APPENDIX A

SAMPLING LOCATIONS

SAMPLING LOCATIONS

The major sources and export sites of freshwater in the estuary were sampled monthly to determine their mercury concentrations and calculate a mercury budget for the Delta.

Sacramento River @ Greene's Landing. **N38-20.721 W121-32.812** River sampled from the end of the U.S. Bureau of Reclamation water quality pier off Randall Island Road. Site is about 3 miles downstream of Freeport. Samples were collected on outgoing tide. Flow rates were obtained from the California Department of Water Resources web site for Freeport (FPT) at HTTP://cdec.water.ca.gov.

San Joaquin @ Vernalis. **N37-40.510 W121-15.994** Sample collected off middle of Airport Way Bridge (Rd J3). Site is above tidal influence. Flow rates were obtained from the California Department of Water Resources web site for Vernalis (VNS) at HTTP://cdec.water.ca.gov.

Mokelumne-Consumnes Rivers. **N38-15.276 W121-27.075** Sampled by boat about one mile downstream of the I-5 bridge on outgoing tide. Flow rate was estimated by summing the discharge from Camanche Reservoir (CMN) and Cosumnes River at Michigan Bar (MHB). Discharge rates for both sites can be obtained from the California Department of Water Resources web site at HTTP://cdec.water.ca.gov.

Prospect Slough **N38-19.216 W121-39.236** Sampled by boat at junction of Prospect Slough and Toe drain. Prospect Slough is the main channel draining the Yolo Bypass. Samples collected on an outgoing tide. If the Slough's discharge rate is above 1,000 cfs then it is reported on the California Department of Water Resources web site under the heading of YBY. At lower flows, discharge was estimated by summing the flow of Cache Creek at Yolo and Putah Creek at Winters and subtracting the Solano Irrigation District's diversion on the South Putah Canal. The Cache and Putah data sets are provisional and were obtained from the U.S. Geological Survey. Solano Irrigation District diversions were obtained from Don Busby (personal communication).

Putah Creek **N38-31.067 W121-41.710** Sampled by wading into mid stream at Mace BLVD bridge. Provisional discharge rates for the Creek at Winters were obtained from the U.S. Geological Survey and was corrected for the Solano Irrigation District's diversion on the South Putah Canal (personal communication Don Busby).

Delta Mendota Canal **N37-48.735 W121-34.713** Sample collected by lowering bailer into mid canal off Byron HWY (County Road J4). Flow data for the Canal was obtained from the U.S. Bureau of Reclamation's provisional operations schedule (personal communication, Richard Oltmann).

State Water Project. **N37-46.890 W121-36.978** Sample collected by boat from input canal to Bethany Reservoir. Bethany is the first lift station on the State Water Project canal system about 1 mile south of Clifton Court in the Bay-Delta Estuary. Diversion data for the State Water Project was obtained from the U.S. Bureau of Reclamation's provisional operation schedule (personal communication, Richard Oltmann).

X2. X2 is defined as that point in the Estuary with 2 o/oo salinity on the bottom. The position of X2 varies as a function of freshwater outflow and tidal cycle. Samples were collected by boat after verifying the salt content of the bottom water. The location of X2 varied between the Cities of Martinez and Pittsburg.

DELTA ISLAND MAIN DRAIN SAMPLES

Samples were taken from representative Delta Island drains in June and July to ascertain whether the islands were a net source or sink for mercury. The initial strategy was to sample

mercury concentrations in main drains of a set of representative peat and mineral islands. However, most island drains were not actively pumping when we attempted to collect the samples. Therefore, the initial strategy was abandoned and samples were only collected from islands with active flow. All the samples were taken from the main drain at or within a quarter mile of the pump house so as to collect water as representative as possible of what was being discharged back into the delta.

Staten Island N38-09.363 W121-13.011 Sample collected by wading into the drainage ditch several hundred yards from pump house along the Staten Island Road.

Empire Tract N38-03.607 W121-29.909 Sample collected from culvert at intersection of Eight Mile and Empire Tract Roads.

Lower Jones Main Drain Sample collected from middle of drain off the pump house platform. Site is located of Lower Jones Road.

Twitchell Island Drain N 38-05.799 W121-39.05 Sample collected from middle of drain off the pump house platform. Pump house is off Brannon Island Road.

Upper Jones Main Drain N37-56.353 W121-31.872 Sample collected from middle of drain off the pump house platform. Site located off Bacon Island Road.

APPENDIX B

QUALITY ASSURANCE AND QUALITY CONTROL TABLES

Table 1. Summary of travel blanks analyzed for raw and filtered total and methyl mercury. Twelve of the 67 analyses for total mercury were above the program's quality assurance/quality control's detection limit of 0.2 ng/l. These are noted in bold. Similarly, 4 of the methyl mercury analyses were above the detection limit of 0.02 ng/l. The probable cause and resulting corrective action undertaken are discussed in the text.

		TOTAL MERCURY (ng/l)		METHYL MERCURY (ng/l)[1]	
DATE	**SITE**	**RAW**	**FILTERED**	**RAW**	**FILTERED**
27 Mar	Putah Ck Blank	0.06	**0.21**	0.02U	0.02U
	Sacramento R. Blank	**0.23**	**1.05**	0.02U	0.02U
27 April	Putah Ck Blank	0.11	**0.24**	0.02U	0.02U
	Mokelumne R. Blank	0.13	0.11	0.02U	0.02U
30 May	Sacramento R. Blank	0.01	0.15	**0.055**	0.02U
	San Joaquin R. Blank	0.09	0.15	**0.098**	0.02U
26 June	Putah Ck Blank	0.05	0.07	0.02U	0.02U
	Prospect Sl. Blank	0.06	0.05	0.02U	0.02U
24 July	Delta Mendota Canal Blank	0.08	0.06	0.02U	0.02U
	Field Blank	0.09	0.07	0.02U	0.02U
21 August	Prospect Sl Blank	0.08	0.05	0.02U	0.02U
	X2 Blank	0.19	**0.23**	**0.071**	0.02U
	Field Blank	**1.10**	-	**0.037**	-
28 September	State Water Project Blank	0.12	0.20	0.01U	0.02U
	Field Blank	0.18	0.11	0.02U	0.02U
29 October	Field Blank	**0.57**	**0.49**	0.02U	0.02U
	Prospect Sl old Blank	**0.44**	**0.61**	0.02U	0.02U
	Green Landing new blank	**0.48**	**0.70**	0.02U	0.02U
18 December	Prospect Sl new blank	0.02	0.02	0.01U	0.01U
29 January	Greens Landing Blank	0.17	0.02	0.02U	0.02U
	X2 Blank	0.02	0.11	0.02 U	0.02U
26 Feb	Greens Landing Blank	0.02	0.04	0.01 U	0.01U
	X2 Blank	0.02	0.02	0.01U	0.01U
25 March	Greens Landing Blank	0.02	0.02	0.01U	0.01U
	Old Blank	0.02	0.02	0.01U	0.01U
29 April	Prospect Slough	0.02	0.02	0.01U	0.01U

[1] The U denotes that the value was below the laboratories analytical detection limit.

