

STATE OF ILLINOIS

LEN SMALL, Governor

DEPARTMENT OF REGISTRATION AND EDUCATION

A. M. SHELTON, Director

**DIVISION OF THE
STATE WATER SURVEY**

A. M. BUSWELL, Chief

BULLETIN No. 24

Pollution of Streams in Illinois



[Printed by authority of the State of Illinois]

**Published in Co-operation with the
DEPARTMENT OF CONSERVATION**

**WM. J. STRATTON, Director
FRANK A. ABBEY, Assistant Director**

Illinois State Register
Springfield, Ill.



1 9 2 7
164779—1500

ORGANIZATION

STATE OF ILLINOIS

LEN SMALL, *Governor*

DEPARTMENT OF REGISTRATION AND EDUCATION

A. M. SHELTON, *Director*

Board of Natural Resources and Conservation Advisers

A. M. SHELTON, *Chairman*

WILLIAM A. NOTES, Chemistry,
Secretary.

JOHN W. ALVORD, Engineering.

EDSON S. BASTIN, Geology.

HENRY C. COWLES, Forestry.

WILLIAM TRELEASE, Biology.

C. M. THOMPSON, Representing the
President of the University of Illi-
nois.

Water Survey Division Committee

A. M. SHELTON

C. M. THOMPSON

WILLIAM A. NOTES

JOHN W. ALVORD

WATER SURVEY DIVISION

A. M. BUSWELL, *Chief*

LETTER OF TRANSMITTAL.

STATE OF ILLINOIS
DEPARTMENT OF REGISTRATION AND EDUCATION
STATE WATER SURVEY DIVISION

URBANA, ILLINOIS, February 18, 1927.

A. M. Shelton, Chairman, and Members of the Board of Natural Resources and Conservation Advisors:

GENTLEMEN: Herewith I submit a report of a survey of the pollution of streams in Illinois and recommend that it be published as Bulletin No. 24 of the State Water Survey Division in cooperation with the State Department of Conservation.

This report should serve a useful purpose in presenting a general picture of the condition of streams in Illinois. It is hoped that its publication will stimulate more detailed investigations by local communities.

Respectfully submitted,
A. M. BUSWELL, *Chief.*

INTRODUCTION.

There has been a recent awakening of interest in the protection and rehabilitation of our streams. The value of lakes and rivers, not only as sources of public water supply but also as places for recreation, is beginning to be generally appreciated by the citizens of Illinois. The fact that large and valuable crops of food can be produced annually in our public waters lends support to the plea of sportsmen, fishermen, and hunters, that a sane program be adopted for the protection and development of our natural water resources. Before such a program can be formulated,- it is necessary to have at hand information concerning the sources and foci of destructive agencies.

A preliminary survey of stream pollution in the State was published by the Water Survey Division in 1924 as a part of Bulletin 20; The information at that time was limited almost exclusively to the pollution caused by domestic sewage. During the past three years an effort has been made to extend the study to include the industrial sources of pollution insofar as this could be done.

The collection of information on industrial or manufacturing wastes is a matter of considerable difficulty. The usual sources of such information are not sufficiently specific to be of any material assistance; there is considerable change in industry from year to year, resulting in the shutting down of some plants and the starting up of others; and the amount of wastes produced by any given plant varies so widely during the year that the estimation of the amount of pollution is impractical. Fortunately, detailed data are not important for the present purpose. It will be necessary for each individual community to make a complete investigation of its wastes at the time that it undertakes a treatment program. The results of a thorough study made even a year or two in advance of that date would probably be obsolete by the time they would be needed.

It has been our immediate purpose, therefore, to present a general picture of the situation which exists in Illinois. We will welcome any additions or corrections which interested persons or organizations may offer in order to make the picture more accurate.

An attempt has been made to cover the State as thoroughly as possible. That this has been done with reasonable success is evidenced by the fact that of 1112 towns in the State having public water supplies our report covers 884. Most of those not included are very, small communities, very few having more than 1000 inhabitants. A check of various sources of information indicates that no important source of pollution has been omitted.

The results of the survey are presented in the form of maps, which, taken together, cover the whole State, as shown in the key (Fig. 1). Each map represents an area having common drainage. The larger drainage basins, those of the Illinois and the Mississippi, have been subdivided into areas of convenient size for mapping on the same scale as that used for the smaller streams. The various industries are indicated by characters which are explained in the legend of each map.

Coal mines have been located according to post office addresses rather than actual position of the mines. There has been no attempt to indicate the location of oil wells; they are practically limited to the basins of the Embarrass-Wabash and the Kaskaskia. More detailed data concerning these two industries may be obtained by addressing this office or the State Geological Survey Division.

In addition to the maps, there is given in alphabetical order a list of the counties in the State, showing for each town the known factors in the pollution problem. These factors include (1) the population of the community, indicated by numbers in parentheses, (2) the existence of a sewer system and its type, (3) the character of sewage treatment, if any, and (4) the nature and number of industries having liquid wastes, with brief notes on the size of the plants wherever such information was available. The information assembled in this form should call attention to the danger spots and should afford starting points for detailed investigations in communities throughout the State.

The principal means of securing information for this Bulletin was by use of a questionnaire as shown in Bulletin No. 20, a copy of which was sent to each community in the State. The number of replies to this Questionnaire was very gratifying, and the information thus obtained was sufficiently extensive to serve our purpose.

Supplementary sources of information were the following:

Records of the State "Water Survey Division.

Visits by the personnel of the State Water Survey Division.

Data from files of the Division of Waterways.

Lists of plans examined by the State Department of Health, furnished by the Division of Sanitary Engineering.

Notices, announcements of bids, articles, and contractors' notes found in various engineering magazines.

A few personal letters and interviews.

Bulletin No. 20 of the State Water Survey Division.

A paper on the Status of Sewage Disposal in Illinois, by Paul Hansen and Harry P. Ferguson, in the 38th Annual Report of the Illinois Society of Engineers.

State Geological Survey map of Illinois mineral industries and list of companies operating coal mines.

The data of this report are summarized in the following table:

Plate No.	Drainage Basin	No. of towns having sewers	No. of towns having treatment partial or complete	No. of Industries Producing Pollution*	
				Organic	Inorganic
I	Rock	20	6	55	34
II	Fox	18	12	12	11
III	Desplaines and Illinois A	33	21	18	26
IV	Illinois B	27	13	25	58
V	Illinois C	10	5	12	8
VI	Vermilion (Illinois)	3	1	6	8
VII	Iroquois and Kankakee	11	4	12	4
VIII	Mackinaw	4	1	7	2
IX	Sangamon	15	4	23	87
X	Vermilion (Wabash)	5	3	13	21
XI	Kaskaskia	16	8	46	102
XII	Little Wabash	7	4	6	0
XIII	Embarrass	8	2	4	7
XIV	Big Muddy	13	9	13	102
XV	Saline	3	2	3	33
XVI	Mississippi A	5	1	10	8
XVII	Mississippi B	5	4	7	2
XVIII	Mississippi C	3	0	5	4
XIX	Mississippi D	11	3	15	35
XX	Ohio	5	2	4	2
XXI	Wabash	5	3	9	5
Totals.....		227	108	305	559

*Exclusive of the Sanitary District of Chicago.

It will be noted that every drainage basin in the State is subject at some point to serious pollution. There is, however, a definite trend toward improvement. The previous report (Bulletin 20) showed 208 towns with sewers and 72 with treatment. The present report shows 227 towns with sewers and 108 with treatment, an increase of 36 towns with treatment. The number of towns without treatment has, therefore, decreased from 136 to 119. It should be noted, also, that the Sanitary District of Chicago is making rapid progress in handling its problem and at the present time appears to be ahead of the schedule imposed by the Secretary of War.

A tabulation of industrial sources of pollution has been considered

inadvisable from the present data. A fair presentation of the situation would require more exact information concerning the amount of discharge from each plant than is now available.

The State law regarding the pollution of rivers and lakes is quoted as follows in Bulletin No. 27 of the Division of Waterways:

Section 14. It shall be the duty of the Department of Public Works and Buildings to see that all the streams and lakes of the State of Illinois, wherein the State of Illinois or any of its citizens has any rights or interests, are not polluted or defiled.

It shall be unlawful for any person, persons, firm or corporation, to throw, discharge, dump, or deposit, or cause, suffer, or procure to be thrown, discharged, dumped or deposited any acids or chemicals, industrial wastes or refuse, poisonous effluent or dye-stuff, clay or other washings, or any other substance deleterious to fish life, or any refuse matter of any kind or description containing solids, substance, discoloring or otherwise polluting any navigable lake, river or stream in this State, or lake, river or stream connected with or the waters of which discharge into any navigable lake, river or stream of this State or upon the borders thereof, or any water course whatsoever. Any person, persons, firm or corporation violating the provisions of this section shall, upon conviction thereof, be fined in a sum not exceeding five hundred dollars (\$500.00) for each offense.

Complaints of violations of the provisions of this section shall be made to the Department of Public Works and Buildings of the State of Illinois. This department is authorized to make investigations, and hold hearings if necessary, to determine whether or not the complaint is well founded. If the department shall find the complaint is well founded it may, after giving due and reasonable notice to the persons to be affected thereby and after giving such persons an opportunity to be heard, make, with the assistance of engineering suggestions, an order prescribing methods for neutralizing said acids and other poisonous substances and to prevent continued pollution of said streams and shall have the power to prohibit discharges, as herein defined, into said lakes or streams until the terms of said order have been complied with; provided, however, that the provisions of this section shall not apply to that portion of the Desplaines River lying downstream from any point at which the waters of the Sanitary District of Chicago have been or are discharged into said Desplaines River, nor to the waters of Hickory Creek, tributary to said Desplaines River.

Under this Act a sewage treatment plant, to be constructed by city of Elmhurst, was necessary.—*Elmhurst vs. Rohmeyer*, 297 Ill. 430.

