

Watershed Summary Information

Accounting Unit Name:	Middle Tennessee-Elk
State(s):	AL TN (MS)
Political Boundaries:	Colbert, Lauderdale, Lawrence, Lawrence, Wayne, Tishomingo, Hardin, Franklin
Major Waterways:	Tennessee R Bear Cr Shoal Cr Wilson L Pickwick L
Number of Stations in Watershed:	Tier1 - 49 Tier2 - 9 Tier3 - 11

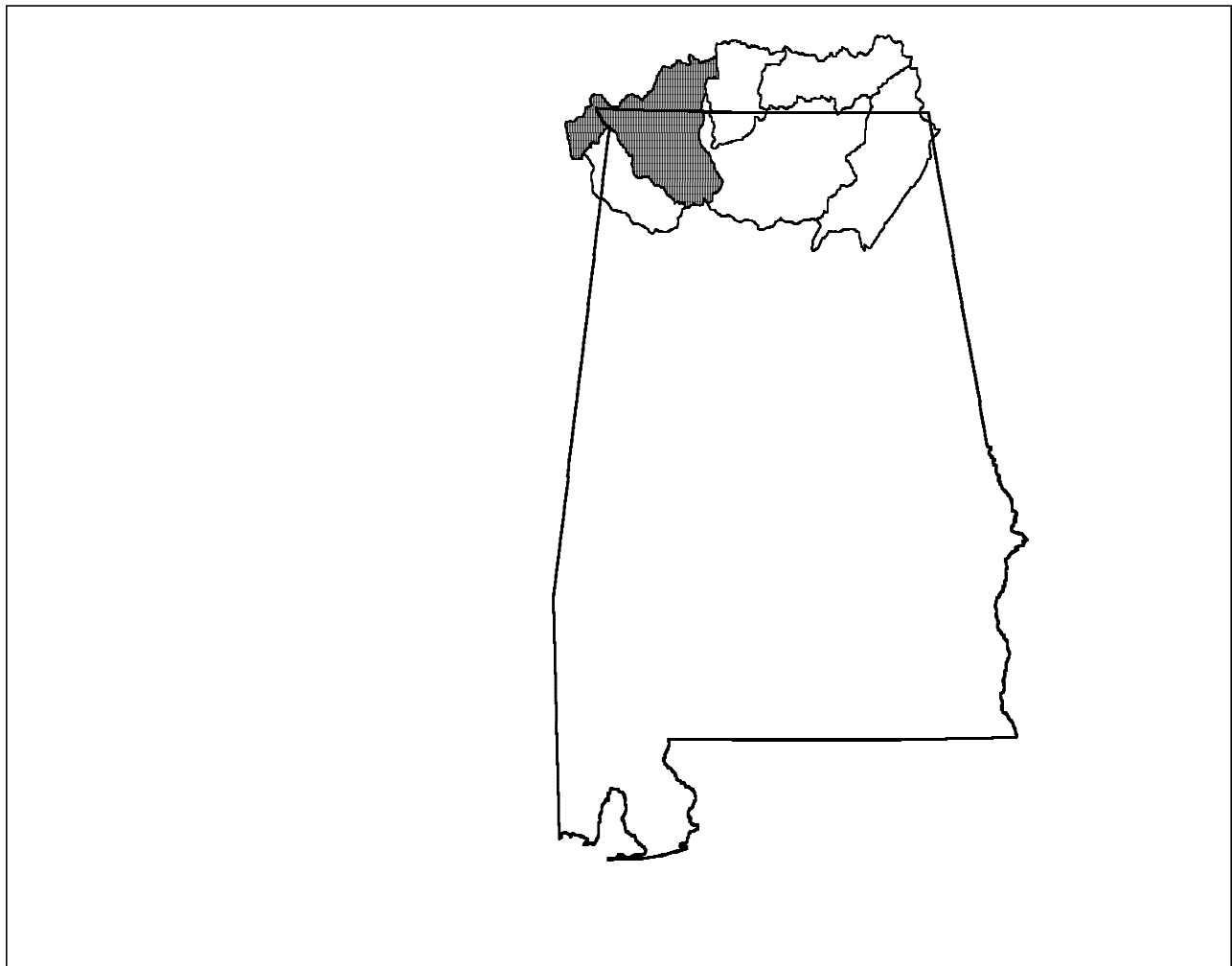


Figure 107. Watershed Location Map