Table 1. (Continued)

		TOTAL MERCURY (ng/l)		METHYL MERCURY (ng/l)[2]	
DATE	**SITE**	**RAW**	**FILTERED**	**RAW**	**FILTERED**
29 May	Prospect Slough Blank	0.02	0.02	0.01U	0.01U
	Blank	0.05	0.04	0.01U	0.01U
24 June	Yolo Bypass	0.12	0.02	0.01U	0.01U
	Blank	0.14	0.07	0.01U	0.01U
31 July	Field Blank	0.02	0.02	0.01U	0.01U
	Mokelumne R	0.02	0.09	0.01U	0.01U
27 August	Prospect Slough	0.02	0.02	0.01U	0.01U
1 Oct	Prospect Slough	0.02	0.02	0.01U	0.01U

[2] The U denotes that the value was below the laboratories analytical detection limit.

Table 2. Summary of mercury and total suspended solid (TSS) concentrations in replicate field samples collected simultaneously. Relative percent difference (RPD) is defined as the difference of the two measurements divided by their average and multiplied by 100. Summary statistics are provided at the bottom of the table.

DATE	SITE	RAW Hg (ng/l)	FILTERED Hg (ng/l)	RAW METHYL Hg (ng/l)	FILTERED METHYL Hg (ng/l)	TSS (mg/l)
29 Mar	Prospect Sl #1	32.8	1.40	0.722	0.151	129
	Prospect Sl #2	44.3	2.38	0.681	0.138	136
	RPD	30%	52%	6%	9%	5%
	Sacramento R #1	8.70	1.14	0.148	0.0305	42
	Sacramento R #2	8.96	1.05	0.149	0.0481	41
	RPD	3%	8%	1%	45%	2%
24 Apr	Mokelumne R #1	7.42	1.28	0.291	0.175	16
	Mokelumne R #2	7.56	1.63	0.268	0.155	13
	RPD	2%	24%	8%	12%	21%
	Prospect Sl #1	21.19	1.30	0.361	0.0646	76
	Prospect Sl #2	20.79	1.36	0.433	0.129	87
	RPD	2%	5%	18%	67%	13%
30 May	Mokelumne R #1	5.60	1.07	0.290	0.156	11
	Mokelumne R #2	4.83	0.94	0.290	0.134	13
	RPD	15%	13%	0%	15%	17%
	State Water Proj #1	3.70	0.92	0.165	0.0279	20
	State Water Proj #2	3.88	0.75	0.122	0.0802	20
	RPD	5%	20%	30%	97%	0%
26 Jun	Prospect Sl #1	32.96	1.34	0.243	0.109	152
	Prospect Sl #2	30.57	1.28	0.234	0.0882	159
	RPD	8%	5%	4%	21%	5%
	Putah Ck #1	13.06	0.86	0.356	0.116	37
	Putah Ck #2	13.05	0.97	0.341	0.296	32
	RPD	0%	12%	4%	87%	14%
24 Jul	San Joaquin R #1	7.79	1.18	0.108	0.0220U	73
	San Joaquin R #2	6.72	1.48	0.127	0.0222U	61
	RPD	15%	23%	16%	0%	18%
21 Aug	Prospect Sl #1	22.7	2.25	0.186	0.0664	111
	Prospect Sl #2	25.0	1.38	0.230	0.0762	101
	RPD	10%	48%	21%	14%	9%
	X2 #1	9.88	0.60	0.0209U	0.0211U	31
	X2 #2	9.55	0.54	0.0209U	0.0210U	24
	RPD	3%	11%	0%	0%	25
24 Sep	San Joaquin R #1	6.25	0.790	0.103	0.0420	45

Table 2. (Continued)

DATE	SITE	RAW Hg (ng/l)	FILTERED Hg (ng/l)	RAW METHYL Hg (ng/l)	FILTERED METHYL Hg (ng/l)	TSS (mg/l)
	San Joaquin R #2	6.17	0.770	0.0942	0.0243	46
	RPD	1%	3%	9%	53%	2%
29 Oct	Greens Landing #1	3.54	1.31	0.0847	0.0	17
	Greens Landing #2	4	1.26	0.0856	0	17
	RPD	12%	4%	1%	0%	0%
18 Dec	Greens Landing #1	2.89	0.33	0.0869	0.0581	19
	Greens Landing #2	3.1	0.42	0.0912	0.0649	16
	RPD	7%	24%	5%	11%	17%
18 Dec	Prospect Slough #1	14.6	1.17	0.251	0.124	48
	Prospect Slough #2	13.5	1.25	0.287	0.0837	51
	RPD	8%	7%	13%	39%	6%
28 Jan	Greens Landing #1	20.5	2.37	0.24	0.0532	162
	Greens Landing #2	25.27	2.73	0.248	0.062	173
	RPD	21%	14%	3%	15%	7%
26 Feb	Greens Landing #1	13.5	2.58	0.159	0.0865	
	Greens Landing #2	15.6	2.54	0.194	0.0787	
	RPD	14%	2%	20%	9%	
25 Mar	Greens Landing #1	3.56	0.74	0.0825	0.0141U	-
	Greens Landing #2	3.28	0.76	0.0856	0.0142U	-
	RPD	8%	3%	4%	0%	
29 April	Prospect Slough #1	25.79	0.77	0.142	0.0141U	55
	Prospect Slough #2	16.96	0.8	0.146	0.0142U	67
	RPD	41%	4%	3%	0%	20%
28 May	Prospect Slough #1	49.1	1.37	0.211	0.0943	198
	Prospect Slough #2	40.50	1.470	0.2470	0.0429	172
	RPD	19%	7%	16%	75%	14%
26 Jun	Prospect Slough #1	37.7	1.23	0.204	0.054	
	Prospect Slough #2	34.70	3.16	0.208	0.053	
	RPD	8%	88%	2%	2%	
31 July	Mokelumne #1	6.45	1.17	0.148	0.0423	
	Mokelumne #2	7.46	1.12	0.19	0.0573	
	RPD	15%	4%	23%	30%	
27 Aug	Prospect Slough #1	28.6	1.35	0.139	0.0506	
	Prospect Slough #2	27.7	1.38	0.142	0.0433	
	RPD	3%	2%	2%	16%	
1 Oct	Prospect Slough #1	18.30	1.120	0.1190	0.0139U	
	Prospect Slough #2	17.7	0.968	0.1240	0.0139U	