City is liable for pollution of stream by sewage, at the suit by riparian owner of servient heritage.—*Buckles vs. Decatur*, 234 Ill. App. 89.

ACKNOWLEDGMENT

The writer wishes to acknowledge the assistance of the following members of the Water Survey staff in the collection and preparation of this material: Mr. H. L. White, Dr. R. E. Greenfield, Mr. G. C. Habermeyer, Engineer, and Mr. H. C. Oesterling, Editor.

A. M. BUSWELL, *Chief*.

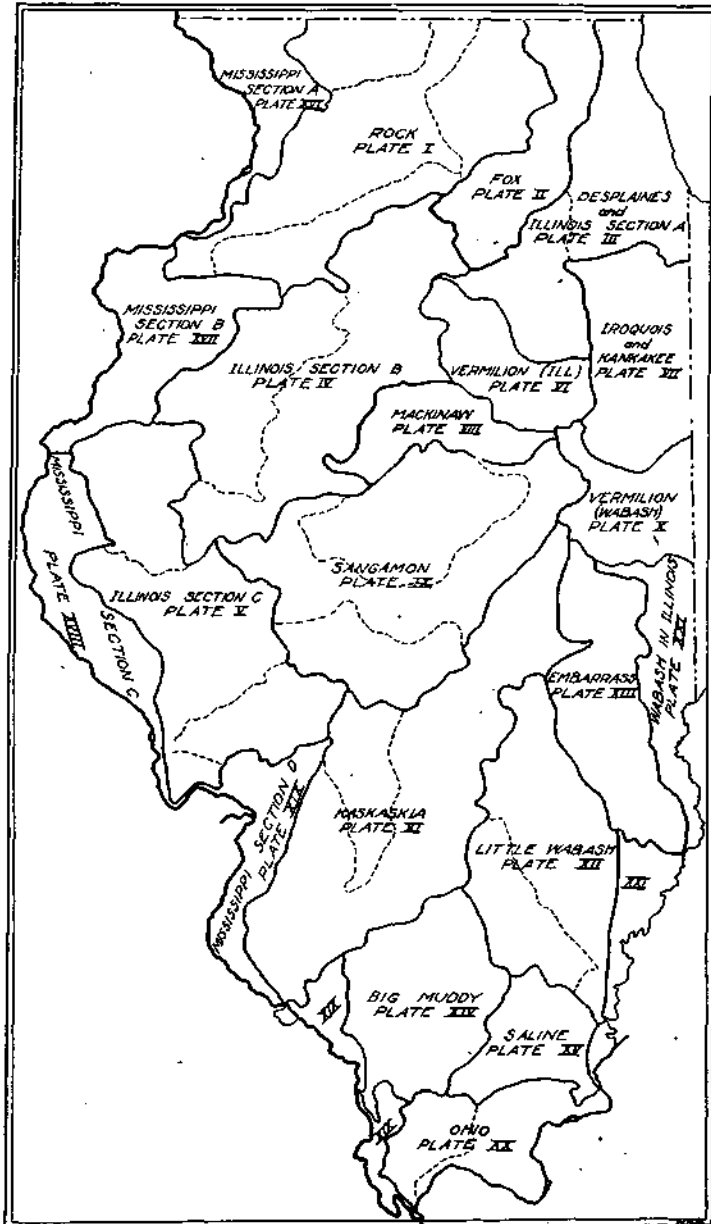
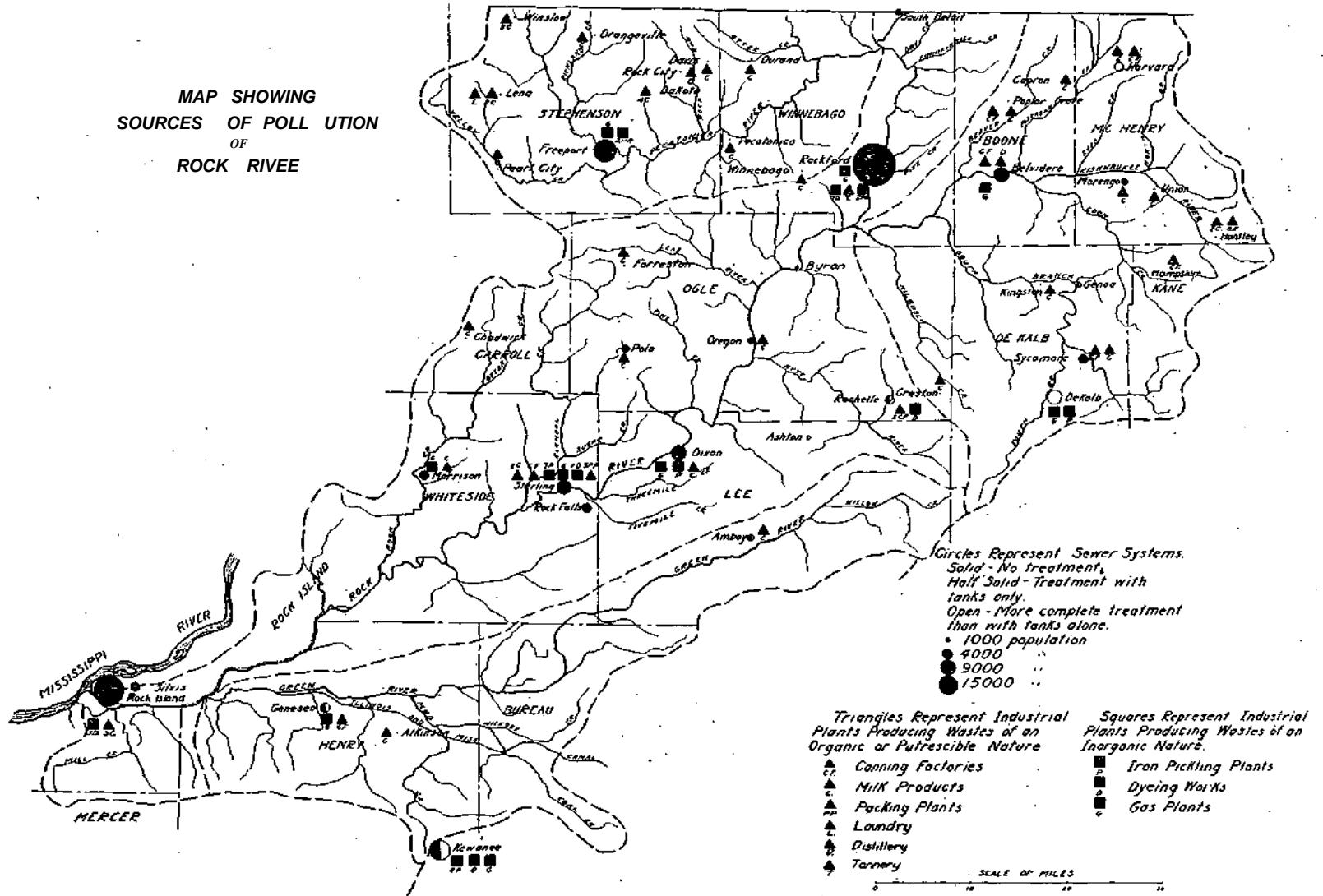
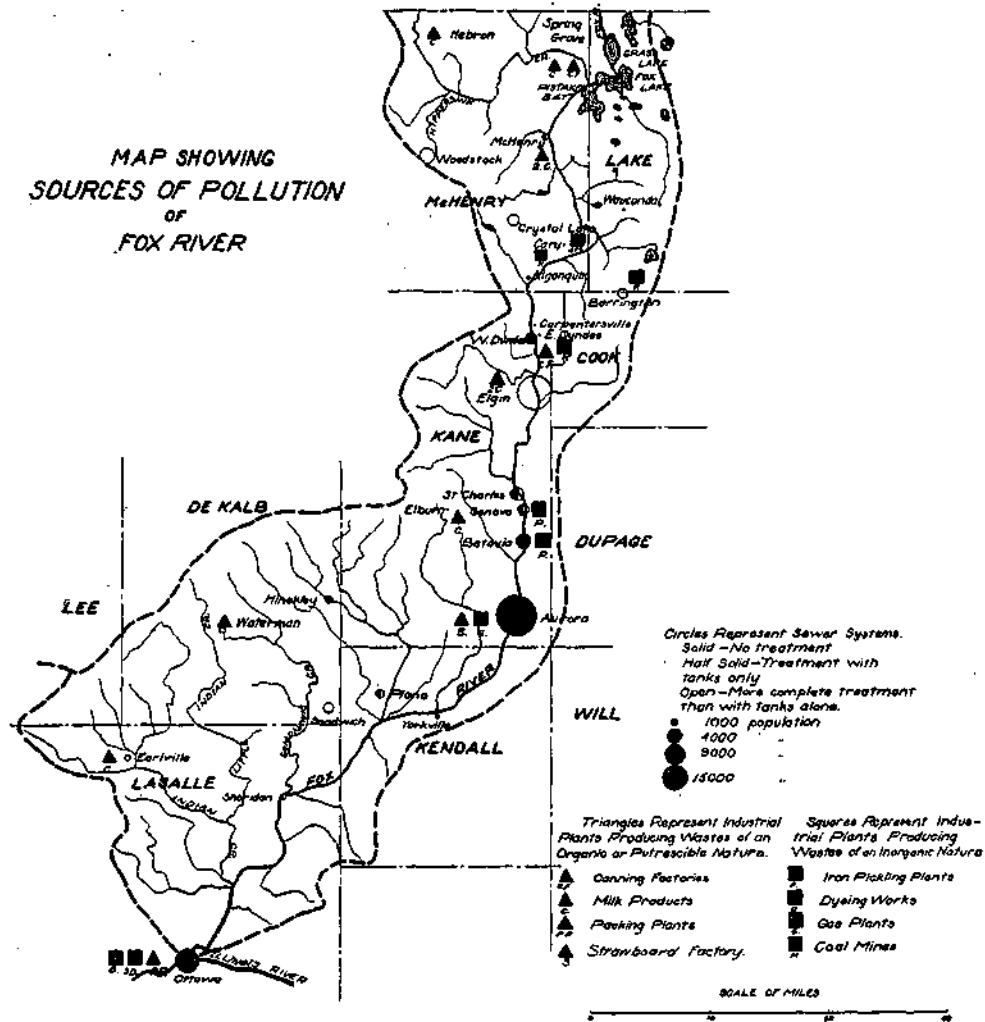


Figure 1. Key to Maps of Drainage Areas.

