

APPENDIX Q

Summary of 1995-97 Data

PAHs in Mussel, Oyster, Abalone Jingle, Shore Crab,
and Sand Worm
(ppb, wet weight)

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State Mussel Watch Program

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Station Number	Station Name	Sample Type*	Sample Date	Total PAH	Anthracene	Anthracene, benz(a)	Anthracene, dibenz(a,h)	Biphenyl	Chrysene	Fluoranthene
1.0	Crescent City Harbor	RCM	04/09/97	186.1	1.9	4.1	ND	ND	9.7	14.3
2.0	Crescent City/STP Outfall	RCM	04/09/97	ND	ND	ND	ND	ND	ND	ND
2.2	Crescent City Harbor/Inner Jetty	RCM	04/09/97	14.6	ND	ND	ND	ND	ND	2.8
3.0	Crescent City/Control	RCM	04/10/97	15.6	ND	ND	ND	ND	ND	1.5
100.0	Mad River Slough	OYS	04/10/97	43.0	ND	ND	ND	ND	ND	8.4
101.4	Arcata Bay/Jolly Giant Slough	PAC	04/18/96	3.6	ND	ND	ND	ND	ND	ND
101.5	Humboldt Bay/Eureka SM.22	TCM	02/15/95	24.2	ND	ND	ND	ND	ND	3.2
101.8	Humboldt Bay/Halberson Shoreline	RBM-s	04/17/96	110.6	2.5	6.9	ND	ND	9.2	20.5
101.8	Humboldt Bay/Halberson Shoreline	PAC	04/17/96	ND	ND	ND	ND	ND	ND	ND
101.8	Humboldt Bay/Halberson Shoreline	GLY	04/17/96	18.9	ND	1.6	ND	ND	1.3	2.1

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
1.0	6.6	2.7	7.3	10.1	4.1	7.0	19.3	13.9	ND
2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
2.2	ND	ND	ND	ND	ND	3.3	ND	ND	ND
3.0	ND	ND	ND	ND	ND	1.6	1.6	ND	ND
100.0	ND	ND	2.2	ND	1.6	2.3	1.9	ND	ND
101.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
101.5	ND	ND	2.2	ND	ND	4.7	ND	ND	ND
101.8	6.2	6.7	1.8	2.0	1.9	2.7	ND	ND	ND
101.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
101.8	ND	1.3	ND	2.0	ND	ND	ND	ND	2.3

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
1.0	ND	1.4	1.5	25.7	32.2	16.6	1.8	4.5	1.5
2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
2.2	ND	ND	ND	6.6	ND	1.9	ND	ND	ND
3.0	ND	ND	ND	5.2	3.7	2.0	ND	ND	ND
100.0	ND	ND	ND	9.8	9.6	7.1	ND	ND	ND
101.4	ND	ND	ND	ND	ND	3.6	ND	ND	ND
101.5	ND	ND	ND	10.2	ND	4.0	ND	ND	ND
101.8	ND	4.7	4.0	12.3	ND	15.8	4.7	4.7	4.1
101.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
101.8	ND	1.4	ND	1.4	ND	4.3	1.3	ND	ND

* RCM = Resident California Mussel
 TCM = Transplanted California Mussel
 RBM = Resident Bay Mussel (s = small size)
 OYS = Oyster (*Crassostrea gigas*)

POD = Abalone Jingle (*Pododesmus cepio*)
 PAC = Shore Crab (*Pachygrapsus crassipes*)
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Station Number	Station Name	Sample Type*	Sample Date	Total PAH	Anthracene	Anthracene, benz(a)	Anthracene, dibenz(a,h)	Biphenyl	Chrysene	Fluoranthene
102.6	Humboldt Bay/J Street	RCM	02/15/95	181.6	1.0	8.3	ND	ND	10.9	63.8
102.6	Humboldt Bay/J Street	PAC	02/15/95	106.6	ND	2.7	ND	2.7	5.2	13.9
102.6	Humboldt Bay/J Street	TCM	02/15/95	27.7	ND	ND	ND	ND	ND	4.3
102.6	Humboldt Bay/J Street	POD	02/15/95	7168.1	461.9	301.1	28.4	81.2	456.3	1170.6
102.6	Humboldt Bay/J Street	GLY	04/17/96	35.9	ND	1.4	ND	ND	2.7	5.7
102.6	Humboldt Bay/J Street	PAC	04/17/96	19.4	ND	ND	ND	ND	5.2	5.0
102.6	Humboldt Bay/J Street	RBM	04/17/96	91.3	1.6	6.1	5.4	ND	9.7	12.0
102.6	Humboldt Bay/J Street	TCM	04/10/97	77.4	ND	2.3	ND	ND	3.1	14.4
102.7	Humboldt Bay/H Street	TCM	02/15/95	23.3	ND	ND	ND	ND	ND	3.0
102.7	Humboldt Bay/H Street	RBM-s	04/17/96	126.4	2.8	7.2	ND	1.7	9.6	23.5