Table 2. (Continued)

DATE	SITE	RAW Hg (ng/l)	FILTERED Hg (ng/l)	RAW METHYL Hg (ng/l)	FILTERED METHYL Hg (ng/l)	TSS (mg/l)
	RPD	3%	15%	4%	0%	
	RANGE	**0-41%**	**2-88%**	**0-30%**	**0-97%**	**0-25%**
	MEAN	**10.5%**	**16.6%**	**8.9%**	**25.7%**	**10.8%**

Table 3. Summary of the repeated laboratory analysis of the same field samples. Relative percent difference (RPD) is defined as the difference of the two measurements divided by their average and multiplied by 100. Summary statistics are provided at the bottom of the table.

Date	Site	Raw Hg (ng/l)	Filtered Hg (ng/l)	Raw MMHg (ng/l)	Filtered MMHg (ng/l)	RPD (%)
29 Mar	San Joaquin River @ Vernalis			0.164		1%
	San Joaquin River @ Vernalis			0.165		
29 Mar	Putah Creek				0.036	52%
	Putah Creek				0.061	
29 Mar	X2		1.54			12%
	X2		1.74			
29 Mar	State Water Project	1.77				2%
	State Water Project	1.81				
24 Apr	X2			0.081		26%
	X2			0.106		
24 Apr	Prospect Slough			0.361		1%
	Prospect Slough			0.358		
24 Apr	Putah Creek		0.86			9%
	Putah Creek		0.94			
24 Apr	San Joaquin River @ Vernalis		1.27			8%
	San Joaquin River @ Vernalis		1.38			
24 Apr	State Water Project		1.29			9%
	State Water Project		1.41			
30 May	State Water Project			0.165		4%
	State Water Project			0.158		
30 May	State Water Project				0.027	40%
	State Water Project				0.042	
30 May	Mokelumne		1.07			14%
	Mokelumne		0.93			
30 May	State Water Project		0.92			13%
	State Water Project		0.81			
29 June	Greene's Landing			0.716		21%
	Greene's Landing			0.088		
29 Jun	Lower Jones Tract		1.14			7%
	Lower Jones Tract		1.06			
29 Jun	Lower Jones Tract			0.302		9%
	Lower Jones Tract			0.277		
29 Jun	Lower Jones Tract				0.239	8%
	Lower Jones Tract				0.221	
29 Jun	Delta Mendota Canal		0.71			22%
	Delta Mendota Canal		0.57			
28 July	Putah Creek			0.281		13%
	Putah Creek			0.321		
28 July	Twitchell Island			1.50		20%
	Twitchell Island			1.23		
28 July	Upper Jones Island				0.129	6%
	Upper Jones Island				0.146	
	Upper Jones Island				0.136	

Table 3. (Continued).

Date	Site	Raw Hg (ng/l)	Filtered Hg (ng/l)	Raw MMHg (ng/l)	Filtered MMHg (ng/l)	RPD (%)
28 July	Mokelumne River		1.01			10%
	Mokelumne River		0.91			
21 Aug	X2			0.02U		0%
	X2			0.020U		
21 Aug	Mokelumne River		1.18			7%
	Mokelumne River		1.10			
21 Aug	Mokelumne River				0.097	5%
	Mokelumne River				0.092	
21 Aug	Franks Tract		0.59			19%
	Franks Tract		0.71			
21 Aug	Franks Tract			0.079		5%
	Franks Tract			0.083		
21 Aug	Sherman Island			0.079		1%
	Sherman Island			0.07		
28 Sept	Prospect Slough			0.114		23%
	Prospect Slough			0.144		
28 Sept	Prospect Slough				0.030	175%
	Prospect Slough				0.020U	
28 Sept	Franks Tract		1.63			3%
	Franks Tract		1.68			
29 Oct	Sherman Lake		4.92			7%
			5.26			
29 Oct	Sulfur Creek		1801.5			19%
			1482.5			
29 Oct	Vernalis			0.158		3%
				0.163		
29 Oct	X2				0.02U	0%
					0.02U	
18 Dec	Mokelumne			0.095		1%
				0.094		
18 Dec	Propect Slough			0.287		2%
				0.294		
18 Dec	Propect Slough				0.083	43%
					0.129	
18 Dec	Greens Landing #1		3.15			9%
			2.89			
18 Dec	Vernalis		3.12			9%
			3.41			
29 Jan	Vernalis			0.239		8%
				0.220		
29 Jan	Mokelumne				0.121	0%
					0.120	
29 Jan	SWP	1.66				2%
		1.70				
29 Jan	Greens Landing	20.5				11%
		22.8				
26 Feb	Greens Landing I	13.5				8%
		14.6				
26 Feb	X2	15.7				5%

Table 3. (Continued).

Date	Site	Raw Hg (ng/l)	Filtered Hg (ng/l)	Raw MMHg (ng/l)	Filtered MMHg (ng/l)	RPD (%)
		16.5				
26 Feb	Vernalis	10.5				7%
		11.7				
26 Feb	Putah Creek			0.290		5%
				0.276		
26 Feb	Putah Creek				0.077	17%
					0.065	
28 Mar	DMC			0.092		0%
				0.093		
28 Mar	X2			0.165		14%
				0.144		
28 Mar	Franks Tract				0.122	6^
					0.115	
28 Mar	Putah Creek	24.8				11%
		27.7				
28 Mar	DMC	4.40				4%
		4.59				
28 Mar	X2		2.00			9%
			1.83			
29 April	Putah Creek			0.148		1%
				0.146		
29 April	Cache Creek			0.160		3%
				0.165		
29 April	Franks Tract				0.042	98%
					0.014	
29 April	Feather River			0.190		8%
				0.175		
29 April	Colusa	2.70				12%
		2.40				
29 April	Cache Creek	9.08				5%
		8.27				
29 May	Cache Creek			0.261		14%
				0.299		
29 May	Mud Slough			0.583		2%
				0.571		
29 May	Mokelumne River				0.033	30%
					0.044	
29 May	Propect Slough II	40.5				6%
		42.8				
29 May	Cache Creek	8.54				7%
		8.00				
29 May	Greens Landing	3.63				2%
		3.75				
29 May	Salinity 3	10.2				2%
		10.4				
26 June	Vernalis	9.98				6%
		10.6				
26 June	X2	9.21				14%
		10.6				

Table 3. (Continued).

