

Watershed Summary Information

Accounting Unit Name:	Eastern Lake Erie
State(s):	NY
Political Boundaries:	Niagara, Erie, Genesee, Wyoming
Major Waterways:	Niagara R Tonawanda Cr Ellicott Cr Murder Cr Little Tonawanda Cr
Number of Stations in Watershed:	Tier1 - 24 Tier2 - 16 Tier3 - 1



Figure 79. Watershed Location Map

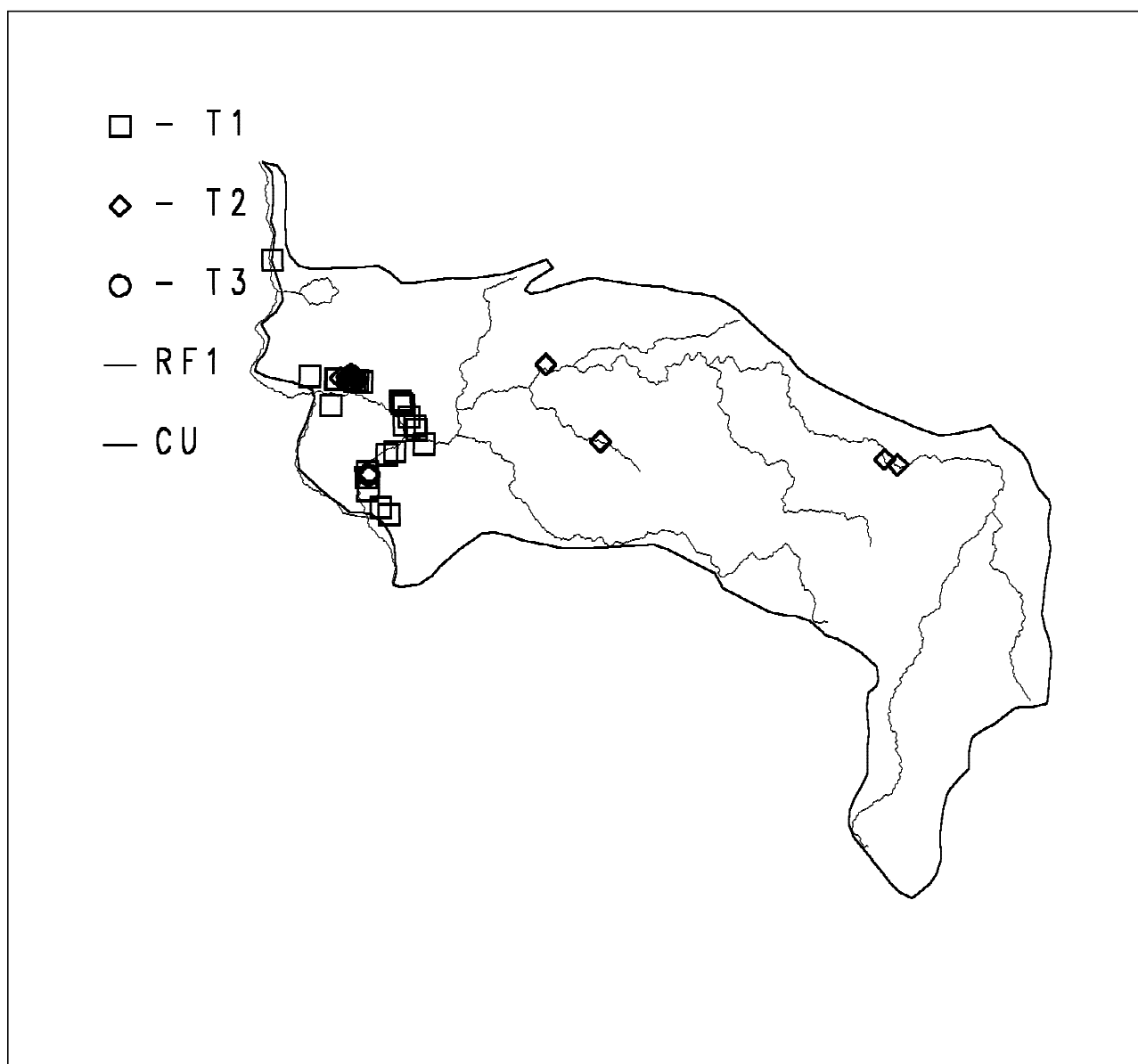


Figure 80. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **STORET** Agency: **11BIOACC**
 Monitoring Program: **USEPA National Bioaccumulation Study**
 Num. of Stations: 3 Date Range: 1987

