



Technical Report 78-1 (BEP)
Division of Fish and Wildlife

Toxic Substances in Fish and Wildlife

1977 Annual Report
Volume 1

March 1978

1977 HEAVY METAL ANALYSIS RESULTS FROM THE STATEWIDE TOXIC SUBSTANCES MONITORING PROGRAM;
 DASH (-) INDICATES VALUE THAT WAS NOT DETERMINED

PART 1

LOCATION	SPECIES	NO. OF FISH ANALYZED	NO. OF ANALYSES	AVERAGE LENGTH (mm)	LENGTH RANGE (mm)	AVERAGE WEIGHT (g)	WEIGHT RANGE (g)	AVERAGE MERCURY (ppm)	MERCURY RANGE (ppm)	AVERAGE LEAD (ppm)	LEAD RANGE (ppm)
<u>Niagara River</u> Buffalo	Smallmouth bass	19	2	316	249-422	449	200-1134	0.31	0.18-0.46	-	-
	White sucker	20	2	334	218-457	410	83-910	0.17	0.11-0.24	-	-
<u>Buffalo River</u> Buffalo	White sucker	10	1	283	231-318	192	95-296	0.29	-	0.15	-
	Carp	10	1	420	356-483	1003	408-2087	0.12	-	0.20	-
<u>Eighteen Mile Creek</u> Olcott	Northern pike	13	2	611	450-754	1316	284-2586	0.35	0.34-0.36	-	-
	White sucker	20	2	350	249-445	431	105-796	0.19	0.12-0.26	-	-
<u>Chautauqua Lake</u> Benus Point	Largemouth bass	10	2	327	274-386	472	271-779	0.29	0.24-0.35	0.29	0.15-0.44
	Brown bullhead	10	1	276	241-302	268	156-318	0.10	-	-	-
<u>Johnson Creek</u> Lyndonville	Black crappie	10	1	255	243-268	283	233-327	0.21	-	-	-
	Brown bullhead	10	1	264	236-293	215	163-322	0.20	-	-	-
	White sucker	20	2	324	269-392	339	198-562	0.16	0.16-0.16	-	-
<u>Canaseraga Creek</u> Dansville	White sucker	9	1	250	210-299	141	69-233	0.22	-	-	-
	Northern hog sucker	6	1	223	216-240	94	71-131	0.20	-	-	-
	Redhorse	5	1	246	125-342	267	167-340	0.32	-	-	-
<u>Canisteo River</u> Addison	Smallmouth bass	21	2	234	160-295	164	50-304	0.38	0.33-0.42	-	-
	Northern hog sucker	10	1	257	233-281	168	120-225	0.26	-	-	-
	White sucker	10	1	333	295-394	353	214-702	0.26	-	-	-
<u>Cohocton River</u> Cooper Plain	Smallmouth bass	14	2	258	175-383	265	67-668	0.53	0.46-0.62	-	-
	White sucker	19	2	316	104-418	395	70-756	0.27	0.14-0.38	-	-
<u>Susquehanna River</u> Windsor	Smallmouth bass	12	2	282	218-382	314	132-688	0.48	0.36-0.61	-	-
	White sucker	15	2	376	250-442	584	156-856	0.28	0.16-0.34	-	-
<u>Genesee River</u> Rochester	Redhorse	12	3	340	313-374	453	308-625	0.24	0.22-0.27	0.50	0.44-0.58
	Brown trout	20	4	302	212-385	314	80-640	0.23	0.15-0.30	0.41	0.34-0.48
<u>Oatka Creek</u>	White sucker	5	2	305	282-363	298	220-460	0.32	0.31-0.34	0.59	0.45-0.62
	Northern pike	17	2	750	540-900	2491	950-4250	0.41	0.34-0.50	-	-
<u>Cross Lake</u>	White perch	19	2	171	141-205	71	35-104	0.20	0.14-0.26	-	-
	White sucker	13	2	380	320-457	516	308-851	0.20	0.19-0.22	-	-

