

**Watershed Summary Information**

**Accounting Unit Name:** Southwestern Lake Ontario

**State(s):** NY

**Political Boundaries:** Monroe, Orleans, Niagara, Genesee

**Major Waterways:** Oak Orchard Cr  
West Cr  
Brockport Cr  
Eighteenmile Cr  
Sandy Cr

**Number of Stations in Watershed:** Tier1 - 39  
Tier2 - 46  
Tier3 - 1

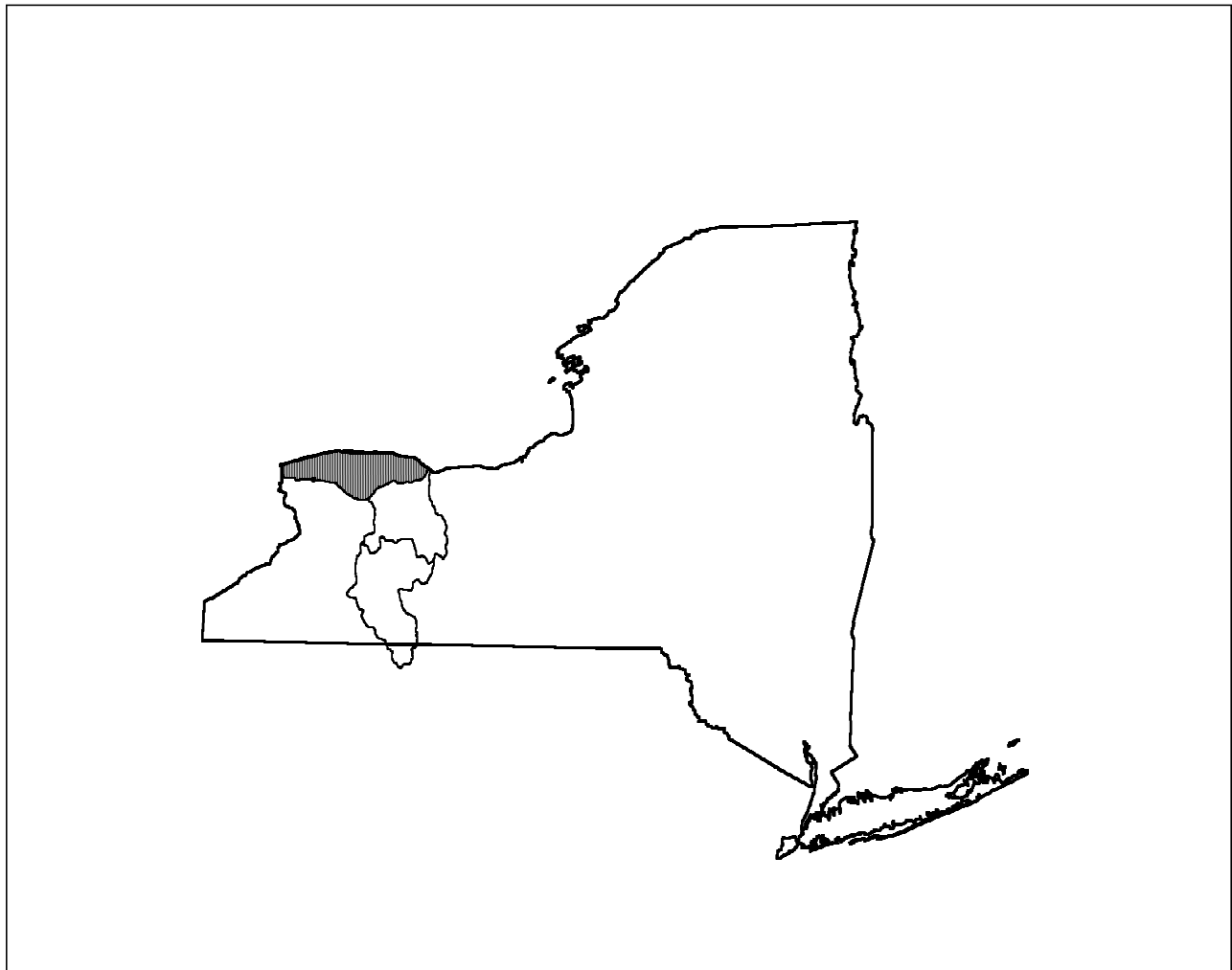


Figure 81. Watershed Location Map

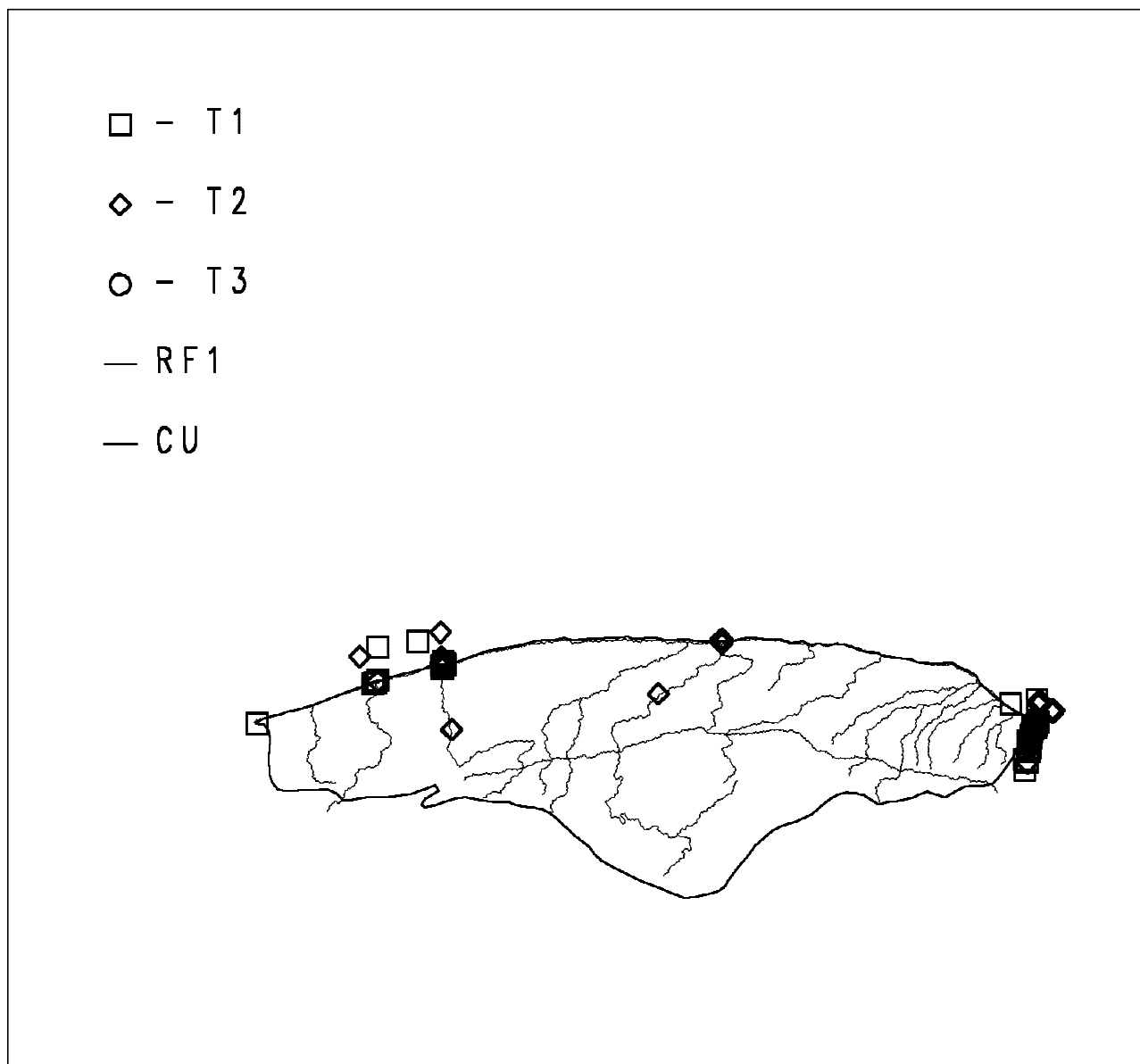


Figure 82. Major Waterways and Location of Sampling Stations

## Data Source(s) Used in Evaluation

Source: **GR. LAKE** Agency: **26**

Monitoring Program: **Aqua Tech Environ. Cnslts, Melmore Oh.**

Num. of Stations: 1 Date Range: 1984-88

Source: **STORET** Agency: **11BIOACC**

Monitoring Program: **USEPA National Bioaccumulation Study**

Num. of Stations: 2 Date Range: 1987

Source: **STORET** Agency: **11COEBUF**

Monitoring Program: **Corps of Engineers Data Buffalo District**

Num. of Stations: 43 Date Range: 1981-89

Source: **STORET** Agency: **11COENCD**

Monitoring Program: **Corps of Engineers North Central Division Water & Sediments Data**

