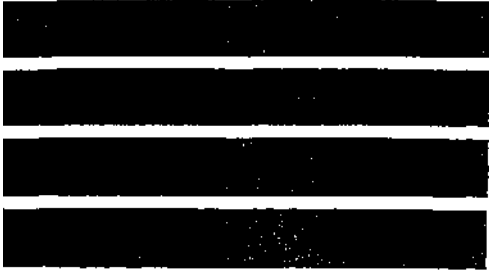


Circular 175



# Illinois Geographic Information System: An Index to Automated Statewide Databases ■

by Amelia V. Greene

ILLINOIS STATE WATER SURVEY

DEPARTMENT OF ENERGY AND NATURAL RESOURCES

1990

CIRCULAR 175



*Illinois Geographic Information System:  
An Index to Automated Statewide Databases*

by

AMELIA V. GREENE

**Title:** Illinois Geographic Information System: An Index to Automated Statewide Databases.

**Abstract:** The Illinois Geographic Information System (GIS), which began in 1982 with one Prime minicomputer and a few peripherals, is currently converting to a large networked system of Unix workstations with many peripherals. This same expansion has been seen in the GIS databases. They are accessed by a user community that includes both new and experienced programmers who require detailed knowledge of individual coverages, as well as persons requiring information of a more general nature. This document was compiled to provide all users with information about three of the available databases: the statewide Illinois 1:500,000 coverages, the Geographic Names Information System coverages, and some very detailed archaeology coverages. The following information has been included for each coverage: coverage name and location, contact person with phone number, INFO item description and coding, mapping procedure, bibliography, and a plot to show the distribution and density of the graphic data.

**Reference:** Greene, Amelia V. Illinois Geographic Information System: An Index to Automated Statewide Databases. Illinois State Water Survey, Champaign, Circular 175, 1990.

**Indexing Terms:** GIS, IGIS, ARC/INFO, ESRI, database, spatial data, maps, Geographic Information System, Illinois Geographic Information System, computerized mapping, Illinois maps, index.

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**1990**

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## ABBREVIATIONS

COE	U.S. Army Corps of Engineers
ENR	Illinois Department of Energy & Natural Resources
ESRI	Environmental Systems Research Institute
FIPS	Federal Information Processing System
GIS	Geographic Information System
GNIS	Geographic Names Information System
HPA	Illinois Historic Preservation Agency
IAS	Illinois Archaeological Survey
IDOT	Illinois Department of Transportation
IGIS	Illinois Geographic Information System
ISGS	Illinois State Geological Survey
ISM	Illinois State Museum
ISWS	Illinois State Water Survey
N.Dec	Number of decimals
NHS	Illinois Natural History Survey
NOAA	National Oceanic and Atmospheric Administration
SCS	Soil Conservation Service
SGS	Illinois State Geological Survey
SWS	Illinois State Water Survey
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

## BACKGROUND

Activities related to the Geographic Information System (GIS) began at the Illinois Department of Energy and Natural Resources (ENR) in 1982 as part of a contract with the Illinois Department of Mines and Minerals (IDMM) regarding the Lands Unsuitable for Mining Program (LUMP). During this early period, funding was provided by the IDMM (through the Office of Surface Mining LUMP program) to purchase hardware and software for the GIS and to build much of the statewide database described in this publication. This report was prepared for the IDMM, Land Reclamation Division, Paul Ehret, Supervisor.

The GIS is currently accessed by a computer and workstation network dispersed among seven ENR divisions: the Natural History Survey, the Geological Survey, the State Water Survey, and the Hazardous Waste Research and Information Center, all in Champaign; the State Museum, the Office of Research and Planning, and the Office of Administration in Springfield; and IDMM, which has offices in both Springfield and Carterville.

Over the years, the GIS hardware network has grown to include three Prime minicomputers and many workstations, personal computers, printers, and plotters. In a similar way, the GIS database has become far more extensive than the statewide data described here. The system is now known collectively as the Illinois Geographic Information System (IGIS) and is managed by ENR. The IGIS Policy Committee, with representatives from each ENR division, provides coordination and oversight of the system.

The IGIS database began with the statewide (1:500,000 scale) and coal area (1:62,500 scale) data layers produced by the Environmental Systems Research Institute (ESRI) of Redlands, California, as part of their initial turnkey installation. Additional databases were subsequently purchased or digitized, usually in response to individual contract requirements. Currently users have access to the Class I database, a category that includes all the original databases plus the U.S. Geological Survey (USGS) landuse/landcover at 1:250,000; statewide hydrology and transportation at 1:100,000; and Geo-ecology, a tabular database. The full IGIS database includes many other project-related coverages (databases containing one type of graphic data or feature) that have been created by the participating agencies and are not listed here.

### **Use of This Document**

This document was compiled to provide both the casual observer and the active ARC/INFO user with information about three types of data available to IGIS users: the statewide 1:500,000 coverages, the Geographic Names Information System (GNIS), and two very detailed archaeology coverages. Information is included on both the graphic and tabular data aspects of each coverage.



The INFO item descriptions for each coverage were taken directly from INFO to provide the most current information available. Most polygon coverages were plotted exactly as they exist. A state boundary has been added as a dashed line to a few polygon coverages with very sparse data. The state boundary has been plotted as a solid line to aid in the location of data on all point and line coverages.

The material has been arranged so that all information for each coverage appears as a unit that can also serve as a stand-alone document.

#### Contents of each Coverage

**Title** - The general content of the coverage.

**Coverage Name** - The exact name of the coverage on the Prime computer.

**Location of Coverage** - Useable pathname.

**Mapscale** - Scale at which the coverage was originally digitized.

**Contact Person** - The agency and if possible the person responsible for the coverage, along with a current address and phone number.

**Coverage History** - The date and agency responsible for the origin of the coverage and updates. An update indicates that new information has been added to the coverage. If the current coverage was merely derived from another larger coverage by either a DISSOLVE or a RESELECT, it was not considered to be an updated coverage.

**INFO Item Description** - An exact printout from the INFO file as it existed when this document was compiled.

**Coding for INFO Items** - Pertinent information on the codes used within many of the INFO items.

**Mapping Procedures** - Procedures used to create the coverage. Much of this information consists of the procedures used by ESRI in the original creation of the database.

**Bibliography** - All sources used in the development of the coverage and the updates.

**Plot** - Indicates the general density and placement of graphic data.

#### Availability of **Data**

Member agencies of the IGIS have access to both the graphic and tabular data of Class I databases. For additional information on specific coverages, users are referred to the specific agency and contact person listed for each coverage.

## Acknowledgments

This report was prepared under the administrative guidance of Richard G. Semonin, Chief of the Illinois State Water Survey, and Michael L. Terstriep, Director of the Water Survey's Office of Spatial Data Analysis & Information.

Much of the material for this document was assembled from the documentation provided by ESRI when the IGIS database was first established in 1982. Members of the IGIS committee have also reviewed the document and provided both helpful recommendations and additional coverages to be included. Member agencies of the IGIS Policy Committee are: Natural History Survey, State Geological Survey, State Water Survey, State Museum, Office of Research and Planning, Office of Administration, and Hazardous Waste Research and Information Center.

I also wish to acknowledge the dialogue and assistance provided by Robert A. Sinclair, Michael L. Terstriep, Becky J. Howard, and Kathleen J. Brown, without whose help this document would never have been completed. The report was edited by Laurie Talkington.

# **ARCHAEOLOGY DATABASE**

**ARCHAEOLOGICAL SITES  
(County Coverages)**

Coverage Name: CTY

Location of Coverages: PROPRIETARY

Coverage Types: POINT & LINE

Mapscale: 1:24,000

**Contact Person**

Dr. Michael D. Wiant  
Illinois State Museum  
Springfield, IL 62703  
(217) 785-0134

**Coverage History**

Digitized by the Illinois State Museum, Illinois Geographic Information System staff, 1984 to the present. New data are added biannually. Corrections are made as needed.

**INFO Item Description**

DATAFILE NAME: CTY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	CTY#	4	5	B	-	
13	CTY-ID	4	5	B	-	IAS number
17	CTY	3	3	C	-	
20	INDEX	9	9	I	-	
29	CODE	2	2	I	-	
	<b>** REDEFINED ITEMS **</b>					
24	IAS	5	5	I	-	

**Coding for INFO Items**

CTY (Columns 17-19)

Two-character county code used on IAS forms.

#### INDEX (Columns 20-28)

A unique ID number used to RELATE to tabular data files

FIPS county code (Columns 20-22)

Source of index: 2 = derived from IAS number (Column 23)

IAS site ID number, unique to county (Columns 24-28)

#### CODE (Columns 29-30)

A temporary variable to hold codes for RESELECTS or symbolization.

There are no attributes for LINES. They correspond to site boundaries when recorded.

#### Mapping Procedures

The Illinois Archaeological Survey is a not-for-profit organization whose membership is composed of professional archaeologists involved in Illinois archaeology. The IAS maintains extensive paper records regarding reported archaeological sites in Illinois. Some of these records date to the 19th century, although systematic record keeping did not begin until the 1950s with the creation of the IAS. Most of the data are a result of cultural resource management legislation of the mid-1970s.

In 1985, after much discussion, the Illinois State Museum IGIS staff began digitizing the IAS maps of archaeological site locations. Most are 7.5-minute, and some are 15-minute USGS topographic maps with hand-drawn site locations and identifying site numbers. Extensive quality assurance procedures have been initiated to identify and resolve shortcomings in the coverages and in the original data, with frequent additions of new site information. Data are added on an ongoing basis with high confidence in their appropriateness.

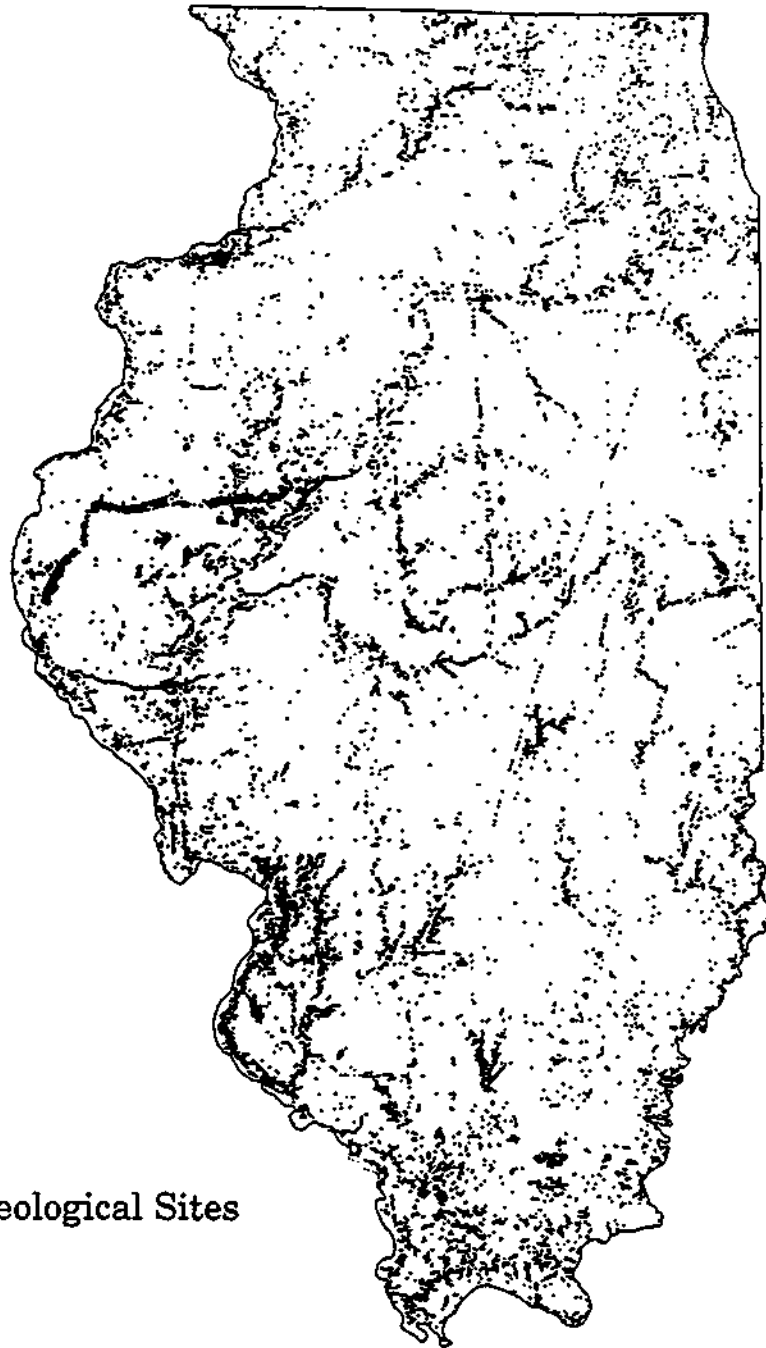
Museum staff have created extensive tabular data files of IAS records. These include a site location file with legal location information; and a site attribute file with physiographic, cultural, and administrative information. Both of these INFO files contain the item INDEX so that these tabular files may be RELATED to the item INDEX, which is a unique identification number for each site in the coverage PAT file. The coverage and tabular data organization are county by county rather than statewide.

Note that the data are of a proprietary nature and are wholly owned by the Illinois Archaeological Survey. By binding agreement, digitized data of archaeological site locations may be used by the Illinois State Museum for cultural resource management needs pertinent to the activities of state government. All other uses of this data fall under the strict purview of the Illinois Archaeological Survey, Urbana, IL. ISM staff actively seek to make digitized site location data and tabular data conform to the paper records of the IAS, but ISM staff can make no

evaluation of the correctness or completeness of the information reported to the IAS by its members. It is widely believed that approximately 10 percent of all sites have been identified and reported.

### Bibliography

Charter and by-laws of the Illinois Archaeological Survey.



**Archaeological Sites**

AREAS OF SYSTEMATIC ARCHAEOLOGICAL RECONNAISSANCE  
(County Coverages)

Coverage Name: HPA-SURVEY

Location of Coverages: PROPRIETARY

Coverage Types: POLYGON & LINE

Mapscale: 1:24,000

Contact Person

Dr. Michael D. Wiant  
Illinois State Museum  
Springfield, IL 62703  
(217) 785-0134

Coverage History

Digitized by the Illinois State Museum, Illinois Geographic Information System staff, 1989. New data are added periodically. Corrections are made as needed.

INFO Item Description

DATAFILE NAME: HPA-SURVEY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	HPA-SURVEY#	4	5	B	-	
13	HPA-SURVEY-ID	4	5	B	-	HPA document number

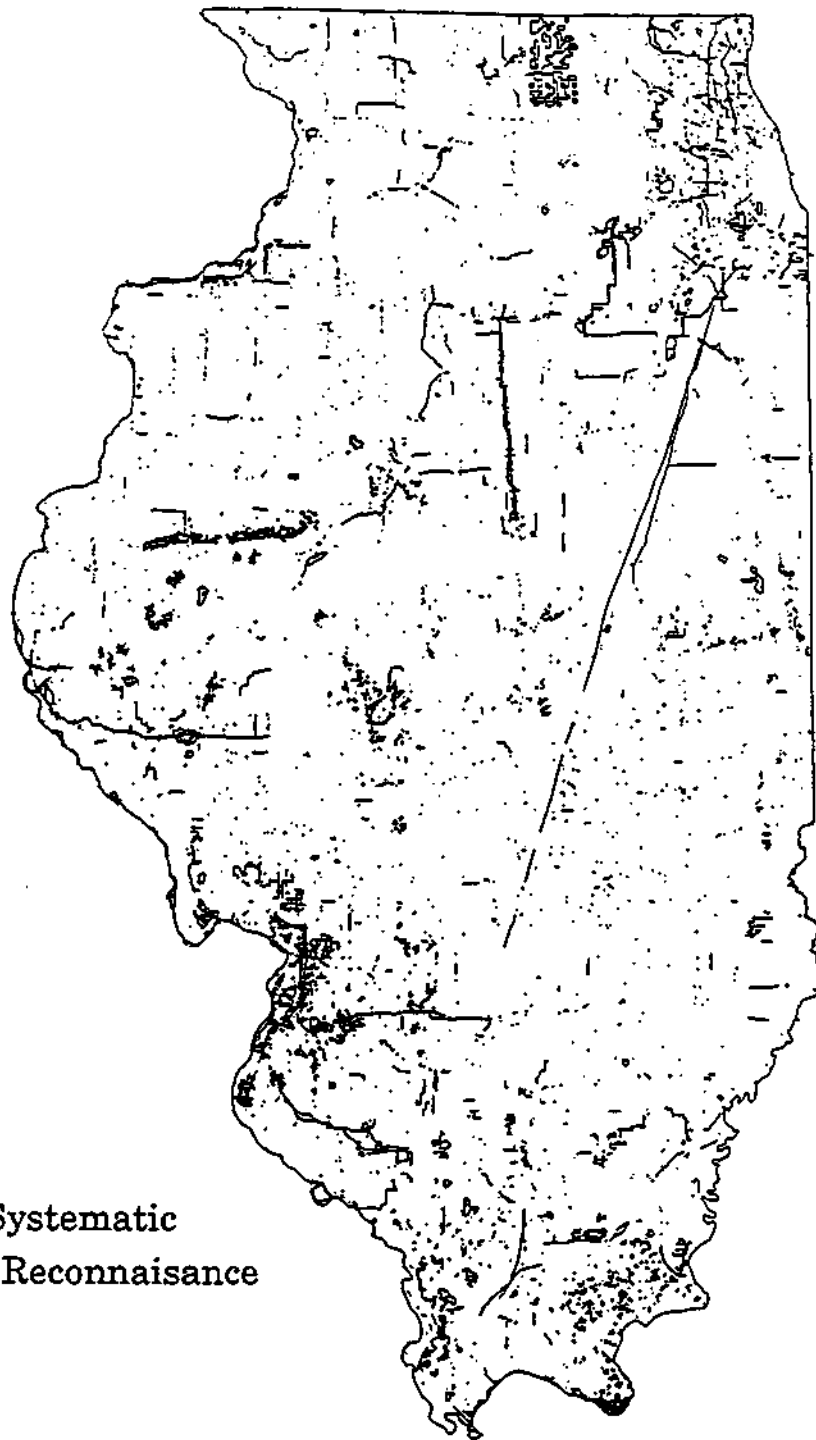
Coding for INFO Items

The user ID corresponds to the HPA document number, usually a six-digit integer.

Mapping Procedures

The Illinois Historic Preservation Agency (HPA) maintains a map file of areas examined by archaeologists to identify cultural resources in compliance with state and federal statutes. These areas are hand drawn on 7.5-minute USGS topographic maps and are labeled with an HPA document number, a unique number that identifies the area of investigation. In 1989 Illinois State Museum IGIS staff digitized the HPA maps using the HPA document number as the coverage feature user ID. Information prior to 1984, the year the HPA was created, is less rigorous and not uniquely identified. Some highly linear areas are recorded as lines, not polygons, and the LINE user-ID is the HPA document number. The lines that are part of

polygons are not so identified. New information will be added periodically. This is not proprietary information, but the coverages reside on a directory that is proprietary. There is one coverage for each county.



**Areas of Systematic  
Archaeological Reconnaissance**



**GEOGRAPHIC NAMES**  
**INFORMATION SYSTEM DATABASE**

GEOGRAPHIC NAMES INFORMATION SYSTEM

**Coverage Name**

44 coverages

<i>Cover Name</i>	<i># Records</i>	<i>Cover Name</i>	<i># Records</i>
ARCH	1	HOSPITAL	119
AREA	2	ISLAND	275
BAR	20	LAKE	906
BASIN	17	LEVEE	8
BAY	29	LOCALE	1352
BEACH	1	MINE	76
BEND	19	OTHER	507
BUILDING	41	PARK	948
CANAL	237	PILLAR	2
CAPE	16	PPL	2460
CAVE	12	RANGE	1
CEMETERY	3763	RAPIDS	1
CHANNEL	14	RIDGE	46
CHURCH	1470	SCHOOL	6003
CLIFF	38	SPRING	24
DAM	48	STREAM	2557
FALLS	3	SUMMIT	200
FLAT	27	SWAMP	35
FOREST	31	TRAIL	2
GAP	2	VALLEY	266
GUT	137	WELL	2
HARBOR	1	WOODS	106

Location of Coverages: ILLINOIS > GNIS

Coverage Type: POINT

Mapscale: Varies depending on the source map (24,000 - 100,000).

### Contact Person

Office of Spatial Data Analysis & Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-9544  
or  
IGIS Database Administrator  
(217) 333-8907

### Coverage History

The Phase I GNIS tape was originally from the USGS; the tape was converted to a point coverage by Bob Sinclair and Amelia Greene, SWS. Update #1, 1989, SWS; the GNIS coverage was split into 45 coverages based on feature by Amelia Greene.

### Status of Data

1. Airports are missing.
2. Some cemeteries are missing in west-central Illinois.

### INFO Item Description

Number of records varies depending on the coverage.

DATAFILE NAME: COVERAGE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	COVERAGE#	4	5	B	-	
13	COVERAGE-ID	4	5	B	-	
17	NAME	48	48	C	-	
65	FEATURE-CLASS	9	15	C	-	
74	FEATURE-CLASS#	2	6	I	-	
76	FIPS-STATE	2	2	I	-	
78	FIPS-COUNTY	3	3	I	-	
81	FIPS-STATE2	2	2	I	-	
83	FIPS-COUNTY2	3	3	I	-	
86	LATITUDE	7	7	C	-	
93	LONGITUDE	8	8	C	-	
101	LAMBERT-COORD-X	12	12	N	4	
113	LAMBERT-COORD-Y	12	12	N	4	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
125	BOARD-GEOG-NAMES	14	14	C	-	
139	ELEVATION-FEET	5	5	I	-	
144	SOURCE	15	15	C	-	
159	USGS-MAPS-USED1	5	5	I	-	
164	TOPO-MAP-NAME1	25	25	C	-	
189	SGS-TOPO-MAP#-1	4	4	C	-	
193	USGS-MAPS-USED2	5	5	I	-	
198	TOPO-MAP-NAME2	25	25	C	-	
223	SGS-TOPO-MAP#-2	4	4	C	-	
227	USGS-MAPS-USED3	5	5	I	-	
232	TOPO-MAP-NAME3	25	25	C	-	
257	SGS-TOPO-MAP#-3	4	4	C	-	
261	USGS-MAPS-USED4	5	5	I	-	
266	TOPO-MAP-NAME4	25	25	C	-	
291	SGS-TOPO-MAP#-4	4	4	C	-	
295	GNIS-LAKE-TANK	1	1	C	-	Only in LAKE coverage
	<b>** REDEFINED ITEMS **</b>					
65	FC	9	15	C	-	

Coding for INFO Items

### Mapping Procedures

The Geographic Names Information System (GNIS) was developed by the USGS to standardize geographic names. It provides information for all known places, features, and areas in Illinois that are identified by a proper name. Two phases are being planned in the tabulation of the data. Phase I data were collected from all levels of USGS topographic maps. Phase II data were collected from 7.5-minute topographic maps as well as any other sources that could be found. Thus Phase I incorporates data from older maps (15-minute series) as well as current maps, and some places may no longer exist (especially schools). Phase II will have more current data, but it was not scheduled for Illinois (as of February 1989). The original mapping of the data was contracted out to colleges and universities.

These 44 coverages were produced from a Phase I GNIS tape for Illinois provided by the USGS. Initially, one coverage was produced from the data on the tape. This coverage was then split into 45 coverages based on feature class using ARC RESELECT. Coverages LAKE and TANK were combined to form the coverage LAKE.

The GNIS is available in two forms: as a menu-driven program and as separate coverages. To access the menu-driven program, type GNIS. The separate coverages described here are based on feature class, rather than on county or other area delineation.

## Bibliography

Phase I tape for Illinois for the National Geographic Names Data Base, National Cartographic Information Center, USGS, Reston, VA.

All topographic maps generated by USGS for Illinois (source of Phase I tape).

## Feature Definitions

(Each feature is a separate coverage.)

**AIRPORT:** Man-made facility maintained for the use of aircraft; airfield, airstrip, landing field, landing strip

**ARCH:** Natural arch-like opening in a rock mass; bridge, natural bridge, sea arch

**AREA:** Any one of several areally extensive natural features not included in other categories; fan, badlands, barren, delta, garden

**ARROYO:** Watercourse or channel through which water may occasionally flow; wash, gully, coulee, draw

**BAR:** Natural accumulation of sand, gravel, or alluvium forming an underwater or exposed embankment; sandbar, spit, reef, ledge, shoal

**BASIN:** Natural depression or relatively low area enclosed by higher land; sink, pit, amphitheater, cirque

**BAY:** Indentation of a coast or shoreline enclosing part of a body of water; a body of water partly surrounded by land; arm, bight, cove, estuary, gulf, inlet, sound

**BEACH:** The sloping shore along a body of water that is washed by waves or tides and is usually covered by sand or gravel; shore, strand, coast

**BENCH:** Area of relatively level land on the flank of an elevation such as a hill, ridge, or mountain, where the slope of the land rises on one side and descends on the opposite side

**BEND:** Curve in the course of a stream and/or the land within the curve; a curve in a linear body of water; meander, bottom

**BLDG:** Building, a man-made structure with walls and a roof for protection of people and/or materials but not including a church, hospital, or school

**BRIDGE:** Man-made structure carrying a trail, road, or other transportation system across a body of water or depression; overpass, trestle

- CANAL: Man-made waterway used by water craft or for drainage, irrigation, mining, or water power; ditch, lateral
- CAPE: Projection of land extending into a body of water; point, peninsula, neck
- CAVE: Natural underground passageway or chamber, or a hollowed-out cavity in the side of a cliff; cavern, grotto
- CEM: Cemetery, a place or area for burying the dead; burial, grave, burying ground, memorial garden
- CHANNEL: Linear deep part of a body of water through which the main volume of water flows and is frequently used as a route for water craft; passage, thoroughfare, thoroughfare, strait, reach
- CHURCH: Building used for religious worship; chapel, synagogue, mosque, tabernacle, temple
- CIVIL: A political division formed for administrative purposes; county, borough, town, township
- CLIFF: Very steep slope; bluff, crag, precipice, head, headland, nose, palisades, promontory, rim, rimrock
- CRATER: Circular-shaped depression at the summit of a volcanic cone or one on the surface of the land caused by the impact of a meteorite; a man-made depression caused by an explosion
- DAM: Water barrier or embankment built across the course of a stream or into a body of water to control and/or impound the flow of water
- FALLS: Perpendicular or very steep fall of water in the course of a stream; waterfall, cataract, cascade
- FLAT: Relatively level area within a region of greater relief; playa, clearing, glade
- FOREST: Bounded area of woods, forest, or grassland under the administration of a political agency (see WOODS); national forest, national grasslands, state forest
- GAP: Low point or opening between hills or mountains or in a ridge or mountain range; pass, notch, water gap, saddle, col
- GEYSER: Eruptive spring from which hot water and/or steam and in some cases mud are periodically thrown
- GLACIER: Body or stream of ice moving outward and downward from an area of accumulation; an area of relatively permanent snow/ice on the top of or side of a mountain or mountainous area; ice patch, snow patch, ice field
- GUT: Relatively small coastal waterway connecting larger bodies of water or other waterways; slough, creek, inlet
- HARBOR: Sheltered area of water where ships or other watercraft can anchor or dock; port; roads, roadstead

- HOSP:** Hospital, building where the sick or injured may receive medical or surgical attention
- ISLAND:** Area of dry or relatively dry land surrounded by water or low wetland; isle, isla, rock, archipelago, atoll, key, cay, hammock, hummock
- ISTHMUS:** Narrow projection of land in a body of water connecting two larger land areas
- LAKE:** Natural body of inland water; pond, backwater, lagoon, laguna, pool, resaca, lac, waterhole
- LAVA:** Formations resulting from the consolidation of molten rock on the surface of the earth
- LEVEE:** Natural or man-made embankment flanking a stream; bank
- LOCALE:** Place at which there is or was human activity; it does not include populated places (PPL), mines, and dams; railroad siding, station, junction, site, camp, landing, battlefield, crossroad, ranch, farm, windmill, tower, ruins, ghost town
- MILITARY:** Area administered and used by U.S. or state armed forces for military purposes; air force base, air facility, air station, army post, marine corps base
- MINE:** Place or area from which commercial minerals are or were removed from the earth, not including oilfield; shaft, quarry, pit
- OILFIELD:** Area where petroleum is or was removed from the earth
- OTHER:** Category for miscellaneous, named, man-made entities that cannot readily be placed in the other feature classes listed here
- PARK:** Place or area set aside for recreation or preservation of a cultural or natural resource and under some form of governmental administration, not including forest; national park, state park, national historical landmark, wilderness
- PILLAR:** Vertical-standing often spire-shaped, natural rock formation; pinnacle, chimney, monument, rock, tower
- PLAIN:** A region of generally uniform slope, comparatively level and of considerable extent; grassland, highland, upland, plateau
- PPL:** Populated place; place or area with clustered or scattered buildings and a permanent human population; city, village, settlement, town
- RANGE:** Chain of hills or mountains; a somewhat linear, complex, mountainous, or hilly area; cordillera, sierra
- RAPIDS:** Fast-flowing section of a stream, often shallower and with exposed rock or boulders; ripple, riffle
- RIDGE:** Elevation with a narrow, elongated crest that can be part of a hill or mountain; rim, crest, cuesta, escarpment, hogback, spur

- SCHOOL:** Building or group of buildings used as an institution for study, teaching, and learning; academy, high school, college, university
- SEA:** Large body of saltwater; gulf, ocean
- SLOPE:** A gently inclined part of the earth's surface; pitch, grade
- SPRING:** Place where underground water flows naturally to the surface of the earth; seep
- STREAM:** Linear body of water flowing on the earth's surface; creek, river, anabranch, distributary, branch, run, slough, bayou, pup, brook, fork, kill, rio
- SUMMIT:** Prominent elevation rising about the surrounding level of the earth's surface; does not include ridges and ranges; hill, mountain, knob, butte, berg, colina, cone, volcano, cumbre, dome, head, knoll, mesa, meseta, mesita, mound, mount, peak, rock, sugarloaf, table, bald, cerro, horn
- SWAMP:** Poorly drained wetland, fresh or saltwater, wooded or grassy, possibly covered with open water; marsh, bog, cienaga, marais, pocosin
- TANK:** Artificially impounded body of water; reservoir, lake (combined with the lake coverage)
- TRAIL:** Route for passage from one point to another; it does not include roads or highways (categories of entities not included in this alphabetical finding list); ski trail, jeep trail, path
- TUNNEL:** Linear underground passageway open at both ends
- VALLEY:** Linear depression in the earth's surface that generally slopes from one end to the other; canyon, barranca, chasm, cove, draw, glen, gorge, gulch, gulf, hollow, ravine
- WELL:** Man-made shaft or hole in the earth's surface used to obtain fluid or gaseous materials
- WOODS:** Small area covered with a dense growth of trees; does not include an area of trees under the administration of a political agency (see FOREST)





Arch



Area



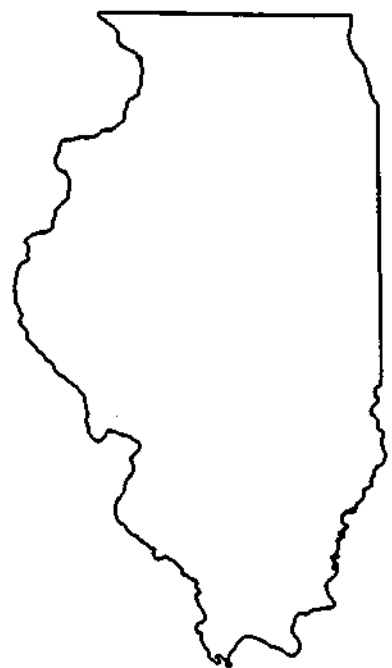
Bar



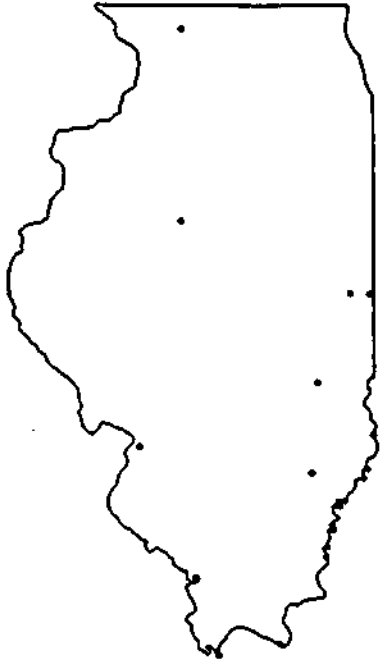
Basin



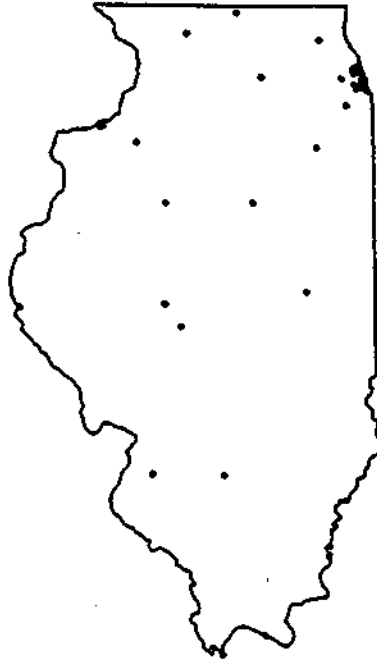
Bay



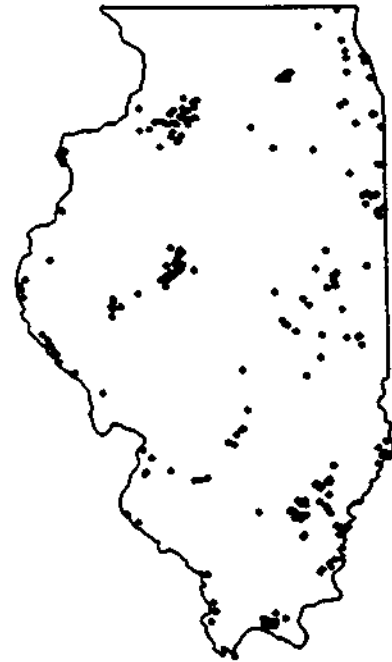
Beach



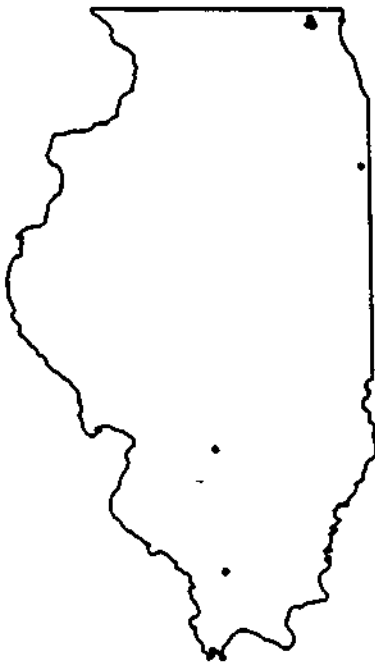
Bend



Building



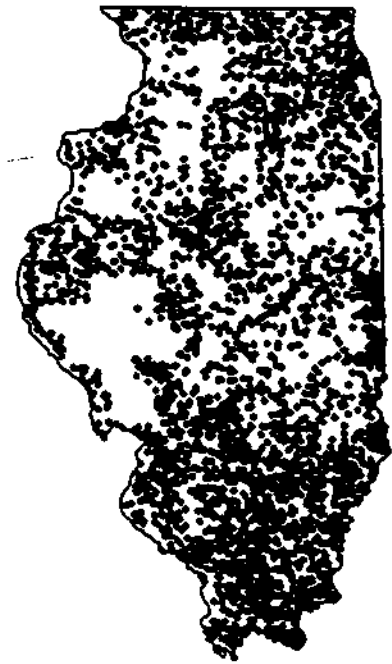
Canal



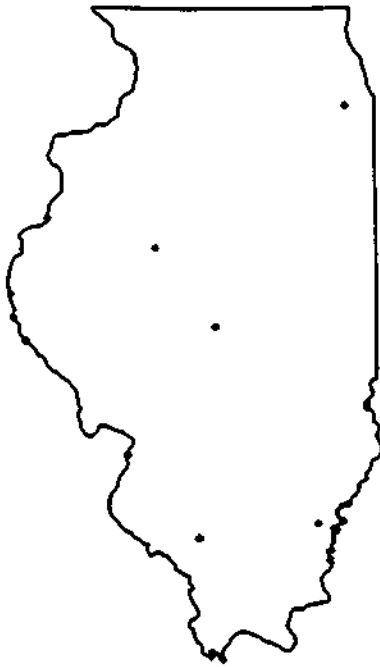
Cape



Cave



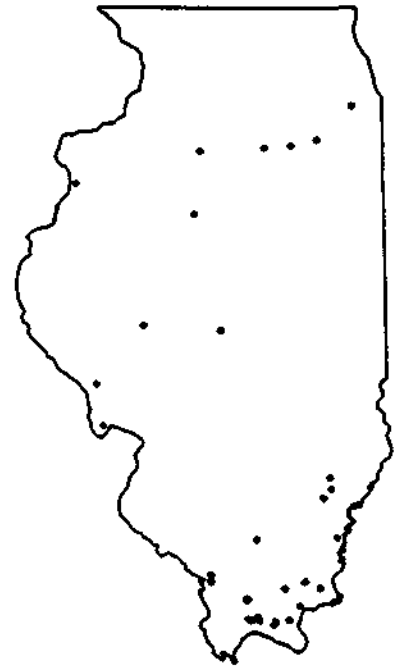
Cemetery



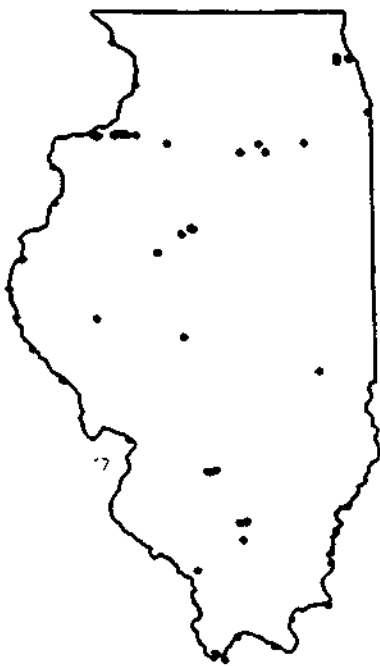
Channel



Church



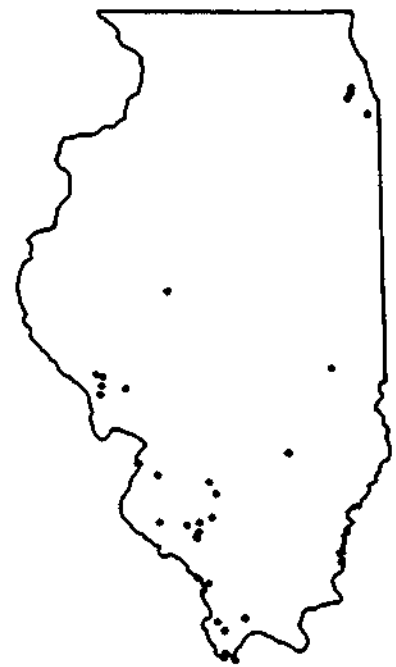
Cliff



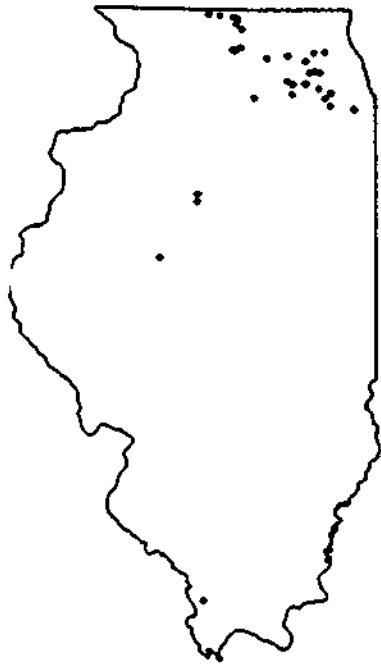
Dam



Falls



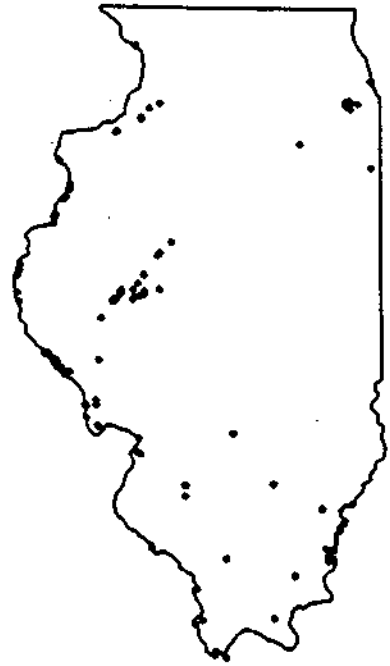
Flat



Forest



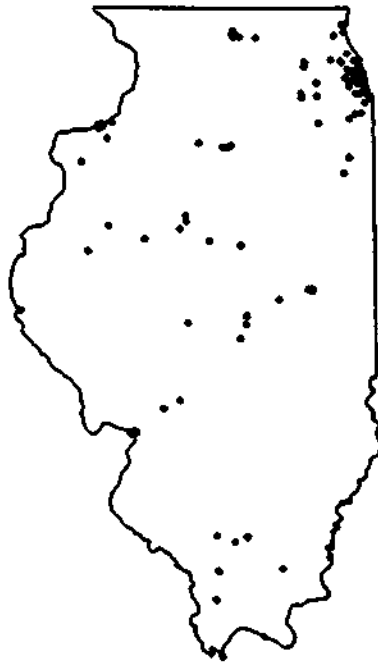
Gap



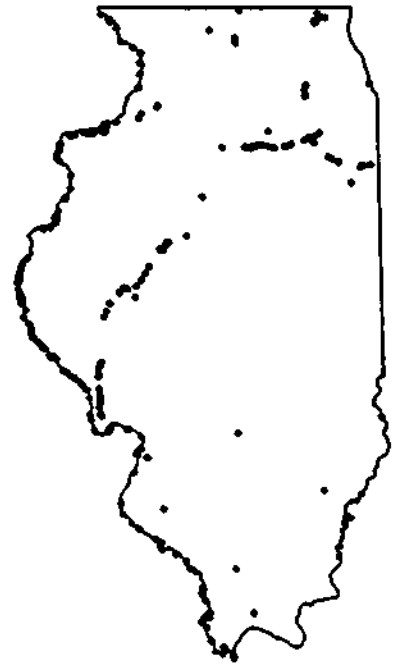
Gut



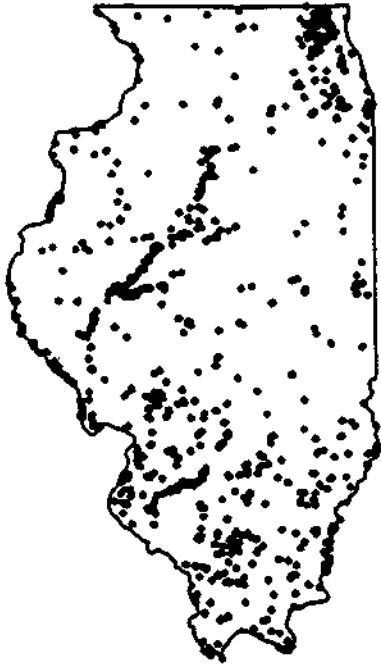
Harbor



Hospital



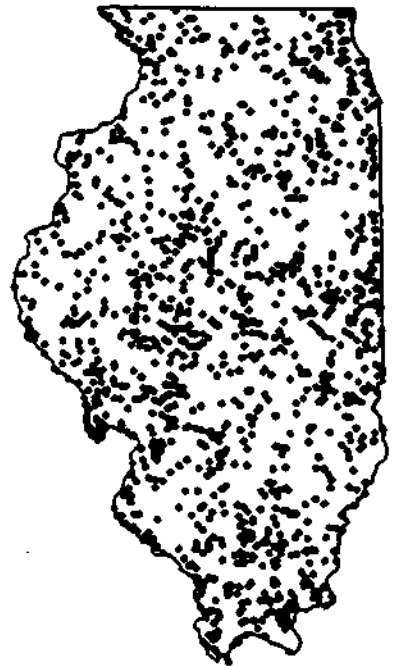
Island



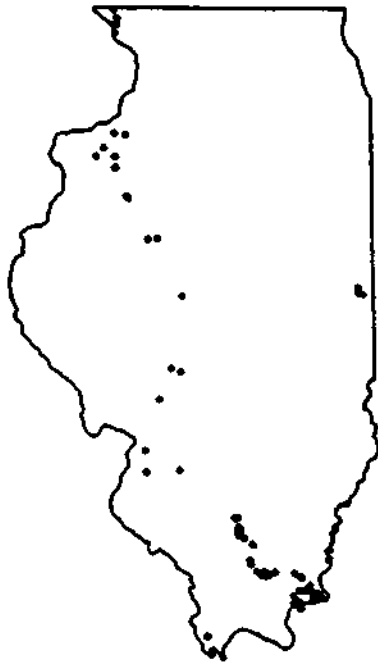
Lake



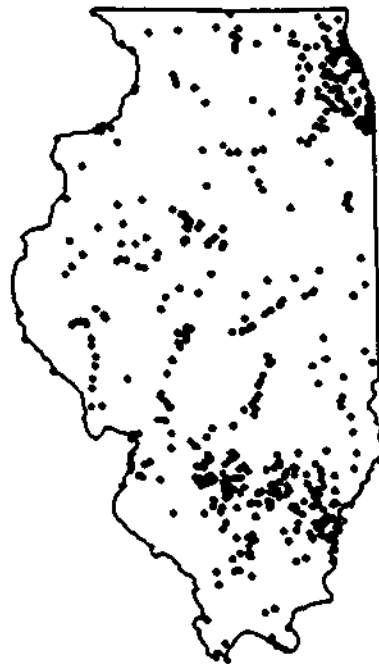
Levee



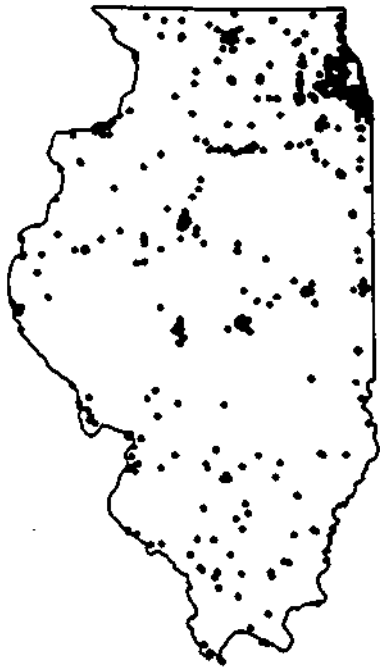
Locale



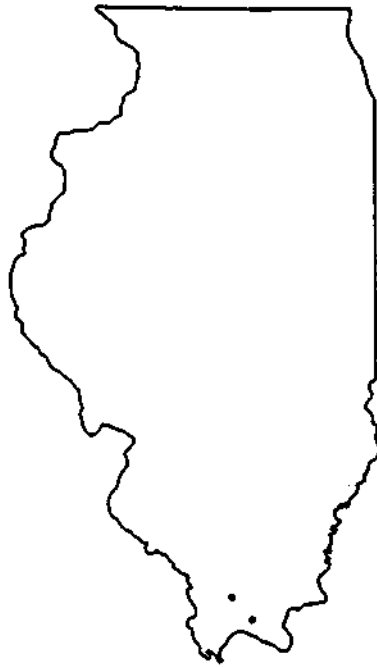
Mine



Other



Park



Pillar



Ppl



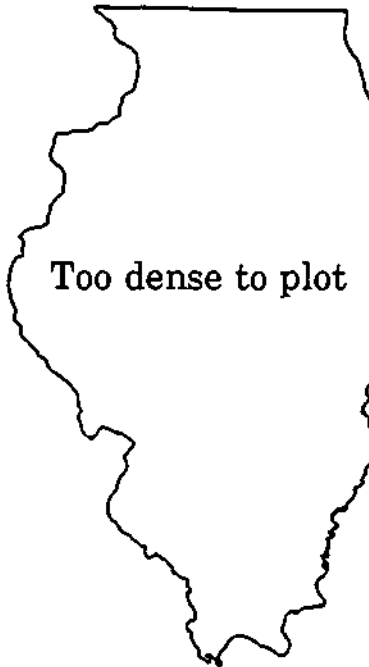
Range



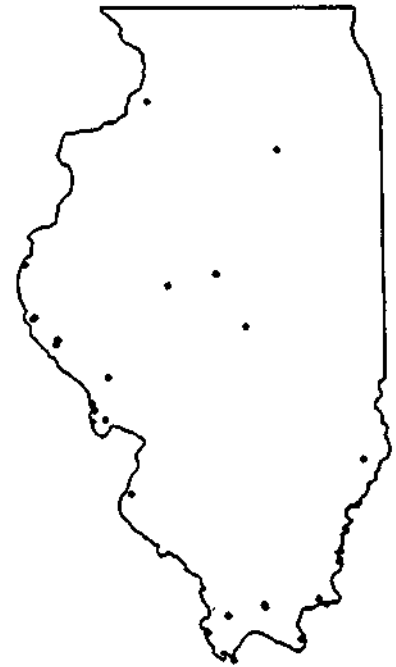
Rapids



Ridge



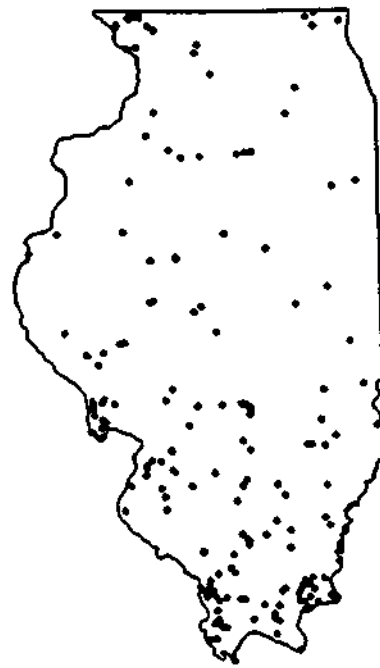
School



Spring



Stream



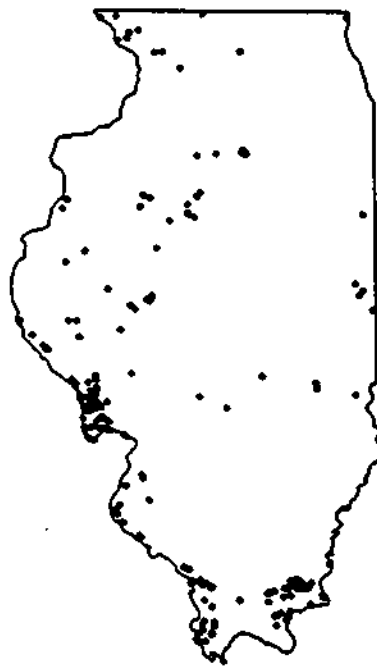
Summit



Swamp



Trail



Valley



Well



Woods



**ADMINISTRATIVE COVERAGES**  
**ILLINOIS STATEWIDE DATABASE**

## COUNTY BOUNDARIES FOR ILLINOIS

Coverage Names: COUNTIES (legal boundary in Lake Michigan)  
COUNTY-NL (no lake boundary)

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

Coverage History

Created in 1984 by ESRI as part of AUPYMG; AUPYMG was DISSOLVED to create COUNTIES and COUNTY-NL.

### INFO Item Description

103 records

DATAFILE NAME: COUNTIES.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	COUNTIES#	4	5	B	-	
13	COUNTIES-ID	4	5	B	-	
17	COUNT-FED-FIPS	7	6	I	-	County by FIPS and state codes
24	COUNTY_NAME	16	16	C	-	
<b>** REDEFINED ITEMS **</b>						
17	FIPS_CO	4	4	I	-	

103 records

DATAFILE NAME: COUNTY-NL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	COUNTY-NL#	4	5	B	-	
13	COUNTY-NL-ID	4	5	B	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
17	COUNT-FED-FIPS	7	6	I	-	County by FIPS and state codes
24	COUNTY_NAME	16	16	C	-	
	<b>** REDEFINED ITEMS **</b>					
17	FIPS_CO	4	4	I	-	
13	COUNTIES-ID	4	5	B	-	

### Coding for INFO Items

#### COUNTY BY FIPS AND STATE CODES (Columns 18-23)

	<i>FIPS code (col 18-20)</i>	<i>State code (col 21-23)</i>		<i>FIPS code (col 18-20)</i>	<i>State code (col 21-23)</i>
Adams	001	001	Effingham	049	025
Alexander	003	002	Fayette	051	026
Bond	005	003	Ford	053	027
Boone	007	004	Franklin	055	028
Brown	009	005	Fulton	057	029
Bureau	011	006	Gallatin	059	030
Calhoun	013	007	Greene	061	031
Carroll	015	008	Grundy	063	032
Cass	017	009	Hamilton	065	033
Champaign	019	010	Hancock	067	034
Christian	021	011	Hardin	069	035
Clark	023	012	Henderson	071	036
Clay	025	013	Henry	073	037
Clinton	027	014	Iroquois	075	038
Coles	029	015	Jackson	077	039
Cook	031	016	Jasper	079	040
Crawford	033	017	Jefferson	081	041
Cumberland	035	018	Jersey	083	042
DeKalb	037	019	JoDaviess	085	043
DeWitt	039	020	Johnson	087	044
Douglas	041	021	Kane	089	045
DuPage	043	022	Kankakee	091	046
Edgar	045	023	Kendall	093	047
Edwards	047	024	Knox	095	048

	<i>FIPS code (col 18-20)</i>	<i>State code (col 21-23)</i>		<i>FIPS code (col 18-20)</i>	<i>State code (col 21-23)</i>
Lake	097	049	Pope	151	076
LaSalle	099	050	Pulaski	153	077
Lawrence	101	051	Putnam	155	078
Lee	103	052	Randolph	157	079
Livingston	105	053	Richland	159	080
Logan	107	054	Rock Island	161	081
McDonough	109	055	St. Clair	163	082
McHenry	111	056	Saline	165	083
McLean	113	057	Sangamon	167	084
Macon	115	058	Schuyler	169	085
Macoupin	117	059	Scott	171	086
Madison	119	060	Shelby	173	087
Marion	121	061	Stark	175	088
Marshall	123	062	Stephenson	177	089
Mason	125	063	Tazewell	179	090
Massac	127	064	Union	181	091
Menard	129	065	Vermilion	183	092
Mercer	131	066	Wabash	185	093
Monroe	133	067	Warren	187	094
Montgomery	135	068	Washington	189	095
Morgan	137	069	Wayne	191	096
Moultrie	139	070	White	193	097
Ogle	141	071	Whiteside	195	098
Peoria	143	072	Will	197	099
Perry	145	073	Williamson	199	100
Piatt	147	074	Winnebago	201	101
Pike	149	075	Woodford	203	102

## Mapping Procedures

This manuscript is a polygon map that contains information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript. Exceptions to this were National Heritage Landmarks. Data for the locations of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.

## Bibliography

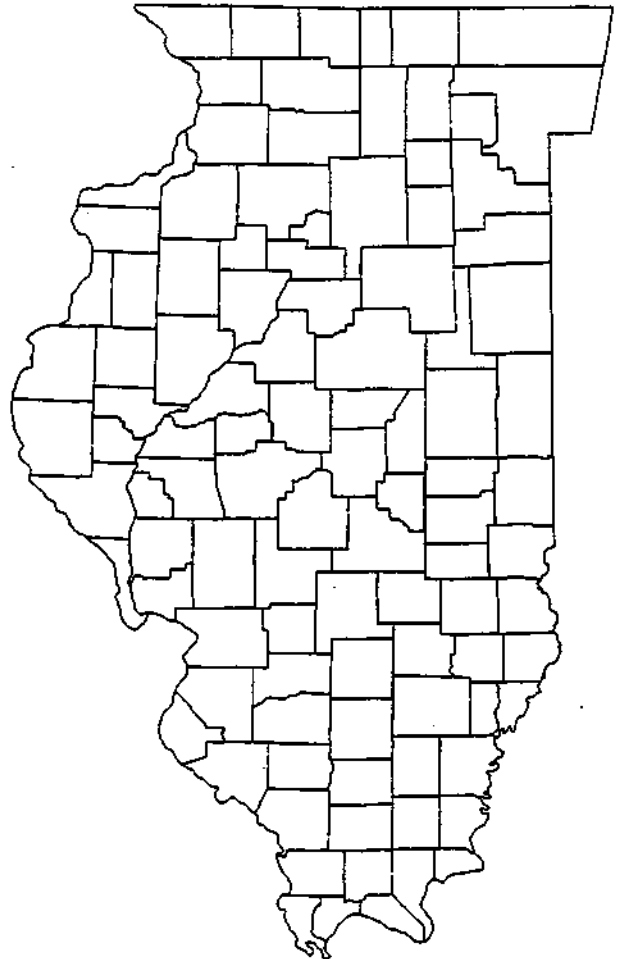
*County by FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations used by the SWS database system water use surveys.

U.S. Geological Survey, 1972, Maps of the State of Illinois: scale 1:500,000.



County Boundaries



County Boundaries

## ELECTRIC UTILITY SERVICE AREAS

Coverage Name: ELECTRIC

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:704,000

Contact Person

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

Coverage **History**

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item ELE-UTL-SER.