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
102.6	9.6	3.7	1.1	ND	ND	1.0	ND	ND	ND
102.6	7.4	2.3	2.1	5.6	3.9	4.8	5.4	ND	5.4
102.6	ND	ND	2.1	ND	ND	5.3	ND	ND	ND
102.6	286.1	103.2	422.6	254.3	104.7	61.3	37.0	9.7	525.5
102.6	1.7	ND	ND	3.8	ND	ND	ND	ND	7.1
102.6	ND	ND	ND	ND	ND	ND	ND	ND	4.1
102.6	5.7	5.9	1.1	1.3	1.2	1.6	ND	ND	1.4
102.6	ND	ND	4.2	ND	1.9	4.9	ND	ND	2.3
102.7	ND	ND	2.0	ND	ND	6.6	ND	ND	ND
102.7	5.7	6.2	2.4	3.9	3.3	4.4	ND	ND	3.9

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
102.6	ND	1.3	2.3	19.0	1.9	46.6	1.9	7.4	1.9
102.6	ND	ND	3.9	11.0	ND	19.7	3.5	4.1	3.1
102.6	ND	ND	ND	11.2	ND	4.8	ND	ND	ND
102.6	43.4	49.7	79.8	1453.0	51.4	774.2	190.7	131.3	90.5
102.6	ND	ND	ND	3.6	ND	10.0	ND	ND	ND
102.6	ND	ND	ND	ND	ND	5.2	ND	ND	ND
102.6	ND	4.4	3.5	5.9	ND	10.4	4.2	5.4	4.6
102.6	ND	ND	ND	20.8	7.3	16.1	ND	ND	ND
102.7	ND	ND	ND	8.4	ND	3.4	ND	ND	ND
102.7	ND	2.3	4.3	17.5	ND	17.4	2.7	5.0	2.7

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102.7	Humboldt Bay/H Street	PAC	04/17/96	103.9	ND	5.8	10.2	ND	11.8	3.9
102.7	Humboldt Bay/H Street	GLY	04/17/96	103.5	ND	ND	ND	ND	4.5	39.6
103.3	Humboldt Bay/E Street	TCM	04/10/97	49.8	ND	ND	ND	ND	3.3	8.1
103.5	Humboldt Bay/Clark Slough	TCM	04/10/97	54.1	2.1	3.8	ND	ND	4.5	8.7
104.1	Humboldt Bay/Union Oil Plant	TCM	02/15/95	29.0	ND	ND	ND	ND	1.6	4.2
104.2	Humboldt Bay/Coal Oil Gas Plant	TCM	02/15/95	41.2	ND	ND	ND	ND	ND	6.0
104.3	Humboldt Bay/Old Pac. Lumber	TCM	02/15/95	13.7	ND	ND	ND	ND	ND	2.0
202.0	Bodega Head	RCM	08/29/96	ND	ND	ND	ND	ND	ND	ND
205.0	Bodega Harbor/Spud Point Marina	TCM	03/21/97	79.2	1.8	2.0	ND	1.2	5.2	12.3
205.1	Bodega Bay/Porto Bodega	RBM	03/21/97	233.3	ND	7.5	ND	ND	28.0	77.4

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
102.7	8.4	11.1	ND	ND	ND	ND	ND	ND	ND
102.7	ND	ND	16.3	2.3	ND	ND	ND	ND	2.1
103.3	ND	ND	3.1	ND	ND	2.9	1.9	ND	ND
103.5	2.0	ND	2.9	ND	ND	3.1	2.0	ND	ND
104.1	ND	ND	1.9	ND	ND	6.4	ND	ND	ND
104.2	ND	ND	2.8	1.8	ND	5.3	ND	ND	2.2
104.3	ND	ND	ND	ND	ND	3.8	ND	ND	ND
202.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
205.0	1.8	1.2	2.6	ND	3.3	6.9	4.1	3.5	ND
205.1	9.0	3.5	3.9	ND	1.5	2.4	2.3	2.7	ND