Source: **STORET** Agency: **11COEBUF**
 Monitoring Program: **Corps of Engineers Data Buffalo District**
 Num. of Stations: 7 Date Range: 1983

Source: **STORET** Agency: **1115GLSB**
 Monitoring Program: **USEPA Region 5 Great Lakes Surveillance Branch Data**
 Num. of Stations: 22 Date Range: 1981

Source: **STORET** Agency: **112WRD**
Monitoring Program: **US Geological Survey Data**
Num. of Stations: 5 Date Range: 1982-88

Source: **STORET** Agency: **21NYDECA**
Monitoring Program: **NY Dept of Env. Cons. Water Quality Network Data**
Num. of Stations: 4 Date Range: 1987-88

Chemicals Responsible for Sampling Station Classification as Tier 1 or Tier 2

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Polychlorinated biphenyls	34	26	17	9	14	4	3	23
Fluoranthene	24	24	7	17	7	17	.	.
Pyrene	24	23	13	10	13	10	.	.
Bis(2-ethylhexyl)phthalate	23	23	10	13	10	13	.	10
Copper	31	22	.	22	.	22	.	.
Mercury	37	21	5	16	5	16	.	.
Lead	33	20	.	20	.	20	.	.
Nickel	36	20	.	20	.	20	.	.
DDT	30	19	12	7	12	7	.	13
Naphthalene	18	18	10	8	10	8	.	.
Zinc	34	18	.	18	.	18	.	.
Anthracene&Phenanthrene	17	17	14	3	14	3	.	.
BHC	32	17	6	11	6	11	.	7
Cadmium	33	17	.	17	.	17	.	.
Benzo(a)anthracene/Chrysene	15	15	13	2	13	2	.	15
Heptachlor epoxide	29	11	.	11	.	.	.	11
Chromium	32	9	.	9	.	9	.	.
Dichlorobenzene, 1,2-	15	8	6	2	6	2	.	.
Benzo(a)pyrene	8	8	1	7	1	7	.	8
Dieldrin	19	8	1	7	1	4	.	7
Chlordane	23	8	.	8	.	8	.	4
Dichlorobenzene, 1,4-	13	6	6	.	6	.	.	2
Benzo(a)anthracene	7	6	.	6	.	6	.	3
Chrysene	7	6	.	6	.	6	.	.
Hexachlorobenzene	26	6	.	6	.	6	.	1
Phenanthrene	7	6	.	6	.	6	.	.
Acenaphthene	5	5	3	2	3	2	.	.
Anthracene	8	5	1	4	1	4	.	.
Dichlorobenzene, 1,3-	13	4	.	4	.	4	.	.
Silver	7	4	.	4	.	4	.	.
Trichlorobenzene, 1,2,4-	14	4	.	4	.	4	.	.
Dioxins	10	3	3	.	.	.	3	.
Fluorene	3	3	3	.	3	.	.	.
Dichlorobenzenes	6	3	2	1	2	1	.	1