### INFO Item Description

28 records

**DATAFILE NAME: ELECTRIC.PAT**

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	ELECTRIC#	4	5	B	-	
13	ELECTRIC-ID	4	5	B	-	
17	COMPANY#	2	2	I	-	
19	COMPANY-NAME	45	45	C	-	

### Coding for INFO Items

ELECTRIC UTILITY SERVICE AREAS BY OPERATOR

COMPANY NUMBER (Columns 17-18)

COMPANY NAME (Columns 19-63)

01 = Cedar Point Light and Water Company

02 = Central Illinois Light Company

03 = Central Illinois Public Service Company

04 = Commonwealth Edison Company

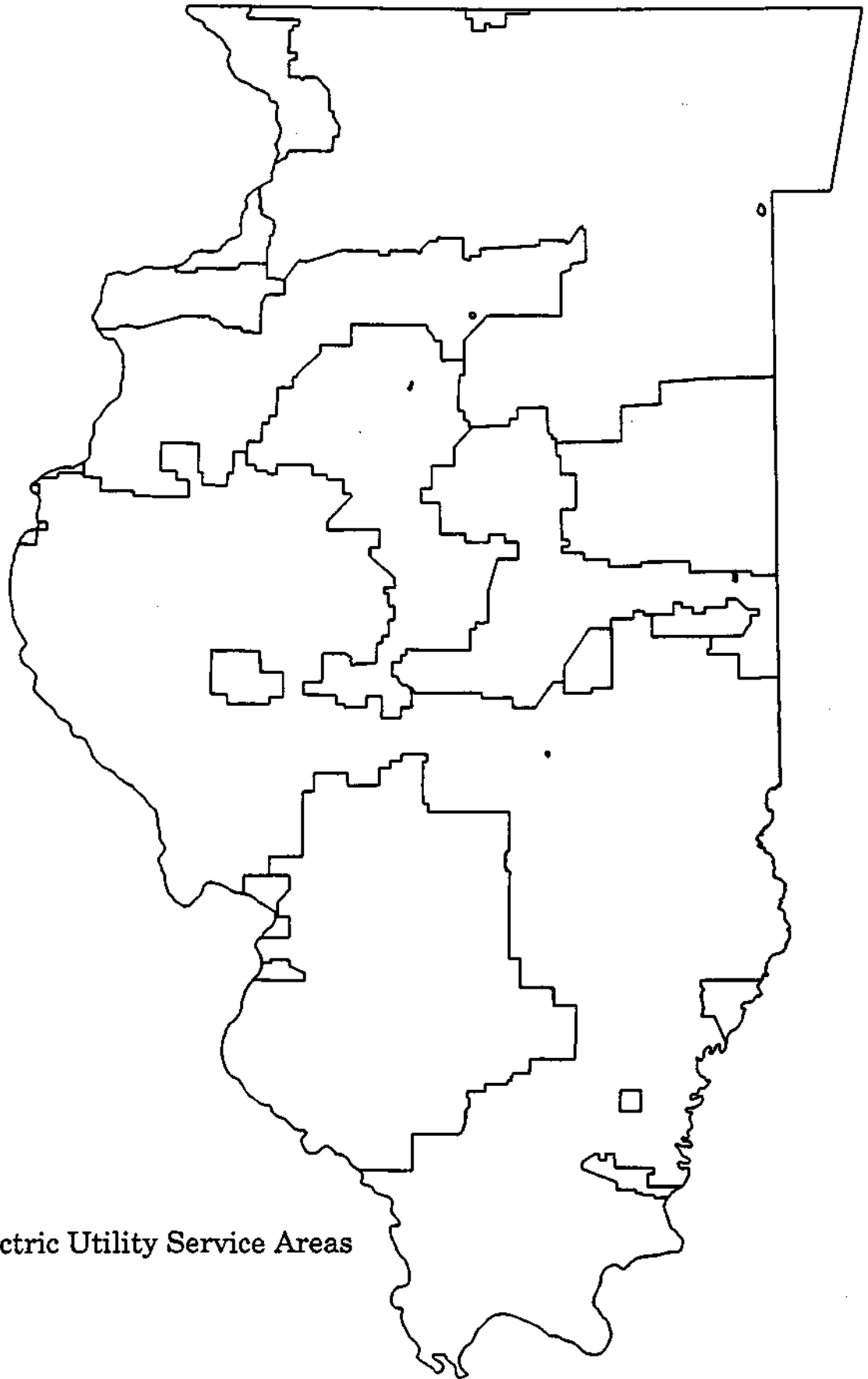
- 05 = Electric Energy, Incorporated
- 06 = Illinois Power Company
- 07 = Interstate Power Company
- 08 = Iowa-Illinois Gas and Electric Company
- 09 = Mt. Carmel Public Utility Company
- 10 = Sherrand Power System
- 11 = South Beloit Water, Gas, and Electric Company
- 12 = Union Electric
- 99 = Not an electric utility area

### **Mapping Procedures**

AUPYMG was a polygon map that contained information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### **Bibliography**

Illinois Commerce Commission, 1980, Electric Utilities in Illinois: scale 1:704,000.



Electric Utility Service Areas



## FEDERAL CONGRESSIONAL DISTRICTS

Coverage Name: CONGRESS

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:200,000 to 1:1,000,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item FED-CON-DIS.

### INFO Item Description

27 records

DATAFILE NAME: FED-CON-DIS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	CONGRESS#	4	5	B	-	
13	CONGRESS-ID	4	5	B	-	
17	DISTRICT#	2	2	I	-	

### Coding for INFO Items

FEDERAL CONGRESSIONAL DISTRICTS (Columns 17-18)

01-22 = District number

99 = Not a Federal Congressional District

### Mapping Procedures

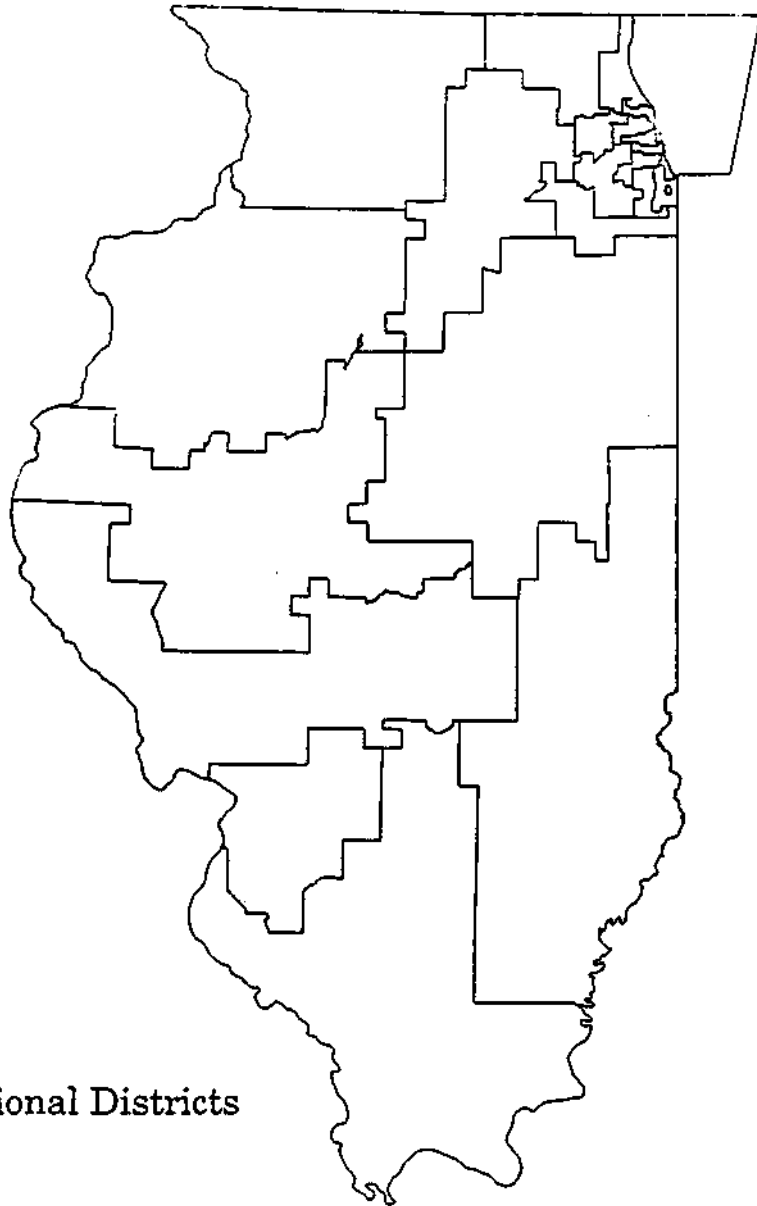
AUPYMG was a polygon map that contained information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays

were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

#### Bibliography

Illinois State Board of Education, 1981, Congressional Districts of Illinois Excluding the Northeastern Section: scale 1:1,000,000.

Illinois State Board of Education, 1981, Congressional Districts of Northeastern Illinois: scale 1:200,000.



**Federal Congressional Districts**

## LEGISLATIVE DISTRICTS FOR ILLINOIS

Coverage Name: LEG-DISTRICTS

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:120,000 - Cook County  
1:200,000 - Northeastern Illinois  
1:1,000,000 - Remainder of Illinois

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of AUPYMG; AUPYMG was DISSOLVED to create LEG-DISTRICTS.

### INFO Item Description

119 records

DATAFILE NAME: LEG-DISTRICTS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	LEG-DISTRICTS#	4	5	B	-	
13	LEG-DISTRICTS-ID	4	5	B	-	
17	STATE-SEN-DIS	2	2	I	-	State Representative Districts
19	STATE-REP-DIS	3	3	I	-	State Senatorial Districts

### Coding for INFO Items

STATE SENATORIAL DISTRICTS (Columns 17-18)

01-59 = District number

99 = Not a State Senatorial District

## STATE REPRESENTATIVE DISTRICTS (Columns 19-21)

001-118 = District number

999 = Not a State Representative District

### Mapping Procedures

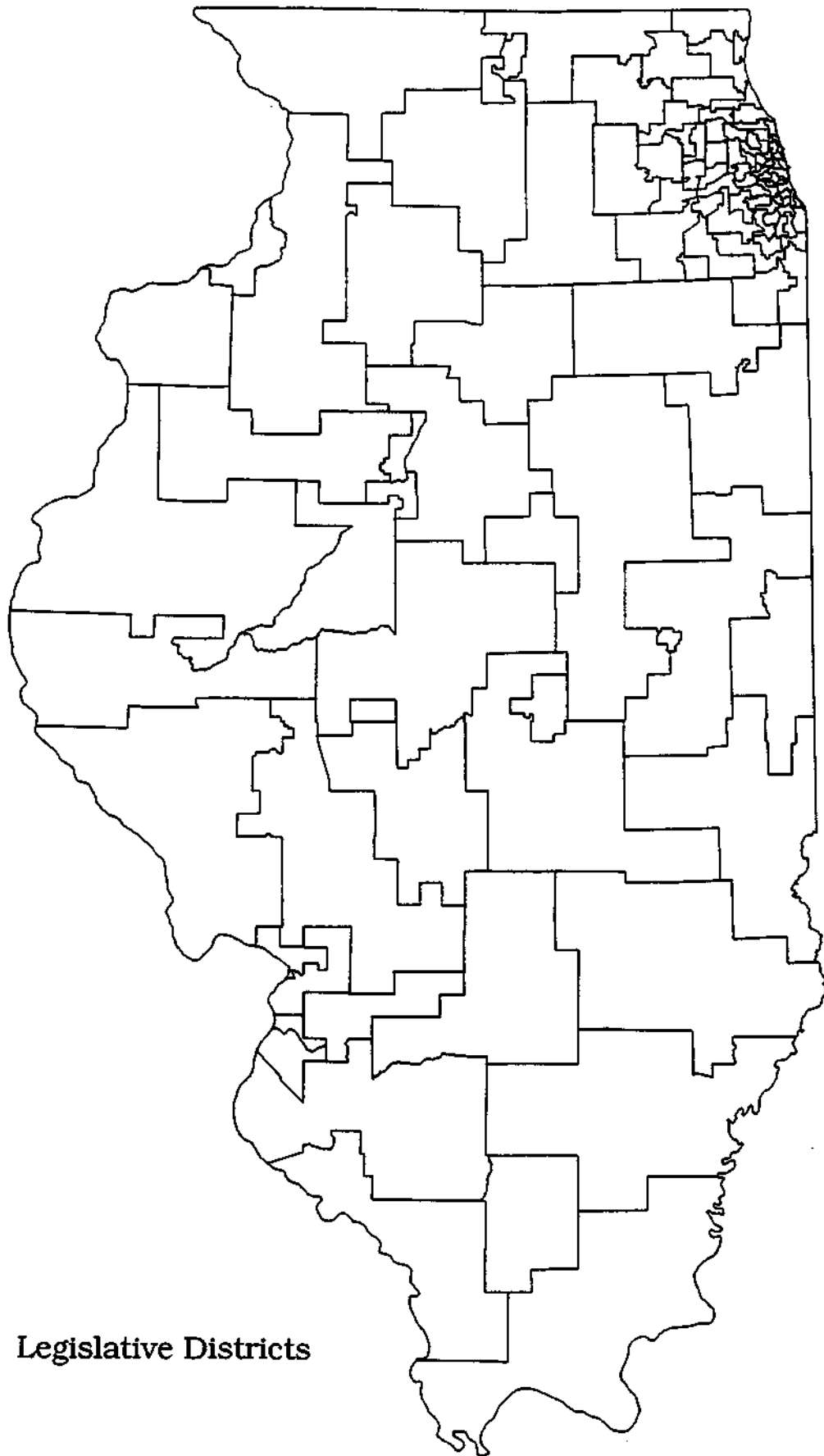
This manuscript is a polygon map that contains information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript. An exception to this was National Heritage Landmarks. Data for their locations were provided as latitude-longitude coordinates, which were keypunched and entered into the final coverage.

### Bibliography

Illinois State Board of Education, 1981, Legislative Districts of Cook County: scale 1:120,000.

Illinois State Board of Education, 1981, Legislative Districts of Illinois Excluding the Northeastern Section: scale 1:1,000,000.

Illinois State Board of Education, 1981, Legislative Districts of Northeastern Illinois Excluding Cook County: scale 1:200,000.



**Legislative Districts**

## MUNICIPAL BOUNDARIES FOR ILLINOIS

Coverage Name: MUNICIPAL-BND

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

**Mapscale:** 1:500,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1987 by Bob Lindquist, ENR, Office of Research and Planning. (Cook, DuPage, and Lake Counties are not on this map.)

### INFO Item Description

997 records

DATAFILE NAME: MUNICIPAL-BND.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	MUNICIPAL-BND#	4	5	B	-	
13	MUNICIPAL-BND-ID	4	5	B	-	
17	CODE	1	1	I	-	
	** REDEFINED ITEMS **					
10	CFF	4	3	I	-	

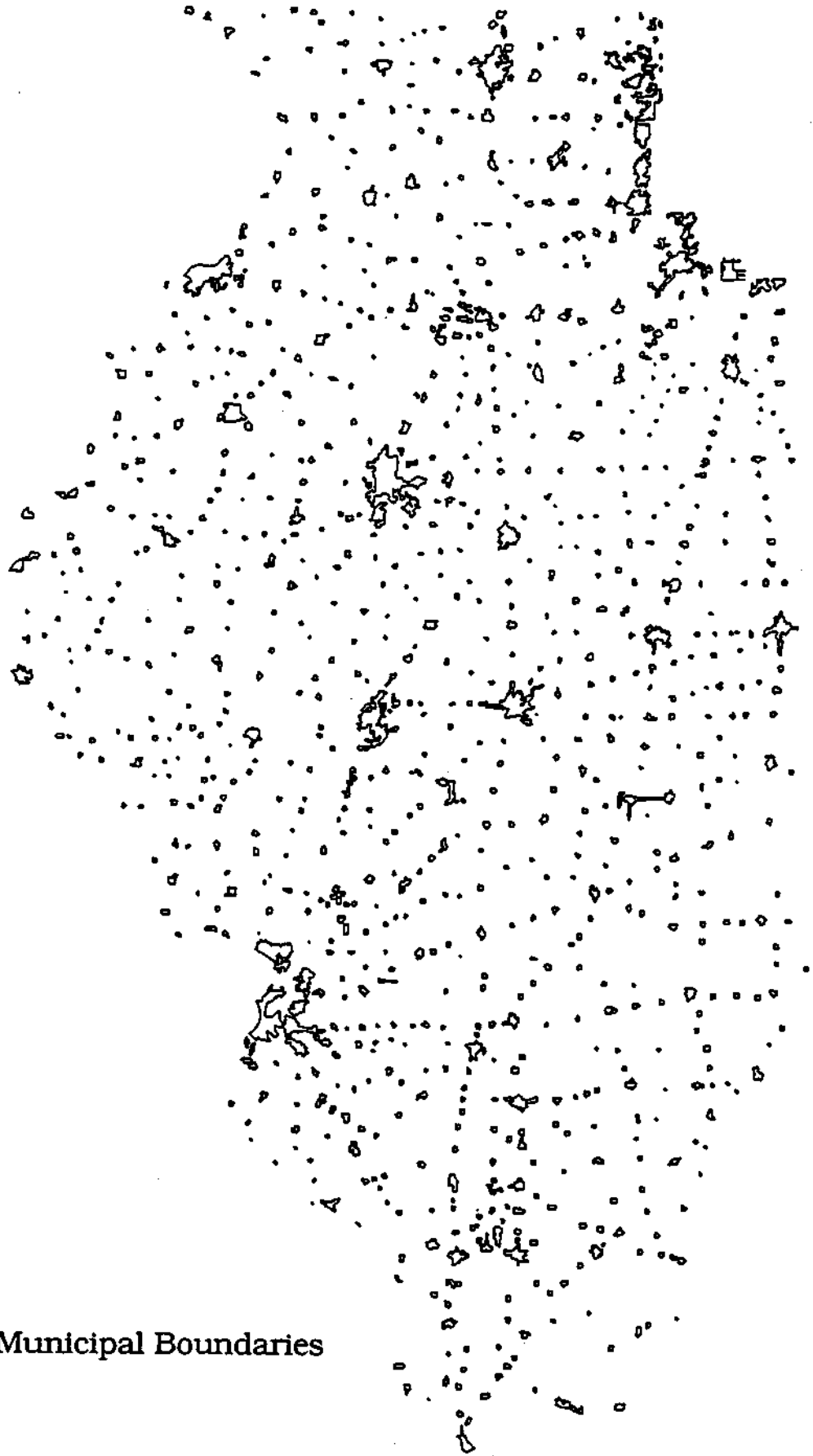
### Coding for INFO Items

### Mapping Procedures

Digitized from 1:500,000 scale map.

### Bibliography

Municipal Boundary Map, 1980 data, U.S. Census Bureau, Geography Division.



Municipal Boundaries

POLITICAL TOWNSHIPS

Coverage Name: TOWNSHIPS

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1985 by Tom Heavisides, ENR, Office of Research & Planning, using township maps from IDOT.

INFO Item Description

1,692 records

DATAFILE NAME: TOWNSHIPS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	TOWNSHIPS#	4	5	B	-	
13	TOWNSHIP-ID	4	5	B	-	
17	TOWNSHIP-NUM	3	2	I	-	
20	TOWNSHIP-NAME	30	30	C	-	
50	COUNT-FED-FIPS	6	6	I	-	County by FIPS and state codes
<b>** REDEFINED ITEMS **</b>						
17	ALL	39	39	C	-	
20	NAME	30	30	C	-	
50	COUNTY#	3	3	I	-	
50	CO-FIPS	6	6	I	-	



**Coding for INFO Items**

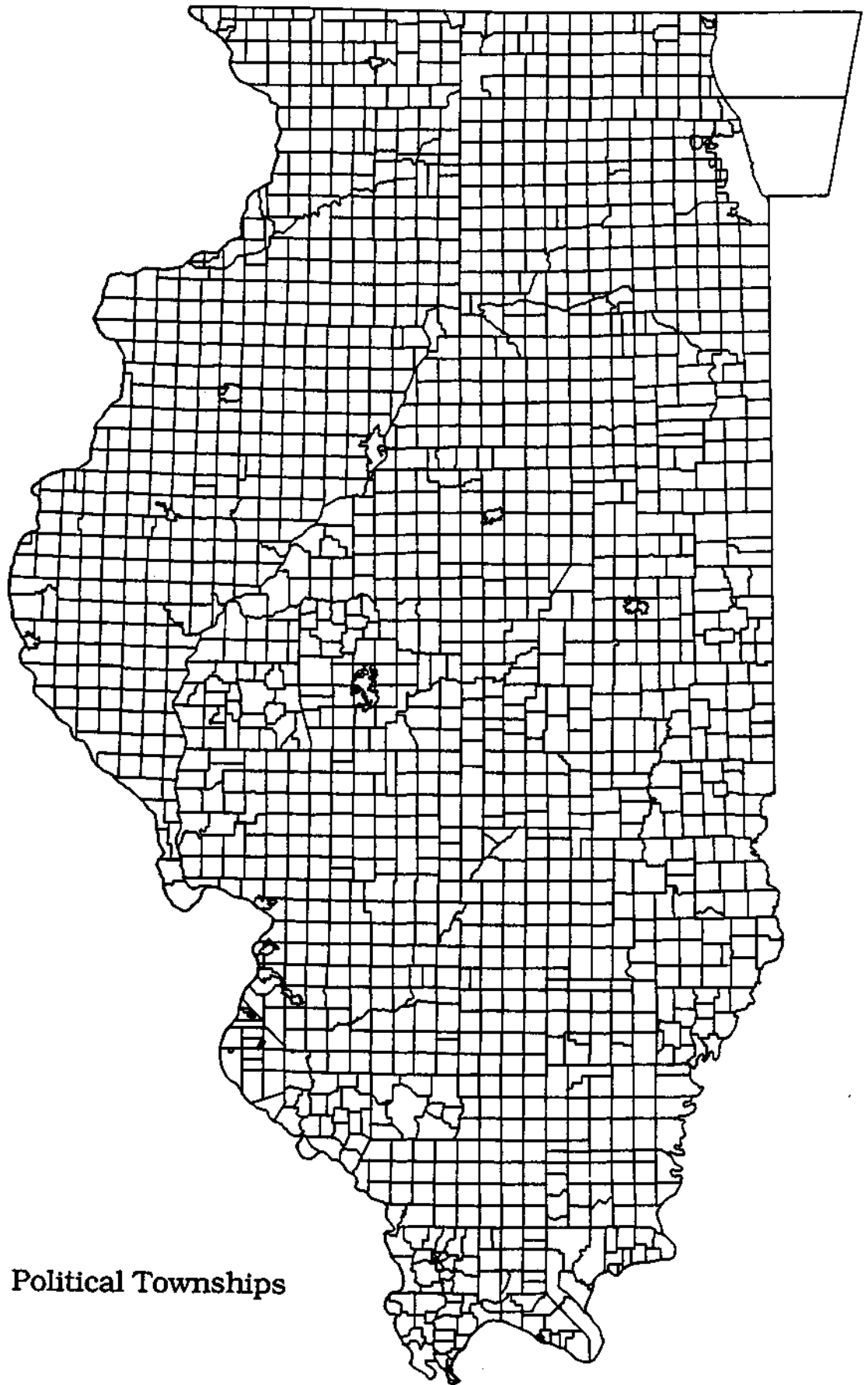
COUNTY BY FIPS AND STATE CODES (Columns 50-55)

FIPS Code (Columns 50-52)

State Code (Columns 53-55)

	<i>FIPS</i>	<i>State</i>		<i>FIPS</i>	<i>State</i>
Adams	= 001	001	Gallatin	= 059	030
Alexander	= 003	002	Greene	= 061	031
Bond	= 005	003	Grundy	= 063	032
Boone	= 007	004	Hamilton	= 065	033
Brown	= 009	005	Hancock	= 067	034
Bureau	= 011	006	Hardin	= 069	035
Calhoun	= 013	007	Henderson	= 071	036
Carroll	= 015	008	Henry	= 073	037
Cass	= 017	009	Iroquois	= 075	038
Champaign	= 019	010	Jackson	= 077	039
Christian	= 021	011	Jasper	= 079	040
Clark	= 023	012	Jefferson	= 081	041
Clay	= 025	013	Jersey	= 083	042
Clinton	= 027	014	Jo Daviess	= 085	043
Coles	= 029	015	Johnson	= 087	044
Cook	= 031	016	Kane	= 089	045
Crawford	= 033	017	Kankakee	= 091	046
Cumberland	= 035	018	Kendall	= 093	047
DeKalb	= 037	019	Knox	= 095	048
DeWitt	= 039	020	Lake	= 097	049
Douglas	= 041	021	LaSalle	= 099	050
DuPage	= 043	022	Lawrence	= 101	051
Edgar	= 045	023	Lee	= 103	052
Edwards	= 047	024	Livingston	= 105	053
Effingham	= 049	025	Logan	= 107	054
Fayette	= 051	026	McDonough	= 109	055
Ford	= 053	027	McHenry	= 111	056
Franklin	= 055	028	McLean	= 113	057
Fulton	= 057	029	Macon	= 115	058

	<i>FIPS</i>	<i>State</i>		<i>FIPS</i>	<i>State</i>
Macoupin	= 117	059	Rock Island	= 161	081
Madison	= 119	060	St. Clair	= 163	082
Marion	= 121	061	Saline	= 165	083
Marshall	= 123	062	Sangamon	= 167	084
Mason	= 125	063	Schuyler	= 169	085
Massac	= 127	064	Scott	= 171	086
Menard	= 129	065	Shelby	= 173	087
Mercer	= 131	066	Stark	= 175	088
Monroe	= 133	067	Stephenson	= 177	089
Montgomery	= 135	068	Tazewell	= 179	090
Morgan	= 137	069	Union	= 181	091
Moultrie	= 139	070	Vermilion	= 183	092
Ogle	= 141	071	Wabash	= 185	093
Peoria	= 143	072	Warren	= 187	094
Perry	= 145	073	Washington	= 189	095
Piatt	= 147	074	Wayne	= 191	096
Pike	= 149	075	White	= 193	097
Pope	= 151	076	Whiteside	= 195	098
Pulaski	= 153	077	Will	= 197	099
Putnam	= 155	078	Williamson	= 199	100
Randolph	= 157	079	Winnebago	= 201	101
Richland	= 159	080	Woodford	= 203	102



Political Townships

## REGIONAL PORT DISTRICTS

Coverage Name: PORTS

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: Variable

Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

Coverage History

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item REG-PORT-DIS.

### INFO Item Description

17 records

DATAFILE NAME: PORTS.PAT

6 items, starting in Position 1

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	PORTS#	4	5	B	-	
13	PORTS-ID	4	5	B	-	
17	PORT-DISTRICT#	2	2	I	-	
19	PORT-NAME	30	30	C	-	

### Coding for INFO Items

PORT DISTRICT NUMBER (Columns 17-18)

PORT NAME (Columns 19-48)

01 = Chicago

02 = Havana

03 = Illinois Valley

04 = Jackson-Union Counties

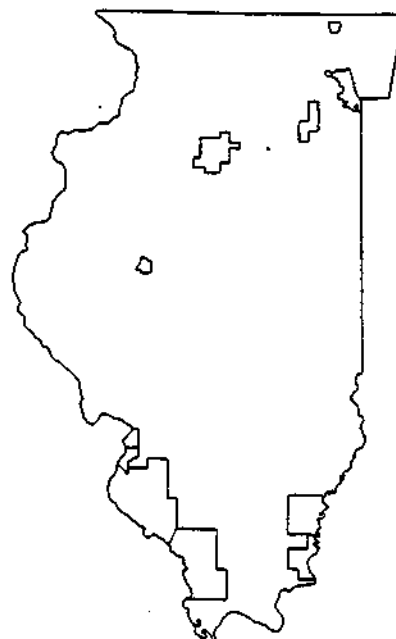
- 05 = Joliet
- 06 = Kaskaskia
- 07 = Mt. Carmel
- 08 = Seneca
- 09 = Shawneetown
- 10 = Southwest
- 11 = Tri-City
- 12 = Waukegan
- 13 = White County
- 99 = Not a regional port district

### Mapping Procedures

AUPYMG was a polygon map that contained information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### Bibliography

Illinois Department of Transportation, Division of Water Resources, Ports Management Section, 1978, Directory of Regional Port Districts in Illinois: scale variable.



**Regional Port Districts**

## STATE BOUNDARY FOR ILLINOIS

Coverage Names: STATE (legal boundary in Lake Michigan)  
STATE-NL (no lake boundary)

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:500,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of AUPTMG; AUPTMG was DISSOLVED to create STATE and STATE-NL.

### INFO Item Description

2 records

DATAFILE NAME: STATE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE#	4	5	B	-	
13	STATE-ID	4	5	B	-	
17	COUNT-FED-FIPS	7	6	I	-	County by FIPS and state codes

2 records

DATAFILE NAME: STATE-NL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE#	4	5	B	-	
13	STATE-NL-ID	4	5	B	-	
17	COUNT-FED-FIPS	7	6	I	-	County by FIPS and state codes

### **Coding for INFO Items**

COUNTY BY FIPS AND STATE CODES (Columns 18-23)

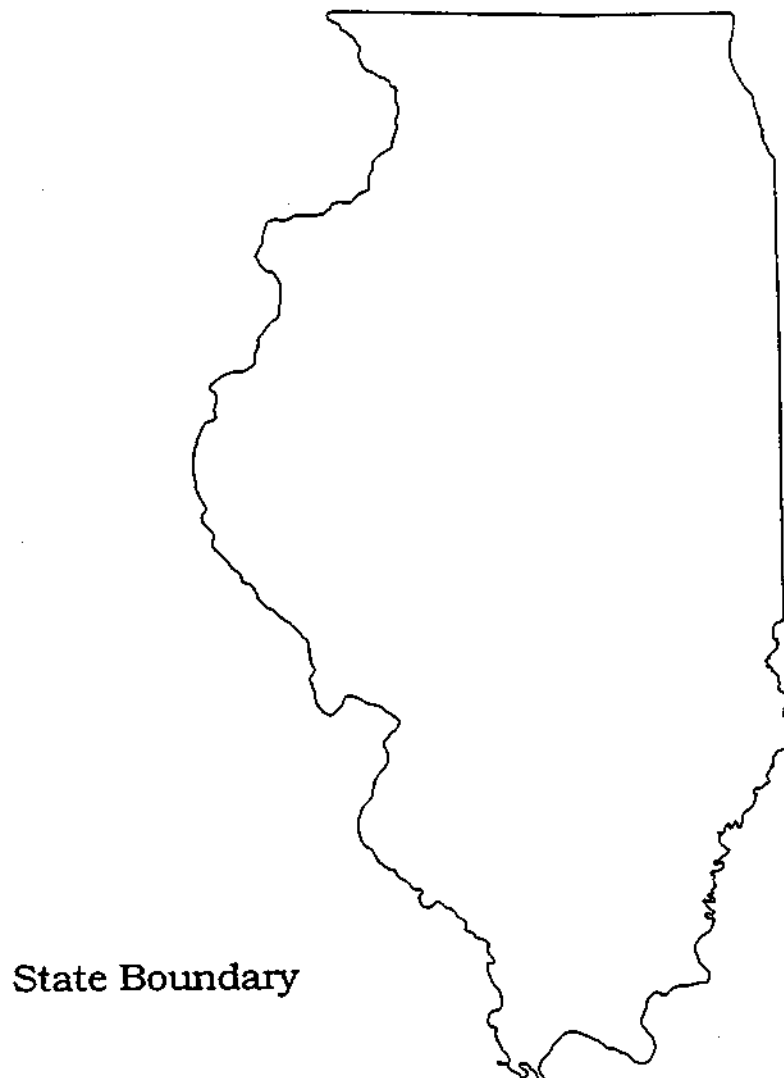
FIPS code (Columns 18-20)

State code (Columns 21-23)

(These items contain no useful information.)

### **Mapping Procedures**

These procedures apply to the original coverage AUPYMG. This manuscript is a polygon map that contains information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript.



## STATE REPRESENTATIVE DISTRICTS

Coverage Name: STATE-REP

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:120,000 to 1:1,000,000

Contact Person

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

Coverage History

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item STATE-REP-DIS.

### INFO Item Description

119 records

DATAFILE NAME: STATE-REP.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE-REP#	4	5	B	-	
13	STATE-REP-ID	4	5	B	-	
17	DISTRICT#	3	3	I	-	

### Coding for INFO Items

STATE REPRESENTATIVE DISTRICTS (Columns 17-18)

001-118 = District number

### Mapping Procedures

AUPYMG was a polygon map that contained information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing



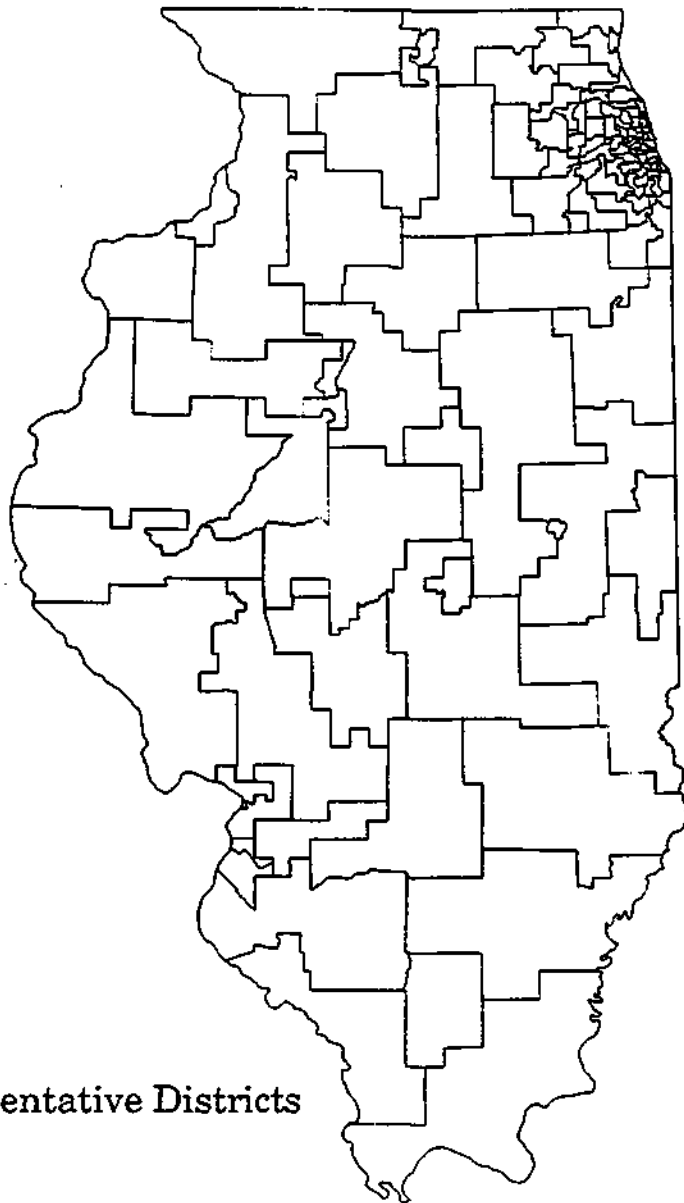
scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

#### Bibliography

Illinois State Board of Education, 1981, Legislative Districts of Cook County: scale 1:120,000.

Illinois State Board of Education, 1981, Legislative Districts of Illinois Excluding the Northeastern Section: scale 1:1,000,000.

Illinois State Board of Education, 1981, Legislative Districts of Northeastern Illinois Excluding Cook County: scale 1:200,000.



**State Representative Districts**

## STATE SENATORIAL DISTRICTS

Coverage Name: STATE-SEN

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:120,000 to 1:1,000,000

Contact Person:

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

Coverage History

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item STATE-SEN-DIS.

INFO Item Description

60 records

DATAFILE NAME: STATE-SEN.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE-SEN#	4	5	B	-	
13	STATE-SEN-ID	4	5	B	-	
17	DISTRICT#	2	2	I	-	

Coding for INFO Items

STATE SENATORIAL DISTRICTS (Columns 17-18)

01-59 = District number

Mapping Procedures

AUPYMG was a polygon map that contained information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing

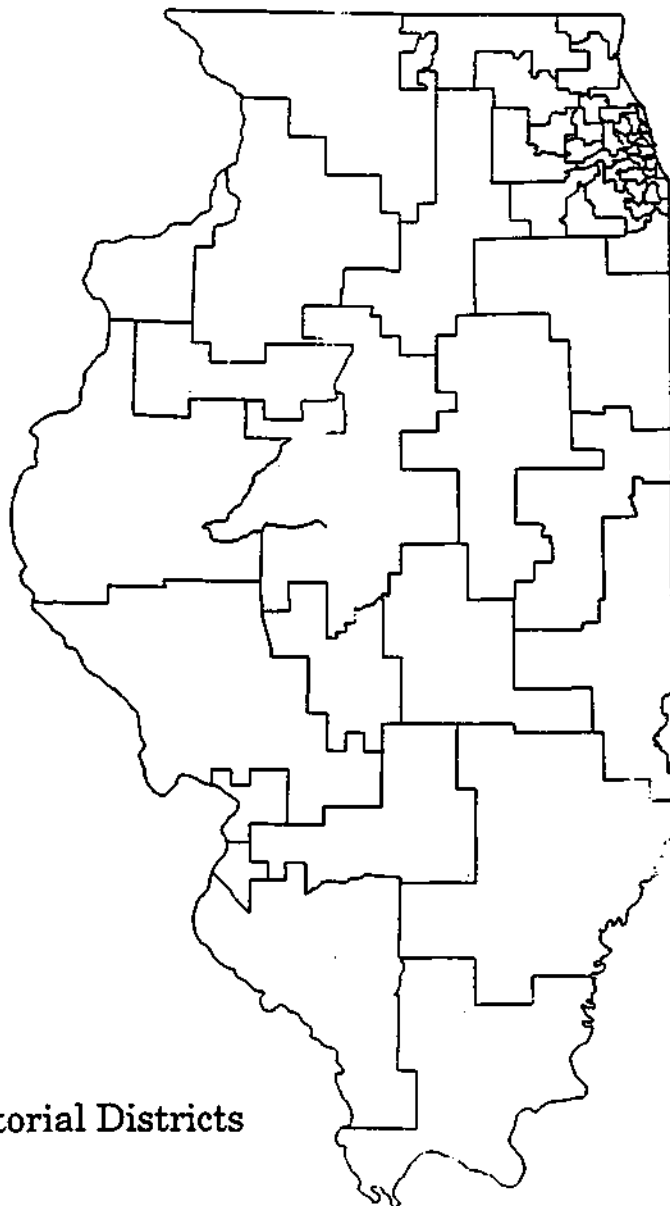
scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

#### Bibliography

Illinois State Board of Education, 1981, Legislative Districts of Cook County: scale 1:120,000.

Illinois State Board of Education, 1981, Legislative Districts of Illinois Excluding the Northeastern Section: scale 1:1,000,000.

Illinois State Board of Education, 1981, Legislative Districts of Northeastern Illinois Excluding Cook County: scale 1:200,000.



**State Senatorial Districts**

## ZIPCODES FOR ILLINOIS

Coverage Name: ZIPCODES

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale

Kane, Will, Cook, Lake, DuPage, McHenry Counties: 1:26,720

Remainder of the state: 1:500,000

Contact Person

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

Coverage History

Created in 1982 and purchased by ENR, Office of Research and Planning, in 1986.

INFO Item Description

1,434 records

DATAFILE NAME: ZIPCODES.PAT

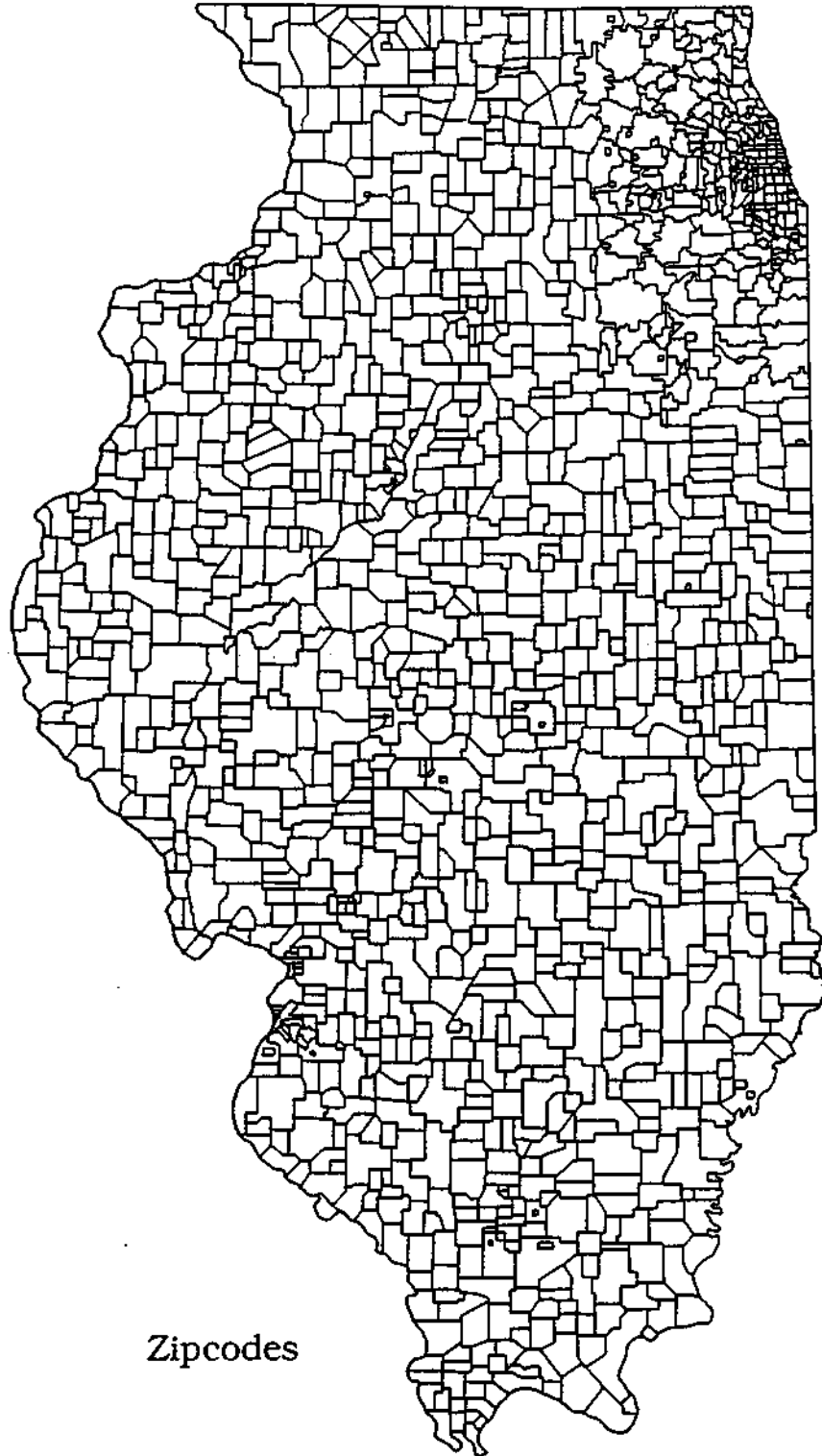
<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	ZIPCODES#	4	5	B	-	
13	ZIPCODES-ID	4	5	B	-	
17	CAT-77	2	2	I	-	
21	EST-77	4	4	I	-	
25	EST-86	4	4	I	-	
29	ZIPCODE	6	6	I	-	
	<b>** REDEFINED ITEMS **</b>					
29	Z	6	6	I	1	

**Coding for INFO Items**

**Mapping Procedures**

Bibliography

Chicago Area Geographic Information System (CAGIS), 1982 data, Department of Geography,  
University of Illinois at Chicago.



Zipcodes

**GEOLOGY COVERAGES**  
**ILLINOIS STATEWIDE DATABASE**

## BEDROCK GEOLOGY

Coverage Name: BEDGEO (boundary extends into Lake Michigan)  
BEDGEO-NL (boundary does not extend into Lake Michigan)  
-NL (no lake boundary)

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217)333-0044

or  
IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item BED-GEO.

### INFO Item Description

526 records

DATAFILE NAME: BEDGEO.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	BEDGEO#	4	5	B	-	
13	BEDGEO-ID	4	5	B	-	
17	BED-GEO	4	5	I	-	

525 records

DATAFILE NAME: BEDGEO-NL.PAT

5 ITEMS

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
9	BEDGEO-NL#	4	5	B	-	
13	BEDGEO-NL-ID	4	5	B	-	
17	BED-GEO	4	5	I	-	Bedrock geology

Coding for INFO Items

BEDROCK GEOLOGY (Columns 17-20)

Tertiary

1200 = Undifferentiated

Cretaceous

1360 = Undifferentiated

Pennsylvanian

1550 = Mattoon

1880 = Bond

2120 = Modesto

2480 = Carbondale

3030 = Spoon

3540 = Abbott

3820 = Caseyville

Mississippian

4025 = Upper Chesterian

4265 = Lower Chesterian

5005 = Upper Valmeyeran

5175 = Middle Valmeyeran

5255 = Lower Valmeyeran

5420 = Kinderhookian

Devonian

5810 = Upper

5880 = Middle

6170 = Lower

Silurian

6700 = Undifferentiated

Ordovician

7390 = Maquoketa

7550 = Galena-Platteville

8160 = Ancell

8420 = Prairie du Chien

Cambrian

8550 = Undifferentiated

Major Water Bodies

9991 = Lake Michigan

9992 = Mississippi River

9993 = Ohio River

9994 = Wabash River

## Mapping Procedures

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.



### *Bedrock Geology*

The 1:500,000 scale *Geologic Map of Illinois* was redrafted directly onto a mylar overlay registered to the basemap using rivers and waterbodies to ensure proper registration. Recent unpublished data received from the SGS were used in two areas of the state. Bedrock lines were adjusted only when small sliver polygons would have been created by adding these data to the integrated data set. Exceptions to this included bedrock units that bordered on faults and the boundary line representing the extent of Pennsylvanian rocks. Bedrock outcrops on the Quaternary geology map and the STACK unit map were adjusted to bedrock geology units.

### Bibliography

#### *Bedrock Geology*

- Treworgy, J.D., 1983, Update overlay for Geologic Map of Illinois, Illinois State Geological Survey unpublished manuscript: scale 1:500,000.
- Willman, H.B., 1967, Geologic Map of Illinois, Illinois State Geological Survey: scale 1:500,000.



Bedrock Geology

## DIRECTIONAL LINES OF FAULTS

**Coverage Name:** SFDLFX

**Location of Coverages:** ILLINOIS > FAULTS

**Coverage Type:** LINE

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as SFDLMG.

### INFO Item Description

224 records

DATAFILE NAME: SFDLFX.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	<b>B</b>	-	
5	<b>TNODE3</b>	4	5	<b>B</b>	-	
9	<b>LPOLY#</b>	4	5	<b>B</b>	-	
13	<b>RPOLY#</b>	4	5	<b>B</b>	-	
17	<b>LENGTH</b>	4	12	<b>F</b>	3	
21	<b>SFDLFX#</b>	4	5	<b>B</b>	-	
25	<b>SFDLFX-ID</b>	4	5	<b>B</b>	-	
29	<b>CODE</b>	4	4	<b>I</b>	-	<b>Directional lines</b>

### Coding for INFO Items

DIRECTIONAL LINES (Columns 29-32)

General Type (Column 29)

1 = Fault

4 = Monocline

Individual Number/Name (Columns 30-32)

### *Faults*

- 001 = Albion-Ridgeway Fault (formerly the Ridgeway-Omaha Monocline or Fault Zone; includes the former Albion Fault and Ridgeway Fault)
- 002 = Atwood Fault
- 003 = Centralia Fault Zone
- 004 = Cottage Grove Fault System (includes the former Harrisburg Fault)
- 005 = Cottonwood Fault
- 006 = Delta Fault
- 007 = Dowell Fault Zone
- 008 = Fluorspar Area Fault Complex
- 009 = Herald-Phillipstown Fault
- 010 = Inman East Fault (includes the former Mink Island Fault)
- 011 = Inman Fault
- 012 = Inman West Fault (formerly the Hill Fault)
- 013 = Junction Fault
- 014 = Maunie Fault
- 015 = McCormick Fault
- 016 = Mt. Carmel - New Harmony Fault (includes the former Mt. Carmel Fault, New Harmony Fault, and Greathouse Island Fault)
- 017 = Mud Creek Fault
- 018 = North Fork Fault
- 019 = Pitcher Lake Fault
- 020 = Plum River Fault Zone (formerly the Savanna-Sabula Anticline)
- 021 = Pomona Fault
- 022 = Rend Lake Fault System
- 023 = Ribeyre Island Fault
- 024 = Ste. Genevieve Fault Zone (formerly the Rattlesnake Ferry Fault Zone)
- 025 = Sandwich Fault Zone
- 026 = Shawneetown Fault Zone (formerly the Gold Hill Fault)
- 027 = White Ash Fault Zone
- 028 = Winkleman Fault
- 029 = Unnamed faults in the greater Chicago area, Cook and DuPage Counties
- 030 = Unnamed faults in the Pomona and Cobden Quadrangles, Jackson County
- 031 = Unnamed faults in Union County
- 032 = Unnamed faults in Johnson County
- 033 = Unnamed faults in Thebes Gap, Alexander County
- 034 = Unnamed faults beneath the Mississippi Embayment sediments, Pulaski and Massac Counties
- 035 = Unnamed faults on Troy Grove Dome, LaSalle County
- 036 = Unnamed faults bordering the Omaha Graben
- 999 = Not a structural feature

### *Monoclines*

- 001 = DuQuoin Monocline
- 002 = Longbranch Monocline
- 999 - Not a structural feature

### **Mapping Procedures**

This manuscript identifies features such as domes, basins, and grabens as polygons; faults, anticlines, synclines, escarpments, etc. as lines; and crypto-explosion structures, Silurian reefs, and buried Precambrian hills as points. Escarpments were interpreted from

USGS 1:250,000 scale topographic maps and Landsat images. All other data are included on a 1:570,000 scale map of structural features in Illinois. Unpublished map overlays developed by the SGS were also used to update the location of some faults. The following criteria were used for mapping escarpments:

1. Lines defining escarpments were drafted at the base of the feature.
2. Minimum length was one mile.
3. Minimum slope was 1/8 inch between 50- or 100-foot contours at 1:250,000 scale.
4. Minimum height was generally 50 feet.

Along with naturally occurring escarpments, road cuts and quarries meeting the above requirements were also mapped. Escarpments along levees and dams were not included.

Complex data in the southern portion of the state were mapped at 1:250,000 scale using the USGS Paducah Quadrangle as a basemap. The data were automated at this scale and later merged with those for the rest of the state.

## Bibliography

### *Structural Features*

Treworgy, J.D., 1982, Structural Features in Illinois - A Compendium, SGS Circular 519, Champaign, IL, plate 1: scale 1:570,000.

Treworgy, J.D., 1983, Unpublished updates to SGS Circular 519, Champaign, IL: scale 1:500,000.

### *Escarpments*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

Landsat Imagery.



A map of the state of Illinois, outlined in black. The map is populated with numerous small black dots representing fault locations. These dots are scattered across the state, with a notable concentration in the southern and southeastern regions. There are also several smaller clusters in the northern part of the state. The text 'Directional Lines of Faults' is printed in a bold, black, sans-serif font in the lower-left quadrant of the map area.

**Directional Lines of Faults**

## GLACIAL BOUNDARIES

**Coverage Name:** GLCBND

**Location of Coverages:** ILLINOIS > ITU

**Coverage Type:** POLYGON

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item GLC-BND.

### INFO Item Description

23 records

**DATAFILE NAME:** GLCBND.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>
1	AREA	4	12	F	3
5	PERIMETER	4	12	F	3
9	GLCBND#	4	5	B	-
13	GLCBND-ID	4	5	B	-
17	GLC-BND	1	2	I	-

### Coding for INFO Items

**GLACIAL BOUNDARIES** (Column 17)

Wisconsin

- 1 = Late Woodfordian
- 2 = Middle Woodfordian
- 3 = Early Woodfordian
- 4 = Altonian

Illinoian

- 5 = Undifferentiated

Kansan

6 = Undifferentiated

9 = Not glaciated

## Mapping Procedures

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

### *Glacial Boundaries*

Glacial boundary lines represent the southernmost extent of glaciation for each of the major glacial periods. Registration of the 1:500,000 scale source map to the basemap was good, and little change was required to draft the compilation overlay. The glacial boundary lines were adjusted to the boundaries of till members from the Quaternary geology overlay produced during the integration of STACK units and Quaternary geology units. In areas where glacial till was absent (i.e., bedrock, loess, and silt areas) the glacial boundaries were left unchanged.

## **Bibliography**

### *Glacial Boundaries*

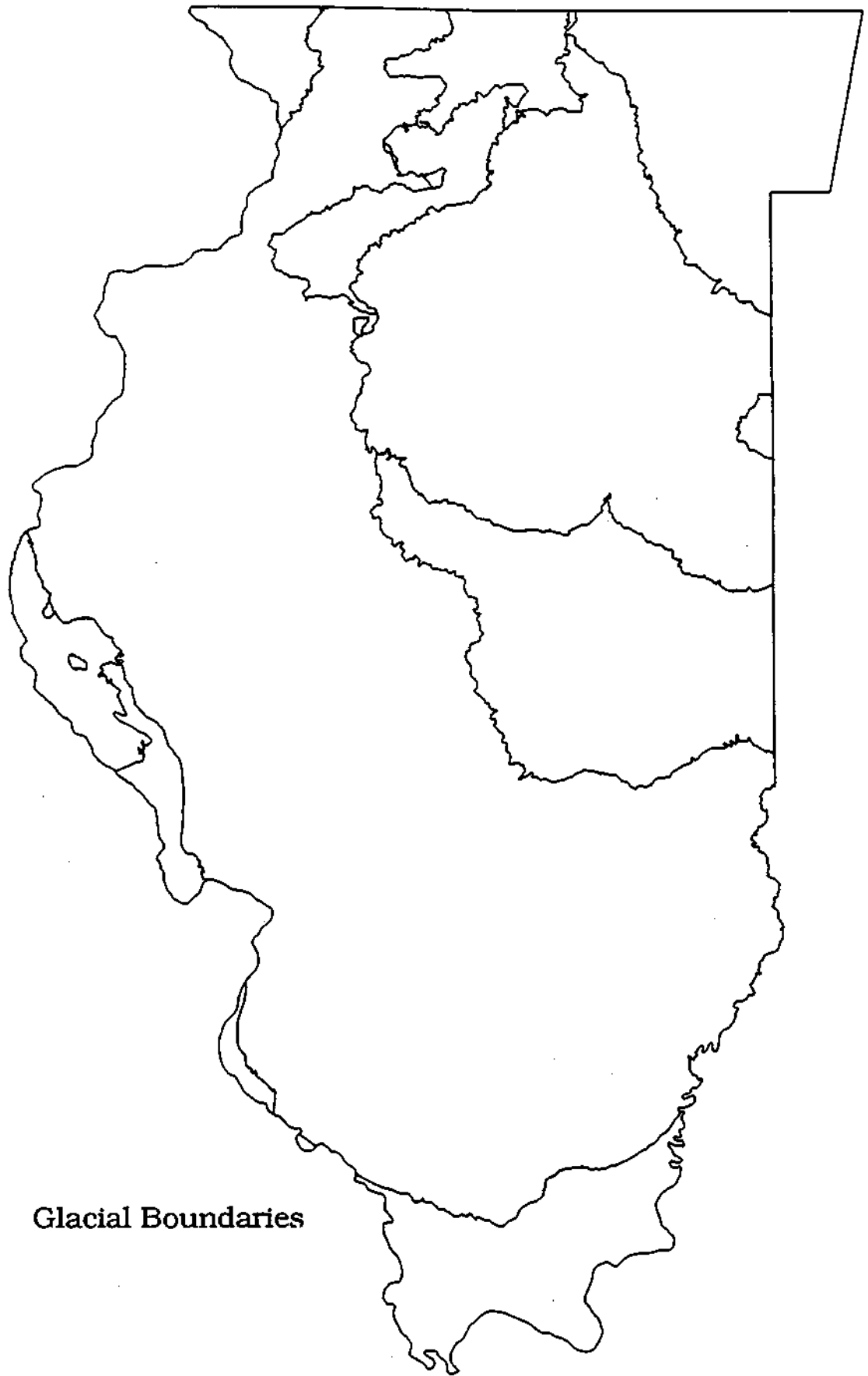
Willman, H.B., 1967, Geologic Map of Illinois, Illinois State Geological Survey, Champaign,

IL: scale 1:500,000.

Linebeck, J.A., 1979, Quaternary Deposits of Illinois, Illinois State Geological Survey,

Champaign, IL: scale 1:500,000.





**Glacial Boundaries**

## HERRIN (NO. 6) COAL

Coverage Name: MMPYMB

Location of Coverages: ILLINOIS > COAL6

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as MMPYMB.

### INFO Item Description

410 records

DATABLE NAME: MMPYMB.PAT

7 ITEMS

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	MMPYMB#	4	5	B	-	
13	MMPYMB-ID	4	5	B	-	
17	THICK	2	1	I	-	Thickness
19	DEPTH	1	1	I	-	Depth
20	PENSY	1	1	I	-	Pennsylvanian System
	<b>** REDEFINED ITEMS **</b>					
17	CODE	4	4	I	-	

### Coding for INFO Items

RESOURCES OF HERRIN (NO. 6) COAL (COLUMNS 17-20)

#### Thickness (Column 17-18)

- 1 = Coal greater than 42 inches thick
- 2 = Coal 28 to 42 inches thick
- 3 = Coal less than 28 inches thick

- 4 = Insufficient data for estimate of reserves
- 5 = Coal split or thin
- 6 = Coal missing because of sandstone channel
- 7 = Coal eroded
- 9 = Outside limit of coal seam

Depth (Column 19)

- 1 = Depth to coal less than 150 feet
- 2 = Depth to coal greater than 150 feet
- 9 = Outside limit of coal seam

Pennsylvanian System (Column 20)

- 1 = Within Pennsylvanian System
- 9 = Outside Pennsylvanian System

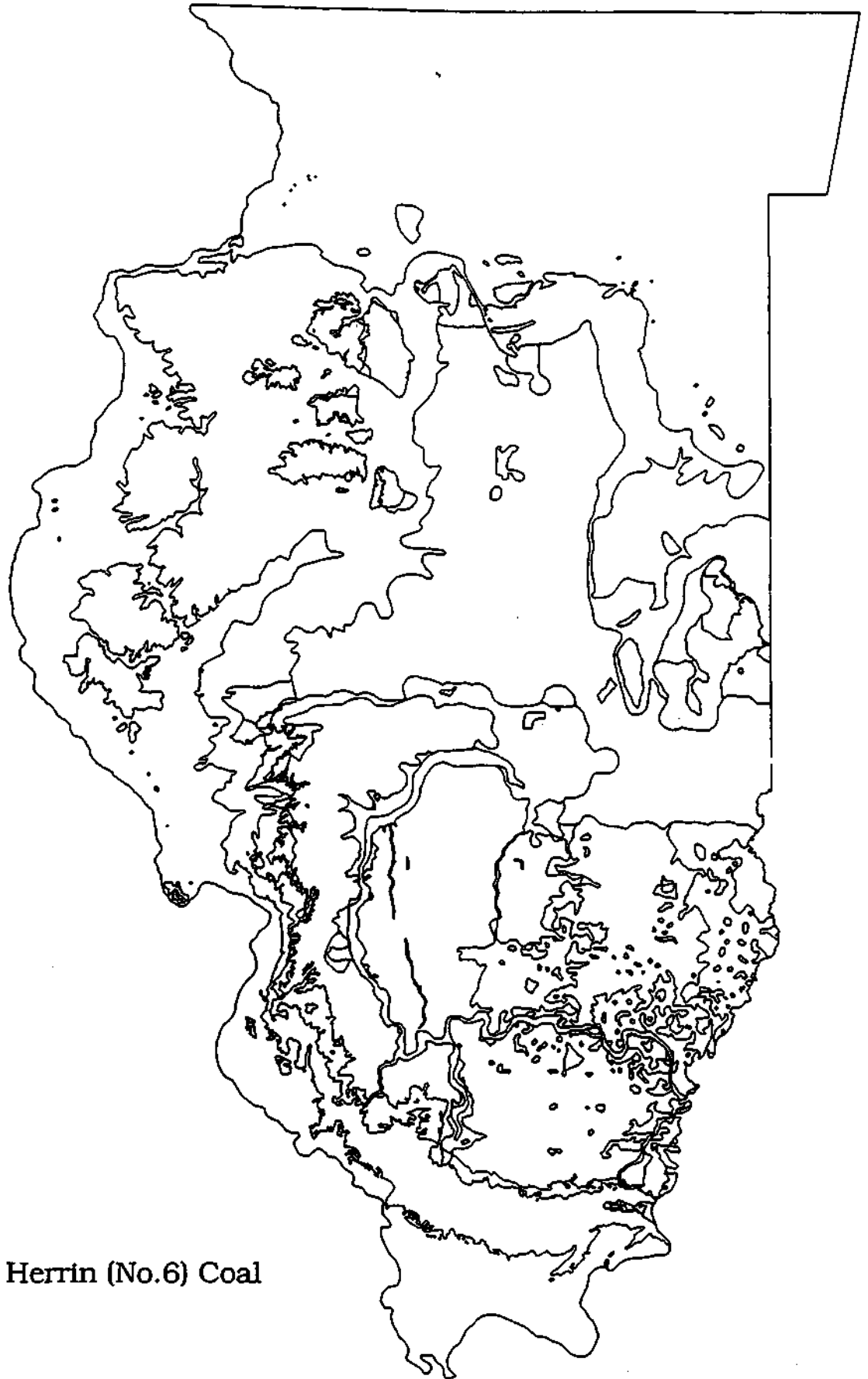
### Mapping Procedures

This polygon map shows the distribution, thickness, depth, and Pennsylvanian boundary for the coal resources of Springfield (No. 5) and Herrin (No. 6) coal. Polygon boundaries were transferred directly from the coal resources map at a scale of 1:500,000 to a mylar overlay registered on top of the USGS basemap. Each coal type was drafted onto a separate manuscript; the Pennsylvanian rock boundary was the only coincident line between the two manuscripts. All mined-out areas and areas heavily drilled for oil and gas were included in the coal type surrounding them.

