

**Watershed Summary Information**

**Accounting Unit Name:** Upper Illinois

**State(s):** IL IN

**Political Boundaries:** Cook, Will, Lake

**Major Waterways:** Calumet Sag Channel  
Little Calumet R  
Calumet R  
Chicago San Ship Ca  
Chicago R, N Br

**Number of Stations in Watershed:** Tier1 - 64  
Tier2 - 36  
Tier3 - 3

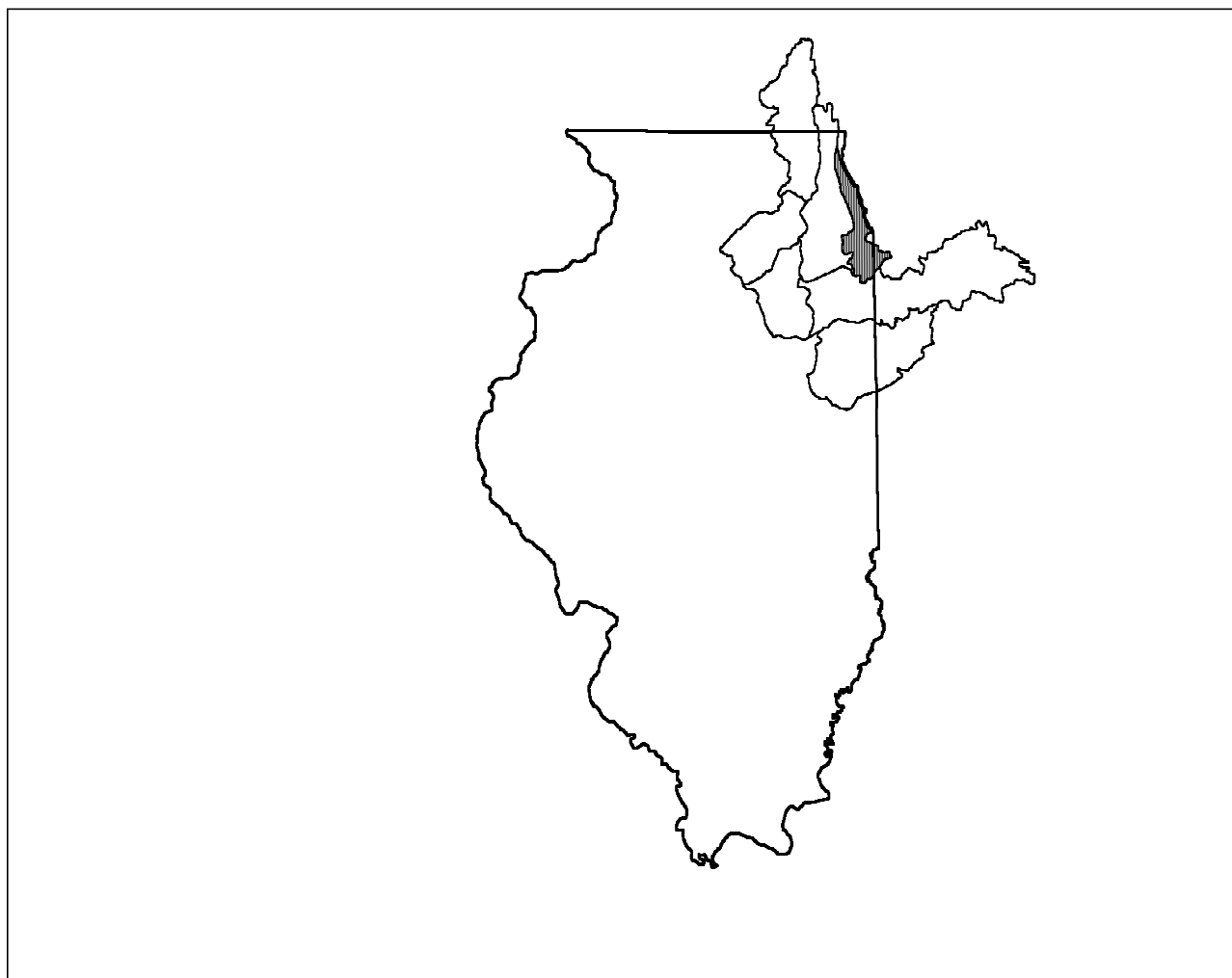


Figure 125. Watershed Location Map



Figure 126. Major Waterways and Location of Sampling Stations

## Data Source(s) Used in Evaluation

Source: **STORET** Agency: **11COECHI**  
 Monitoring Program: **Corps of Engineers Data Chicago District**  
 Num. of Stations: 42 Date Range: 1980-81

