

**Watershed Summary Information**

<b>Accounting Unit Name:</b>	Southern Lake Erie
<b>State(s):</b>	OH
<b>Political Boundaries:</b>	Ashtabula, Lake, Cuyahoga, Geauga, Portage
<b>Major Waterways:</b>	Chagrin R Ashtabula R Aurora Bk
<b>Number of Stations in Watershed:</b>	Tier1 - 10 Tier2 - 18 Tier3 - 3



Figure 73. Watershed Location Map

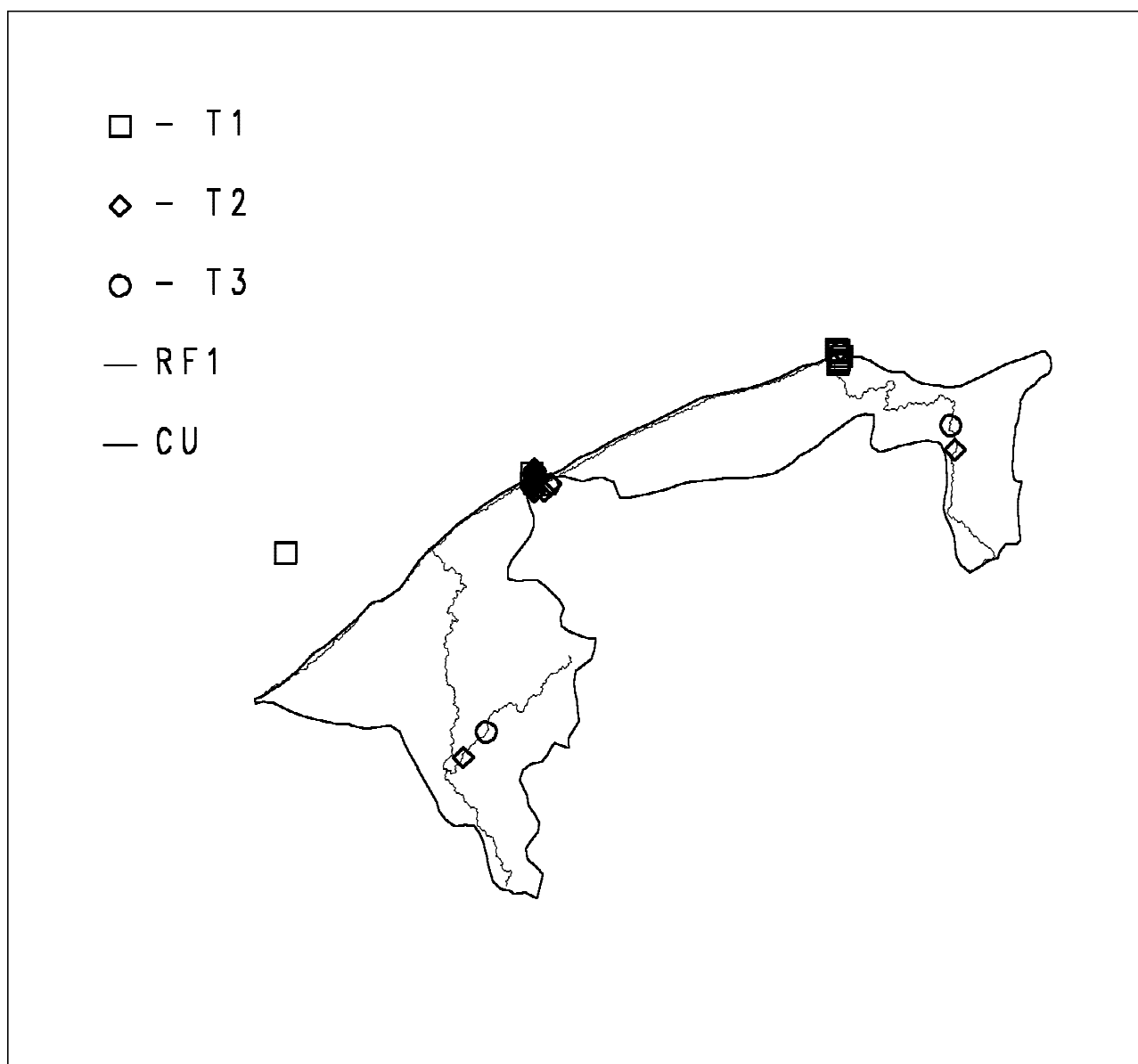


Figure 74. Major Waterways and Location of Sampling Stations

## Data Source(s) Used in Evaluation

Source: **STORET** Agency: **11COEBUF**  
 Monitoring Program: **Corps of Engineers Data Buffalo District**  
 Num. of Stations: 20 Date Range: 1981-88