### **Bibliography**

*Resources of Herrin (No. 6) Coal: Thickness and Depth*

Smith, W.H., and J.B. Stall, 1975, Map of reserves of Herrin (No. 6) coal *in* Coal and Water Resources for Coal Conversion in Illinois, Illinois State Water Survey and Illinois State Geological Survey Cooperative Report 4, Champaign, IL; plate 1: scale 1:00,000.



Herrin (No.6) Coal

## QUATERNARY GEOLOGY

Coverage Name: QATGEO (boundary extends into Lake Michigan)  
 QATGEO-NL (no lake boundary)

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Computer Research and Services Section  
 Illinois State Geological Survey  
 615 E. Peabody Drive  
 Champaign, IL 61820  
 (217)333-0044

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item QAT-GEO.

INFO Item Description

2,463 records

DATAFILE NAME: QATGEO.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	QATGEO#	4	5	B	-	
13	QATGEO-ID	4	5	B	-	
17	QAT-GEO	5	6	I	-	Quaternary geology

2,462 records

DATAFILE NAME: QATGEO-NL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	QATGEO-NL#	4	5	B	-	
13	QATGEO-NL-ID	4	5	B	-	
17	QAT-GEO	5	6	I	-	Quaternary geology

**Coding for INFO Items**

**QUATERNARY GEOLOGY (Columns 17-21)**

**Quaternary Geology Type (Columns 17-20)**

*Wisconsin and Holocene*

**Woodfordian, Twocreekan, Valderan, and Younger**

0050 = Cahokia alluvium (includes alluvial fan faces)

0060 = Grayslake peat

0070 = Parkland sand

0090 = Peyton colluvium

**Lake Michigan Formation**

0110 = Ravinia sand member

*Wisconsinan*

**Altonian, Farmdalian, Woodfordian, Twocreekan, and Valderan**

0149 = Peoria loess and Roxana silt (includes Peyton colluvium)

**Equality Formation**

0240 = Carmi member

0250 = Dolton member

**Henry Formation**

0260 = Mackinaw member

0270 = Batavia member

0280 = Wasco member

*Woodfordian*

**Wedron Formation**

0410 = Wadsworth till member

0420 = Haeger till member

0430 = Yorkville till member

0440 = Maiden till member

0450 = Snider till member

**Tiskilwa till member**

0471 = Tiskilwa ablation drift

0472 = Tiskilwa till

0480 = Batestown till member

0490 = Piatt till member

0500 = Delavan till member

0510 = Fairgrange till member

0520 = Lee center till member

0530 = Esmond till member

**Trafalgar Formation (Indiana)**

0535 = Unnamed till member

*Altonian*

**Winnebago Formation**

0660 = Capron till member

0720 = Argyle till member

*Illinoian*

**Liman, Monican, and Jubileean Formations**

0810 = Teneriffe silt

0820 = Pearl formation

Glasford Formation  
0870 = Hagarstown Member

*Jubileean*

Glasford Formation  
0830 = Radnor till member  
0840 = Sterling till member

*Monican*

Glasford Formation  
0860 = Winslow till member  
0900 = Hulick till member  
0910 = Ogle till member  
0920 = Vandalia till member

*Liman*

Glasford Formation  
0970 = Kellerville till member

*Kansan*

Banner Formation  
1021 = Banner formation till  
1022 = Banner formation outwash faces

*Pre-Kansan*

1180 = Mounds gravel

*Mixed Areas*

9991 = Surface-mined area  
9998 = Water  
9999 = Not a Quaternary deposit

Quaternary Geology Qualifier - Moraine (Column 21)

0 = No moraine qualifier  
1 = Moraine qualifier  
9 = Water

**Mapping Procedures**

*Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

### *Quaternary Geology*

Data from *Quaternary Deposits of Illinois* (scale 1:500,000) were registered to the basemap using stream courses and other identifiable features. Few changes to the original data were required.

### Bibliography

#### *Quaternary Geology*

Lineback, J.A., 1979, *Quaternary Deposits of Illinois*, Illinois State Geological Survey, Champaign, IL: scale 1:500,000.





Quaternary Geology

SPRINGFIELD (NO. 5) COAL

Coverage Name: MMPYMA

Location of Coverages: ILLINOIS > COAL5

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or

IGIS Database Administrator  
(217) 333-8907

Coverage History

Created in 1984 by ESRI as MMPYMA.

INFO Item Description

289 records

DATAFILE NAME: MMPYMA.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	18	F	3	
5	PERIMETER	4	12	F	3	
9	MMPYMA#	4	5	B	-	
13	MMPYMA-ID	4	5	B	-	
17	THICK	2	1	I	-	
19	DEPTH	1	1	I	-	
20	PENSYS	1	1	I	-	
	<b>** REDEFINED ITEMS **</b>					
17	CODE	4	4	I	-	

Coding for INFO Items

RESOURCES OF SPRINGFIELD (NO. 5) COAL (Columns 17-20)

Thickness (Columns 17-18)

- 1 = Coal greater than 42 inches thick
- 2 = Coal 28 to 42 inches thick

- 3 = Coal less than 28 inches thick
- 4 = Insufficient data for estimate of reserves
- 5 = Coal split or thin
- 6 = Coal missing because of sandstone channels
- 7 = Coal eroded
- 9 = Outside limit of coal seam

Depth (Column 19)

- 1 = Depth to coal less than 150 feet
- 2 = Depth to coal greater than 150 feet
- 8 = Coal not present
- 9 = Outside limit of coal seam

Pennsylvanian System (Column 20)

- 1 = Within Pennsylvanian System
- 9 = Outside Pennsylvanian System

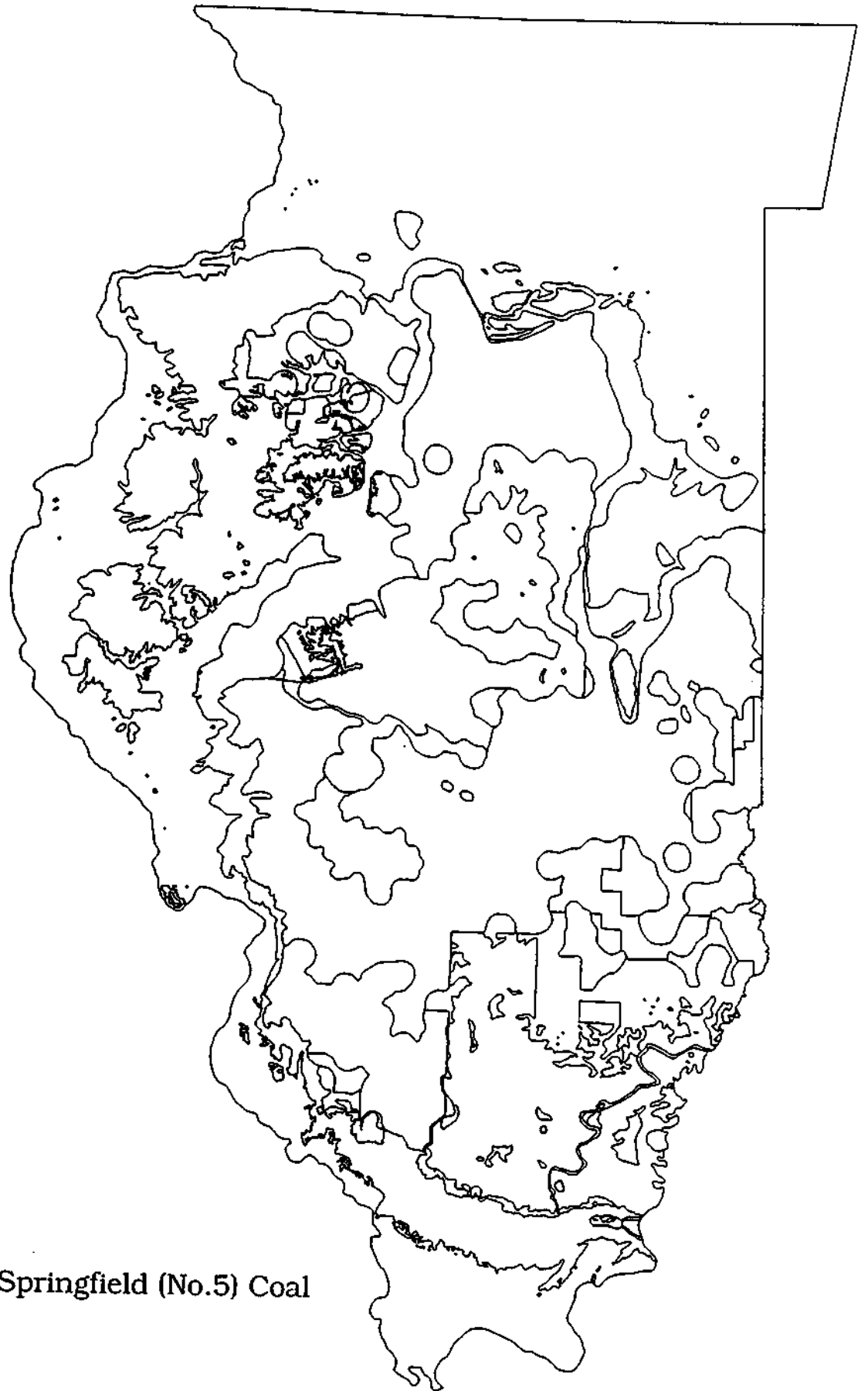
Mapping Procedures

This polygon map shows the distribution, thickness, depth, and Pennsylvanian boundary for coal resources of Springfield (No. 5) coal. Polygon boundaries were transferred directly from the coal resources map at a scale of 1:500,000 to a mylar overlay registered on top of the USGS basemap. Each coal type was drafted onto a separate manuscript; the Pennsylvanian rock boundary was the only coincident line between the two manuscripts. All mined-out areas and areas heavily drilled for oil and gas were included in the coal type surrounding them.

Bibliography

*Resources of Springfield (No. 5) Coal: Thickness and Depth*

Smith, W.H., and J.B. Stall, 1975, Map of reserves of Harrisburg-Springfield (No. 5) Coal in Coal and Water Resources for Coal Conversion in Illinois, Illinois State Water Survey and Illinois State Geological Survey Cooperative Report 4, Champaign, IL; plate 2: scale 1:500,000.



Springfield (No.5) Coal

## STRUCTURAL FEATURES AND ESCARPMENTS - LINES

Coverage Name: SFLNFX

**Location** of Coverages: ILLINOIS > FAULTS

Coverage Type: LINE

Mapscals: 1:570,000, 1:500,000, and 1:250,000

### Contact Person

Computer Research and Services Section  
 Illinois State Geological Survey  
 615 E. Peabody Drive  
 Champaign, IL 61820  
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or

IGIS Database Administrator  
 (217) 333-8907

### Coverage History

Created in 1984 by ESRI as SFLNMR.

### INFO Item Description

6,166 records

DATAFILE NAME: SFLNFX.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	3	
5	TNODE#	4	5	B	3	
9	LPOLY#	4	5	B	-	
13	RPOLY	4	5	B	-	
17	LENGTH	4	12	F	3	
21	SFLNFX	4	5	B	-	
25	SFLNFX-ID	4	5	B	-	
29	GNTYPE	2	2	I	-	Structural features-general type
31	NUMBER	3	3	I	-	Structural features-individual number
34	ESCARP	1	1	I	-	Escarpments-general type
35	CLASS	1	1	I	-	Escarpments-height class
	<b>** REDEFINED ITEMS **</b>					
29	ALL	7	6	I	-	

**Coding for INFO Items**

**STRUCTURAL FEATURES (Columns 29-33)**

**General Type (Columns 29-30)**

- 1 = Fault**
- 2 = Anticline or arch**
- 3 = Syncline**
- 4 = Monocline**
- 5 = Anticlinal nose**
- 9 = Not a structural feature**

**Individual Number/Name (Columns 31-33)**

***Faults***

- 001 = Albion-Ridgeway Fault (formerly the Ridgeway-Omaha Monocline or Fault Zone; includes the former Albion Fault and Ridgeway Fault)**
- 002 = Atwood Fault**
- 003 = Centralia Fault Zone**
- 004 = Cottage Grove Fault System (includes the former Harrisburg Fault)**
- 005 = Cottonwood Fault**
- 006 = Delta Fault**
- 007 = Dowell Fault Zone**
- 008 = Fluorspar Area Fault Complex**
- 009 = Herald-Phillipstown Fault**
- 010 = Inman East Fault (includes the former Mink Island Fault)**
- 011 = Inman Fault**
- 012 = Inman West Fault (formerly the Hill Fault)**
- 013 = Junction Fault**
- 014 = Maunie Fault**
- 015 = McCormick Fault**
- 016 = Mt. Carmel-New Harmony Fault (includes the former Mt. Carmel Fault, New Harmony Fault, and Greathouse Island Fault)**
- 017 = Mud Creek Fault**
- 018 = North Fork Fault**
- 019 = Pitcher Lake Fault**
- 020 = Plum River Fault Zone (formerly the Savanna-Sabula Anticline)**
- 021 = Pomona Fault**
- 022 = Rend Lake Fault System**
- 023 = Ribeyre Island Fault**
- 024 = Ste. Genevieve Fault Zone (formerly the Rattlesnake Ferry Fault Zone)**
- 025 = Sandwich Fault Zone**
- 026 = Shawneetown Fault Zone (formerly the Gold Hill Fault)**
- 027 = White Ash Fault Zone**
- 028 = Winkleman Fault**
- 029 = Unnamed faults in the greater Chicago area, Cook and DuPage Counties**
- 030 = Unnamed faults in the Pomona and Cobden Quadrangles, Jackson County**
- 031 = Unnamed faults in Union County**
- 032 = Unnamed faults in Johnson County**
- 033 = Unnamed faults in Thebes Gap, Alexander County**
- 034 = Unnamed faults beneath the Mississippi Embayment sediments, Pulaski and Massac Counties**

- 035 = Unnamed faults on Troy Grove Dome, LaSalle County
- 036 = Unnamed faults bordering the Omaha Graben
- 999 = Not a structural feature

*Anticlines or Arches*

- 001 = Aden structure (informally named structure)
- 002 = Anderson Anticline
- 003 = Ashton Arch
- 004 = Assumption structure (informally named structure)
- 005 = Astoria Anticline
- 006 = Aviston Anticline
- 007 = Ayers Anticline
- 008 = Babylon Anticline
- 009 = Bardolph Anticline
- 010 = Belleville Anticline
- 011 = Beltrees-Melville Anticline
- 012 = Benton structure (informally named structure)
- 013 = Bonpas Anticline
- 014 = Boyd structure (informally named structure)
- 015 = Bremen Anticline
- 016 = Brereton Anticline
- 017 = Brushy Anticline
- 018 = Burton Anticline
- 019 = Butler Anticline
- 020 = Campbell Hill Anticline
- 021 = Canton Anticline
- 022 = Carlinville Anticline
- 023 = Carrollton Anticline (North)
- 024 = Carrollton Anticline (South)
- 025 = Cedar Point Anticline
- 026 = Centralia Anticline
- 027 = Clay City Anticlinal Belt (includes the former Noble Anticline)
- 028 = Colmar Anticline
- 029 = Cooks Mills Anticline
- 030 = Cordes structure (informally named structure)
- 031 = Cottage Anticline
- 032 = Dahlgren Anticline
- 033 = Depue Anticline
- 034 = Donnellson Anticline
- 035 = Downs Anticline
- 036 = Drake-White Hall Anticline
- 037 = Dwight Anticline
- 038 = Fairman Anticline
- 039 = Fancher-Mode Anticline
- 040 = Farmington Anticline
- 041 = Fishhook Anticline
- 042 = Fosterburg-Staunton Anticline
- 043 = Gilead Anticline
- 044 = Glenridge Anticline
- 045 = Goldengate structure (informally named structure)
- 046 = Grimes Anticline
- 047 = Harrison Creek Anticline
- 048 = Hickory Grove Anticline
- 049 = Hoffman Anticline

050 = Holland Anticline  
051 = Jamestown Anticline  
052 = Kane Anticline  
053 = King Anticline  
054 = Lawrence County structure (informally named structure)  
055 = Leaf River Anticline  
056 = Levan Anticline  
057 = Lincoln Fold  
058 = Littleton Anticline  
059 = Louden Anticline  
060 = Louisville Anticline  
061 = Lowder Anticline  
062 = Main structure (informally named structure)  
063 = Makanda Anticline  
064 = Mason Anticline  
065 = Mattoon Anticline  
066 = McCormick Anticline  
067 = Media Anticline  
068 = Millstadt Anticline  
069 = Minick Anticline  
070 = Modesto Anticline  
071 = New Burnside Anticline  
072 = Nilwood Anticline  
073 = Nokomis Anticline  
074 = Nutwood Anticline  
075 = Oakland Anticlinal Belt  
076 = Oblong structure (informally named structure)  
077 = Odell Anticline  
078 = Ohlman Anticline  
079 = Old Ripley Anticline (formerly Pocahontas Anticline, and then  
Stubblefield Anticline)  
080 = Oregon Anticline  
081 = Ottawa Anticline  
082 = Panama Anticline (formerly Sorento Dome)  
083 = Patoka Anticline  
084 = Payson Anticline  
085 = Peru Anticline  
086 = Pinckneyville Anticline  
087 = Pittsburg Anticline  
088 = Pittsfield Anticline  
089 = Redhead Anticline  
090 = Reno Anticline  
091 = Rural Hill Anticline  
092 = St. David Anticline  
093 = St. James Anticline  
094 = Salem Anticline  
095 = Samsville Anticline  
096 = Sciota Anticline  
097 = Sesser structure (informally named structure)  
098 = Seville Anticline  
099 = Shelbyville Anticline  
100 = Shipman Anticline  
101 = Sigel Anticline  
102 = Sigam Anticline



- 103 = Spring Valley Anticline
- 104 = Stewardson Anticline
- 105 = Stonefort Anticline
- 106 = Swansea Anticline
- 107 = Thebes Anticline
- 108 = Trowbridge Anticline
- 109 = Tuscola Anticline
- 110 = Valmeyer Anticline
- 111 = Vergennes Anticline
- 112 = Versailles Anticline
- 113 = Wabash River Anticline (formerly New Harmony Anticline)
- 114 = Walpole Anticline
- 115 = Warsaw Anticline
- 116 = Waterloo-Dupo Anticline (formerly Dupo Anticline)
- 117 = Waverly Anticline
- 118 = Woburn structure (informally named structure)
- 119 = Wyen Anticline
- 999 = Not a structural feature

*Synclines*

- 001 = Birkbeck Syncline
- 002 = Black Jack Syncline
- 003 = Bogota-Rinard Syncline
- 004 = Bryant Syncline
- 005 = Bushnell Syncline
- 006 = Canton Syncline
- 007 = Clinton Syncline
- 008 = Colfax Syncline
- 009 = Columbia Syncline
- 010 = Eagle Valley Syncline (Fluorspar Area Fault Complex)
- 011 = Earlville Sag
- 012 = Elmwood Syncline
- 013 = Fairview Syncline
- 014 = Galena Junction Syncline
- 015 = Galena Syncline
- 016 = Graham-Ginte Syncline
- 017 = Greenridge Syncline
- 018 = Hardin Syncline
- 019 = Hennepin Syncline
- 020 = Kempton Syncline
- 021 = Kritesville Syncline
- 022 = Marshall-Sidell Syncline (includes former West Union Syncline)
- 023 = Meppen Syncline
- 024 = Millbrig Syncline
- 025 = Monroe City Syncline
- 026 = Murdock Syncline
- 027 = Oakdale Syncline
- 028 = Oglesby Syncline
- 029 = Oswego Syncline
- 030 = Otter Creek Syncline
- 031 = Plainview Syncline
- 032 = Polo Basin
- 033 = Portage Syncline
- 034 = Pottsville Syncline

- 035 = Ransom Syncline
- 036 = Ripley Syncline
- 037 = Seatonville Syncline
- 038 = Shoal Creek Syncline
- 039 = Smallpox Creek Syncline
- 040 = Star Union Syncline
- 041 = Stavanger Syncline
- 042 = Sugar Creek Syncline
- 043 = Table Grove Syncline
- 044 = Troy-Brussels Syncline (formerly Brussels Syncline)
- 045 = Uptons Cave Syncline (formerly Stephenson-Ogle County Line Syncline)
- 046 = Vinegar Hill Syncline
- 047 = Wittenberg Trough
- 999 = Not a structural feature

*Monoclines*

- 001 = DuQuoin Monocline
- 002 = Longbranch Monocline
- 999 = Not a structural feature

*Anticlinal Noses*

- 001 = Goreville Anticlinal Nose
- 002 = McClure Anticlinal Nose
- 003 = Saratoga Anticlinal Nose
- 999 = Not a structural feature

ESCARPMENTS (Columns 34-35)

General Type (Column 34)

- 1 = River
- 2 = Inland
- 9 = Not an escarpment

Height Class (Column 35)

- 1 = Greater than 200 feet
- 2 = 100 to 200 feet
- 3 = 50 to 100 feet
- 9 = Not an escarpment

**Mapping Procedures**

This manuscript identifies features such as domes, basins, and grabens as polygons; faults, anticlines, synclines, escarpments, etc. as lines; and crypto-explosion structures, Silurian reefs, and buried Precambrian hills as points. Escarpments were interpreted from USGS 1:250,000 scale topographic maps and Landsat images. All other data are included on a 1:570,000 scale map of *Structural Features in Illinois*. Unpublished map overlays developed by the SGS were also used to update the location of some faults. The following criteria were used for mapping escarpments:

1. Lines defining escarpments were drafted at the base of the feature.
2. Minimum length was one mile.
3. Minimum slope was 1/8 inch between 50- or 100-foot contours at 1:250,000 scale.
4. Minimum height was generally 50 feet.

Along with naturally occurring escarpments, road cuts and quarries meeting the above requirements were also mapped. Escarpments along levees and dams were not included.

Complex data in the southern portion of the state were mapped at 1:250,000 scale using the USGS Paducah Quadrangle as a basemap. The data were automated at this scale and later merged with data for the rest of the state.

## Bibliography

### *Structural Features*

Treworgy, J.D., 1982, Structural Features in Illinois - A Compendium, Illinois State Geological Survey Circular 519, Champaign, IL, plate 1: scale 1:570,000.

Treworgy, J.D., 1983, Unpublished updates to SGS Circular 519, Champaign, IL: scale 1:500,000.

### *Escarpments*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

Landsat Imagery.



Structural Features  
and Escarpments -  
Lines

## STRUCTURAL FEATURES AND ESCARPMENTS - POINTS

**Coverage Name:** SFPTFX

**Location of Coverages:** ILLINOIS > FAULTS

**Coverage Type:** POINT

**Mapscapes:** 1:570,000, 1:500,000, and 1:250,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or  
IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as SFPTMR.

### INFO Item Description

44 records

DATAFILE NAME: SFPTFX.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SFPTFX#	4	5	B	-	
13	SFPTFX-ID	4	5	B	-	
17	GNTYPE	2	2	I	-	Structural features-general type
19	NUMBER	2	2	I	-	Structural features-individual number
<b>** REDEFINED ITEMS **</b>						
17	CODE1	4	3	I	-	Structural features

### Coding for INFO Items

STRUCTURAL FEATURES (Columns 17-20)

**General Type (Column 18)**

- 1 = Crypto - explosion structure
- 2 = Named Silurian reef
- 3 = Buried Precambrian hills

**Individual Number/Name (Columns 19-20)**

*Crypto-Explosion Structures*

- 01 = DesPlaines Disturbance
- 02 = Glasford Disturbance
- 03 = Hicks Dome

*Named Silurian Reefs*

- 01 = Baldwin
- 02 = Bartelso
- 03 = Bartelso East
- 04 = Boulder
- 05 = Brubaker
- 06 = Chicago Heights
- 07 = Coulterville North
- 08 = Darmstadt
- 09 = Elbridge
- 10 = Frogtown North
- 11 = Germantown East
- 12 = Lillyville North
- 13 = Lively Grove
- 14 = Marine
- 15 = McKinley
- 16 = Nashville
- 17 = Nevins
- 18 = New Baden East
- 19 = New Memphis
- 20 = New Memphis South
- 21 = Okawville
- 22 = Okawville North
- 23 = Patoka
- 24 = Patoka East
- 25 = Raccoon Lake
- 26 = St. Libory
- 27 = Sandoval
- 28 = State Line
- 29 = Stony Island
- 30 = Thornton
- 31 = Tilden
- 32 = Tilden North
- 33 = Tonti
- 34 = Weaver

*Buried Precambrian Hills*

- 01 = Richard W. Beeson 1 Joseph Pointer Unit, 28-5S-3W, Perry County
- 02 = C. E. Brehm Drilling and Producing 1 Bochantin Comm., 35-3S-2W, Washington County
- 03 = C. E. Brehm Drilling and Producing 1 Hemminghaus, 33-3N-1W, Clinton County
- 04 = Mississippi River Fuel Corp. A-15 Theobald, 35-1S-10W, Monroe County

- 05 = Mississippi River Transmission Corp. S-5 Huldah Baer, 27-3N-6W, Madison County  
06 = Panhandle-Eastern 1 Mumford, 21-5S-4W, Pike County  
07 = Texaco 1 E. Cuppy, 6-65-7E, Hamilton County

### Mapping Procedures

This manuscript identifies features such as domes, basins, and grabens as polygons; faults, anticlines, synclines, escarpments, etc. as lines; and crypto-explosion structures, Silurian reefs, and buried Precambrian hills as points. Escarpments were interpreted from USGS 1:250,000 scale topographic maps and Landsat images. All other data are included on a 1:570,000 scale map of *Structural Features in Illinois*. Unpublished map overlays developed by the SGS were also used to update the location of some faults. The following criteria were used for mapping escarpments:

1. Lines defining escarpments were drafted at the base of the feature.
2. Minimum length was one mile.
3. Minimum slope was 1/8 inch between 50- or 100-foot contours at 1:250,000 scale.
4. Minimum height was generally 50 feet.

Along with naturally occurring escarpments, road cuts and quarries meeting the above requirements were also mapped. Escarpments along levees and dams were not included.

Complex data in the southern portion of the state were mapped at 1:250,000 scale using the USGS Paducah Quadrangle as a basemap. The data were automated at this scale and later merged with data for the rest of the state.

### Bibliography

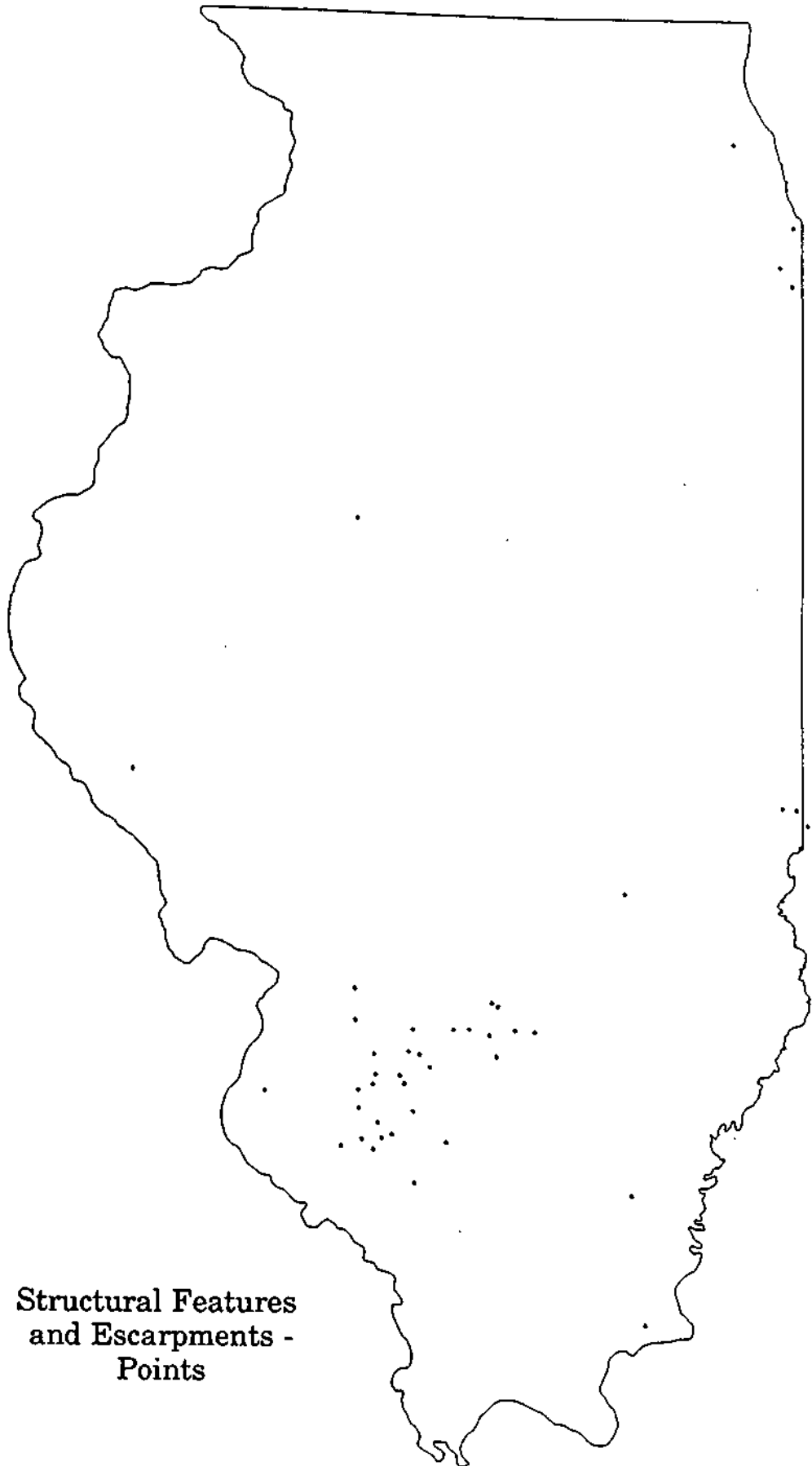
#### *Structural Features*

Treworgy, J.D., 1982, *Structural Features in Illinois - A Compendium*, Illinois State Geological Survey Circular 519, Champaign, IL, plate 1: scale 1:570,000.

Treworgy, J.D., 1983, Unpublished updates to SGS Circular 5191, Champaign, IL: scale 1:500,000.

#### *Escarpments*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.  
Landsat Imagery.



**Structural Features  
and Escarpments -  
Points**



## STRUCTURAL FEATURES AND ESCARPMENTS - POLYGONS

Coverage Name: SFPYFX

Location of Coverages: ILLINOIS > FAULTS

Coverage Type: POLYGON

Mapscales: 1:570,000, 1:500,000, and 1:250,000

### Contact Person

Computer Research and Services Section  
 Illinois State Geological Survey  
 615 E. Peabody Drive  
 Champaign, IL 61820  
 (217) 333-0044

or

IGIS Database Administrator  
 (217) 333-8907

### Coverage History

Created in 1984 by ESRI as SFPYMR.

### INFO Item Description

88 records

DATAFILE NAME: SFPYFX.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SFPYFX#	4	5	B	-	
13	SFPYFX-ID	4	5	B	-	
17	GNTYPE	2	1	I	-	Structural features-general type
19	NUMBER	2	2	I	-	Structural features-individual number
<b>** REDEFINED ITEMS **</b>						
17	CODE1	4	3	I	-	Structural features

### Coding for INFO Items

STRUCTURAL FEATURES (Columns 17-20)

**General Type (Column 18)**

- 1 = Dome**
- 2 = Basin**
- 3 = Graben**
- 4 = Zone of Folding**

**Individual Number/Name (Columns 19-20)**

*Domes*

- 01 = Abingdon Dome**
- 02 = Ancona Dome**
- 03 = Ashmore Dome**
- 04 = Beckemeyer Dome**
- 05 = Blackoak Dome**
- 06 = Blairsville Dome**
- 07 = Brocton Dome (formerly Oakland Dome)**
- 08 = Brookville Dome**
- 09 = Bungay Dome**
- 10 = Carlinville Dome**
- 11 = Carlinville North Dome**
- 12 = Carlyle Dome**
- 13 = Cedar Creek Dome**
- 14 = Conant Dome**
- 15 = Court Creek Dome**
- 16 = Crescent City Dome**
- 17 = Dale Dome**
- 18 = Deer Lick Dome**
- 19 = DeLand Dome**
- 20 = Dudley Dome**
- 21 = Flora Dome**
- 22 = Forreston Dome**
- 23 = Garfield Dome**
- 24 = Gibson City Dome**
- 25 = Glasford Disturbance**
- 26 = Grandview Dome**
- 27 = Greenville Dome (formerly part of Pocahontas Anticline, and then Stubblefield Anticline)**
- 28 = Gridley Dome**
- 29 = Haw Creek Dome**
- 30 = Hayes Dome**
- 31 = Herscher Dome**
- 32 = Hillsboro Dome**
- 33 = Hoodville Dome**
- 34 = Hookdale Dome**
- 35 = Hudson Dome**
- 36 = Hume Dome**
- 37 = Ina Dome**
- 38 = Johnsonville structure (not formally named)**
- 39 = Junction City Dome**
- 40 = Kenner Dome**
- 41 = Lake Bloomington Dome**
- 42 = Lexington Dome**
- 43 = Lincoln Dome**
- 44 = Macoupin Dome**

- 45 = Mahomet Dome
- 46 = Marissa Dome
- 47 = Martinsville Dome
- 48 = New Douglas Dome (formerly Sorento Dome)
- 49 = O'Fallon Dome
- 50 = Omaha Dome
- 51 = Parkersburg Dome
- 52 = Parnell Dome
- 53 = Pecatonica Dome
- 54 = Pontiac Dome
- 55 = Russelville structure (not formally named)
- 56 = Sailor Springs Dome
- 57 = St. Jacob Dome
- 58 = Shanghai Dome
- 59 = Shattuc Dome
- 60 = Shaw Dome
- 61 = South Johnson Dome
- 62 = South Litchfield Dome
- 63 = Spanish Needle Creek Dome
- 64 = Staunton Dome
- 65 = Sugar Hill Dome
- 66 = Thayer Dome
- 67 = Toulon Dome
- 68 = Troy Grove Dome
- 69 = Venedy Dome
- 70 = Wamac Dome
- 71 = Wapella East Dome
- 72 = Waverly Dome
- 73 = Westfield Dome (formerly Parker Dome)
- 74 = Wine Hill Dome
- 75 = Xenia Dome (formerly Paine Dome)

*Basins*

- 01 = Granville Basin

*Grabens*

- 01 = Dixon Springs Graben (Fluorspar Area Fault Complex)
- 02 = Inman Graben (formerly Hill Graben)
- 03 = Omaha Graben
- 04 = Ridgeway Graben
- 05 = Rock Creek Graben

*Zones of Folding*

- 01 = Cap au Gres Faulted Flexure

Mapping Procedures

This manuscript identifies features such as domes, basins, and grabens as polygons; faults, anticlines, synclines, escarpments, etc. as lines; and crypto-explosion structures, Silurian reefs, and buried Precambrian hills as points. Escarpments were interpreted from USGS 1:250,000 scale topographic maps and Landsat images. All other data are included on a

1:570,000 scale map of *Structural Features in Illinois*. Unpublished map overlays developed by the SGS were also used to update the location of some faults. The following criteria were used for mapping escarpments:

1. Lines defining escarpments were drafted at the base of the feature.
2. Minimum length was one mile.
3. Minimum slope was 1/8 inch between 50- or 100-foot contours at 1:250,000 scale.
4. Minimum height was generally 50 feet.

Along with naturally occurring escarpments, road cuts and quarries meeting the above requirements were also mapped. Escarpments along levees and dams were not included.

Complex data in the southern portion of the state were mapped at 1:250,000 scale using the USGS Paducah Quadrangle as a basemap. The data were automated at this scale and later merged with data for the rest of the state.

## **Bibliography**

### *Structural Features*

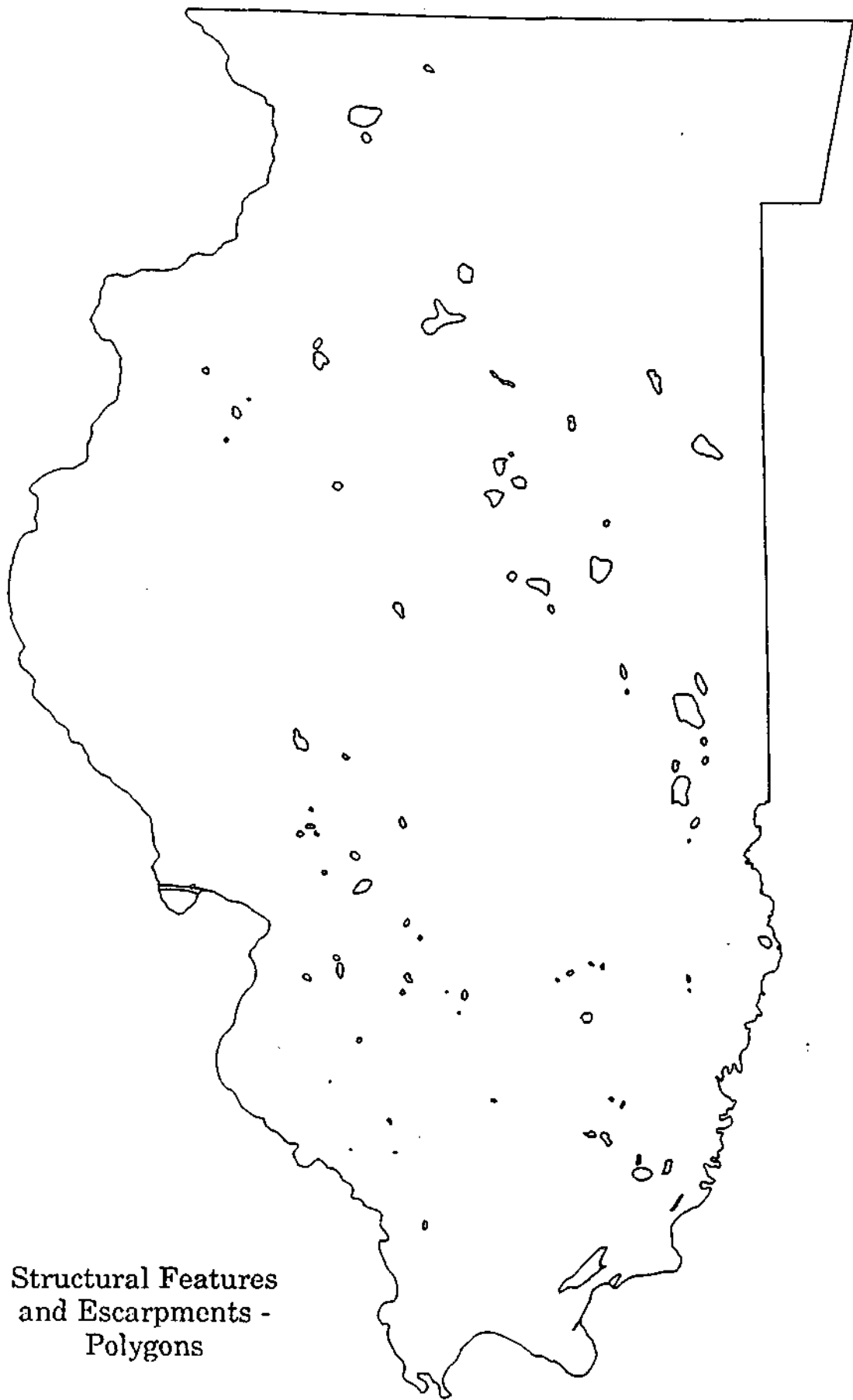
Treworgy, J.D., 1982, *Structural Features in Illinois - A Compendium*. Illinois State Geological Survey Circular 519, Champaign, IL, plate 1: scale 1:570,000.

Treworgy, J.D., 1983, Unpublished updates to SGS Circular 519, Champaign, IL: scale 1:500,000.

### *Escarpments*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

Landsat Imagery.



Structural Features  
and Escarpments -  
Polygons

## SURFACE COAL MINES

**Coverage Names:** SURF-MINES-PY, SURF-MINES-PT

**Location of Coverages:** ILLINOIS > ADMIN

**Coverage Types:** POLYGON, POINT

**Mapscale:** Unknown

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

SURF-MINES-PY was created in 1983 by ESRI as part of AUPYMG and then DISSOLVED from AUPYMG on INFO item SURF-MINES. SURF-MINES-PT was created by ESRI as part of AUPTMG and then RESELECTED from AUPTMG on INFO item SURF-MINES.

### INFO Item Description

32 records

DATAFILE NAME: SURF-MINES-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SURF-MINES-PY#	4	5	B	-	
13	SURF-MINES-PY-ID	4	5	B	-	
17	MINE#	4	4	I	-	
21	MINE-NAME	20	20	C	-	
41	COMPANY-NAME	35	35	C	-	

17 records

DATAFILE NAME: SURF-MINES-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SURF-MINES-PT#	4	5	B	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
13	SURF-MINES-PT-ID	4	5	B	-	
17	MINE#	4	4	I	-	
21	MINE-NAME	20	20	C	-	
41	COMPANY-NAME	35	35	C	-	
76	FIPS#	3	3	I	-	
79	COUNTY#	3	3	I	-	

### Coding for INFO Items

MINE# (Columns 17-20)

MINE NAME (Columns 21-40)

COMPANY NAME (Columns 41-75)

<i>Mine #</i>	<i>Mine Name</i>	<i>Company Name</i>
0622	Fidelity	Freeman United Coal Company
0638	Mine #6	Sahara Coal
0697	Will Scarlet	Peabody Coal Company
0702	Delta	Amax Coal Company
0705	Buckheart	Freeman United Coal Company
0864	Burning Star #2	Consolidation Coal Company
0865	Sun Spot	Amax Coal Company
0873	Captain	Southwestern Illinois Coal Company
0887	Elm	Midland Coal Company
0919	Brown Bros #2 Mine	J.J. Track Mining
0928	Leahy	Amax Coal Company
0932	Burning Star #4	Consolidation Coal Company
0934	River King #6	Peabody Coal Company
0940	River King #3	Peabody Coal Company
0961	Rapatee	Midland Coal Company
0967	Burning Star #5	Consolidation Coal Company
0971	Mine #2	E & B Coal
0978	Crensham #2	E & B Coal
0981	Corinth	E & B Coal
1002	Industry	Freeman United Coal Company
1004	Mine #4	Jadar Fuel, Inc.
9999	Not a surface mine	

### **Mapping Procedures**

AUPYMG and AUPTMG were polygon and point maps that contained information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### **Bibliography**

Unpublished data from the Illinois Department of Energy and Natural Resources.



**Surface Coal Mines -  
Polygons**



**Surface Coal Mines -  
Points**



THICKNESS OF SURFICIAL DEPOSITS/THICKNESS OF GLACIAL DRIFT — LINES

Coverage Name: SDLNMG

Location of Coverages: ILLINOIS> GLACIAL

Coverage Type: LINE

Mapscale: 1:500,000

Contact Person

Computer Research and Services Section  
 Illinois State Geological Survey  
 615 E. Peabody Drive  
 Champaign, IL 61820  
 (217)333-0044

or

IGIS Database Administrator  
 (217)333-8907

Coverage History

Created in 1984 by ESRI as SDLNMG.

INTO Item Description

2,635 records

DATAFILE NAME: SDLNMG.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	SDLNMG#	4	5	B	-	
25	SDLNMG-ID	4	5	B	-	Thickness of glacial drift

Coding for INFO Items

THICKNESS OF GLACIAL DRIFT (Columns 25-28)  
 (excluding driftless areas)

025 = 25-foot contour  
 050 = 50-foot contour  
 100 = 100-foot contour  
 200 = 200-foot contour  
 300 = 300-foot contour  
 400 = 400-foot contour

### Mapping Procedures

This line map depicts the thickness of glacial drift throughout the state. The 1:500,000 scale Map of Thickness of Glacial Drift was registered to the USGS basemap using latitude and longitude coordinates. The isopac lines were rectified and drafted onto a mylar overlay.

### Bibliography

#### *Thickness of Glacial Drift*

Piskin, K., and R.E. Bergstrom, 1975, Map of thickness of glacial drift *in* Glacial Drift in Illinois - Thickness and Character, Illinois State Geological Survey Circular 490, revised, Champaign, IL, plate 1: scale 1:500,000.



Thickness of Surficial Deposits/  
Thickness of Glacial Drift -  
Lines

THICKNESS OF SURFICIAL DEPOSITS/THICKNESS OF GLACIAL DRIFT —  
POLYGONS

Coverage Name: SDPYMG

Location of Coverages: ILLINOIS > GLACIAL

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217)333-0044

or

IGIS Database Administrator  
(217) 333-8907

Coverage History

Created in 1984 by ESRI as SDPYMG.

INTO Item Description

1,379 records

DATAFILE NAME: SDPYMG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SDPYMG#	4	5	B	-	
13	SDPYMG-ID	4	5	B	-	
17	THICK	2	2	I	-	Thickness of glacial drift

**Coding for INFO Items**

**THICKNESS OF GLACIAL DRIFT (Columns 17-18)**

- 1 = Less than 25 feet
- 2 = 25-50 feet
- 3 = 50-100 feet
- 4 = 100-200 feet
- 5 = 200-300 feet
- 6 = 300-400 feet
- 7 = 400-500 feet
- 8 = Greater than 500 feet
- 9 = No drift

### Mapping Procedures

This polygon map depicts the thickness of glacial drift throughout the state. The 1:500,000 scale Map of Thickness of Glacial Drift was registered to the USGS basemap using latitude and longitude coordinates. The isopac lines were rectified and drafted onto a mylar overlay.

### Bibliography

Piskin, K. and R.E. Bergstrom, 1975, Map of thickness of glacial drift *in* Glacial Drift in Illinois - Thickness and Character. Illinois State Geological Survey Circular 490, revised, Champaign, IL, plate 1: scale 1:500,000.



**Thickness of Surficial Deposits/  
Thickness of Glacial Drift -  
Polygons**

## THICKNESS OF SURFICIAL DEPOSITS/THICKNESS OF LOESS - LINES

Coverage Name: SDLNMA

Location of Coverages: ILLINOIS > LOESS

Coverage Type: LINE

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-0044

or

IGIS Database Administrator  
(217)333-8907

Coverage History

Created in 1984 by ESRI as SDLNMA.

### INFO Item Description

43 records

DATAFILE NAME: SDLNMA.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE	4	5	B	-	
5	TNODE	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	SDLNMA#	4	5	B	-	
25	SDLNMA-ID	4	5	B	-	
29	LOESS	3	2	I	-	Thickness of loess

### Coding for INFO Items

THICKNESS OF LOESS (Columns 29-30)

05 = 5-foot contour

10 = 10-foot contour

15 = 15-foot contour

## Mapping Procedures

### *Thickness of Surficial Deposits*

This line map depicts the thickness of loess and glacial drift throughout the state. Loess thickness contours were transferred directly from the 1:500,000 scale map of the Quaternary deposits of Illinois, in which lines representing loess thickness on uneroded upland areas had been delineated. The 1:500,000 scale Map of Thickness of Glacial Drift was registered to the USGS basemap using latitude and longitude coordinates. The isopac lines were rectified and drafted onto a mylar overlay.

## Bibliography

### *Thickness of Glacial Drift*

Piskin, K., and R.E. Bergstrom, 1975, Map of thickness of glacial drift *in* Glacial Drift in Illinois - Thickness and Character, Illinois State Geological Survey Circular 490, revised, Champaign, IL, plate 1: scale 1:500,000.



**Thickness of Surficial Deposits/  
Thickness of Loess -  
Lines**



## THICKNESS OF SURFICIAL DEPOSITS/THICKNESS OF LOESS - POLYGONS

Coverage Name: SDPYMA

**Location of Coverages:** ILLINOIS > LOESS

**Coverage Type:** POLYGON

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217)333-0044

or

IGIS Database Administrator  
(217)333-8907

Coverage History

Created in 1984 by ESRI as SDPYMA.

### INFO Item Description

12 records

DATAFILE NAME: SDPYMA.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	18	F	3	
5	PERIMETER	4	12	F	3	
9	SDPYMA#	4	5	B	-	
13	SDPYMA-ID	4	5	B	-	
17	LOESS	2	1	I	-	Thickness of loess

### Coding for INFO Items

THICKNESS OF LOESS (Column 18)

1 = Less than 5 feet

2 = 5-10 feet

3 = 10-15 feet

4 = Greater than 15 feet

## Mapping Procedures

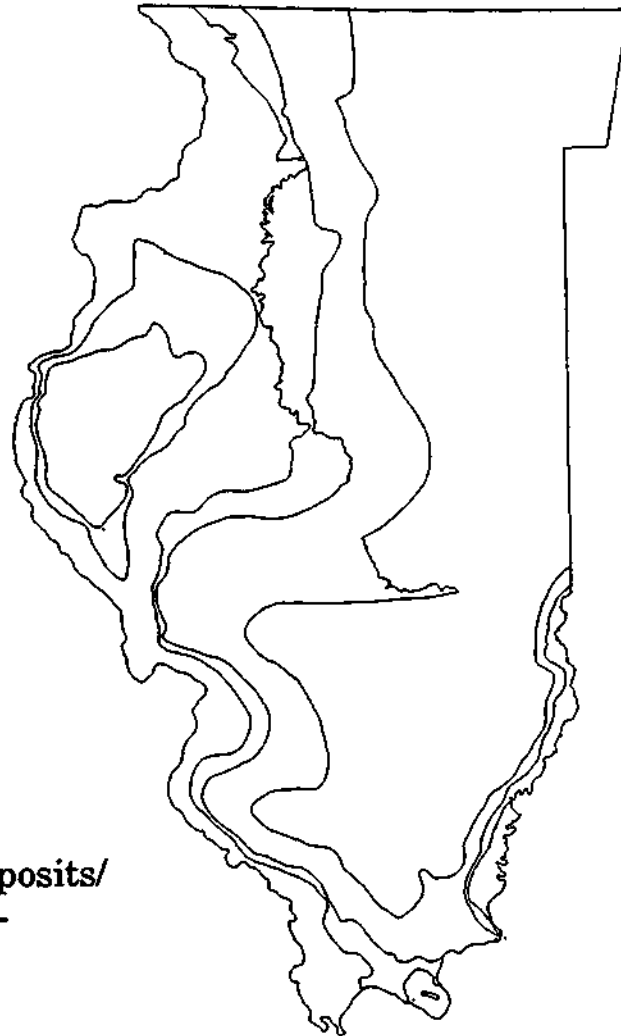
### *Thickness of Surficial Deposits*

This polygon map depicts the thickness of loess and glacial drift throughout the state. Loess thickness contours were transferred directly from the 1:500,000 scale map of the Quaternary deposits of Illinois, in which lines representing loess thickness on uneroded upland areas had been delineated. The 1:500,000 scale Map of Thickness of Glacial Drift was registered to the USGS basemap using latitude and longitude coordinates. The isopac lines were rectified and drafted onto a mylar overlay.

## Bibliography

### *Thickness of Glacial Drift*

Piskin, K., and R.E. Bergstrom, 1975, Map of thickness of glacial drift *in* Glacial Drift in Illinois - Thickness and Character, Illinois State Geological Survey Circular 490, revised, Champaign, IL, plate 1: scale 1:500,000.



**Thickness of Surficial Deposits/  
Thickness of Loess -  
Polygons**

## STACK UNIT

Coverage Name: STACKUNIT

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:500,000

### Contact Person

Computer Research and Services Section  
Illinois State Geological Survey  
615 E. Peabody Drive  
Champaign, IL 61820  
(217)333-0044

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item STACK-UNIT. The coverage contains numerous coding errors.

### INFO Item Description

5,199 records

DATAFILE NAME: STACKUNIT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>
1	AREA	4	12	F	3
5	PERIMETER	4	12	F	3
9	STACK#	4	5	B	-
13	STACKUNIT-ID	4	5	B	-
17	STACK-UNIT	12	13	I	-
	<b>** REDEFINED ITEMS **</b>				
17	STACKUNIT	12	12	C	-

### Coding for INFO Items

STACK UNIT (Columns 17-28)

#### Formation Member of Buried Soil Type

Position 1: Upper (Columns 17-18)

Position 2: Lower, if applicable (Columns 20-21)

Position 3: Lower, if applicable (Columns 23-24)

Position 4: Lower, if applicable (Columns 26-27)

00 = No second, third, or fourth STACK unit

*Drift Units*

- 01 = Cahokia alluvium
- 02 = Peyton colluvium
- 03 = Richland loess generally less than 10 feet thick
- 04 = Peoria and Roxana loess
- 05 = Parkland sand
- 06 = Grayslake peat
- 07 = Equality Formation, Carmi Member
- 08 = Equality Formation, Dolton Member
- 09 = Henry Formation
- 10 = Wedron Formation, silty and clayey till members
- 11 = Wedron Formation, loam and sandy till members
- 12 = Sand and gravel within Wedron Formation
- 13 = Winnebago Formation, mainly sandy tills
- 14 = Sand and gravel within Winnebago Formation
- 15 = Tenneriffe silt
- 16 = Pearl Formation (includes Hagarstown Member)
- 17 = Glasford Formation, silt and clay till, etc.
- 18 = Glasford Formation, loam and sandy till members
- 19 = Sand and gravel within Glasford Formation
- 20 = Banner Formation (mainly till)
- 21 = Sand and gravel within Banner Formation
- 22 = Wolf Creek Formation (mainly till)
- 23 = Mound gravel and related units
- 24 = Cretaceous sediments, silts, sands, etc.
- 25 = Surface mines or man-made land
- 26 = Sand and gravel within 20-50 feet of surface

*Bedrock Units*

- 41 = Rocks of Pennsylvanian age, mainly shales
- 42 = Rocks of Pennsylvanian age, mainly sandstones
- 43 = Rocks of Mississippian age, mainly shales
- 44 = Rocks of Mississippian age, mainly limestones, some sandstones
- 45 = Rocks of Silurian, some Devonian age, mainly dolomite
- 46 = Rocks of Ordovician age, mainly shale (Maquoketa)
- 47 = Rocks of Ordovician age, mainly dolomite, some sandstone
- 98 = Water

Thickness and Spatial Qualifier (Columns 19, 22, 25, 28)

- 0 = No second, third, or fourth STACK qualifier
- 1 = Drift unit >20 feet thick, continuous throughout mapped area
- 2 = Drift unit >20 feet thick, locally less than 20 feet thick
- 3 = Drift unit <20 feet thick, continuous throughout mapped area
- 4 = Drift unit <20 feet thick, not continuous throughout mapped area
- 6 = Bedrock unit present within 20-50 feet below surface
- 7 = Bedrock unit not present continuously within 20-50 feet of surface; locally present at or just below 50 feet
- 8 = Bedrock unit present within 20 feet of surface
- 9 = Bedrock unit not present continuously above 20 feet, but present continuously 20-50 feet from surface

## Mapping Procedures

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

### *STACK Units*

Unpublished STACK unit data were received at a scale of 1:250,000 and were photographically rescaled to 1:500,000. The rectified Quaternary geology overlay was used to register STACK units to the basemap, especially along drainages where alluvial units on both the STACK unit map and the Quaternary geology map had a high correlation. All alluvial units were drafted to ensure that streams on the hydrography manuscript fell within their boundaries. In order to rectify differences between STACK units and Quaternary geology during integration, the following rules were established:

1. Generally, STACK unit boundaries were adjusted to match Quaternary geology unit boundaries in areas dominated by glacial drift. Quaternary geology units were adjusted to STACK units in bedrock-dominated areas. Topography and signature patterns on the Landsat images were used to establish line placement.
2. For Winnebago and Boone Counties, the STACK unit map was more recent than the Quaternary geology map. Therefore, quaternary geology unit boundaries were adjusted to the corresponding STACK units.
3. When alluvial units on the Quaternary geology map were narrower or did not extend as far up-valley as did the corresponding area on the STACK unit map, the area was compared to the hydrology manuscript and the Landsat imagery to resolve the unit's most appropriate line placement. If an alluvial deposit appeared to be large enough, it was extended or expanded to match the STACK unit. If the alluvial deposit was not readily observed or too small, the STACK unit was shortened to match the Quaternary geology unit.
4. Small alluvial units and floodplains on the Quaternary geology map were widened to match corresponding areas on the STACK unit map, which had been previously widened by the State Geological Survey.

