

South River Mercury Project

May 2003

The following tables have results for fillets from fish collected in the spring of 2002 for the South River Mercury Project. Data have been averaged for each species at each site. Methyl mercury, which was analyzed in one fish from each species at every site, was found to be 85.5% of the total mercury.

Shaded cells are below detection levels.

NT1 - North River near Rt. 668

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/11/02	18.7	135	0.10	
Redbreast Sunfish	04/11/02	21	192	0.17	
Redbreast Sunfish	04/11/02	19.5	156	0.11	
Redbreast Sunfish	04/11/02	18.4	113	0.10	
Redbreast Sunfish	04/11/02	15	63	0.10	
Redbreast Sunfish	04/11/02	18	114	0.13	
Redbreast Sunfish	04/11/02	16.6	99	0.10	
Redbreast Sunfish	04/11/02	17	100	0.12	
Redbreast Sunfish	04/11/02	18.9	139	0.10	0.1
Redbreast Sunfish	04/11/02	17.5	109	0.10	
Average Total Mercury (ppm)				0.11	

Smallmouth Bass	04/11/02	36.8	567	0.44	0.39
Smallmouth Bass	04/11/02	31.5	404	0.38	
Smallmouth Bass	04/11/02	35.4	618	0.32	
Smallmouth Bass	04/11/02	37	654	0.54	
Smallmouth Bass	04/11/02	34.5	504	0.40	
Smallmouth Bass	04/11/02	37.2	584	0.46	
Smallmouth Bass	04/11/02	30.4	363	0.24	
Smallmouth Bass	04/11/02	35	507	1.13	
Smallmouth Bass	04/11/02	29.4	305	0.37	
Smallmouth Bass	04/11/02	25.4	198	0.37	
Average Total Mercury (ppm)				0.47	

White Sucker	04/11/02	45.8	1140	0.43	
White Sucker	04/11/02	48.3	1276	0.19	
White Sucker	04/11/02	45.6	1036	0.25	
White Sucker	04/11/02	42	1069	0.13	
White Sucker	04/11/02	42.7	1042	0.12	
White Sucker	04/11/02	45.9	1052	0.14	0.12
White Sucker	04/11/02	45	1111	0.65	
White Sucker	04/11/02	47.2	1285	0.13	
White Sucker	04/11/02	46	983	0.51	
White Sucker	04/11/02	43.5	1094	0.13	
Average Total Mercury (ppm)				0.27	

ST1 - South River above Rife Loth Dam in Waynesboro

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/17/02	17.3	108	0.11	
Redbreast Sunfish	04/17/02	16.9	92	0.38	
Redbreast Sunfish	04/17/02	15.8	84	0.11	
Redbreast Sunfish	04/17/02	15.4	81	0.20	
Redbreast Sunfish	04/17/02	17.5	104	0.15	
Redbreast Sunfish	04/17/02	15.3	73	0.18	
Redbreast Sunfish	04/17/02	15.1	70	0.19	
Redbreast Sunfish	04/17/02	15.3	73	0.17	
Redbreast Sunfish	04/17/02	14.1	59	0.19	
Redbreast Sunfish	04/17/02	14.5	69	0.18	0.17
Average Total Mercury (ppm)				0.19	

Smallmouth Bass	04/17/02	23.2	179	0.16	
Smallmouth Bass	04/17/02	20.1	123	0.13	
Smallmouth Bass	04/17/02	22.5	152	0.14	
Smallmouth Bass	04/17/02	26	252	0.28	
Smallmouth Bass	04/17/02	20.6	129	0.26	
Smallmouth Bass	04/17/02	21.4	157	0.10	
Smallmouth Bass	04/17/02	21	122	0.22	
Smallmouth Bass	04/17/02	27	255	0.25	0.23
Smallmouth Bass	04/17/02	18.1	78	0.13	
Smallmouth Bass	04/17/02	26.1	235	0.21	
Average Total Mercury (ppm)				0.19	

White Sucker	04/17/02	31.5	356	0.10	
White Sucker	04/17/02	48.2	1216	0.30	
White Sucker	04/17/02	40.7	744	0.12	
White Sucker	04/17/02	46.8	877	0.32	
White Sucker	04/17/02	38.3	625	0.20	
White Sucker	04/17/02	42.8	798	0.38	
White Sucker	04/17/02	38.1	593	0.19	0.18
White Sucker	04/17/02	30.6	412	0.10	
White Sucker	04/17/02	49.7	630	0.17	
White Sucker	04/17/02	40.5	701	0.20	
Average Total Mercury (ppm)				0.21	

ST2 - South River north of DuPont footbridge in Waynesboro

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/17/02	17.3	114	1.03	0.34
Redbreast Sunfish	04/17/02	17.9	120	0.95	
Redbreast Sunfish	04/17/02	16.3	97	0.89	
Redbreast Sunfish	04/17/02	15.6	91	0.21	
Redbreast Sunfish	04/17/02	15.9	87	0.47	
Redbreast Sunfish	04/17/02	16	92	0.39	
Redbreast Sunfish	04/17/02	14.8	74	0.46	
Redbreast Sunfish	04/17/02	13.9	67	0.61	
Redbreast Sunfish	04/17/02	13.2	56	0.16	
Redbreast Sunfish	04/17/02	14	57	0.54	
Average Total Mercury (ppm)				0.57	