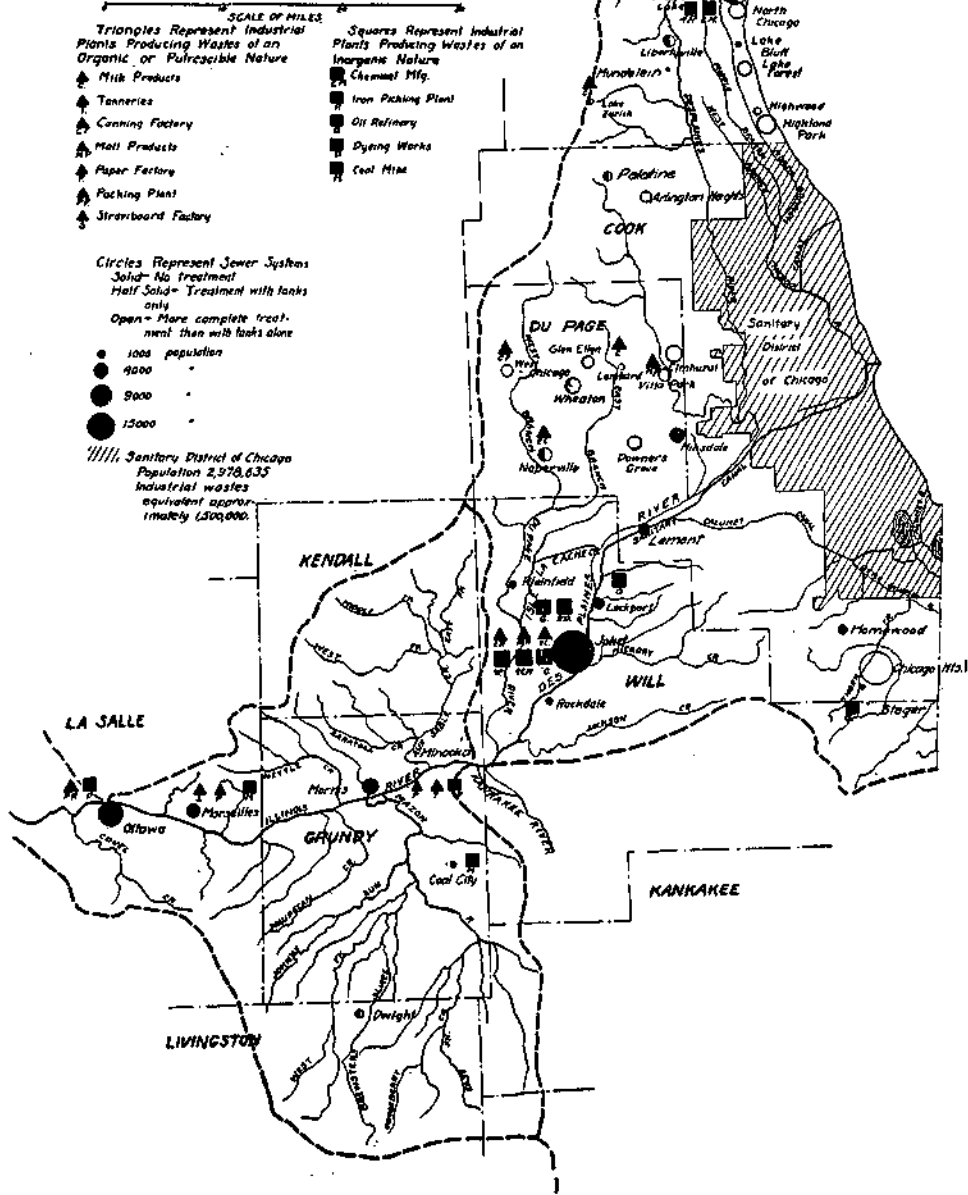
MAP SHOWING
SOURCES OF POLLUTION
OF
ROCK RIVER



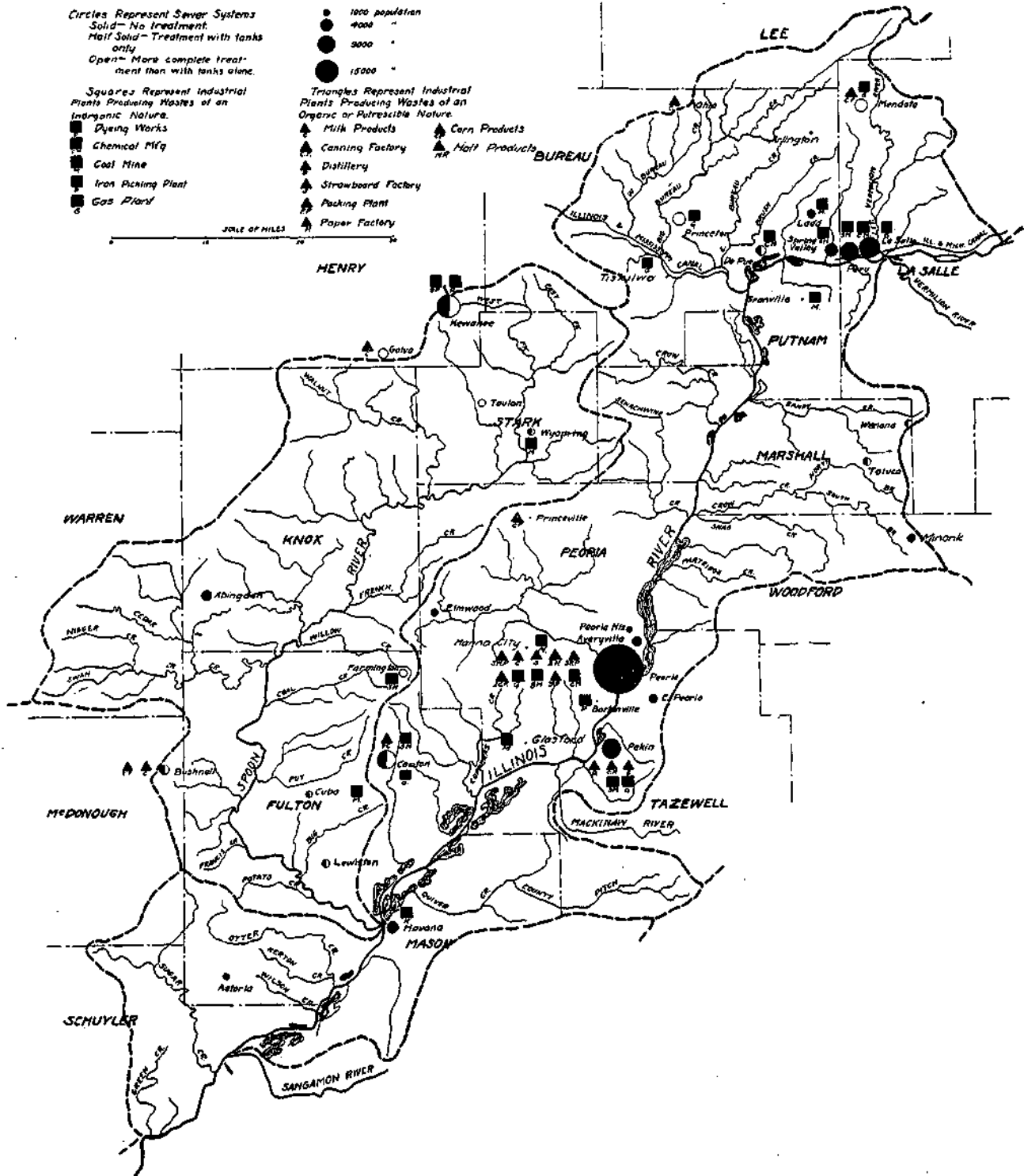
MAP SHOWING
SOURCES OF POLLUTION
OF
FOX RIVER