Source: **STORET** Agency: **112WRD**  
 Monitoring Program: **US Geological Survey Data**  
 Num. of Stations: 1 Date Range: 1980

Source: **STORET** Agency: **21ILFISH**  
 Monitoring Program: **USEPA Region 5 Data**  
 Num. of Stations: 23 Date Range: 1983-92

Source: **STORET** Agency: **21ILLAKE**  
Monitoring Program: **USEPA Region 5 Data**  
Num. of Stations: 19 Date Range: 1988-92

Source: **STORET** Agency: **21ILSED**  
Monitoring Program: **Illinois EPA Div of Water Pollution Control Data**  
Num. of Stations: 18 Date Range: 1980-90

## 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 |
| Lead                      | 78                 | 63    | .     | 63    | .            | 63    | .            | .     |
| Cadmium                   | 77                 | 62    | .     | 62    | .            | 62    | .            | .     |
| Polychlorinated biphenyls | 100                | 50    | 34    | 16    | 13           | 14    | 21           | 29    |
| Copper                    | 52                 | 49    | .     | 49    | .            | 49    | .            | .     |
| Mercury                   | 77                 | 48    | 21    | 27    | 21           | 27    | .            | .     |
| DDT                       | 67                 | 47    | 16    | 31    | 16           | 16    | .            | 41    |
| Chromium                  | 77                 | 41    | 12    | 29    | 12           | 29    | .            | .     |
| Zinc                      | 49                 | 41    | .     | 41    | .            | 41    | .            | .     |
| Dieldrin                  | 67                 | 38    | .     | 38    | .            | 20    | .            | 37    |
| Arsenic                   | 53                 | 33    | 11    | 22    | 11           | 22    | .            | .     |
| Chlordane                 | 67                 | 33    | .     | 33    | .            | 17    | .            | 29    |
| Nickel                    | 23                 | 14    | .     | 14    | .            | 14    | .            | .     |
| Heptachlor epoxide        | 67                 | 13    | .     | 13    | .            | .     | .            | 13    |
| BHC                       | 67                 | 7     | 4     | 3     | 4            | 3     | .            | 5     |
| Silver                    | 16                 | 1     | 1     | .     | 1            | .     | .            | .     |
| Aldrin                    | 66                 | 1     | .     | 1     | .            | .     | .            | 1     |
| Toxaphene                 | 30                 | 1     | .     | 1     | .            | .     | .            | 1     |

## Sediment Chemistry Data: Chemical Summary

| Sediment Parameter | Total Observations |            |              | Detected Observations |           |           |
|--------------------|--------------------|------------|--------------|-----------------------|-----------|-----------|
|                    | Num.               | Mean (ppb) | Median (ppb) | Num.                  | Max (ppb) | Min (ppb) |
| Aldrin             | 83                 | 0.00       | 0.00         | 0                     | .         | .         |
| Antimony           | 22                 | 35909.09   | 30000.00     | 11                    | 100000.0  | 60000.00  |
| Arsenic            | 119                | 24633.70   | 7000.00      | 117                   | 370000.0  | 100.00    |
| BHC                | 227                | 0.32       | 0.00         | 10                    | 18.00     | 1.90      |
| Cadmium            | 143                | 33467.83   | 3000.00      | 111                   | 190000.0  | 400.00    |
| Chlordane          | 247                | 5.16       | 0.00         | 79                    | 100.00    | 1.30      |
| Chromium           | 143                | 235100.7   | 107000.0     | 129                   | 1000000   | 6000.00   |
| Copper             | 118                | 273261.0   | 150000.0     | 114                   | 1339000   | 3000.00   |
| Dieldrin           | 83                 | 3.78       | 0.00         | 29                    | 58.00     | 1.20      |
| Dioxins            | 3                  | 0.00       | 0.00         | 0                     | .         | .         |
| DDT                | 491                | 32.75      | 0.00         | 197                   | 790.00    | 1.10      |