Rainbow Trout	04/17/02	35	374	0.14	0.1	
Rainbow Trout	04/17/02	34.2	424	0.10		
Rainbow Trout	04/17/02	28.6	298	0.10		
Rainbow Trout	04/17/02	27.4	262	0.10		
Rainbow Trout	04/17/02	27.4	245	0.10		
Rainbow Trout	04/17/02	24.2	143	0.10		
Rainbow Trout	04/17/02	27.4	229	0.10		
Rainbow Trout	04/17/02	27.3	211	0.10		
Rainbow Trout	04/17/02	27	213	0.10		
Rainbow Trout	04/17/02	24.1	136	0.10		
Average Total Mercury (ppm)				0.10		

Smallmouth Bass	04/17/02	28.1	275	0.52	0.27
Smallmouth Bass	04/17/02	26.1	266	0.63	
Smallmouth Bass	04/17/02	23	150	1.63	
Smallmouth Bass	04/17/02	22	173	0.27	
Smallmouth Bass	04/17/02	24.5	192	0.50	
Smallmouth Bass	04/17/02	20.4	129	0.32	
Smallmouth Bass	04/17/02	23.5	177	0.31	
Smallmouth Bass	04/17/02	25.1	205	0.32	
Smallmouth Bass	04/17/02	19.4	94	0.26	
Smallmouth Bass	04/17/02	21.1	126	0.28	
Average Total Mercury (ppm)				0.50	

White Sucker	04/17/02	26.4	620	0.81	0.34
White Sucker	04/17/02	28.5	312	0.10	
White Sucker	04/17/02	38.3	625	0.52	
White Sucker	04/17/02	38.5	642	0.25	
White Sucker	04/17/02	37.4	638	0.39	
White Sucker	04/17/02	30.8	349	0.10	
White Sucker	04/17/02	35.3	450	0.25	
White Sucker	04/17/02	34.4	485	0.13	
White Sucker	04/17/02	32	352	0.68	
White Sucker	04/17/02	33.5	483	0.26	
Average Total Mercury (ppm)				0.35	

ST3 - South River at 2nd Street in Waynesboro

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/16/02	15.5	72	0.96	
Redbreast Sunfish	04/16/02	17.2	104	0.87	
Redbreast Sunfish	04/16/02	17.4	99	0.48	
Redbreast Sunfish	04/16/02	15	73	0.38	
Redbreast Sunfish	04/16/02	17.5	109	1.08	
Redbreast Sunfish	04/16/02	14.7	66	0.65	
Redbreast Sunfish	04/16/02	15.2	90	0.74	
Redbreast Sunfish	04/16/02	13.2	51	1.24	
Redbreast Sunfish	04/16/02	13.8	57	0.24	
Redbreast Sunfish	04/16/02	13.7	57	0.36	0.27
Average Total Mercury (ppm)				0.70	

Smallmouth Bass	04/16/02	42.2	918	1.21	
Smallmouth Bass	04/16/02	37.1	638	2.56	
Smallmouth Bass	04/16/02	37.8	608	2.21	
Smallmouth Bass	04/16/02	35.2	589	1.26	
Smallmouth Bass	04/16/02	30.9	382	0.94	
Smallmouth Bass	04/16/02	29	303	1.04	
Smallmouth Bass	04/16/02	28.8	309	1.58	
Smallmouth Bass	04/16/02	25.4	197	0.84	
Smallmouth Bass	04/16/02	27.9	262	2.32	
Smallmouth Bass	04/16/02	24.5	188	0.71	0.55
Average Total Mercury (ppm)				1.47	

White Sucker	04/16/02	39.4	637	0.45	
White Sucker	04/16/02	34.5	493	0.26	
White Sucker	04/16/02	49.4	1295	0.65	
White Sucker	04/16/02	38.1	598	0.39	
White Sucker	04/16/02	40.8	765	0.32	
White Sucker	04/16/02	40	652	0.41	0.42
White Sucker	04/16/02	38.3	684	0.52	
White Sucker	04/16/02	35	461	0.66	
White Sucker	04/16/02	50.2	1228	0.69	
White Sucker	04/16/02	34.9	475	0.28	
Average Total Mercury (ppm)				0.46	

ST4 - South River at Hopeman Parkway in Waynesboro

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Largemouth Bass	04/16/02	38.5	1007	2.11	1.88
Largemouth Bass	04/16/02	35.5	746	1.89	
Largemouth Bass	04/16/02	39.9	1129	2.09	
Largemouth Bass	04/16/02	41.7	1020	2.08	
Largemouth Bass	04/16/02	36.9	800	1.61	
Largemouth Bass	04/16/02	33.8	499	2.79	
Largemouth Bass	04/16/02	31.3	516	1.39	
Largemouth Bass	04/16/02	20.6	115	1.05	
Largemouth Bass	04/16/02	20.9	125	1.40	
Largemouth Bass	04/16/02	24	189	1.56	
Average Total Mercury (ppm)				1.80	

Redbreast Sunfish	04/16/02	17.9	116	0.82	0.84
Redbreast Sunfish	04/16/02	18.7	128	1.33	
Redbreast Sunfish	04/16/02	16.5	93	1.03	
Redbreast Sunfish	04/16/02	18.6	135	1.23	
Redbreast Sunfish	04/16/02	16.4	99	0.73	
Redbreast Sunfish	04/16/02	16.2	90	0.99	
Redbreast Sunfish	04/16/02	17	103	1.06	
Redbreast Sunfish	04/16/02	16	90	1.58	
Redbreast Sunfish	04/16/02	16.4	100	0.83	
Redbreast Sunfish	04/16/02	18.6	140	0.94	
Average Total Mercury (ppm)				1.05	

