

Supplemental Table A Trends in Hg concentrations in fish tissue from 1969 to 2005 at 90 sites. Significant trends ($p < 0.05$) are shaded. The trend at site 27 was not considered significant because the range of Hg concentrations was not greater than the lowest detection level (0.01 $\mu\text{g/g}$). Trends above EPA advisory guideline (0.3 $\mu\text{g/g}$ MeHg) are in bold text. Upward trends starting below and ending above EPA guideline are underlined. Downward trends starting above and ending below EPA guideline are in italics. Trends below EPA guideline are in regular text.

Site	Site name	State	Species ^a	Site type ^b	Trophic Level ^c	n	Hg ($\mu\text{g/g}$)		p-value	Percent change	Begin year	End year	Source ^d	Tissue type ^e
1	Apalachicola River, J Woodruff Dam	FL	SS	I	M	13	0.11	0.23	0.135	-2.11	1969	1986	NCBP	1
2	Arkansas River	AR	CC	R	L	11	0.07	0.16	0.002	-2.82	1969	1995	NCBP/BEST	1
3	Chena River	AK	LNS	R	L	8	0.08	0.14	0.402	2.41	1969	1981	NCBP	1
4	Columbia River, Cascade Locks	OR/WA	LSS	I	L	11	0.11	0.27	0.013	-4.22	1969	1997	NCBP/BEST	1
5	Connecticut River, Windsor locks	CT	WCF	I	M	12	0.15	0.22	0.000	-7.22	1969	1984	NCBP	1
6	Delaware River	NJ/PA	WS	R	L	12	0.06	0.18	0.050	-4.59	1969	1984	NCBP	1
7	Hudson River	NY	G	R	L	10	0.13	0.19	0.414	-2.89	1969	1980	NCBP	1
8	Illinois River	IL	CC	R	L	15	0.07	0.10	0.447	-0.55	1969	1995	NCBP/BEST	1
9	Klamath River	CA	YP	R	U	7	0.19	0.22	0.000	-3.31	1969	1986	NCBP	1
10	Lake Erie	PA	YP	L	U	11	0.09	0.23	0.000	-8.23	1969	1986	NCBP	1
11	Lake Huron	MI	CC	L	L	14	0.06	0.23	0.206	3.11	1969	1986	NCBP	1
11	Lake Huron	MI	YP	L	U	10	0.08	0.09	0.221	4.68	1969	1986	NCBP	1
12	Lake Ontario	NY	RB	L	U	7	0.36	0.65	0.000	-10.36	1969	1981	NCBP	1
13	Lake Superior	WI	BL	L	M	10	0.11	0.20	0.000	-5.36	1969	1986	NCBP	1
13	Lake Superior	WI	LT	L	U	7	0.26	0.46	0.082	-3.52	1969	1986	NCBP	1
14	Missouri River, Garrison Dam	ND	W	I	U	7	0.20	0.30	0.081	-2.74	1969	1986	NCBP	1
15	Red River of the North	MN/ND	S	R	U	9	0.45	0.75	0.001	-4.86	1969	1986	NCBP	1
16	Penobscot River	ME	WS	R	L	13	0.25	0.60	0.001	-4.71	1969	1986	NCBP	1
17	Rio Grande	TX	GS	R	L	9	0.05	0.15	0.004	-5.69	1969	1986	NCBP	1
18	Sacramento River	CA	CC	R	L	7	0.10	0.18	0.001	-7.13	1969	1986	NCBP	1
19	Salmon River	ID	LSS	R	L	8	0.19	0.42	0.289	-1.95	1969	1997	NCBP/BEST	1
20	Snake River	ID/WA	LSS	R	L	13	0.11	0.23	0.679	0.95	1969	1986	NCBP	1
21	Utah Lake	UT	CC	L	L	10	0.04	0.07	0.396	2.65	1969	1986	NCBP	1
21	Utah Lake	UT	WB	L	U	8	0.06	0.08	0.588	1.85	1969	1986	NCBP	1
22	White River	AR	BMBU	R	L	8	0.24	0.38	0.009	7.66	1969	1986	NCBP	1
23	Yakima River	WA	LSS	R	L	8	0.08	0.30	0.362	-3.26	1969	1986	NCBP	1