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Benzo(b)fluoranthene	7	3	.	3	.	.	.	3
Indeno(1,2,3-cd)pyrene	7	3	.	3	.	.	.	3
Dibenzofuran	2	2	1	1	1	1	.	.
Di-n-butyl phthalate	27	2	.	2	.	2	.	.
Endosulfan, beta-	23	2	.	2	.	2	.	.
Methoxychlor	19	2	.	2	.	2	.	.
Phenol	9	2	.	2	.	2	.	.
Diethyl phthalate	8	1	1	.	1	.	.	.
Xylenes	3	1	1	.	1	.	.	.
Arsenic	9	1	.	1	.	1	.	.
Chlorobenzene	15	1	.	1	.	1	.	.
Endosulfan, alpha-	13	1	.	1	.	1	.	.
Ethylbenzene	9	1	.	1	.	1	.	.
Hexachlorobutadiene	11	1	.	1	.	1	.	1
Mirex/Dechlorane	14	1	.	1	.	.	.	1
Pentachlorobenzene	8	1	.	1	.	1	.	.
Toluene	18	1	.	1	.	1	.	.

Sediment Chemistry Data: Chemical Summary

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	7	628.57	400.00	7	1600.00	200.00
Acrylonitrile	7	0.00	0.00	0	.	.
Aldrin	13	0.00	0.00	0	.	.
Anthracene	9	1304.43	140.00	6	5600.00	100.00
Anthracene&Phenanthrene	23	3605.22	1600.00	23	26300.00	220.00
Arsenic	9	3754.00	3799.00	7	10290.00	1800.00
Benzene	11	2.73	0.00	4	10.00	5.00
Benzo(a)anthracene	7	168.53	159.90	6	440.00	100.00
Benzo(a)anthracene/Chrysene	20	17965.00	8400.00	20	59500.00	700.00
Benzo(a)pyrene	9	6977.76	590.00	9	29600.00	229.90
Benzo(b)fluoranthene	7	202.83	150.00	4	479.90	150.00
Benzo(ghi)perylene	7	0.00	0.00	0	.	.
Benzo(k)fluoranthene	7	461.37	530.00	7	579.90	219.90
Biphenyl	1	900.00	900.00	1	900.00	900.00
Bis(2-ethylhexyl)phthalate	30	4287.63	1650.00	30	23800.00	200.00
Butyl benzyl phthalate	7	0.00	0.00	0	.	.
BHC	72	71.56	0.00	20	3250.00	0.05
Cadmium	36	1268.61	600.00	25	6000.00	200.00
Chlordane	22	8.64	0.00	9	73.00	1.00
Chlorobenzene	16	65.38	1.00	8	1000.00	2.00
Chlorpyrifos/Dursban	2	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Chromium	33	46757.88	25990.00	31	260000.0	70.00
Chrysene	7	568.54	339.90	6	1670.00	209.90
Copper	35	48799.43	29000.00	35	230000.0	2000.00
Di-n-butyl phthalate	28	243.43	57.00	21	1700.00	26.00
Di-n-octyl phthalate	7	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	7	0.00	0.00	0	.	.
Dibenzofuran	2	5650.00	5650.00	2	9600.00	1700.00
Dibromochloromethane	1	11.00	11.00	1	11.00	11.00
Dichlorobenzene, 1,2-	18	2961.11	800.00	11	11700.00	200.00
Dichlorobenzene, 1,3-	17	3152.94	500.00	10	17500.00	500.00
Dichlorobenzene, 1,4-	16	2037.50	700.00	9	21400.00	700.00
Dichlorobenzenes	6	555.00	50.00	6	2800.00	30.00
Dichloroethane 1,1-	1	14.00	14.00	1	14.00	14.00
Dichloromethane	18	437.83	153.00	18	2340.00	4.00
Dichloropropane, 1,2-	1	11.00	11.00	1	11.00	11.00
Dieldrin	18	15.06	0.00	5	260.00	1.00
Diethyl phthalate	8	112.50	0.00	1	900.00	900.00
Dimethyl phthalate	7	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	7	0.00	0.00	0	.	.
Dioxins	7	0.00	0.00	0	.	.
DCPA/Dacthal	5	51.20	6.00	5	240.00	1.00