White Sucker	04/16/02	45	1047	1.30	0.54
White Sucker	04/16/02	44.9	1108	1.01	
White Sucker	04/16/02	39.3	733	1.32	
White Sucker	04/16/02	37.5	635	0.87	
White Sucker	04/16/02	42.2	901	1.36	
White Sucker	04/16/02	31.1	316	0.74	
White Sucker	04/16/02	44	1263	1.06	
White Sucker	04/16/02	33.5	485	0.57	
White Sucker	04/16/02	40	777	1.08	
White Sucker	04/16/02	36.6	550	1.10	
Average Total Mercury (ppm)				1.04	

ST5 - South River at Rt. 611 in Doods

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/15/02	17.5	130	1.07	
Redbreast Sunfish	04/15/02	18.4	124	0.92	
Redbreast Sunfish	04/15/02	18	136	0.95	
Redbreast Sunfish	04/15/02	16.5	106	1.37	
Redbreast Sunfish	04/15/02	18.2	129	1.54	
Redbreast Sunfish	04/15/02	17	106	0.91	
Redbreast Sunfish	04/15/02	17.2	112	1.80	
Redbreast Sunfish	04/15/02	17.3	113	1.48	
Redbreast Sunfish	04/15/02	17.6	137	0.98	0.81
Redbreast Sunfish	04/15/02	16	89	1.70	
Average Total Mercury (ppm)				1.27	

Smallmouth Bass	04/15/02	47.5	1360	4.31	
Smallmouth Bass	04/15/02	37.5	614	3.98	3.46
Smallmouth Bass	04/15/02	26.2	250	2.39	
Smallmouth Bass	04/15/02	36	536	3.38	
Smallmouth Bass	04/15/02	31	409	3.05	
Smallmouth Bass	04/15/02	32	457	2.46	
Smallmouth Bass	04/15/02	30.9	418	1.53	
Smallmouth Bass	04/15/02	26.2	257	2.30	
Smallmouth Bass	04/15/02	22.4	147	2.02	
Smallmouth Bass	04/15/02	22.8	172	2.70	
Average Total Mercury (ppm)				2.81	

White Sucker	04/15/02	31	383	1.11	
White Sucker	04/15/02	46	1270	1.93	
White Sucker	04/15/02	35.6	653	1.12	
White Sucker	04/15/02	40.1	758	1.59	
White Sucker	04/15/02	38.1	698	1.79	
White Sucker	04/15/02	42.4	1008	2.15	
White Sucker	04/15/02	39.5	674	1.68	
White Sucker	04/15/02	37.3	606	1.42	
White Sucker	04/15/02	41.1	887	1.66	
White Sucker	04/15/02	28.5	272	0.66	0.42
Average Total Mercury (ppm)				1.51	

ST6 - South River at VDOF nursery in Crimora

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/12/02	18.5	148	1.18	0.82
Redbreast Sunfish	04/12/02	19.3	177	1.50	
Redbreast Sunfish	04/12/02	17.2	123	1.01	
Redbreast Sunfish	04/12/02	18.2	147	1.40	
Redbreast Sunfish	04/12/02	16	97	1.48	
Redbreast Sunfish	04/12/02	18.5	132	2.02	
Redbreast Sunfish	04/12/02	15	80	0.78	
Redbreast Sunfish	04/12/02	16.1	98	0.90	
Redbreast Sunfish	04/12/02	14.4	81	1.07	
Redbreast Sunfish	04/12/02	15.3	77	1.69	
Average Total Mercury (ppm)				1.30	

Smallmouth Bass	04/12/02	40.8	968	4.62	1.95
Smallmouth Bass	04/12/02	38.1	735	3.97	
Smallmouth Bass	04/12/02	35.1	560	3.47	
Smallmouth Bass	04/12/02	29	283	3.56	
Smallmouth Bass	04/12/02	26.4	225	3.36	
Smallmouth Bass	04/12/02	25.2	217	2.38	
Smallmouth Bass	04/12/02	28.8	320	3.56	
Smallmouth Bass	04/12/02	25.5	219	2.40	
Smallmouth Bass	04/12/02	28.2	285	2.76	
Smallmouth Bass	04/12/02	23	166	2.31	
Average Total Mercury (ppm)				3.24	

White Sucker	04/12/02	45.6	1334	1.90	1.35
White Sucker	04/12/02	39.9	856	1.74	
White Sucker	04/12/02	37.2	644	1.27	
White Sucker	04/12/02	41.5	1053	2.35	
White Sucker	04/12/02	35	530	1.16	
White Sucker	04/12/02	43.9	1170	2.05	
White Sucker	04/12/02	37.5	615	1.59	
White Sucker	04/12/02	42.4	974	2.62	
White Sucker	04/12/02	32.1	431	1.06	
White Sucker	04/12/02	36	640	1.24	
Average Total Mercury (ppm)				1.70	

ST7 - South River near Grand Caverns Bridge in Grottoes

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/15/02	17.1	123	0.70	1.25
Redbreast Sunfish	04/15/02	18	125	1.34	
Redbreast Sunfish	04/15/02	17.2	113	0.65	
Redbreast Sunfish	04/15/02	17.1	113	1.65	
Redbreast Sunfish	04/15/02	16.4	97	1.10	
Redbreast Sunfish	04/15/02	18.8	136	1.35	
Redbreast Sunfish	04/15/02	17.2	115	1.29	
Redbreast Sunfish	04/15/02	15.2	72	0.91	
Redbreast Sunfish	04/15/02	15.9	92	0.73	
Redbreast Sunfish	04/15/02	15	74	0.65	
Average Total Mercury (ppm)				1.04	