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
102.7	ND	7.4	10.4	ND	ND	4.8	10.5	7.8	11.8
102.7	ND	ND	ND	7.1	ND	29.1	ND	2.6	ND
103.3	ND	ND	ND	14.1	4.8	9.7	ND	2.0	ND
103.5	ND	ND	ND	16.4	2.7	5.9	ND	ND	ND
104.1	ND	ND	ND	10.7	ND	4.2	ND	ND	ND
104.2	ND	ND	ND	16.5	ND	6.5	ND	ND	ND
104.3	ND	ND	ND	5.9	ND	2.1	ND	ND	ND
202.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
205.0	ND	ND	ND	17.1	4.2	9.3	1.6	1.2	ND
205.1	ND	1.8	ND	25.7	15.1	44.3	2.2	6.0	ND

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205.3	Bodega Bay/Mason's Marina	TCM	03/21/97	50.5	ND	2.0	ND	ND	4.4	8.4
205.5	Bodega Bay/Back Marsh	RBM	03/21/97	47.2	1.0	1.4	ND	ND	3.4	7.4
280.0	Russian River/S Goat Rock	RCM	03/21/97	20.8	ND	ND	ND	6.9	ND	1.6
400.6	Santa Cruz/Natural Bridges	RCM	06/09/97	17.2	ND	ND	ND	ND	ND	3.0
403.0	Elkhorn Slough/Highway 1 Bridge	TCM	03/12/97	37.0	ND	ND	ND	ND	ND	4.4
404.0	Sandholdt Bridge	TCM	03/04/97	42.7	1.2	1.2	ND	ND	2.0	4.3
414.0	Pacific Grove	RCM	04/25/97	1.3	ND	ND	ND	ND	ND	ND
601.0	LA Harbor/National Steel	TCM	01/28/97	240.4	5.0	ND	ND	ND	33.9	62.5
616.0	LA Harbor/Consolidated Slip	TCM	01/28/97	257.5	3.2	16.6	ND	ND	40.0	42.2
650.0	Santa Monica	RCM	11/25/96	38.9	ND	2.2	ND	ND	2.4	4.7

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
205.3	ND	ND	3.9	ND	ND	2.9	ND	3.7	ND
205.5	1.4	ND	2.8	ND	1.9	3.2	2.0	ND	ND
280.0	ND	ND	ND	ND	ND	1.6	ND	ND	ND
400.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
403.0	ND	ND	1.8	8.1	2.0	3.8	ND	ND	ND
404.0	ND	ND	2.8	6.4	1.2	2.8	1.2	ND	ND
414.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
601.0	26.9	9.3	2.0	ND	2.2	ND	ND	ND	ND
616.0	18.1	7.3	1.9	ND	3.8	5.1	3.2	5.3	2.5
650.0	ND	ND	3.6	ND	ND	3.6	ND	ND	ND

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
205.3	ND	ND	ND	20.4	4.8	ND	ND	ND	ND
205.5	1.0	ND	ND	10.4	6.7	4.7	ND	ND	ND
280.0	ND	ND	ND	4.6	3.1	3.0	ND	ND	ND
400.6	ND	ND	ND	5.7	4.8	3.7	ND	ND	ND
403.0	ND	ND	ND	6.7	5.4	4.8	ND	ND	ND
404.0	ND	ND	ND	12.3	2.8	4.4	ND	ND	ND
414.0	ND	ND	ND	1.3	ND	ND	ND	ND	ND
601.0	1.2	ND	ND	5.8	2.5	61.7	7.1	20.3	ND
616.0	2.5	ND	3.6	7.1	10.6	55.3	6.1	18.7	4.4
650.0	ND	ND	ND	14.9	3.7	4.0	ND	ND	ND