LOCATION	SPECIES	CADMIUM (ppm)	CADMIUM RANGE (ppm)	CHROMIUM (ppm)	CHROMIUM RANGE (ppm)	ZINC (ppm)	ZINC RANGE (ppm)	COPPER (ppm)	COPPER RANGE (ppm)
<u>Niagara River</u> Buffalo	Smallmouth bass	<0.01	<0.01-<0.01	0.09	0.02-0.16	9.26	7.31-11.01	0.50	0.47-0.53
	White sucker	<0.01	<0.01-<0.01	0.04	0.02-0.07	10.19	9.26-11.13	0.59	0.58-0.60
<u>Buffalo River</u> Buffalo	White sucker	<0.01	-	0.12	-	11.35	-	0.55	-
	Carp	<0.01	-	0.13	-	26.07	-	0.66	-
<u>Eighteen Mile Creek</u> Olcott	Northern pike	<0.01	<0.01-<0.01	0.02	0.02-0.02	10.80	10.62-10.96	0.38	0.34-0.41
	White sucker	<0.01	<0.01-<0.01	0.04	0.02-0.07	9.90	8.58-11.39	0.58	0.56-0.60
<u>Chautauqua Lake</u> Bemus Point	Largemouth bass	<0.01	<0.01-<0.01	0.12	0.10-0.15	8.46	6.65-10.28	0.32	0.27-0.37
	Brown bullhead	<0.01	-	0.11	-	8.44	-	0.41	-
<u>Johnson Creek</u> Lyndonville	Black crappie	<0.01	-	0.02	-	9.20	-	0.34	-
	Brown bullhead	<0.01	-	0.02	-	9.55	-	0.55	-
	White sucker	<0.01	<0.01-<0.01	0.02	0.02-0.02	8.26	8.22-8.30	0.72	0.50-0.95
<u>Canaseraga Creek</u> Dansville	White sucker	<0.01	-	0.06	-	13.69	-	1.30	-
	Northern hog sucker	0.03	-	0.06	-	18.40	-	0.55	-
	Redhorse	<0.01	-	0.06	-	8.09	-	0.58	-
<u>Canisteo River</u> Addison	Smallmouth bass	<0.01	<0.01-<0.01	0.03	0.02-0.04	6.97	6.47-7.52	0.52	0.38-0.67
	Northern hog sucker	<0.01	-	0.03	-	15.19	-	0.66	-
	White sucker	<0.01	-	0.03	-	8.21	-	0.55	-
<u>Cohocton River</u> Cooper Plain	Smallmouth bass	<0.01	<0.01-<0.01	0.03	0.01-0.04	6.38	5.75-6.85	0.40	0.38-0.43
	White sucker	<0.01	<0.01-<0.01	0.03	0.02-0.03	6.91	6.47-7.39	0.52	0.50-0.55
<u>Susquehanna River</u> Windsor	Smallmouth bass	<0.01	<0.01-<0.01	0.08	0.08-0.08	6.29	5.56-7.03	0.38	0.34-0.43
	White sucker	<0.01	<0.01-<0.01	0.02	0.02-0.02	5.99	5.67-6.63	0.51	0.49-0.54
<u>Genesee River</u> Rochester	Redhorse	<0.01	<0.01-<0.01	0.18	0.16-0.20	8.45	8.34-8.67	0.93	0.80-1.09
	Brown trout	<0.01	<0.01-<0.01	0.32	0.24-0.48	12.25	10.37-14.06	1.10	0.94-1.17
<u>Oatka Creek</u>	White sucker	<0.01	<0.01-<0.01	0.30	0.28-0.36	11.75	10.56-12.05	1.03	0.86-1.07
	Northern pike	<0.01	<0.01-<0.01	0.02	0.01-0.03	8.68	7.99-9.17	0.35	0.34-0.36
<u>Cross Lake</u>	White perch	<0.01	<0.01-<0.01	0.04	0.01-0.06	12.21	9.62-15.08	1.32	1.19-1.46
	White sucker	<0.01	<0.01-<0.01	0.02	0.01-0.02	6.37	5.27-7.05	0.51	0.51-0.52