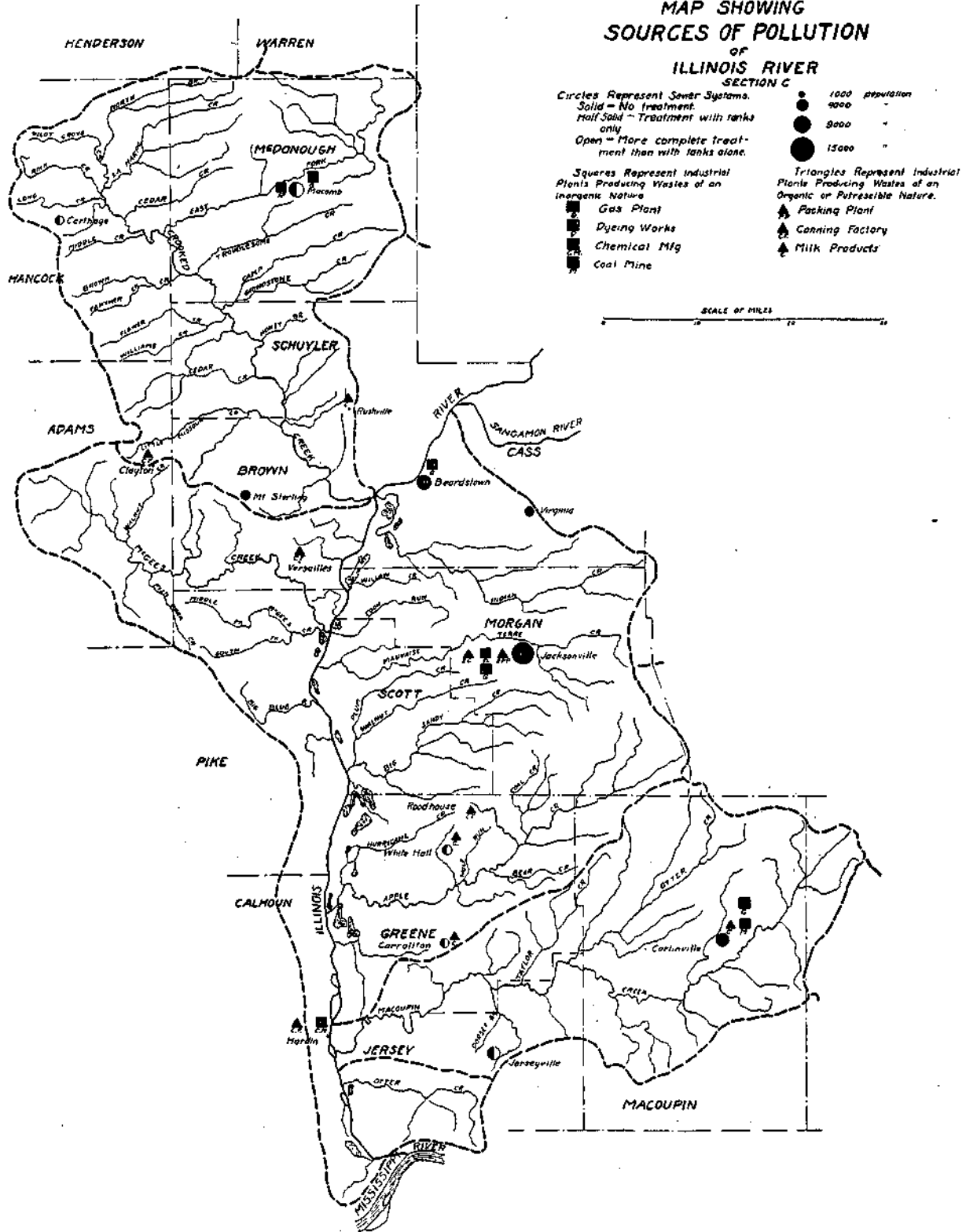
**MAP SHOWING
SOURCES OF POLLUTION
OF
DESPLAINES RIVER
AND
ILLINOIS RIVER, SECTION A**



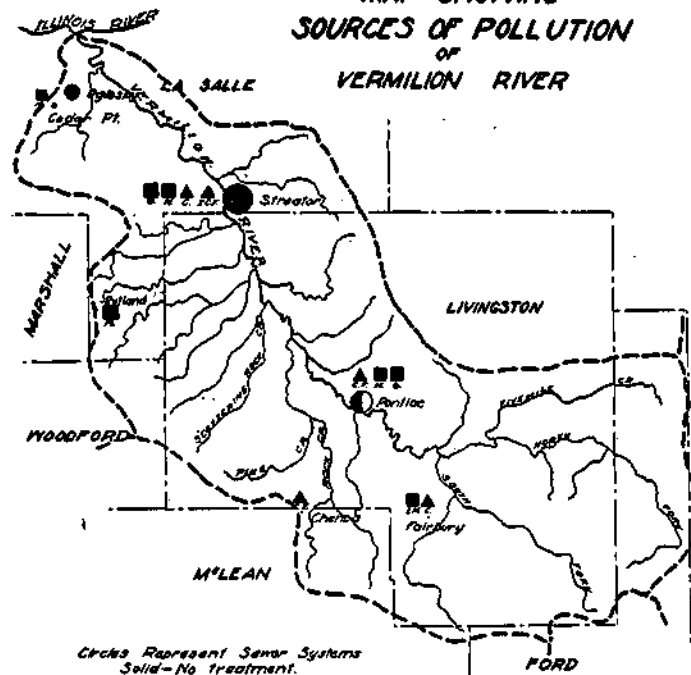
**MAP SHOWING
SOURCES OF POLLUTION
OF
ILLINOIS RIVER, SECTION B, AND SPOON RIVER**



MAP SHOWING SOURCES OF POLLUTION OF ILLINOIS RIVER SECTION C



MAP SHOWING SOURCES OF POLLUTION OF VERMILION RIVER



Circles Represent Sewer Systems
Solid - No treatment.
Half solid - Treatment with tanks only.
Open - More complete treatment than with tanks alone.

- 1000 population
- 4000 "
- 9000 "
- 13000 "

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

▲ Canning Factories.

▲ Milk Products.

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

■ Coal Mine.

SCALE OF MILES.



**MAP SHOWING
SOURCES OF POLLUTION
IN ILLINOIS
OF
IROQUOIS AND KANKAKEE RIVERS**

SCALE OF MILES

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

- ▲ Stockyard Factory
- ▲ Canning Factory
- ▲ Tannery
- ▲ Milk Products
- ▲ Distillery

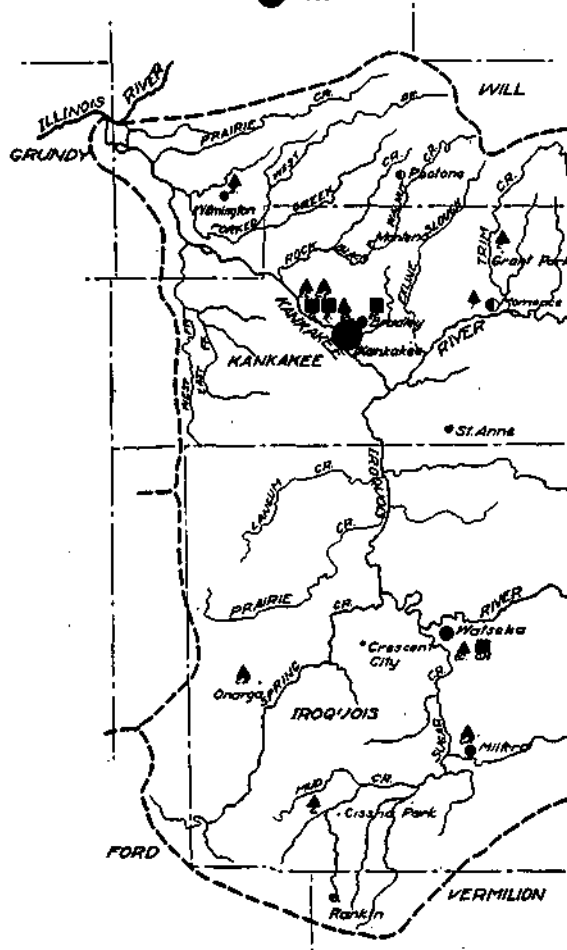
Circles Represent Sewer Systems

Solid - No treatment
Half Solid - Treatment with tanks only
Open - More complete treatment than with tanks alone.

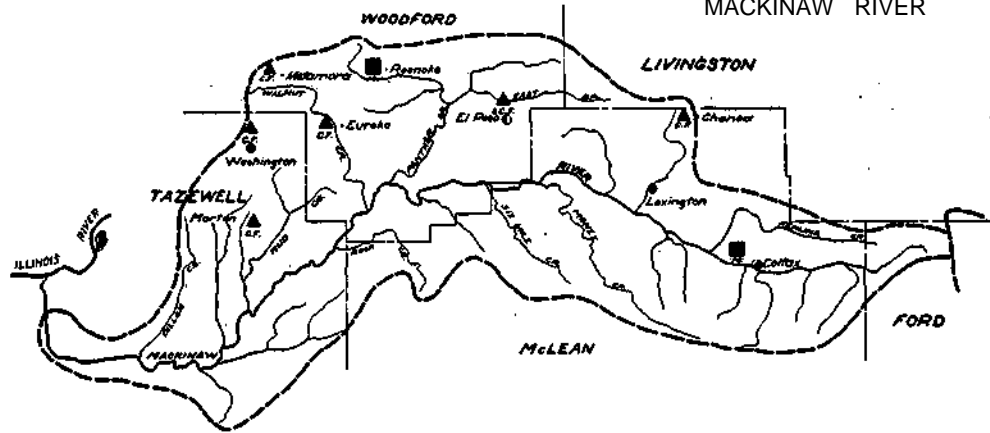
- 1000 population
- 4000 "
- 9000 "
- 13000 "

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

- Gas Plants
- Distillery
- Chemical Manufactures
- Picking Plant



MAP SHOWING
SOURCES OF POLLUTION
OF
MACKINAW RIVER



Circles Represent Sewer Systems.
 Solid - No treatment
 Half Solid - Treatment with tanks only.
 Open - More complete treatment than with tanks alone.

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.
 C.F. Canning Factories

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.
 C.M. Cool Mines

● 1000 population
 ● 4000 "
 ● 8000 "
 ● 12000 "

SCALE OF MILES

MAP SHOWING
SOURCES OF POLLUTION
IN ILLINOIS
OF
VERMILION RIVER

SCALE OF MILES.
10 20 30

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

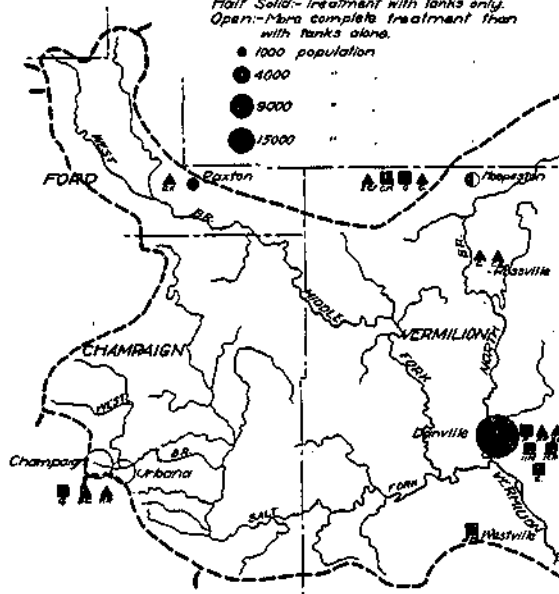
- ▲ Milk Products.
- ▲ Canning Factory.
- ▲ Packing Plant.