Rainbow Trout	04/15/02	30.5	338	0.12	0.1
Rainbow Trout	04/15/02	30.8	312	0.10	
Rainbow Trout	04/15/02	26	202	0.10	
Rainbow Trout	04/15/02	27.6	245	0.10	
Rainbow Trout	04/15/02	23.1	128	0.10	
Rainbow Trout	04/15/02	26	231	0.10	
Rainbow Trout	04/15/02	25.3	166	0.10	
Average Total Mercury (ppm)				0.10	

Smallmouth Bass	04/15/02	29.9	327	2.30	0.93
Smallmouth Bass	04/15/02	28.4	370	0.54	
Smallmouth Bass	04/15/02	30.5	401	2.53	
Smallmouth Bass	04/15/02	22.1	144	1.48	
Smallmouth Bass	04/15/02	22	127	1.61	
Smallmouth Bass	04/15/02	26.3	241	2.62	
Smallmouth Bass	04/15/02	28.6	336	2.63	
Smallmouth Bass	04/15/02	19.5	107	1.55	
Smallmouth Bass	04/15/02	21.1	112	1.17	
Smallmouth Bass	04/15/02	20	96	1.14	
Average Total Mercury (ppm)				1.76	

White Sucker	04/15/02	45.7	1166	1.60	1	
White Sucker	04/15/02	46	1079	0.87		
White Sucker	04/15/02	33.8	532	1.15		
White Sucker	04/15/02	41	852	0.10		
White Sucker	04/15/02	41.8	810	1.26		
White Sucker	04/15/02	47.6	1466	0.91		
White Sucker	04/15/02	40.6	851	0.49		
White Sucker	04/15/02	47.4	1156	1.36		
White Sucker	04/15/02	46.5	1303	0.78		
White Sucker	04/15/02	44.2	1208	1.13		
Average Total Mercury (ppm)				0.97		

SF1 - South Fork Shenandoah River at Rt. 708 in Lynwood

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/11/02	17	113	0.50	0.35
Redbreast Sunfish	04/11/02	17.5	126	0.41	
Redbreast Sunfish	04/11/02	16.5	113	0.36	
Redbreast Sunfish	04/11/02	17.2	108	0.43	
Redbreast Sunfish	04/11/02	15.9	87	0.60	
Redbreast Sunfish	04/11/02	16.5	93	0.42	
Redbreast Sunfish	04/11/02	15.8	90	0.54	
Redbreast Sunfish	04/11/02	15.8	81	0.54	
Redbreast Sunfish	04/11/02	15.7	97	0.37	
Redbreast Sunfish	04/11/02	16.5	111	0.39	
Average Total Mercury (ppm)				0.46	

Smallmouth Bass	04/11/02	41.5	1109	1.24	2.68
Smallmouth Bass	04/11/02	40.3	1038	2.65	
Smallmouth Bass	04/11/02	42	1007	3.26	
Smallmouth Bass	04/11/02	39.1	839	1.79	
Smallmouth Bass	04/11/02	30	317	1.31	
Smallmouth Bass	04/11/02	29.7	362	1.31	
Smallmouth Bass	04/11/02	36.8	743	1.71	
Smallmouth Bass	04/11/02	33.8	496	1.39	
Smallmouth Bass	04/11/02	39.8	821	1.70	
Smallmouth Bass	04/11/02	28.5	298	1.34	
Average Total Mercury (ppm)				1.77	

White Sucker	04/11/02	40.5	733	0.48	0.62
White Sucker	04/11/02	38.9	616	0.65	
White Sucker	04/11/02	43.9	1256	0.85	
White Sucker	04/11/02	46	1387	0.56	
White Sucker	04/11/02	43.8	1047	0.81	
White Sucker	04/11/02	43.1	993	0.46	
White Sucker	04/11/02	44	1181	0.53	
White Sucker	04/11/02	41	871	0.46	
White Sucker	04/11/02	46.2	1384	0.60	
White Sucker	04/11/02	44	1144	0.63	
Average Total Mercury (ppm)				0.60	

SF2 - South Fork Shenandoah River above dam in Shenandoah, VA

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Channel Catfish	07/19/02	56.5	1839	0.55	0.52
Channel Catfish	07/24/02	66.6	2976	1.73	
Channel Catfish	07/24/02	68.7	3251	0.54	
Channel Catfish	07/25/02	72.3	5048	2.99	
Channel Catfish	07/25/02	68	4021	0.62	
Channel Catfish	07/25/02	82.7	7132	2.73	
Average Total Mercury (ppm)				1.53	

SF2 - South Fork Shenandoah River above dam in Shenandoah, VA (cont'd)

Largemouth Bass	04/10/02	42.4	1102	1.90	
Largemouth Bass	04/10/02	42	955	1.74	
Largemouth Bass	04/10/02	40.9	937	1.92	
Largemouth Bass	04/10/02	35	587	1.06	
Largemouth Bass	04/10/02	28.8	352	0.77	
Largemouth Bass	04/10/02	32.4	453	1.05	
Largemouth Bass	04/10/02	31.4	420	1.18	
Largemouth Bass	04/10/02	31.1	398	1.21	
Largemouth Bass	04/10/02	28.6	315	1.04	0.81
Largemouth Bass	04/10/02	30.2	382	0.61	
Average Total Mercury (ppm)				1.25	

