

## Watershed Summary Information

<b>Accounting Unit Name:</b>	Lower Tennessee
<b>State(s):</b>	TN (MS)
<b>Political Boundaries:</b>	Hardin, Perry, Decatur, Henderson, Wayne, Benton, Humphreys, Mcnairy, Alcorn, Tishomingo, Chester
<b>Major Waterways:</b>	Tennessee R White Oak Cr Beech R Horse Cr Kentucky L
<b>Number of Stations in Watershed:</b>	Tier1 - 15 Tier2 - 6 Tier3 - 4

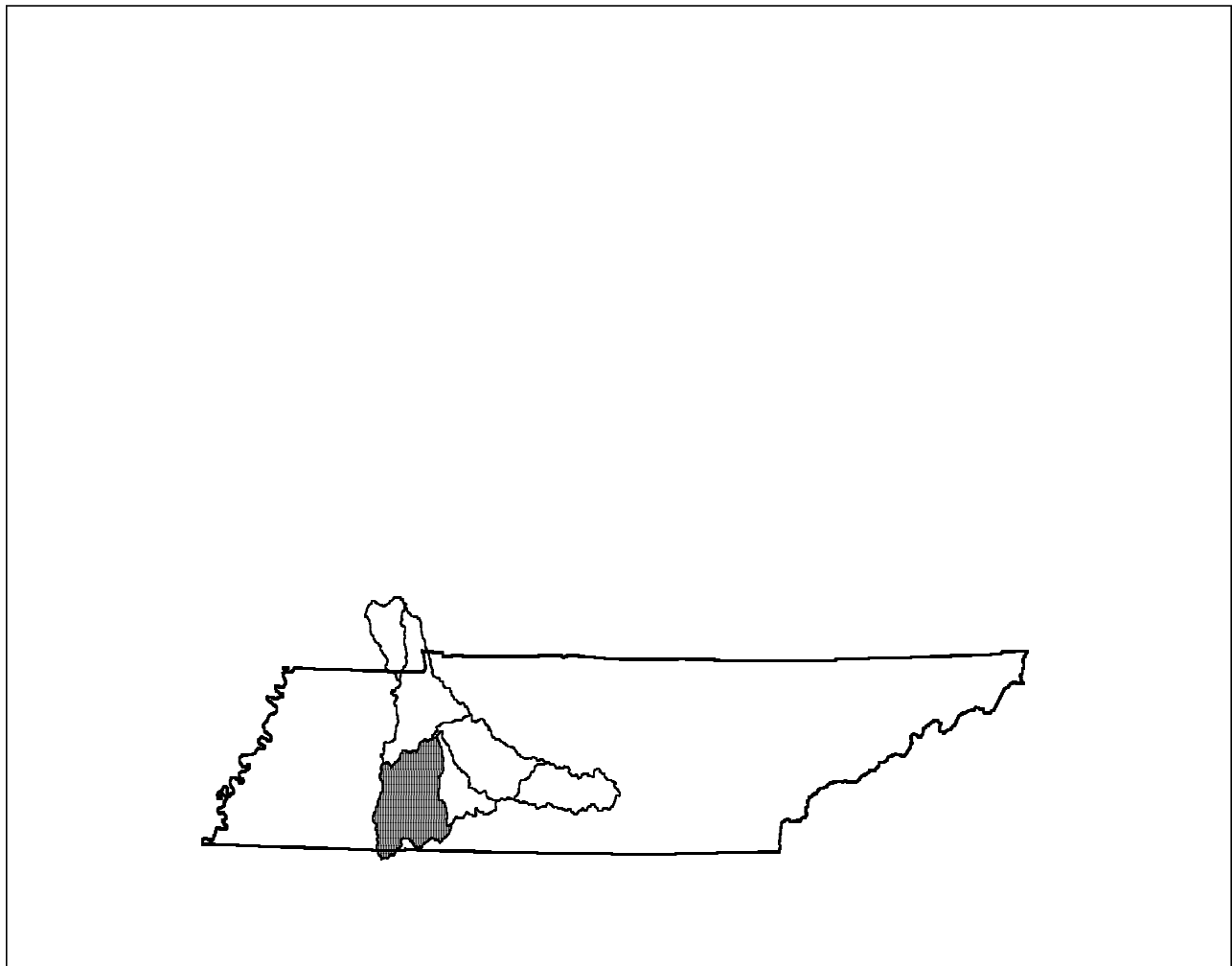