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

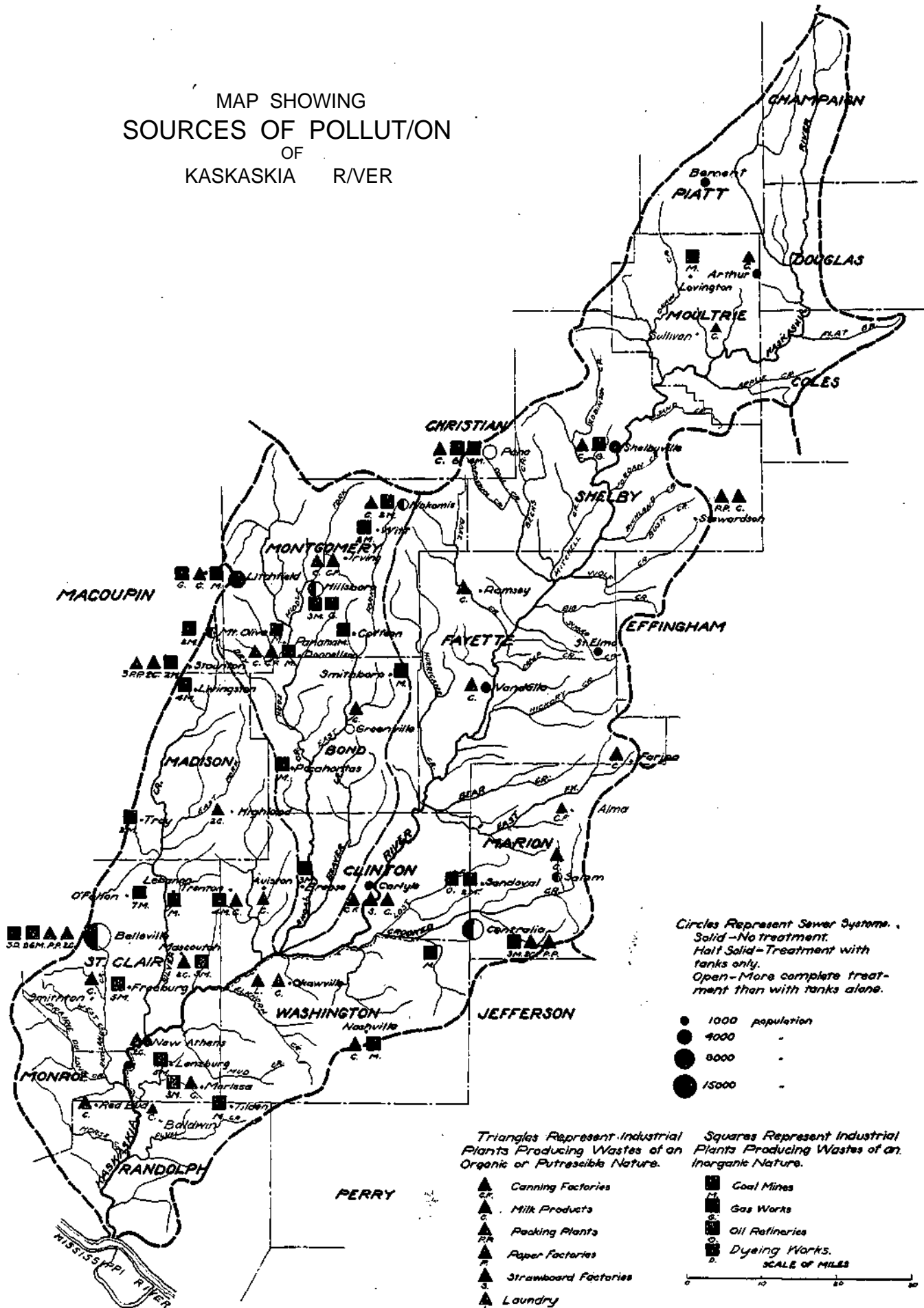
- Coal Mine.
- Gas Plant.
- Pickling Plant.
- Malt Products.

Circles Represent Sewer Systems
Solid - No treatment.
Half Solid - Treatment with tanks only.
Open - Have complete treatment than with tanks alone.

- 1000 population
- 4000 "
- 9000 "
- 15000 "



MAP SHOWING
SOURCES OF POLLUTION
OF
KASKASKIA RIVER

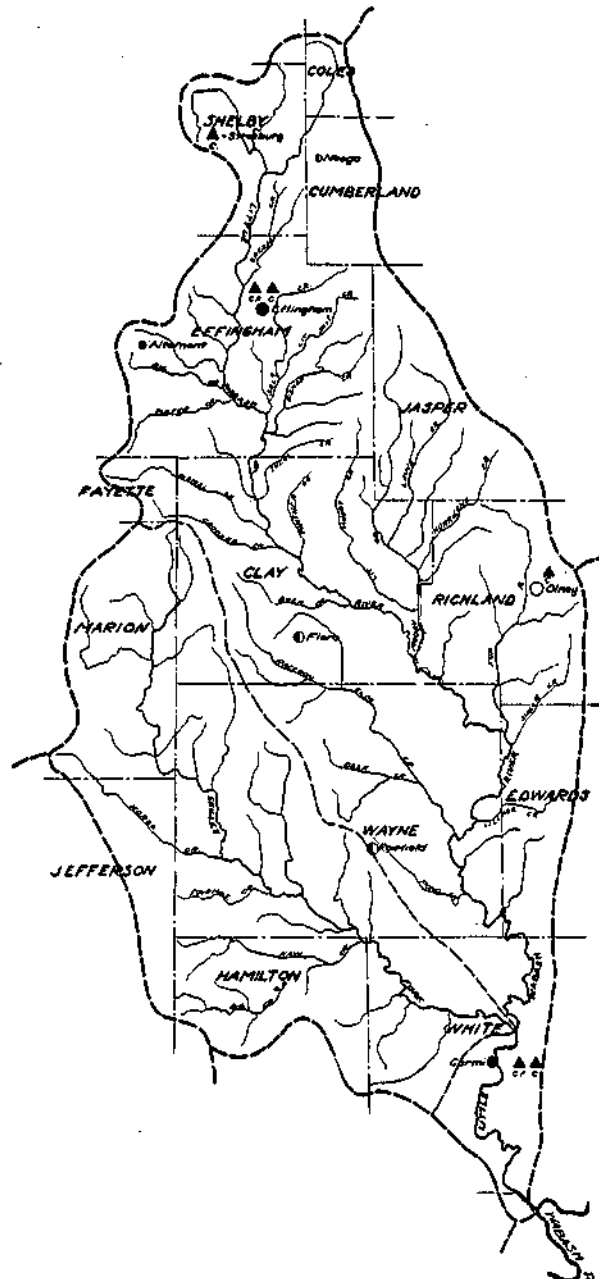


Circles Represent Sewer Systems.
Solid - No treatment.
Half Solid - Treatment with tanks only.
Open - More complete treatment than with tanks alone.

- 1000 population
- 4000 -
- 8000 -
- 15000 -

- Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.
- ▲ Canning Factories
 - ▲ Milk Products
 - ▲ Packing Plants
 - ▲ Paper Factories
 - ▲ Strawboard Factories
 - ▲ Laundry
- Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.
- Coal Mines
 - Gas Works
 - Oil Refineries
 - Dyeing Works.
- SCALE OF MILES
- 0 10 20 30

MAP SHOW/NO
 SOURCES OF POLLUTION
 OF
 LITTLE WABASH RIVER

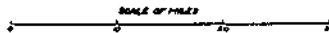


Circles Represent Sewer Systems
 Solid - No treatment
 Half Solid - Treatment with
 tanks only.
 Open - More complete treat-
 ment than with tanks alone.

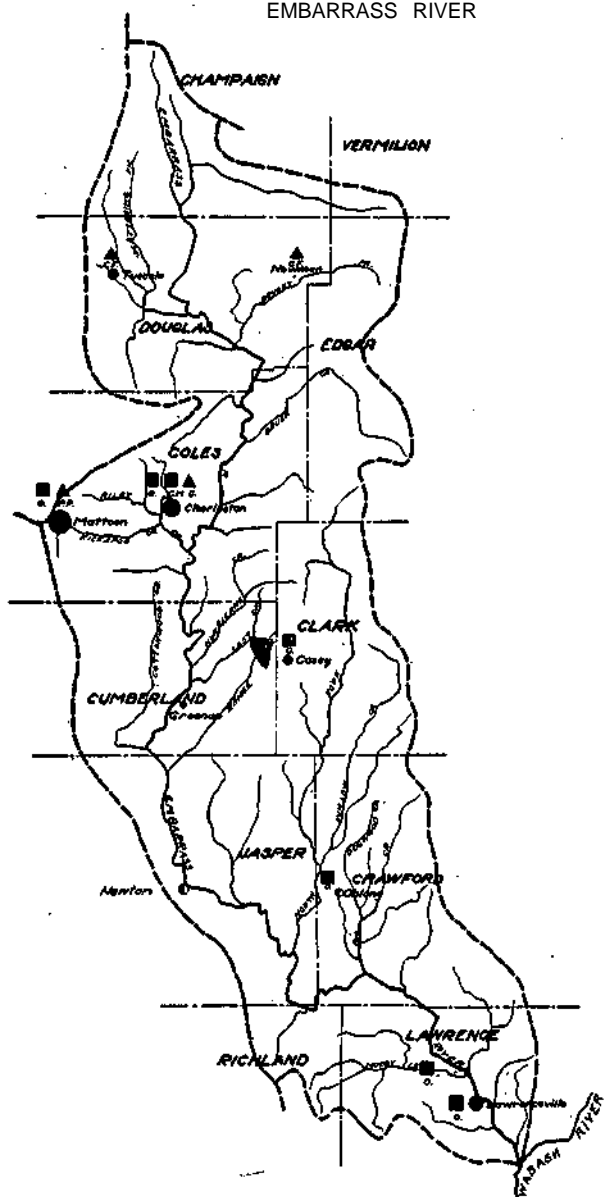
● 1000 population
 ● 4000
 ● 8000
 ● 15000

Triangles Represent Industrial
 Plants Producing Wastes of an
 Organic or Putrescible Nature.