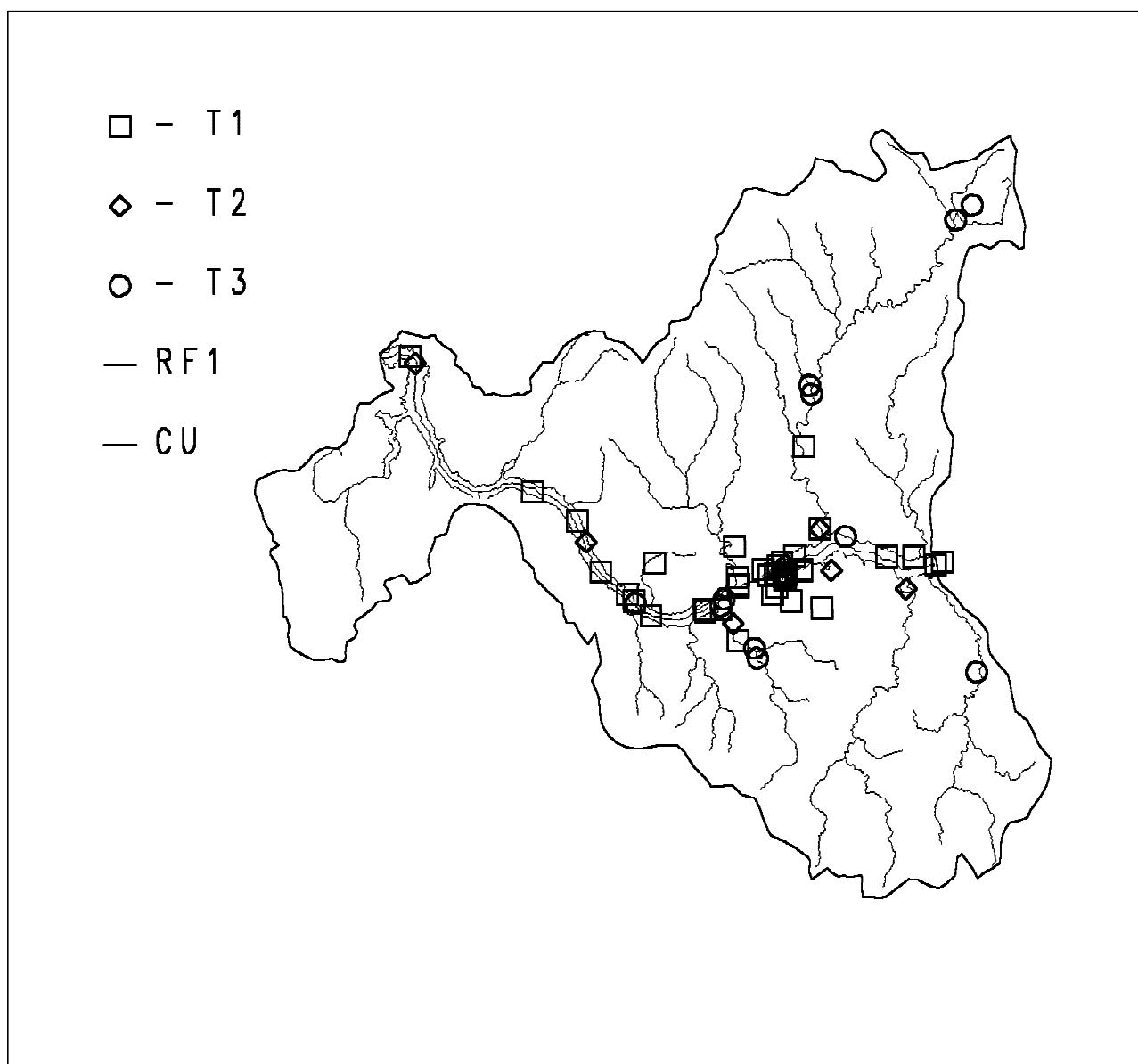


Figure 108. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **STORET** Agency: **131TVAC**
 Monitoring Program: **Tennessee Valley Authority Water, Sediment And Tissue Data**
 Num. of Stations: 64 Date Range: 1982-93

Source: **STORET** Agency: **21AWIC**
 Monitoring Program: **Alabama Dept Environmental Management**
 Num. of Stations: 4 Date Range: 1986