DDT	111	36.54	4.00	74	730.00	1.00
Endosulfan, alpha-	15	4.67	0.00	2	70.00	0.03
Endosulfan, beta-	25	10.24	0.00	12	200.00	2.00
Endrin	15	0.47	0.00	2	4.00	3.00
Ethylbenzene	9	14.00	0.00	2	124.00	2.00
Fluoranthene	31	6802.90	3200.00	31	50000.00	129.90
Fluorene	3	1266.67	600.00	3	2600.00	600.00
Heptachlor	13	0.00	0.00	0	.	.
Heptachlor epoxide	28	48.22	1.01	15	1000.00	0.03
Hexachlorobenzene	23	42.04	4.00	16	480.00	0.02
Hexachlorobutadiene	8	58.75	0.00	1	470.00	470.00
Hexachloroethane	7	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	7	94.27	0.00	3	290.00	179.90
Isophorone	7	0.00	0.00	0	.	.
Lead	37	139293.8	37000.00	36	2100000	4000.00
Mercury	39	356.41	300.00	27	1400.00	100.00
Methoxychlor	18	21.50	0.00	5	282.00	2.00
Mirex/Dechlorane	13	0.00	0.00	0	.	.
Naphthalene	24	754.17	450.00	24	3100.00	200.00
Nickel	40	16311.25	15495.00	32	51000.00	3800.00
Nitrosodiphenylamine, N-	7	0.00	0.00	0	.	.
Pentachlorobenzene	5	456.00	200.00	5	1700.00	40.00
Pentachlorophenol	7	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Phenanthrene	7	331.40	200.00	6	1020.00	129.90
Phenol	9	422.22	0.00	2	3100.00	700.00
Polychlorinated biphenyls	159	533.01	30.00	97	10200.00	3.00
Pyrene	31	5631.57	2800.00	31	38500.00	129.90
Silver	7	1291.43	1000.00	7	3700.00	370.00
Tetrachloroethane, 1,1,2,2-	4	2.75	2.00	4	5.00	2.00
Tetrachloroethene	9	4.22	3.00	9	12.00	2.00
Toluene	18	325.67	3.00	11	5600.00	1.00
Toxaphene	13	0.00	0.00	0	.	.
Tribromomethane/Bromoform	5	4.80	3.00	5	12.00	2.00
Trichlorobenzene, 1,2,4-	11	290.91	0.00	4	1100.00	300.00
Trichloroethane, 1,1,1-	1	8.00	8.00	1	8.00	8.00
Trichloromethane/Chloroform	7	239.57	112.00	7	1190.00	12.00
Xylenes	5	109.40	100.00	5	342.00	2.00
Zinc	38	219041.8	120000.0	38	780000.0	30000.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Biphenyl	4	0.00	0.00	0	.	.
BHC	8	0.93	0.00	2	4.05	3.42
Chlordane	8	3.76	3.28	5	10.30	2.99
Chlorpyrifos/Dursban	4	0.00	0.00	0	.	.
Dicofol/Kelthane	4	0.00	0.00	0	.	.
Dieldrin	4	19.87	19.55	4	25.80	14.60
Dioxins	8	0.01	0.01	8	0.03	0.00
DDT	1	58.20	58.20	1	58.20	58.20
Endrin	4	0.00	0.00	0	.	.
Heptachlor	4	0.00	0.00	0	.	.
Heptachlor epoxide	4	0.38	0.00	1	1.51	1.51
Hexachlorobenzene	4	6.54	7.33	3	11.50	5.23
Hexachlorobutadiene	4	0.00	0.00	0	.	.
Isopropalin	4	0.00	0.00	0	.	.
Mercury	3	76.67	80.00	3	120.00	30.00
Methoxychlor	4	0.00	0.00	0	.	.
Mirex/Dechlorane	4	16.40	0.00	1	65.60	65.60
Pentachlorobenzene	4	3.62	3.06	2	8.37	6.11
Pentachloronitrobenzene/Quin	4	0.00	0.00	0	.	.
Polychlorinated biphenyls	4	3429.83	3309.50	4	6346.00	754.30
Tetrachlorobenzene, 1,2,4,5-	4	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	4	0.77	0.00	1	3.09	3.09
Trifluralin/Treflan	4	0.00	0.00	0	.	.