5. When an alluvial unit was surrounded by a bedrock outcrop that was below resolution, the bedrock outcrop was incorporated into the surrounding till member, and the alluvial unit was not widened.
6. Quaternary geology units smaller than the minimum mapping resolution (640 acres) were combined in the same way that STACK units had been combined by the SGS. This was done only when the area below resolution units made up more than 50% of the area of the corresponding larger STACK unit polygon.
7. Surface-mined areas represented differently on the Quaternary geology and STACK unit maps were compared to the Landsat scenes. Surface mines found on the STACK unit maps but not on the Quaternary geology map were added and coded to both the STACK unit and Quaternary geology maps. Surface mines found on the Quaternary Geology map but not on the **STACK** unit map were retained for the integrated map but were not added or coded to the **STACK** units. The resulting integrated map shows all surface mines from both sources. The individual attribute code list for Quaternary geology identifies all surface-mined areas, while the STACK unit codes only identify surface mines originally recorded on the SGS STACK unit maps.

## **Bibliography**

### *STACK Unit*

Illinois State Geological Survey, 1983, STACK Unit Maps: 20 maps, 10 each at 1:500,000 and 1:250,000 scales.



STACK Unit

## UNDERGROUND COAL MINES

Coverage Name: UNDER-MINES

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POINT

Mapscale: Unknown

Contact Person

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

Coverage History

Created in 1983 by ESRI as part of AUPTMG; RESELECTED from AUPTFX on INFO item UNDER-MINES.

INFO Item Description

36 records

DATAFILE NAME: UNDER-MINES.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	UNDER-MINES#	4	5	B	-	
13	UNDER-MINES-ID	4	5	B	-	
17	MINE#	4	4	I	-	
21	MINE-NAME	15	15	C	-	
36	COMPANY-NAME	30	30	C	-	
66	FIPS#	3	3	I	-	
69	COUNTY#	3	3	I	-	

Coding for INFO Items

MINE# (Columns 17-20)

MINE-NAME (Columns 21-35)

COMPANY-NAME (Columns 36-65)



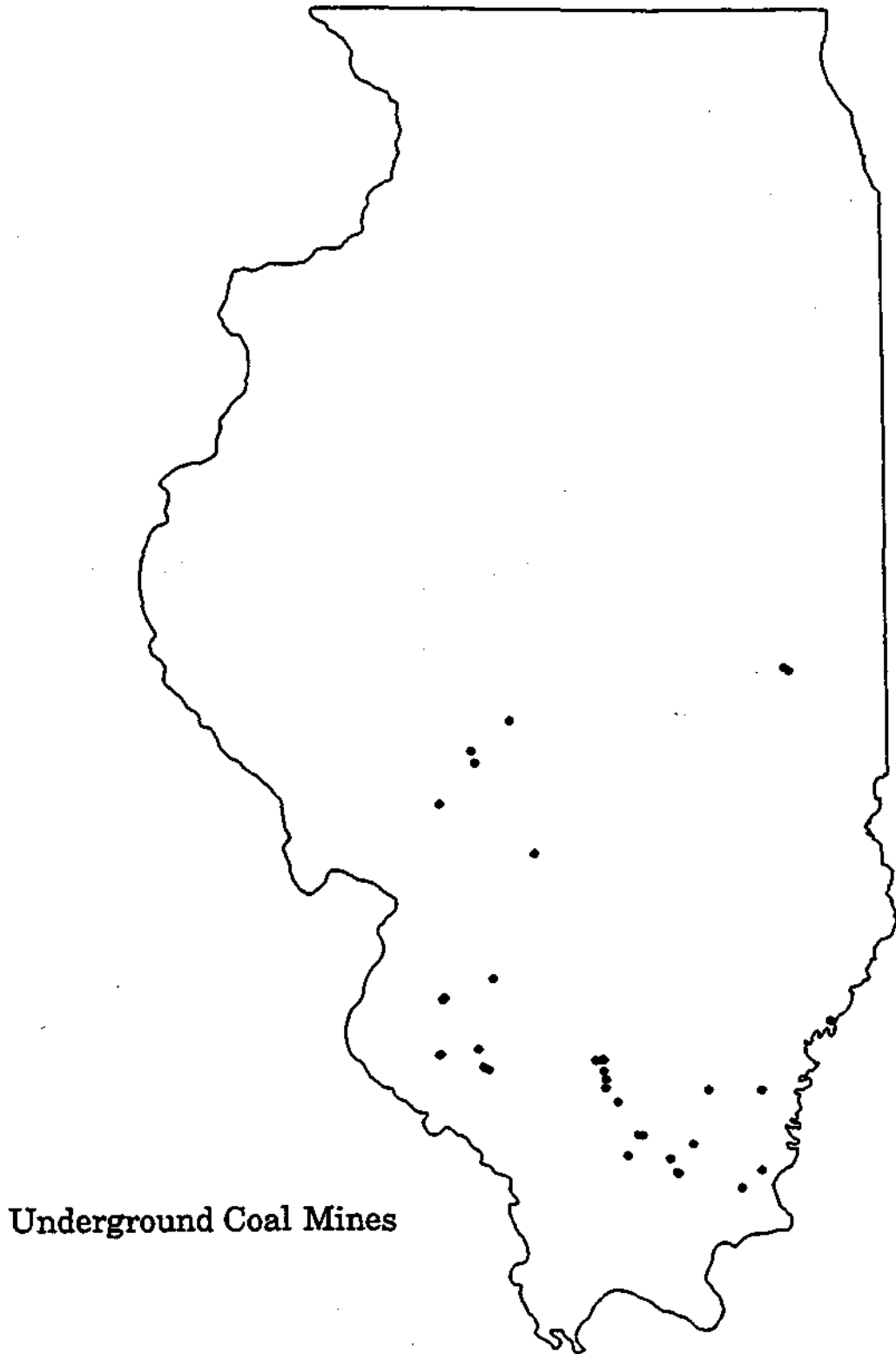
<i>Mine #</i>	<i>Mine Name</i>	<i>Company Name</i>
0668	Murdock	Ziegler Coal Company
0688	Orient #4	Freeman United Coal Company
0690	Orient #3	Freeman United Coal Company
0693	Mine #10	Peabody Coal Company
0701	Spartan #2	Ziegler Coal Company
0863	Mine #21	Old Ben Coal Company
0866	Mine #24	Old Ben Coal Company
0871	Hillsboro	Consolidation Coal Company
0877	Mine #1	Inland Steel Coal Company
0879	Mine #26	Old Ben Coal Company
0885	Orient #6	Freeman United Coal Company
0886	Mine #1	Monterey Coal Company
0898	Eagle #2	Peabody Coal Company
0911	Mine #21	Sahara Coal Company
0921	Wabash	Amax Coal Company
0931	Lovilia	Jadar Fuel Inc.
0933	Crown 2	Freeman United Coal Company
0938	Mine #2	Inland Steel Coal Company
0940	River King	Peabody Coal Company
0952	Baldwin	Peabody Coal Company
0954	Mine #5	Ziegler Coal Company
0962	Mine #25	Old Ben Coal Company
0968	Mine #11	Ziegler Coal Company
0974	Mine #2	Monterey Coal Company
0975	Mine #27	Old Ben Coal Company
0990	Marissa	Peabody Coal Company
0992	Brushy Creek	Kennelis Energy Inc.
0993	Mine #22	Sahara Coal Company
0996	Crown 3	Freeman United Coal Company
0998	Elkhart	Turriss Coal Company
1000	Pattiki	Mapco
1001	Galatia	Kerr McGee Coal Company

### **Mapping Procedures**

AUPTMG was a point map that contained information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

**Bibliography**

Unpublished data from the Illinois Department of Energy and Natural Resources.



**HYDROLOGY COVERAGES**  
**ILLINOIS STATEWIDE DATABASE**

## CLIMATE

Coverage Name: CLIMATE

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: Probably 1:500,000

Contact Person

Office of Applied Climatology  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-6780

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as coverage CLIMATE.

INFO Item Description

218 records

DATAFILE NAME: CLIMATE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	CLIMATE#	4	5	B	-	
13	CLIMATE-ID	4	5	B	-	Individual number/name
17	SWS-LONG-TRM-STA	1	1	I	-	SWS long-term stations
18	STATION-STATUS	1	1	I	-	Station status
19	STATION-ORDER	1	1	I	-	Station order
20	TEMP-DAYS-EVAP	1	1	I	-	Temperature, days with, evaporation
21	PRECIPITATION	1	1	I	-	Precipitation
	<b>** REDEFINED ITEMS **</b>					
13	ID	4	5	I	-	
25	SLTS	1	1	I	-	
26	SS	1	1	I	-	
27	SO	1	1	I	-	
28	TDE	1	1	I	-	
29	PRECIP	1	1	I	-	

## **Coding for INFO Items**

### CLIMATE/METEOROLOGY RECORD STATIONS (Columns 13-21)

#### Individual Number/Name (Columns 13-16)

0001-N = Individual number/name

#### SWS Long-Term Stations, 1901-1980 (Column 17)

- 1 = SWS long-term station
- 2 = Not an SWS long-term station

#### Station Status (Column 18)

- 1 = Active
- 2 = Inactive

#### Station Order (Column 19)

- 1 = First order (345)
- 2 = Cooperative (486)

#### Temperature, Days with, Evaporation (Column 20)

- 1 = Maximum - minimum temperature
- 2 = Days with
- 3 = Evaporation
- 4 = Maximum - minimum temperature + days with
- 5 = Maximum - minimum + evaporation
- 6 = Days with + evaporation
- 7 = Maximum - minimum temperature + days with + evaporation
- 8 = Not recorded

#### Precipitation (Column 21)

- 1 = Rainfall
- 2 = Hourly precipitation
- 3 = Fischer-Porter gauge (hourly precipitation)
- 4 = Rainfall + hourly precipitation
- 5 = Rainfall + Fischer-Porter gauge (hourly precipitation)
- 6 = Hourly precipitation + Fischer-Porter gauge (hourly precipitation)
- 7 = Rainfall + hourly precipitation + Fischer-Porter gauge (hourly precipitation)
- 8 = Not recorded

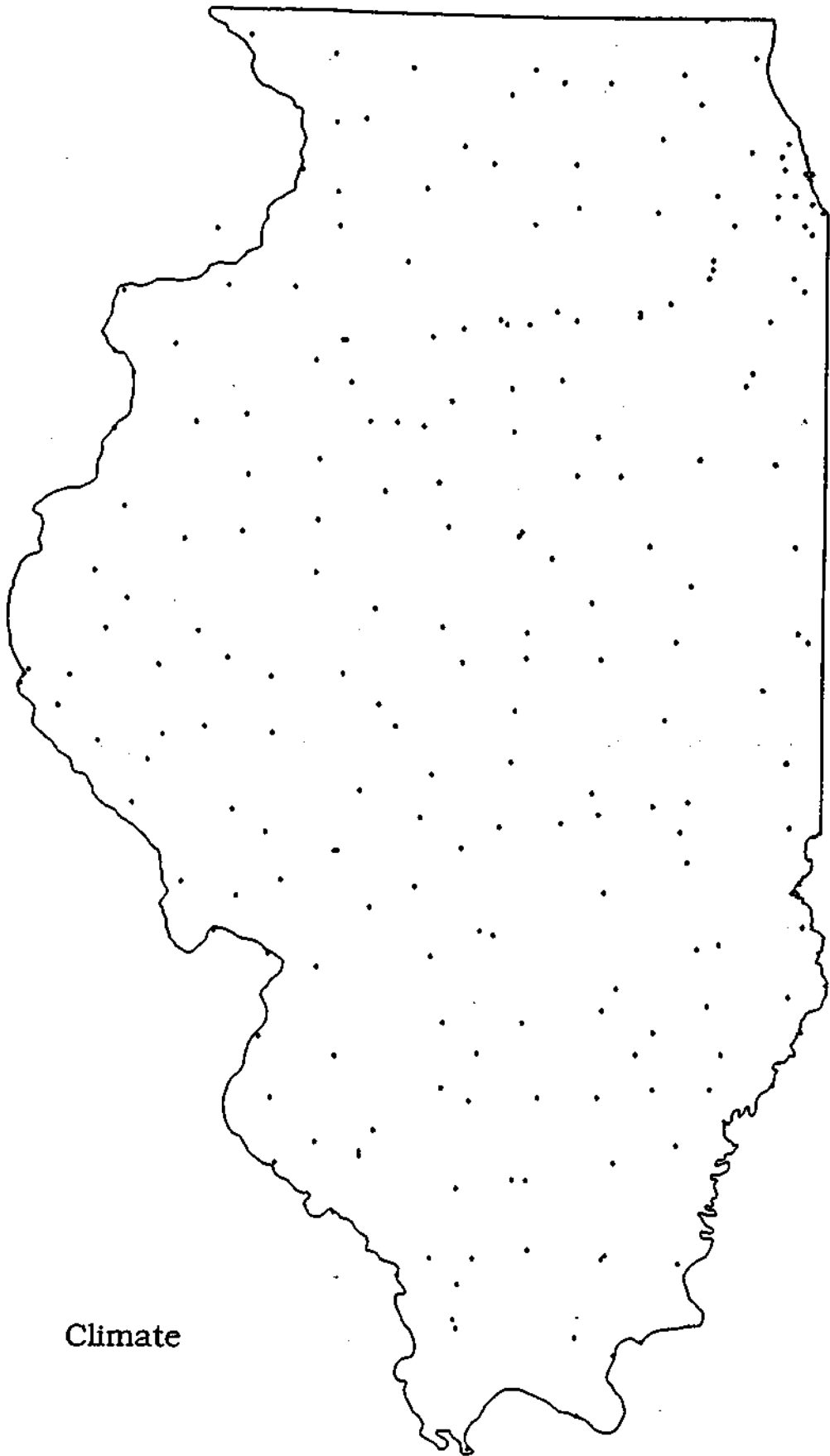
## **Mapping Procedures**

### Bibliography

#### *Climate/Meteorology Record Stations*

Illinois State Water Survey, 1983, Listing of SWS climate index stations in Illinois.

U.S. Department of Commerce, National Climatic Center, 1981, Station Historical List - Illinois, NOAA form 27-314.



Climate

## COMMERCIAL BOAT DOCKS

Coverage Name: COMM-BOAT-DK

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information

Illinois State Water Survey

2204 Griffith Drive

Champaign, IL 61820

(217) 333-9544

or

IGIS Database Administrator

(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of coverage SHPTMA; RESELECTED from SHPTMA on INFO item COMM-BOAT-DOCK. Boat dock names were added to the INFO file from documentation by Amelia Greene (SWS).

### INFO Item Description

65 records

DATAFILE NAME: COMM-BOAT-DK

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	COMM-BOAT-DK#	4	5	B	-	
13	COMM-BOAT-DK-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	COMM-BOAT-DOCK	4	4	I	-	Commercial boat docks
33	STREAM-NAME	46	46	C	-	Stream name
79	DOCK-NAME	30	30	C	-	Dock name
<b>** REDEFINED ITEMS **</b>						
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	

<i>Col</i>	<i>Item name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	comm-boat-dock	4	4	I	-	
29	PRODUCT-TYPE	1	1	I	-	
30	DOCK#	3	3	I	-	

### Coding for INFO Items

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream-Number/Name (Columns 17-28)

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

COMMERCIAL BOAT DOCKS (Columns 29-32)

General Product Type (Column 29)

1 = Coal

9 = Not a commercial boat dock

Individual Number/Name (Columns 30-32)

001-N = Individual number/name

999 = Not a commercial boat dock

### Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).



An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

### **Bibliography**

#### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin: USGS, Water Resources Division Investigation 79-111.

#### *Commercial Boat Docks*

Hopkins, M.E., 1975, Coal Mines in Illinois, SGS: scale 1:500,000.



**Commercial Boat Docks**

DAM SAFETY SURVEY SITES

Coverage Name: DAM-SAFE-SITE

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544

or  
 IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of coverage SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item DAM-SAFETY-SITE.

INFO Item Description

906 records

DATAFILE NAME: DAM-SAFE-SITE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	DAM-SAFE-SITE#	4	5	B	-	
13	DAM-SAFE-SITE-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	DAM-SAFETY-SITE	4	4			SWS dam safety survey sites
33	DAM-SITE-NAME	45	45	C	-	
78	STREAM-NAME	46	46	C	-	
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	dam-safety-site	4	4	I	-	
29	DAM-SITE#	4	4	I	-	

### **Coding for INFO Items**

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream-Number/Name (Columns 17-21)

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

### **SWS DAM SAFETY SURVEY SITES**

Site number (Columns 29-32)

### **Mapping Procedures**

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

Some point data were mapped independently of the stream network because the features were not stream-related. These included observation wells and dams on artificial empoundments. In these cases, data from the source documents served as locational definition.

### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage

books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## **Bibliography**

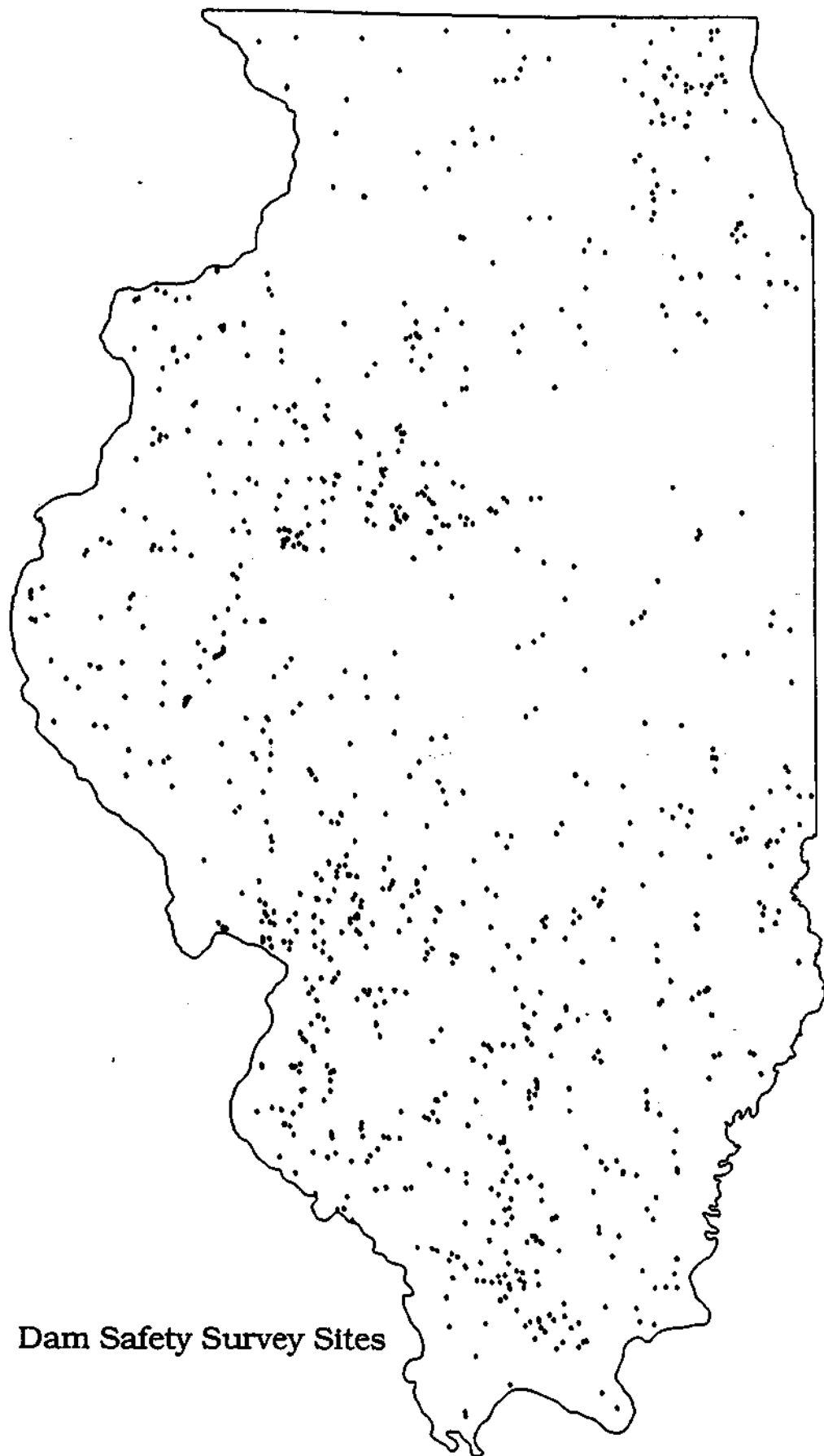
### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin: USGS Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin: USGS Water Resources Division Investigation 79-111.

### *SWS Dam Safety Survey Sites*

U.S. Army Corps of Engineers, Chicago District, 1980, National Dam Safety Program Inventory of Dams - State of Illinois (with one map sheet for each county): scale 1:500,000.



Dam Safety Survey Sites

## HIGH GROUND-WATER YIELD AREAS

Coverage Name: GYPYMG

Location of Coverages: ILLINOIS > GH20

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Office of Ground-Water Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-4300

or

IGIS Database Administrator  
(217) 333-8907

Coverage History

Created in 1984 by ESRI as GYPYMG.

INFO Item Description

37 records

DATAFILE NAME: GYPYMG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	GYPYMG#	4	5	B	-	
13	GYPYMG-ID	4	5	B	-	
17	CODE	4	5	B	-	High ground-water yield areas

**Coding for INFO Items**

HIGH GROUND-WATER YIELD AREAS (Column 17-20)

1 = 14 million gallons per day

2 = 28 million gallons per day

3 = 72 million gallons per day

9 = Not a high ground-water yield area

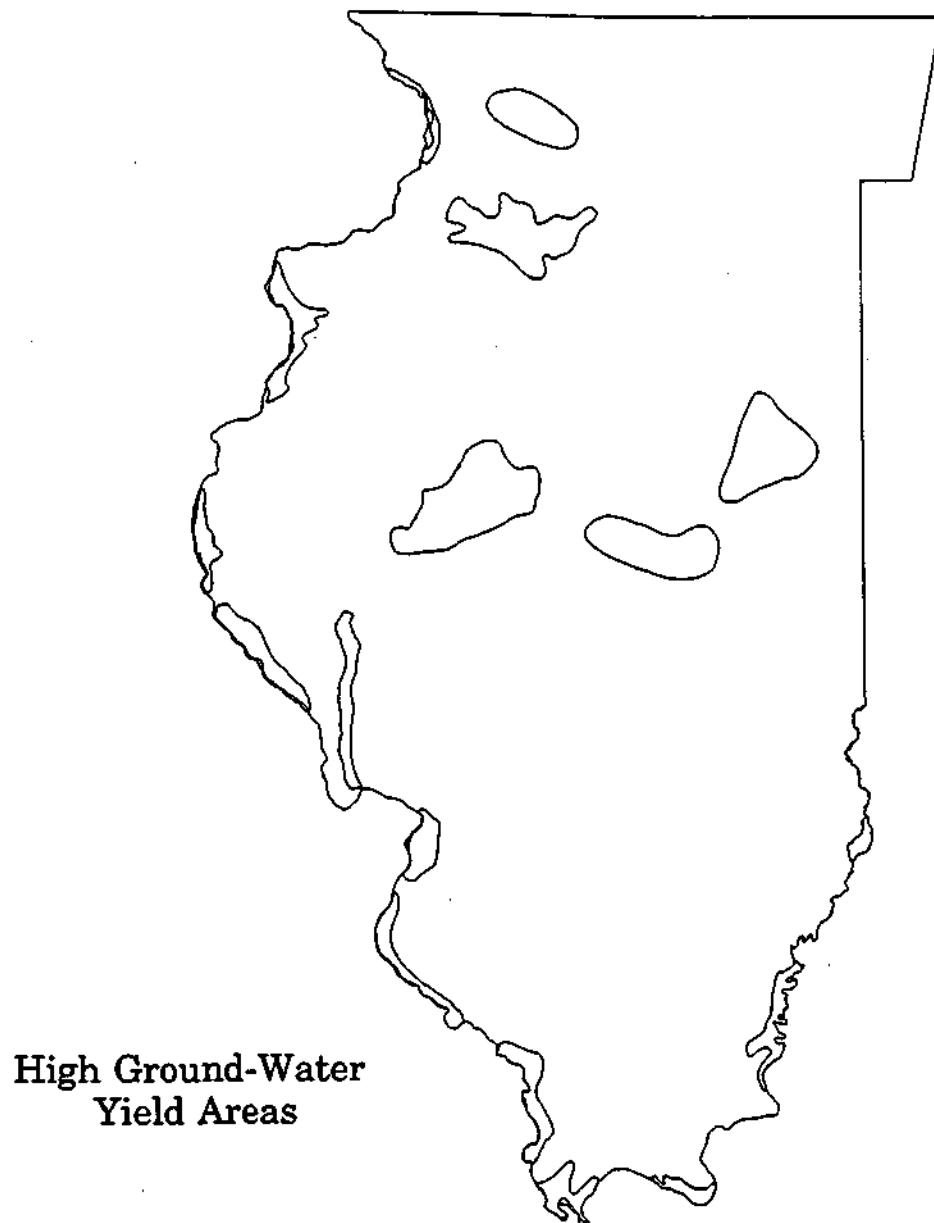
### **Mapping Procedures**

This manuscript identifies areas where ground-water yields are 14, 28, and 78 million gallons per day. The 1:500,000 scale source data were transferred directly to a stable mylar overlay. Little modification of the original data was required. Attributes were assigned directly to each polygon.

### **Bibliography**

#### *High Ground-water Yield Areas*

Smith, W.H., and J.B. Stall, 1975, Coal and Water Resources for Coal Conversion in Illinois, SWS and SGS Cooperative Resources Report 4, map C: scale 1:500,000.



## IDOT DRAINAGE BASINS

Coverage Name: DRAINBASINS

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POLYGON

Mapscale: 1:1,000,000

### Contact Person

Office of Spatial Data Analysis & Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-9544

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPYMG; SHPYMG was DISSOLVED on item DRAINAGE-BASINS by Amelia Greene (SWS). Basin names were contributed by Vernon Knapp, SWS.

### INFO Item Description

34 records

DATAFILE NAME: DRAINBASINS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	DRAINBASINS#	4	5	B	-	
13	DRAINBASINS-ID	4	5	B	-	
17	BASIN#	2	2	I	-	IDOT drainage basins
19	BASIN-NAME	45	45	C		

### Coding for INFO Items

IDOT DRAINAGE BASINS (Columns 17-18)

01-26 = Individual Alpha Basin Identifier

- 1 = Kankakee
- 2 = Big Muddy
- 3 = Cache
- 4 = DesPlaines
- 5 = Embarras



- 6 = Fox
- 7 = Lake Michigan
- 8 = Little Wabash
- 9 = Illinois
- 10 = Spoon
- 11 = Kaskaskia
- 12 = LaMoine
- 13 = Macoupin
- 14 = Mackinaw
- 15 = Ohio
- 16 = Calumet
- 17 = Saline
- 18 = Rock
- 19 = Sangamon
- 20 = Vermilion (Illinois River basin)
- 21 = Upper Mississippi (above Rock River)
- 22 = Vermilion (Wabash River basin)
- 23 = Wabash
- 24 = Upper Mississippi (below Rock River)
- 25 = Lower Mississippi (above Kaskaskia River)
- 26 = Lower Mississippi (below Kaskaskia River)

## Mapping Procedures

### *USGS Cataloging Units (polygons)*

The USGS has divided each state into regions, subregions, accounting units, and cataloging units. All of Illinois is in region 17. The source maps (scale 1:500,000) were rectified to the basemaps, and delineations were made on a mylar overlay. Line placements were enhanced using the USGS basemap and Landsat imagery.

### *IDOT Drainage Basins*

The Illinois Department of Transportation divided Illinois into 26 major drainage basins. The collateral data (scale 1:1,000,000) were not rescaled because the drainage basin units represent groupings of USGS cataloging units that were mapped previously. Each USGS cataloging unit polygon was assigned an IDOT drainage basin code.

## Bibliography

### *USGS Cataloging Units*

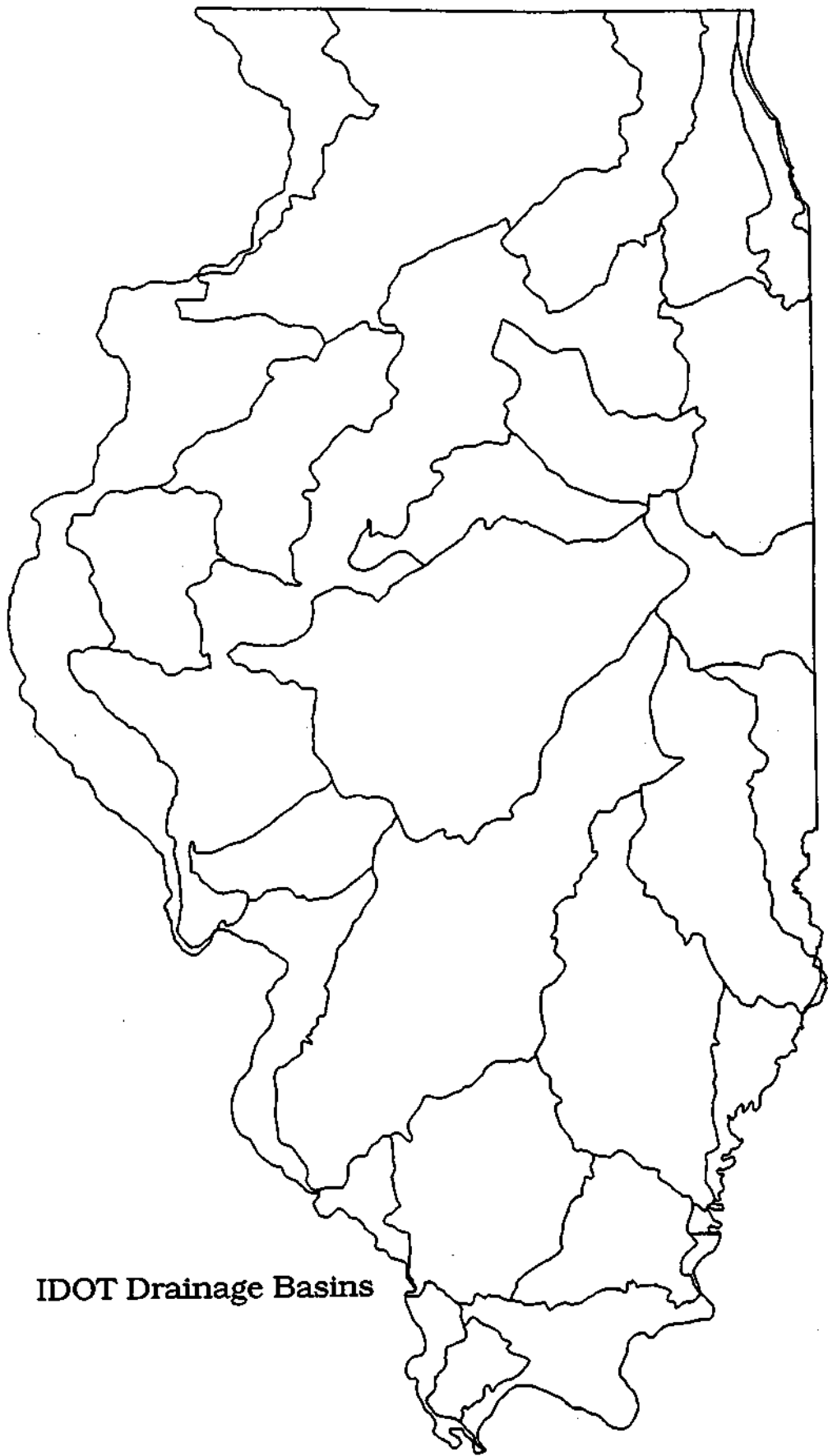
U.S. Geological Survey, 1975, Hydrologic Unit Map of Illinois, 1974: scale 1:500,000.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

### *IDOT Drainage Basins*

Illinois Department of Public Works and Buildings, 1971, Illinois Drainage Map with Watersheds Delineated: scale 1:1,000,000.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.



**IDOT Drainage Basins**

## PIEZOMETRIC SURFACE OF CAMBRIAN-ORDIVICIAN AQUIFER

Coverage **Name:** PZLNMG

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: LINE

Mapscale: 1:500,000

### Contact Person

Office of Ground-Water Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-4300  
or  
IGIS Database Administrator  
(217) 333-8907

Coverage History

Created in 1984 by ESRI as PZLNMG.

### INFO Item Description

115 records

DATAFILE NAME: PZLNMG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	B	-	
5	<b>TNODE#</b>	4	5	B	-	
9	<b>LPOLY#</b>	4	5	B	-	
13	<b>RPOLY</b>	4	5	B	-	
17	<b>LENGTH</b>	4	12	F	3	
21	<b>PZLNMG#</b>	4	5	B	-	
25	<b>PZLNMG-ID</b>	4	5	B	-	

### Coding for INFO Items

PIEZOMETRIC SURFACE OF CAMBRIAN-ORDIVICIAN AQUIFER, 1980 (Columns 25-28)

000-800 = Surface elevation (contour interval = 50 feet)

### Mapping Procedures

This manuscript consists of line data representing the piezometric surface of the Cambrian-Ordovician aquifer. The surface is represented with 50-foot contours. The 1:250,000

scale source data from the State Water Survey were photographically reduced to the 1:500,000 mapping scale. The surface contours and values were then transferred to a clean mylar sheet for each of the three modules.

#### Bibliography

*Piezometric Surface of Cambrian-Ordovician Aquifer, 1980*

Illinois State Water Survey, 1980, Piezometric Surface of Cambrian-Ordovician Aquifer, final draft (with three map sheets): scale 1:250,000.



**Piezometric Surface,  
Cambrian Ordovician Aquifer**

RIVER ENTRY, UPSTREAM TERMINAL, CONFLUENCE, AND EXIT POINTS

Coverage Name: CONFLUENCE-PT

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of SHPTMA; RESELECTED from SHPTMA on INFO item CONFLUENCE-POINT.

INFO Item Description

10,713 records

DATAFILE NAME: CONFLUENCE-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	CONFLUENCE-PT#	4	5	B	-	
13	CONFLUENCE-PT-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	CONFLUENCE-POINT	1	1	I	-	River entry, upstream terminus, confluence, and exit points
30	STREAM-ELEVATION	7	7	N	2	Stream elevation
37	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
28	DOC-RM	1	1	I	-	
29	confluence-point	1	1	I	-	
29	CODING	1	1	I	-	
30	stream-elevation	7	7	N	2	
30	ELEVATION-FT	6	6	N	1	
36	DOC-SE	1	1	I	-	

#### Coding for INFO Items

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream-Number/Name (Columns 17-21)

0001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

RIVER ENTRY, UPSTREAM TERMINUS, CONFLUENCE, AND EXIT POINTS (Column 29)

1 = Upstream entry

2 = Upstream terminus - perennial

3 = Upstream terminus - intermittent

4 = Confluence

5 = Downstream exit

9 = Not a river entry, upstream terminus, confluence, or exit point

STREAM ELEVATION (Columns 30-36)

Real Elevation (Columns 30-35)

0001.0-N = Elevation in feet

Documentation (Column 36)

1 = Documented

#### Mapping Procedures

The surface hydrography manuscript is a polygon, line segment, and point map depicting basic hydrologic information. The manuscript is designed to tie stream-related point information to the actual network of stream course lines.

Stream courses were originally traced from the USGS 1:250,000 scale paper topographic quadrangle maps onto a mylar overlay. Streams flowing through lakes, or wide rivers that have been included on the waterbody template, were extended through the waterbodies by drawing a

smooth line. In some instances, more than one stream segment entered a waterbody; these segments were depicted as joining within the waterbody.

The resulting 1:250,000 scale overlays were photographically reduced to the 1:500,000 mapping scale and compared to the stream delineations on the USGS 1:500,000 scale basemaps. A revised stream network was then drawn on a fresh mylar overlay that included all streams from both the 1:250,000 and the 1:500,000 scale USGS maps. Where the same stream was shown on both the reduced 1:250,000 and the 1:500,000 scale stream networks, the configuration was taken from the delineation on the 1:500,000 scale basemap. Where there was a major difference between the two delineations, Landsat imagery was checked to determine the correct location of the stream. Where either source had longer or additional streams, they were added. Finally, the network was compared to the 7-day, 10-year low-flow maps, and some streams were lengthened to ensure that all 7-day, 10-year low-flow data points were included.

Minimum mapping resolution for polygons was 640 acres. Minimum resolution for streams that came to a terminus was two miles, and for individual line segments a one-mile drafted line length was established.

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

### *USGS River Mileage*

- Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS Water Resources Division Investigation 79-110.
- Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS Water Resources Division Investigation 79-111.

### *Stream Elevation*

- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS Water Resources Division Report HD-81/053.
- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS Water Resources Division Report HD-81/054.

### *USGS River Entry, Upstream Terminus, Confluence, and Exit Points*

- U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.





River Entry, Upstream Terminal,  
Confluence, and Exit Points

## RIVER LOCKS

Coverage Name: RIVER-LOCK

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information

Illinois State Water Survey

2204 Griffith Drive

Champaign, IL 61820

(217)333-9544

or

IGIS Database Administrator

(217) 333-8907

Coverage History

Created in 1984 by ESRI as part of coverage SHPTMA; RESELECTED from SHPTMA on INFO item RIVER-LOCK.

INFO Item Description

30 records

DATAFILE NAME: RIVER-LOCK.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	RIVER-LOCK#	4	5	B	-	
13	RIVER-LOCK-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	RIVER-LOCK	4	4	I	-	River locks
33	STREAM-NAME	46	46	C	-	Stream name
<b>** REDEFINED ITEMS **</b>						
17	river-mileage	12	12	N	2	
17	STREAM#	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	
29	river-lock	4	4	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	RIVER#	1	1	I	-	
30	INDIVIDUAL#	3	3	I	-	

#### Coding for INFO Items

##### USGS RIVER MILEAGE (Columns 17-28)

##### Individual Stream Number/Name (Columns 17-21)

00001-N = Individual number/name

Blank = No data

##### River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

##### Documentation (Column 28)

1 = Documented

Blank = No data

##### RIVER LOCKS (Columns 29-32)

##### River Number (Column 29)

1 = Calumet-Sag Channel

2 = Illinois River

3 = Kaskaskia River

4 = Mississippi River

5 = Ohio River

9 = Not a lock

##### Individual Number (Columns 30-32)

001-N = Individual number

999 = Not a lock

#### Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream). An overlay identifying documented streams and

associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS Water Resources Division Investigation 79-110.

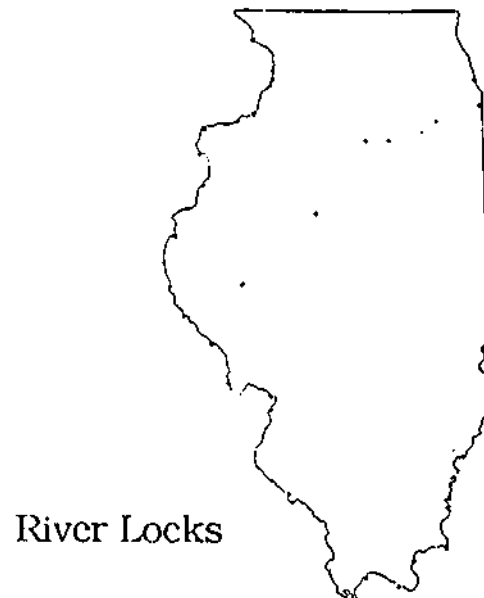
Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS Water Resources Division Investigation 79-111.

### *River Locks*

Boyce, D.A., et al., 1981, Implications of Expanding Coal Production for Illinois Transportation Systems, Illinois Institute of Natural Resources, Department of Engineering Document No. 81/10, Tables 7 and 8.

U.S. Army Corps of Engineers, 1981, Water Resource Development in Illinois.

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.



## SCS WATERSHEDS

**Coverage Name:** SUBUNITS

**Location of Coverages:** ILLINOIS > HYDRO

**Coverage Type:** POLYGON

**Mapscale:** 1:500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217)333-8907

or

IGIS Database Administrator  
(217)333-8907

### Coverage History

Created in 1988 by Louis Iverson (NHS), who extracted watersheds from the statewide database SHPYMG. Additional watersheds came from SCS unpublished maps (scale 1:250,000). The SCS watersheds were drawn by Harry Means.

### INFO Item Description

424 records

DATAFILE NAME: SUBUNITS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SUBUNITS#	4	5	B	-	
13	SUBUNITS-ID	4	5	B	-	
17	HYDROUNIT	11	11	I	-	
28	TILE-NAME	32	32	C	-	
60	LOCATION	128	128	C	-	
<b>** REDEFINED ITEMS **</b>						
17	HYDRO2	11	11	C	-	
17	BASIN	8	8	I	-	
25	WS	3	3	I	-	
60	L	60	60	C	-	

## Coding for INFO Items

### Mapping Procedures

#### *USGS Cataloging Units (polygons)*

The USGS has divided each state into regions, subregions, accounting units, and cataloging units. All of Illinois is in region 17. The source maps (scale 1:500,000) were rectified to the basemaps, and delineations were made on a mylar overlay. Line placements were enhanced using the USGS basemap and Landsat imagery.

### Bibliography

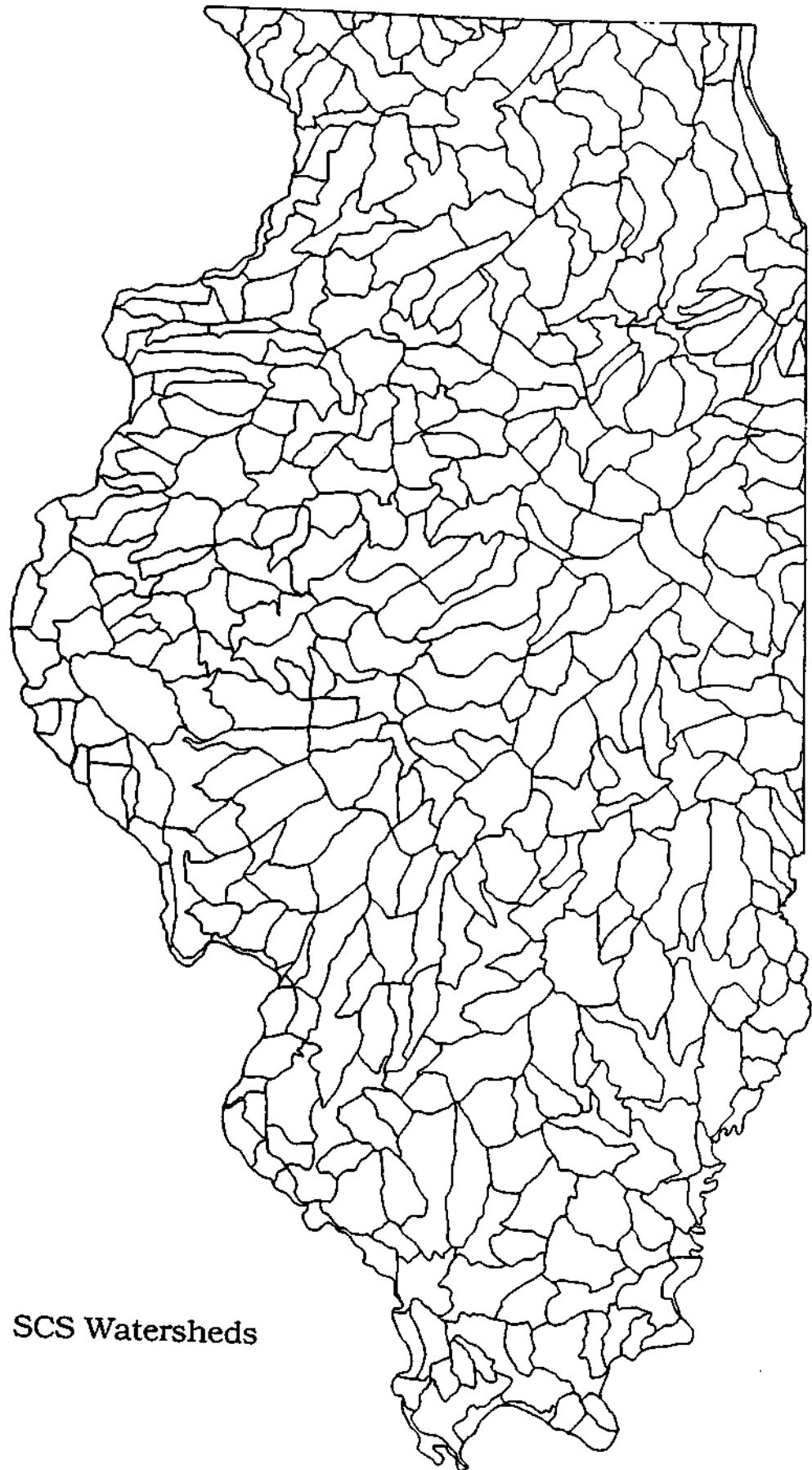
#### *USGS Cataloging Units*

U.S. Geological Survey, 1975, Hydrologic Unit Map of Illinois, 1974: scale 1:500,000.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

#### *Watersheds*

Soil Conservation Service, Unpublished maps (watersheds drawn by Harry Means), SCS, Champaign, IL: scale 1:250,000.



SCS Watersheds

## STATEWIDE STREAMS FOR ILLINOIS

Coverage Name: STREAMS

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: LINE

Mapscale: 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544

or

IGIS Database Administrator  
 (217)333-8907

### Coverage History

Created in 1984 by ESRI as SHLNMG. In the first update, Lance Perry (NHS) corrected the three state natural areas INFO items (SNA-REFERENCE#, FIPS, and SNA-AREA#). The second update occurred in 1989 when Amelia Greene (SWS) removed the waterbody outlines. The data are limited in that the coverage was created at mapscale 1:500,000, so it contains only about 10 percent of the streams in the state.

### INFO Item Description

15,600 records

DATAFILE NAME: STREAMS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY	4	5	B	-	
13	RPOLY	4	5	B	-	
17	LENGTH	4	12	F	3	
21	STREAMS#	4	5	B	-	
25	STREAMS-ID	4	5	B	-	
29	MILEAGE-LOWER	12	12	N	2	USGS river mileage: lower end
41	STREAM-NAME-L	46	46	C	-	



<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
87	MILEAGE-UPPER	12	12	N	2	USGS river mileage: upper end
99	STREAM-NAME-U	46	46	C	-	
145	HYDRO-REACH	12	12	N	-	USEPA hydrologic reach
157	STREAM-ORDER	1	1	I	-	Stream order (not coded)
158	STREAM-SITUATION	1	1	I	-	Stream situation
159	STREAM-PERIOD	1	1	I	-	Stream periodicity (not coded)
160	STREAM-LOW-FLOW	1	1	I	-	Stream low flow
161	PUBLIC-NAV-WAY	1	1	I	-	Illinois public waterways and COE navigable waterways
162	STREAM-CHNL-CANL	1	1	I	-	Stream channelization and canalization
163	POTENTIAL-RESVR	1	1	I	-	SWS potential reservoirs
164	STATE-RES-SYS	4	4	I	-	State reserve system units
168	SPC-FED-RES	3	3	I	-	Special federal reservoir designation
171	INV-PUB-REC	5	5	I	-	Inventory of public recreation land sites
176	SNA-REFERENCE#	4	4	C	-	State natural areas (letter modifier)
180	COUNTY-FIPS	3	3	I	-	County FIPS#
183	SNA-AREA#	4	4	I	-	State natural areas (individual number)
	<b>** REDEFINED ITEMS **</b>					
29	mileage-lower	12	12	N	2	
29	STREAM#-L	5	5	I	-	
34	RIVER-MILE-L	6	6	N	1	
40	DOC-RM-L	1	1	I	-	
87	mileage-upper	12	12	N	2	
87	STREAM#-U	5	5	I	-	
92	RIVER-MILE-U	6	6	N	1	
98	DOC-RM-U	1	1	I	-	
145	hydro-reach	12	12	I	-	
145	CATALOGUE-UNIT	8	8	I	-	
153	CHECK#	1	1	I	-	
154	LOCAL-SEGMENT#	3	3	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
164	state-res-sys	4	4	I	-	
164	GENERAL-TYPE-SRS	2	2	I	-	
166	INDIVIDUAL#-SRS	2	2	I	-	
168	spc-fed-res	3	3	I	-	
168	GENERAL-TYPE-SFR	1	1	I	-	
169	INDIVIDUAL#-SFR	2	2	I	-	
171	inv-pub-rec	5	5	I	-	
171	GENERAL-TYPE-IPR	2	2	I	-	
173	INDIVIDUAL#-IPR	3	3	I	-	
176	sna-reference#	4	4	C	-	
176	LETTER-ID	1	1	C	-	
177	NUMBER-ID	1	1	C	-	

#### Coding for INFO Items

USGS RIVER MILEAGE: LOWER END (Columns 29-40)

Individual Stream Number (Columns 29-33)

00000 = Shoreline, isolated reservoir, or hypothetical connector

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 34-39)

0000.0 = Shoreline, isolated reservoir, or hypothetical connector

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 40)

0 = Shoreline, isolated reservoir or hypothetical connector

1 = Documented

Blank = No data

USGS RIVER MILEAGE: UPPER END (Columns 87-98)

Individual Stream Number (Columns 87-91)

00000 = Shoreline, isolated reservoir, or hypothetical connector

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 92-97)

0000.0 = Shoreline, isolated reservoir, or hypothetical connector

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 98)

- 0 = Shoreline, isolated reservoir, or hypothetical connector
- 1 = Documented
- Blank = No data

USEPA HYDROLOGIC REACH (Columns 145-152)

USGS Cataloging Unit (Columns 145-152)

- 04040001-07140204 = Individual unit

Check Number (Column 153) - Not coded

Local Segment Number (Columns 154-156)

- 000 = Shoreline, isolated reservoir, or hypothetical connector
- 001-099 = Individual number (documented)
- 999 = No EPA local segment number available

STREAM ORDER (Column 157) - Not coded

STREAM SITUATION (Column 158)

- 0 = Isolated reservoir or hypothetical connector
- 1 = In waterbody: shoreline
- 2 = In waterbody: centerline
- 3 = Out of waterbody: centerline

STREAM PERIODICITY (Column 159) - Not coded

- 0 = Shoreline, isolated reservoir, or hypothetical connector
- 1 = Intermittent
- 2 = Perennial

STREAM LOW FLOW (Column 160)

- 0 = Shoreline, isolated reservoir, or hypothetical connector
- 1 = Zero 7-day, 10-year low-flow
- 2 = Nonzero 7-day, 10-year low-flow

ILLINOIS PUBLIC WATERWAYS AND COE NAVIGABLE WATERWAYS (Column 161)

- 0 = Shoreline, isolated reservoir, or hypothetical connector
- 1 = Public waterway and COE navigable waterway
- 2 = Public waterway, not COE navigable waterway
- 6 = COE navigable waterway, not public waterway
- 7 = Not a public waterway or a COE navigable waterway

STREAM CHANNELIZATION AND CANALIZATION (Column 162)

- 0 = Shoreline, isolated reservoir or hypothetical connector
- 1 = Not a canalized stream or ditch
- 3 = Canalized stream
- 4 = Abandoned canal
- 5 = Ditch

SWS POTENTIAL RESERVOIRS (Column 163)

- 0 = Shoreline
- 1 = Not a potential reservoir: centerline
- 2 = Not a potential reservoir: hypothetical connector
- 3 = Potential reservoir - isolated
- 4 = Potential reservoir

STATE RESERVE SYSTEM UNITS (Columns 164-167)

General Type (Columns 164-165)

- 11 = State park
- 99 = Not a state reserve system unit

Individual Number/Name (Columns 166-167)

- 30 = Illinois and Michigan Canal
- 99 = Not a state reserve system unit

SPECIAL FEDERAL RESERVE DESIGNATIONS (Columns 168-170)

General Type (Column 168)

- 1 = National natural landmark
- 9 = No special federal designation

Individual Number/Name (Columns 169-170)

- 13 = Lusk Creek Canyon
- 99 = No special federal designation

INVENTORY OF PUBLIC RECREATION LAND SITES (Columns 171-175)

General Type (Columns 171-172)

- 01 = Canoe trail
- 99 = Not an *Inventory of Public Recreation Lands* site

Individual Number/Name (Columns 173-175)

- 001-N = Individual number/name (see Administrative Units classification.)
- 999 = Not an *Inventory of Public Recreation Lands* site

SNA-REFERENCE# (Columns 176-179)

Letter-ID (Column 176)

- W = Water

Number-ID (Columns 177-179)

- 000-999

COUNTY FIPS (Columns 180-182))

- 1-102 County FIPS number used with SNA-REFERENCE# to create a unique ID#

SNA-AREA# (Columns 183-186)

- 0000-1089 sequential coding system for encoding natural areas; also see AUPYFX, AUPTFX, and AULNMG.

## Mapping Procedures

Stream courses were originally traced from the USGS 1:250,000 scale paper topographic quadrangle maps onto a mylar overlay. Streams flowing through lakes, or wide rivers that have been included on the waterbody template were extended through the waterbodies by drawing a smooth line. In some instances, more than one stream segment entered a waterbody; these segments were depicted as joining within the waterbody.

The resulting 1:250,000 scale overlays were photographically reduced to the 1:500,000 mapping scale and compared to the stream delineations on the USGS 1:500,000 scale basemaps. A revised stream network was then drawn on a fresh mylar overlay that included all streams from both the 1:250,000 and the 1:500,000 scale USGS maps. Where the same stream was shown on both the reduced 1:250,000 and the 1:500,000 scale stream networks, the configuration was taken from the delineation on the 1:500,000 scale basemap. Where there was a major difference between the two delineations, Landsat imagery was checked to determine the correct location of the stream. Where either source had longer or additional streams, they were added. Finally, the network was compared to the 7-day, 10-year low-flow maps, and some streams were lengthened to ensure that all 7-day, 10-year low-flow data points were included.

### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

### *USEPA Hydrologic Reach*

The USEPA Reach File identifies streams and waterbody shorelines by name and by a unique topological number nested within the USGS cataloging units. Map sheets at a scale close

to 1:500,000 were used to encode stream segments. If the stream shown on the reach file maps ended before the stream on the topographic maps ended, the stream was segmented and the upstream portion was not encoded with a hydrologic reach number. The stream shoreline segments were coded after automation when the waterbody template lines were merged into the file.

*Stream Order (line)*

Not mapped.

*Stream Situation (line)*

These data were automatically coded. This variable was coded using a variety of techniques. First, all isolated reservoirs and hypothetical connectors (code = 0) were coded during manuscript preparation and keypunched. Second, waterbodies from the template were overlaid atop the stream course coverage to encode streams as inside or outside of a waterbody. INTERSECT was used to overlay the waterbody polygons on the stream course coverage. RESELECT then identified all stream segments within a waterbody, and their code was CALCULATE[d] to be equal to 2 (in waterbody: Centerline). The same RESELECT and CALCULATE procedures were used to assign all other stream segments a code of 3 (out of Waterbody: Centerline). Finally, all waterbody shorelines were APPEND[ed] to the stream course coverage and received a code of 1 (in Waterbody: Shoreline). Shorelines then received a code of 0 for all other variables in the line coverage.

*Stream Periodicity (line)*

Not mapped.

*Stream Low Flow (line)*

The 7-day, 10-year low-flow maps of Illinois streams (scale of 1:250,000) were used to delineate streams with nonzero low-flow sections. The boundary between zero 7-day, 10-year low-flow and nonzero 7-day, 10-year low-flow streams was drafted on an overlay during manual rescaling of the data.

*Stream Navigability (line)*

Stream navigability was based on an unpublished list provided by the Illinois Department of Transportation. Navigable streams were coded either as public waterways (under section 403 ederal law), COE waterways (requiring a bridge permit), or both public and COE navigable.

When the limit of navigability was given as a river mileage between two documented river mileages, the point location was estimated between the two.

*Stream Channelization and Canalization (line)*

Canals and abandoned canals were identified on the 1:250,000 scale USGS maps. Stream segments were coded as ditches if they were identified as such on the USGS maps or if they were very straight line segments on the maps.

*Potential Reservoirs (line)*

The Illinois State Water Survey conducted a reconnaissance survey of potential sites within the state where surface storage of water is physically feasible. Streams were segmented and coded to indicate where the shoreline of a potential reservoir crossed a stream. Potential reservoirs not falling on mapped streams were delineated as line segments running from their upslope to their downslope limits. Hypothetical connectors were created to join these potential reservoirs to the existing streams.

**Bibliography**

*USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS Water Resources Division Investigation 79-111.

*USEPA Hydrologic Reach*

U.S. Environmental Protection Agency, Monitoring Branch, 1981, Reach File - The State of Illinois (with map sheets).

*Stream Order*

Not coded.

*Stream Situation*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

*Stream Periodicity*

Not coded.

### *Stream Low Flow*

Singh, K.P., and J.B. Stall, 1973, The 7-Day, 10-Year Low Flow of Illinois Streams, Illinois State Water Survey Bulletin 57: scale 1:250,000.

### *Stream Navigability*

Illinois Department of Transportation, Water Resources Division, 1982, Illinois Waterways Requiring U.S. Coast Guard Bridge Permits, Appendix 1 - Additional List of Streams Considered Navigable under Section 403 Federal Law (Unpublished lists).

### *Stream Channelization and Canalization*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

### *SWS Potential Reservoirs*

Dawes, J.H., and M.L. Terstriep, 1966, Potential Surface Water Reservoirs of South-Central Illinois, Illinois State Water Survey Report of Investigation 54 (with one map): scale 1:450,000.

Dawes, J.H., and M.L. Terstriep, 1966, Potential Surface Water Reservoirs of North-Central Illinois, Illinois State Water Survey Report of Investigation 56 (with one map): scale 1:450,000.

Dawes, J.H., and M.L. Terstriep, 1967, Potential Surface Water Reservoirs of Northern Illinois, Illinois State Water Survey Report of Investigation 58 (with one map): scale 1:450,000.

Roberts, W.J., R. Hanson, F.A. Huff, S.A. Changnon, Jr., and T.E. Larson, 1962, Potential Water Resources of Southern Illinois, Illinois State Water Survey Report of Investigation 31 (with one map): scale 1:350,000.

### *State Reserve System Units*

U.S. Geological Survey, 1977-1983, State Land Ownership Maps, Open File Reports 77-007-6, 77-010-6, 77-103-6, 79-266-6, 79-267-6, 79-1053-6, 79-1550-6, 80-154-6, 80-629-6, 80-635-6, 82-008-6, 82-012-6, 82-228-6, 82-234-6: scale 1:250,000.

Illinois Department of Energy and Natural Resources, Miscellaneous untitled maps.