Num. of Stations: 17 Date Range: 1980

Source: **STORET** Agency: **1115GLSB**

Monitoring Program: **USEPA Region 5 Great Lakes Surveillance Branch Data**

Num. of Stations: 17 Date Range: 1981

Source: **STORET** Agency: **112WRD**

Monitoring Program: **US Geological Survey Data**

Num. of Stations: 3 Date Range: 1989-90

Source: **STORET** Agency: **21NYDECA**

Monitoring Program: **NY Dept of Env. Cons. Water Quality Network Data**

Num. of Stations: 3 Date Range: 1989-90

## 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
Copper	82	66	.	66	.	66	.	.
Nickel	82	61	.	61	.	61	.	.
Cadmium	83	58	.	58	.	58	.	.
Mercury	72	40	10	30	10	30	.	.
Lead	82	34	.	34	.	34	.	.
Silver	39	27	20	7	20	7	.	.
Arsenic	61	27	.	27	.	27	.	.
Zinc	82	26	.	26	.	26	.	.
Polychlorinated biphenyls	66	19	4	15	2	9	2	17
DDT	65	16	4	12	4	12	.	5
Benzo(a)anthracene/Chrysene	15	13	1	12	1	12	.	13
Anthracene&Phenanthrene	16	13	.	13	.	13	.	.
BHC	60	12	4	8	4	8	.	6
Bis(2-ethylhexyl)phthalate	16	11	.	11	.	11	.	.
Pyrene	30	11	.	11	.	11	.	.
Fluoranthene	31	10	.	10	.	10	.	.
Dieldrin	61	9	.	9	.	7	.	5
Naphthalene	27	9	.	9	.	9	.	.
Heptachlor	52	8	.	8	.	.	.	8
Chromium	78	7	.	7	.	7	.	.
Acenaphthene	24	6	.	6	.	6	.	.
Benzo(a)pyrene	22	5	3	2	3	2	.	5
Fluorene	25	5	.	5	.	5	.	.
Benzo(b)fluoranthene	5	3	.	3	.	.	.	3
Mirex/Dechlorane	38	3	.	3	.	.	.	3
Dioxins	2	2	2	.	.	.	2	.
Aldrin	52	2	.	2	.	.	.	2