Source: **STORET** Agency: **21TNWQ**
 Monitoring Program: **Tennessee Dept of Public Health Water, Sediment & Tissue Data**
 Num. of Stations: 1 Date Range: 1985

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	63	47	45	2	14	2	32	15
DDT	40	22	1	21	1	3	.	21
Mercury	42	19	8	11	8	9	.	2
Arsenic	34	18	.	18	.	13	.	6
Nickel	37	18	.	18	.	18	.	.
Lead	38	14	.	14	.	14	.	.
Zinc	37	14	.	14	.	14	.	.
Copper	33	13	.	13	.	13	.	.
Chromium	37	3	1	2	1	2	.	.
Heptachlor epoxide	30	3	.	3	.	.	.	3
Aldrin	31	2	.	2	.	.	.	2
Bis(2-ethylhexyl)phthalate	22	2	.	2	.	.	.	2
Cadmium	42	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	12	0.00	0.00	0	.	.
Acenaphthylene	12	0.00	0.00	0	.	.
Aldrin	21	0.00	0.00	0	.	.
Anthracene	12	0.00	0.00	0	.	.
Antimony	21	314.29	300.00	13	2000.00	100.00
Arsenic	24	8433.33	11000.00	23	14000.00	1600.00
Benzo(a)anthracene	12	0.00	0.00	0	.	.
Benzo(a)pyrene	12	0.00	0.00	0	.	.
Benzo(b)fluoranthene	12	0.00	0.00	0	.	.
Benzo(ghi)perylene	12	0.00	0.00	0	.	.
Benzo(k)fluoranthene	12	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	13	0.00	0.00	0	.	.
Bromophenyl phenyl ether, 4-	12	0.00	0.00	0	.	.
Butyl benzyl phthalate	12	0.00	0.00	0	.	.
BHC	84	0.00	0.00	0	.	.
Cadmium	37	54.05	0.00	1	2000.00	2000.00
Chlordane	21	0.00	0.00	0	.	.
Chromium	37	43621.62	33000.00	36	478000.0	10000.00
Chrysene	12	0.00	0.00	0	.	.
Copper	33	24121.21	25000.00	32	50000.00	6000.00
Di-n-butyl phthalate	12	0.00	0.00	0	.	.
Di-n-octyl phthalate	12	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	12	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Dichlorobenzene, 1,2-	12	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	12	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	12	0.00	0.00	0	.	.
Dieldrin	21	0.00	0.00	0	.	.
Diethyl phthalate	12	0.00	0.00	0	.	.
Dimethyl phthalate	12	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	12	0.00	0.00	0	.	.
DDT	63	2.73	0.00	5	130.00	10.00
Endosulfan, alpha-	21	0.00	0.00	0	.	.
Endosulfan, beta-	21	0.00	0.00	0	.	.
Endrin	21	0.00	0.00	0	.	.
Fluoranthene	12	0.00	0.00	0	.	.
Fluorene	12	0.00	0.00	0	.	.
Heptachlor	21	0.00	0.00	0	.	.
Heptachlor epoxide	21	0.00	0.00	0	.	.
Hexachlorobenzene	12	0.00	0.00	0	.	.
Hexachlorobutadiene	12	0.00	0.00	0	.	.
Hexachloroethane	12	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	12	0.00	0.00	0	.	.
Isophorone	12	0.00	0.00	0	.	.
Lead	37	35810.81	30000.00	32	152000.0	10000.00
Mercury	37	1707.57	270.00	30	37420.00	120.00
Methoxychlor	7	0.00	0.00	0	.	.
Naphthalene	12	0.00	0.00	0	.	.
Nickel	37	22513.51	23000.00	30	63000.00	10000.00
Nitrosodiphenylamine, N-	12	0.00	0.00	0	.	.
Pentachlorophenol	12	0.00	0.00	0	.	.
Phenanthrene	12	0.00	0.00	0	.	.
Phenol	12	0.00	0.00	0	.	.
Polychlorinated biphenyls	306	75.20	0.00	34	2700.00	100.00
Pyrene	12	0.00	0.00	0	.	.
Silver	15	0.00	0.00	0	.	.
Toxaphene	21	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	12	0.00	0.00	0	.	.
Zinc	37	145513.5	130000.0	37	957000.0	29000.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	18	0.00	0.00	0	.	.
Aldrin	76	0.53	0.00	2	30.00	10.00
Anthracene	18	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Antimony	41	0.00	0.00	0	.	.
Arsenic	45	31.33	0.00	13	280.00	30.00
Benzidine	18	0.00	0.00	0	.	.
Benzo(a)anthracene	18	0.00	0.00	0	.	.
Benzo(a)pyrene	18	0.00	0.00	0	.	.
Benzo(b)fluoranthene	18	0.00	0.00	0	.	.
Benzo(k)fluoranthene	18	0.00	0.00	0	.	.
Beryllium	41	0.00	0.00	0	.	.
Bis(2-chloroethyl)ether	18	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	18	1277.78	0.00	2	13000.00	10000.00
Bromophenyl phenyl ether, 4-	18	0.00	0.00	0	.	.
Butyl benzyl phthalate	18	0.00	0.00	0	.	.
BHC	282	0.11	0.00	2	20.00	10.00
Cadmium	59	109.12	0.00	26	1300.00	10.00
Chlordane	159	5.47	0.00	36	60.00	10.00
Chloronaphthalene, 2-	18	0.00	0.00	0	.	.
Chlorophenol, 2-	18	0.00	0.00	0	.	.
Chromium	41	89.27	30.00	23	1000.00	20.00
Chrysene	18	0.00	0.00	0	.	.
Copper	41	1346.34	0.00	16	10000.00	200.00
Di-n-butyl phthalate	18	0.00	0.00	0	.	.
Di-n-octyl phthalate	18	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	18	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	18	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	18	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	18	0.00	0.00	0	.	.
Dichlorobenzidine, 3,3'-	18	0.00	0.00	0	.	.
Dichlorophenol, 2,4-	18	0.00	0.00	0	.	.
Dieldrin	76	0.00	0.00	0	.	.
Diethyl phthalate	18	0.00	0.00	0	.	.
Dimethyl phthalate	18	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	18	0.00	0.00	0	.	.
Dinitrophenol, 2,4-	18	0.00	0.00	0	.	.
Dinitrotoluene, 2,4-	18	0.00	0.00	0	.	.
Dinitrotoluene, 2,6-	18	0.00	0.00	0	.	.
Diphenylhydrazine, 1,2-	18	0.00	0.00	0	.	.
DDT	692	252.55	42.50	461	13000.00	5.00
Endosulfan, alpha-	67	0.00	0.00	0	.	.
Endosulfan, beta-	67	0.00	0.00	0	.	.
Endrin	75	0.80	0.00	6	10.00	10.00
Fluoranthene	18	0.00	0.00	0	.	.
Fluorene	18	0.00	0.00	0	.	.
Heptachlor	67	0.00	0.00	0	.	.
Heptachlor epoxide	67	3.43	0.00	5	120.00	10.00

