

Watershed Summary Information

Accounting Unit Name: Southern Lake Erie

State(s): OH

Political Boundaries: Cuyahoga, Lorain, Medina, Erie, Huron, Ashland, Summit

Major Waterways: Black R
Rocky R
Black R, E Br
Rocky R, W Br
Rocky R, E Br

Number of Stations in Watershed: Tier1 - 24
Tier2 - 31
Tier3 - 4



Figure 71. Watershed Location Map

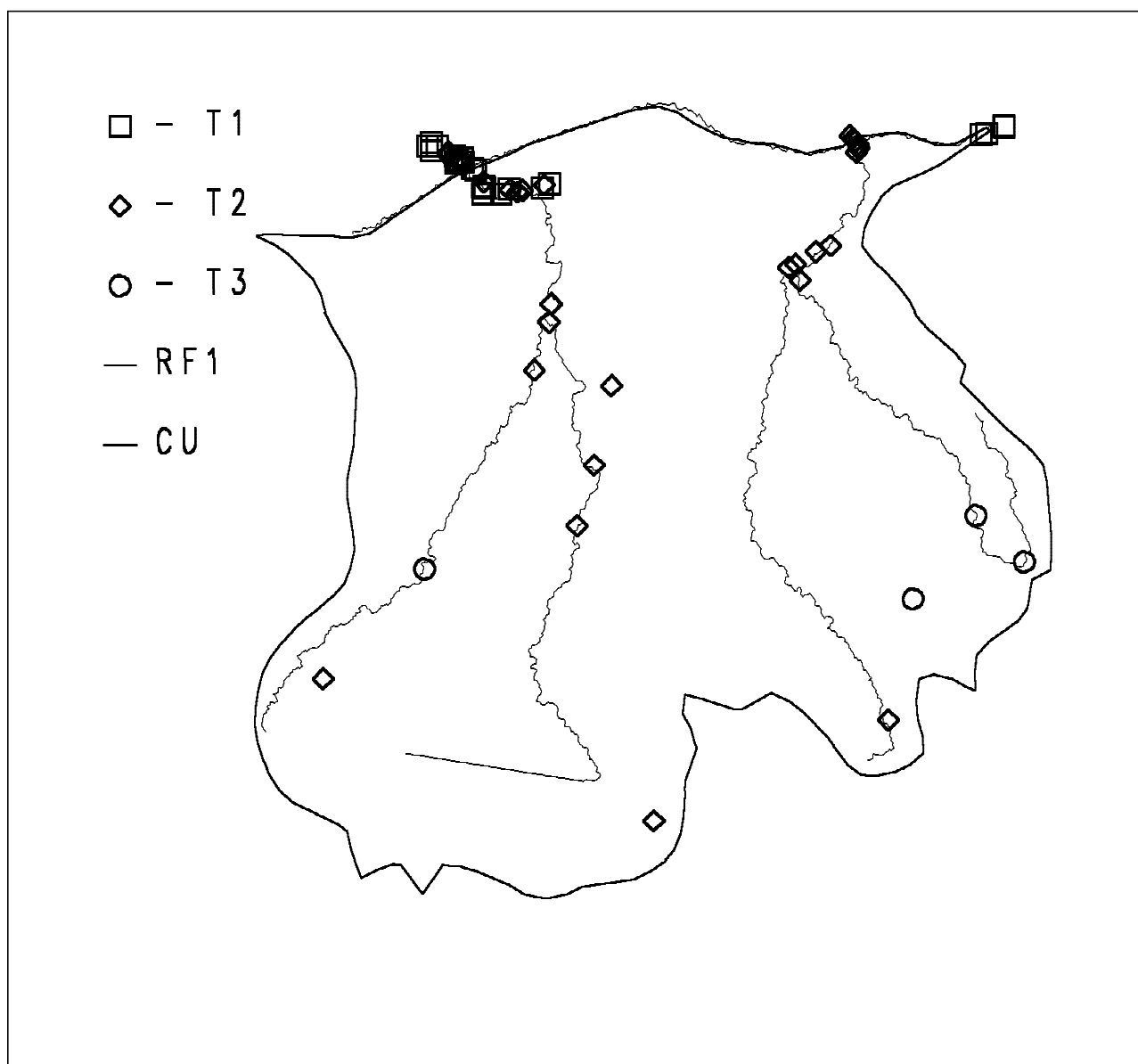


Figure 72. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **STORET** Agency: **11BIOACC**
 Monitoring Program: **USEPA National Bioaccumulation Study**
 Num. of Stations: 1 Date Range: 1984