Source: **STORET** Agency: **1115GLSB**  
 Monitoring Program: **USEPA Region 5 Great Lakes Surveillance Branch Data**  
 Num. of Stations: 7 Date Range: 1982

Source: **STORET** Agency: **21OHIO**  
 Monitoring Program: **Ohio EPA Water, Sediment, Tissue And Drinking Water Data**  
 Num. of Stations: 4 Date Range: 1985-91

## 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	30	27	.	27	.	27	.	.
Arsenic	24	22	.	22	.	22	.	.
Cadmium	30	22	.	22	.	22	.	.
Copper	30	22	.	22	.	22	.	.
Lead	30	22	.	22	.	22	.	.
Polychlorinated biphenyls	26	14	9	5	9	4	.	14
Bis(2-ethylhexyl)phthalate	15	14	7	7	7	7	.	7
Zinc	30	13	.	13	.	13	.	.
Mercury	11	10	5	5	5	5	.	.
Fluoranthene	16	8	1	7	1	7	.	.
Phenanthrene	16	8	1	7	1	7	.	.
Chromium	30	7	2	5	2	5	.	.
Dichlorobenzene, 1,4-	9	6	6	.	6	.	.	5
Pyrene	16	6	1	5	1	5	.	.
Dichlorobenzene, 1,2-	9	5	5	.	5	.	.	.
Silver	22	5	5	.	5	.	.	.
Trichlorobenzene, 1,2,4-	9	5	3	2	3	2	.	.
DDT	14	5	1	4	1	4	.	.
Dichlorobenzene, 1,3-	9	5	.	5	.	5	.	.
Hexachlorobenzene	14	5	.	5	.	5	.	5
Hexachlorobutadiene	9	5	.	5	.	5	.	2
Benzo(a)anthracene/Chrysene	4	4	2	2	2	2	.	4
Anthracene	12	4	1	3	1	3	.	.
Fluorene	8	4	1	3	1	3	.	.
BHC	13	4	.	4	.	4	.	.
Acenaphthene	5	2	1	1	1	1	.	.
Benzo(a)pyrene	12	2	1	1	1	1	.	2
Naphthalene	7	2	1	1	1	1	.	.
Benzene	12	2	.	2	.	2	.	.
Indeno(1,2,3-cd)pyrene	11	2	.	2	.	1	.	2
Acenaphthylene	4	1	1	.	1	.	.	.
Dibenzofuran	2	1	1	.	1	.	.	1
Xylenes	3	1	1	.	1	.	.	.
Benzo(ghi)perylene	11	1	.	1	.	1	.	.
Benzo(k)fluoranthene	9	1	.	1	.	.	.	1
Chlordane	21	1	.	1	.	1	.	1
Cresol, p-	2	1	.	1	.	1	.	.
Dichloromethane	14	1	.	1	.	.	.	1
Dimethylphenol, 2,4-	10	1	.	1	.	1	.	.
Ethylbenzene	12	1	.	1	.	1	.	.
Phenol	10	1	.	1	.	1	.	.