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Hexachlorobenzene	27	0.00	0.00	0	.	.
Hexachlorobutadiene	22	0.00	0.00	0	.	.
Hexachloroethane	18	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	18	0.00	0.00	0	.	.
Isophorone	18	0.00	0.00	0	.	.
Lead	45	63.11	40.00	27	750.00	20.00
Mercury	59	178.14	0.00	23	3600.00	100.00
Methoxychlor	9	0.00	0.00	0	.	.
Mirex/Dechlorane	16	0.00	0.00	0	.	.
Naphthalene	18	0.00	0.00	0	.	.
Nickel	41	97.56	0.00	2	3000.00	1000.00
Nitrobenzene	18	0.00	0.00	0	.	.
Nitrophenol, 4	18	0.00	0.00	0	.	.
Nitrosodi-n-propylamine, N-	18	0.00	0.00	0	.	.
Nitrosodiphenylamine, N-	18	0.00	0.00	0	.	.
Pentachlorophenol	18	0.00	0.00	0	.	.
Phenol	18	0.00	0.00	0	.	.
Polychlorinated biphenyls	3387	879.61	0.00	901	350000.0	100.00
Pyrene	18	0.00	0.00	0	.	.
Selenium	45	288.00	120.00	25	1800.00	110.00
Silver	32	0.00	0.00	0	.	.
Toxaphene	67	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	18	0.00	0.00	0	.	.
Trichlorophenol, 2,4,6-	18	0.00	0.00	0	.	.
Zinc	41	17173.17	9100.00	39	50000.00	2800.00