Source: **STORET** Agency: **11COEBUF**
 Monitoring Program: **Corps of Engineers Data Buffalo District**
 Num. of Stations: 24 Date Range: 1981-88

Source: **STORET** Agency: **1115GLSB**
 Monitoring Program: **USEPA Region 5 Great Lakes Surveillance Branch Data**
 Num. of Stations: 10 Date Range: 1982

Source: STORET Agency: 21OHIO

Monitoring Program: Ohio EPA Water, Sediment, Tissue And Drinking Water Data

Num. of Stations: 24 Date Range: 1982-92

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
Nickel	58	50	.	50	.	50	.	.
Copper	58	43	.	43	.	43	.	.
Cadmium	58	42	.	42	.	42	.	.
Arsenic	43	38	.	38	.	38	.	.
Zinc	58	37	.	37	.	37	.	.
Lead	58	33	.	33	.	33	.	.
Mercury	42	25	2	23	2	23	.	.
Phenanthrene	26	23	11	12	11	12	.	.
Fluoranthene	26	23	9	14	9	14	.	.
Benzo(a)pyrene	25	22	19	3	19	3	.	22
Polychlorinated biphenyls	39	19	12	7	11	7	1	18
Anthracene	26	17	4	13	4	13	.	.
Pyrene	26	15	10	5	10	5	.	.
Chrysene	18	15	4	11	4	11	.	.
Chromium	58	13	.	13	.	13	.	.
Chlordane	34	11	.	11	.	10	.	10
DDT	29	10	7	3	7	3	.	8
Benzo(a)anthracene/Chrysene	8	8	8	.	8	.	.	8
Naphthalene	29	8	8	.	8	.	.	.
Bis(2-ethylhexyl)phthalate	8	8	7	1	7	1	.	7
Fluorene	23	7	4	3	4	3	.	.
Acenaphthene	23	7	2	5	2	5	.	.
BHC	26	7	.	7	.	7	.	7
Benzo(ghi)perylene	22	6	.	6	.	6	.	.
Indeno(1,2,3-cd)pyrene	22	6	.	6	.	6	.	6
Dibenzofuran	5	3	1	2	1	2	.	.
Di-n-butyl phthalate	5	2	.	2	.	2	.	.
Heptachlor epoxide	24	2	.	2	.	.	.	2
Silver	15	2	.	2	.	2	.	.
Acenaphthylene	17	1	1	.	1	.	.	.
Dibenzo(a,h)anthracene	17	1	1	.	1	.	.	1
Dioxins	1	1	1	.	.	.	1	.
Methylnaphthalene, 2-	1	1	1	.	1	.	.	.
Dieldrin	19	1	.	1	.	.	.	1
Hexachlorobenzene	11	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	23	852.23	0.00	10	17000.00	0.32
Acenaphthylene	17	70.59	0.00	1	1200.00	1200.00
Aldrin	36	0.00	0.00	0	.	.
Anthracene	39	674.46	0.72	26	15000.00	0.11
Arsenic	61	14028.34	11290.00	61	61000.00	2020.00
Benzene	21	0.00	0.00	0	.	.
Benzo(a)anthracene	21	0.80	0.49	12	7.46	0.44
Benzo(a)anthracene/Chrysene	8	14962.50	6700.00	8	74900.00	1700.00
Benzo(a)pyrene	38	4175.36	2010.00	30	77700.00	0.18
Benzo(ghi)perylene	22	2173.04	0.00	9	35000.00	1.04
Benzo(k)fluoranthene	16	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	8	10700.00	4600.00	8	33500.00	1900.00
Bromophenyl phenyl ether, 4-	2	900.00	900.00	2	1000.00	800.00
BHC	88	5.80	0.00	8	258.00	1.00
Cadmium	76	5822.35	2000.00	76	59000.00	61.00
Chlordane	46	10.24	0.00	10	116.00	5.00
Chlorobenzene	21	0.00	0.00	0	.	.
Chromium	76	37103.82	19100.00	76	240000.0	5000.00
Chrysene	31	918.36	9.62	27	4199.00	0.70
Copper	76	49094.21	29700.00	76	230000.0	3850.00
Di-n-butyl phthalate	5	1240.00	1200.00	5	1900.00	400.00
Dibenzo(a,h)anthracene	17	482353.0	0.00	2	8200000	1.75
Dibenzofuran	5	2460.06	600.00	5	10600.00	0.30
Dibromochloromethane	16	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	16	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	16	0.00	0.00	0	.	.