Redbreast Sunfish	04/10/02	21.1	206	0.67	0.55
Redbreast Sunfish	04/10/02	18.2	142	0.23	
Redbreast Sunfish	04/10/02	21.5	232	0.72	
Redbreast Sunfish	04/10/02	17.6	104	0.44	
Redbreast Sunfish	04/10/02	19.3	161	0.49	
Redbreast Sunfish	04/10/02	20.2	178	0.67	
Redbreast Sunfish	04/10/02	19	144	0.72	
Redbreast Sunfish	04/10/02	18.6	139	0.39	
Redbreast Sunfish	04/10/02	18.6	131	0.48	
Redbreast Sunfish	04/10/02	20.1	173	0.85	
Average Total Mercury (ppm)				0.57	

Smallmouth Bass	04/10/02	38	677	2.27	
Smallmouth Bass	04/10/02	35.9	496	1.77	
Smallmouth Bass	04/10/02	32.1	403	1.44	
Smallmouth Bass	04/10/02	24.6	173	0.84	
Smallmouth Bass	04/10/02	23.5	161	0.71	0.6
Smallmouth Bass	04/10/02	33.1	425	1.53	
Smallmouth Bass	04/10/02	30.5	382	0.87	
Smallmouth Bass	04/10/02	26.9	214	0.98	
Smallmouth Bass	04/10/02	25.8	215	0.81	
Smallmouth Bass	04/10/02	28.1	290	0.84	
Average Total Mercury (ppm)				1.21	

White Sucker	04/10/02	50.9	1856	1.30	1.07
White Sucker	04/10/02	48.7	1759	1.12	
White Sucker	04/10/02	43.3	1236	0.34	
White Sucker	04/10/02	40.6	885	0.75	
White Sucker	04/10/02	48.9	1405	0.79	
White Sucker	04/10/02	50.9	1426	1.20	
White Sucker	04/10/02	46.1	1371	0.75	
White Sucker	04/10/02	41.8	949	0.62	
White Sucker	04/10/02	45.7	1173	0.49	
White Sucker	04/10/02	49.2	1897	0.95	
Average Total Mercury (ppm)				0.83	

SF3 - South Fork Shenandoah River at Newport Landing

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	04/10/02	15.8	78	0.69	0.55
Redbreast Sunfish	04/10/02	16.9	107	0.53	
Redbreast Sunfish	04/10/02	19.5	155	0.96	
Redbreast Sunfish	04/10/02	18	140	0.32	
Redbreast Sunfish	04/10/02	19.2	171	0.42	
Redbreast Sunfish	04/10/02	18.1	131	0.37	
Redbreast Sunfish	04/10/02	19	150	0.48	
Redbreast Sunfish	04/10/02	17	103	0.63	
Redbreast Sunfish	04/10/02	16.5	89	0.68	
Redbreast Sunfish	04/10/02	17.5	105	0.71	
Average Total Mercury (ppm)				0.58	

Smallmouth Bass	04/10/02	36.4	543	1.94	0.98	
Smallmouth Bass	04/10/02	28.4	257	1.64		
Smallmouth Bass	04/10/02	24.6	180	0.88		
Smallmouth Bass	04/10/02	25.7	190	1.19		
Smallmouth Bass	04/10/02	23.1	140	1.17		
Smallmouth Bass	04/10/02	26.8	207	1.42		
Smallmouth Bass	04/10/02	27.3	262	0.96		
Smallmouth Bass	04/10/02	26	211	1.25		
Smallmouth Bass	04/10/02	25.5	203	1.16		
Smallmouth Bass	04/10/02	24.3	170	1.15		
Average Total Mercury (ppm)				1.28		

White Sucker	04/10/02	42.7	927	0.67	0.56
White Sucker	04/10/02	48.2	1560	0.95	
White Sucker	04/10/02	41	837	0.90	
White Sucker	04/10/02	49.3	1370	0.83	
White Sucker	04/10/02	42.1	834	0.62	
White Sucker	04/10/02	44.5	1050	0.51	
White Sucker	04/10/02	43.8	952	0.79	
White Sucker	04/10/02	46.4	1235	0.84	
Average Total Mercury (ppm)				0.76	

SF4 - South Fork Shenandoah River at Rt. 211 near Hamburg, VA

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Channel Catfish	07/24/02	29.5	210	0.30	0.62
Channel Catfish	07/24/02	33.6	338	0.30	
Channel Catfish	07/24/02	57.5	2095	0.77	
Channel Catfish	07/24/02	69.5	3621	1.61	
Channel Catfish	07/25/02	56.5	1512	0.23	
Channel Catfish	07/25/02	50	1088	0.73	
Channel Catfish	07/25/02	67.6	3734	0.49	
Channel Catfish	07/25/02	64.8	2497	0.17	
Channel Catfish	07/25/02	65	2835	0.31	
Average Total Mercury (ppm)				0.55	

SF4 - South Fork Shenandoah River at Rt. 211 near Hamburg, VA (cont'd)

Largemouth Bass	04/09/02	38.2	851	1.47	0.84
Largemouth Bass	04/09/02	28.6	349	0.66	
Largemouth Bass	04/09/02	32.6	514	1.13	
Largemouth Bass	04/09/02	27.5	301	0.70	
Largemouth Bass	04/09/02	35	615	1.16	
Largemouth Bass	04/09/02	28.9	333	0.85	
Largemouth Bass	04/09/02	35.1	673	1.22	
Largemouth Bass	04/09/02	27.8	273	1.13	
Largemouth Bass	04/09/02	27.9	334	1.05	
Largemouth Bass	04/09/02	28.4	296	1.30	
Average Total Mercury (ppm)				1.07	

