0
648.0	Malibu	RBM	02/07/94	220.0	1.5	0.2	0.33	2.50	0.79	4.00	0.023	0.37	0.85	0.290	18.0
648.0	Malibu	RBM	01/31/95	280.0	NA	0.4	8.30	1.50	0.15	5.30	0.014	NA	0.58	0.048	16.0
650.0	Santa Monica	RCM	02/07/94	410.0	1.3	0.3	0.44	1.30	0.31	8.80	0.017	0.61	0.73	0.057	12.0
650.0	Santa Monica	RCM	01/31/95	120.0	NA	0.3	4.50	2.60	0.75	2.60	0.026	NA	0.99	0.670	34.0
662.0	Royal Palms	RCM	02/08/94	190.0	NA	0.3	0.42	1.50	0.32	6.10	0.017	0.53	0.53	0.400	20.0
662.0	Royal Palms	RCM	01/31/95	110.0	NA	0.4	5.10	1.60	0.32	2.90	0.024	NA	0.47	0.290	27.0
664.0	Cabrillo Beach	RCM	11/11/94	120.0	NA	0.4	1.60	2.00	0.43	2.60	0.036	NA	0.54	0.720	34.0

\* RCM = Resident California Mussel  
TCM = Transplanted California Mussel

RBM = Resident Bay Mussel  
SED = Sediment

NA = Not Analyzed  
ND = Not Detected

\*\* Samples with a collection date prior to 1993 are archive samples.

J-2

## APPENDIX J (continued)

### State Mussel Watch Program

#### Summary of 1993-95 Data: Trace Elements in Mussels and Sediment (ppm, wet weight)

Station Number	Station Name	Sample Type*	Sample Date	Aluminum	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Zinc
681.0	Catalina Island/West	RCM	03/30/94	27.0	NA	1.2	0.30	0.68	3.50	1.30	0.031	0.35	0.36	0.150	37.0
713.0	Huntington Harbour/Edinger Street	TCM	02/07/94	190.0	1.6	1.3	0.28	2.50	0.89	4.20	0.055	0.26	0.40	0.007	53.0
713.0	Huntington Harbour/Edinger Street	TCM	01/30/95	250.0	NA	1.5	18.00	2.10	0.90	6.20	0.036	NA	NA	0.012	46.0
715.0	Huntington Harbour/Warner Ave Brdg	TCM	02/07/94	190.0	1.5	1.4	0.33	2.50	1.70	5.90	0.036	0.34	0.37	0.009	63.0
715.0	Huntington Harbour/Warner Ave Brdg	TCM	01/30/95	200.0	NA	1.2	15.00	2.60	1.50	5.90	0.032	NA	NA	0.014	55.0
723.4	Newport Bay/Turning Basin	TCM	01/30/95	95.0	NA	1.7	1.90	2.40	0.54	4.50	0.044	NA	NA	0.009	55.0
724.0	Newport Bay/Highway 1 Bridge	TCM	02/07/94	150.0	1.5	1.4	0.32	2.70	0.54	7.50	0.037	0.58	0.27	0.008	46.0
724.0	Newport Bay/Highway 1 Bridge	TCM	01/30/95	110.0	NA	1.4	0.52	7.00	0.70	6.90	0.065	NA	NA	0.010	75.0
725.0	Newport Bay/Crows Nest	TCM	02/07/94	110.0	1.5	1.7	0.29	21.00	1.00	4.80	0.085	0.58	0.31	0.011	81.0
725.0	Newport Bay/Crows Nest	TCM	01/30/95	280.0	NA	1.2	2.50	2.10	0.49	4.50	0.034	NA	NA	0.006	42.0
726.4	Newport Bay/Rhine Channel/End	TCM	02/07/94	120.0	1.4	1.5	0.45	26.00	0.92	12.00	0.069	0.62	0.27	0.014	88.0
726.4	Newport Bay/Rhine Channel/End	TCM	01/30/95	100.0	NA	1.6	0.57	11.00	0.58	6.10	0.063	NA	NA	0.009	72.0
750.0	Oceanside	RCM	01/30/95	230.0	NA	0.3	2.30	1.70	0.11	3.60	0.012	NA	NA	0.015	23.0
868.5	Mission Bay/Landfill 1	TCM	01/30/95	250.0	1.2	1.1	1.10	1.70	0.27	4.00	0.030	1.10	0.30	0.015	34.0
868.6	Mission Bay/Landfill 2	TCM	01/30/95	240.0	1.6	1.6	0.54	2.10	0.24	3.30	0.037	0.72	0.43	0.015	37.0
882.0	24th St Maritime Terminal/South	TCM	02/08/94	170.0	1.4	1.2	0.31	11.00	0.67	5.60	0.047	0.47	0.28	0.094	81.0
882.0	24th St Maritime Terminal/South	TCM	01/31/95	150.0	NA	2.0	1.70	6.90	0.60	4.50	0.045	NA	NA	0.042	71.0
883.1	San Diego Bay/Chollas Creek	TCM	02/08/94	170.0	1.3	1.7	0.31	5.30	1.30	5.40	0.044	0.21	0.26	0.040	75.0
883.4	San Diego Bay/Continental Maritime	TCM	02/08/94	160.0	1.3	1.2	0.32	9.20	0.70	10.00	0.039	0.21	0.27	0.060	71.0
883.5	San Diego Bay/Tuna Docks	TCM	02/08/94	110.0	1.3	1.2	0.23	4.80	0.94	2.80	0.030	0.16	0.22	0.039	62.0
883.8	San Diego Bay/Switzer Creek	TCM	02/08/94	120.0	1.3	1.2	0.28	5.80	0.67	4.70	0.037	0.25	0.24	0.043	53.0
894.0	SD Bay/Harbor Is/E Basin/Storm Dr	TCM	02/08/94	87.0	1.4	1.7	0.43	8.00	2.00	2.30	0.030	0.21	0.23	0.140	86.0
894.0	SD Bay/Harbor Is/E Basin/Storm Dr	TCM	01/31/95	130.0	NA	1.4	3.40	5.30	3.40	3.00	0.036	NA	NA	0.110	97.0
899.0	San Diego Bay/Shelter Is/Fshg Pier	TCM	01/31/95	180.0	NA	1.0	4.40	2.60	0.79	3.00	0.035	NA	NA	0.012	62.0

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 TCM = Transplanted California Mussel      SED = Sediment      ND = Not Detected