24	Verdigris River, Bartlesville Reservoir	OK	CC	I	L	10	0.06	0.13	0.765	-0.60	1970	1986	NCBP	1
25	Columbia River	WA	CC	R	L	8	0.06	0.12	0.051	-8.66	1970	1980	NCBP	1
26	Cumberland River	TN	CC	R	L	9	0.08	0.12	0.125	-1.65	1970	1986	NCBP	1
27	Colorado River, Imperial Reservoir	AZ/CA	CC	I	L	10	0.01	0.02	0.001	6.36	1970	1984	NCBP	1
28	James River	SD	CC	R	L	11	0.10	0.14	0.845	0.21	1970	1995	NCBP/BEST	1
28	James River	SD	GE	R	M	10	0.21	0.32	0.198	2.35	1971	1995	NCBP/BEST	1
29	Kennebec River	ME	WS	R	L	7	0.16	0.2	0.091	-1.49	1971	1984	NCBP	1
29	Kennebec River	ME	YP	R	U	10	0.50	0.71	0.000	-9.13	1970	1986	NCBP	1
30	Lake Michigan	WI	BL	L	M	14	0.05	0.16	0.003	-5.75	1970	1986	NCBP	1
30	Lake Michigan	WI	LT	L	U	7	0.14	0.52	0.000	-10.26	1971	1986	NCBP	1

Site	Site name	State	Species ^a	Site type ^b	Trophic Level ^c	n	Hg (µg/g)		p-value	Percent change	Begin year	End year	Source ^d	Tissue type ^e
31	Colorado River, Lake Powell	AZ	CC	I	L	13	0.12	0.15	0.270	-1.52	1971	1986	NCBP	1
31	Colorado River, Lake Powell	AZ	LMB	I	U	7	0.18	0.23	0.126	-3.34	1970	1984	NCBP	1
32	Mississippi River	IA/WI	CC	R	L	11	0.10	0.18	0.433	-0.98	1970	1995	NCBP/BEST	1
33	Missouri River	NE/IA	CC	R	L	15	0.06	0.20	0.853	-0.38	1970	1995	NCBP/BEST	1
33	Missouri River	NE/IA	GE	R	M	7	0.10	0.20	0.000	-10.32	1970	1981	NCBP	1
34	North Platte River, Lake McConaughy	NE	CC	I	L	9	0.10	0.21	0.087	-3.21	1970	1986	NCBP	1
34	North Platte River, Lake McConaughy	NE	W	I	U	8	0.08	0.21	0.011	-7.37	1970	1986	NCBP	1
35	Nueces River	TX	GS	R	L	10	0.02	0.04	0.043	2.47	1970	1986	NCBP	1
36	Red River, Lake Texoma	OK/TX	CC	I	L	9	0.09	0.14	0.962	0.19	1970	1986	NCBP	1
37	<i>Rogue River, Goldray Dam</i>	OR	BB	I	M	10	0.12	0.51	0.000	-11.98	1970	1986	NCBP	1
38	Wisconsin River	WI	CC	R	L	12	0.16	0.42	0.000	-4.04	1970	1995	NCBP/BEST	1
39	Yazoo River	MS	SMBU	R	L	8	0.17	0.21	0.703	0.49	1970	1986	NCBP	1
40	Green River	UT	CC	R	L	10	0.11	0.17	0.082	2.53	1971	1986	NCBP	1
41	Mississippi River	MN	WS	R	L	11	0.20	0.43	0.727	0.60	1971	1995	NCBP/BEST	1
42	Ohio River	IL/KY	CC	R	L	8	0.14	0.23	0.000	-5.64	1971	1984	NCBP	1
43	Ohio River	OH/KY	CC	R	L	9	0.06	0.09	0.006	-3.56	1971	1987	NCBP	1
44	Raritan River	NJ	WS	R	L	9	0.18	0.34	0.032	3.46	1971	1986	NCBP	1
45	Rio Grande	CO	WS	R	L	7	0.03	0.06	0.000	-6.31	1971	1986	NCBP	1
46	St. Lawrence River	NY	WS	R	L	7	0.11	0.19	0.770	-1.02	1971	1987	NCBP	1
47	Susquehanna River, Conowingo Dam	MD	CC	I	L	7	0.08	0.12	0.000	-5.37	1971	1986	NCBP	1
48	Wabash River	IN/IL	CC	R	L	8	0.15	0.28	0.002	-4.59	1971	1986	NCBP	1
49	Des moines River	IA	CC	R	L	11	0.07	0.10	0.041	6.34	1972	1986	NCBP	1