Date	Site	Raw Hg (ng/l)	Filtered Hg (ng/l)	Raw MMHg (ng/l)	Filtered MMHg (ng/l)	RPD (%)
26 June	Yolo Bypass		1.23			11%
			1.38			
26 June	Mud Slough		5.28			10%
			5.82			
26 June	Yolo N. HWY 80	3.09				19%
		3.73				
26 June	Putah Creek			0.105		44%
				0.067		
26 June	Cache Creek			0.202		8%
				0.186		
26 June	Yolo Bypass			0.208		12%
				0.234		
26 June	Freeport I				0.040	77%
					0.017	
26 June	Conway Ranch			0.134		0%
				0.134		
26 June	Mud Slough			0.509		18%
				0.608		
				0.529		
26 June	Mud Slough				1.14	2%
					1.16	
26 June	Putah Creek			0.220		30%
				0.164		
31 July	Putah Creek	1.68				14%
		1.94				
31 July	Cache Creek		0.68			12%
			0.77			
31 July	Middle River		1.01			7%
			1.08			
31 July	Mokelumne River		1.17			5%
			1.23			
31 July	Rio Vista	4.69				13%
		5.35				
31 July	Cache Creek			0.366		29%
				0.488		
				0.468		
31 July	X1			0.040		5%
				0.038		
31 July	Franks Tract			0.038		3%
				0.040		
31 July	DMC				0.064	21%
					0.052	
27 Aug	Franks Tract	0.62				6%
		0.59				
27 Aug	Putah Creek	4.03				7%
		4.31				
27 Aug	Georgiana Slough			0.062		25%
				0.080		
27 Aug	Prospect Sl II			0.142		7%

Table 3. (Continued).

Date	Site	Raw Hg (ng/l)	Filtered Hg (ng/l)	Raw MMHg (ng/l)	Filtered MMHg (ng/l)	RPD (%)
				0.153		
27 Aug	Greens Landing				0.071	0%
					0.071	
10 Oct	Prospect Slough I			0.119		22%
				0.148		
10 Oct	Georgiana Slough			0.015U		0%
				0.015U		
10 Oct	Putah Creek		0.69			21%
			0.85			
10 Oct	Cache Creek	15.0				0%
		15.0				
	AVERAGE RPD	**7%**	**11%**	**11%**	**34%**	
	RPD RANGE	**0-19%**	**3-22%**	**0-44%**	**0-175%**	
	N	**22**	**23**	**37**	**17**	

Table 4. Summary of methyl mercury spikes and their replicated percent recovery in raw and filtered site water.

DATE	SITE	WATER FORM	AMBIENT CONC (ng/l)	SPIKE (ng/l)	RECOVERY IN DUPLICATE SPIKES (%)	RPD (%)
29 Mar	Putah Ck	raw	0.108	1.75	101, 99	2
29 Mar	Sacramento R.	raw	0.149	1.72	93, 99	7
27 April	Putah Ck.	raw	0.132	1.75	107, 106	0
27 April	Mokelumne R.	raw	0.268	1.75	107, 73	38
30 May	San Joaquin R.	raw	0.134	1.75	111, 90	21
30 May	Sacramento R.	raw	0.336	1.75	99, 99	0
29 Jun	Mokelumne R.	raw	0.114	3.44	95, 101	6
29 Jun	San Joaquin R.	raw	0.220	3.45	98, 106	9
29 Jun	State Water Project	raw	0.02u	3.52	105, 106	1
24 Aug	Putah Ck	raw	0.205	3.75	101, 104	2
24 Aug	Sacramento R.	raw	0.110	3.44	102, 98	5
28 Sept	Sacramento R.	raw	0.051	3.51	107, 118	14
28 Oct	Putah Creek	raw	0.114	3.46	97,102	5
28 Oct	Sherman Lake	raw	0.0227u	3.46	96,93	3
18 Dec	Greene landing #I	raw	0.0869	0.630	99,105	6
18 Dec	Prospect slough #1	raw	0.251	0.631	104,93	11
18 Dec	Vernalis	raw	0.102	0.638	104,109	5
29 Jan	DMC	raw	0.144	0.637	98,103	5
29 Jan	Putah CK	raw	0.0780	0.623	97,102	5
28 Feb	Vernalis	raw	0.180	0.641	97,86	12
28 Feb	Prospect Slough	raw	0.414	0.643	97,119	19
25 Mar	Cache Ck	raw	0.203	0.633	87,107	20
25 Mar	Greene Landing	raw	0.0825	0.637	103,102	1
25 Mar	Mud Slough	raw	0.539	0.625	91,102	11
29 April	Greene Landing	raw	0.116	0.787	111,97	14
29 April	Georgiana Slough	raw	0.0833	0.787	111,97	14
29 April	X1	raw	0.0528	0.789	97,98	1
29 April	Sacramento R.	raw	0.150	0.797	101,100	1
29 May	Greene Landing	raw	0.0986	0.632	101,101	1
29 May	Freeport	raw	0.0904	0.633	98,100	2
29 May	Putah Ck	raw	0.118	0.633	100,97	3
29 May	Putah Ck	raw	0.131	0638	104,107	3
26 Jun	Putah Ck	raw	0.105	0.639	87,96	9
26 Jun	Putah Ck	raw	0.113	0.639	112,101	11
26 Jun	Franks Tract	raw	0.0708	0.643	91,96	5
26 Jun	Freeport	raw	0.0675	0.643	107,98	9
26 Jun	Greene Landing	raw	0.0878	0.631	104,92	12
26 Jun	Yolo North	raw	0.504	0.637	100,93	7
26 Jun	Putah Ck	raw	0.149	0.632	108,111	3
31 July	Putah Ck	raw	0.158	0.631	100,94	6
31 July	Mokelumne R	raw	0.186	0.632	97,102	5
31 July	Middle R.	raw	0.0244	0.650	99,102	3
31 July	X2	raw	0.0701	0.632	94,107	13
31 July	Putah Ck	raw	0.0980	0.644	90,103	13
29 Aug	Putah Ck	raw	0.104	0.631	90,106	16