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Station Number	Station Name	Sample Type*	Sample Date	Total PAH	Anthracene	Anthracene, benz(a)	Anthracene, dibenz(a,h)	Biphenyl	Chrysene	Fluoranthene
740.0	Dana Point Harbor/Boat Yard	TCM	01/27/97	33.2	1.6	3.3	ND	ND	6.7	3.1
750.0	Oceanside	RCM	09/30/96	8.2	ND	ND	ND	ND	ND	1.6
883.1	San Diego Bay/Chollas Creek	TCM	01/28/97	2610.4	41.2	358.0	13.1	8.1	352.5	394.3
883.2	San Diego Bay/Chollas Creek/Mouth	TCM	01/28/97	16291.6	691.2	1541.0	38.4	45.7	1108.6	4289.5
883.3	San Diego Bay/Chollas Creek/End	TCM	01/28/97	5028.1	47.7	449.1	6.4	7.9	430.1	1523.2
883.5	San Diego Bay/Tuna Docks	TCM	01/28/97	2913.3	115.4	231.6	3.8	5.7	211.2	892.8
883.6	San Diego Bay/7th Street Channel	TCM	01/28/97	13347.7	476.2	856.8	20.0	36.6	749.0	4079.6
883.8	San Diego Bay/Switzer Creek	TCM	01/28/97	307.0	5.9	29.4	2.3	1.6	32.6	77.4
885.1	San Diego Bay/Paletta Creek/End	TCM	01/28/97	5620.6	121.8	479.9	9.0	10.7	540.3	1608.9
885.3	San Diego Bay/7th Street Ch/Mid	TCM	01/28/97	22287.3	399.3	1773.9	32.1	42.2	1360.8	7524.9

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
740.0	2.4	ND	ND	ND	1.3	4.6	1.5	ND	ND
750.0	ND	ND	ND	ND	ND	1.7	ND	ND	ND
883.1	67.7	27.7	26.6	5.7	9.5	7.6	ND	5.7	20.4
883.2	1128.2	293.3	292.1	20.1	45.2	126.5	44.4	18.5	169.1
883.3	200.5	40.2	87.3	ND	4.8	12.3	8.2	5.2	59.7
883.5	107.6	28.1	46.8	ND	4.6	16.6	6.3	4.0	27.6
883.6	503.4	112.7	338.5	19.0	34.7	80.1	31.1	16.4	186.0
883.8	14.3	5.4	5.9	ND	2.0	2.8	ND	1.2	3.2
885.1	307.8	66.0	93.0	5.3	10.5	23.9	14.1	7.8	68.4
885.3	1158.3	275.4	226.0	7.2	43.6	102.1	49.5	19.1	185.5

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
740.0	ND	ND	ND	4.2	1.6	1.8	1.3	ND	ND
750.0	ND	1.8	ND	3.0	ND	ND	ND	ND	ND
883.1	8.9	ND	171.1	233.4	13.6	688.2	94.9	45.7	16.6
883.2	14.9	162.1	129.9	2219.5	143.8	2771.5	369.1	494.5	134.6
883.3	6.3	24.8	25.3	799.9	58.5	1078.6	29.0	98.6	24.8
883.5	4.4	17.0	10.8	459.6	31.4	594.0	24.2	58.4	11.2
883.6	16.4	72.2	58.2	2529.6	140.1	2554.4	137.6	244.3	54.9
883.8	1.6	ND	3.0	50.8	3.0	49.7	3.6	8.4	2.7
885.1	4.6	31.6	33.7	708.7	61.6	1171.8	57.4	155.3	28.5
885.3	14.7	134.5	118.3	3021.3	302.1	4568.4	325.6	485.2	117.4

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888.0	San Diego Bay/Coronado Bridge	RBM	01/28/97	279.7	2.6	21.6	3.7	ND	40.0	78.0
894.0	SD Bay/Harbor Is/E Basin/Storm Dr	TCM	01/28/97	134.2	2.8	8.7	ND	ND	17.9	38.9

Station Number	Fluoranthene, benzo(b)	Fluoranthene, benzo(k)	Fluorene	Naphthalene	Naphthalene, 1-methyl	Naphthalene, 2-methyl	Naphthalene, 2,6-dimethyl	Naphthalene, 2,3,5-trimethyl	Naphthene, ace
888.0	36.0	13.1	ND	ND	ND	ND	ND	ND	ND
894.0	11.0	5.3	ND	ND	ND	ND	ND	ND	ND

Station Number	Naphthylene, ace	Perylene	Perylene, benzo(ghi)	Phenanthrene	Phenanthrene, 1-methyl	Pyrene	Pyrene, benzo(a)	Pyrene, benzo(e)	Pyrene, indeno(1,2,3-cd)
888.0	ND	ND	3.9	8.3	ND	43.1	5.5	19.3	4.8
894.0	ND	ND	3.3	6.3	ND	25.9	3.3	8.0	2.9

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