50	Cooper River, Lake Moultrie	SC	CCF	I	U	8	0.04	0.05	0.208	3.14	1976	1986	NCBP	1
51	Rock River	WI	CC	R	L	9	0.04	0.09	0.643	3.20	1977	1988	WiDNR	1
52	Columbia River	WA	W	R	U	7	0.12	0.15	0.000	1.12	1970	1997	NCBP/BEST	1
53	Willamette River	OR	LSS	R	L	9	0.24	0.37	0.286	-2.63	1970	1997	NCBP/BEST	1
54	Tennessee River	TN	CC	R	L	8	0.21	0.28	0.000	-1.78	1971	1995	NCBP/BEST	1
55	Mississippi River	WI	CC	R	L	9	0.08	0.10	0.069	8.35	1978	1990	WiDNR	1
56	Canadian River, Eufaula Reservoir	OK	CC	I	L	9	0.08	0.14	0.017	3.81	1979	1995	NCBP/BEST	1
57	Abbotts Creek	NC	BG	R	M	19	0.07	0.28	0.002	-6.89	1981	1996	NLFWA	7
58	Root River	WI	CC	R	L	7	0.03	0.06	0.001	13.39	1981	1991	WiDNR	1
59	Wisconsin River	WI	W	R	U	17	0.31	0.47	0.393	-0.89	1981	1994	WiDNR	7
60	Wisconsin River	WI	NP	R	U	9	0.45	0.59	0.659	-0.61	1981	1996	WiDNR	7
61	Des moines River	IA	CC	R	L	12	0.11	0.24	0.021	-6.80	1984	1995	DMRWQN	7
62	Des moines River	IA	CC	R	L	11	0.15	0.25	0.000	-11.83	1985	1995	DMRWQN	7
63	Saylorville Reservoir	IA	CC	L	L	11	0.08	0.34	0.167	-8.96	1985	1995	DMRWQN	7
64	Kankakee River	IN	CC	R	L	7	0.12	0.17	0.127	2.44	1988	2004	InDEM	8
65	Kankakee River	IN	CC	R	L	7	0.15	0.16	0.520	1.32	1988	2004	InDEM	8
66	Lake Superior	MN	CS	L	L	34	0.22	0.38	0.790	0.34	1983	2001	MnPCA	7
67	Wabash River	IN	CC	R	L	10	0.21	0.31	0.227	-3.24	1989	2004	InDEM	8
68	Black River	SC	LMB	R	U	17	1.30	2.56	0.014	-8.02	1993	2004	ScDHEC	7
69	Combahee River	SC	B	R	U	18	0.51	2	0.781	1.14	1993	2004	ScDHEC	7

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69	Combahee River	SC	LMB	R	U	26	0.87	1.90	0.274	4.52	1993	2004	ScDHEC	7
70	Edisto River	SC	LMB	R	U	17	0.65	1.63	0.109	-7.02	1993	2003	ScDHEC	7
71	Edisto River	SC	LMB	R	U	20	1.02	1.75	0.794	-0.73	1993	2003	ScDHEC	7
72	Great Pee Dee	SC	B	R	U	16	0.84	2.20	0.166	5.89	1993	2003	ScDHEC	7
72	Great Pee Dee	SC	LMB	R	U	19	0.54	2.40	0.573	2.36	1993	2004	ScDHEC	7
73	Great Pee Dee	SC	LMB	R	U	19	0.83	1.67	0.020	-5.57	1993	2004	ScDHEC	7
73	Great Pee Dee	SC	RS	R	M	25	< 0.25	0.94	0.090	8.85	1993	2004	ScDHEC	7
74	Langley Pond	SC	LMB	L	U	41	1.11	1.64	0.885	-0.29	1993	2004	ScDHEC	7
75	Pocotaligo River	SC	B	R	U	17	1.39	2.27	0.801	-0.49	1993	2003	ScDHEC	7
75	Pocotaligo River	SC	LMB	R	U	12	1.56	2.04	0.841	1.10	1993	2004	ScDHEC	7
76	Santee River	SC	LMB	R	U	18	0.52	1.00	0.383	-3.42	1993	2004	ScDHEC	7
77	Santee River	SC	B	R	U	18	0.52	1.60	0.736	-2.29	1993	2004	ScDHEC	7
<u>77</u>	<u>Santee River</u>	<u>SC</u>	<u>LMB</u>	<u>R</u>	<u>U</u>	<u>17</u>	<u>0.35</u>	<u>1.70</u>	<u>0.038</u>	<u>11.05</u>	<u>1993</u>	<u>2004</u>	<u>ScDHEC</u>	<u>7</u>
78	Waccamaw River	SC	LMB	R	U	8	1.29	1.94	0.046	-6.78	1993	2003	ScDHEC	7