Table 4. (Continued)

DATE	SITE	WATER FORM	AMBIENT CONC (ng/l)	SPIKE (ng/l)	RECOVERY IN DUPLICATE SPIKES (%)	RPD (%)
29 Aug	Putah Ck	raw	0.157	0.643	95,106	11
29 Aug	Mokelumne R	raw	0.0650	0.650	109,90	19
29 Aug	SWP	raw	0.0u	0.636	111,104	7
1 Oct	Mokelumne	raw	0.184	0.643	101,97	4
1 Oct	Putah Ck	raw	0.126	0.633	102,100	2
MEAN % RECOVERY			**100.3**			
AVE RPD OF DUPLICATE SPIKES			**8%**			
RPD RANGE			**0-38%**			
N			**50**			
29 Mar	San Joaquin R	filtered	0.0512	1.78	107, 100	7
29 Mar	X2	filtered	0.0583	1.77	90, 103	14
27 April	Prospect Slough	filtered	0.0646	1.76	118, 103	14
27 April	State Water Project	filtered	0.0214u	1.78	88, 98	11
30 May	San Joaquin R.	filtered	0.0713	1.74	100, 103	3
30 May	State Water Project	filtered	0.0802	1.76	94, 102	11
29 Jun	Putah Ck	filtered	0.116	3.52	102, 86	17
29 Jun	Empire Tract	filtered	0.0503	3.52	96, 96	0
29 Jun	Twitchell Island	filtered	0.229	3.52	104, 103	1
24 Aug	X2	filtered	0.000u	3.44	103, 93	10
28 Sept	San Joaquin R.	filtered	0.0420	3.43	102, 89	14
28 Oct	White Slough	filtered	0.0215u	3.50	100,101	1
28 Oct	Vernalis	filtered	0.0421	3.51	106,103	3
18 Dec	Putah Ck	filtered	0.0504	0.635	99,88	11
18 Dec	Vernalis	filtered	0.0234	0.624	103,102	1
29 Jan	Green Landing I	filtered	0.0532	0.630	91,97	6
29 Jan	Putah Creek	filtered	0.0304	0.624	112,99	13
28 Feb	SWP	filtered	0.0508	0.627	107,105	2
28 Feb	Greens Landing	filtered	0.0787	0.616	96,92	4
25 Mar	Putah Ck	filtered	0.0769	0.629	102,104	2
25 Mar	Georgiana Sl	filtered	0.0u	0.623	91,105	14
25 Mar	Mud Slough	filtered	0.0901	0.628	103,101	2
29 April	Feather R.	filtered	0.109	0.811	90,104	14
29 April	X2	filtered	0.0u	0.790	107,98	9
29 April	Sutter Bypass	filtered	0.0192	0.807	94,105	11
29 May	Cache Ck	filtered	0.0332	0.638	101,102	1
26 Jun	Georgiana	filtered	0.0321	0.644	98,95	3
26 Jun	Rio Vista	filtered	0.0173	0.631	105,101	4
26 Jun	Vernalis	filtered	0.0u	0.637	107,100	7
26 Jun	Yolo Bypass	filtered	0.0540	0.632	100,81	19
31 July	Mokelumne	filtered	0.0423	0.634	105,98	7
31 July	N. F. Mokelumne	filtered	0.0508	0.626	94,104	10
31 July	Freeport	filtered	0.0546	0.628	100,89	11
29 Aug	Prospect II	filtered	0.0433	0.790	90,89	1
29 Aug	Mokelumne R.	filtered	0.0538	0.794	106,115	9
29 Aug	Georgiana Sl	filtered	0.0382	0.642	96,91	5

Table 4. (Continued).

DATE	SITE	WATER FORM	AMBIENT CONC (ng/l)	SPIKE (ng/l)	RECOVERY IN DUPLICATE SPIKES (%)	RPD (%)
1 Oct	X2	filtered	0.0U	0.631	107,97	10
1 Oct	Greene Landing	filtered	0.088	0.640	94,102	8
MEAN % RECOVERY			**99.4**			
AVE RPD OF DUPLICATE SPIKES			**8%**			
RPD RANGE			**0-19%**			
N			**38**			

Table 5. Summary of inorganic mercury spikes and their replicated percent recovery in site water. The relative percent difference is defined at the difference between values divided by their average and multiplied by 100.

DATE	SITE	WATER FORM	BACKGROUND (ng/l)	SPIKE (ng/l)	RECOVERY IN DUPLICATE SPIKES (%)	RPD (%)
27 Mar	X2	filtered	1.54	1.71	108,123	13
27 Mar	State Water Project	filtered	1.77	1.96	94,109	15
24 April	Putah Creek	filtered	0.86	0.98	126,164	26
24 April	San Joaquin River	filtered	1.27	1.24	106,109	3
24 April	State Water Project	filtered	1.29	1.24	111,122	9
30 May	Mokelumne River	filtered	1.07	0.98	117,102	14
30 May	State Water Project	filtered	0.92	0.98	96,84	14
29 Jun	State Water Project	filtered	0.82	0.99	98,109	10
29 Jun	Prospect Slough	filtered	1.34	0.74	115,124	8
24 July	Staten Island	filtered	1.74	2.97	112,119	7
24 July	Upper Jones Island	filtered	0.86	2.99	111,118	8
24 Sept	Sherman Island	filtered	0.42	2.98	93,100	7
18 Dec	Greene Landing	filtered	0.42	4.00	91,101	10
28 Jan	Greene Landing II	filtered	2.73	3.99	102,111	9
28 Feb	Greene Landing II	filtered	2.54	2.00	125,129	4
28 Feb	Mokelumne	filtered	5.39	4.00	93,93	0
25 Mar	Vernalis	filtered	2.95	1.99	110,111	1
25 Mar	X2	filtered	4.11	1.99	110,117	7
29 April	Feather R.	filtered	0.60	2.00	71,75,120	56
29 April	Greene Landing	filtered	0.58	2.00	74,73	1
28 May	SWP	filtered	0.86	2.00	118,130	12
28 May	Mud Sl	filtered	0.49	2.00	102,124	20
28 May	Greene Landing	filtered	0.50	2.00	107,116	11
26 Jun	Vernalis	filtered	0.25	2.02	105,121	14
26 Jun	Mud Slough	filtered	3.55	4.04	110,113	3
26 Jun	Yolo North	filtered	3.09	4.04	120,123	3
31 July	Putah Ck	filtered	2.61	2.00	103,108	5
31 July	Mokelumne	filtered	1.12	2.00	111,105	6
1 Oct	Putah Ck	filtered	0.69	2.00	111,113	2
1 Oct	Cache Ck	filtered	0.85	2.00	105,96	9
MEAN % RECOVERY			**108%**			
AVE RPD OF DUPLICATE SPIKES			**10%**			
RPD RANGE			**0-56%**			
N			**30**			
18 Dec	Putah Ck	raw	0.49	3.99	97,105	8
28 Jan	Vernalis	raw	7.09	3.99	103,80	25
28 Feb	SWP	raw	2.46	4.00	84,79	6
25 Mar	SWP	raw	7.49	3.99	102,107	5
29 April	Propect Slough	raw	25.79	2.00	115,121	6
28 May	DMC	raw	3.41	4.04	102,101	1
28 May	Putah Ck	raw	1.90	2.02	113,102	11
26 Jun	Franks Tract	raw	1.31	2.02	113,120	7