Northern Hogsucker	04/09/02	41.8	971	1.00	0.82
Northern Hogsucker	04/09/02	39.6	732	1.07	
Northern Hogsucker	04/09/02	40.1	793	1.00	
Northern Hogsucker	04/09/02	36.7	564	1.21	
Northern Hogsucker	04/09/02	40.1	818	0.98	
Northern Hogsucker	04/09/02	41	788	0.92	
Northern Hogsucker	04/09/02	39.8	830	1.22	
Northern Hogsucker	04/09/02	40.1	859	1.17	
Northern Hogsucker	04/09/02	41	890	1.02	
Northern Hogsucker	04/09/02	41	825	0.88	
Average Total Mercury (ppm)				1.05	

Redbreast Sunfish	04/09/02	18.6	159	0.79	0.68
Redbreast Sunfish	04/09/02	19.5	177	0.35	
Redbreast Sunfish	04/09/02	19	164	0.50	
Redbreast Sunfish	04/09/02	19.5	160	0.77	
Redbreast Sunfish	04/09/02	18.5	155	0.34	
Redbreast Sunfish	04/09/02	18	120	0.72	
Redbreast Sunfish	04/09/02	18	130	0.61	
Redbreast Sunfish	04/09/02	19.4	163	0.46	
Redbreast Sunfish	04/09/02	16	96	0.31	
Redbreast Sunfish	04/09/02	16.5	100	0.29	
Average Total Mercury (ppm)				0.51	

Smallmouth Bass	04/09/02	41.2	868	2.70	0.82
Smallmouth Bass	04/09/02	40	961	2.65	
Smallmouth Bass	04/09/02	37.9	869	1.93	
Smallmouth Bass	04/09/02	27.5	274	1.39	
Smallmouth Bass	04/09/02	32.1	455	1.80	
Smallmouth Bass	04/09/02	30.1	373	1.61	
Smallmouth Bass	04/09/02	26.9	222	1.40	
Smallmouth Bass	04/09/02	24.1	174	1.35	
Smallmouth Bass	04/09/02	24	156	1.19	
Smallmouth Bass	04/09/02	23.6	171	0.98	
Average Total Mercury (ppm)				1.70	

SF5 - South Fork Shenandoah River at Fosters Landing

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Northern Hogsucker	04/09/02	41.5	1085	0.84	0.73
Northern Hogsucker	04/09/02	40.5	925	0.86	
Northern Hogsucker	04/09/02	40.7	994	0.81	
Northern Hogsucker	04/09/02	40	866	0.79	
Northern Hogsucker	04/09/02	40.5	948	0.73	
Northern Hogsucker	04/09/02	37.3	719	0.74	
Northern Hogsucker	04/09/02	39.1	810	0.54	
Northern Hogsucker	04/09/02	40.9	930	0.75	
Northern Hogsucker	04/09/02	41.1	972	0.80	
Northern Hogsucker	04/09/02	33	417	0.26	
Average Total Mercury (ppm)				0.71	

Redbreast Sunfish	04/09/02	16.7	121	0.38	0.49
Redbreast Sunfish	04/09/02	18	158	0.43	
Redbreast Sunfish	04/09/02	18.5	157	0.40	
Redbreast Sunfish	04/09/02	19	157	0.40	
Redbreast Sunfish	04/09/02	20.1	177	0.75	
Redbreast Sunfish	04/09/02	18.4	143	0.46	
Redbreast Sunfish	04/09/02	18.9	158	0.49	
Redbreast Sunfish	04/09/02	17.8	146	0.40	
Redbreast Sunfish	04/09/02	19	170	0.49	
Redbreast Sunfish	04/09/02	18.5	142	0.63	
Average Total Mercury (ppm)				0.48	

Smallmouth Bass	04/09/02	33.6	461	2.38	1.94
Smallmouth Bass	04/09/02	44	1295	1.98	
Smallmouth Bass	04/09/02	32.9	511	1.25	
Smallmouth Bass	04/09/02	30.1	371	1.04	
Smallmouth Bass	04/09/02	29.4	364	1.51	
Smallmouth Bass	04/09/02	30.3	394	1.16	
Smallmouth Bass	04/09/02	30.5	418	1.40	
Smallmouth Bass	04/09/02	26.4	235	1.18	
Smallmouth Bass	04/09/02	26	249	0.91	
Smallmouth Bass	04/09/02	32.9	529	1.29	
Average Total Mercury (ppm)				1.41	

SF6 - South Fork Shenandoah River at Bentonville Landing

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Northern Hogsucker	04/08/02	38.1	780	0.71	0.63
Northern Hogsucker	04/08/02	40	945	0.67	
Northern Hogsucker	04/08/02	39.6	815	0.84	
Northern Hogsucker	04/08/02	40	824	0.61	
Northern Hogsucker	04/08/02	39.9	776	0.71	
Northern Hogsucker	04/08/02	31.6	450	0.79	
Northern Hogsucker	04/08/02	33.2	445	0.84	
Northern Hogsucker	04/08/02	38.5	758	0.77	
Northern Hogsucker	04/08/02	27	214	0.71	
Northern Hogsucker	04/08/02	29.1	306	0.22	
Average Total Mercury (ppm)				0.69	