79	Waccamaw River	SC	LMB	R	U	17	1.49	2.30	0.219	-2.37	1993	2004	ScDHEC	7
80	Waccamaw River	SC	BG	R	M	16	0.29	0.44	0.111	-2.36	1993	2004	ScDHEC	7
80	Waccamaw River	SC	LMB	R	U	24	0.76	1.45	0.719	0.64	1993	2004	ScDHEC	7
80	Waccamaw River	SC	RS	R	M	24	0.30	0.85	0.563	-1.53	1993	2004	ScDHEC	7
81	Bogue Chitto	LA	LMB	R	U	12	0.68	1.03	0.556	1.97	1994	2004	LaDEQ	8
82	Congaree River	SC	LMB	R	U	18	< 0.25	0.81	0.088	-13.29	1994	2004	ScDHEC	7
83	Cooper River	SC	B	R	U	21	0.34	1.35	0.834	1.19	1994	2004	ScDHEC	7
83	Cooper River	SC	LMB	R	U	29	< 0.25	0.89	0.536	-5.12	1994	2004	ScDHEC	7
84	East Fork Cooper River	SC	B	R	U	30	0.45	1.10	0.816	-0.80	1994	2004	ScDHEC	7
84	East Fork Cooper River	SC	LMB	R	U	27	0.39	2.16	0.992	-0.04	1994	2004	ScDHEC	7
<u>85</u>	<u>Lake Marion</u>	<u>SC</u>	<u>LMB</u>	<u>L</u>	<u>U</u>	<u>26</u>	<u>< 0.25</u>	<u>0.41</u>	<u>0.033</u>	<u>17.03</u>	<u>1994</u>	<u>2004</u>	<u>ScDHEC</u>	<u>7</u>
<u>86</u>	<u>Mermentau River</u>	<u>LA</u>	<u>LMB</u>	<u>R</u>	<u>U</u>	<u>7</u>	<u>0.49</u>	<u>0.64</u>	<u>0.004</u>	<u>6.49</u>	<u>1994</u>	<u>2004</u>	<u>LaDEQ</u>	<u>8</u>
87	Savannah River	SC	LMB	R	U	21	0.38	2.58	0.759	-2.12	1994	2004	ScDHEC	7
88	Savannah River	SC	LMB	R	U	15	0.43	0.76	0.227	-3.72	1994	2004	ScDHEC	7
89	Savannah River	SC	B	R	U	21	0.56	1.70	0.264	5.96	1994	2004	ScDHEC	7
89	Savannah River	SC	LMB	R	U	20	0.26	0.76	0.067	-5.06	1994	2004	ScDHEC	7
90	Maquoketa River	IA	CC	R	L	7	0.07	0.22	0.470	-4.77	1995	2005	IaDNR	1

^a BMBU = Bigmouth Buffalo, BL = Bloater, BG = Bluegill, B = Bowfin, BB= Brown Bullhead, CCF = Channel Catfish, CS = Chinook Salmon, CC = Common Carp, GS = Gizzard Shad, G = Goldfish, GE = Goldeye, LT = Lake Trout, LMB = Largemouth Bass, LSS = largescale Sucker, LNS = Longnose Sucker, NP = Northern Pike, RS = Redear Sunfish, RB = Rock Bass, S= Sauger, SMBU = Smallmouth Buffalo, SS = Spotted Sucker, W = Walleye, WB = White Bass, WCF = White Catfish, WS = White Sucker, YP = Yellow Perch; ^b R = river, I = impoundment, L = lake; ^c L = lower, M = middle, U = upper; ^d NCBP = National Contaminant Biomonitoring Program, BEST = Biomonitoring of Environmental Status and Trends, WiDNR = Wisconsin Department of Natural Resources, NLFWA = National Listing of Fish and Wildlife Advisories, InDEM = Indiana Department of Environmental Monitoring, DMRWQN = Des Moines River Water Quality Network, MnPCA = Minnesota Pollution Control Agency, ScDHEC = South Carolina Department of Health and Environmental Conservation, LaDEQ = Louisiana Department of Environmental Quality, IaDNR = Iowa Department of Natural Resources; ^e 1 = whole, 7 = skin-on fillet, 8 = skin-off fillet