### *State Natural Areas*

University of Illinois at Urbana-Champaign, Department of Landscape Architecture and the Natural Land Institute, 1978, Illinois Natural Areas Inventory, technical report (with county maps delineating natural areas), Illinois Department of Conservation: scale variable.



*Special Federal Reserve Designation*

U.S. Department of the Interior, 1980, National Register of Natural Landmarks in U.S. National Archives Federal Register, Vol. 45, No. 232, Notices.

*Inventory of Public Recreation Land Sites*

Ackerman, K., et al., 1977, Inventory of Public Recreation Lands in Illinois, Illinois Department of Transportation, Bureau of Location and Environment.



## STATEWIDE WATERBODIES

Coverage Name: WATERBODIES

Location of Coverages: ILLINOIS > HYDRO

Mapscale: 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information

Illinois State Water Survey

2204 Griffith Drive

Champaign, IL 61820

(217)333-9544

or

IGIS Database Administrator

(217)333-8907

### Coverage History

Created in 1984 by ESRI as ITU; ITU was DISSOLVED to create SOILALL. WATERBODIES was RESELECTED from statewide soil association map SOILALL.

### INFO Item Description

166 records

DATAFILE NAME: WATERBODIES.PAT

4 ITEMS

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>
1	AREA	4	12	F	3
5	PERIMETER	4	12	F	3
9	WATERBODIES#	4	5	B	-
13	WATERBODIES-ID	4	5	B	-

### Coding for INFO Items

### Mapping Procedures

This coverage was created from the statewide soil association coverage, RESELECT[ing] on water (98) for both the soil parent material and the soil associations. It was not created from SHLNMG, the original stream and waterbody coverage, because the "waterbodies" formed as part of the Mississippi River and other major rivers at the boundary of the state were not complete polygons, but rather just unconnected lines.

## **Bibliography**

### *Soil Associations*

Fehrenbacher, **J.B.**, 1982, General Soil Map of Illinois, Illinois Agricultural Experiment Station, University of Illinois at Urbana-Champaign: scale 1:500,000.



## STREAM ELEVATION

Coverage Name: STREAM-ELEV

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created by ESRI as part of SHPTMA; RESELECTED from SHPTMA using INFO item STREAM-ELEVATION.

INFO Item Description

249 records

DATAFILE NAME: STREAM-ELEV.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STREAM-ELEV#	4	5	B	-	
13	STREAM-ELEV-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	STREAM-ELEVATION	7	7	N	2	Stream elevation
36	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	
29	stream-elevation	7	7	N	2	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	ELEVATION-FT	6	6	N	1	
35	DOC-SE	1	1	I	-	

### Coding for INFO Items

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number/Name (Columns 17-21)

0001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

STREAM ELEVATION (Columns 29-35)

Real Elevation (Columns 29-34)

0001.0-N = Elevation in feet

Documentation (Column 35)

1 = Documented

### Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and an associated individual number were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river

mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

### *USGS River Mileage*

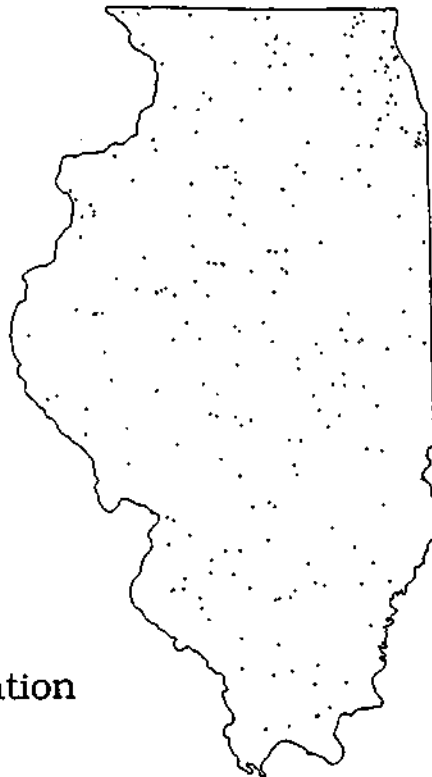
Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

### *Stream Elevation*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.



**Stream Elevation**

## SURFACE WATER WITHDRAWAL INTAKES

**Coverage Name:** SURF-WD-INTAK

**Location of Coverages:** ILLINOIS > HYDRO

**Coverage Type:** POINT

**Mapscale:** 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544

or  
 IGIS Database Administrator  
 (217) 333-8907

### Coverage History

Created by ESRI as part of SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item SURF-WTHDRL-INTK.

### INFO Item Description

392 records

DATAFILE NAME: SURF-WD-INTAK.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SURF-WD-INTAK#	4	5	B	-	
13	SURF-WD-INTAK-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	SURF-WTHDRL-INTK	9	9	I	-	SWS surface water withdrawal intakes
38	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM#	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	
29	surf-withdrl-intk	9	9	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	INDIVIDUAL#	8	8	I	-	
37	INTAKE-NUMBER	1	1	I	-	

### **Coding for INFO Items**

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number/Name (Columns 17-21)

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

SURFACE WATER WITHDRAWAL INTAKES (Columns 29-37)

Individual Number (Columns 29-36)

00000001-N = Individual number

99999999 = Not a surface water withdrawal intake

Intake Number (Column 37)

1-N = Intake number

9 = Not a surface water withdrawal intake

### **Mapping Procedures**

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

### *USGS River Mileage*

River mileages were taken from the *USGS River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage



books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

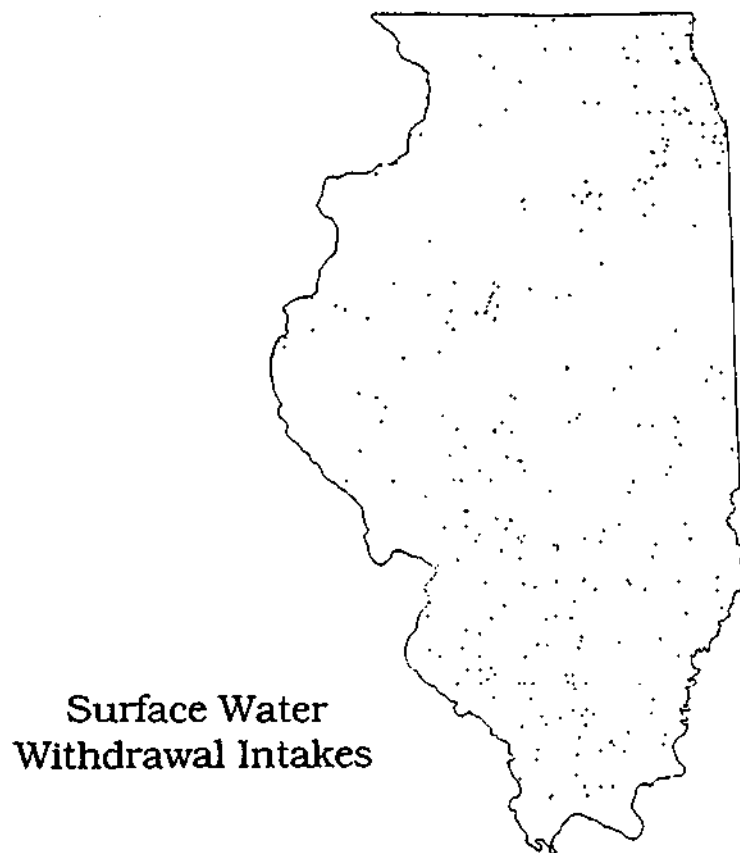
### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

### *SWS Surface Water Withdrawal Intakes*

**Illinois State Water Survey, 1983, Tape and listing of SWS surface water withdrawal intake sites in Illinois.**



SWS INSTREAM SEDIMENT MONITORING STATIONS

Coverage Name: SED-MONIT-STN

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544  
 or  
 IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item SED-MONIT-STN.

INFO Item Description

48 records

DATAFILE NAME: SED-MONIT-STN.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SED-MONIT-STN#	4	5	B	-	
13	SED-MONIT-STN-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	SED-MONITOR-STN	9	9	I	-	SWS instream sediment monitoring stations
38	STREAM-ELEVATION	7	7	N	2	Stream elevation
45	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	sed-monitor-stn	9	9	I	-	
29	STATION#	8	8	I	-	
37	STATION-TYPE	1	1	I	-	
38	stream-elevation	7	7	N	2	
38	ELEVATION-FT	6	6	N	1	
44	DOC-SE	1	1	I	-	

### **Coding for INFO Items**

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number (Columns 17-21)

00001-N = Individual number

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

SWS INSTREAM SEDIMENT MONITORING STATIONS (Column 29-37)

Individual Number (Columns 29-36)

00000001-N = Individual number

99999999 = Not an SWS instream sediment monitoring station

Station Type (Column 37)

1 = Continuous daily

2 = Noncontinuous daily

3 = Continuous weekly

4 = Noncontinuous weekly

9 = Not an SWS instream sediment monitoring station

STREAM ELEVATION (Columns 38-44)

Real Elevation (Columns 38-43)

0001.0-N = Elevation in feet

Documentation (Column 44)

1 = Documented

### **Mapping Procedures**

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate

information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage (line and point)*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

#### Bibliography

##### *USGS River Mileage*

- Healy, R.W., 1979, *River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin*, USGS, Water Resources Division Investigation 79-110.
- Healy, R.W., 1979, *River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin*, USGS, Water Resources Division Investigation 79-111.

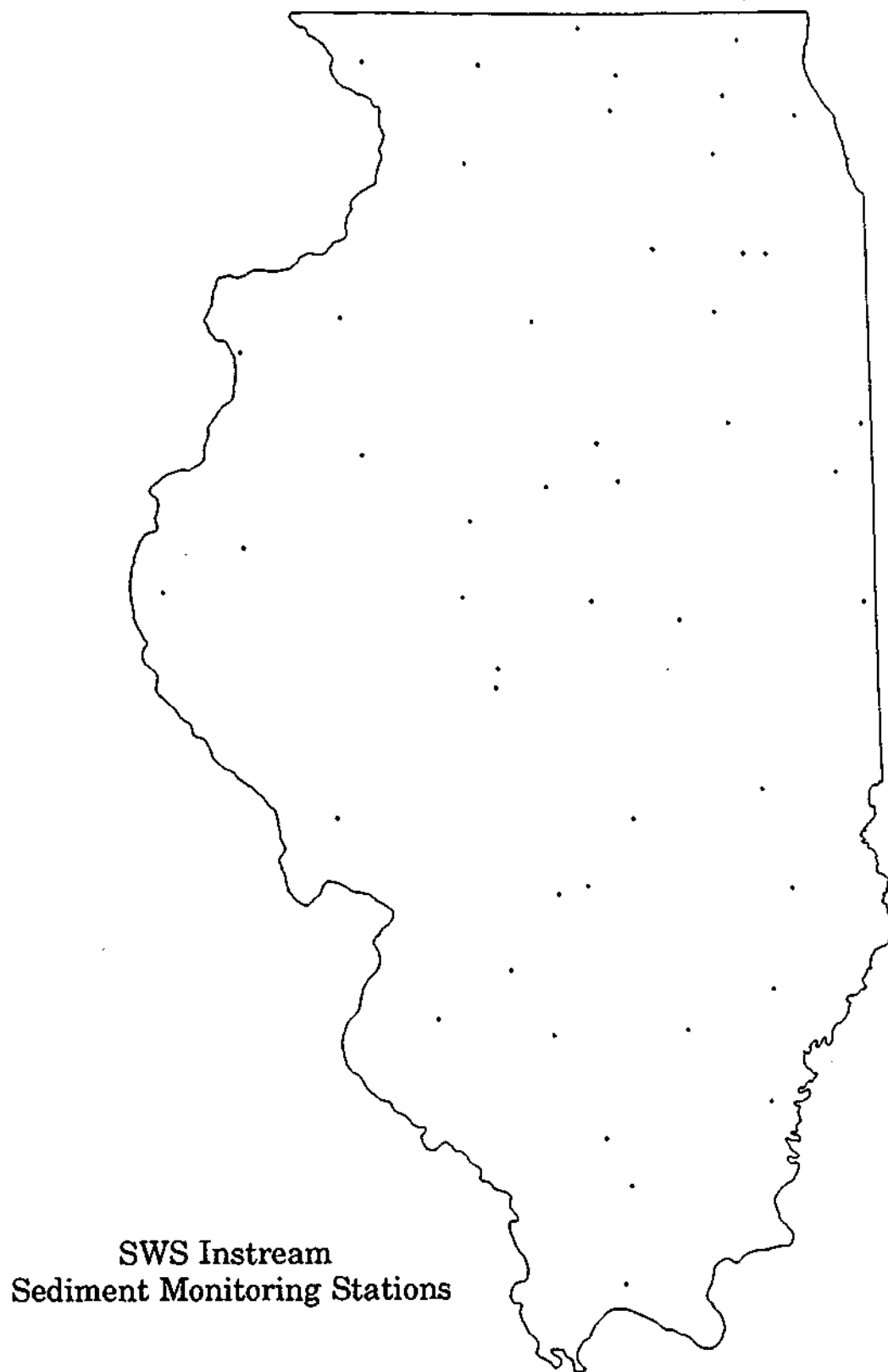
##### *SWS Instream Sediment Monitoring Stations*

- Illinois State Water Survey, 1983, *Tape and listing of SWS streamgaging stations in Illinois*.
- Illinois State Water Survey, 1983, *Tape and listing of SWS sediment monitoring network stations in Illinois*.

##### *Stream Elevation*

- U.S. Geological Survey, 1981, *Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin*, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2,  
Illinois River Basin, Water Resources Division Report HD-81/054.



**SWS LAKE AND RESERVOIR SEDIMENTATION SURVEY SITES**

Coverage Name: SED-SURV-SITE

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217)333-9544

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of SHPTMA and SHPTMB. It was updated in 1987 by Ali Durgunoglu, Bob Sinclair, and Amelia Greene (SWS) from information compiled by SWS staff.

INFO Item Description

131 records

DATAFILE NAME: SED-SURV-SITE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SED-SURV-SITE#	4	5	B	-	
13	SED-SURV-SITE-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	
29	SED-SURVEY-SITE	5	5	I	-	
34	SITE-NAME	30	30	C	-	Site name
64	STREAM-NAME	46	46	C	-	Stream name
110	SURVEY-SITE-ALPH	5	5	C	-	Sedimentation survey site-leading zeros
115	DRAIN-AREA-SQ-MI	7	7	N	2	Drainage area-square miles
122	TOWN-RANGE-SEC	11	11	C	-	Township, range, section
133	CONSTRUCTION-YR	4	4	I		Year constructed

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
137	SURF-AREA-ACRES	7	7	N	1	Surface area-acres
144	DESIGN-STOR-AC-FT	10	10	N	2	Storage design-acre-feet
154	%-CAPACITY-LOSS	5	5	N	2	Percent capacity loss
159	SED-YIELD-T/AC	5	5	N	3	Sediment yield-tons/acre
164	YEAR-SURVEY2	4	4	I	-	
168	SURF-AREA-ACRES2	7	7	N	1	
175	REMAIN-CAPACITY2	10	10	N	2	
185	%-CAPACITY-LOSS2	5	5	N	2	
190	SED-YIELD-T/AC2	5	5	N	3	
195	YEAR-SURVEY3	4	4	I	-	
199	SURF-AREA-ACRES3	7	7	N	1	
206	REMAIN-CAPACITY3	10	10	N	2	
216	%-CAPACITY-LOSS3	5	5	N	2	
221	SED-YIELD-T/AC3	5	5	N	3	
226	YEAR-SURVEY4	4	4	I	-	
230	SURF-AREA-ACRES4	7	7	N	1	
237	REMAIN-CAPACITY4	10	10	N	2	
247	%-CAP-LOSS4	5	5	N	2	
252	SED-YIELD-T/AC4	5	5	N	3	
257	YEAR-SURVEY5	4	4	I	-	
261	SURF-AREA-ACRES5	7	7	N	1	
268	REMAIN-CAPACITY5	10	10	N	2	
278	%-CAP-LOSS5	5	5	N	2	
283	SED-YIELD-T/AC5	5	5	N	3	
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM-#/NAME	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	

#### Coding for INFO Items

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number (Columns 17-21)

00001-N = Individual number

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

SWS LAKE AND RESERVOIR SEDIMENTATION SURVEY SITES (Columns 29-33)

00001-N = Individual number

Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

Bibliography

*USGS River Mileage*

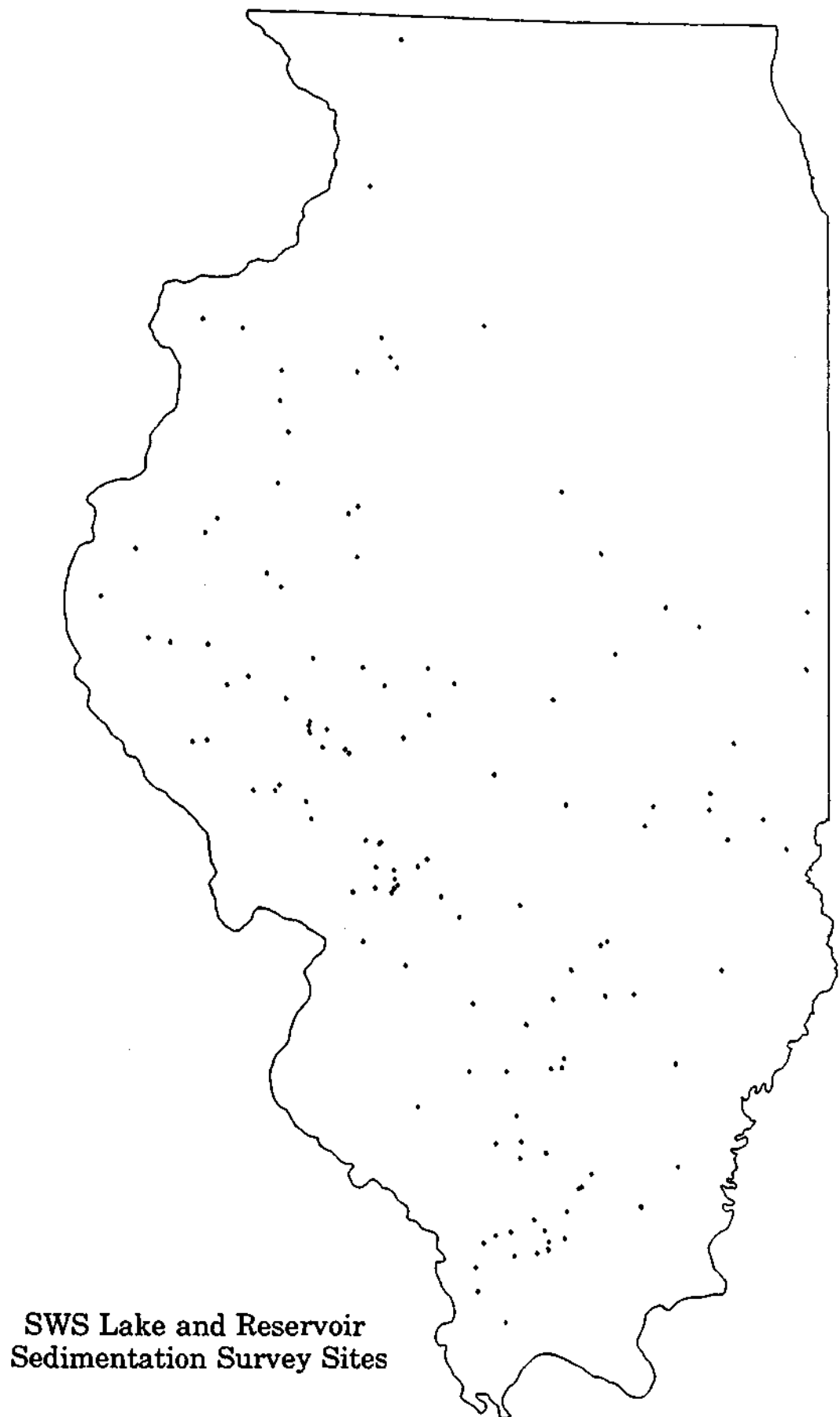
Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

*SWS Lake and Reservoir Sedimentation Survey Sites*

Illinois State Water Survey, 1983, Tape and listing of SWS sedimentation survey sites in Illinois (SEDSURV).





**SWS Lake and Reservoir  
Sedimentation Survey Sites**

**SWS MASS MEASUREMENT OF GROUND-WATER LEVEL AREAS**

**Coverage Name:** GH20-LEVEL

**Location of Coverages:** ILLINOIS > **HYDRO**

**Coverage Type:** POLYGON

**Mapscale:** 1:500,000

**Contact Person**

Office of Ground-Water Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217)333-4300

or

IGIS Database Administrator  
(217)333-8907

**Coverage History**

Created in 1984 by ESRI as part of SHPYMG; DISSOLVED from SHPYMG on item GH20-LEVEL-AREA.

**INFO Item Description**

4 records

DATAFILE NAME: GH20-LEVEL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	GH20-LEVEL#	4	5	B	-	
13	GH20-LEVEL-ID	4	5	B	-	
17	GH20-LEVEL-AREA	1	1	I	-	<b>SWS mass measurement of ground-water level areas</b>

**Coding for INFO Items**

SWS MASS MEASUREMENT OF **GROUND-WATER LEVEL AREAS** (Column 17)

1 = Northern Illinois area

2 = East St. Louis area

9 = Not an SWS mass measurement area

## **Mapping Procedures**

### *SWS Mass Measurement of Ground-Water Level Areas*

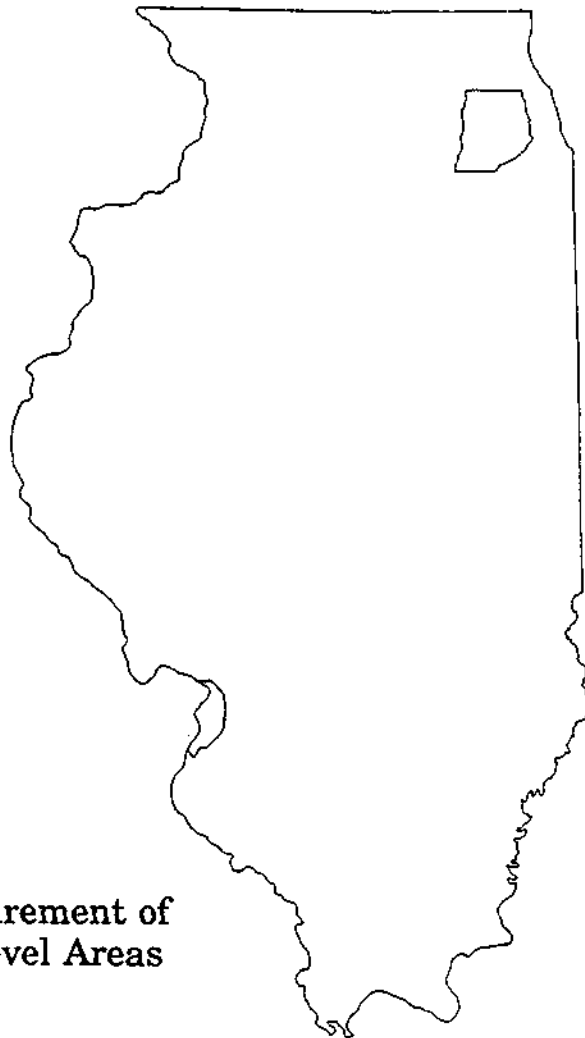
SWS mass measurements of ground-water levels were mapped for only two areas of the state. Two collateral maps at a scale of 1:63,000 were provided by the SWS; one for the East St. Louis area and another for an area near Chicago. The ground-water maps were manually rescaled to 1:500,000 and rectified to the basemaps. In several instances, mapped streams served as boundaries of the mass measurement of ground-water levels.

## **Bibliography**

### *SWS Mass Measurement of Ground-Water Levels by Area*

Illinois State Water Survey, 1980, Final draft of the potentiometric surface of Silurian dolomite aquifer - Chicago area: scale 1:63,000.

Illinois State Water Survey, 1980, Approximate elevation of piezometric surface - East St. Louis area: scale 1:63,000.



**SWS Mass Measurement of  
Ground-Water Level Areas**

## SWS OBSERVATION WELLS

Coverage Name: SWS-OBS-WELL

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

### Contact Person

Office of Ground-Water Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-4300

or

IGIS Database Administrator  
(217)333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPTMB; RESELECTED from SHPTMB on INFO Item SWS-OBSERV-WELL.

### INFO Item Description

97 records

DATAFILE NAME: SWS-OBS-WELL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SWS-OBS-WELL#	4	5	B	-	
13	SWS-OBS-WELL-ID	4	5	B	-	
17	SWS-OBSERV-WELL	6	6	N	2	SWS observation wells
<b>** REDEFINED ITEMS **</b>						
17	INDIVIDUAL	5	5	I	-	
22	GENERAL-TYPE	1	1	I	-	

### Coding for INFO Items

SWS OBSERVATION WELLS (Columns 17-21)

SWS Individual Number (Columns 17-20)

00001-N = Individual number

99999 = Not an SWS observation well

General Type (Column 21)

- 1 = Observation well with recorder
- 2 = Observation well without recorder
- 9 = Not an SWS observation well

**Mapping Procedures**

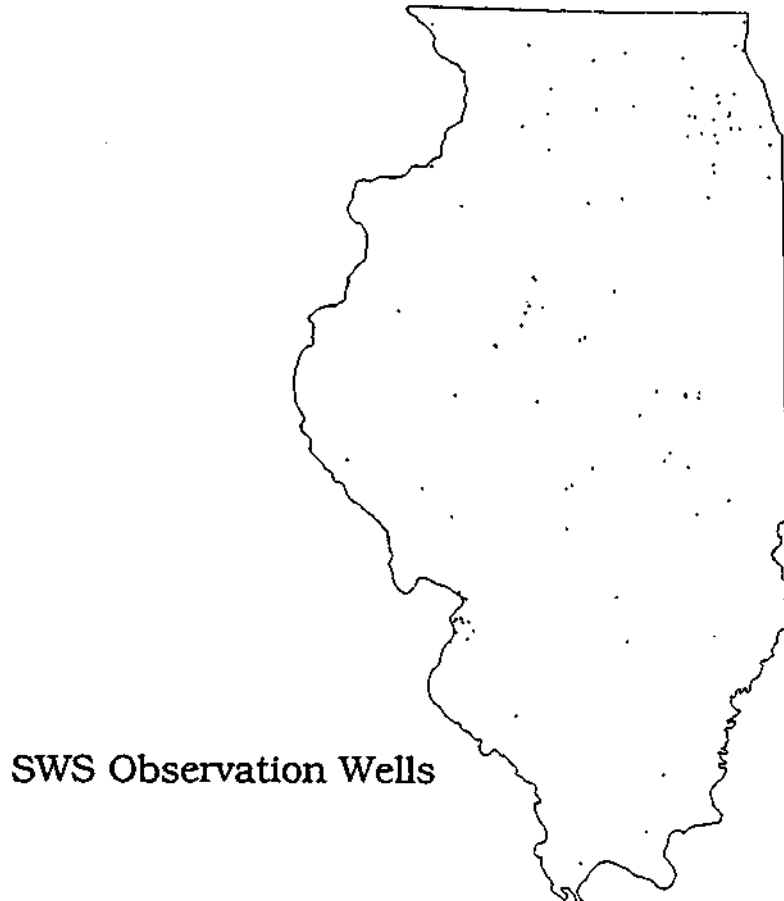
Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

Some point data were mapped independently of the stream network because the features were not stream-related, such as observation wells and dams on artificial empoundments. In these cases, data from the source documents served as locational definition.

**Bibliography**

*SWS Observation Wells*

Illinois State Water Survey, 1983, Listing of active SWS observation wells in Illinois.



## SWS SANITARY DISCHARGE POINTS

Coverage Name: SANIT-DISCH

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544  
 or  
 IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of SHPTMA; RESELECTED from SHPTMA on INFO item SANIT-DISCHARGE. Sanitary discharge point names were added to the INFO file from documentation by Amelia Greene (SWS).

INFO Item Description

675 records

DATAFILE NAME: SANIT-DISCH.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SANIT-DISCH#	4	5	B	-	
13	SANIT-DISCH-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	SANIT-DISCHARGE	4	4	I	-	SWS sanitary discharge points
33	SAN-DIS-NAME	30	30	C	-	SWS sanitary discharge point name
63	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	

28	DOC-RM	1	1	I	-
29	sanitary-discharge	4	4	I	-
29	GEN-TYPE	1	1	I	-
30	INDIVIDUAL#	3	3	I	-

### Coding for INFO Items

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number (Columns 17-21)

00001-N = Individual number

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank- = No data

SWS SANITARY DISCHARGE POINTS (Columns 29-32)

General Type (Column 29)

1 = Major wastewater outfall

2 = Major industrial wastewater plant

9 = Not an SWS sanitary discharge point

Individual Number (Columns 30-32)

001-N = Individual number

Individual Name (Column 33)

### Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

### *USGS River Mileage*

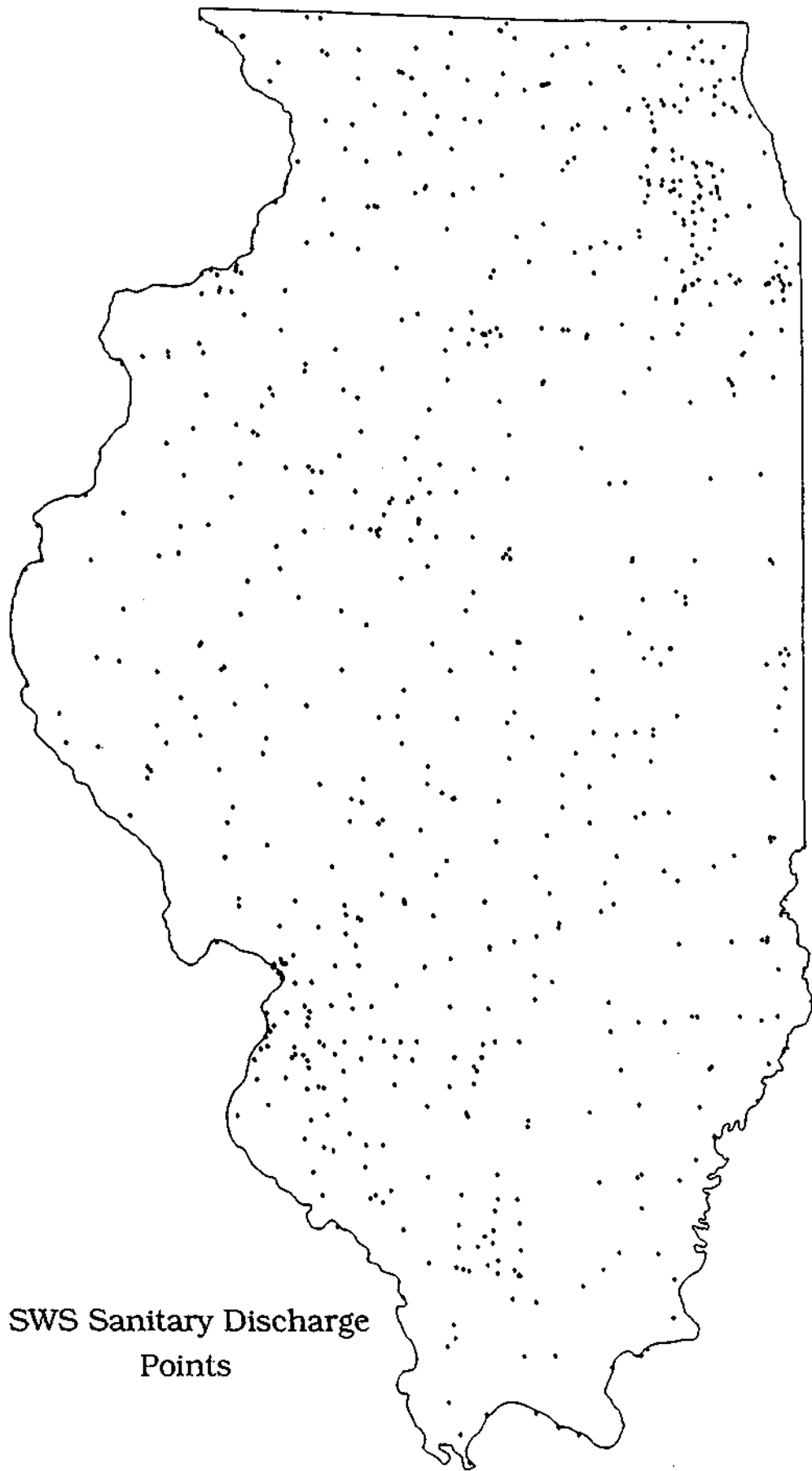
Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

### *SWS Sanitary Discharge Points*

Singh, K.P., and J.B. Stall, 1973, The 7-day, 10-Year Low Flow of Illinois Streams, Illinois State Water Survey Bulletin 57 (with 11 map sheets): scale 1:250,000.





SWS Sanitary Discharge  
Points

## SWS WATER QUALITY MONITORING STATIONS

Coverage Name: SWSWQ

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217)333-9544  
 or  
 IGIS Database Administrator  
 (217)333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item SWS-WTR-QUAL-STN.

### INFO Item Description

77 records

DATAFILE NAME: SWSWQ.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SWSWQ#	4	5	B	-	
13	SWSWQ-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	SWS-WTR-QUAL-STN	8	8	I	-	SWS water quality monitoring stations
37	STREAM-ELEVATION	7	7	N	2	Stream elevation
44	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM #	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
37	stream-elevation	7	7	N	2	
37	STATION-TYPE	1	1	I	-	
38	ELEVATION-FT	6	6	N	-	
43	DOC-SE	1	1	I	-	

### **Coding for INFO Items**

USGS RIVER MILEAGE (Columns 17-28)

Individual Stream Number/Name (Columns 17-21)

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 28)

1 = Documented

Blank = No data

SWS WATER QUALITY MONITORING STATIONS (Columns 29-36)

00000001-N = Individual number/name

99999999 = Not an SWS water quality monitoring station

STREAM ELEVATION (Columns 37-43)

Real Elevation (Columns 37-42)

0001.0-N = Elevation in feet

Documentation (Column 43)

1 = Documented

### **Mapping Procedures**

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## Bibliography

### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

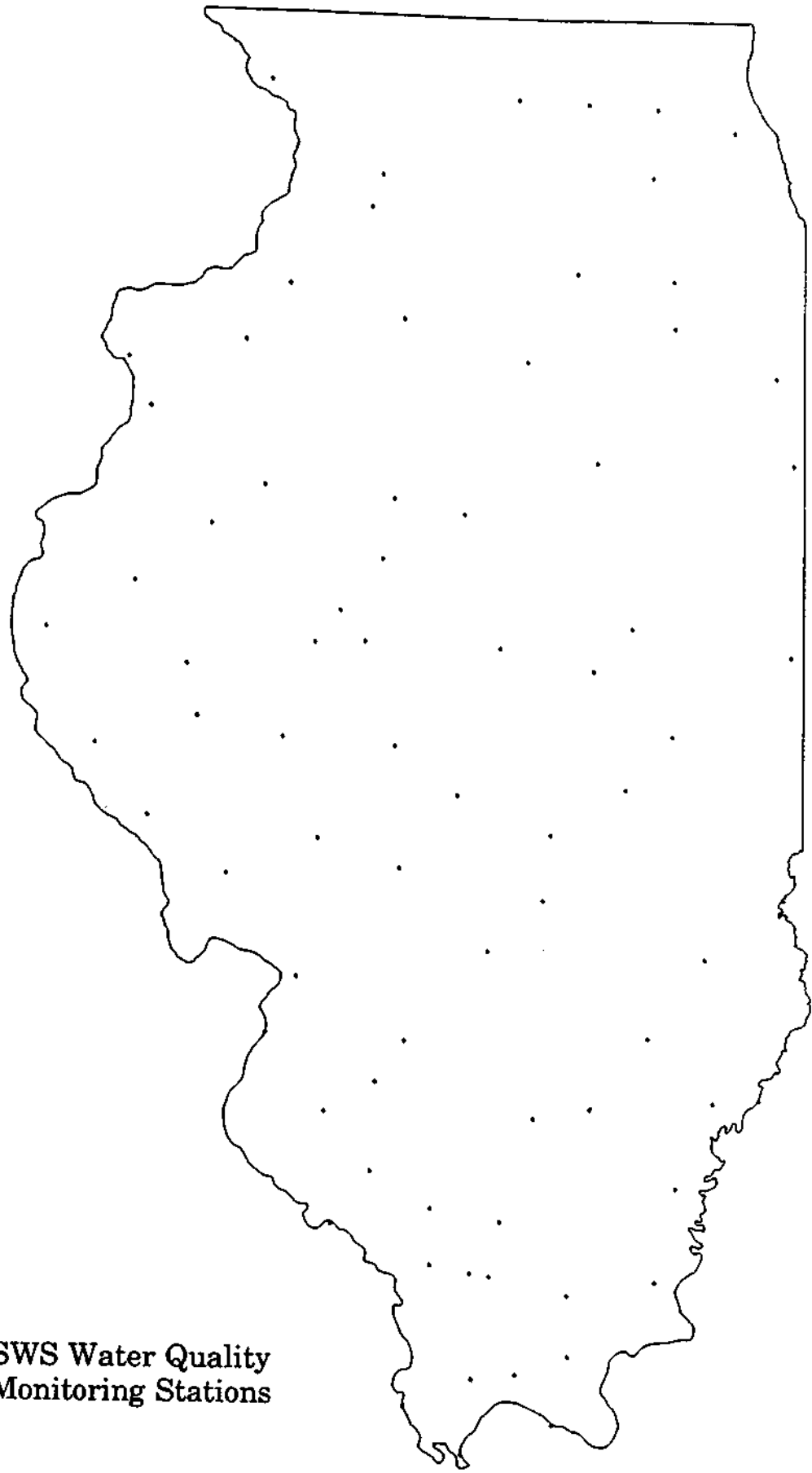
### *SWS Water Quality Monitoring Stations*

Illinois State Water Survey, 1983, Tape and listing of SWS surface water quality data stations in Illinois.

### *Stream Elevation*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.



**SWS Water Quality  
Monitoring Stations**

**USGS HYDROLOGIC UNITS**

Coverage Name: CATALOG-UNITS

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POLYGON

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544  
 or  
 IGIS Database Administrator  
 (217)333-8907

Coverage History

Created in 1984 by ESRI as part of SHPYMG; SHPYMG was DISSOLVED on CATALOG-UNIT.

INFO Item Description

64 records

DATAFILE NAME: CATALOG-UNITS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	CATALOG-UNIT#	4	5	B	-	
13	CATALOG-UNIT-ID	4	5	B	-	
17	CATALOG-UNIT	8	8	I	-	USGS cataloging units
	<b>** REDEFINED ITEMS **</b>					
17	REGIONS	2	2	I	-	
19	SUBREGIONS	2	2	I	-	
21	ACCOUNTING-UNITS	2	2	I	-	
23	CATALOGING-UNITS	2	2	I	-	
17	REGIONS-C	2	2	C	-	
19	SUBREGIONS-C	2	2	C	-	
21	ACCOUNTING-C	2	2	C	-	
23	CATALOGING-C	2	2	C	-	

## **Coding for INFO Items**

### USGS CATALOGING UNITS (Columns 17-24)

#### Regions (Columns 17-18)

- 04 = Great Lakes
- 05 = Ohio
- 07 = Upper Mississippi

#### Subregions (Columns 19-20)

- 04 = Subregion 04
- 06 = Subregion 06
- 08 = Subregion 08
- 09 = Subregion 09
- 11 = Subregion 11
- 12 = Subregion 12
- 13 = Subregion 13
- 14 = Subregion 14

#### Accounting Units (Columns 21-22)

- 00 = Unit 00
- 01 = Unit 01
- 02 = Unit 02

#### Cataloging Units (Columns 23-24)

- 00 - 15 = Individual unit number

## **Mapping Procedures**

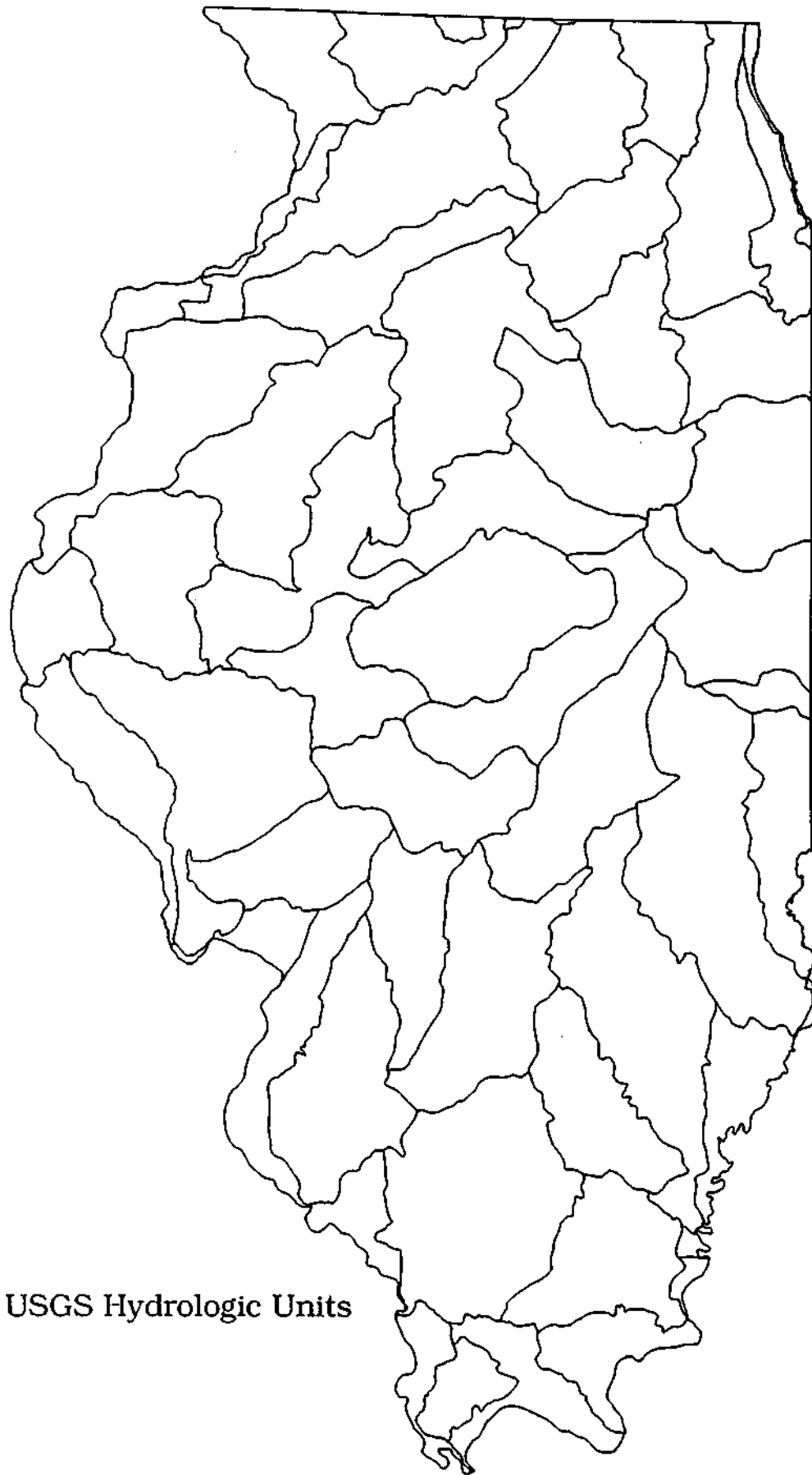
### *USGS Cataloging Units*

The USGS has divided each state into regions, subregions, accounting units, and cataloging units. All of Illinois is in region 17. The source maps at a scale of 1:500,000 were rectified to the basemaps, and delineations were made on a mylar overlay. Line placements were enhanced using the USGS basemap and Landsat imagery.

## **Bibliography**

### *USGS Cataloging Units*

- U.S. Geological Survey, 1975, Hydrologic Unit Map of Illinois, 1974: scale 1:500,000.
- U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.



**USGS Hydrologic Units**



## USGS OBSERVATION WELLS

**Coverage Name:** USGS-OBS-WELL

**Location of Coverages:** ILLINOIS > HYDRO

**Coverage Type:** POINT

**Mapscale:** 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information

Illinois State Water Survey

2204 Griffith Drive

Champaign, IL 61820

(217)333-9544

or

IGIS Database Administrator

(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPTMB; RESELECTED from SHPTMB on INFO item USGS-OBSERV-WELL.

### INFO Item Description

32 records

DATAFILE NAME: USGS-OBS-WELL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	USGS-OBS-WELL#	4	5	B	-	
13	USGS-OBS-WELL-ID	4	5	B	-	
17	WATSTORE-NUMBER	15	15	I	-	USGS WATSTORE number
32	USGS-OBSERV-WELL	1	1	I	-	USGS observation wells

### Coding for INFO Items

USGS WATSTORE NUMBER (Columns 17-31)

00000000000001-N = Individual WATSTORE number

99999999999999 = Not a USGS observation well

## USGS OBSERVATION WELLS (Column 32)

- 1 = Observation well with recorder
- 2 = Observation well without recorder
- 9 = Not a USGS observation well

## Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

Some point data were mapped independently of the stream network because the features were not stream-related, such as observation wells and dams on artificial empoundments. In these cases, data from the source documents served as locational definition.

## Bibliography

### *USGS Well WATSTORE Number and USGS Observation Wells*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.



**USGS Observation Wells**

## USGS RIVER MILEAGE

Coverage **Name:** RIVER-MILEAGE

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: POINT

Mapscale: 1:500,000

### Contact **Person**

Office of Spatial Data Analysis & Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-9544

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPTMA; RESELECTED from SHPTMA on INFO item RIVER-MILEAGE. Stream names were added by Amelia Greene with data from *USGS Water Resources Data for Illinois, Water Year 1981*, volumes 1 and 2.

### INFO Item Description

10,754 records

DATAFILE NAME: RIVER-MILEAGE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	RIVER-MILEAGE#	4	5	B	-	
13	RIVER-MILEAGE-ID	4	5	B	-	
17	RIVER-MILEAGE	12	12	N	2	USGS river mileage
29	STREAM-ELEVATION	7	7	N	2	Stream elevation
36	STREAM-NAME	46	46	C	-	Stream name
	<b>** REDEFINED ITEMS **</b>					
17	river-mileage	12	12	N	2	
17	STREAM#	5	5	I	-	
22	RIVER-MILE	6	6	N	1	
28	DOC-RM	1	1	I	-	
29	stream-elevation	7	7	N	2	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	ELEVATION-FT	6	6	N	1	
35	DOC-SE	1	1	I	-	

### **Coding for INFO Items**

#### USGS RIVER MILEAGE (Columns 17-28)

##### Individual Stream Number/Name (Columns 17-21)

00001-N = Individual number/name

Blank = No data

##### River Mileage (Columns 22-27)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

##### Documentation (Column 28)

1 = Documented

Blank = No data

#### STREAM ELEVATION (Columns 29-35)

##### Real Elevation (Columns 29-34)

0001.0-N = Elevation in feet

##### Documentation (Column 35)

1 = Documented

### Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

#### *USGS River Mileage (line and point)*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river

mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## **Bibliography**

### *USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

### *Stream Elevation*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.



USGS River Mileage

## USGS SURFACE WATER GAGING STATIONS

**Coverage Name:** USGSGAGES

**Location of Coverages:** ILLINOIS > HYDRO

**Coverage Type:** POINT

**Mapscale:** 1:500,000

### Contact Person

Office of Spatial Data Analysis & Information  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217) 333-9544

or

IGIS Database Administrator  
(217)333-8907

### Coverage History

Created in 1984 by ESRI as part of SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item SURFACE-GAGE-STN. It was updated in 1989 by Ganapathi Ramamurthy and Amelia Greene (SWS). Additional points and data were obtained from *Hydrodata-USGS Daily and Peak Values* (CD-Rom) by U.S. WEST Knowledge Engineering, Inc, 4380 S. Syracuse, Suite 600, Denver, CO, 80237.

### INFO Item Description

303 records

DATAFILE NAME: USGSGAGES.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	USGSGAGES#	4	5	B	-	
13	USGSGAGES-ID	4	5	B	-	
17	USGS-STATION#	8	8	I	-	
25	STATE-FIPS	3	3	I	0	
28	COUNTY-FIPS	4	4	I	-	
32	HYDRO-UNIT	8	8	I	-	
40	DATE-BEGUN	4	4	I	-	
44	DATE-LAST	4	4	I	-	
48	LATITUDE	6	8	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
54	LONGITUDE	7	9	I	-	
61	DRAIN-AREA-SQ-MI	10	10	N	2	
71	STR-SLOPE-FT/MI	8	8	N	2	
79	STR-LENGTH-MILES	8	8	N	2	
87	STATION-NAME	60	60	C	-	
147	RIVER-MILEAGE	12	12	N	2	USGS river mileage
159	SURFACE-GAGE-STN	1	1	I	-	USGS surface water gaging stations
160	STREAM-ELEVATION	7	7	N	2	Stream elevation
167	STREAM-NAME	46	46	C	-	
<b>** REDEFINED ITEMS **</b>						
17	USGS-Station #	8	8	I	-	
17	STORET-NUMBER	8	8	I	-	USEPA STORET number
147	river mileage	12	12	N	2	
147	STREAM #	5	5	I	-	
152	RIVER-MILE	6	6	N	1	
158	DOC-RM	1	1	I	-	
160	stream elevation	7	7	N	2	
160	ELEVATION-FT	6	6	N	1	
166	DOC-SE	1	1	I	-	

### Coding for INFO Items

USEPA STORET NUMBER (Columns 17-24)

00000001-N = Individual STORET number

99999999 = Not a USGS station

USGS RIVER MILEAGE (Columns 147-158)

Individual Stream Number (Columns 147-151)

00001-N = Individual number/name

Blank = No data

River Mileage (Columns 152-157)

0001.0-N = River mileage (to tenth of mile)

Blank = No data

Documentation (Column 158)

1 = Documented

Blank = No data



## USGS SURFACE WATER GAGING STATIONS (Column 159)

- 1 = Continuous record station with a telephone or radio
- 2 = Continuous record station without a telephone or radio
- 3 = Stage-only continuous record station with a telephone or radio
- 4 = Stage-only continuous record station without a telephone or radio
- 8 = Inactive station
- 9 = Not a USGS surface water gaging station

## STREAM ELEVATION (Columns 160-166)

### Real Elevation (Columns 160-165)

0001.0-N = Elevation in feet

### Documentation (Column 166)

1 = Documented

## **Mapping Procedures**

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

### *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. Individual numbers were assigned sequentially based on occurrence within the river mileage books. The first named stream in the river mileage book (volume) 1 was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

Bibliography (original work done by ESRI)

*USGS River Mileage*

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.

Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

*USEPA STORET Numbers and Stream Elevation*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.

*USGS Surface Water Gaging Stations*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, Water Resources Division Report HD-81/053.

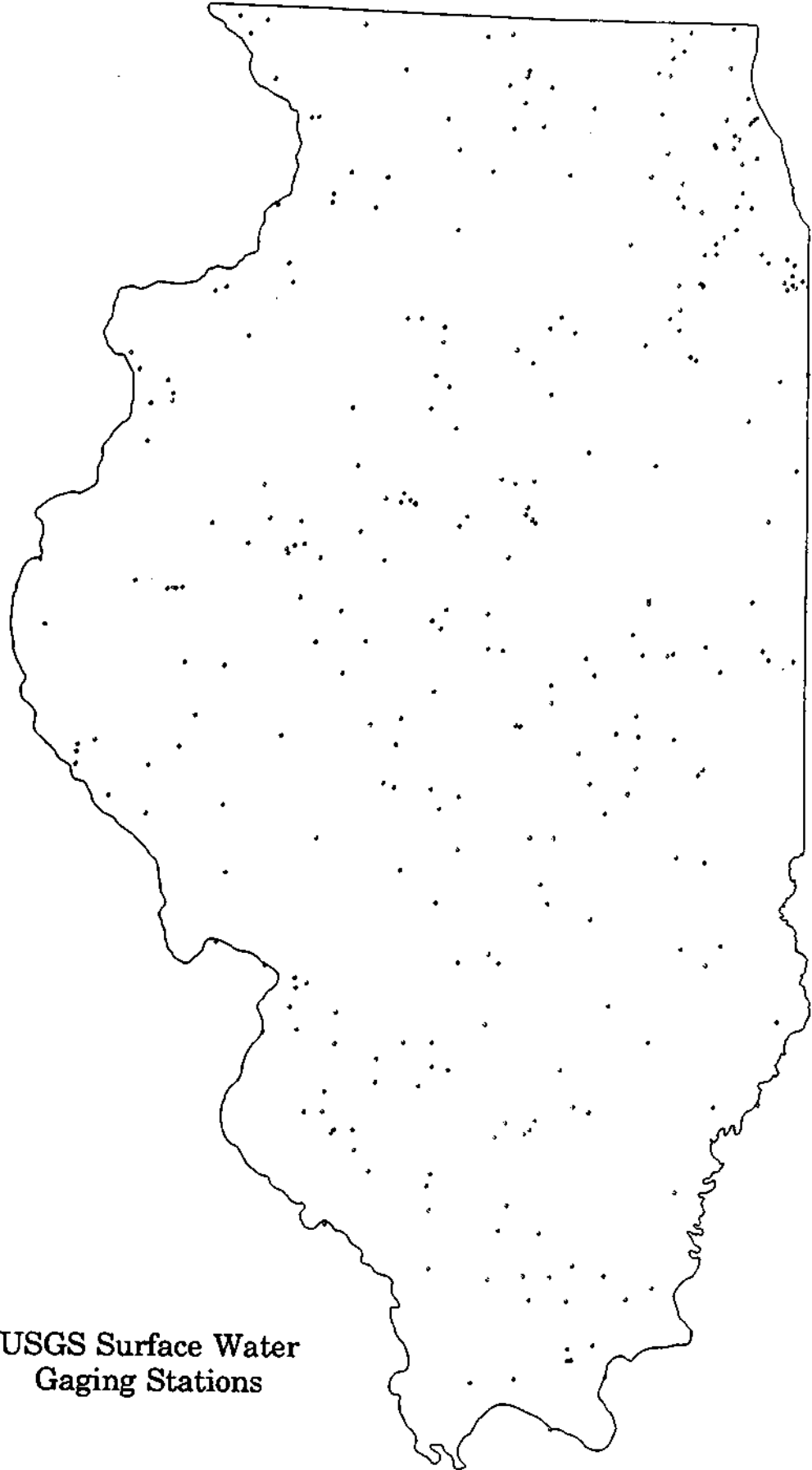
U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, Water Resources Division Report HD-81/054.

Hydrodata-USGS Daily and Peak Values (CD-Rom), 1987, U.S. WEST Knowledge Engineering, Inc., Denver, CO.

*Stream Elevation*

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Report HD-81/053.

U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, USGS, Water Resources Division Report HD-81/054.



**USGS Surface Water  
Gaging Stations**

## USGS WATER QUALITY STATIONS

Coverage Name: USGSWQ

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: Point

Mapscale: 1:500,000

Contact Person

Office of Spatial Data Analysis & Information  
 Illinois State Water Survey  
 2204 Griffith Drive  
 Champaign, IL 61820  
 (217) 333-9544  
 or  
 IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of SHPTMA and SHPTMB; RESELECTED from SHPTMA and SHPTMB on INFO item WATER-QUAL-STN.

INFO Item Description

582 records

DATAFILE NAME: USGSWQ.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	USGSWQ#	4	5	B	-	
13	USGSWQ-ID	4	5	B	-	
17	STATION#	8	8	I	-	USGS station number
25	NAME	37	37	C	-	Station name
62	FIPS#	3	3	I	-	
65	HYDRO-UNIT#	8	8	I	-	
73	DRAIN-AREA	10	10	N	2	Drainage area
83	LATITUDE	6	6	I	-	
89	LONGITUDE	7	7	I	-	
96	RIVER-MILEAGE	12	12	N	2	USGS River Mileage

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
108	WATER-QUAL-STN	5	5	I	-	USGS water quality stations
113	STREAM-ELEVATION	7	7	N	2	Stream elevation
120	STREAM-NAME	46	46	C	-	Stream name
<b>** REDEFINED ITEMS**</b>						
17	STORET-NUMBER	8	8	I	-	USEPA STORET number
96	river-mileage	12	12	N	2	
96	STREAM#	5	5	I	-	
101	RIVER-MILE	6	6	N	1	
107	DOC-RM	1	1	I	-	
108	water-qual-stn	5	5	I	-	
108	GENERAL-TYPE	1	1	I	-	
109	specific-type	4	4	I	-	
109	CHEMICAL	1	1	I	-	
110	TEMPERATURE	1	1	I	-	
111	BIOLOGICAL	1	1	I	-	
112	SEDIMENT	1	1	I	-	
113	stream-elevation	7	7	N	2	
113	ELEVATION-FT	6	6	N	1	
119	DOC-SE	1	1	I	-	

### Coding for INFO Items

USEPA STORET NUMBER (Columns 17-24)  
00000001-N = Individual STORET number  
99999999 = Not a USGS station

USGS RIVER MILEAGE (Columns 96-107))

Individual Stream Number/Name (Columns 96-100)  
0001-N = Individual number/name  
Blank = No data

River Mileage (Columns 101-106)  
0001.0-N = River mileage (to tenth of mile)  
Blank = No data

Documentation (Column 107)  
1 = Documented  
Blank = No data

## USGS WATER QUALITY STATIONS (Columns 108-112)

### General Type (Column 108)

- 1 = Water quality station with monitor
- 2 = Water quality station without monitor
- 9 = Not a water quality station

### Specific Types

- Chemical measurement (Column 109)
- Temperature measurement (Column 110)
- Biological measurement (Column 111)
- Sediment measurement (Column 112)
  - 1 = Measurement taken
  - 2 = Measurement not taken
  - 9 = Not a water quality station

## STREAM ELEVATION (Columns 113-119)

### Real Elevation (Columns 113-118)

- 0001.0-N = Elevation in feet

### Documentation (Column 119)

- 1 = Documented

## Mapping Procedures

Most point data from the source documents fell on stream courses, and no adjustment was necessary during the redrafting step. Some data, however, were provided as coordinate information, siting only the center of a section or subsection of the Public Land Survey. In such instances the data were located during redrafting to fall on the stream course that ran through the specified section.

## *USGS River Mileage*

River mileages were taken from the USGS *River Mileages and Drainage Areas for Illinois Streams*, volumes 1 and 2. River mileages represent linear distances along the center course of a stream (from the downstream end, where a stream enters a larger body of water or another stream, to some point upstream).