Redbreast Sunfish	04/08/02	19.5	171	0.70	0.41
Redbreast Sunfish	04/08/02	17	109	0.51	
Redbreast Sunfish	04/08/02	20.4	190	0.75	
Redbreast Sunfish	04/08/02	16	89	0.76	
Redbreast Sunfish	04/08/02	19.1	138	1.00	
Redbreast Sunfish	04/08/02	18	112	0.47	
Redbreast Sunfish	04/08/02	18.9	147	0.52	
Redbreast Sunfish	04/08/02	19.7	172	0.92	
Redbreast Sunfish	04/08/02	17.4	118	0.50	
Redbreast Sunfish	04/08/02	16.3	85	0.82	
Average Total Mercury (ppm)				0.70	

Smallmouth Bass	04/08/02	31.2	433	1.36	0.72
Smallmouth Bass	04/08/02	24.8	148	0.78	
Smallmouth Bass	04/08/02	19.1	71	0.54	
Smallmouth Bass	04/08/02	19.6	97	0.44	
Smallmouth Bass	04/08/02	18.2	71	0.69	
Smallmouth Bass	04/08/02	17.4	68	0.40	
Smallmouth Bass	04/08/02	18.9	81	0.65	
Smallmouth Bass	04/08/02	17.9	63	0.74	
Smallmouth Bass	04/08/02	18.7	73	0.53	
Smallmouth Bass	04/08/02	19.6	84	0.49	
Average Total Mercury (ppm)				0.66	

SF7 - South Fork Shenandoah River at Luray Ave. Launch in Front Royal

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Channel Catfish	07/18/02	45.3	828	0.48	0.68
Channel Catfish	07/19/02	46.5	1088	0.52	
Channel Catfish	07/24/02	50.8	1066	0.78	
Channel Catfish	07/24/02	56.5	1700	1.14	
Channel Catfish	07/24/02	47.6	993	0.28	
Channel Catfish	07/24/02	48.8	1124	0.31	
Channel Catfish	07/25/02	54.7	1594	0.34	
Channel Catfish	07/25/02	65.7	3540	0.82	
Average Total Mercury (ppm)				0.58	

Largemouth Bass	05/30/02	45.9	1553	1.70	0.78
Largemouth Bass	05/30/02	36.4	636	1.31	
Largemouth Bass	05/30/02	29.3	342	0.82	
Largemouth Bass	05/30/02	30.5	385	0.72	
Largemouth Bass	05/30/02	31	388	0.93	
Largemouth Bass	05/30/02	30.9	410	0.79	
Largemouth Bass	05/30/02	29	318	0.70	
Largemouth Bass	05/30/02	31	408	0.71	
Largemouth Bass	05/30/02	29.1	361	0.84	
Largemouth Bass	05/30/02	26.5	268	0.57	
Average Total Mercury (ppm)				0.91	

Northern Hogsucker	04/08/02	38	679	0.73	0.71
Northern Hogsucker	04/08/02	38.2	712	0.67	
Northern Hogsucker	04/08/02	39.8	808	0.65	
Northern Hogsucker	04/08/02	32.6	446	0.69	
Northern Hogsucker	04/08/02	37	680	0.78	
Northern Hogsucker	04/08/02	40.9	911	0.89	
Northern Hogsucker	04/08/02	38.5	809	0.82	
Northern Hogsucker	04/08/02	37.9	741	0.69	
Northern Hogsucker	04/08/02	39.2	781	0.50	
Northern Hogsucker	04/08/02	38.9	782	0.69	
Average Total Mercury (ppm)				0.71	

Redbreast Sunfish	04/08/02	18.6	142	0.57	0.37
Redbreast Sunfish	04/08/02	18	121	0.67	
Redbreast Sunfish	04/08/02	17.3	128	0.43	
Redbreast Sunfish	04/08/02	20	189	0.80	
Redbreast Sunfish	04/08/02	18.5	146	0.59	
Redbreast Sunfish	04/08/02	19	158	0.39	
Redbreast Sunfish	04/08/02	20.7	182	1.21	
Redbreast Sunfish	04/08/02	20	188	0.60	
Redbreast Sunfish	04/08/02	19.2	145	0.58	
Redbreast Sunfish	04/08/02	17.2	113	0.53	
Average Total Mercury (ppm)				0.64	

SF7 - South Fork Shenandoah River at Luray Ave. Launch in Front Royal (cont'd)

Smallmouth Bass	04/08/02	36.6	519	1.94	1.7
Smallmouth Bass	04/08/02	46.6	1301	1.84	
Smallmouth Bass	04/08/02	45.6	1376	1.42	
Smallmouth Bass	04/08/02	29.9	349	0.51	
Smallmouth Bass	04/08/02	44	1036	2.06	
Smallmouth Bass	04/08/02	26.1	202	1.04	
Smallmouth Bass	04/08/02	37.7	765	1.98	
Smallmouth Bass	04/08/02	31.3	412	1.20	
Smallmouth Bass	04/08/02	26.8	242	1.27	
Smallmouth Bass	04/08/02	26.2	215	1.56	
Average Total Mercury (ppm)				1.48	

SH1 - Shenandoah River at Rt. 17/50 bridge

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Channel Catfish	05/03/02	40	510	0.25	0.24
Channel Catfish	05/03/02	42.3	715	0.22	
Channel Catfish	05/03/02	46.5	824	0.35	
Channel Catfish	05/03/02	61.7	2491	0.80	
Channel Catfish	05/03/02	39	509	0.21	
Channel Catfish	05/30/02	39	602	0.19	
Channel Catfish	05/30/02	51.2	1315	0.29	
Channel Catfish	05/30/02	39.6	588	0.20	
Channel Catfish	05/30/02	40.3	570	0.21	
Channel Catfish	05/30/02	42.6	668	0.29	
Average Total Mercury (ppm)				0.30	