Dichloroethane 1,1-	1	2.00	2.00	1	2.00	2.00
Dichloroethane 1,2-	23	0.17	0.00	2	2.00	2.00
Dichloroethene, trans-1,2-	16	0.00	0.00	0	.	.
Dichloromethane	24	0.92	0.00	3	9.00	5.00
Dichloropropane, 1,2-	17	0.12	0.00	1	2.00	2.00
Dieldrin	31	0.00	0.00	0	.	.
DDT	107	10.51	0.00	29	210.00	4.00
Endosulfan, alpha-	16	0.00	0.00	0	.	.
Endosulfan, beta-	16	0.00	0.00	0	.	.
Endrin	36	0.00	0.00	0	.	.
Ethylbenzene	16	0.00	0.00	0	.	.
Fluoranthene	39	3842.88	2599.00	36	55300.00	0.66
Fluorene	23	708.75	0.00	10	12800.00	0.15
Heptachlor	36	0.00	0.00	0	.	.
Heptachlor epoxide	23	0.65	0.00	2	9.00	6.00
Hexachlorobenzene	10	8.40	6.00	9	24.00	2.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Indeno(1,2,3-cd)pyrene	22	2836.47	0.00	8	46800.00	0.99
Lead	76	57092.74	30600.00	73	590000.0	4000.00
Mercury	54	213.14	184.95	46	1600.00	0.01
Methoxychlor	15	0.00	0.00	0	.	.
Methylnaphthalene, 2-	1	2600.00	2600.00	1	2600.00	2600.00
Mirex/Dechlorane	5	0.00	0.00	0	.	.
Naphthalene	29	1055.54	0.00	13	21000.00	0.13
Nickel	76	34720.26	27400.00	76	120000.0	6320.00
Pentachlorophenol	5	0.00	0.00	0	.	.
Phenanthrene	39	2016.95	419.90	36	43000.00	0.10
Polychlorinated biphenyls	233	83.03	0.00	29	4093.00	71.00
Pyrene	40	3664.76	0.79	28	45200.00	0.18
Silver	15	269.33	0.00	6	1000.00	140.00
Tetrachloroethane, 1,1,2,2-	17	0.35	0.00	1	6.00	6.00
Tetrachloroethene	20	0.00	0.00	0	.	.
Tetrachloromethane	16	0.00	0.00	0	.	.
Toluene	21	2.73	0.00	3	48.70	0.04
Toxaphene	36	0.00	0.00	0	.	.
Tribromomethane/Bromoform	22	0.09	0.00	1	2.00	2.00
Trichloroethane, 1,1,1-	21	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	16	0.00	0.00	0	.	.
Trichloroethene	23	0.57	0.00	2	11.00	2.00
Trichlorofluoromethane	16	0.00	0.00	0	.	.
Trichloromethane/Chloroform	21	0.00	0.00	0	.	.
Xylenes	5	0.00	0.00	0	.	.
Zinc	76	230035.1	150000.0	76	1300000	25000.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Biphenyl	1	7.54	7.54	1	7.54	7.54
BHC	2	30.20	30.20	2	44.50	15.90
Chlordane	2	138.00	138.00	2	164.00	112.00
Chlorpyrifos/Dursban	1	46.70	46.70	1	46.70	46.70
Dicofol/Kelthane	1	0.00	0.00	0	.	.
Dieldrin	1	64.20	64.20	1	64.20	64.20
Dioxins	2	0.00	0.00	2	0.01	0.00
DDT	1	115.00	115.00	1	115.00	115.00
Endrin	1	0.00	0.00	0	.	.
Heptachlor	1	0.00	0.00	0	.	.
Heptachlor epoxide	1	0.00	0.00	0	.	.
Hexachlorobenzene	1	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Hexachlorobutadiene	1	0.00	0.00	0	.	.
Isopropalin	1	0.00	0.00	0	.	.
Mercury	1	0.00	0.00	0	.	.
Methoxychlor	1	0.00	0.00	0	.	.
Mirex/Dechlorane	1	0.00	0.00	0	.	.
Pentachlorobenzene	1	5.21	5.21	1	5.21	5.21
Pentachloronitrobenzene/Quin	1	0.00	0.00	0	.	.
Polychlorinated biphenyls	1	3681.00	3681.00	1	3681.00	3681.00
Tetrachlorobenzene, 1,2,4,5-	1	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	1	10.20	10.20	1	10.20	10.20
Trifluralin/Treflan	1	0.00	0.00	0	.	.