An overlay identifying documented streams and associated individual numbers were created by color-coding all line segments belonging to a given stream listed in the river mileage books. The assignment of individual numbers was sequential based on occurrence within the river mileage books. The first named stream in the river mileage book (volume 1) was assigned number 1, the next stream was number 2, etc. Streams not listed in the documents were not assigned individual numbers, except the Mississippi River, which was given number 3000, and the Ohio River, which was assigned number 3001.

All stream confluences with documented river mile addresses were assigned river mile values. USGS gaging stations that were listed in the documents were also assigned river mile values.

## **Bibliography**

### *USEPA STORET Number*

- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, Water Resources Division Report HD-81/053.
- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, Water Resources Division Report HD-81/054.

### *USGS River Mileage*

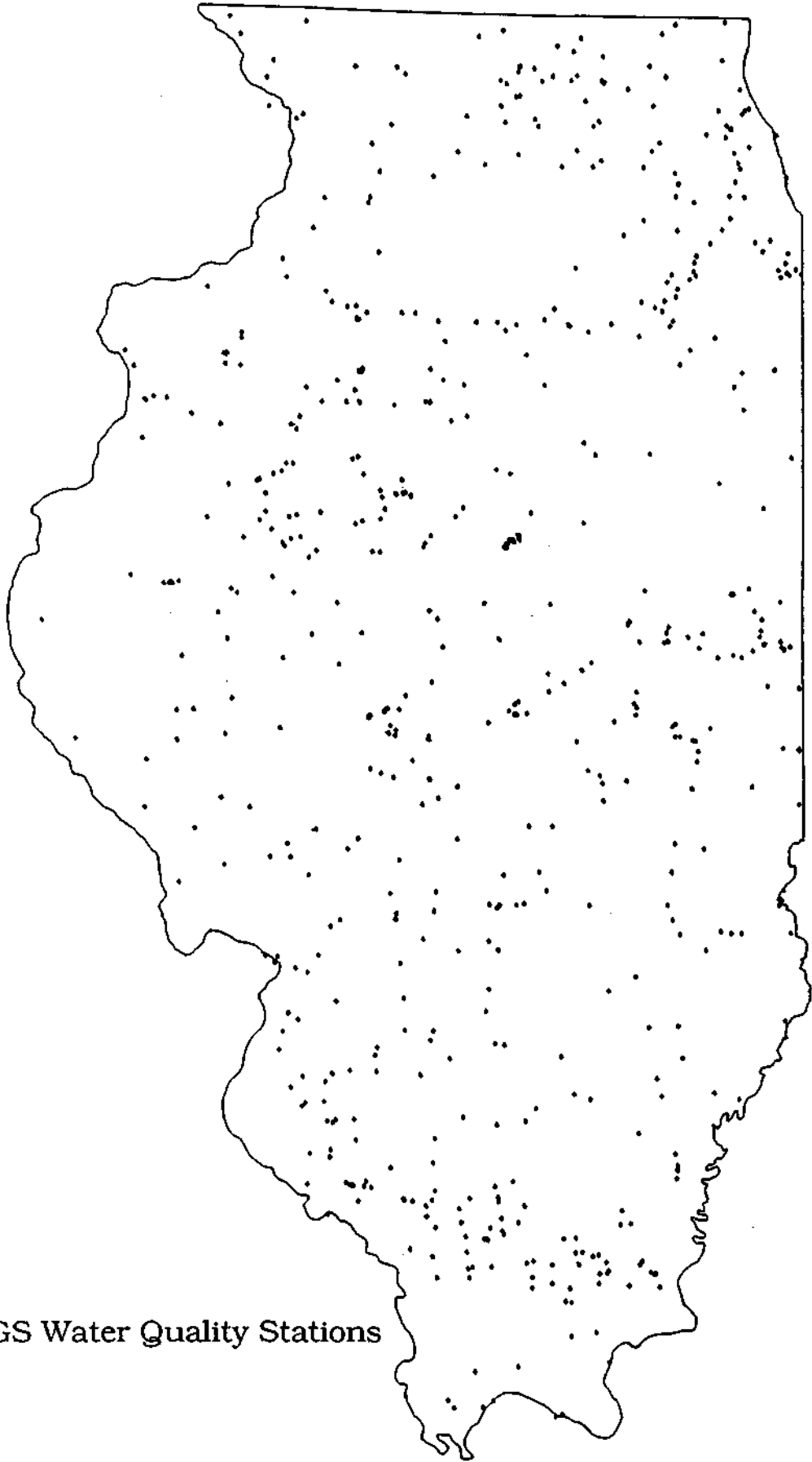
- Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 1, Illinois except Illinois River Basin, USGS, Water Resources Division Investigation 79-110.
- Healy, R.W., 1979, River Mileages and Drainage Areas for Illinois Streams, Volume 2, Illinois River Basin, USGS, Water Resources Division Investigation 79-111.

### *USGS Water Quality Stations*

- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, Water Resources Division Report HD-81/053.
- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, Water Resources Division Report HD-81/054.

### *Stream Elevation*

- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 1, Illinois except Illinois River Basin, Water Resources Division Report HD-81/053.
- U.S. Geological Survey, 1981, Water Resources Data for Illinois, Water Year 1981, Volume 2, Illinois River Basin, Water Resources Division Report HD-81/054.



USGS Water Quality Stations



## USGS WATERSHEDS

Coverage Name: BASINS

Location of Coverages: ILLINOIS > HYDRO

Coverage Type: NET

Mapscale: 1:24,000

### Contact Person

Hydrology Division  
Illinois State Water Survey  
2204 Griffith Drive  
Champaign, IL 61820  
(217)333-9544

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

This coverage was created in 1990-91 as a joint project between the USGS, Urbana, IL, and the IGIS. The coverage was derived from the USGS Water Resources Division Drainage Area Basin files, which were furnished to the IGIS as delineations on 1:24,000 scale quadrangle paper maps. Approximately 80% were also furnished in digital form by the USGS. The rest were digitized by members of the IGIS, INHS, and SWS. They were then appended into a single statewide coverage and edgematched at the quadrangle boundaries. Additional lines were also digitized to complete the polygons when the eight-digit USGS codes were added. The IGIS work was supervised by Mark Joselyn, IGIS Database Administrator.

### INFO Item Description

2,695 records

DATAFILE NAME: BASINS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	BASINS#	4	5	B	-	
13	BASINS-ID	4	5	B	-	
17	CATALOG_UNIT	8	8	I	-	
<b>REDEFINED ITEMS</b>						
17	REGION	2	2	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
17	SUBREGION	4	4	I	-	
17	ACCOUNT_UNIT	6	6	I	-	

13,889 records

DATAFILE NAME: BASINS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	BASINS#	4	5	B	-	
25	BASINS-ID	4	5	B	-	
29	STATUS	1	1	I	-	
30	DIGIT	1	1	I	-	
31	QUAD	4	4	I	-	

Coding for INFO Items

CATALOG-UNIT (eight-digit code from USGS Hydrologic Unit Map)

STATUS

- 0 = Not set
- 1 = Official USGS delineation
- 2 = Provisional USGS delineation
- 4 = From xeroxes of USGS quads, used for error correction
- 7 = Transferred from ILLIMAP coverage COUNTIES
- 8 = Delineated by IGIS
- 9 = Closure lines added to connect lines across quad sheet boundaries

DIGIT

- 0 = Not set
- 1 = Digital data provided by USGS
- 6 = Digitized by IGIS

QUAD

Quad number based on IGIS row-column tiling structure

## **Mapping Procedures**

The USGS at Urbana, Illinois, provided 1:24,000 scale topographic maps containing watershed boundary delineations that had been added to the maps over a number of years. Because the watershed and subwatershed boundary delineations were project related, the size of the subwatershed polygons varied widely, from 1.93 to 1,304,436 acres. The delineations were in three categories: officially recognized by the ISGS-WRD (932 quads), considered provisional by the USGS-WRD (137 quads), and delineated by IGIS to complete the inventory (2 quads).

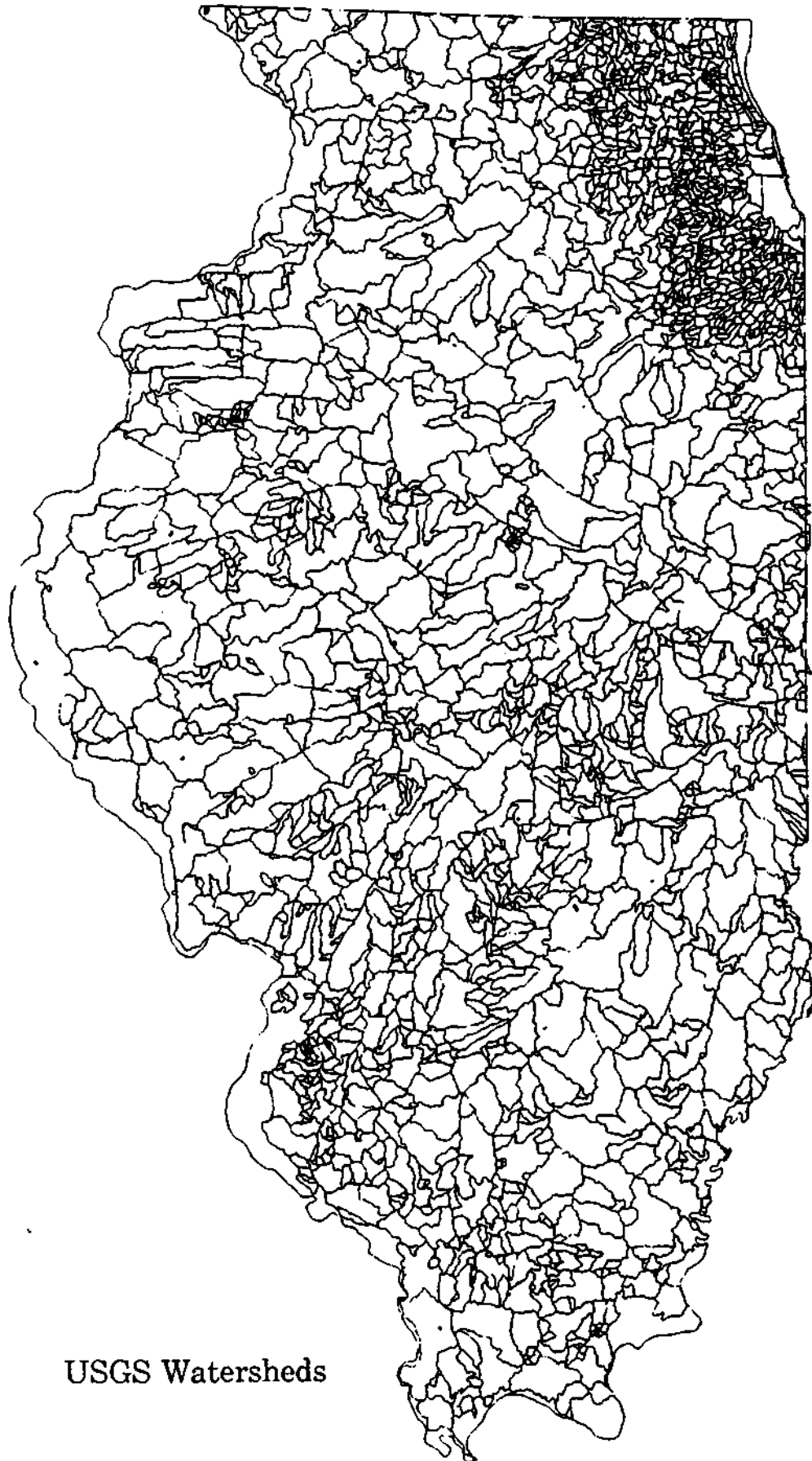
Since 80% of the quads were also furnished in digital form, digitizing was done on the remaining 20%. The quads were then appended, and MATCHNODE was run with a tolerance of 40 feet. Necessary edgematching was done with added closure lines being coded as 9 in the INFO item STATUS. The coverage was then cleaned as a polygon coverage. The eight-digit USGS Catalog-Unit codes were then added to the polygons. Where necessary, additional lines were digitized to create polygons that conformed to the hydrologic unit boundaries.

## **Bibliography**

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:24,000.

U.S. Geological Survey, Hydrologic Unit Map-1974, State of Illinois: scale 1:500,000.

Watershed delineations done by USGS Water Resources Division, Urbana, Illinois.



USGS Watersheds

INFRASTRUCTURE COVERAGES  
ILLINOIS STATEWIDE DATABASE

**ABANDONED STANDARD-GAUGE RAILROADS  
AND OLD RAILROAD GRADES**

Coverage Name: ABANDON-RAILS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESELECTED to create ABANDON-RAILS.

INFO Item Description

492 records

DATAFILE NAME: ABANDON-RAILS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	ABANDON-RAILS#	4	5	B	-	
25	ABANDON-RAILS-ID	4	5	B	-	
29	RAILROAD-TYPE	1	1	I	-	

**Coding for INFO Items**

**RAILROAD-TYPE (Column 29)**

- 1 = Abandoned standard-gauge railroad - documented
- 2 = Abandoned standard-gauge railroad - assumed
- 3 = Old railroad grade

## **Mapping Procedures**

### *Overview*

Coverage RRLNFX was a line and point map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

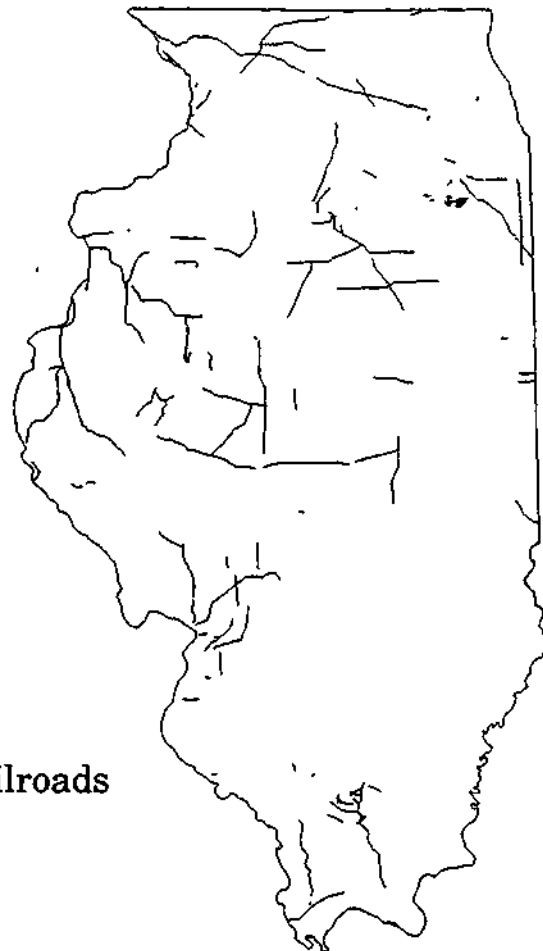
### *Abandoned Standard-Gauge Railroads and Old Railroad Grades*

Abandoned railroads and old railroad grades on the 1:250,000 scale USGS maps were delineated. In addition, those railroads on the USGS maps but not on the more recent IDOT railroad map were assumed to be abandoned.

### **Bibliography**

#### *Abandoned Standard-Gauge Railroads and Old Railroad Grades*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.



**Abandoned Standard-Gauge Railroads  
and Old Railroad Grades**

## COMMERCIAL BOAT DOCKS

Coverage Name: BOAT-DOCKS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

Coverage History

Created in 1984 by ESRI as part of RRPTFX; RRPTFX was RESELECTED to create BOAT-DOCKS.

INFO Item Description

64 records

DATAFILE NAME: BOAT-DOCKS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	BOAT-DOCKS#	4	5	B	-	
13	BOAT-DOCKS-ID	4	5	B	-	
17	GENERAL-PROD-TYP	1	1	I	-	
18	DOCK-NUMBER	3	3	C	-	
21	DOCK-NAME	30	30	C	-	

Coding for INFO Items

GENERAL PRODUCT TYPE

1 = Coal



## Mapping Procedures

### *Overview*

RRPTFX was a point map with information related to infrastructure, settlements, and other cultural features. Point data included settlements, airports, air navigation facilities, and commercial boat docks. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### *Commercial Boat Docks*

All coal docks on the *Coal Mines in Illinois* 1:500,000 scale map were delineated and sequentially numbered from north to south.

## Bibliography

Hopkins, M.E., 1975, *Coal Mines in Illinois*, Illinois State Geological Survey: scale 1:500,000.



**Commercial Boat Docks**

## EXISTING STANDARD-GAUGE RAILROADS

Coverage Name: EXIST-RAILS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscapes: 1:750,000 and 1:250,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESELECTED to create EXIST-RAILS.

### INFO Item Description

3,510 records

DATAFILE NAME: EXIST-RAILS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	<b>B</b>	-	
5	<b>TNODE#</b>	4	5	<b>B</b>	-	
9	<b>LPOLY#</b>	4	5	<b>B</b>	-	
13	<b>RPOLY#</b>	4	5	<b>B</b>	-	
17	<b>LENGTH</b>	4	12	<b>F</b>	3	
21	<b>EXIST-RAILS#</b>	4	5	<b>B</b>	-	
25	<b>EXIST-RAILS-ID</b>	4	5	<b>B</b>	-	
29	<b>RR-TRACK-CLASS</b>	1	1	<b>I</b>	-	
30	<b>OWNING-COMPANY#</b>	2	2	<b>I</b>	-	
32	<b>COMPANY-NAME</b>	120	120	<b>C</b>	-	

### Coding for INFO Items

R-TRACK-CLASS (Column 29)

1 = Single track

2 = Double or multiple track

8 = No data

OWNING-COMPANY# (Columns 30-31)

01-N Individual number

COMPANY-NAME (Columns 32-152)

## **Mapping Procedures**

### *Overview*

Coverage RRLNFX was a line and point map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines and points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### *Existing Standard-Gauge Railroads*

Existing standard-gauge railroads are those identified on the 1:750,000 scale IDOT railroad map. Delineations of these railroads were made to the USGS basemap, verifying the areas in question using Landsat imagery. Track class was coded from the IDOT railroad map. Those railroads designated on the IDOT map as "line not operated" were mapped and coded as existing railroads. Spur railroads were mapped and coded as "no existing data" for ownership. Similar to roads, railroads were mapped at 1:125,000 for the Chicago area.

## **Bibliography**

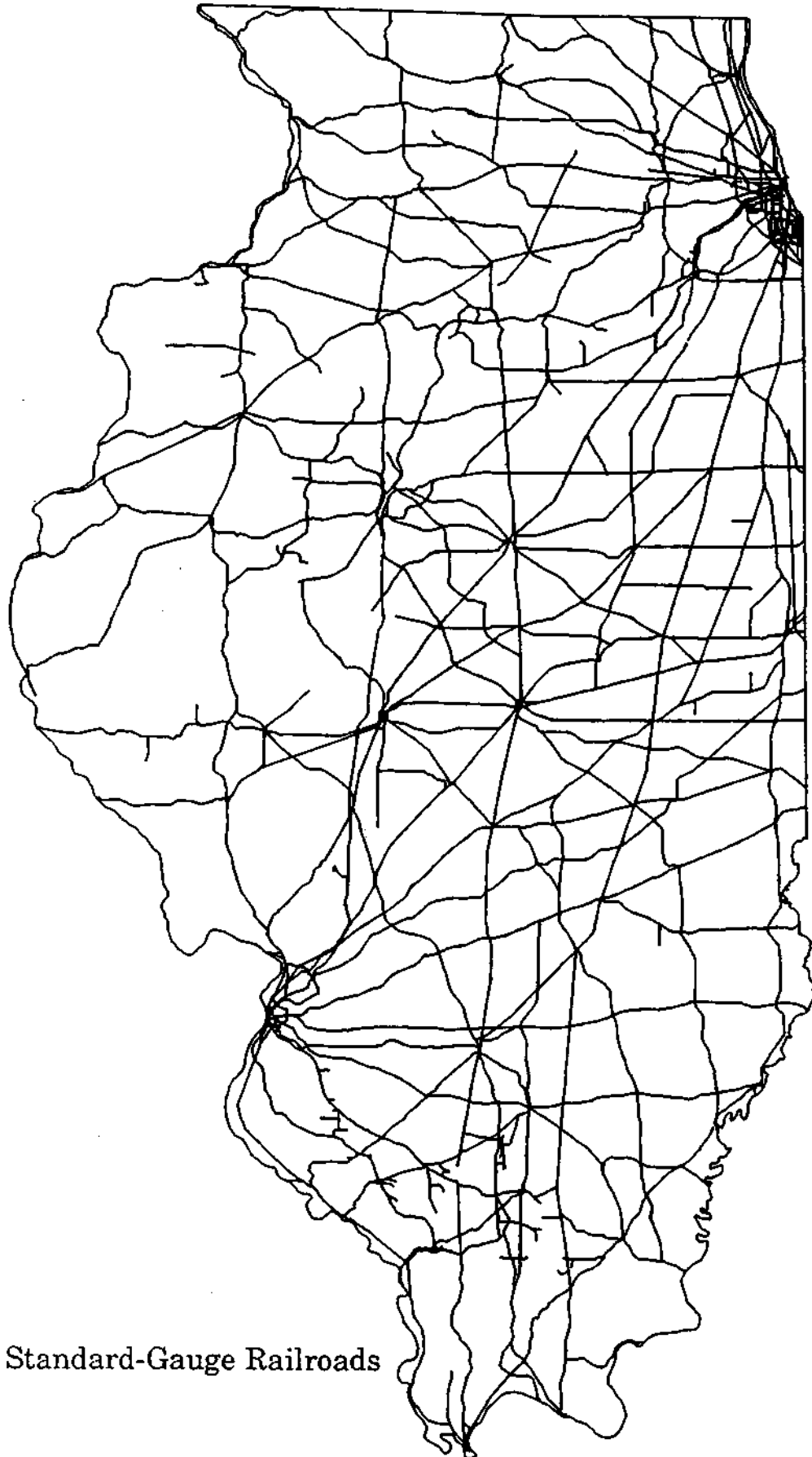
### *Existing Standard-Gauge Railroads*

Illinois Department of Transportation, Office of Planning and Programming, 1982, Illinois

Railroad map: scale 1:750,000.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.



Existing Standard-Gauge Railroads

## ILLINOIS HIGHWAYS

Coverage Name: ILLHIGHWAYS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:760,000 to 1:320,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESELECTED to create ILLHIGHWAYS.

### INFO Item Description

3,329 records

DATAFILE NAME: ILLHIGHWAYS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	ILLHIGHWAYS#	4	5	B	-	
25	ILLHIGHWAYS-ID	4	5	B	-	
29	NAME1	3	3	I	-	
32	NAME2	3	3	I	-	
35	NAME3	3	3	I	-	
38	NAME4	3	3	I	-	
41	FED-AID-TYPE	1	1	I	-	
42	FAP-NUMBER	3	3	I	-	
45	TRAFF-VOL-GROUP	2	2	I	-	

## **Coding for INFO Items**

NAME 1 (Columns 29-31)

001-N = Road number

NAME 2 (Columns 32-34)

001-N = Road number

NAME 3 (Columns 35-37)

001-N = Road number

NAME 4 (Columns 38-40)

001-N = Road number

FEDERAL AID TYPE (Column 41)

1 = Interstate

2 = Freeway

3 = Major highway

4 = Area service

8 = No data

FAP NUMBER (Columns 42-44)

001-N = Individual number

998 = No data

TRAFFIC VOLUME GROUP (Columns 45-46)

Statewide (excluding Chicago)

01 = 0-999 (average 900)

02 = 1,000-2,499 (average 2,490)

03 = 2,500-4,999 (average 4,990)

04 = 5,000 and greater (average 9,000)

Chicago Area

11 = 0-4,999

12 = 5,000-9,999

13 = 10,000-19,999

14 = 20,000 and greater

98 = No data

## **Mapping Procedures**

### *Overview*

Coverage RRLNFX was a line map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

*Existing Roads: State Primary System*

Roads defining the State Primary System were identified on the USGS basemap and transferred to an overlay. Discrepancies between the *State Primary System* source map and the USGS map were resolved using Landsat imagery. Roads were coded to identify their general type, federal aid number, traffic volume, and so on. The dense network of roads in the Chicago area was delineated at 1:125,000 and merged with the remainder of the state after automation.

Bibliography

*Existing Roads: State Primary System*

*General Type/Individual Number*

Illinois Department of Transportation, Office of Planning and Programming, 1982, State Primary System: scale 1:500,000.

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.

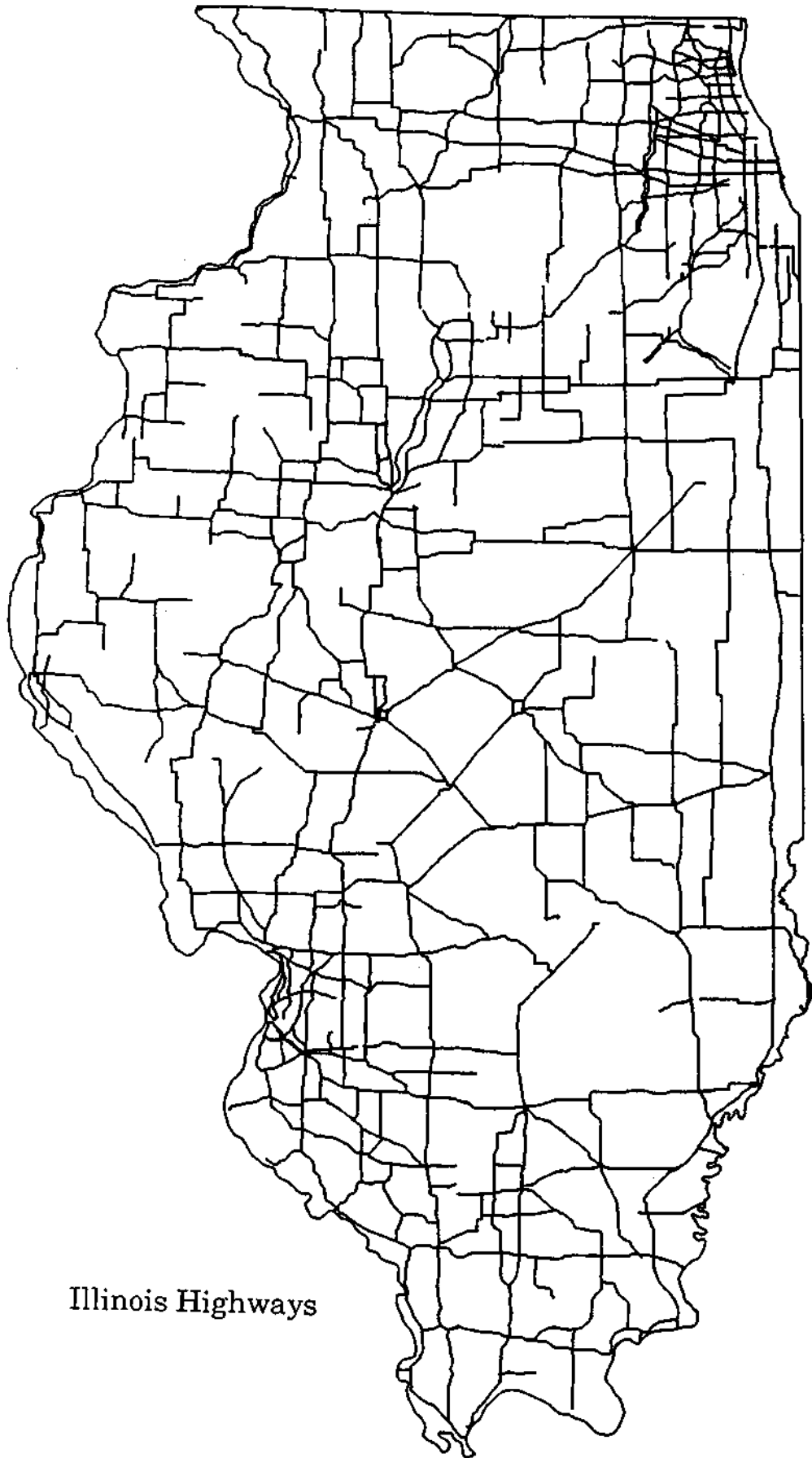
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

*Federal Aid Type/FAP Number*

Illinois Department of Transportation, 1982, Federal Aid Primary System and 5-Year Classification Map: map 1 of 2 sheets: scale 1:750,000.

*Traffic Volume Group*

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.



Illinois Highways



INCORPORATED SETTLEMENTS OR SETTLEMENTS  
WITH POPULATION GREATER THAN 275

Coverage Name: TOWNS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: POINT

Mapscale: Unknown

Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

Coverage History

Created in 1984 by ESRI as part of RRPTFX; RRPTFX was RESELECTED to create TOWNS.

INFO Item Description

1,302 records

DATAFILE NAME: TOWNS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	TOWNS#	4	5	B	-	
13	TOWNS-ID	4	5	B	-	
17	POLITIC-CATEGORY	2	2	I	-	
19	POPULAT-CATEGORY	1	1	I	-	
20	TOWN-FIPS#	5	5	I	-	
25	TOWN-NAME	30	30	C	-	
55	COUNTY-FIPS#	3	3	I	-	
58	ZIP-CODE	5	5	I	-	

Coding for INFO Items

POLITICAL STATUS

- 1 = State capital
- 2 = County seat - home rule
- 3 = County seat - nonhome rule
- 4 = Incorporated - home rule
- 5 = Incorporated - nonhome rule

- 5 = Incorporated - nonhome rule
- 6 = Not incorporated

#### POPULATION CLASS

- 1 = Less than 1,000
- 2 = 1,000-2,499
- 3 = 2,500-4,999
- 4 = 5,000-9,999
- 5 = 10,000-24,999
- 6 = 25,000-49,999
- 7 = 50,000-99,999
- 8 = 100,000 or greater

#### Mapping Procedures

##### *Overview*

RRPTFX was a point map with information related to infrastructure, settlements, and other cultural features. Point data included settlements, airports, air navigation facilities, and commercial boat docks. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

##### *Incorporated Settlements or Settlements with Populations Greater than 275*

All named incorporated settlements and unincorporated settlements with a population greater than 275 were identified. All points were coded with political status, population class, and an individual FIPS number with its corresponding name. In addition, county FIPS codes and ZIP codes were inserted from a keypunched reference table.

#### Bibliography

##### *Political Status*

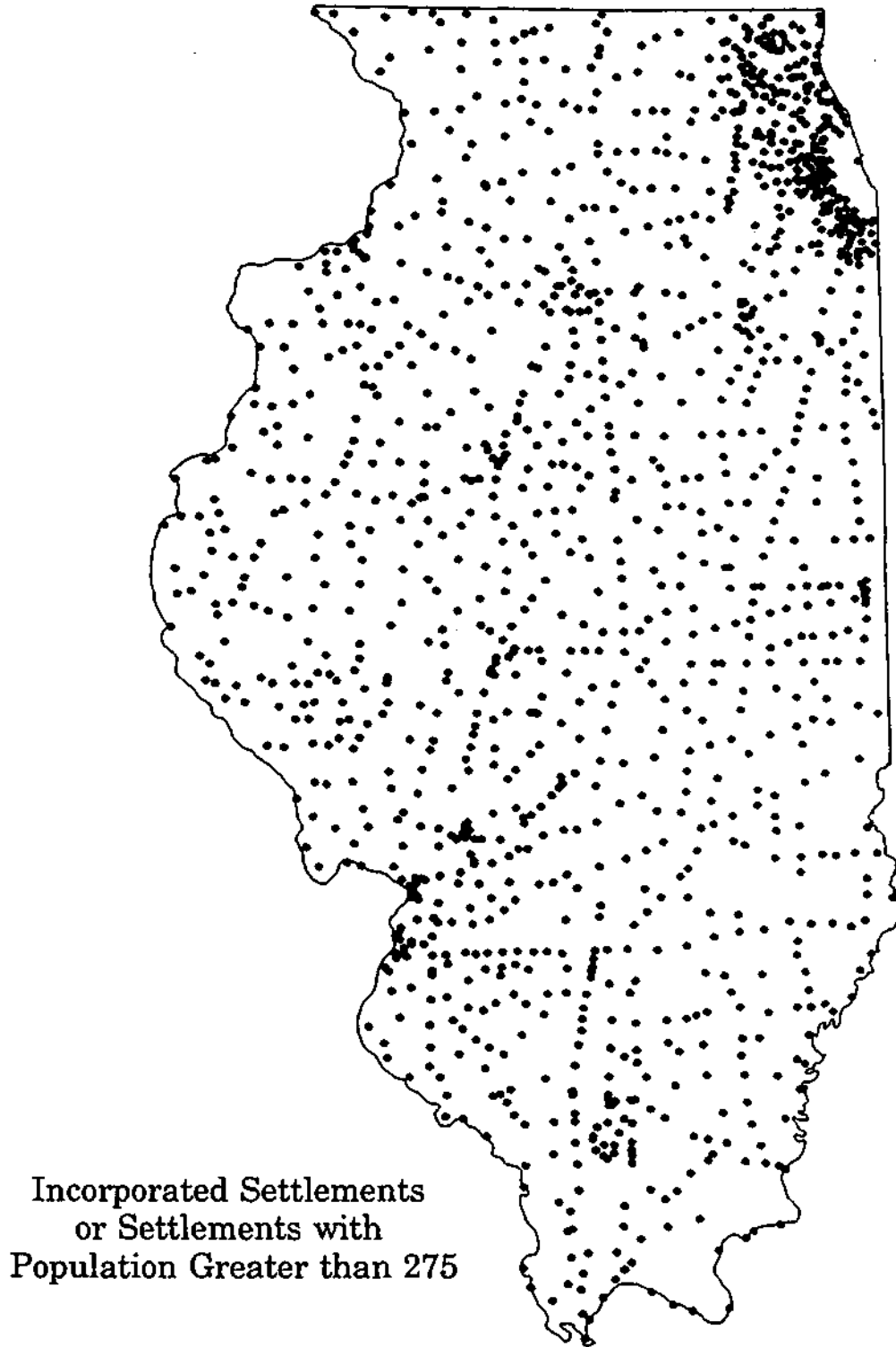
- Edgar, J., 1981, Illinois Counties and Incorporated Municipalities, GA-716.
- Illinois Department of Local Government Affairs, 1979, Home rule units for small municipalities in Illinois, unpublished list.

##### *Population Class*

- Edgar, J., 1981, Illinois Counties and Incorporated Municipalities, GA-716.
- Illinois Department of Transportation, 1981, Index to cities and villages on Map of Illinois: scale 1:40,000.

*FIPS Number/Name*

U.S. Department of Commerce, Institute for Computer Sciences and Technology, National Bureau of Standards, 1983, Listing of FIPS 55 Codes for Named Populated Places, Primary County Divisions, and other Locational Entities in Illinois.



## INTERSTATE HIGHWAYS

Coverage Name: INTERSTATES

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:760,000 to 1,320,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESLECTED to create INTERSTATES.

### INFO Item Description

591 records

DATAFILE NAME: INTERSTATES.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	INTERSTATES#	4	5	B	-	
25	INTERSTATES-ID	4	5	B	-	
29	NAME1	3	3	I	-	
32	NAME2	3	3	I	-	
35	NAME3	3	3	I	-	
38	NAME4	3	3	I	-	
41	FED-AID-TYPE	1	1	I	-	
42	FAP-NUMBER	3	3	I	-	
45	TRAFF-VOL-GROUP	2	2	I	-	

### **Coding for INFO Items**

NAME 1 (Columns 29-31)

001-N = Highway number

NAME 2 (Columns 32-34)

001-N = Highway number

NAME 3 (Columns 35-37)

001-N = Highway number

NAME 4 (Columns 38-40)

001-N = Highway number

FEDERAL AID TYPE (Column 41)

1 = Interstate

2 = Freeway

3 = Major highway

4 = Area service

8 = No data

FAP NUMBER (Columns 42-44)

001-N = Individual number

998 = No data

TRAFFIC VOLUME GROUP (Columns 45-46)

Statewide (Excluding Chicago)

01 = 0-999 (average 900)

02 = 1,000-2,499 (average 2,490)

03 = 2,500-4,999 (average 4,990)

04 = 5,000 and greater (average 9,000)

Chicago Area

11 = 0-4,999

12 = 5,000-9,999

13 = 10,000-19,999

14 = 20,000 and greater

### **Mapping Procedures**

#### *Overview*

Coverage RRLNFX was a line map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

*Existing Roads: State Primary System*

Roads defining the State Primary System were identified on the USGS basemap and transferred to an overlay. Discrepancies between the *State Primary System* source map and the USGS map were resolved using Landsat imagery. Roads were coded to identify their general type, federal aid number, traffic volume, and so on. The dense network of roads in the Chicago area was delineated at 1:125,000 and merged with the remainder of the state after automation.

Bibliography

*Existing Roads: State Primary System*

*General Type/Individual Number*

Illinois Department of Transportation, Office of Planning and Programming, 1982, State Primary System: scale 1:500,000.

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.

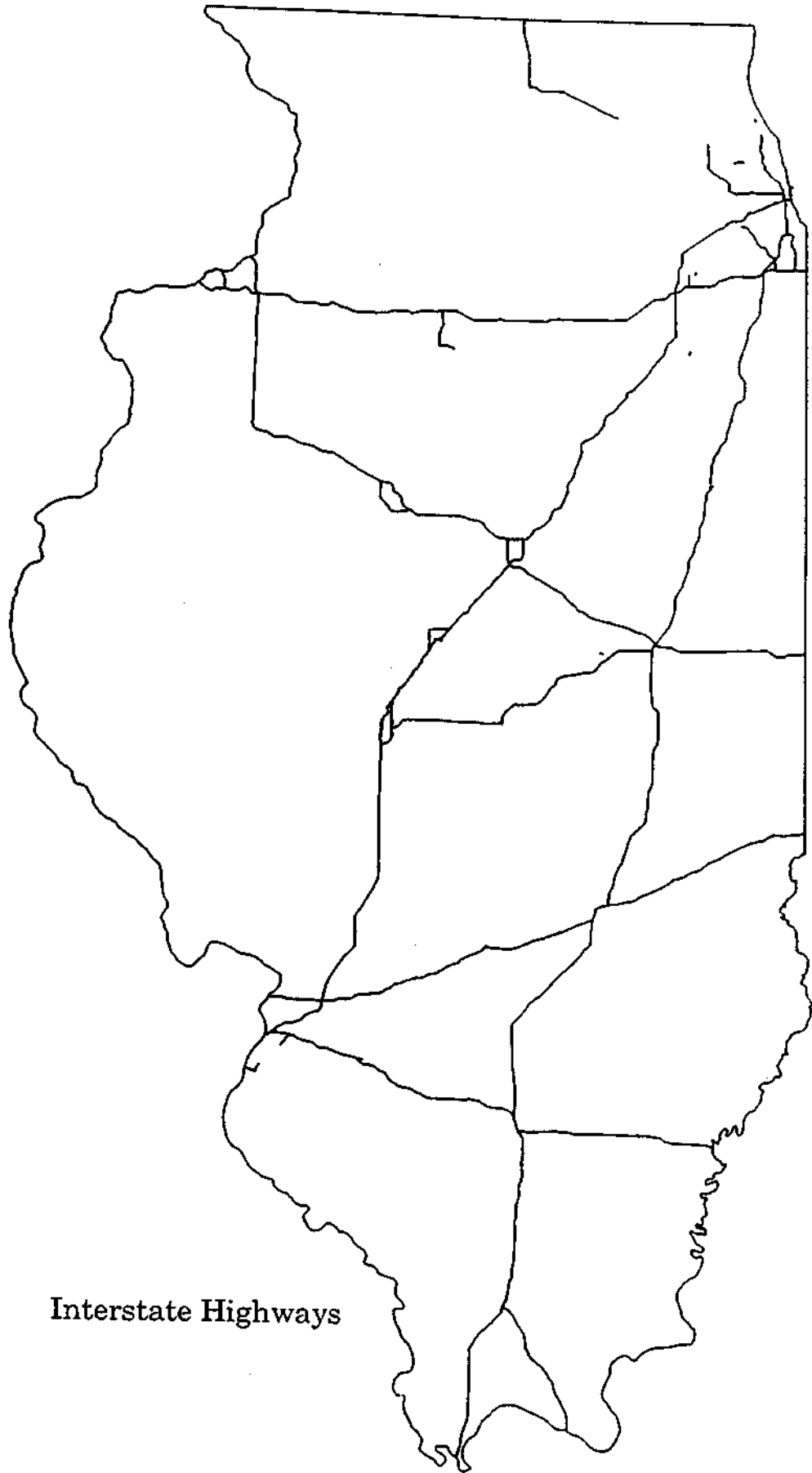
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

*Federal Aid Type/FAP Number*

Illinois Department of Transportation, 1982, Federal Aid Primary System and 5-Year Classification Map, map 1 of 2 sheets: scale 1:750,000.

*Traffic Volume Group*

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.



**Interstate Highways**

MAJOR AIR NAVIGATION FACILITIES

Coverage Name: AIR-NAVIGATE

Location of Coverages: ILLINOIS > INFRA

Coverage Type: POINT

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1984 by ESRI as part of RRPTFX; RRPTFX was RESELECTED to create AIR-NAVIGATE.

INFO Item Description

29 records

DATAFILE NAME: AIR-NAVIGATE.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	AIR-NAVIGATE#	4	5	B	-	
13	AIR-NAVIGATE-ID	4	5	B	-	
17	MAJOR-NAVIGA-FAC	1	1	I	-	

Coding for INFO Items

MAJOR AIR NAVIGATION FACILITY (Column 36)

1 = VOR, VORTAC, or VOR-DME

Mapping Procedures

*Overview*

RRPTFX was a point map with information related to infrastructure, settlements, and other cultural features. Point data included settlements, airports, air navigation facilities, and commercial boat docks. Individual overlays were prepared for each variable using existing



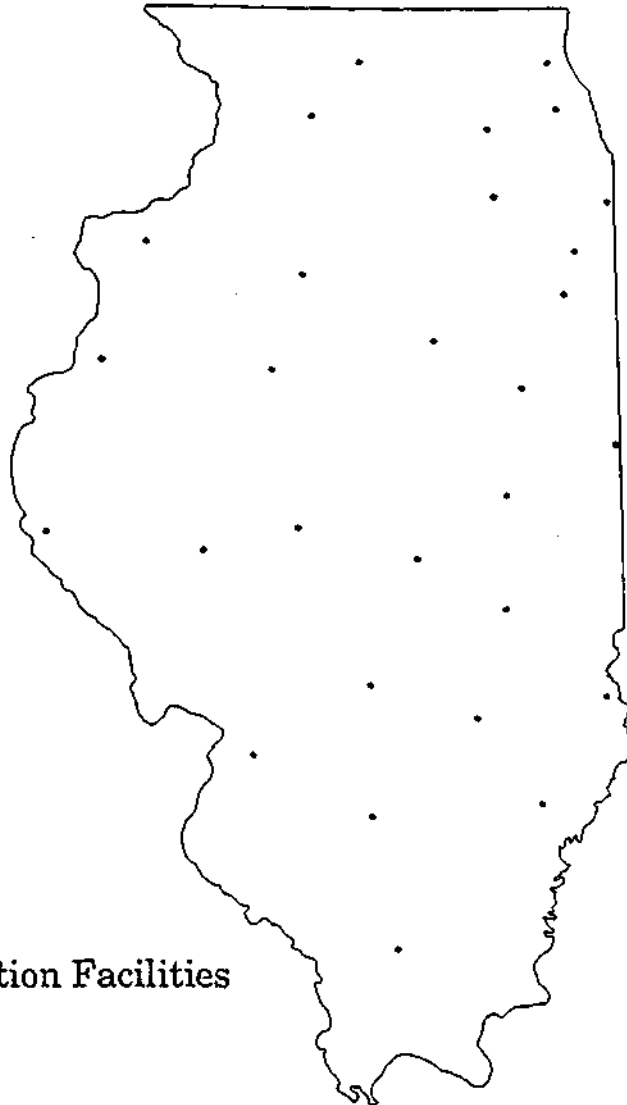
collateral data and Landsat imagery. The points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

*Major Air Navigation Facilities: VOR, VORTAC, and VOR-DME*

Major air navigation facilities, including VOR, VORTAC, and VOR-DME sites, were identified and coded as points. These facilities are civilian directional navigation/communication aids as defined on NOAA aeronautical charts. The points were directly transferred from the source map to the manuscript map.

**Bibliography**

Illinois Department of Transportation, Division of Aeronautics, 1983, Illinois Aeronautical Chart, 1983-1984: scale 1:500,000.



**Major Air Navigation Facilities**

## MAJOR AIRPORTS

Coverage Name: AIRPORTS

**Location of Coverages:** ILLINOIS > INFRA

**Coverage Type:** POINT

**Mapscale:** 1:500,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRPTFX; RRPTFX was RESELECTED to create AIRPORTS.

### INFO Item Description

20 records

DATAFILE NAME: AIRPORTS.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	AIRPORTS#	4	5	B	-	
13	AIRPORTS-ID	4	5	B	-	
17	GENERAL-TYPE	1	1	I	-	
18	NUMBER	2	2	I	-	
20	NAME	70	70	C	-	

### Coding for INFO Items

GENERAL TYPE

1 = Commercial airport with scheduled service

2 = Military airport

## **Mapping Procedures**

### *Overview*

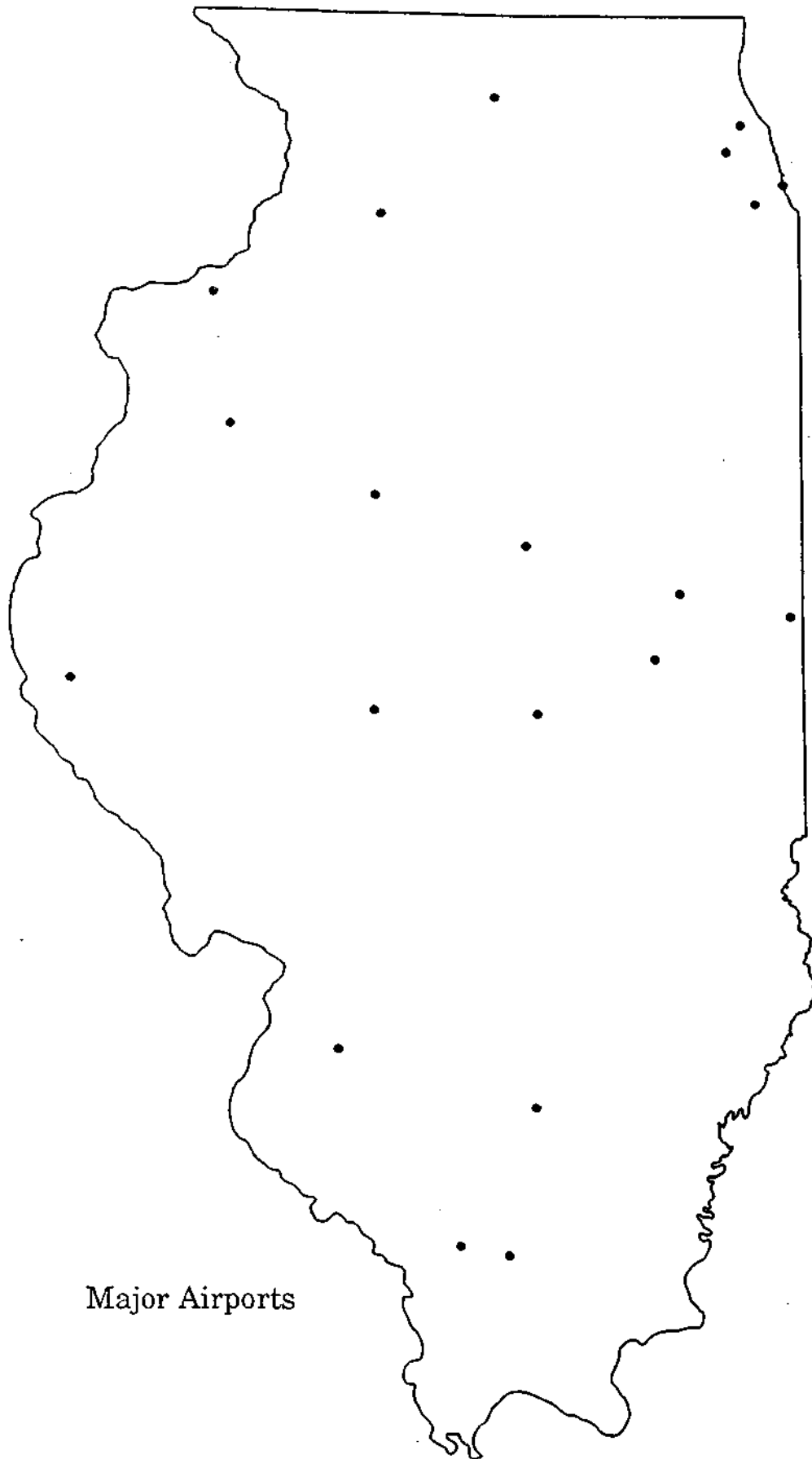
**RRPTFX** was a point map with information related to infrastructure, settlements, and other cultural features. Point data included settlements, airports, air navigation facilities, and commercial boat docks. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines and points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### *Major Airports*

All airports with commercial service were identified as points and located using the *Illinois Airport Directory* and the 1:250,000 scale USGS topographic maps. Placement was verified and refined using Landsat images wherever possible. Points were coded by name in alphabetical order. Military airports were identified from a U.S. real estate property listing and coded in alphabetical order.

## **Bibliography**

- Illinois Department of Transportation, Division of Aeronautics, 1983, Illinois Aeronautical Chart, 1983-1984: scale 1:500,000.
- Illinois Department of Transportation, Division of Aeronautics, 1982, Illinois Airport Directory, 1982-1983, with aerial photos and descriptions of airports.
- U.S. General Services Administration, Office of Administration, 1983, Detailed Listing of Real Property Owned by the United States and Used by the Department of Defense for Military Functions throughout the World as of September 30, 1980: GS 1.15/4-2:980.
- U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.
- U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.



Major Airports

## OIL AND GAS PIPELINES AND FACILITIES - LINES

Coverage Name: INLNFX

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:500,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as INLNMG.

### INFO Item Description

5,844 records

DATAFILE NAME: INLNFX.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	B	-	
5	<b>TNODE#</b>	4	5	B	-	
9	<b>LPOLY#</b>	4	5	B	-	
13	<b>RPOLY#</b>	4	5	B	-	
17	<b>LENGTH</b>	4	12	F	3	
21	<b>INLNFX#</b>	4	5	B	-	
25	<b>INLNFX-ID</b>	4	5	B	-	
29	<b>CODE</b>	4	4	I	-	Existing oil and gas pipelines

### Coding for INFO Items

EXISTING OIL AND GAS PIPELINES (Columns 29-32)

- 1 = Crude oil
- 2 = Natural gas
- 3 = Refined products
- 4 = Crude oil plus natural gas
- 5 = Crude oil plus refined products
- 6 = Natural gas plus refined products
- 7 = Crude oil plus natural gas plus refined products

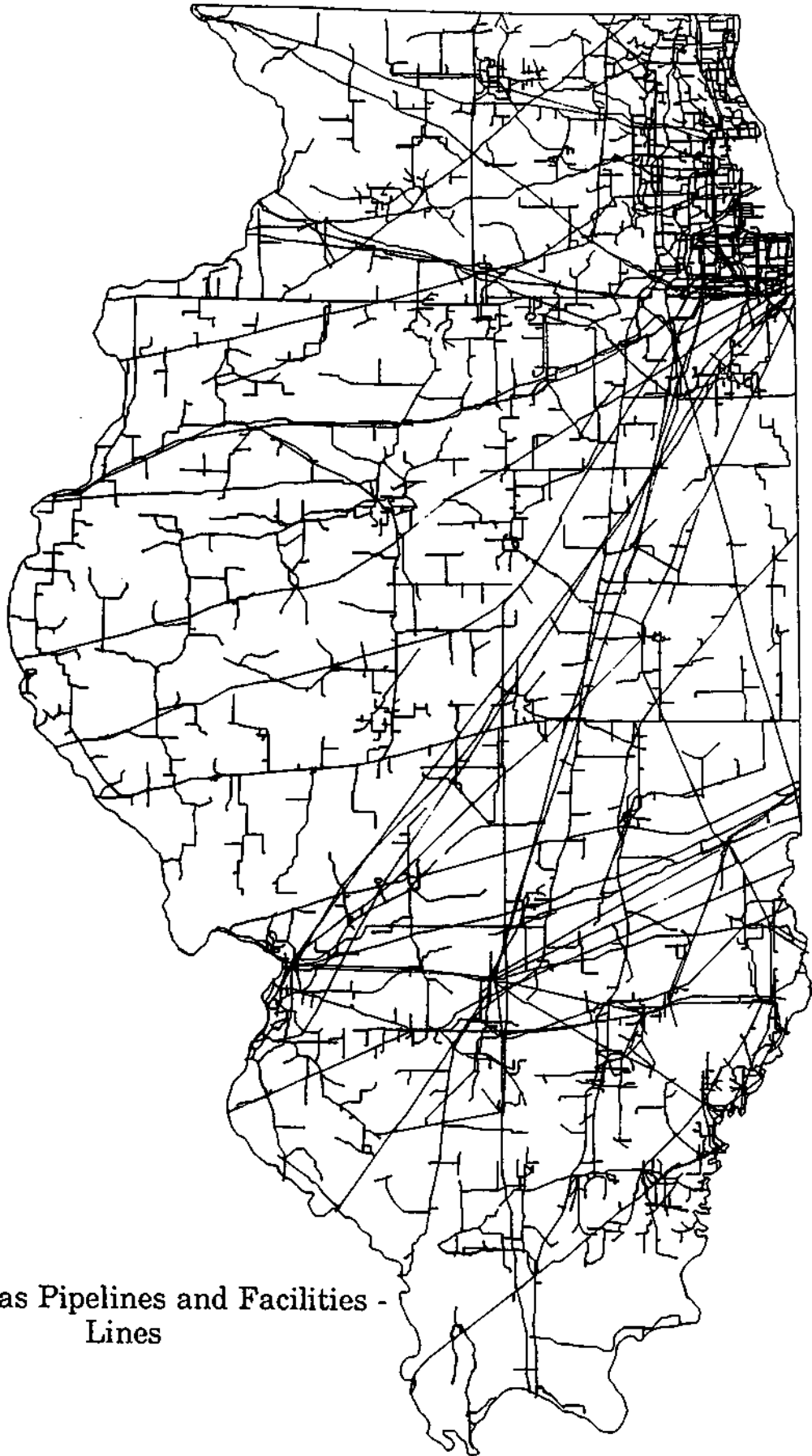
## Mapping Procedures

This manuscript consists of line and point data representing oil and gas pipeline locations and related facilities. The manuscript was prepared using composite mapping procedures. Pipelines as delineated by the SGS at 1:500,000 were transferred directly onto a mylar overlay registered to the basemap. Pipelines were registered to the basemap by lining up known locations such as cities, railroads, and stream courses shown on both the source map and the basemap. Lines were coded with type of product(s) carried. Whenever a pipeline carried more than one type of product, the line was assigned a code attribute for each product in the order in which the types were listed in the classification. Points were located either on or off pipelines and generally fell at intersections where several pipelines converged or at a line terminus.

## Bibliography

### *Existing Oil and Gas Pipelines and Facilities*

Meents, W.F., 1977, Oil and Gas Industry in Illinois, Illinois State Geological Survey: scale 1:500,000.



Oil and Gas Pipelines and Facilities -  
Lines

## OIL AND GAS PIPELINES AND FACILITIES - POINTS

**Coverage Name:** INPTFX

**Location of Coverages:** ILLINOIS > INFRA

**Coverage Type:** POINT

**Mapscale:** 1:500,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as INPTMB.

### INFO Item Description

151 records

DATAFILE NAME: INPTFX.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	INPTFX#	4	5	B	-	
13	INPTFX-ID	4	5	B	-	
17	CODE	4	4	I	-	Existing oil and gas pipeline - related facilities

### Coding for INFO Items

EXISTING OIL AND GAS PIPELINE - RELATED FACILITY (Columns 17-20)

- 1 = Crude oil
- 2 = Natural gas
- 3 = Refined products
- 4 = Refinery
- 5 = Propane storage
- 6 = Gas storage
- 7 = LNG plant
- 8 = SNG plant



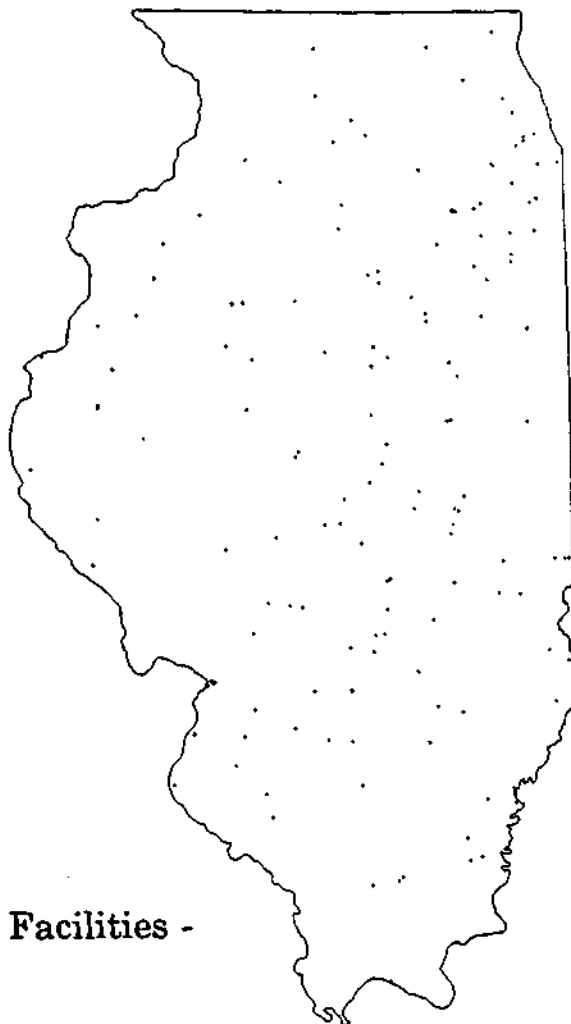
## Mapping Procedures

This manuscript consists of point data representing oil and gas pipeline locations and related facilities. The manuscript was prepared using composite mapping procedures. Pipelines as delineated by the SGS at 1:500,000 were transferred directly onto a mylar overlay registered to the basemap. Pipelines were registered to the basemap by lining up known locations such as cities, railroads, and stream courses shown on both the source map and the basemap. Lines were coded with type of product(s) carried. Whenever a pipeline carried more than one type of product, the line was assigned a code attribute for each product in the order in which the types were listed in the classification. Points were located either on or off pipelines and generally fell at intersections where several pipelines converged or at a line terminus.

## Bibliography

*Existing Oil and Gas Pipeline and Facilities*

Meents, W.F., 1977, *Oil and Gas Industry in Illinois*, Illinois State Geological Survey: scale 1:500,000.