▲ Canning Factories
 ▲ Milk Products



MAP SHOWING
SOURCES OF POLLUTION
OF
EMBARRASS RIVER



Circles Represent Sewer Systems:
 Solid - No treatment.
 Half Solid - Treatment with tanks only.
 Open - More complete treatment than with tanks alone.

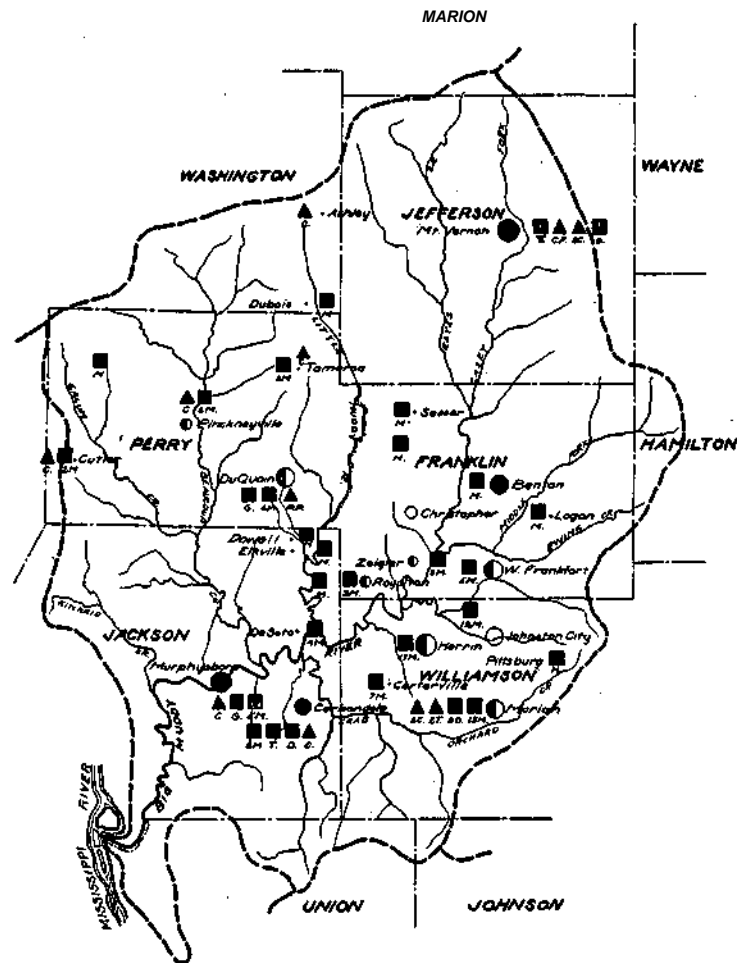
Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature:
 CF - Canning Factories
 M.P. - Milk Products
 P.P. - Packing Plants

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature:
 C.M. - Chemical Mfg.
 G.W. - Gun Works
 O. - Oil Refineries

● 1000 population
 ● 4000 "
 ● 8000 "
 ● 15000 "

SCALE OF MILES

MAP SHOWING
SOURCES OF POLLUTION
OF
BIG MUDDY RIVER



Circles Represent Sewer Systems.
Solid - No treatment.
Half Solid - Treatment with tanks only.
Open - More complete treatment than with tanks alone.

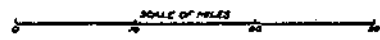
Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

- ▲ Canning Factories
- ▲ Milk Products
- ▲ Poultry Plants
- ▲ Tanneries

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

- Coal Mines
- Dyeing Works
- Goo Works
- Iron Pickling Plants
- Ties Plant

- 1000 population
- 4000
- 8000
- 13000



MAP SHOWING
SOURCES OF POLLUTION
OF
MISSISSIPPI RIVER
SECTION A

SCALE OF MILES

Circles Represent Sewer Systems
Solid - No Treatment.
Half Solid - Treatment with
tanks only.
Open - More complete treat-
ment than with tanks alone.

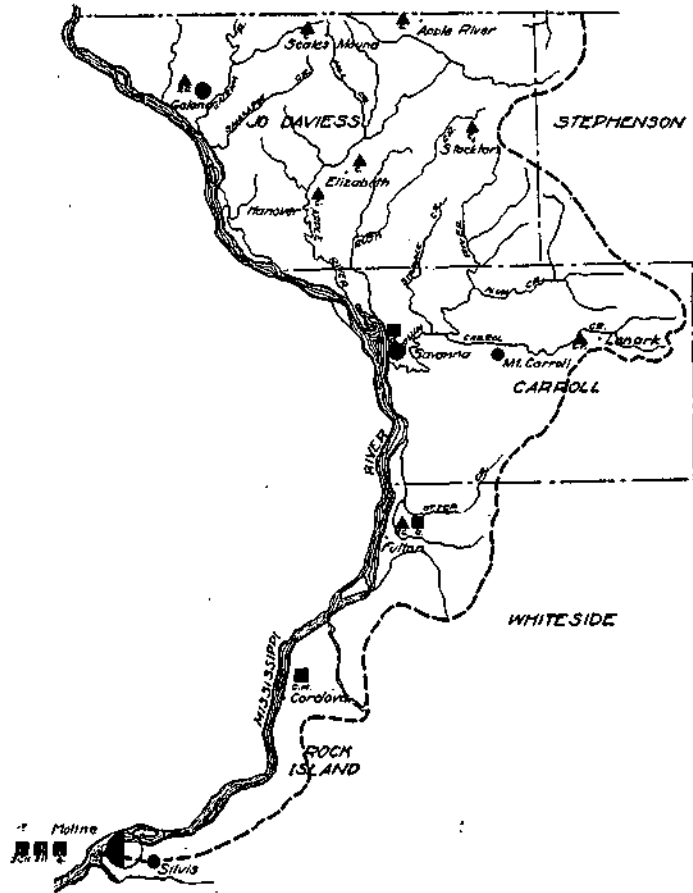
- 1000 population
- 4000 "
- 9000 "
- 13000 "

Squares Represent Industrial
Plants Producing Wastes of an
Inorganic Nature.

- Oil Refinery
- Gas Plant

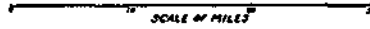
Triangles Represent In-
dustrial Plants Producing
Wastes of an Organic or
Putrescible Nature.

- ▲ Canning Factory
- ▲ Milk Products



MAP SHOWING
SOURCES OF POLLUTION
OF
MISSISSIPPI RIVER

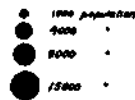
SECTION B



Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

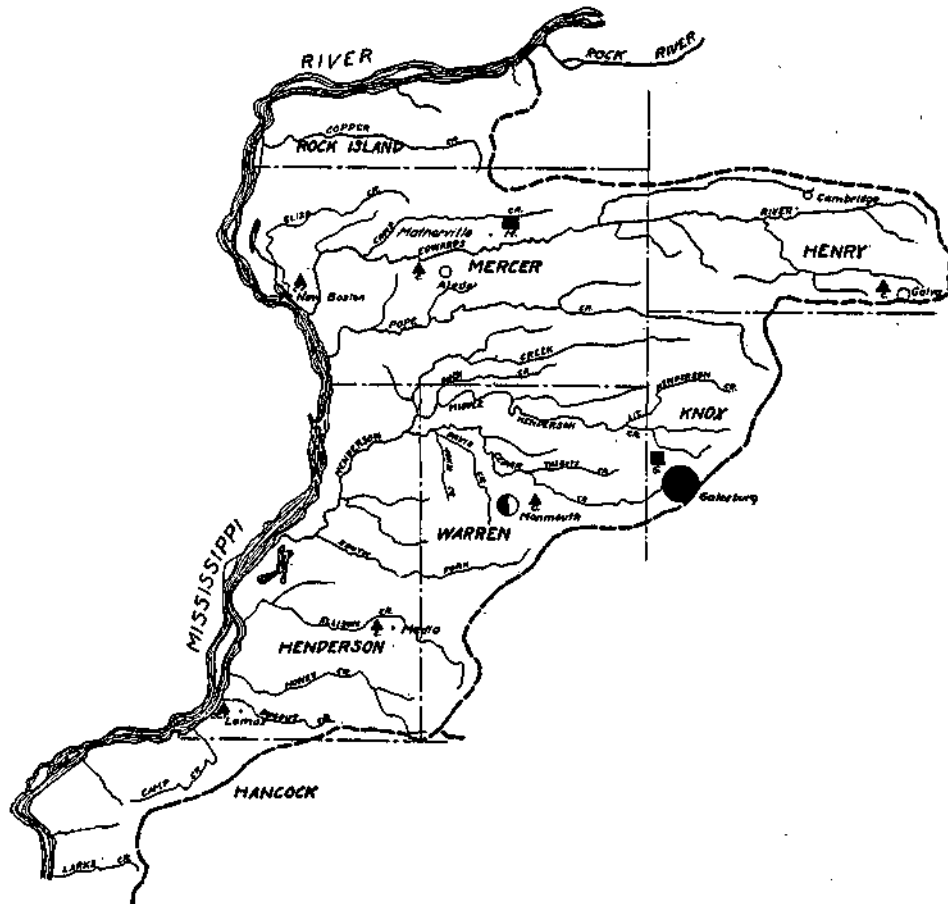
▲ Milk Products
▲ Canning Factory

Circles Represent Sewer Systems.
Solid - No treatment
Half Solid - Treatment with tanks only.
Open - More complete treatment than with tanks alone.