Table 5. (Continued).

DATE	SITE	WATER FORM	BACKGROUND (ng/l)	SPIKE (ng/l)	RECOVERY IN DUPLICATE SPIKES (%)	RPD (%)
26 Jun	Mokelumne	raw	7.35	8.08	119,108	11
31 July	Putah Ck	raw	4.27	2.02	113,102	11
31 July	Franks Tract	raw	0.53	2.00	107,120	13
31 July	Knights Landing	raw	3.11	2.00	118,110	8
27 Aug	Franks Tract	raw	0.59	2.00	109,105	4
27 Aug	Putah Ck	raw	4.03	4.00	109,102	7
MEAN % RECOVERY			**106**			
AVE RPD OF DUPLICATE SPIKES			**9%**			
RPD RANGE			**1-25%**			
N			**14**			

APPENDIX C

SUMMARY OF WATER QUALITY DATA

SACRAMENTO RIVER @ GREENE LANDING (N38 20.721 W121 32.812)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{O}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	8.83	1.10	0.148	0.039	150		41				3,594,733	
24-25 Apr	6.59	1.19	0.117	0.022U	138	17.0	38				1,583,261	
30-31 May	3.36	0.74	0.336	0.074	128	20.1	16				1,254,353	
26-27 Jun	3.36	0.58	0.072	0.042	112	21.6	15				975,312	
19-21 July	3.06	0.67	0.052	0.022	273	21.2	17				1,285,548	
21-22 Aug	3.43	0.64	0.110	0.090	167	21.0	20				1,080,689	
26-27 Sept	3.04	0.60	0.051	0.053	159	20.0	17				900,618	7
28-29 Oct	3.77	1.28	0.085	0.022U	175	14.1	17				732635.64	11
18-19 Dec	3.00	0.38	0.089	0.062	139	10.0	18				856959.84	12
29-30 Jan 2001	22.89	2.55	0.244	0.058	94	7.6	167				1072977.84	14
26-27 Feb	14.55	2.56	0.177	0.083	138	9.9	81	5.4	1.0	2.4	1175597.28	10
26-27 Mar	3.42	0.75	0.084	0.015	174	17.6	16	1.6	0.8	0.6	1532622.96	10
29-30 Apr	4.52	0.58	0.113	0.025	189	20.8	30	2.8	4.1	3.4	743596.92	10
27-28 May	3.63	0.5	0.099	0.034	180	22.0	21	1.6	6.1	6.2	574128.72	12
29-30 Jun	4.46	0.15	0.088	0.013U	145	21.6	21	1.6	3.0	2.8	742076.28	7
30-31 July	4.31	0.28	0.108	0.0197			13	1.0	2.8	2.2	923277.96	7
27-28 Aug	5.57	0.68	0.071	0.0185	209	22.4	21	1.7	2.0	2.3	820072	9
1-2 Oct	2.13	0.45	0.095	0.0888	167	20.7	8	1.2	3.2	4.0	746763	6

San Joaquin River @ Vernalis (N37 40.510-W121 15.994)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{o}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	8.57	1.32	0.164	0.051	389		48				758,696	
24-25 Apr	11.50	1.27	0.147	0.036	317	15.9	56				323,609	
30-31 May	7.44	0.74	0.134	0.071	472	21.0	78				299,639	
26-27 Jun	8.38	0.73	0.220	broken	701	25.6	78				175,483	
19-21 July	7.22	1.33	0.118	0.022U	570	24.0	67				120,488	
21-22 Aug	12.70	0.78	0.140	0.022U	440	21.0	85				129,418	
26-27 Sept	6.21	0.78	0.099	0.033	405	19.5	46				137,968	42
28-29 Oct	7.19	3.04	0.158	0.0421	301	14.3	49				172,345	47
18-19 Dec	3.12	0.59	0.102	0.0234	560	10.3	20				135,804	99
29-30 Jan 2001	7.09	0.91	0.239	0.0753	530	9.5	59				150,834	98
26-27 Feb	10.5	0.96	0.180	0.0562	324	11.1	89	5	1.3	2.0	176,841	66
26-27 Mar	8.55	0.76	0.178	0.0766	869	17.7	50	6	4.2	3.9	218,637	35
29-30 Apr	7.07	0.39	0.093	0.014U	278	17.0	38	3	6.2	5.3	182,868	42
27-28 May	8.28	0.51	0.122	0.0258	587	20	52	6	31.2	15.0	223,233	87
29-30 Jun	9.98	0.25	0.256	0.014U	701	21.8	74	11	59.8	19.9	96,344	108
30-31 July	5.43	0.45	0.147	0.007U	679	25.9	56	11	100.6	21.6	86,029	91
27-28 Aug	6.21	1.73	0.194	0.0573	695	24.2	45	6	47.3	15.6	82,229	89
1-2 Oct	6.01	1.08	0.163	0.014U	640	21.4	36	4	17.0	11.0	81,942	66