**Oil and Gas Pipelines and Facilities -  
Points**

## TOLL ROADS

Coverage Name: TOLLWAYS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:760,000 to 1:320,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESELECTED to create TOLLWAYS.

### INFO Item Description

131 records

### DATAFILE NAME: TOLLWAYS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	TOLLWAYS#	4	5	B	-	
25	TOLLWAYS-ID	4	5	B	-	
29	NAME1	3	3	I	-	
32	NAME2	3	3	I	-	
35	FED-AID-TYPE	1	1	I	-	
36	FAP-NUMBER	3	3	I	-	
39	TRAFF-VOL-GROUP	2	2	I	-	

## **Coding for INFO Items**

NAME 1 (Columns 29-31)

001-N = Individual number

NAME 2 (Columns 32-34)

001-N = Individual number

FEDERAL AID TYPE (Column 35)

1 = Interstate

2 = Freeway

3 = Major highway

4 = Area service

FAP NUMBER (Columns 36-38)

001-N = Individual number

TRAFFIC VOLUME GROUP (Columns 39-40)

Statewide (Excluding Chicago)

01 = 0-999 (average 900)

02 = 1,000-2,499 (average 2,490)

03 = 2,500-4,999 (average 4,990)

04 = 5,000 and greater (average 9,000)

Chicago Area

11 = 0-4,999

12 = 5,000-9,999

13 = 10,000-19,999

14 = 20,000 and greater

## **Mapping Procedures**

### *Overview*

Coverage RRLNFX was a line map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Point data included settlements, airports, air navigation facilities, and commercial boat docks. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines and points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### *Existing Roads: State Primary System*

Roads defining the State Primary System were identified on the USGS basemap and transferred to an overlay. Discrepancies between the *State Primary System* source map and the USGS map were resolved using Landsat imagery. Roads were coded to identify their general type, federal aid number, traffic volume, and so on. The dense network of roads in the Chicago area was delineated at 1:125,000 and merged with the remainder of the state after automation.

## Bibliography

### *Existing Roads: State Primary System*

#### *General Type/Individual Number*

Illinois Department of Transportation, Office of Planning and Programming, 1982, State Primary System: scale 1:500,000.

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

#### *Federal Aid Type/FAP Number*

Illinois Department of Transportation, 1982, Federal Aid Primary System and 5-Year Classification Map, map 1 of 2 sheets: scale 1:750,000.

#### *Traffic Volume Group*

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.



TRANSMISSION LINES AND FACILITIES - LINES

Coverage Name: TRLNMG

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINE

Mapscale: 1:704,000

Contact Person:

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1984 by ESRI as TRLNMG.

**INFO Item Description**

4,732 records

DATAFILE NAME: TRLNMG.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	<b>B</b>	-	
5	<b>TNODE#</b>	4	5	<b>B</b>	-	
9	<b>LPOLY#</b>	4	5	<b>B</b>	-	
13	<b>RPOLY#</b>	4	5	<b>B</b>	-	
17	<b>LENGTH</b>	4	12	<b>F</b>	3	
21	<b>TRLNMG#</b>	4	5	<b>B</b>	-	
25	<b>TRLNMG-ID</b>	4	5	<b>B</b>	-	Existing transmission lines
29	<b>CAPACITY-CLASS</b>	1	1	<b>I</b>	-	Capacity class
30	<b>NUM-LINES</b>	1	1	<b>I</b>	-	Number of lines
	<b>** REDEFINED ITEMS **</b>					
29	<b>CODE</b>	2	2	<b>I</b>	-	
29	<b>CC</b>	1	1	<b>I</b>	-	

**Coding for INFO Items**

EXISTING TRANSMISSION LINES (Columns 29-30)

Capacity Class (Column 28)

1 = 34,500 volts

2 = 69,000 volts

- 2 = 69,000 volts
- 3 = 138,000 volts
- 4 = 161,000 volts
- 5 = 230,000 volts
- 6 = 345,000 volts
- 7 = 765,000 volts
- 8 = No data

Number of Lines (Column 30)

- 1 = One line
- 2 = Two lines
- 3 = Three lines
- 8 = No data

## Mapping Procedures

### *Overview*

This manuscript consists of line data representing transmission lines and related facilities. Transmission lines are wires or wire cable used for the transmission of electrical power.

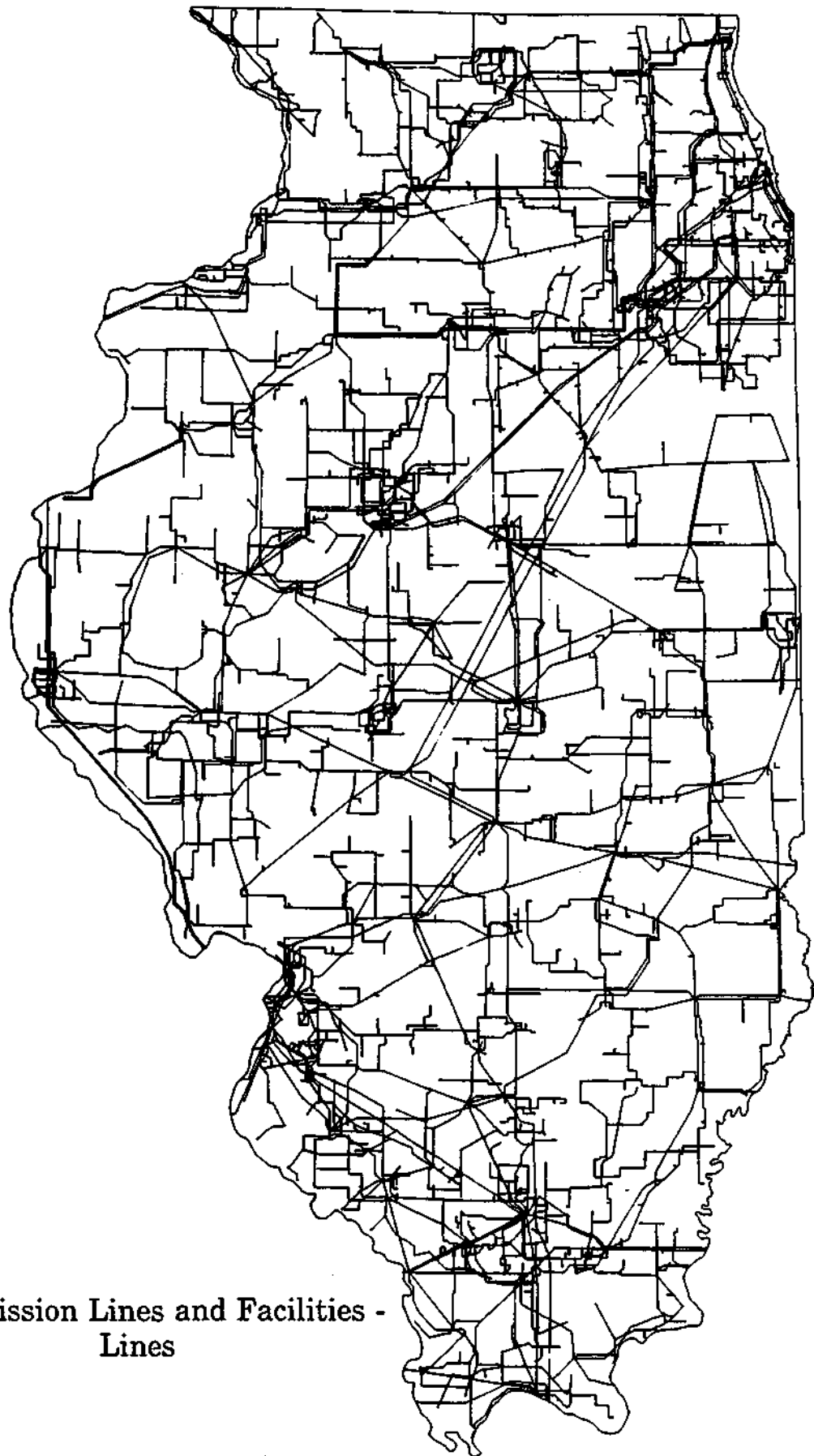
The transmission line collateral map, originally at a scale of approximately 1:704,000, was photo-enlarged to the 1:500,000 mapping scale. A clean mylar sheet was tab registered to the basemap and overlaid on the photo-enlarged transmission line map. Due to differences in projections, an exact match was not possible between the two data sources. Therefore, transmission lines were drafted county by county, and line adjustments were made when necessary.

All proposed and existing transmission lines were drafted as unbroken lines and coded for voltage and number of lines. On the original collateral maps, lines of high voltage (thick lines) obscured the detail of lower voltage lines, making line placement questionable in dense areas. Generating stations, substations, and municipalities were mapped as points usually associated with existing lines.

## Bibliography

### *Transmission Lines and Facilities*

Illinois Commerce Commission, 1980, Electric Utilities in Illinois: scale 1:704,000.



**Transmission Lines and Facilities -  
Lines**

**TRANSMISSION LINES AND FACILITIES - POINTS**

Coverage Name: TRPTMG

Location of Coverages: ILLINOIS > INFRA

Coverage Type: POINT

Mapscale: 1:704,000

Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1984 by ESRI as TRPTMG.

INFO Item Description

1,261 records

DATAFILE NAME: TRPTMG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	TRPTMG#	4	5	B	-	
13	TRPTMG-ID	4	5	B	-	
17	STATIONS	1	1	I	-	Existing power and transmission lines - related facilities

Coding for **INFO** Items

EXISTING POWER AND TRANSMISSION LINES - RELATED FACILITIES (Column 17)

- 1 = Generating station or peaking substation (20,000 kilowatts and more)
- 2 = Substation
- 3 = Municipalities supplying electric service
- 4 = Municipalities supplying electric service in competition with utilities
- 5 = City water, light, and power



## Mapping Procedures

This manuscript consists of point data representing transmission lines and related facilities. Transmission lines are wires or wire cable used for the transmission of electrical power.

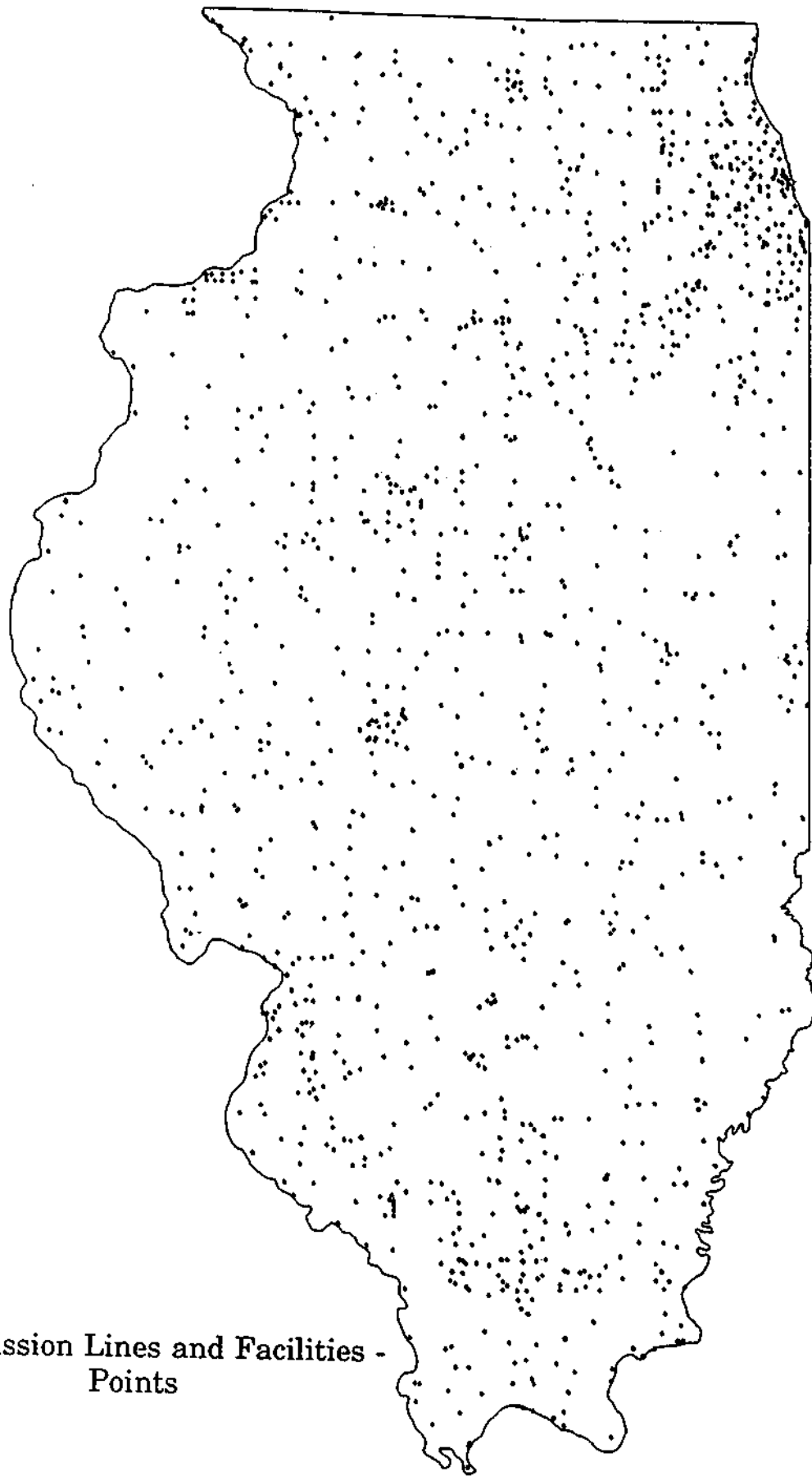
The transmission line collateral map, originally at a scale of approximately 1:704,000, was photo-enlarged to the 1:500,000 mapping scale. A clean mylar sheet was tab registered to the basemap and overlaid on the photo-enlarged transmission line map. Due to differences in projections, an exact match was not possible between the two data sources. Therefore, transmission lines were drafted county by county, and line adjustments were made when necessary.

All proposed and existing transmission lines were drafted as unbroken lines and coded for voltage and number of lines. On the original collateral maps, lines of high voltage (thick lines) obscured the detail of lower voltage lines, making line placement questionable in dense areas. Generating stations, substations, and municipalities were mapped as points usually associated with existing lines.

## **Bibliography**

### *Transmission Lines and Facilities*

Illinois Commerce Commission, 1980, Electric Utilities in Illinois: scale 1:704,000.



Transmission Lines and Facilities -  
Points

## UNITES STATES HIGHWAYS

Coverage Name: USHIGHWAYS

Location of Coverages: ILLINOIS > INFRA

Coverage Type: LINES

Mapscales: 1:760,000 and 1:320,000

### Contact Person

Manager, GIS Section  
Office of Research & Planning  
Illinois Department of Energy & Natural Resources  
325 W. Adams Street, Room 300  
Springfield, IL 62704  
(217)785-1211

### Coverage History

Created in 1984 by ESRI as part of RRLNFX; RRLNFX was RESELECTED to create USHIGHWAYS.

### INFO Item Description

1,311 records

DATAFILE NAME: USHIGHWAYS.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	<b>FNODE#</b>	4	5	<b>B</b>	-	
5	<b>TNODE#</b>	4	5	<b>B</b>	-	
9	<b>LPOLY#</b>	4	5	<b>B</b>	-	
13	<b>RPOLY#</b>	4	5	<b>B</b>	-	
17	<b>LENGTH</b>	4	12	<b>F</b>	3	
21	<b>USHIGHWAYS#</b>	4	5	<b>B</b>	-	
25	<b>USHIGHWAYS-ID</b>	4	5	<b>B</b>	-	
29	<b>NAME1</b>	3	3	<b>I</b>	-	
32	<b>NAME2</b>	3	3	<b>I</b>	-	
35	<b>NAME3</b>	3	3	<b>I</b>	-	
38	<b>NAME4</b>	3	3	<b>I</b>	-	
41	<b>FED-AID-TYPE</b>	1	1	<b>I</b>	-	
42	<b>FAP-NUMBER</b>	3	3	<b>I</b>	-	
45	<b>TRAFF-VOL-GROUP</b>	2	2	<b>I</b>	-	

## Coding for INFO Items

### NAME 1 (Columns 29-31)

001-N = Road number

### NAME 2 (Columns 32-34)

001-N = Road number

### NAME 3 (Columns 35-37)

001-N = Road number

### NAME 4 (Columns 38-40)

001-N = Road number

### FEDERAL AID TYPE (Column 41)

1 = Interstate

2 = Freeway

3 = Major highway

4 = Area service

8 = No data

### FAP NUMBER (Columns 42-44)

001-N = Individual number

998 = No data

999 = Not an existing state primary road

### TRAFFIC VOLUME GROUP (Columns 45-46)

#### Statewide (Excluding Chicago)

01 = 0-999 (average 900)

02 = 1,000-2,499 (average 2,490)

03 = 2,500-4,999 (average 4,990)

04 = 5,000 and greater (average 9,000)

#### Chicago Area

11 = 0-4,999

12 = 5,000-9,999

13 = 10,000-19,999

14 = 20,000 and greater

98 = No data

## Mapping Procedures

### *Overview*

Coverage RRLNFX was a line map with information related to infrastructure, settlements, and other cultural features. The linear features included roads, existing and abandoned railroads, and old railroad grades. Individual overlays were prepared for each variable using existing collateral data and Landsat imagery. The lines and points from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

*Existing Roads: State Primary System*

Roads defining the State Primary System were identified on the USGS basemap and transferred to an overlay. Discrepancies between the *State Primary System* source map and the USGS map were resolved using Landsat imagery. Roads were coded to identify their general type, federal aid number, traffic volume, and so on. The dense network of roads in the Chicago area was delineated at 1:125,000 and merged with the remainder of the state after automation.

Bibliography

*Existing Roads: State Primary System*

*General Type/Individual Number*

Illinois Department of Transportation, Office of Planning and Programming, 1982, State Primary System: scale 1:500,000.

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.

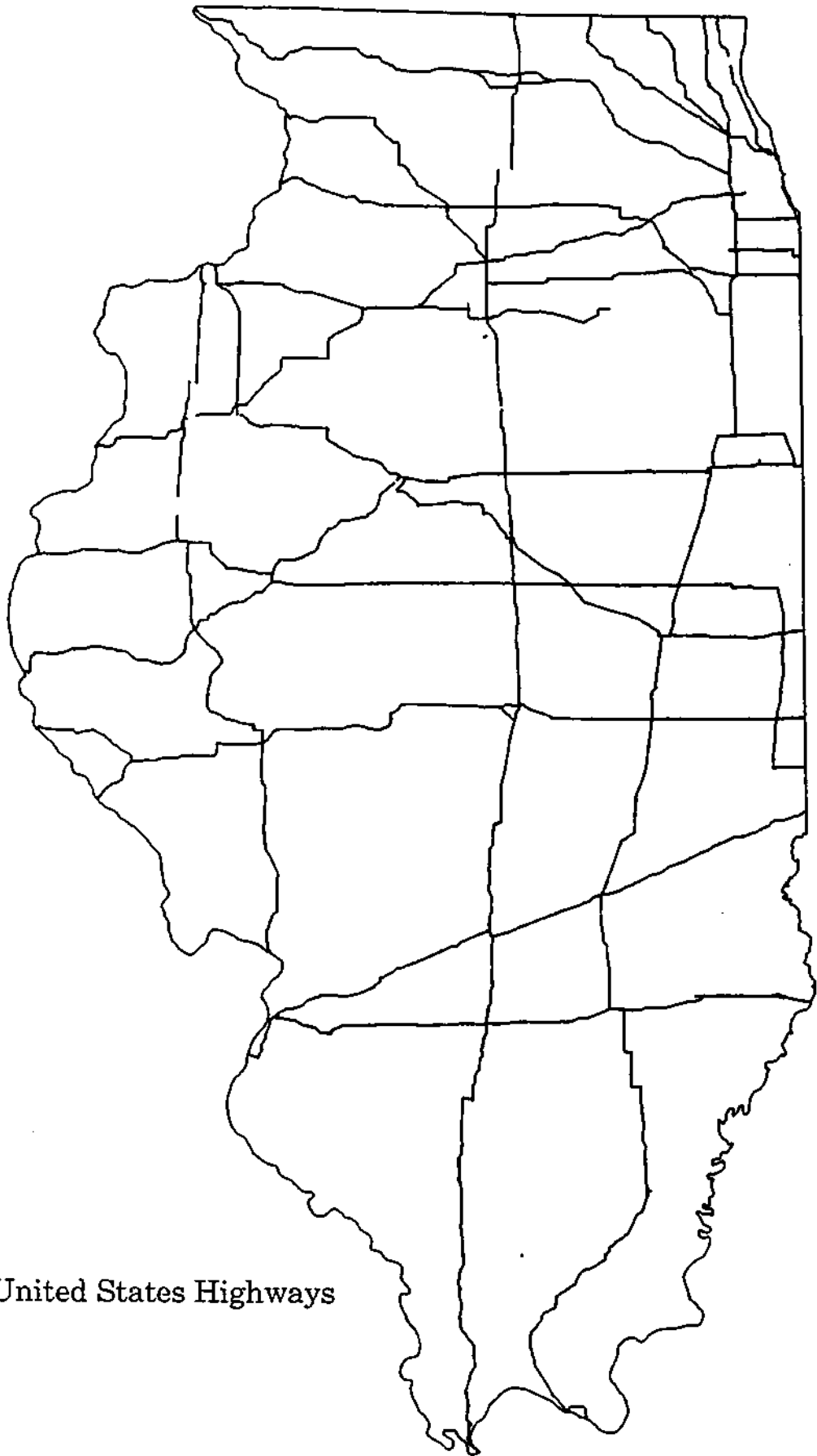
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

*Federal Aid Type/FAP Number*

Illinois Department of Transportation, 1982, Federal Aid Primary System and 5-Year Classification Map, map 1 of 2 sheets: scale 1:750,000.

*Traffic Volume Group*

Illinois Department of Transportation, Office of Planning and Programming, 1981, 1981 Average Daily Total Traffic - State Primary System, 2 map sheets: scales 1:760,000 and 1:320,000.



United States Highways

NATURAL HISTORY COVERAGES  
ILLINOIS STATEWIDE DATABASE

## ECOREGIONS

Coverage Name: ECO

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:2,500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-8907

or  
IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; it was DISSOLVED from TUPYMG on INFO item ECO.

### INFO Item Description

6 records

DATAFILE NAME: ECO.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	ECO#	4	5	B	-	
13	ECO-ID	4	5	B	-	
17	ECO	1	2	I	-	

### Coding for INFO Items

ECOREGIONS (Column 17)

#### *Hot Continental Division*

Eastern Deciduous Forest Province

- 1 = Maple-basswood forest and oak savanna section
- 2 = Oak-hickory forest section



### *Subtropical Division*

Outer Coastal Plain Forest Province

3 = Southern floodplain forest section

### *Prairie Division*

Prairie Parkland Province

4 = Oak-hickory-bluestem parkland section

## **Mapping Procedures**

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

### *Ecoregions*

The ecoregions map shows location and extent of the four major ecoregions (which represent broad ecological zones influenced primarily by climate) in Illinois. The divisions each have distinctive natural vegetation, soils, land surface forms, climate, and fauna.

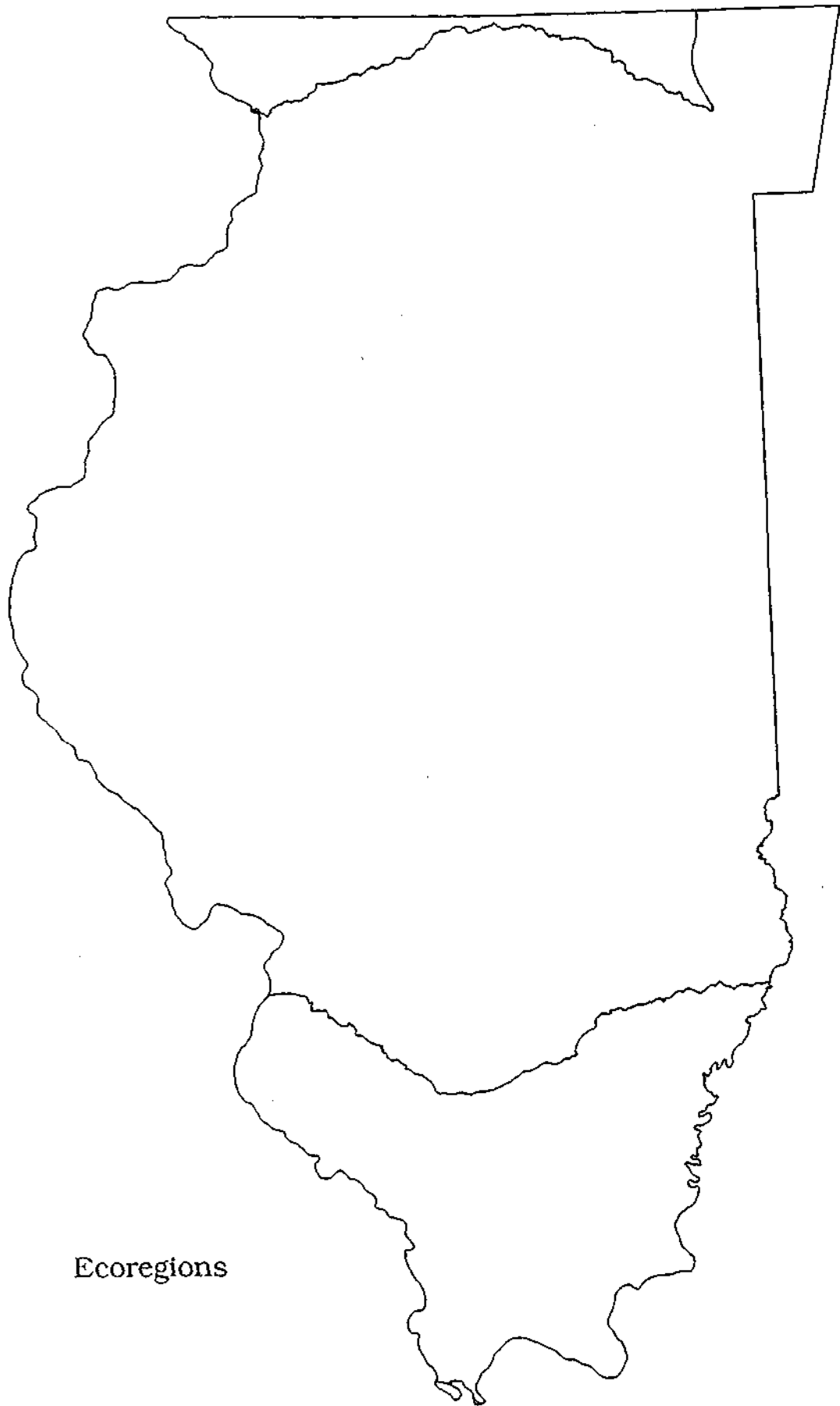
The source map was manually rescaled from 1:2,500,000 to 1:500,000 and registered to the basemap using stream and county lines. This map represents broad transition zones and was adjusted to natural division boundary lines wherever possible. Otherwise, any previous data boundary that was close to the ecoregion boundary was used to adjust the ecoregion boundary.

## **Bibliography**

### *Ecoregions*

Baily, R.G., and C.T. Cushwa, 1981, Map of ecoregions of North America *in* Ecoregion, Land Surface Form, and Hydrologic Unit Maps of the United States, U.S. Geological Survey, Division of Fish and Wildlife Services: scales 1:12,000,000 and 1:7,500,000 (auxiliary information).

Baily, R.G., and C.T. Cushwa, 1981, Map of Ecoregions of North America, U.S. Geological Survey, Division of Fish and Wildlife Services: scale 1:2,500,000 (digitized graphic information).



Ecoregions

## FOREST/PRAIRIE DISTRIBUTION, 1820

**Coverage Name:** FPPYMG

**Location of Coverages:** ILLINOIS > FOREST

**Coverage Type:** POLYGON

**Mapscale:** 1:2,500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217)333-8907

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as FPPYMG.

### INFO Item Description

765 records

DATAFILE NAME: FPPYMG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	FPPYMG#	4	5	B	-	
13	FPPYMG-ID	4	5	B	-	
17	FPPYMG-ID	4	5	B	-	Forest/prairie distribution, 1820
<b>** REDEFINED ITEMS **</b>						
17	CODE	4	5	B	-	

### Coding for INFO Items

FOREST/PRAIRIE DISTRIBUTION, 1820 (Column 20)

1 = Forest

2 = Prairie

9 = Water (excluding reservoirs)

## Mapping Procedures

This polygon map represents the locations of prairies and forest in Illinois at the time of settlement. A 1:2,500,000 scale map from Anderson was photo-enlarged to the 1:500,000 mapping scale and manually transferred to a mylar overlay registered to the USGS basemap. The forest/prairie boundaries were rectified to the basemap by comparing forest units, especially along drainages, to the image and making sure forested units followed natural features such as mountains and rivers. Natural waterbodies were added to the manuscript, and all features on the map were assigned the appropriate codes.

## Bibliography

- Anderson, R.C., 1970, Prairies in the Prairie State, Illinois State Academy of Science Transactions, vol. 63, pp. 214-221.
- Schwegman, J.E., 1973, The Natural Divisions of Illinois, Illinois Department of Conservation, accompanied with several map sheets: scale 1:2,500,000.



Forest/Prairie  
Distribution, 1820

**FEDERAL RESERVE SYSTEM UNITS**

Coverage Names: FED-LAND-PT, FED-LAND-PY

**Location of Coverages:** ILLINOIS > ADMIN

**Coverage Types:** POINT, POLYGON

Mapscale: 1:250,000 to 1:500,000

**Contact Person**

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

**Coverage History**

Created in 1983 by ESRI as AUPTMG AND AUPYMG. FED-LAND-PT was RESELECTED from AUPTFX on INFO item FED-RES-SYS. FED-LAND-PY was DISSOLVED from AUPYFX on INFO item FED-RES-SYS.

**INFO Item Description**

14 records

DATAFILE NAME: FED-LAND-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	FED-LAND-PT#	4	5	B	-	
13	FED-LAND-PT-ID	4	5	B	-	
17	ID#	4	4	I	-	Federal Reserve System units
21	CATEGORY-NAME	50	50	C	-	
71	SITE-NAME	70	70	C	-	
141	FIPS#	3	3	I	-	
144	COUNTY#	3	3	I	-	
<b>**REDEFINED ITEMS **</b>						
17	ID-NUMBER	4	4	I	-	
17	CATEGORY#	2	2	I	-	
19	SITE#	2	2	I	-	

19 records

DATAFILE NAME: FED-LAND-PT.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	4	4	I	-	Federal Reserve System units
5	SITE-NAME	70	70	C	-	

6 records

DATAFILE NAME: FED-LAND-PT.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	50	50	C	-	

35 records

DATAFILE NAME: FED-LAND-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	FED-LAND-PY#	4	5	B	-	
13	FED-LAND-PY-ID	4	5	B	-	
17	ID#	4	4	I	-	Federal Reserve System units
21	CATEGORY-NAME	50	50	C	-	
71	SITE-NAME	70	70	C	-	
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	4	4	I	-	
17	CATEGORY#	2	2	I	-	
19	SITE#	2	2	I	-	

19 records

DATAFILE NAME: FED-LAND-PY.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	4	4	I	-	Federal Reserve System units
5	SITE-NAME	70	70	C	-	

6 records

DATAFILE NAME: FED-LAND-PY.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	50	50	C	-	

Coding for INFO Items

FEDERAL RESERVE SYSTEM UNITS

ID# (Columns 17-20)

CATEGORY# (Columns 17-18)

SITE# (Columns 19-20)

CATEGORY# and CATEGORY NAME

11 = National Wildlife Refuge

21 = National Monument

31 = National Forest

41 = Military reservation/base or other large facility

51 = National Wildlife Refuge and National Forest

99 = Not a federal system unit type

SITE NAME

Name of the individual site

FIPS NUMBER (Federal Information Processing System)

1-203 = FIPS# FIPS# = [(COUNTY# x 2) - 1]

COUNTY NUMBER (alphabetical sequence number)

1-102 = COUNTY#

Mapping Procedures

AUPTFX and AUPYFX are polygon and point maps that contain information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000. An exception to this was National Heritage Landmarks. Data for the location of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.



## **Bibliography**

### *County by FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

### *Federal Reserve System Units*

#### *National Wildlife Refuge System*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

U.S. Fish and Wildlife Service, 1978, Crab Orchard National Wildlife Refuge: scale 1:24,000.

### *National Park System*

U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

### *National Forest System*

U.S. Forest Service, 1971, Shawnee National Forest, Illinois: scale 1:250,000.

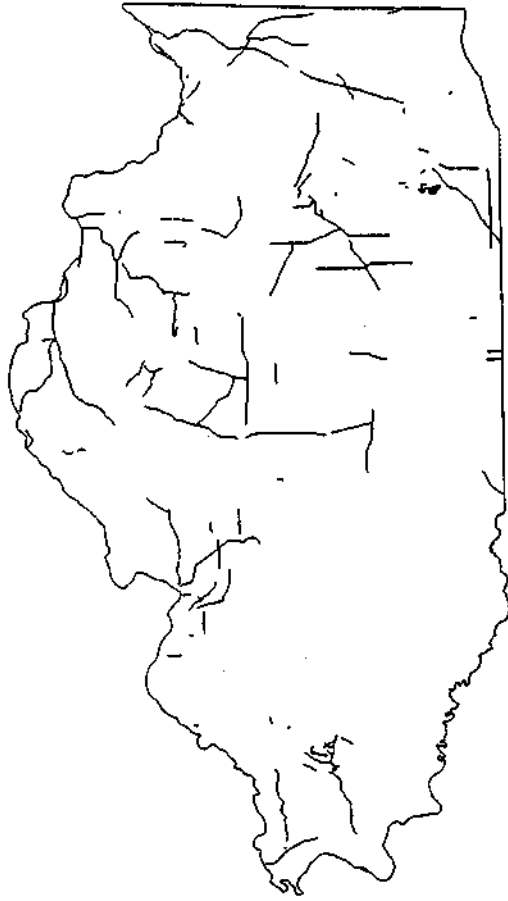
### *Military Reservation System*

U.S. General Services Administration, Office of Administration, 1983, Detailed Listing of Real Property Owned by the United States and Used by the Department of Defense for Military functions throughout the World as of September 30, 1980: GS 1.15/4-2:980.

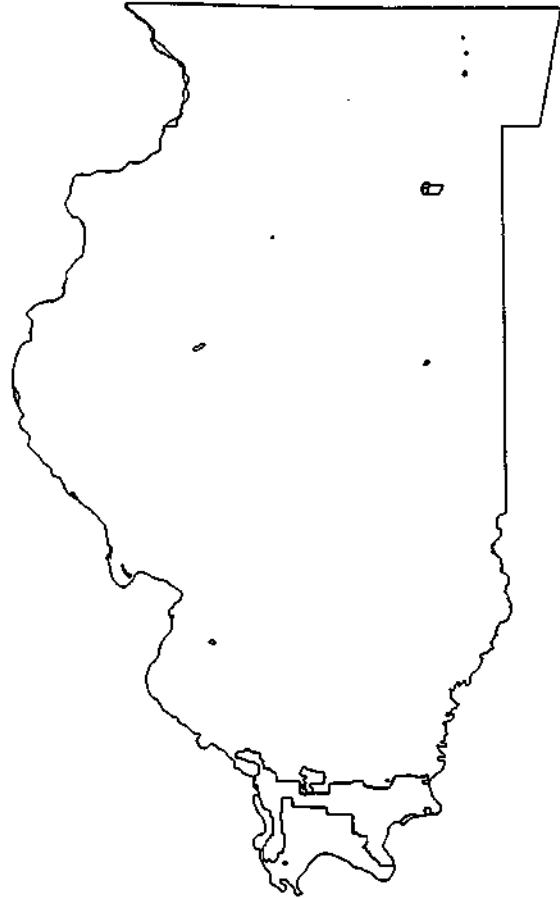
U.S. Geological Survey, Topographic Quadrangle Series: scale 1:250,000.

**Federal Reserve System  
Units - Points**





**Federal Reserve System  
Units - Lines**



**Federal Reserve System  
Units - Polygons**

INVENTORY OF PUBLIC RECREATION LAND SITES

Coverage Names: RECREATION-PT, RECREATION-LN, RECREATION-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage Types: POINT, LINE, POLYGON

Mapscale: Variable

Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1983 by ESRI as AUPTMG, AULNMG, AND AUPYMG. RECREATION-PT was RESELECTED from AUPTFX on INFO item INV-PUB-REC. RECREATION-LN was RESELECTED from AULNMG on INFO item INV-PUB-REC. RECREATION-PY was DISSOLVED from AUPYFX on INFO item INV-PUB-REC.

INFO Item Description

514 records

DATAFILE NAME: RECREATION-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	RECREATION-PT#	4	5	B	-	
13	RECREATION-PT-ID	4	5	B	-	Inventory of Public Recreation Land sites
17	ID#	5	5	I	-	
22	CATEGORY-NAME	60	60	C	-	
82	SITE-NAME	80	80	C	-	
162	FIPS#	3	3	I	-	
165	COUNTY#	3	3	I	-	
168	SNA-REFERENCE#	4	4	C	-	State natural areas number
172	SNA-AREA#	4	4	I	-	
176	SNA-NAME	95	95	C	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	5	5	I	-	
17	CATEGORY#	2	2	I	-	
19	SITE#	3	3	I	-	
165	SNA-CODE	7	7	C	-	

885 records

DATAFILE NAME: RECREATION-PT.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	5	5	I	-	
6	SITE-NAME	80	80	C	-	

42 records

DATAFILE NAME: RECREATION-PT.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	60	60	C	-	

1,079 records

DATAFILE NAME: RECREATION-PT.SNA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	SNA-CODE	7	7	C	-	
8	SNA-NAME	95	95	C	-	

39 records

DATAFILE NAME: RECREATION-LN.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	RECREATION-LN#	4	5	B	-	
25	RECREATION-LN-ID	4	5	B	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
29	ID#	5	5	I	-	Inventory of Public Recreation Land sites
34	CATEGORY-NAME	60	60	C	-	
94	SITE-NAME	80	80	C	-	
174	FIPS#	3	3	I	-	
177	COUNTY#	3	3	I	-	
<b>** REDEFINED ITEMS **</b>						
29	ID-NUMBER	5	5	I	-	
29	CATEGORY#	2	2	I	-	
31	SITE#	3	3	I	-	

885 records

DATAFILE NAME: RECREATION-LN.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	5	5	I	-	
6	SITE-NAME	80	80	C	-	

42 records

DATAFILE NAME: RECREATION-LN.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	60	60	C	-	

627 records

DATAFILE NAME: RECREATION-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	RECREATION-PY#	4	5	B	-	
13	RECREATION-PY-ID	4	5	B	-	
17	ID#	5	5	I	-	Inventory of Public Recreation Land sites
22	CATEGORY-NAME	60	60	C	-	
82	SITE-NAME	80	80	C	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	5	5	I	-	
17	CATEGORY#	2	2	I	-	
19	SITE#	3	3	I	-	

885 records

DATAFILE NAME: RECREATION-PY.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	5	5	I	-	
6	SITE-NAME	80	80	C	-	

42 records

DATAFILE NAME: RECREATION-PY.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	60	60	C	-	

### Coding for INFO Items

INVENTORY OF PUBLIC RECREATION LAND SITES

ID# (Columns 17 or 29)

CATEGORY# (Columns 17-18 or 29-30)

SITE# (Columns 19-20 or 31-32)

CATEGORY# and CATEGORY NAME (Columns 22-81 or 34-93)

- 01 = Canoe trail
- 02 = Conservancy district
- 03 = Conservation and sportsman's club
- 04 = Conservation area
- 05 = Conservation district
- 06 = Conservation district, owner
- 07 = Fish and wildlife area
- 08 = Fish and wildlife management area
- 09 = Forest park foundation, owner
- 10 = Forest preserve
- 11 = Forest preserve district, owner
- 12 = Game farm
- 13 = Game refuge
- 14 = Historic site
- 15 = Lake
- 16 = Memorial park
- 17 = National forest
- 18 = National Wildlife Refuge
- 19 = Natural area

- 20 = Nature center
- 21 = Nature conservancy
- 22 = Nature preserve
- 23 = Park
- 24 = Park and boulevard association, owner
- 25 = Park association, owner
- 26 = Park district
- 27 = Park district, owner
- 28 = Recreation area
- 29 = Reservoir
- 30 = School
- 31 = Science preserve
- 32 = State forest
- 33 = State of Illinois, owner
- 34 = State of Illinois, Department of Conservation, owner
- 35 = State park
- 36 = Trail
- 37 = University owned
- 38 = U.S.A., owner
- 39 = U.S.A. owner, Corp of Engineers, owner
- 40 = Wildlife refuge
- 41 = Wildlife refuge and game preserve
- 99 = Not an Inventory of Public Recreation Land site

SITE-NAME (Columns 82-161 or 94-173)

Name of individual site

FIPS NUMBER (Federal Information Processing System)

1-203 = FIPS# FIPS# = [(COUNTY# x 2) - 1]

COUNTY NUMBER (alphabetical sequence number)

1-102 = COUNTY#

STATE NATURAL AREA REFERENCE NUMBER (Columns 168-171)

1st column = Blank or letter

Last 3 columns = Numbers

STATE NATURAL AREA AREA NUMBER (Columns 172-175)

SNA-AREA# = 1-9999

STATE NATURAL AREA NAME (Columns 176-271)

Name of the state natural area

REDEFINED ITEM

SNA-CODE (7 columns)

COUNTY# = Columns 1-3

SNA-REFERENCE# = Columns 4-7

SNA-CODE is also present in the files RECREATION-PT.DATA.

## Mapping Procedures

AUPTMG, AULNMG, and AUPYMG were polygon, line, and point maps with information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000. An exception to this was National Heritage Landmarks. Data for the location of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.

## Bibliography

### *County by FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

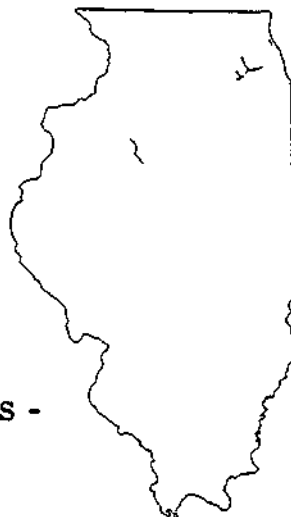
### *State Natural Areas*

University of Illinois at Urbana-Champaign, Department of Landscape Architecture and the Natural Land Institute, 1978, Illinois Natural Areas Inventory, technical report (with county maps delineating natural areas) Illinois Department of Conservation: scale variable.

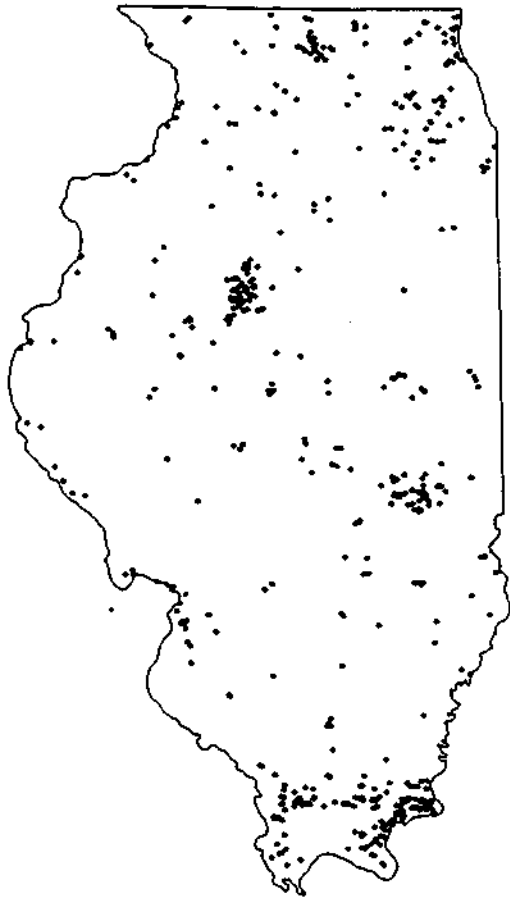
### *Inventory of Public Recreation Land Sites*

Ackerman, K., et al., 1977, Inventory of Public Recreation Lands in Illinois, Illinois Department of Transportation, Bureau of Location and Environment.

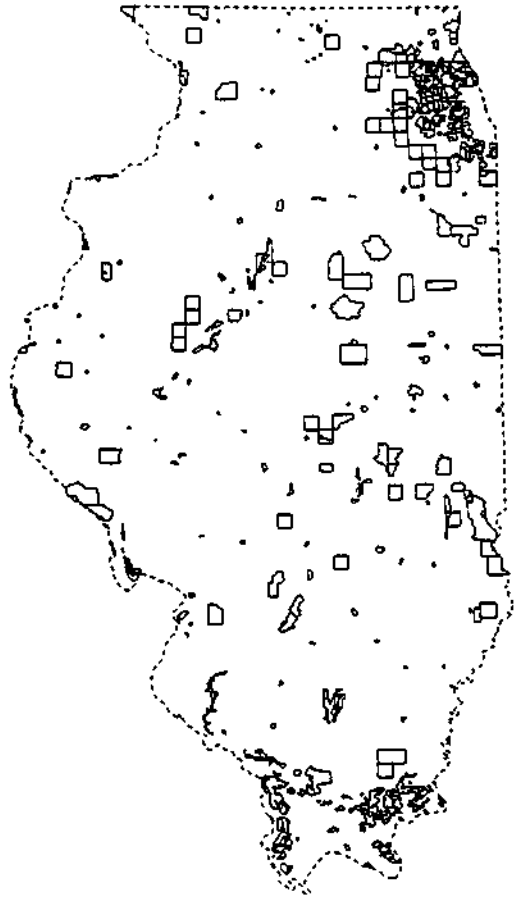
**Inventory of Public  
Recreation Land Sites -  
Lines**







**Inventory of Public  
Recreation Land Sites -  
Points**



**Inventory of Public  
Recreation Land Sites -  
Polygons**

## NATIONAL HERITAGE LANDMARKS

Coverage Names: HERITAGE-PT, HERITAGE-LN, HERITAGE-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage Types: POINT, LINE, POLYGON

Mapscale: 1:500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
 Illinois Natural History Survey  
 607 E. Peabody Drive  
 Champaign, IL 61820  
 (217)333-8907

or

IGIS Database Administrator  
 (217)333-8907

### Coverage History

The coverage was created in 1985. The INFO item NAT-HER-LANDMARK was added to coverages AUPTMG, AULNMG, and AUPYMG by the staff of the Natural History Survey. HERITAGE-PT was RESELECTED from AUPTFX on INFO item NAT-HER-LANDMARK. HERITAGE-LN was RESELECTED from AULNMG on INFO item NAT-HER-LANDMARK. HERITAGE-PY was DISSOLVED from AUPYFX on INFO item NAT-HER-LANDMARK.

### INFO Item Description

67 records

DATAFILE NAME: HERITAGE-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	HERITAGE-PT#	4	5	B	-	
13	HERITAGE-PT-ID	4	5	B	-	
17	NAT-HER-LANDMARK	15	15	C	-	National Heritage Landmark
32	FIPS#	3	3	I	-	County FIPS number
35	COUNTY#	3	3	I	-	County sequence number
38	SNA-REFERENCE#	4	4	C	-	
42	SNA-AREA#	4	4	I	-	State natural area number
46	SNA-NAME	95	95	C	-	State natural area name

**\*\*REDEFINED ITEMS \*\***

35	SNA-CODE	7	7	C	-	State natural area code
----	----------	---	---	---	---	-------------------------

3 records

DATAFILE NAME: HERITAGE-LN.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	HERITAGE-LN#	4	5	B	-	
25	HERITAGE-LN-ID	4	5	B	-	
29	NAT-HER-LANDMARK15		15	C	-	National Heritage landmark
44	FIPS#	3	3	I	-	County FIPS number
47	COUNTY#	3	3	I	-	County sequence number
50	SNA-REFERENCE#	4	4	C	-	
54	SNA-AREA#	4	4	I	-	State natural area number
58	SNA-NAME	95	95	C	-	State natural area name

**\*\* REDEFINED ITEMS \*\***

47	SNA-CODE	7	7	C	-	State natural area code
----	----------	---	---	---	---	-------------------------

8 records

DATAFILE NAME: HERITAGE-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	HERITAGE-PY#	4	5	B	-	
13	HERITAGE-PY-ID	4	5	B	-	
17	NAT-HER-LANDMARK11		11	C	-	National Heritage Landmark

Coding for INFO Items

NAT-HER-LANDMARK (Columns 17-31, 29-43, or 17-27)

1-999 - 1 to 4 sets separated by commas

FIPS# (Columns 32-34 or 44-46)  
1-203 = FIPS#

COUNTY# (Columns 35-37 or 47-49)  
1-102 = COUNTY#

SNA REFERENCE NUMBER (Columns 38-41 or 50-53)  
First columns = Blank or letter  
Last 3 columns = Numbers

SNA AREA NUMBER (Columns 42-45 or 54-57)  
1-9999 = SNA-AREA#

SNA NAME (Columns 46-140 or 58-152)  
Name of the state natural area

REDEFINED ITEM  
SNA-CODE (7 Columns)  
COUNTY# = Columns 1-3  
SNA-REFERENCE# = Columns 4-7

#### Mapping Procedures

AUPYMG, AULNMG, and AUPTMG were polygon, line, and point maps with information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000. An exception to this was National Heritage Landmarks. Data for the location of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.

#### Bibliography

##### *County by FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

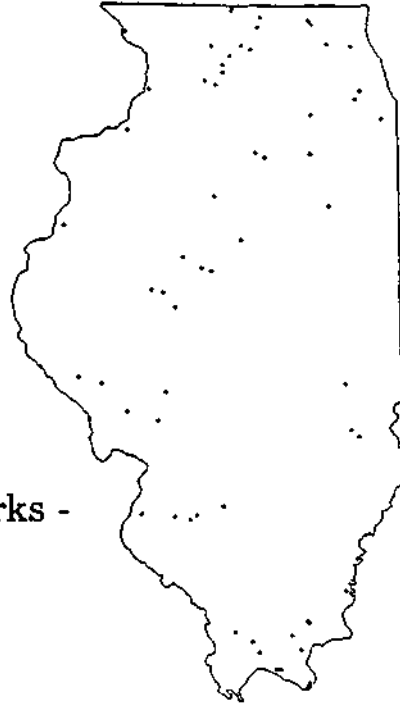
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

##### *State Natural Areas*

University of Illinois at Urbana-Champaign, Department of Landscape Architecture and the Natural Land Institute, 1978, Illinois Natural Areas Inventory, technical report (with county maps delineating natural areas), Illinois Department of Conservation: scale variable.

*National Heritage Landmarks*

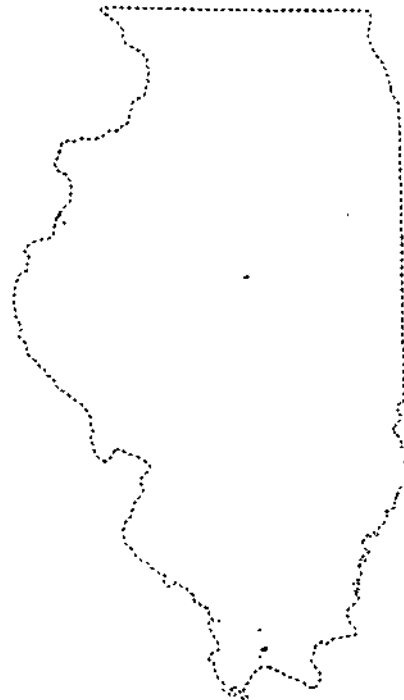
Illinois Department of Conservation, National Heritage Division, Unpublished documents.



**National Heritage Landmarks -  
Points**



**National Heritage Landmarks -  
Lines**



**National Heritage Landmarks -  
Polygons**

NATURAL DIVISIONS

Coverage Name: NATDIV

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:1,000,000

Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
 Illinois Natural History Survey  
 607 E. Peabody Drive  
 Champaign, IL 61820  
 (217)333-8907

or

IGIS Database Administrator  
 (217)333-8907

Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item NAT-DIV.

INFO Item Description

134 records

DATAFILE NAME: NATDIV.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	NATDIV#	4	5	B	-	
13	NATDIV-ID	4	5	B	-	
17	NAT-DIV	4	5	I	-	Natural divisions
21	COLOR	2	2	I	-	
23	COLOR2	2	2	I	-	

Coding for INFO Items

NATURAL DIVISIONS (Columns 17-20)

Wisconsin Driftless Division  
 010 = Undifferentiated

Rock River Hill Country Division  
 021 = Freeport section  
 022 = Oregon section

Northeastern Morainal Division

- 031 = Morainal section
- 032 = Lake Michigan Dunes section
- 033 = Chicago lake plain section
- 034 = Winnebago drift section

Grand Prairie Division

- 041 = Grand Prairie section
- 042 = Springfield section
- 043 = Western section
- 044 = Green River lowland section
- 045 = Kankakee sand area section

Upper Mississippi River and Illinois River Bottomlands Division

- 051 = Illinois River section
- 052 = Mississippi River section

Illinois River and Mississippi River Sand Areas Division

- 061 = Illinois River section
- 062 = Mississippi River section

Western Forest-Prairie Division

- 071 = Galesburg section
- 072 = Carlinville section

Middle Mississippi Border Division

- 081 = Glaciated section
- 082 = Driftless section

Southern Till Plain Division

- 091 = Effingham plain section
- 092 = Mt. Vernon hill country section

Wabash Border Division

- 101 = Bottomlands section
- 102 = Southern uplands section
- 103 = Vermilion River section

Ozark Division

- 111 = Northern section
- 112 = Central section
- 113 = Southern section

Lower Mississippi River Bottomlands Division

- 121 = Northern section
- 122 = Southern section

Shawnee Hills Division

- 131 = Greater Shawnee Hills section
- 132 = Lesser Shawnee Hills section

Coastal Plain Division

- 141 = Cretaceous Hills section
- 142 = Bottomlands section

## Major Waterbodies

- 991 = Lake Michigan
- 992 = Mississippi River
- 993 = Ohio River
- 994 = Wabash River

## Mapping Procedures

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally, ecoregions.

### *Natural Divisions*

The *Natural Divisions Map* shows different natural regions and subdivisions representing differences in topography, glacial history, bedrock, soils, and distribution of plants and animals. The source map at 1:1,000,000 was photo-rescaled to 1:500,000 and redrafted by registering county lines, rivers, and state boundaries.

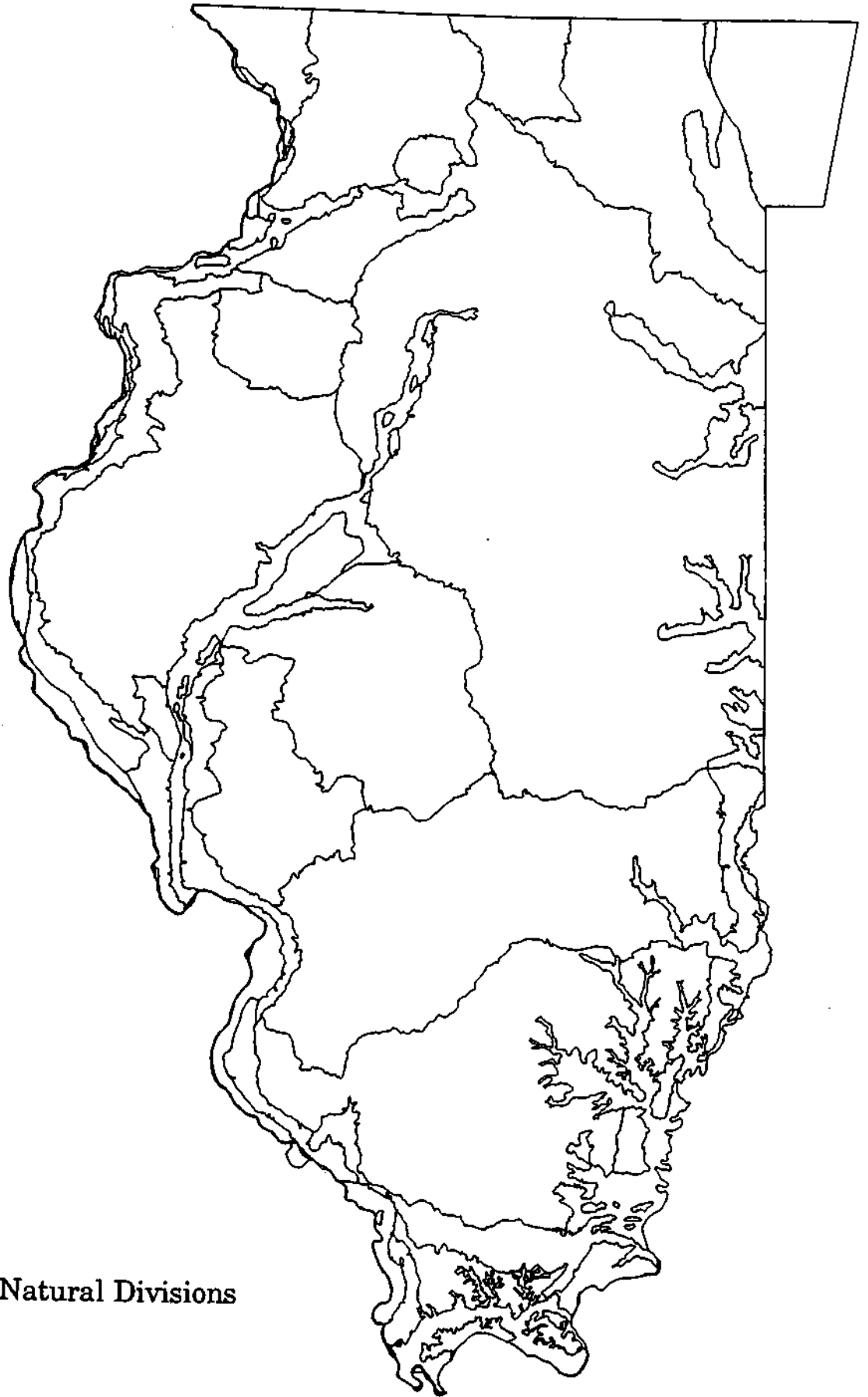
Data were integrated by adjusting the generalized natural division boundaries to the glacial boundaries in driftless areas and with more specific soil association boundaries in other areas. Lines were adjusted to match Landsat image patterns and topography on the basemap.

## Bibliography

### *Natural Divisions*

Schwegman, J.E., 1973, *The Natural Divisions of Illinois*, Illinois Department of Conservation, with 1 map sheet: scale 1:1,000,000.