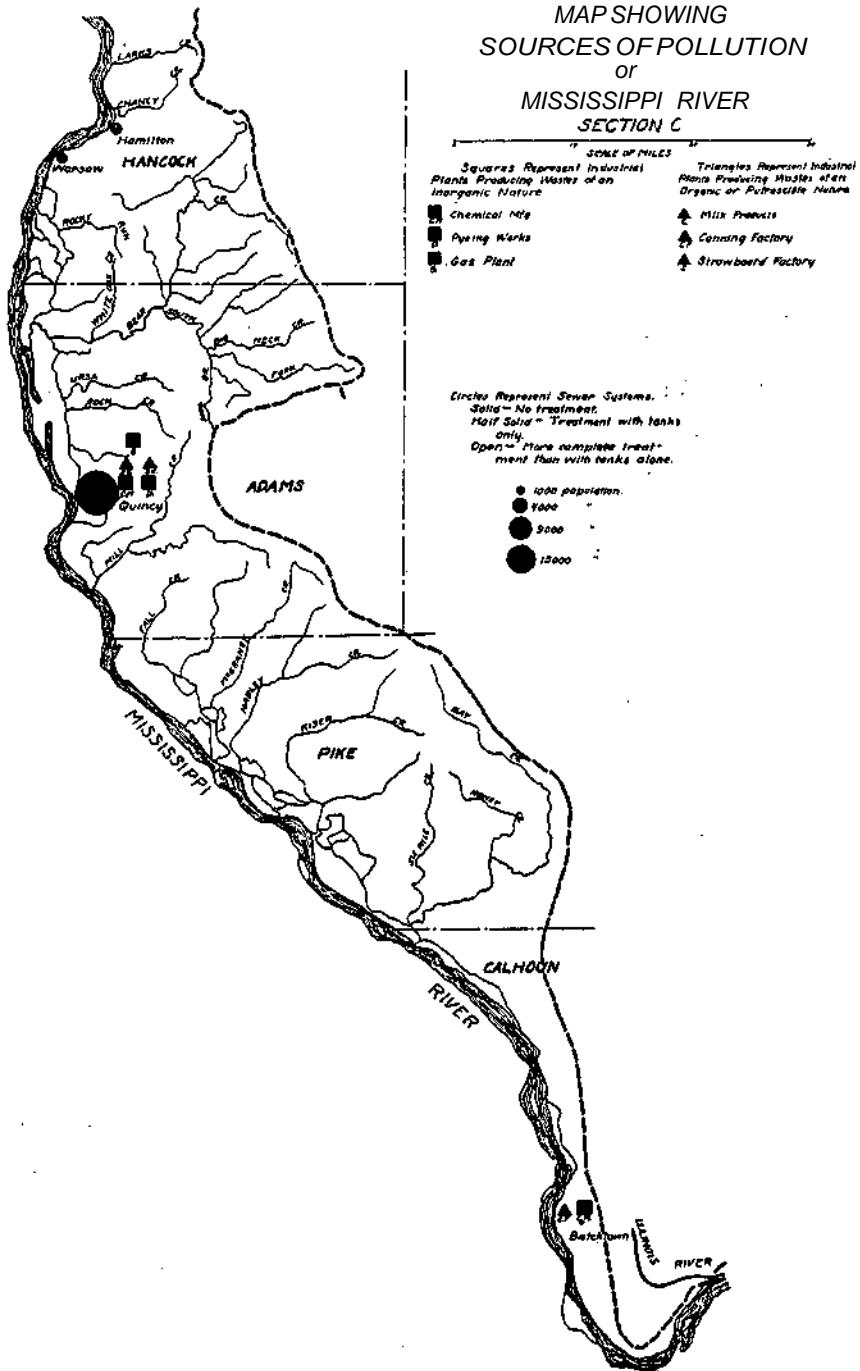


Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

■ Gas Plant
■ Coal Mine



MAP SHOWING
SOURCES OF POLLUTION
OR
MISSISSIPPI RIVER
SECTION C



**MAP SHOWING
SOURCES OF POLLUTION
OF
MISSISSIPPI RIVER
SECTION D**

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

- ▲ Milk Products
- ▲ Packing Plants
- ▲ Tannery
- ▲ Strawboard Factory
- ▲ Corn Products
- ▲ Canning Factory

Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

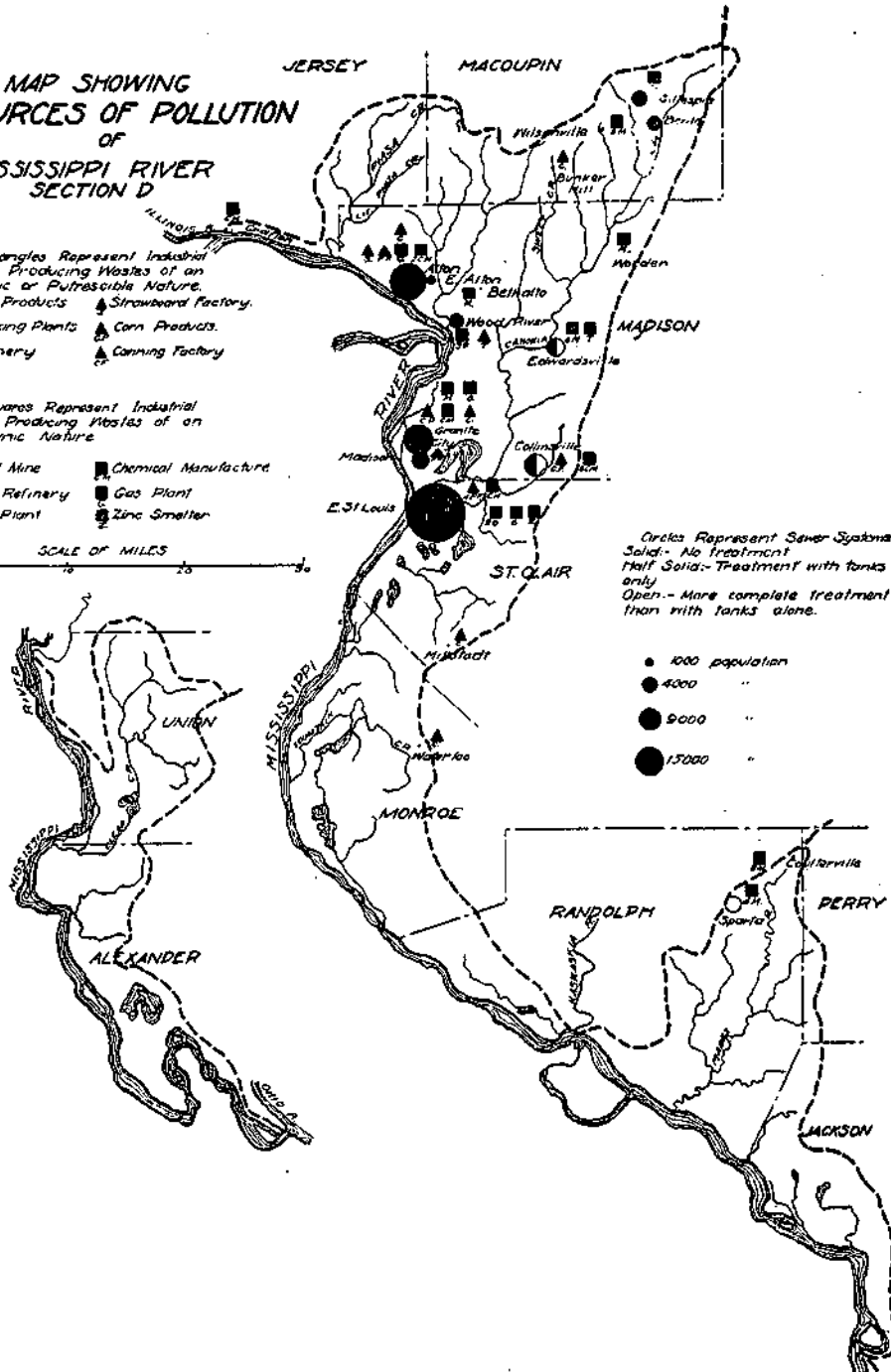
- Coal Mine
- Oil Refinery
- Tie Plant
- Chemical Manufacture
- Gas Plant
- Zinc Smelter

SCALE OF MILES

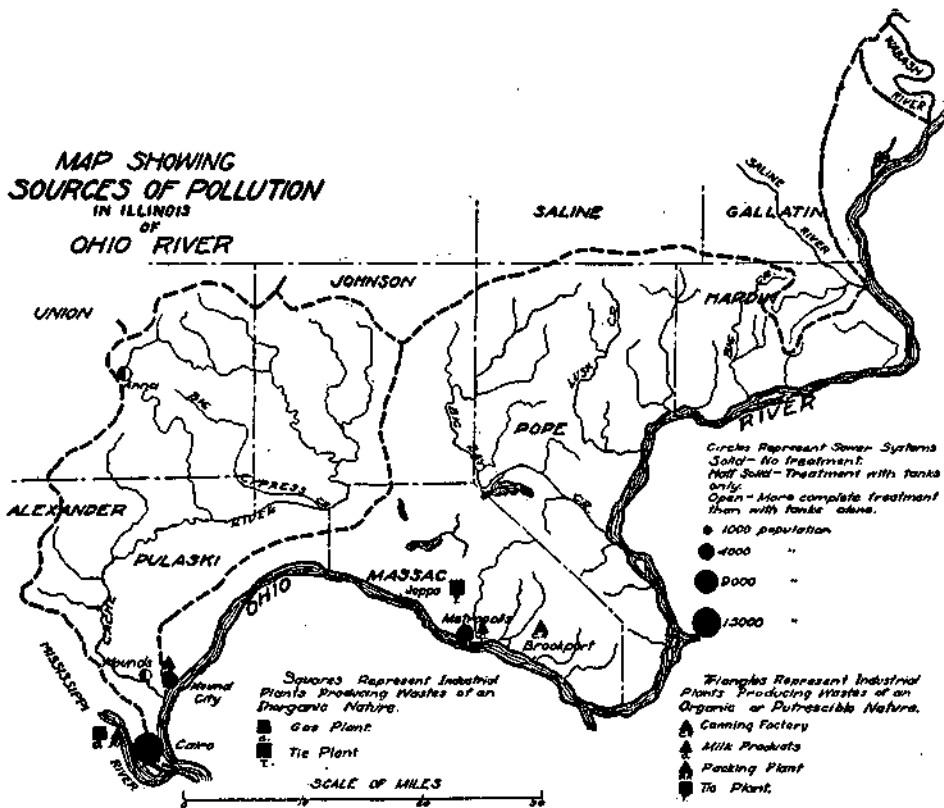
Circles Represent Sewer Systems

- Solid - No treatment
- Half Solid - Treatment with tanks only
- Open - More complete treatment than with tanks alone.