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Toluene	13	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	5	1344.07	0.34	3	6700.00	0.34
Acenaphthylene	4	9400.00	0.00	1	37600.00	37600.00
Acrylonitrile	6	0.00	0.00	0	.	.
Aldrin	42	0.00	0.00	0	.	.
Anthracene	14	2637.91	0.00	6	35300.00	0.30
Antimony	5	320.00	0.00	2	800.00	800.00
Arsenic	47	13241.91	10500.00	47	55990.00	6170.00
Benzene	14	24.00	0.00	3	208.00	4.10
Benzo(a)anthracene	11	0.17	0.00	1	1.90	1.90
Benzo(a)anthracene/Chrysene	4	18045.00	1180.00	4	69600.00	220.00
Benzo(a)pyrene	14	2478.06	0.00	4	33200.00	1.36
Benzo(b)fluoranthene	8	0.00	0.00	0	.	.
Benzo(ghi)perylene	13	975.38	0.00	2	12200.00	480.00
Benzo(k)fluoranthene	11	233.55	0.00	1	2569.00	2569.00
Bis(2-ethylhexyl)phthalate	17	6548.59	1080.00	14	44690.00	390.00
Bromophenyl phenyl ether, 4-	5	0.00	0.00	0	.	.
Butyl benzyl phthalate	9	20.00	0.00	1	180.00	180.00
BHC	48	0.19	0.00	4	3.00	1.00
Cadmium	52	2028.92	1500.00	50	9000.00	67.60
Chlordane	43	4.95	0.00	1	213.00	213.00
Chlorobenzene	13	34.08	1.50	7	150.00	1.50
Chromium	52	62200.58	38000.00	52	628900.0	8580.00
Chrysene	11	0.25	0.00	2	2.15	0.60
Copper	52	26609.62	23000.00	52	76000.00	8000.00
Cresol, p-	2	46630.00	46630.00	2	93100.00	160.00
Di-n-butyl phthalate	17	143.01	0.00	6	950.00	1.20
Di-n-octyl phthalate	11	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	11	0.00	0.00	0	.	.
Dibenzofuran	2	18570.00	18570.00	2	37100.00	40.00
Dibromochloromethane	8	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	11	7980.00	0.00	5	43990.00	1700.00
Dichlorobenzene, 1,3-	11	3745.36	0.00	5	20000.00	1899.00
Dichlorobenzene, 1,4-	9	49586.67	14990.00	6	220000.0	1300.00
Dichlorobenzenes	3	0.00	0.00	0	.	.
Dichloroethane 1,2-	8	0.00	0.00	0	.	.
Dichloroethene, trans-1,2-	8	0.00	0.00	0	.	.
Dichloromethane	14	925.99	0.00	6	12900.00	6.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Dichloropropane, 1,2-	8	0.00	0.00	0	.	.
Dieldrin	11	0.00	0.00	0	.	.
Diethyl phthalate	11	0.00	0.00	0	.	.
Dimethyl phthalate	11	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	10	2910.00	0.00	1	29100.00	29100.00
Dioxins	6	0.00	0.00	0	.	.
DCPA/Dacthal	4	2.00	2.00	4	2.00	2.00
DDT	47	1.94	0.00	14	31.00	2.00
Endosulfan, alpha-	11	0.00	0.00	0	.	.
Endosulfan, beta-	16	0.56	0.00	5	2.00	1.00
Endrin	42	0.00	0.00	0	.	.
Ethylbenzene	14	7.67	0.00	3	104.00	1.60
Fluoranthene	18	5687.02	2.93	12	98300.00	0.55
Fluorene	8	6300.07	10.25	6	50300.00	0.10
Heptachlor	42	0.00	0.00	0	.	.
Heptachlor epoxide	42	0.00	0.00	0	.	.
Hexachlorobenzene	16	3469.25	1.00	10	32000.00	1.00
Hexachlorobutadiene	11	263.63	0.00	5	2000.00	100.00
Hexachloroethane	11	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	13	1100.77	0.00	2	13800.00	510.00
Isophorone	10	2.00	0.00	1	20.00	20.00
Lead	52	38736.15	36000.00	51	110000.0	6790.00
Mercury	13	1230.76	300.00	13	4700.00	100.00
Methoxychlor	8	0.00	0.00	0	.	.
Methylnaphthalene, 2-	1	20.00	20.00	1	20.00	20.00
Mirex/Dechlorane	39	0.00	0.00	0	.	.
Naphthalene	7	52951.64	1.07	6	370600.0	0.10
Nickel	52	32433.27	32000.00	52	65000.00	8600.00
Nitrosodiphenylamine, N-	9	0.00	0.00	0	.	.
Pentachlorophenol	9	0.00	0.00	0	.	.
Phenanthrene	18	7951.79	0.87	12	140100.0	0.25
Phenol	10	710.00	0.00	1	7100.00	7100.00
Polychlorinated biphenyls	109	2375.46	0.00	23	120000.0	2.00
Pyrene	18	3499.20	1.40	10	60300.00	0.80
Silver	42	1248.67	72.50	32	13990.00	50.00
Tetrachloroethane, 1,1,2,2-	9	0.86	0.00	1	7.70	7.70
Tetrachloroethene	9	0.18	0.00	1	1.60	1.60
Tetrachloromethane	8	0.00	0.00	0	.	.
Toluene	15	127.08	0.14	9	1759.00	0.01
Toxaphene	42	0.00	0.00	0	.	.
Tribromomethane/Bromoform	8	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	11	6851.73	0.00	5	35990.00	4399.00
Trichloroethane, 1,1,1-	39	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	8	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Trichloroethene	8	0.00	0.00	0	.	.
Trichlorofluoromethane	8	0.00	0.00	0	.	.
Trichloromethane/Chloroform	8	0.00	0.00	0	.	.
Xylenes	3	107.90	2.10	3	320.00	1.60
Zinc	52	123200.0	120000.0	52	340000.0	41600.00