| Sediment<br>Parameter     | Total Observations |               |                 | Detected Observations |              |              |
|---------------------------|--------------------|---------------|-----------------|-----------------------|--------------|--------------|
|                           | Num.               | Mean<br>(ppb) | Median<br>(ppb) | Num.                  | Max<br>(ppb) | Min<br>(ppb) |
| Endosulfan, alpha-        | 22                 | 0.00          | 0.00            | 0                     | .            | .            |
| Endosulfan, beta-         | 22                 | 0.00          | 0.00            | 0                     | .            | .            |
| Endrin                    | 83                 | 0.00          | 0.00            | 0                     | .            | .            |
| Heptachlor                | 83                 | 0.00          | 0.00            | 0                     | .            | .            |
| Heptachlor epoxide        | 83                 | 0.47          | 0.00            | 13                    | 12.00        | 1.00         |
| Hexachlorobenzene         | 61                 | 0.15          | 0.00            | 2                     | 4.60         | 4.40         |
| Lead                      | 144                | 393796.5      | 175000.0        | 133                   | 2000000      | 6000.00      |
| Mercury                   | 143                | 1415.80       | 330.00          | 124                   | 10000.00     | 42.00        |
| Methoxychlor              | 61                 | 0.00          | 0.00            | 0                     | .            | .            |
| Nickel                    | 38                 | 13736.84      | 0.00            | 15                    | 45000.00     | 21000.00     |
| Polychlorinated biphenyls | 362                | 3898.36       | 0.00            | 71                    | 226000.0     | 10.00        |
| Silver                    | 17                 | 7529.41       | 0.00            | 1                     | 128000.0     | 128000.0     |
| Toxaphene                 | 22                 | 0.00          | 0.00            | 0                     | .            | .            |
| Zinc                      | 115                | 902356.5      | 390000.0        | 115                   | 2900000      | 33000.00     |

## Tissue Residue Data: Chemical Summary

| Tissue<br>Parameter       | Total Observations |               |                 | Detected Observations |              |              |
|---------------------------|--------------------|---------------|-----------------|-----------------------|--------------|--------------|
|                           | Num.               | Mean<br>(ppb) | Median<br>(ppb) | Num.                  | Max<br>(ppb) | Min<br>(ppb) |
| Aldrin                    | 86                 | 0.12          | 0.00            | 1                     | 10.00        | 10.00        |
| BHC                       | 174                | 0.25          | 0.00            | 4                     | 14.00        | 10.00        |
| Chlordane                 | 90                 | 89.22         | 67.50           | 65                    | 290.00       | 10.00        |
| Chlorpyrifos/Dursban      | 2                  | 25.50         | 25.50           | 2                     | 28.00        | 23.00        |
| Dieldrin                  | 88                 | 36.08         | 27.50           | 58                    | 270.00       | 10.00        |
| DDT                       | 88                 | 391.95        | 270.00          | 87                    | 4300.00      | 18.00        |
| Endrin                    | 86                 | 0.12          | 0.00            | 1                     | 10.00        | 10.00        |
| Heptachlor                | 86                 | 0.12          | 0.00            | 1                     | 10.00        | 10.00        |
| Heptachlor epoxide        | 88                 | 9.20          | 0.00            | 33                    | 51.00        | 0.01         |
| Hexachlorobenzene         | 86                 | 0.12          | 0.00            | 1                     | 10.00        | 10.00        |
| Methoxychlor              | 86                 | 0.58          | 0.00            | 1                     | 50.00        | 50.00        |
| Mirex/Dechlorane          | 86                 | 0.12          | 0.00            | 1                     | 10.00        | 10.00        |
| Polychlorinated biphenyls | 88                 | 1306.69       | 1038.00         | 63                    | 7700.00      | 130.00       |
| Toxaphene                 | 86                 | 11.63         | 0.00            | 1                     | 1000.00      | 1000.00      |