Natural Divisions

NATURE PRESERVES

Coverage Names: NATURE-PT, NATURE-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage Types: POINT, POLYGON

Mapscale: 1:500,000

Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
 Illinois Natural History Survey  
 607 E. Peabody Drive  
 Champaign, IL 61820  
 (217)333-8907

or

IGIS Database Administrator  
 (217) 333-8907

Coverage History

The INFO item NATURE-PRESERVE was added to coverages AUPTMG and AUPYMG by the staff of the Natural History Survey. HERITAGE-PT was RESELECTED from AUPTFX on INFO item NATURE-PRESERVE. HERITAGE-PY was DISSOLVED from AUPYFX on INFO item NATURE-PRESERVE. In 1990, the coverage was replaced by an updated, higher resolution database located elsewhere on the system.

INFO Item Description

140 records

DATAFILE NAME: NATURE-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	NATURE-PT#	4	5	B	-	
13	NATURE-PT-ID	4	5	B	-	
17	NATURE-PRESERVE	3	3	I	-	Nature preserve
20	FIPS#	3	3	I	-	County FIPS number
23	COUNTY#	3	3	I	-	County sequence number
26	SNA-REFERENCE#	4	4	C	-	
30	SNA-AREA#	4	4	I	-	State natural area number
34	SNA-NAME	95	95	C	-	State natural area name
	** REDEFINED ITEMS **					
23	SNA-CODE	7	7	C	-	State natural area code

24 records

DATAFILE NAME: NATURE-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	NATURE-PY#	4	5	B	-	
13	NATURE-PY-ID	4	5	B	-	
17	NATURE-PRESERVE	3	3	I	-	Nature preserve

### **Coding for INFO Items**

NATURE-PRESERVE (Columns 17-19)  
1-999

FIPS# (Columns 20-22)  
1-203 = FIPS#

COUNTY# (Columns 23-25)  
1-102 = COUNTY#

SNA REFERENCE NUMBER (Columns 26-29)  
First columns = Blank or letter  
Last 3 columns = Numbers

SNA AREA NUMBER (Columns 30-33)  
1-9999 = SNA-AREA#

SNA NAME (Columns 46-140)  
Name of the state natural area

REDEFINED ITEMS  
SNA-CODE (7 columns)  
COUNTY# = Columns 1-3  
SNA-REFERENCE# = Columns 4-7

### **Mapping Procedures**

AUPYFX and AUPTMG were polygon and point maps with information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

Bibliography

*County by Federal FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

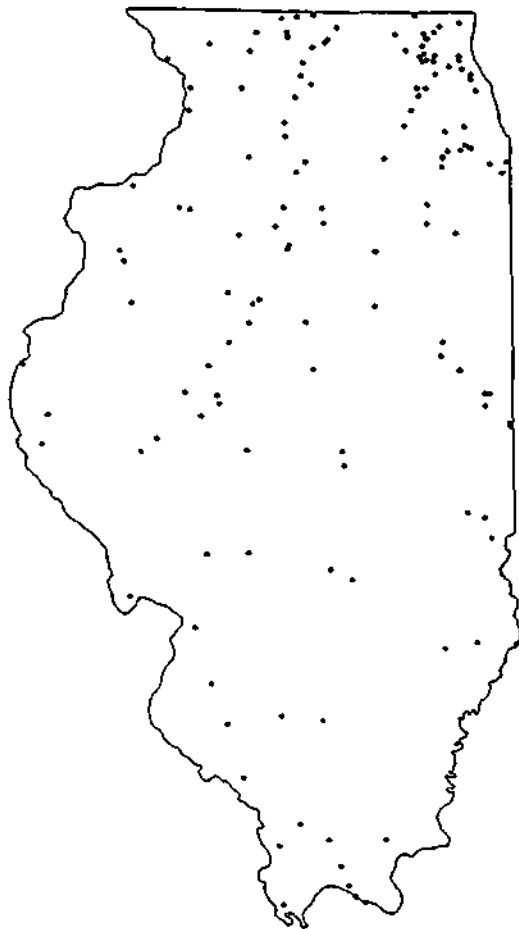
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

*State Natural Areas*

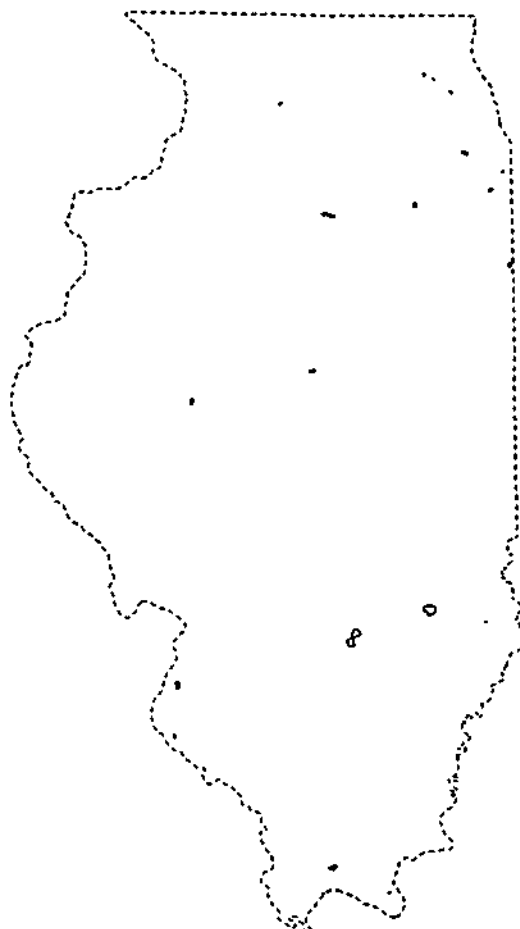
University of Illinois at Urbana-Champaign, Department of Landscape Architecture and the Natural Land Institute, 1978, Illinois Natural Areas Inventory, technical report (with county maps delineating natural areas), Illinois Department of Conservation: scale variable.

*Nature Preserves*

Illinois Department of Conservation, Unpublished documents.



**Nature Preserves -  
Points**



**Nature Preserves -  
Polygons**

POTENTIAL NATURAL VEGETATION

Coverage Name: POTVEG

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:2,500,000

Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
 Illinois Natural History Survey  
 607 E. Peabody Drive  
 Champaign, IL 61820  
 (217) 333-8907

or  
 IGIS Database Administrator  
 (217) 333-8907

Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item POT-VEG.

INFO Item Description

232 records

DATAFILE NAME: POTVEG.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	POTVEG#	4	5	B	-	
13	POTVEG-ID	4	5	B	-	
17	POT-VEG	1	2	I	-	Potential natural vegetation
18	SHADE	2	2	I	-	

Coding for INFO Items

POTENTIAL NATURAL VEGETATION (Column 17)

Central and Eastern Grasslands

1 = Bluestem prairie (Andropogon - Panicum-Sorghastrum)

Grassland and Forest Combinations

2 = Oak savanna (Quercus - Andropogon)

3 = Mosaic of bluestem prairie and oak-hickory forest

#### Eastern Forests (Broadleaf)

4 = Maple-basswood forest (Acer-Tilia)

5 = Oak-hickory forest (Quercus-Carya)

#### Eastern Forests (Broadleaf and Needleleaf)

6 = Southern floodplain forest (Quercus-Nyssa-Taxodium)

9 = Water

### Mapping Procedures

#### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

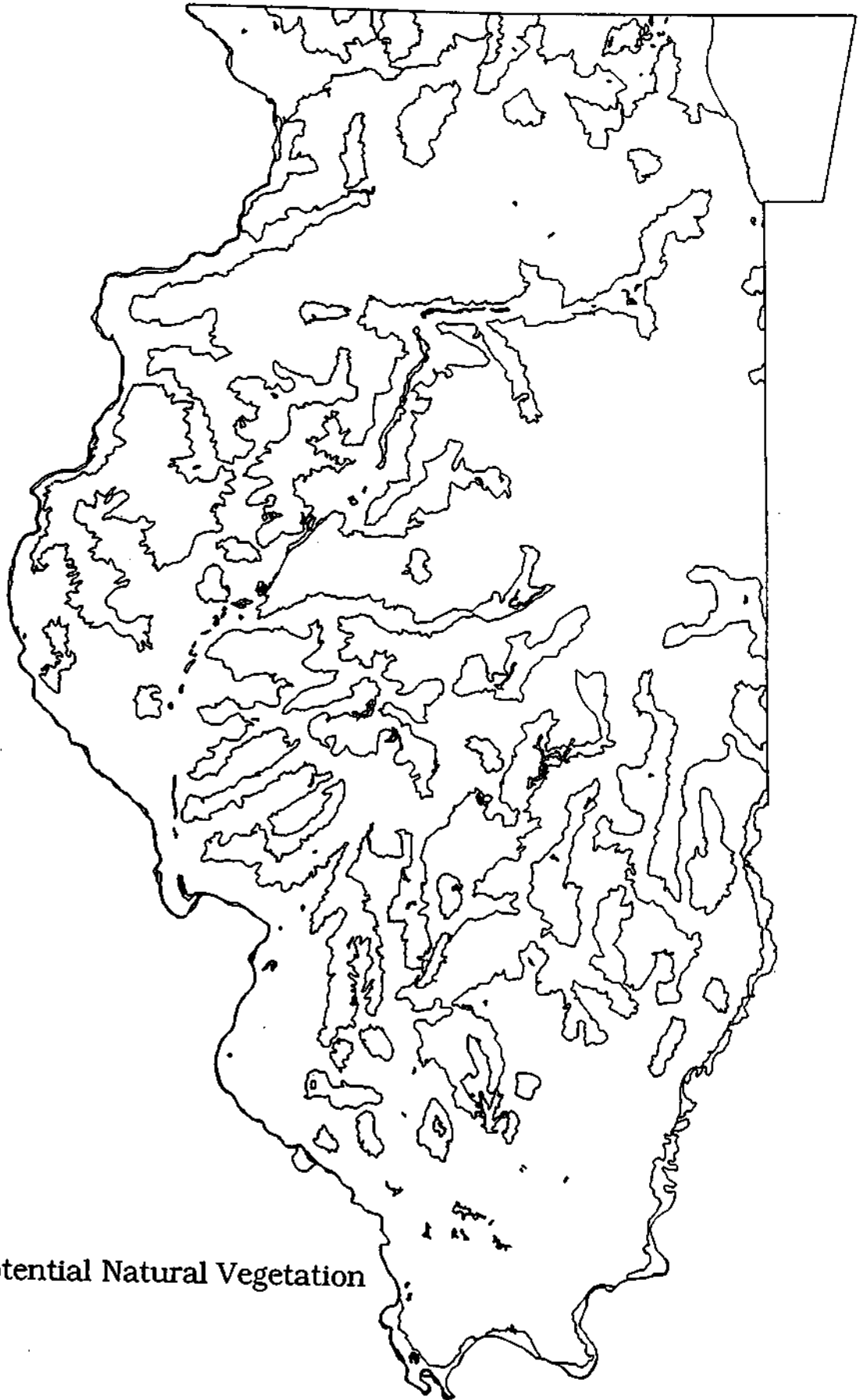
#### *Potential Natural Vegetation*

The *Potential Natural Vegetation Map* by Kuchler shows the general vegetation zones that would exist in the state without disturbances by man. Since these units represent broad transition zones, the vegetation boundary lines were generally adjusted to soil association boundaries. The source map at 1:2,500,000 scale was photographically enlarged to 1:500,000 and rectified to the basemap by registering county boundaries, streams, and the state boundary lines.

### Bibliography

#### *Potential Natural Vegetation*

Kuchler, A.W., 1964, *Potential Natural Vegetation of the Conterminous United States*: scale 1:2,500,000.



Potential Natural Vegetation

## SCS LAND RESOURCE AREAS

Coverage Name: RESAREA

Location of Coverages: ILLINOIS > ITU

Coverage Type: POLYGON

Mapscale: 1:2,500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-8907  
or  
IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item RES-AREA.

### INFO Item Description

10 records

DATAFILE NAME: RESAREA.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	RESAREA#	4	5	B	-	
13	RESAREA-ID	4	5	B	-	
17	RES-AREA	1	2	I	-	SCS land resource areas

### Coding for INFO Items

SCS LAND RESOURCE AREAS (Column 17)

- 1 = Southern Wisconsin and Northern Illinois drift plain (LRA 958)
- 2 = Northern Mississippi Valley loess hills (LRA 105)
- 3 = Illinois and Iowa deep loess and drift (LRA 108)
- 4 = Northern Illinois and Indiana heavy till (LRA 110)
- 5 = Indiana and Ohio till plain (LRA 111)
- 6 = Central claypan areas (LRA 113)



7 = Southern Illinois and Indiana fen loess and till plain (LRA 114)

8 = Central Mississippi Valley wooded slopes (LRA 115)

## **Mapping Procedures**

### *Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Waterbodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

### *SCS Land Resource Areas*

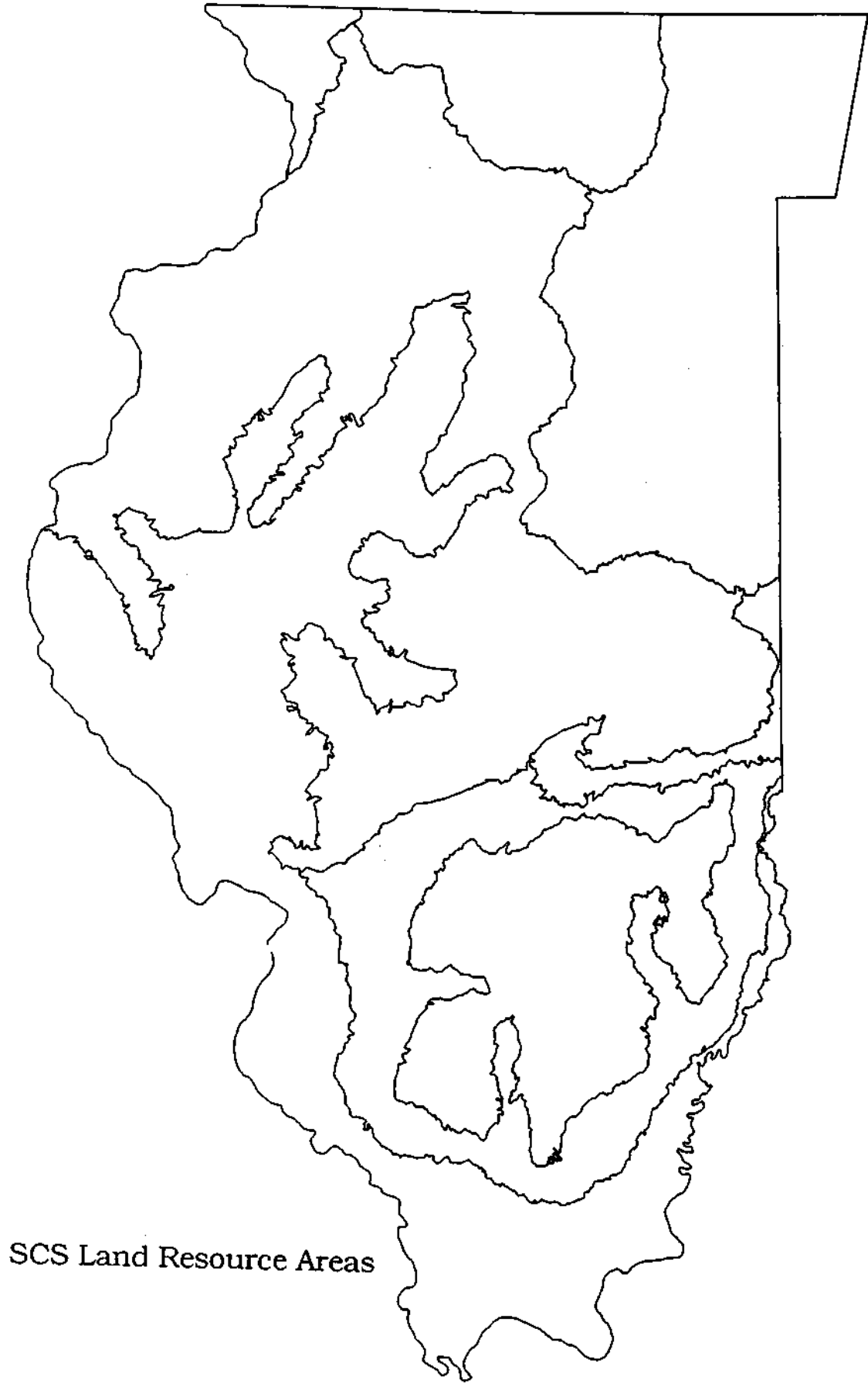
There are eight land resource areas in Illinois, each of which is characterized by a unique pattern of topography, climate, vegetation, and soils. These areas generally correlate to unique groups of soil associations.

The source map (scale 1:2,500,000) was photographically enlarged to the 1:500,000 mapping scale and redrafted on a mylar overlay. The state boundary was used to register the photo-enlargement to the basemap. Because these units were designed to provide a regional perspective rather than detailed site information, no attempt was made to substantially alter the map. The boundaries were generally adjusted to soil association boundaries.

## **Bibliography**

### *SCS Land Resource Areas*

U.S. Soil Conservation Service, 1978, Major Land Resource Areas of Illinois, U.S. Department of Agriculture: scale 1:2,500,000.



SCS Land Resource Areas

## SOIL ASSOCIATIONS

**Coverage Name:** SOILALL

**Location of Coverages:** ILLINOIS > ITU

**Coverage Type:** POLYGON

**Mapscale:** 1:500,000

### Contact Person

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-8907

or

IGIS Database Administrator  
(217) 333-8907

### Coverage History

Created in 1984 by ESRI as part of TUPYMG; DISSOLVED from TUPYMG on INFO item SOIL-ASC. The coverage contains a few minor errors.

### INFO Item Description

2,820 records

DATAFILE NAME: SOILALL.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SOILALL#	4	5	B	-	
13	SOILALL-ID	4	5	B	-	
17	SOIL-ASC	4	5	I	-	Soil associations
	<b>** REDEFINED ITEMS **</b>					
17	P	2	2	I	-	Soil parent material
19	SOIL	2	2	I	-	Soil association

### Coding for INFO Items

SOIL ASSOCIATION (Columns 17-20)

Soil Parent Material (Columns 17-18)

01 = Thick loess (>60 inches)

02 = Moderately thick to thin loess (10-60+ inches) on Illinoian drift with or without paleosols

- 03 = Moderately thick to thin loess (20-60 inches) on Aeolian Wisconsin loamy sands or sands
- 04 = Moderately thick loess (40-60 inches) on medium- to-fine-textured, Wisconsin till or lacustrine sediments
- 05 = Moderately thick to thin loess or silty material (24-60+ inches) on medium-textured, Wisconsin outwash
- 06 = Thin loess (10-40 inches) on loam or sandy loam, Wisconsin till
- 07 = Thin loess (<20 inches) on silty clay loam, Wisconsin till, or lacustrine sediments
- 08 = Thin loess (<20 inches) on silty clay or clay, Wisconsin till, or lacustrine sediments
- 09 = Loamy, silty, and clayey Wisconsin lacustrine sediments
- 10 = Thin loamy or silty materials on gravelly Wisconsin outwash
- 11 = Thin silty or loamy materials on sandy and loamy Wisconsin outwash
- 12 = Thick, sandy Wisconsin outwash and Aeolian materials
- 13 = Thin to thick loess or loamy materials with or without residuum on limestone
- 14 = Thin to thick loess or loamy materials with or without residuum on interbedded sandstone, siltstone, and shale
- 15 = Sandy to clayey alluvial sediments on bottomlands
- 16 = Organic materials (peats and mucks)
- 98 = Water

Soil Associations (Columns 19-20)

*Dark and Moderately Dark (Prairie)*

- 01 = Port Byron-Joy
- 02 = Tama-Muscatine-Sable
- 03 = Tama-Ipava-Sable
- 04 = Herrick-Virden-Piasa
- 05 = Oconee-Cowden-Piasa
- 06 = Hoyleton-Cisne-Huey
- 07 = Winnebago-Durand-Ogle
- 08 = Broadwell-Waukegan-Pilot
- 09 = Catlin-Flanagan-Drummer
- 10 = Wenona-Rutland-Streator
- 11 = Plano-Proctor-Worthen
- 12 = Saybrook-Dana-Drummer
- 13 = Griswold-Ringwood
- 14 = Varna-Elliott-Ashkum
- 15 = Symerton-Andres-Reddick
- 16 = Swygert-Bryce-Mokena
- 17 = Clarence-Rowe
- 18 = Harco-Patton-Montgomery
- 19 = Martinton-Milford
- 20 = Lorenzo-Warsaw-Wea
- 21 = Jasper-LaHogue-Selma
- 22 = Sparta-Dickinson-Onarga
- 23 = Channahon-Dodgeville-Ashdale
- 24 = Lawson-Sawmill-Darwin
- 25 = Houghton-Palms-Muskego

*Light and Moderately Dark (Forest)*

- 31 = Seaton-Timula
- 32 = Fayette-Rozetta-Stronghur
- 33 = Alford-Muren-Iva
- 34 = Clinton-Keomah-Rushville
- 35 = Hosmer-Stoy-Weir
- 36 = Ava-Bluford-Wynoose
- 37 = Westville-Pecatonica-Flagg
- 38 = Middletown-Tell-Thebes
- 39 = Birkbeck-Sabina-Sunbury
- 41 = St. Charles-Camden-Drury
- 42 = Dodge-Russell-Miami
- 43 = Kidder-McHenry
- 44 = Morley-Blount-Beecher
- 45 = St. Clair-Nappanee-Frank
- 46 = Markland-Colp-Del Rey
- 48 = Casco-Fox-Ockley
- 49 = Martinsville-Sciotoville
- 50 = Oakville-Lamont-Alvin
- 51 = Ritchey-New Glarus-Palsgrove
- 52 = Alford-Goss Baxter
- 53 = Alford-Wellston
- 54 = Hosmer-Zanesville-Berks
- 55 = Grantsburg-Zansville-Wellston
- 56 = Derinda-Schapville-Elroy
- 57 = Haymond-Petrolia-Karnak
- 98 = Water

**Mapping Procedures**

*Overview for the Original Integrated Terrain Unit Coverage*

This manuscript synthesizes and organizes natural resource information for the state. Data included are natural divisions, bedrock geology, Quaternary geology, STACK units, glacial boundaries, soil associations, SCS land resource areas, ecoregions, and potential natural vegetation. The mapping resolution was generally 640 acres. Water bodies were mapped to a minimum size of 320 acres.

Data were integrated in the following order: Quaternary geology, STACK units, glacial boundaries, bedrock geology, soil associations, natural divisions, potential natural vegetation, SCS land resource areas, and finally ecoregions.

*Soil Associations*

A soil association is a group of related soil series that generally occur in a characteristic pattern of landscapes that have identifiable topographic features, slopes, and parent materials. The *General Soil Map of Illinois* (scale 1:500,000) identifies the location and extent of 50 soil association types. Scale and projection of the source map and basemap were the same. This

allowed a direct transfer of the data to a mylar overlay. Some considerations during integration included:

1. In alluvial areas, soil unit boundaries were adjusted to corresponding Quaternary geology or STACK unit delineations.
2. Where alluvial soil units could be verified on the Landsat scene, they were extended up drainages for a maximum of an additional 0.5 inch. Further extension would have deviated too much from the original map.
3. When soil units meandered back and forth along drainages, they were redrafted to fit the topography and landforms.
4. Soil units located outside of alluvial areas were not integrated unless sliver polygons were created. In order to resolve sliver polygons, the lines created from either the Quaternary geology or STACK unit maps were considered more definitive.
5. Soil units were not changed where they extended into mined-out areas shown on either the STACK unit or Quaternary geology maps.

#### Bibliography

##### *Soil Associations*

Fehrenbacher, J.B., 1982, General Soil Map of Illinois, Illinois Agricultural Experiment Station, University of Illinois at Urbana-Champaign: scale 1:500,000.



Soil Associations

## SOIL AND WATER CONSERVATION DISTRICTS

Coverage Name: SOIL-WATER

Location of Coverages: ILLINOIS > ADMIN

Coverage Type: POLYGON

Mapscale: 1:250,000

### Contact Person

Manager, GIS Section

Office of Research & Planning

Illinois Department of Energy & Natural Resources

325 W. Adams Street, Room 300

Springfield, IL 62704

(217)785-1211

### Coverage History

Created in 1983 by ESRI as part of AUPYMG; DISSOLVED from AUPYFX on INFO item SOIL-WTR-CON.

### INFO Item Description

20 records

DATAFILE NAME: SOIL-WATER.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SOIL-WATER#	4	5	B	-	
13	SOIL-WATER	4	5	B	-	
17	DISTRICT#	2	2	I	-	

### Coding for INFO Items

SOIL AND WATER CONSERVATION DISTRICTS (Columns 17-18)

01-16 = District number

### Mapping Procedures

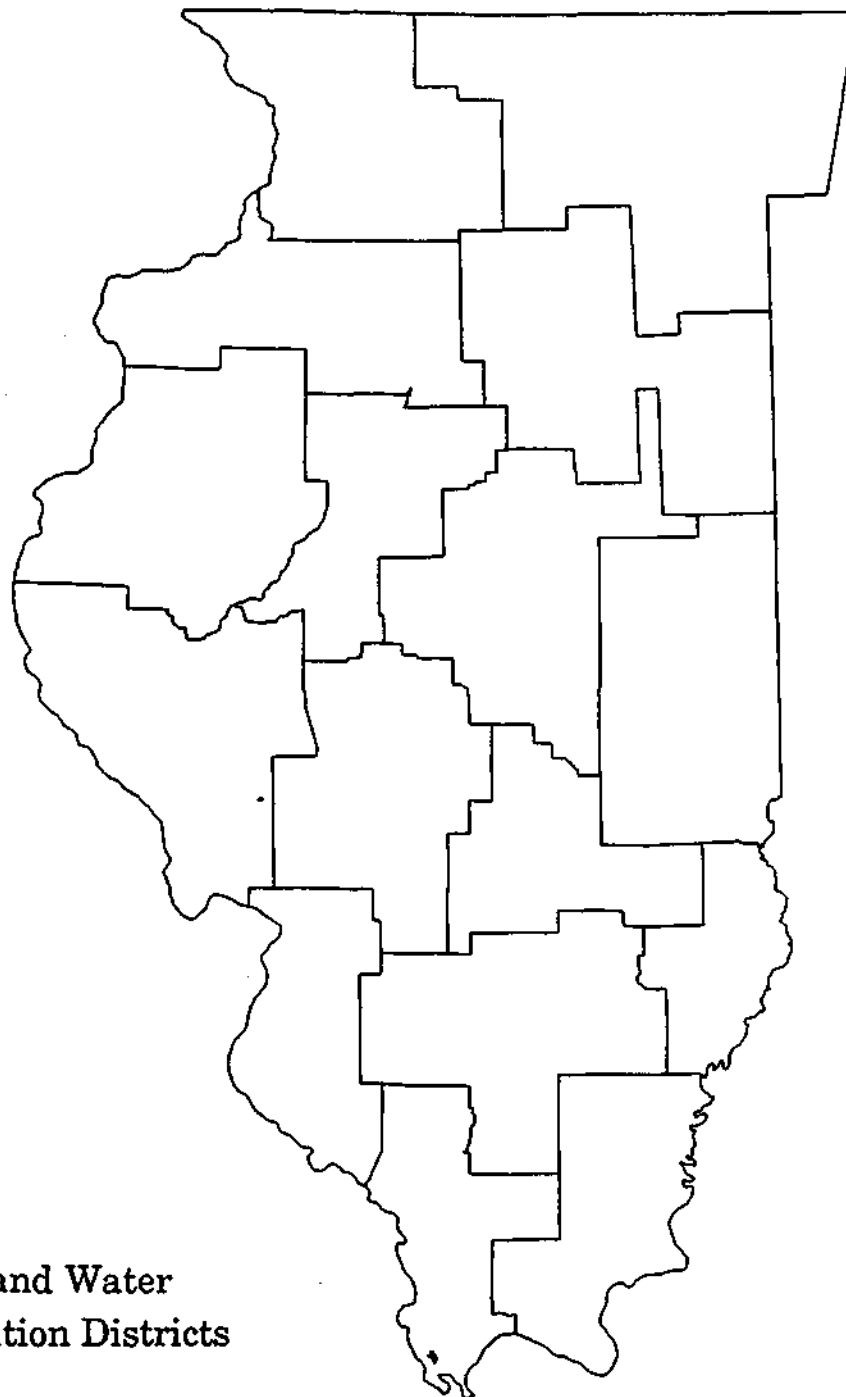
AUPYFX was a polygon map with information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections.



The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

### **Bibliography**

U.S. Soil Conservation Service, 1983, Map of Illinois Soil and Water Conservation Districts, Department of Agriculture: scale 1:2,500,000.



Soil and Water  
Conservation Districts

**SPECIAL FEDERAL RESERVE DESIGNATIONS**

Coverage Names: SFED-LAND-PT, SFED-LAND-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage Types: POINT, POLYGON

Mapscale: 1:500,000

Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

Coverage History

Created in 1983 by ESRI as AUPTMG AND AUPYMG. RECREATION-PT was RESELECTED from AUPTFX on INFO item SPC-FED-RES. RECREATION-PY was DISSOLVED from AUPYFX on INFO item SPC-FED-RES.

INFO Item Description

64 records

DATAFILE NAME: SFED-LAND-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	SFED-LAND-PT#	4	5	B	-	
13	SFED-LAND-PT-ID	4	5	B	-	
17	ID#	3	3	I	-	<b>Special federal reserve designations</b>
20	CATEGORY-NAME	35	35	C	-	
55	SITE-NAME	50	50	C	-	
105	FIPS#	3	3	I	-	
108	COUNTY#	3	3	I	-	
	<b>** REDEFINED ITEMS **</b>					
17	ID-NUMBER	3	3	I	-	
17	CATEGORY#	1	1	I	-	
18	SITE#	2	2	I	-	

77 records

DATAFILE NAME: SFED-LAND-PT.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	3	3	I	-	-
4	SITE-NAME	50	5	C	-	-

3 records

DATAFILE NAME: SFED-LAND-PT.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	1	1	I	-	-
2	CATEGORY-NAME	3	35	C	-	-

14 records

DATAFILE NAME: SFED-LAND-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	-
5	PERIMETER	4	12	F	3	-
9	SFED-LAND-PY#	4	5	B	-	-
13	SFED-LAND-PY-ID	4	5	B	-	-
17	ID#	3	3	I	-	Special federal reserve designations
20	CATEGORY-NAME	35	35	C	-	-
55	SITE-NAME	50	50	C	-	-
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	3	3	I	-	-
17	CATEGORY#	1	1	I	-	-
18	SITE#	2	2	I	-	-

77 records

DATAFILE NAME: SFED-LAND-PY.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	3	3	I	-	Special federal reserve designation
4	SITE-NAME	50	50	C	-	-

3 records

DATAFILE NAME: SFED-LAND-PY.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	1	1	I	-	
2	CATEGORY-NAME	35	35	C	-	

Coding for INFO Items

SPECIAL FEDERAL RESERVE DESIGNATIONS

ID NUMBER (Columns 17-19)

CATEGORY# (Column 17)

SITE# (Columns 18-19)

CATEGORY# and CATEGORY NAME

1 = National natural landmarks

2 = National heritage landmarks

9 = No special federal designation

SITE-NAME

Name of individual site

FIPS NUMBER (Federal Information Processing System)

1-203 = FIPS# FIPS# = [ ( COUNTY# x 2 ) - 1 ]

COUNTY NUMBER (Alphabetical sequence number)

1-102 = COUNTY#

Mapping Procedure

AUPYMG and AUPTMG were polygon and point maps with information related to various administrative data types. Included were data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript. An exception to this was National Heritage Landmarks. Data for the location of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.

Bibliography

*County by Federal FIPS and State Code*

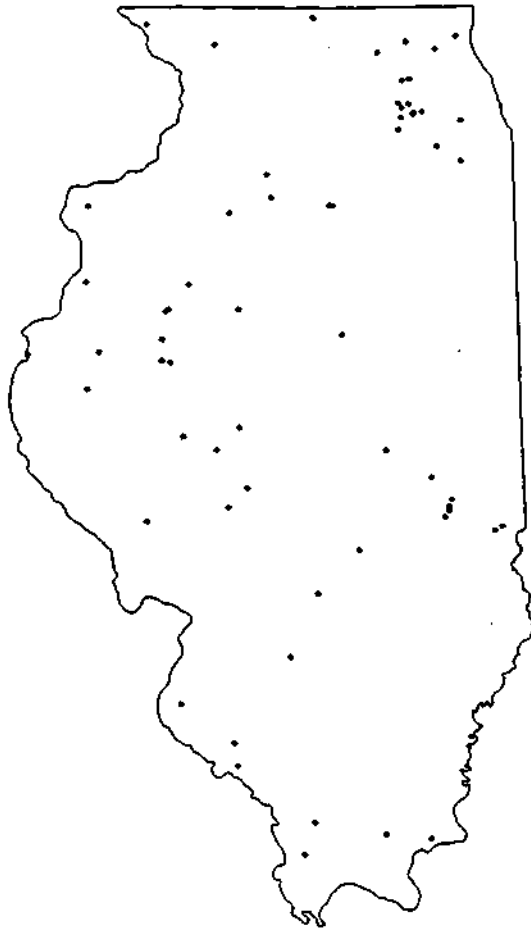
Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

*Special Federal Reserve Designation*

U.S. Department of the Interior, 1980, National Register of Natural Landmarks in U.S. National Archives Federal Register, Vol. 45, No. 232, Notices.

U.S. Department of the Interior, Heritage Conservation and Recreation Service, 1979-1983, National Register of Historic Places, Annual Listing of Historic Properties in U.S. National Archives Federal Register Vol. 44, No. 26, Bk. 2, pp. 7461-7466 (1979); Vol. 45, No. 54, Part II, pp. 17454-17455 (1980); Vol. 46, No. 22, Part II, pp. 10630-10632 (1981); Vol. 47, No. 22, Part III, pp. 4935 (1982); Vol. 48, No. 41, Part II, pp. 8634-8636 (1983).



**Special Federal Reserve  
Designations - Points**



**Special Federal Reserve  
Designations - Polygons**

## STATE NATURAL AREAS

Coverage Names: NATURAL-LN, NATURAL-PT, NATURAL-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage **Type:** LINE, POINT, POLYGON

Mapscale: 1:250,000 to 1:750,000

### Contact **Person:**

Dr. Warren Brigham or Dr. Louis Iverson  
Illinois Natural History Survey  
607 E. Peabody Drive  
Champaign, IL 61820  
(217) 333-8907

or

IGIS Database Administrator  
(217)333-8907

### Coverage History

Created in 1983 by ESRI as part of AULNMG, AUPTMG, and AUPYMG. NATURAL-LN was RESELECTED from AULNMG on INFO item STATE-NAT-AREA. NATURAL-PT was RESELECTED from AUPTFX on INFO item STATE-NAT-AREA. NATURAL-PY was DISSOLVED from AUPYFX on INFO item STATE-NAT-AREA. In 1990, it was replaced by an updated, higher resolution database located elsewhere on the system.

### INFO Item Description

21 records

DATAFILE NAME: NATURAL-LN.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	NATURAL-LN#	4	5	B	-	
25	NATURAL-LN-ID	4	5	B	-	
29	FIPS#	3	3	I	-	
32	COUNTY#	3	3	I	-	
35	SNA-REFERENCE#	4	4	C	-	State natural areas reference number

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
39	SNA-AREA#	4	4	I	-	
43	SNA-NAME	95	95	C	-	State natural areas name
<b>** REDEFINED ITEMS **</b>						
32	SNA-CODE	7	7	C	-	

1,079 records

DATAFILE NAME: NATURAL-LN.SNA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	SNA-CODE	7	7	C	-	
8	SNA-NAME	95	95	C	-	

1,004 records

DATAFILE NAME: NATURAL-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	NATURAL-PT#	4	5	B	-	
13	NATURAL-PT-ID	4	5	B	-	
17	STATE-RES-SYS	5	4	I	-	State reserve system units
22	FED-RES-SYS	4	4	I	-	Federal reserve system units
26	SPC-FED-RES	3	3	I	-	Special federal reserve designations
29	INV-PUB-REC	5	5	I	-	Inventory of Public Recreation Land sites
34	NATURE-PRESERVE	3	3	I	-	
37	NAT-HER-LANDMARK	15	15	C	-	National heritage landmarks
52	FIPS#	3	3	I	-	
55	COUNTY#	3	3	I	-	
58	SNA-REFERENCE#	4	4	C	-	State natural areas reference number
62	SNA-AREA#	4	4	I	-	
66	SNA-NAME	95	95	C	-	State natural areas name

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
<b>** REDEFINED ITEMS **</b>						
55	SNA-CODE	7	7	C	-	

1,079 records

DATAFILE NAME: NATURAL-PT.SNA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	SNA-CODE	7	7	C	-	
8	SNA-NAME	95	95	C	-	

98 records

DATAFILE NAME: NATURAL-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	NATURAL-PY#	4	5	B	-	
13	NATURAL-PY-ID	4	5	B	-	
17	FIPS#	3	3	I	-	
20	COUNTY#	3	3	I	-	
23	SNA-REFERENCE#	4	4	C	-	State natural areas reference number
27	SNA-AREA#	4	4	I	-	
31	SNA-NAME	95	95	C	-	State natural areas name
<b>** REDEFINED ITEMS **</b>						
20	SNA-CODE	7	7	C	-	

1,079 records

DATAFILE NAME: NATURAL-PY.SNA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	SNA-CODE	7	7	C	-	
8	SNA-NAME	95	95	C	-	

**Coding for INFO Items**

STATE RESERVE SYSTEM UNITS (Columns 17-21)

See coverages STATE-LAND-PT, STATE-LAND-LN, STATE-LAND-PY.



FEDERAL RESERVE SYSTEM UNITS (Columns 22-25)  
 See coverages FED-LAND-PT, FED-LAND-LN, FED-LAND-PY.

SPECIAL FEDERAL RESERVE DESIGNATIONS (Columns 26-28)  
 See coverages SFED-LAND-PT, SFED-LAND-PY.

INVENTORY OF PUBLIC RECREATION LAND SITES (Columns 29-33)  
 See coverages RECREATION-PT, RECREATION-LN, RECREATION-PY.

NATURE-PRESERVE (Columns 34-36)  
 See coverages NAT-PRESERVE-PT, NAT-PRESERVE-PY.

NATIONAL HERITAGE LANDMARK (Columns 37-51)  
 See coverages HERITAGE-PT, HERITAGE-LN, HERITAGE-PY.

FIPS NUMBER (Columns 29-31, 52-54, 17-19)  
 1-203 = FIPS#

COUNTY NUMBER (Columns 32-34, 55-57, 20-22)  
 1-102 = COUNTY#

STATE NATURAL AREA REFERENCE NUMBER (Columns 35-38, 58-61, 23-26)  
 First columns = Blank or letter  
 Last 3 columns = Numbers

SNA AREA NUMBER (Columns 39-42, 62-64, 27-30)  
 SNA-AREA# = 1-9999

SNA NAME (Columns 43-137, 66-160, 31-125)  
 Name of the state natural area

REDEFINED ITEM  
 SNA-CODE (7 columns)  
 COUNTY# = Columns 1-3  
 SNA-REFERENCE# = Columns 4-7

### **Mapping Procedures**

AULNMG, AUPTMG and AUPYMG were polygon, line, and point maps with information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000.

## Bibliography

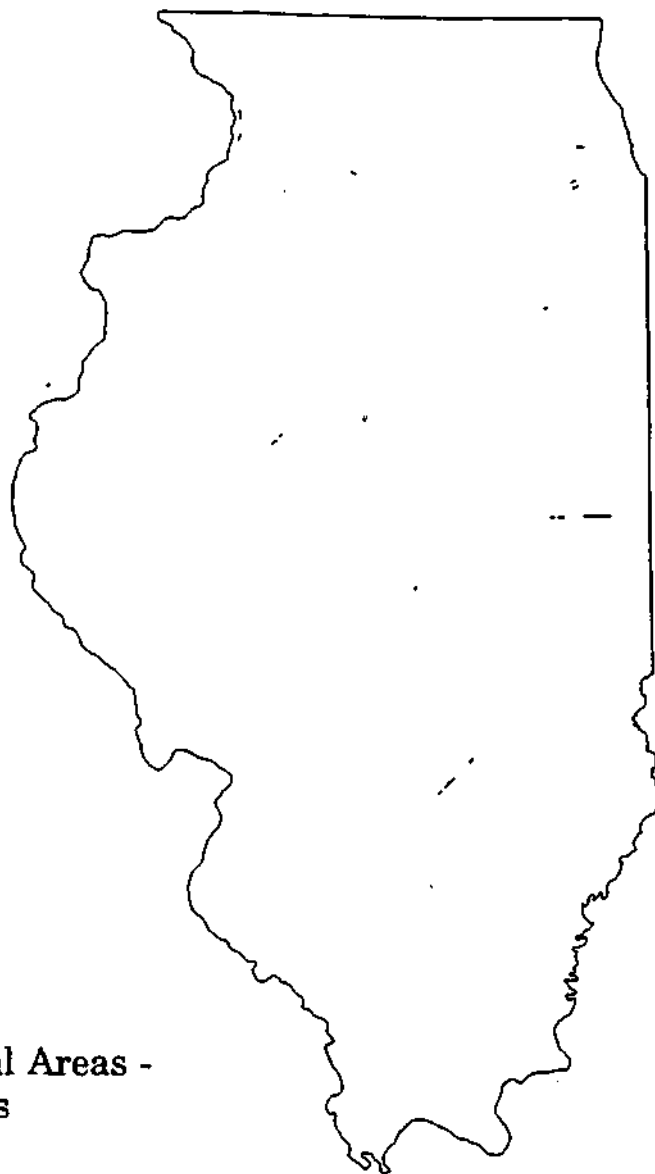
### *County by Federal FIPS and State Code*

Illinois State Water Survey, 1983, County names, numbering system, and abbreviations being used by the SWS database system water use surveys.

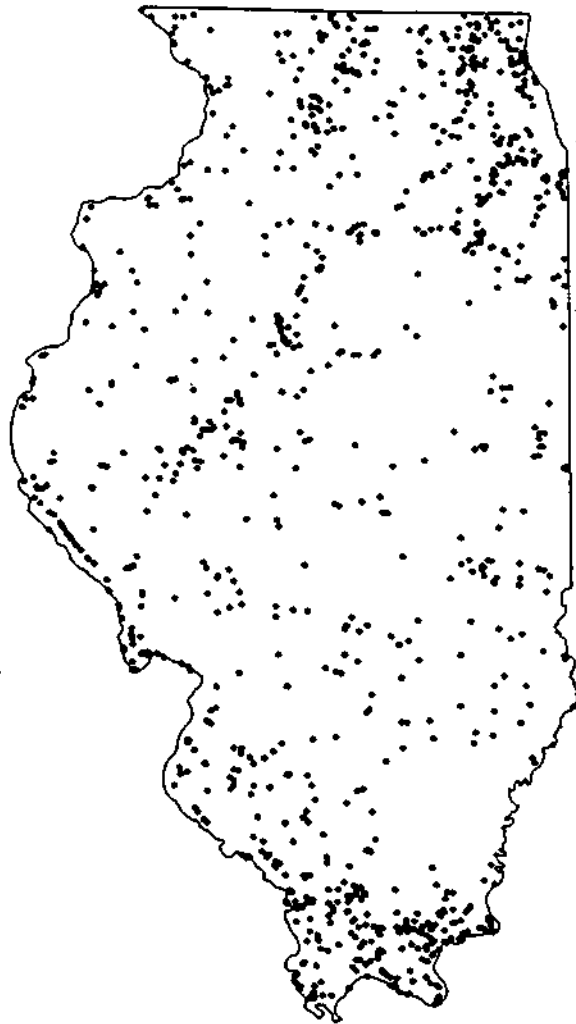
U.S. Geological Survey, 1972, State of Illinois: scale 1:500,000.

### *State Natural Areas*

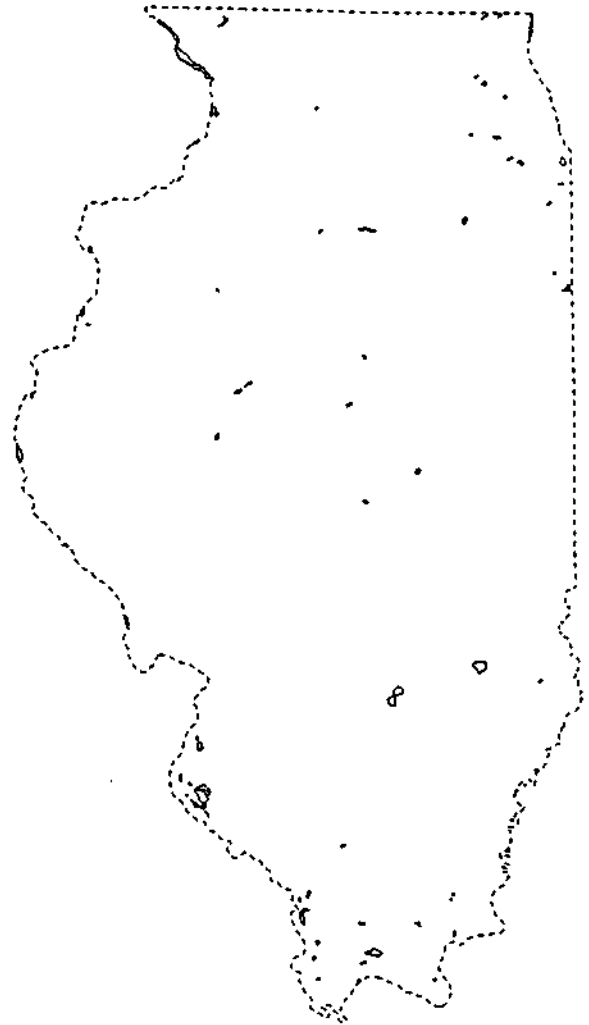
University of Illinois at Urbana-Champaign, Department of Landscape Architecture and the Natural Land Institute, 1978, Illinois Natural Areas Inventory, technical report (with county maps delineating natural areas) Illinois Department of Conservation: scale variable.



**State Natural Areas -  
Lines**



State Natural Areas -  
Points



State Natural Areas -  
Polygons

## STATE RESERVE SYSTEM UNITS

Coverage Names: STATE-LAND-PT, STATE-LAND-LN, STATE-LAND-PY

Location of Coverages: ILLINOIS > ADMIN

Coverage Types: POINT, LINE, POLYGON

Mapscale: 1:500,000

### Contact Person

Manager, GIS Section  
 Office of Research & Planning  
 Illinois Department of Energy & Natural Resources  
 325 W. Adams Street, Room 300  
 Springfield, IL 62704  
 (217)785-1211

### Coverage History

Created in 1983 by ESRI as AUPTMG, AULNMG, and AUPYMG. STATE-LAND-PT was RESELECTED from AUPTFX on INFO item STATE-RES-SYS. STATE-LAND-LN was RESELECTED from AULNMG on INFO item STATE-RES-SYS. STATE-LAND-PY was DISSOLVED from AUPYFX on INFO item STATE-RES-SYS.

### INFO Item Description

213 records

DATAFILE NAME: STATE-LAND-PT.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE-LAND-PT#	4	5	B	-	
13	STATE-LAND-PT-ID	4	5	B	-	
17	ID#	4	4	I	-	State reserve system units
21	CATEGORY-NAME	65	65	C	-	
86	SITE-NAME	100	100	C	-	
186	FIPS#	3	3	I	-	
189	COUNTY#	3	3	I	-	
192	SNA-REFERENCE#	4	4	C	-	State natural areas reference number
196	SNA-AREA#	4	4	I	-	
200	SNA-NAME	95	95	C	-	State natural areas name

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	4	4	I	-	
17	CATEGORY#	2	2	I	-	
19	SITE#	2	2	I	-	
189	SNA-CODE	7	7	C	-	State natural areas code

310 records

DATAFILE NAME: STATE-LAND-PT.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	4	4	I	-	State reserve system units
5	SITE-NAME	100	100	C	-	

25 records

DATAFILE NAME: STATE-LAND-PT.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	65	65	C	-	

1,079 records

DATAFILE NAME: STATE-LAND-PT.SNA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	SNA-CODE	7	7	C	-	State natural areas code
8	SNA-NAME	95	95	C	-	State natural areas name

13 records

DATAFILE NAME: STATE-LAND-LN.AAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	FNODE#	4	5	B	-	
5	TNODE#	4	5	B	-	
9	LPOLY#	4	5	B	-	
13	RPOLY#	4	5	B	-	
17	LENGTH	4	12	F	3	
21	STATE-LAND-LN#	4	5	B	-	
25	STATE-LAND-LN-ID	4	5	B	-	
29	ID#	4	4	I	-	State reserve system units

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
33	CATEGORY-NAME	65	65	C	-	
98	SITE-NAME	25	25	C	-	
123	FIPS#	3	3	I	-	
126	COUNTY#	3	3	I	-	
<b>** REDEFINED ITEMS **</b>						
29	ID-NUMBER	4	4	I	-	
29	CATEGORY#	2	2	I	-	
31	SITE#	2	2	I	-	

2 records

DATAFILE NAME: STATE-LAND-LN.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	4	4	I	-	State reserve system units
5	SITE-NAME	25	25	C	-	

25 records

DATAFILE NAME: STATE-LAND-LN.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	65	65	C	-	

121 records

DATAFILE NAME: STATE-LAND-PY.PAT

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	AREA	4	12	F	3	
5	PERIMETER	4	12	F	3	
9	STATE-LAND-PY#	4	5	B	-	
13	STATE-LAND-PY-ID	4	5	B	-	
17	ID#	4	4	I	-	State reserve system units
21	CATEGORY-NAME	65	65	C	-	
86	SITE-NAME	100	100	C	-	
<b>** REDEFINED ITEMS **</b>						
17	ID-NUMBER	4	4	I	-	

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
17	CATEGORY#	2	2	I	-	
19	SITE#	2	2	I	-	

310 records

DATAFILE NAME: STATE-LAND-PY.DATA

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	ID#	4	4	I	-	State reserve system units
5	SITE-NAME	100	100	C	-	

25 records

DATAFILE NAME: STATE-LAND-PY.DATA2

<i>Col</i>	<i>Item Name</i>	<i>Width</i>	<i>Output</i>	<i>Type</i>	<i>N.Dec</i>	<i>Expanded Item Name</i>
1	CATEGORY#	2	2	I	-	
3	CATEGORY-NAME	65	65	C	-	

### Coding for INFO Items

STATE RESERVE SYSTEM UNITS

ID# (Columns 17-20 or 29-32)

CATEGORY# (Columns 17-18 or 29-30)

SITE# (Columns 19-20 or 31-32)

CATEGORY# and CATEGORY NAME (Columns 21-85 or 33-97)

Department of Conservation

- 11 = State parks
- 12 = State memorials
- 13 = State conservation areas
- 14 = State boating access areas
- 15 = State recreational areas
- 16 = Public lands operated areas
- 17 = Nature preserves
- 18 = Natural areas
- 19 = Fish and wildlife areas
- 20 = Historic sites
- 21 = State forests
- 22 = Game farms
- 23 = State tree nurseries
- 24 = Fish facilities
- 25 = Leased and operated properties

Department of Conservation Overlap Areas

- 31 = State park and nature preserve
- 32 = State park and leased and operated properties
- 33 = State boating access area and leased and operated properties

- 34 = Fish and wildlife area and leased and operated properties
- 35 = State conservation area and fish and wildlife area
- 36 = State park and state memorial
- 37 = State park and state fish and wildlife area

State Museum

- 41 = State Museum reserves

State University

- 51 = State university reserves
- 99 = Not a state system unit type

FIPS NUMBER (Federal Information Processing System)

- 1-203 = FIPS#    FIPS# = [ ( COUNTY# x 2 ) - 1 ]

COUNTY NUMBER (alphabetical sequence number)

- 1-102 = COUNTY#

STATE NATURAL AREA REFERENCE NUMBER (Columns 192-195 )

- First column = Blank or letter
- Last 3 columns = Numbers

STATE NATURAL AREA AREA NUMBER (Columns 196-199)

- SNA-AREA# = 1-9999

STATE NATURAL AREA NAME (Columns 197-292)

- Name of the state natural area

REDEFINED ITEM

- SNA-CODE (7 columns)
- COUNTY# = Columns 1-3
- SNA-REFERENCE# = Columns 4-7

SNA-CODE is also present in the file STATE-LAND-PT.DATA.

Mapping Procedures

This manuscript is a polygon, line, and point map with information related to various administrative data types. Included are data such as county, state, and federal reserves, state natural areas, State Senatorial Districts, regional port districts, and so on. Individual overlays were prepared for all data using existing collateral data that were provided at widely differing scales and projections. The data from each overlay were then transferred and consolidated into a single manuscript at mapscale 1:500,000. An exception to this was National Heritage Landmarks. Data for the location of these were provided as latitude-longitude coordinates. These were keypunched and entered into the final coverage.



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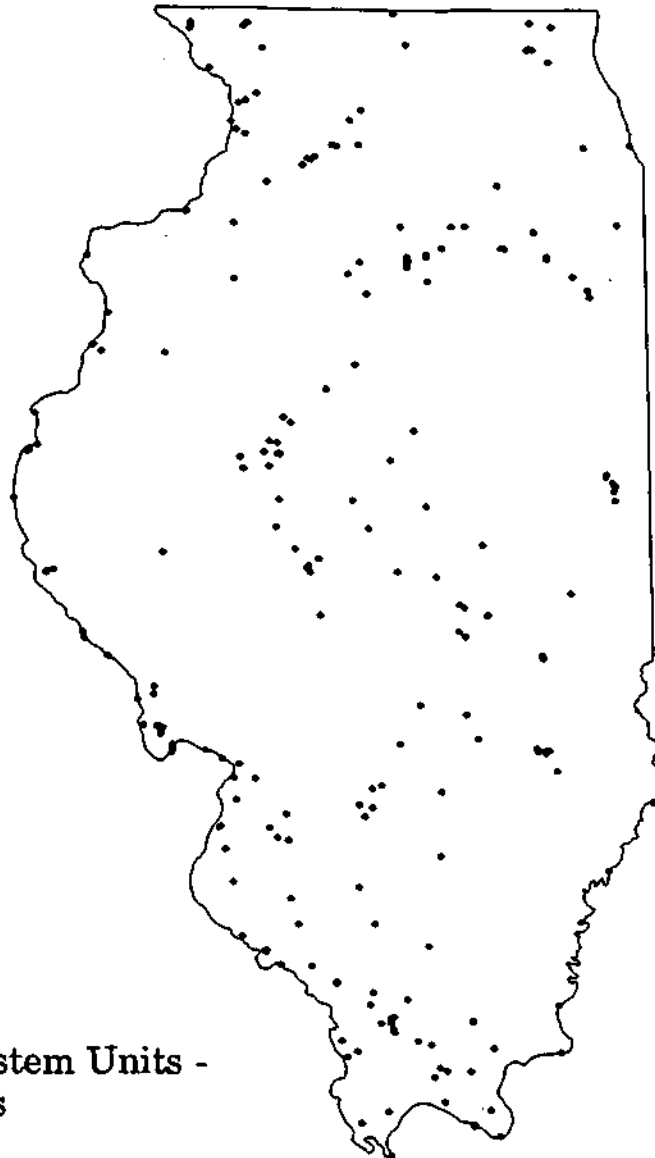
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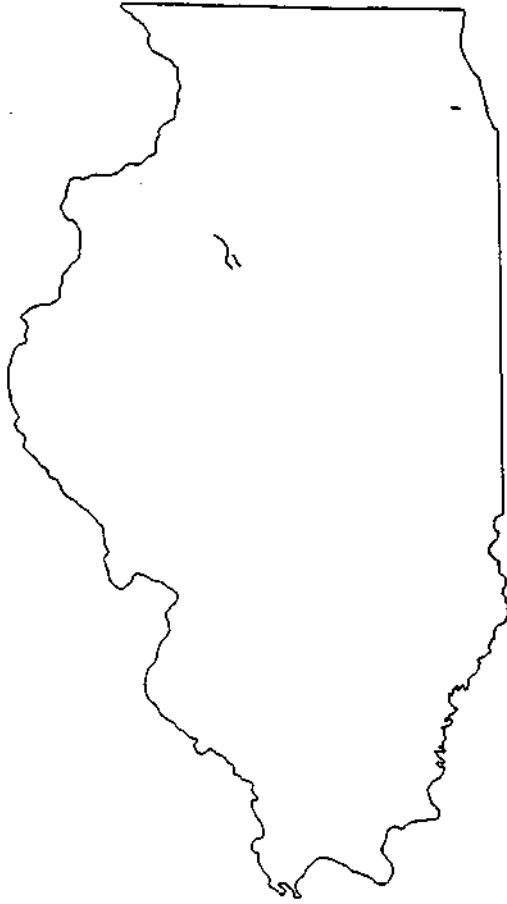
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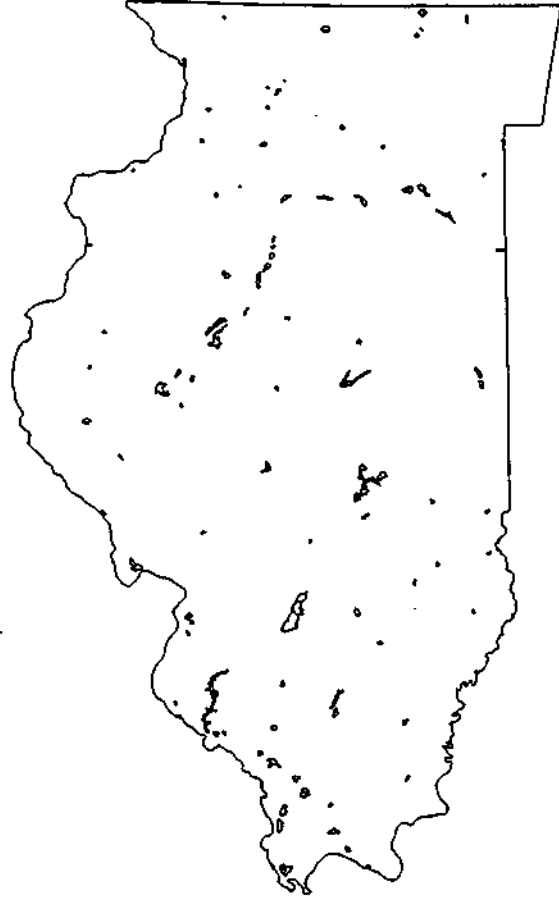
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**State Reserve System Units -  
Points**



State Reserve System Units -  
Lines



State Reserve System Units -  
Polygons