Largemouth Bass	05/03/02	31.6	410	0.40	0.44
Largemouth Bass	05/03/02	25.3	221	0.31	
Largemouth Bass	05/03/02	29	346	0.56	
Largemouth Bass	05/03/02	31	496	0.73	
Largemouth Bass	05/03/02	25.7	232	0.27	
Largemouth Bass	05/03/02	47.5	1593	0.92	
Largemouth Bass	05/03/02	49	1595	1.18	
Largemouth Bass	05/03/02	38.3	830	0.66	
Largemouth Bass	05/03/02	44	1290	0.97	
Largemouth Bass	05/03/02	42.1	1193	1.19	
Average Total Mercury (ppm)				0.72	

SH1 - Shenandoah River at Rt. 17/50 bridge (cont'd)

Redbreast Sunfish	05/03/02	16.1	77	0.33	
Redbreast Sunfish	05/03/02	18.5	138	0.16	
Redbreast Sunfish	05/03/02	18.5	133	0.16	
Redbreast Sunfish	05/03/02	19.2	154	0.23	
Redbreast Sunfish	05/03/02	19.6	173	0.12	
Redbreast Sunfish	05/03/02	19.1	143	0.19	
Redbreast Sunfish	05/03/02	18.7	147	0.17	
Redbreast Sunfish	05/03/02	19.5	162	0.19	
Redbreast Sunfish	05/03/02	18.3	124	0.17	0.14
Redbreast Sunfish	05/03/02	15.8	65	0.19	
Average Total Mercury (ppm)				0.19	

Smallmouth Bass	05/03/02	37	663	0.84	
Smallmouth Bass	05/03/02	35	581	0.64	
Smallmouth Bass	05/03/02	29.6	342	0.47	
Smallmouth Bass	05/03/02	31	366	0.85	
Smallmouth Bass	05/03/02	27	246	0.52	
Smallmouth Bass	05/03/02	24	182	0.42	
Smallmouth Bass	05/03/02	23.7	160	0.34	0.27
Smallmouth Bass	05/03/02	34.8	508	0.65	
Smallmouth Bass	05/03/02	29.3	312	0.37	
Smallmouth Bass	05/03/02	28.7	331	0.47	
Average Total Mercury (ppm)				0.56	

White Sucker	05/03/02	42.7	749	0.38	
White Sucker	05/03/02	41.8	849	0.37	
White Sucker	05/03/02	40.5	701	0.29	
White Sucker	05/03/02	40.8	670	0.46	
White Sucker	05/03/02	44.5	1068	0.32	
White Sucker	05/03/02	43.8	952	0.30	
White Sucker	05/03/02	43.8	956	0.23	0.2
White Sucker	05/03/02	46.6	1179	0.42	
White Sucker	05/03/02	41.8	905	0.19	
White Sucker	05/03/02	41	767	0.32	
Average Total Mercury (ppm)				0.33	

SH2 - Shenandoah River at Rt. 7 near Berryville, VA

Species	Collection Date	Length (cm)	Mass (g)	Total Mercury (ppm)	Methyl Mercury (ppm)
Redbreast Sunfish	05/03/02	16	87	0.26	
Redbreast Sunfish	05/03/02	17.8	134	0.13	
Redbreast Sunfish	05/03/02	18.7	136	0.21	
Redbreast Sunfish	05/03/02	16.6	96	0.14	
Redbreast Sunfish	05/03/02	16.9	101	0.22	
Redbreast Sunfish	05/03/02	19.7	142	0.20	
Redbreast Sunfish	05/03/02	15.5	86	0.11	
Redbreast Sunfish	05/03/02	15.9	75	0.24	
Redbreast Sunfish	05/03/02	15.3	77	0.19	
Redbreast Sunfish	05/03/02	15	76	0.17	0.16
Average Total Mercury (ppm)				0.19	

Smallmouth Bass	05/03/02	44.6	950	1.23	
Smallmouth Bass	05/03/02	42.4	931	1.04	
Smallmouth Bass	05/03/02	46	1080	0.99	
Smallmouth Bass	05/03/02	40	842	0.77	
Smallmouth Bass	05/03/02	35	529	0.69	0.55
Smallmouth Bass	05/03/02	31.7	475	0.65	
Smallmouth Bass	05/03/02	30.9	407	0.39	
Smallmouth Bass	05/03/02	28	291	0.56	
Smallmouth Bass	05/03/02	26	229	0.62	
Smallmouth Bass	05/03/02	25.4	209	0.22	
Average Total Mercury (ppm)				0.72	

White Sucker	05/03/02	46	1205	0.27	
White Sucker	05/03/02	43.4	986	0.21	
White Sucker	05/03/02	42.5	726	0.36	
White Sucker	05/03/02	43	999	0.30	
White Sucker	05/03/02	41.2	803	0.28	
White Sucker	05/03/02	42	1025	0.28	
White Sucker	05/03/02	42	933	0.29	
White Sucker	05/03/02	42	884	0.28	0.22
White Sucker	05/03/02	42.4	878	0.30	
White Sucker	05/03/02	41.6	833	0.31	
Average Total Mercury (ppm)				0.29	