Mokelumne-Consumnes Rivers (N38-15.276 W121 27.075)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{o}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	6.75	1.19	0.171	0.074	68		18				178,904	
24-25 Apr	7.49	1.46	0.280	0.165	85	17.2	15				68,810	
30-31 May	5.22	1.01	0.250	0.146	52	18.3	12				74,717	
26-27 Jun	4.23	0.93	0.114	0.057	48	19.4	7				51,143	
19-21 July	3.50	1.01	0.022U	0.022U	48	21.0	6				40,213	
21-22 Aug	5.19	1.14	0.154	0.098	55	22.4	15				25,670	
26-27 Sept	2.69	0.71	0.022U	0.022U	51	19.1	8				23,552	2
28-29 Oct	6.15	1.46	0.130	0.063	48	14.2	31				16,979	4
18-19 Dec	2.63	0.80	0.096	0.074	55	9.7	6.4				23,445	5
29-30 Jan 2001	8.76	2.38	0.246	0.121	84	8.4	18				26,956	15
26-27 Feb	broke	5.39	0.320	0.191	128	10.3	29	3	4.5	11.5	37,877	14
26-27 Mar	4.24	1.04	0.185	0.162	79	16.4	12	2	0.8	0.9	45,797	3
29-30 Apr	5.97	1.39	0.201	0.091	70	17.8	11	1	0.8	1.5	39,313	2
27-28 May	6.14	1.37	0.178	0.098	61	21.4	10	1	0.8	1.4	28,068	2
29-30 Jun	7.35	0.83	0.208	0.078	127	24.5	22	5	8.7	11.7	6,722	6
30-31 July	6.96	1.15	0.167	0.050	120	24.1	15	2	8.3	4.9	5,077	5
27-28 Aug	4.76	0.81	0.065	0.054	114	24.1	15	2	6.8	5.8	4,249	5
1-2 Oct	4.89	1.31	0.184	0.124	86	20.9	11	1	2.9	8.0	4,386	3

Prospect Slough (N38 19.216 W121 39.236)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{O}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	38.6	1.89	0.701	0.145	550		132				1,479,036	
24-25 Apr	21.0	1.33	0.397	0.096	483	19.5	79				28,632	
30-31 May	21.4	0.81	0.333	0.103	275	21.2	112				7,081	
26-27 Jun	31.8	1.31	0.239	0.099	261	23.3	155				3,354	
19-21 July	35.5	1.50	broken	0.022U	229	23.3	177				3,186	
21-22 Aug	23.9	1.81	0.208	0.071	206	21.5	106				2,388	
26-27 Sept	18.4	0.99	0.114	0.031	317	21.7	82				3,150	15
28-29 Oct	14.6	1.34	0.142	0.022U	544	13.2	42				6,291	31
18-19 Dec	14.0	1.21	0.269	0.104	530	9.7	48				3,294	61
29-30 Jan 2001	26.8	1.28	0.413	0.098	356	7.6	194				18,813	69
26-27 Feb	45.2	3.50	0.414	0.127	365	11.5	251	18	4.1	1.4	72,185	64
26-27 Mar	11.7	0.78	0.325	0.117	718	19.4	63	4	2.9	2.7	147,393	89
29-30 Apr	21.4	0.79	0.144	0.014U	687	19.5	61	7	9.5	12.5	5,066	66
27-28 May	44.8	1.40	0.229	0.069	274	18.5	185	16	14.7	17.9	3,811	22
29-30 Jun	37.7	1.23	0.208	0.053	234	20.9	145	11	12.8	10.2	2,750	
30-31 July	47.3	0.90	0.273	0.045	227	20.5	218	4	33.3	17.3	3,440	13
27-28 Aug	28.1	1.36	0.141	0.047	247	23.5	109	10	21.1	11.9	3,604	13
1-2 Oct	18.0	1.04	0.122	0.014U	256	20.7	65	4	13.0	25.0	1,427	12

Putah Creek @ Mace Blvd (N38 31.067-W121 41.710)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{o}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	5.57	0.63	0.108	0.036	355		17				31,944	
24-25 Apr	8.98	0.86	0.132	0.051	575	17.4	28				2,922	
30-31 May	14.90	1.02	1.120	0.091	564	21.3	46				1,051	
26-27 Jun	13.10	0.92	0.348	0.206	553	23.6	34				188	
19-21 July	12.50	0.92	0.281	0.094	518	24.4	30				879	
21-22 Aug	24.30	0.82	0.205	0.031	540	22.5	46				1,279	
26-27 Sept	8.25	0.96	0.122	0.057	609	19.9	20				2,976	41
28-29 Oct	5.49	1.31	0.114	0.038	470	13.9	11				2,181	40
18-19 Dec	1.94	0.49	0.053	0.050	400	8.4	4				2,233	36
29-30 Jan 2001	1.84	0.64	0.078	0.030	389	7.4	2				1,815	37
26-27 Feb	22.10	3.06	0.290	0.078	196	9.4	120				1,478	33
26-27 Mar	24.80	2.10	0.228	0.077	636	15.8	70	5			2,653	41
29-30 Apr	9.51	0.68	0.105	broken	450	17.5	61	5	2.8	6.5	2,570	36
27-28 May	2.54	0.59	0.141	0.103	450	23.9	7	<1.0	1.3	1.8	2,623	26
29-30 Jun	1.66	0.39	0.113	0.041	483	25.2	7	<1.0	0.7	1.5	2,499	26
30-31 July	2.63	0.55	0.098	0.061	437	26.4	3	<1.0	1.1	2.1	3,127	30
27-28 Aug	4.03	0.47	0.157	0.073	407	27.0	17	2	1.7	3.2	2,869	21
1-2 Oct	1.62	0.69	0.126	0.014U	557	22.2	2	<1.0	<2.0	4.2	1,427	29