Figure 109. Watershed Location Map

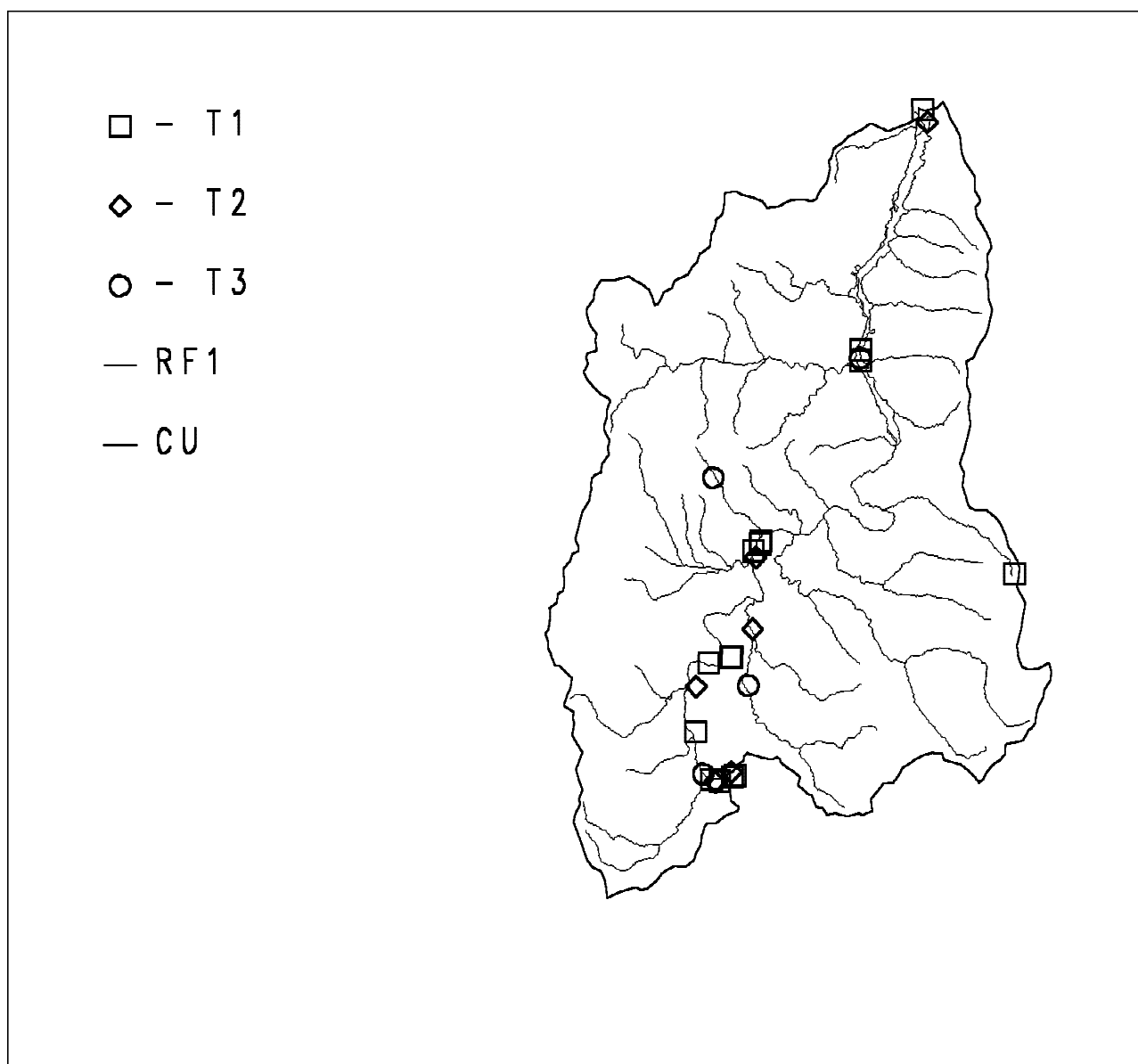


Figure 110. Major Waterways and Location of Sampling Stations

## Data Source(s) Used in Evaluation

Source: **ODES** Agency: **TN**  
 Monitoring Program: **Tennessee**  
 Num. of Stations: 1 Date Range: 1980-84

Source: **STORET** Agency: **11BIOACC**  
 Monitoring Program: **USEPA National Bioaccumulation Study**  
 Num. of Stations: 1 Date Range: 1988