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Chlordane	61	2	.	2	.	2	.	1
Endosulfan, alpha-	50	2	.	2	.	2	.	.
Hexachlorobutadiene	4	2	.	2	.	2	.	.
Toluene	28	2	.	2	.	2	.	.
Acenaphthylene	18	1	.	1	.	1	.	.
Dichloromethane	26	1	.	1	.	.	.	1
Dimethyl phthalate	2	1	.	1	.	1	.	.
Dimethylphenol, 2,4-	1	1	.	1	.	1	.	.
Heptachlor epoxide	54	1	.	1	.	.	.	1
Methoxychlor	31	1	.	1	.	1	.	.
Trichlorobenzene, 1,2,4-	3	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	24	11.67	0.00	7	220.00	0.03
Acenaphthylene	18	0.56	0.00	1	10.00	10.00
Acrylonitrile	10	0.00	0.00	0	.	.
Aldrin	75	0.24	0.00	2	16.00	2.00
Anthracene	17	0.00	0.00	0	.	.
Anthracene&Phenanthrene	18	186.39	135.00	18	630.00	0.24
Arsenic	98	6038.74	5450.00	98	14000.00	1499.00
Benzene	17	0.82	0.00	1	14.00	14.00
Benzo(a)anthracene	17	0.00	0.00	0	.	.
Benzo(a)anthracene/Chrysene	16	543.86	475.00	16	2300.00	0.47
Benzo(a)pyrene	22	409.09	0.00	5	2440.00	850.00
Benzo(b)fluoranthene	5	634.00	470.00	4	1350.00	140.00
Benzo(ghi)perylene	17	0.00	0.00	0	.	.
Benzo(k)fluoranthene	17	47.69	0.00	2	810.00	0.81
Bis(2-ethylhexyl)phthalate	16	330.12	310.00	16	1120.00	0.35
Butyl benzyl phthalate	7	87.14	80.00	7	180.00	40.00
BHC	265	1.97	0.00	15	260.00	0.00
Cadmium	124	2441.12	1400.00	107	85000.00	200.00
Chlordane	82	0.43	0.00	9	23.00	0.00
Chlorobenzene	25	0.00	0.00	0	.	.
Chlorpyrifos/Dursban	12	0.00	0.00	0	.	.
Chromium	115	17165.12	12000.00	115	110000.0	1700.00
Chrysene	17	0.03	0.00	1	0.46	0.46
Copper	123	34268.69	23400.00	123	310000.0	8000.00
Di-n-butyl phthalate	19	157.27	70.00	19	660.00	0.07
Diazinon/Spectracide	6	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	17	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Dibromochloromethane	26	0.12	0.00	1	3.00	3.00
Dichlorobenzene, 1,2-	15	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	15	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	9	0.00	0.00	0	.	.
Dichloroethane 1,1-	2	0.00	0.00	0	.	.
Dichloroethane 1,2-	25	0.00	0.00	2	0.01	0.01
Dichloroethene, trans-1,2-	25	0.00	0.00	0	.	.
Dichloromethane	26	407.36	0.00	9	5860.00	0.53
Dichloropropane, 1,2-	24	0.00	0.00	0	.	.
Dieldrin	82	0.15	0.00	9	4.00	0.00
Diethyl phthalate	8	40.50	40.00	8	100.00	4.00
Dimethyl phthalate	2	996.54	996.54	2	1990.00	3.07
Dimethylphenol, 2,4-	1	60.00	60.00	1	60.00	60.00
DCPA/Dacthal	9	1.33	1.00	9	5.00	0.00
DDT	249	2.91	0.00	61	300.00	0.00
Endosulfan, alpha-	64	0.53	0.00	3	30.00	0.03
Endosulfan, beta-	71	0.13	0.00	8	4.00	0.00
Endrin	63	0.00	0.00	0	.	.
Ethion/Bladen	5	0.00	0.00	0	.	.
Ethylbenzene	18	0.00	0.00	1	0.01	0.01
Fluoranthene	31	110.05	0.00	15	900.00	0.20
Fluorene	25	8.40	0.00	8	50.00	0.05
Heptachlor	73	6.58	0.00	8	310.00	10.00
Heptachlor epoxide	75	18.69	0.00	3	1400.00	0.00
Hexachlorobenzene	9	1.11	1.00	6	5.00	0.00
Hexachlorobutadiene	2	70.00	70.00	2	100.00	40.00
Indeno(1,2,3-cd)pyrene	16	0.00	0.00	0	.	.
Lead	123	42952.75	25000.00	123	400000.0	3800.00
Malathion	6	0.00	0.00	0	.	.
Mercury	111	302.07	100.00	96	3000.00	10.00
Methoxychlor	35	1.31	0.00	3	21.00	12.00
Mirex/Dechlorane	42	2.86	0.00	2	80.00	40.00
Naphthalene	27	27.41	0.00	11	230.00	0.10
Nickel	123	22952.52	17400.00	123	210000.0	8000.00
Phenanthrene	16	37.60	0.00	5	600.00	0.27
Phenol	2	70.30	70.30	2	140.00	0.60
Polychlorinated biphenyls	363	14.23	0.00	57	3300.00	0.01
Pyrene	30	143.12	0.41	18	1570.00	0.18
Silver	39	6343.59	4000.00	31	30000.00	100.00
Tetrachloroethane, 1,1,2,2-	25	0.00	0.00	0	.	.
Tetrachloroethene	24	0.13	0.00	1	3.00	3.00
Tetrachloromethane	15	0.00	0.00	0	.	.
Toluene	28	102.84	0.00	11	1550.00	0.00
Toxaphene	73	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Tribromomethane/Bromoform	26	0.08	0.00	1	2.00	2.00
Trichlorobenzene, 1,2,4-	1	160.00	160.00	1	160.00	160.00
Trichloroethane, 1,1,1-	25	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	25	0.00	0.00	0	.	.
Trichloroethene	23	0.00	0.00	0	.	.
Trichlorofluoromethane	25	0.00	0.00	0	.	.
Trichloromethane/Chloroform	25	0.00	0.00	0	.	.
Xylenes	1	0.04	0.04	1	0.04	0.04
Zinc	123	148194.7	92800.00	123	1500000	20000.00

## Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Biphenyl	3	4.03	0.00	1	12.10	12.10
BHC	6	3.45	3.79	4	7.85	3.42
Chlordane	6	10.79	8.61	4	32.90	2.62
Chlorpyrifos/Dursban	3	4.67	0.00	1	14.00	14.00
Dicofol/Kelthane	3	2.24	0.00	1	6.71	6.71
Dieldrin	3	34.50	18.10	2	85.40	18.10
Dioxins	10	0.03	0.03	10	0.06	0.01
DDT	1	30.90	30.90	1	30.90	30.90
Endrin	3	0.00	0.00	0	.	.
Heptachlor	3	0.00	0.00	0	.	.
Heptachlor epoxide	3	0.00	0.00	0	.	.
Hexachlorobenzene	3	17.67	9.80	2	43.20	9.80
Hexachlorobutadiene	3	0.00	0.00	0	.	.
Isopropalin	3	0.00	0.00	0	.	.
Mercury	2	90.00	90.00	2	100.00	80.00
Methoxychlor	3	0.00	0.00	0	.	.
Mirex/Dechlorane	3	39.21	37.90	3	73.70	6.03
Pentachlorobenzene	3	2.00	0.00	1	5.99	5.99
Pentachloronitrobenzene/Quin	3	0.00	0.00	0	.	.
Polychlorinated biphenyls	3	3787.67	1896.00	3	9306.00	161.00
Tetrachlorobenzene, 1,2,4,5-	3	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	3	0.00	0.00	0	.	.
Trifluralin/Treflan	3	0.00	0.00	0	.	.