Delta Mendota Canal (DMC) (N37 48.735 W121 34.713)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{O}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	4.17	1.65	0.153	0.077	390		16				207,478	
24-25 Apr	2.64	1.14	0.022U	0.022U	443	18.8	9				131,079	
30-31 May	5.96	0.78	0.171	0.093	302	22.4	36				77,509	
26-27 Jun	2.66	0.71	0.074	0.038	340	25.5	13				180,873	
19-21 July	2.71	0.64	0.022U	0.022U	327	24.0	14				265,074	
21-22 Aug	4.52	0.86	0.022U	0.022U	245	23.7	28				269,206	
26-27 Sept	4.26		0.022U	0.022U	423	22.5	31				252,424	39
28-29 Oct	3.99	0.73	0.022U	0.022U	404	15.7	26				257,952	27
18-19 Dec	2.43	0.42	0.063	0.039	410	10.3	14				238,624	33
29-30 Jan 2001	3.12	0.73	0.144	0.068	489	8.9	15				168,005	77
26-27 Feb	4.05	0.93	broken	0.075	310	10.5	19				195,115	47
26-27 Mar	4.40	1.79	0.092	0.024	338	17.1	17				115,590	42
29-30 Apr	2.09	0.83	0.024	0.014U	398	19.6	12				129,617	52
27-28 May	3.41	1.09	0.056	0.0283	443	21.2	18				52,585	57
29-30 Jun	3.48	0.10	0.061	0.032	346	23.2	29				178,568	32
30-31 July	2.84	0.56	0.065	0.016	470	22.9	22	2	4.2	6.0	253,834	34
27-28 Aug	2.86	0.46	0.032	0.0217	629	24.5	16	3	2.9	4.9	253,519	35
1-2 Oct	4.26	0.46	0.014U	0.014U	558	21.3	24				242,578	37

State Water Project (SWP) (N37 46.890 W121 36.978)

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{o}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	2.75	1.77	0.139	0.077	369		5				340,926	
24-25 Apr	7.17	1.35	0.047	0.021	308	16.3	22				181,063	
30-31 May	3.79	0.84	0.144	0.054	264	21.6	20				105,126	
26-27 Jun	2.21	0.82	0.022U	0.022U	258	24.7	5				260,291	
19-21 July	1.91	0.82	0.022U	0.022U	241	23.8	6				359,177	
21-22 Aug	2.19	1.75	0.022U	0.022U	245	21.5	12				385,870	
26-27 Sept	1.71	0.59	0.058	0.022U	357	22.0	6				386,323	21
28-29 Oct	2.49	0.75	0.022U	0.022U	464	14.9	11				306,130	27
18-19 Dec	broke	0.53	0.050	0.041	422	9.9	11				291,719	35
29-30 Jan 2001	1.66	0.67	0.113	0.048	382	8.4	7				240,938	48
26-27 Feb	2.46	0.75	0.077	0.051	314	10.2	11	2	0.8	6.4	260,376	45
26-27 Mar	3.41	1.65	0.055	0.024	364	16.7	8	2	0.8	1.8	360,093	47
29-30 Apr	2.19	0.93	0.058	0.040	387	17.7	4	2	2.2	4.9	98,297	54
27-28 May	2.73	0.86	0.050	0.039	400	20.4	8	1	0.9	2.2	33,747	47
29-30 Jun	leak in State Water Project lift Canal, reservoir dry										8,973	
30-31 July	6.93	0.38	0.021	0.007U	435	21.3	59	4			216,258	25
27-28 Aug	1.58	0.37	0.014U	0.014U	615	24.1	5	<1	3.3	3.6	248,104	32
1-2 Oct	2.06	0.40	0.032	0.014U	721	20.9	7	<1			212,325	34

X2 varies as a function of tidal cycle and outflow but was located in this study between the City of Martinez and Sherman Lake at a site with approximately 0.5 o/oo salinity on the surface and 2.0 o/oo on the bottom.

Date	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (µmhos/cm)	Temp (^{O}C)	TSS (mg/l)	VSS (mg/l)	Chloro (µg/l)	Phaeo (µg/l)	Flow (af/mo)	SO4 (mg/l)
28-29 Mar 2000	35.60	1.54	0.204	0.0583	2.0	13.0	109				6,358,770	
24-25 Apr	49.20	1.06	0.082	0.022U	1.8	16.7	168				1,686,148	
30-31 May	49.20	0.58	0.241	0.022U	1.8	19.1	144				1,439,391	
26-27 Jun	19.10	0.60	0.109	0.031	2.0	21.4	60				588,911	
19-21 July	25.90	0.81	0.022U	0.022U	2.0	21.5	92				604,137	
21-22 Aug	9.71	0.57	0.022U	0.022U	2.0	21.5	27				397,843	
26-27 Sept	9.94	0.61	0.023	0.022U	1.9	21.5	36				294,584	159
28-29 Oct	7.76	0.55	0.022U	0.022U	2.0	15.2	28				356,044	184
18-19 Dec	9.05	0.39	0.0595	0.022U	1.8	10.6	32				428,163	147
29-30 Jan 2001	12.50	0.52	0.0945	0.0321	1.7	8.9	39				968,097	131
26-27 Feb	15.70	0.83	0.0667	0.0483	1.5	10.8	73				1031,135	132
26-27 Mar	24.00	1.83	0.165	0.014U	1.6	15.9	87				1426,638	103
29-30 Apr	11.08	0.51	0.014U	0.014U	1.5	17.7	43				735,429	187
27-28 May	10.20	0.31	0.0409	0.014U			34		2.5	2.9	612,612	126
29-30 Jun	11.00	0.43	0.0369	0.014U			59		1.8	3.7	484,375	237
30-31 July	3.95	0.26	0.0701	0.014U	2.0	20.0	27	1	2.1	2.4	310,375	167
27-28 Aug	9.99	0.37	0.0541	0.041	2.0	21.5	46	4			215,032	198
1-2 Oct	12.10	0.38	0.014U	0.014U	2.0	20.7	41	2			275,200	184

Delta Island Main Drains

	THg (ng/l)	DHg (ng/l)	TMMHg (ng/l)	DMMHg (ng/l)	EC (μmhos/cm)	Temp (^{O}C)	TSS (mg/l)
Staten Island Main Drain (N38-09.363 W121-13.011)							
26-27Jun 2000	10.11	1.56	0.198	0.071	127	21.5	59
19-21 Jul 2000	7.22	1.74	0.094	0.022U	183	21.0	58
Empire Tract Main Drain (N38-03.607 W121-29.909)							
26-27Jun 2000	3.22	0.94	0.093	0.050	256	21.5	38
19-21 Jul 2000	10.2	3.75	0.117	0.056	299	22.4	69
Lower Jones Main Drain							
19-21 Jul 2000	1.14	0.09	0.302	0.239	500	25.5	14
Upper Jones Main Drain (N37-56.353 W121-31.872)							
19-21 Jul 2000	1.52	0.86	0.131	0.129	690	22.9	11
Twichell Island Main Drain (N38-05.799 W121-39.05)							
26-27Jun 2000	3.99	1.06	0.387	0.229	398	20.0	30
19-21 Jul 2000	4.49	1.97	1.500	0.056	380	23.0	247