Source: **STORET** Agency: **11FWS**  
 Monitoring Program: **US Fish & Wildlife Service Data - USEPA Hq Backdata Study**  
 Num. of Stations: 1 Date Range: 1980-86

Source: **STORET** Agency: **1114PEST**  
Monitoring Program: **USEPA SE Environ Water Lab Data**  
Num. of Stations: 1 Date Range: 1981

Source: **STORET** Agency: **131TVAC**  
Monitoring Program: **Tennessee Valley Authority Water, Sediment And Tissue Data**  
Num. of Stations: 15 Date Range: 1982-93

Source: **STORET** Agency: **21TNWQ**  
Monitoring Program: **Tennessee Dept of Public Health Water, Sediment & Tissue Data**  
Num. of Stations: 6 Date Range: 1982-87

## 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	20	14	14	.	1	.	13	1
DDT	21	13	.	13	.	2	.	11
Arsenic	18	9	.	9	.	1	.	8
Mercury	19	2	1	1	1	1	.	.
Cadmium	18	2	.	2	.	2	.	.
Dieldrin	18	2	.	2	.	.	.	2
Lead	19	2	.	2	.	2	.	.
Nickel	15	2	.	2	.	2	.	.
Dioxins	1	1	1	.	.	.	1	.
Aldrin	16	1	.	1	.	.	.	1
Copper	18	1	.	1	.	1	.	.
Toxaphene	15	1	.	1	.	.	.	1
Zinc	17	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	2	0.00	0.00	0	.	.
Acenaphthylene	2	0.00	0.00	0	.	.
Acrylonitrile	2	0.00	0.00	0	.	.
Aldrin	10	0.00	0.00	0	.	.
Anthracene	2	0.00	0.00	0	.	.
Antimony	2	250.00	250.00	2	300.00	200.00
Arsenic	4	5252.50	4255.00	4	11000.00	1500.00
Benzene	2	0.00	0.00	0	.	.
Benzo(a)anthracene	2	0.00	0.00	0	.	.
Benzo(a)pyrene	2	0.00	0.00	0	.	.
Benzo(b)fluoranthene	2	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Benzo(ghi)perylene	2	0.00	0.00	0	.	.
Benzo(k)fluoranthene	2	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	2	0.00	0.00	0	.	.
Bromophenyl phenyl ether, 4-	2	0.00	0.00	0	.	.
Butyl benzyl phthalate	2	0.00	0.00	0	.	.
BHC	40	0.00	0.00	0	.	.
Cadmium	11	727.27	0.00	4	2000.00	2000.00
Chlordane	10	0.00	0.00	0	.	.
Chlorobenzene	2	0.00	0.00	0	.	.
Chromium	12	25333.33	28000.00	12	51000.00	7000.00
Chrysene	2	0.00	0.00	0	.	.
Copper	12	17283.33	16500.00	12	33000.00	4000.00
Di-n-butyl phthalate	2	0.00	0.00	0	.	.
Di-n-octyl phthalate	2	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	2	0.00	0.00	0	.	.
Dibromochloromethane	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	2	0.00	0.00	0	.	.
Dichloroethane 1,1-	2	0.00	0.00	0	.	.
Dichloroethane 1,2-	2	0.00	0.00	0	.	.
Dichloroethene, trans-1,2-	2	0.00	0.00	0	.	.
Dichloromethane	2	0.00	0.00	0	.	.
Dichloropropane, 1,2-	2	0.00	0.00	0	.	.
Dieldrin	10	0.00	0.00	0	.	.
Diethyl phthalate	2	0.00	0.00	0	.	.
Dimethyl phthalate	2	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	2	0.00	0.00	0	.	.
DDT	39	0.58	0.00	9	5.88	0.56
Endosulfan, alpha-	10	0.00	0.00	0	.	.
Endosulfan, beta-	10	0.00	0.00	0	.	.
Endrin	10	0.00	0.00	0	.	.
Ethylbenzene	2	0.00	0.00	0	.	.
Fluoranthene	2	0.00	0.00	0	.	.
Fluorene	2	0.00	0.00	0	.	.
Heptachlor	12	0.04	0.00	2	0.30	0.20
Heptachlor epoxide	10	0.00	0.00	0	.	.
Hexachlorobenzene	5	0.36	0.10	3	1.60	0.10
Hexachlorobutadiene	2	0.00	0.00	0	.	.
Hexachloroethane	2	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	2	0.00	0.00	0	.	.
Isophorone	2	0.00	0.00	0	.	.
Lead	12	25500.00	22000.00	12	57000.00	14000.00
Mercury	11	420.91	490.00	8	750.00	390.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Methoxychlor	6	0.00	0.00	0	.	.
Naphthalene	2	0.00	0.00	0	.	.
Nickel	12	18000.00	17000.00	12	42000.00	6000.00
Nitrosodiphenylamine, N-	2	0.00	0.00	0	.	.
Pentachlorophenol	2	0.00	0.00	0	.	.
Phenanthrene	2	0.00	0.00	0	.	.
Phenol	2	0.00	0.00	0	.	.
Polychlorinated biphenyls	80	1112.50	0.00	1	89000.00	89000.00
Pyrene	2	0.00	0.00	0	.	.
Silver	3	0.00	0.00	0	.	.
Tetrachloroethane, 1,1,2,2-	2	0.00	0.00	0	.	.
Tetrachloroethene	2	0.00	0.00	0	.	.
Tetrachloromethane	2	0.00	0.00	0	.	.
Toluene	2	0.00	0.00	0	.	.
Toxaphene	10	0.00	0.00	0	.	.
Tribromomethane/Bromoform	2	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	2	0.00	0.00	0	.	.
Trichloroethane, 1,1,1-	2	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	2	0.00	0.00	0	.	.
Trichloroethene	2	0.00	0.00	0	.	.
Trichlorofluoromethane	2	0.00	0.00	0	.	.
Trichloromethane/Chloroform	2	0.00	0.00	0	.	.
Zinc	12	89666.67	91000.00	12	160000.0	35000.00

## Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Aldrin	23	0.87	0.00	2	10.00	10.00
Antimony	18	0.00	0.00	0	.	.
Arsenic	34	65.69	57.70	21	240.00	40.00
Beryllium	18	0.00	0.00	0	.	.
Biphenyl	1	0.00	0.00	0	.	.
BHC	88	1.59	0.00	14	10.00	10.00
Cadmium	34	32.30	0.00	16	150.00	2.00
Chlordane	79	8.38	0.00	37	50.00	8.38
Chlorpyrifos/Dursban	1	0.00	0.00	0	.	.
Chromium	21	87.14	40.00	15	330.00	30.00
Copper	31	627.88	600.00	21	2200.00	200.00
Dicofol/Kelthane	1	0.00	0.00	0	.	.
Dieldrin	31	4.19	0.00	9	30.00	10.00
Dioxins	2	0.00	0.00	2	0.01	0.00
DCPA/Dacthal	6	10.00	10.00	6	10.00	10.00

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
DDT	103	226.19	52.00	73	1595.00	5.00
Endosulfan, alpha-	16	3.75	0.00	3	20.00	20.00
Endosulfan, beta-	16	0.00	0.00	0	.	.
Endrin	29	3.79	0.00	10	20.00	10.00
Heptachlor	24	3.75	0.00	7	20.00	10.00
Heptachlor epoxide	19	1.05	0.00	2	10.00	10.00
Hexachlorobenzene	12	5.22	6.35	7	10.00	2.70
Hexachlorobutadiene	3	0.00	0.00	0	.	.
Isopropalin	1	0.00	0.00	0	.	.
Lead	34	104.20	50.00	24	550.00	9.70
Mercury	35	91.56	100.00	21	210.00	49.86
Methoxychlor	6	0.00	0.00	0	.	.
Mirex/Dechlorane	16	4.05	0.00	7	10.00	4.83
Nickel	18	0.00	0.00	0	.	.
Pentachlorobenzene	1	0.00	0.00	0	.	.
Pentachloronitrobenzene/Quin	1	0.00	0.00	0	.	.
Polychlorinated biphenyls	191	95.48	0.00	64	1117.00	100.00
Selenium	31	342.45	180.00	26	1300.00	110.00
Silver	12	0.00	0.00	0	.	.
Tetrachlorobenzene, 1,2,4,5-	1	0.00	0.00	0	.	.
Toxaphene	22	85.91	0.00	6	690.00	100.00
Trichlorobenzene, 1,2,4-	1	0.00	0.00	0	.	.
Trifluralin/Treflan	1	3.40	3.40	1	3.40	3.40
Zinc	28	22790.00	16820.00	28	59620.00	4800.00