- 1000 population
- 4000 "
- 9000 "
- 15000 "



**MAP SHOWING
SOURCES OF POLLUTION
IN ILLINOIS
OF
OHIO RIVER**



MAP SHOWING
SOURCES OF POLLUTION
IN ILLINOIS
OF
WABASH RIVER

Triangles Represent Industrial Plants Producing Wastes of an Organic or Putrescible Nature.

- ▲ Milk Products
- ▲ Coating Factory
- ▲ Packing Plant
- ▲ Streetboard Factory

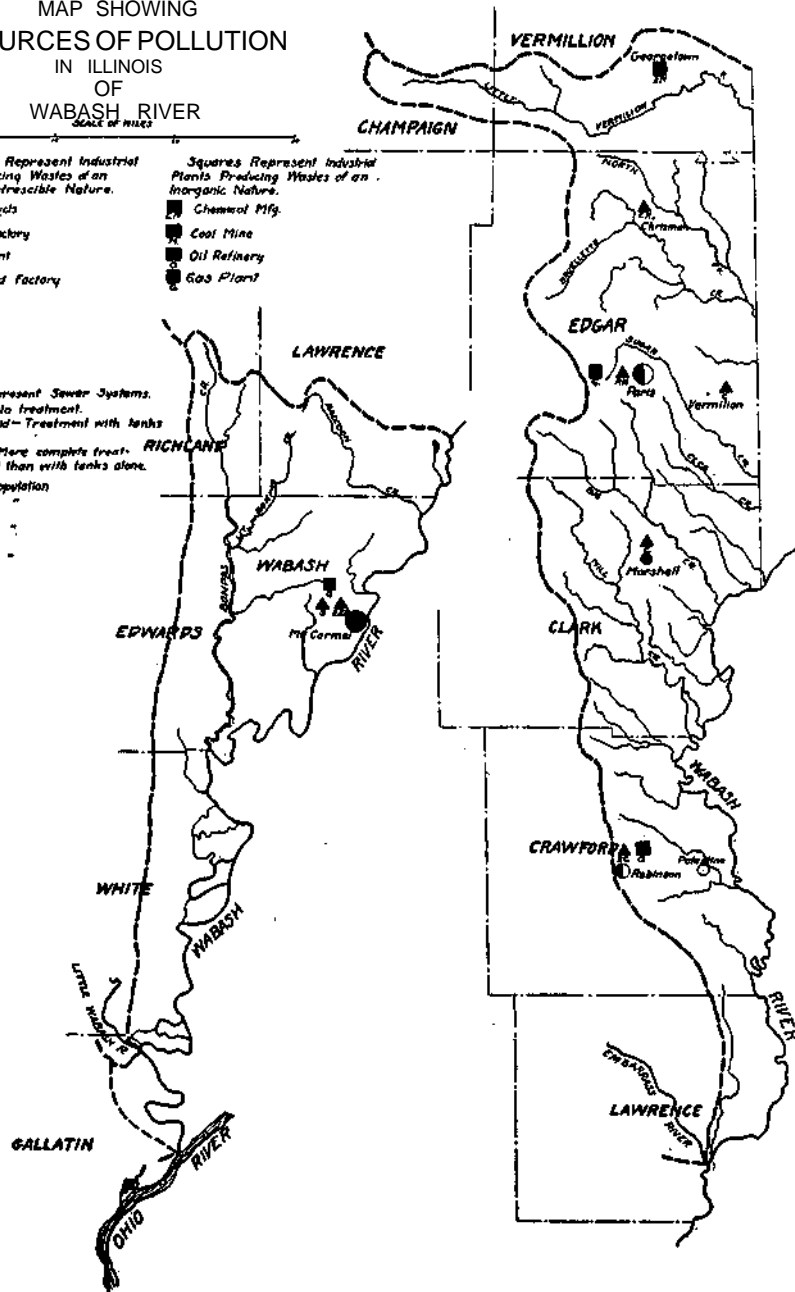
Squares Represent Industrial Plants Producing Wastes of an Inorganic Nature.

- Chemical Mfg.
- Coal Mine
- Oil Refinery
- Gas Plant

Circles Represent Sewer Systems.

- Solid - No treatment.
- Half Solid - Treatment with tanks only.
- Open - More complete treatment than with tanks alone.

● 1000 population
● 4000
● 9000
● 13000



SUMMARY OF DATA ON STREAM POLLUTION

(Towns Listed by Counties in Alphabetical Order.)

ADAMS COUNTY

CLAYTON (1038). No sewer system. One vegetable canning factory.
 QUINCY (35978). Sewage untreated. Two strawboard factories, one dye works, one chemical manufacturing plant, two milk products companies, and one gas plant.

ALEXANDER COUNTY

CAIRO (15203). Sewage untreated. One gas plant and one packing plant.

BOND COUNTY

GREENVILLE (3091). Sewage treated in a septic tank and a gravel pit filter. One creamery handling about 80,000 pounds of milk a day.

PANAMA (Listed under MONTGOMERY COUNTY).

POCAHONTAS (830). No sewer system.. Coalmining.

SMITHBORO (277). No sewer system. Coal mining.

BOONE COUNTY

BELVIDERE (7804). Sewage untreated. One canning factory, one distillery, and one gas plant.

CAPRON (550). No sewer system. One creamery.

POPLAR GROVE (316). No sewer system. One pickle canning factory, and one creamery, handling about 70,000 pounds of milk a day.

BROWN COUNTY

MOUNT STERLING (1932). Sewage untreated.

VERSAILLES (627). No sewer system. One canning factory with a capacity of about six cars a year reported.

BUREAU COUNTY

ARLINGTON (284). Sewage treated in a tank and sand filter.

DEPUE (2525). Sewage treated in tanks. One sulfuric acid plant - and zinc smelter.

LADD (2040). Sewage untreated. Coal mining.

OHIO (874). No sewer system. One creamery.

- PRINCETON (4126). Sewage treated with septic tanks and a stone-and-tile trickling filter. One gas plant.
- SPRING VALLEY (6493). Combined sewer system serving two-thirds the population. Sewage untreated. Coal mining.
- TISKILWA (915). No sewer system. One gas plant.

CALHOUN COUNTY

- BATCHTOWN (273). No sewer system. One apple canning factory and one chemical manufacturing company making spraying-materials.
- HARDIN (694). No sewer system. One chemical manufacturing company making spraying materials and one canning company.

CARROLL COUNTY

- CHADWICK (582). No sewer system. One creamery.
- LANARK (1297). No sewer system. One corn and pumpkin canning factory.
- MOUNT CARROLL (1806). Sewage untreated.
- SAVANNA (5237). Sewage untreated. One gas plant.

CASS COUNTY

- BEARDSTOWN (7111). Sewage untreated. One gas plant.
- VIRGINIA (1051). Sewage untreated.

CHAMPAIGN COUNTY

- CHAMPAIGN (15873). Sewage treated in Imhoff tanks and sprinkling filters. One gas plant, one packing plant, and three creameries.
- URBANA (10244). Sewage treated with that of Champaign in Imhoff tanks and sprinkling filters.

CHRISTIAN COUNTY

- ASSUMPTION (1852). Sewage untreated. One creamery. Coal mining.
- EDINBURG (823). No sewer system. Coal mining.
- JEISYVILLE (428). No sewage system. Coal mining.
- KINCAID (1453). Sewage untreated. Coal mining.
- PANA (6122). Sewage treated with tanks, sprinkling filters, and secondary settling tanks. One creamery, one gas plant, and coal mining.
- STONINGTON (1466). No sewer system. Coal mining.
- TAYLORVILLE (5806). Sewage untreated. One paper company, one creamery, one gas plant, and coal mining.

CLARK COUNTY

- CASEY (2189). Combined sewer system. Sewage untreated. One oil refinery.
- MARSHALL (2222). Combined sewer system. Sewage untreated. One creamery.

CLAY COUNTY

- FLORA (3558). Sewage treated in tanks.

CLINTON COUNTY

- AVISTON (389). No sewer system. One condensed milk plant with a product valued at \$200,000 annually.
- BREESE (2399). No sewer system. Coal mining.
- CARLYLE (2027). Sewage untreated. One strawboard factory, one canning factory, and one creamery.
- CENTRALIA (Listed under MARION COUNTY).
- TRENTON (1200). No sewer system. One condensed milk plant. Coal mining.

COLES COUNTY

- CHARLESTON (6615). Combined sewer system. Sewage untreated. One chemical manufacturing company, one creamery, and one gas plant.
- MATTOON (13552). Sewage untreated. One packing plant and one gas plant.

COOK COUNTY

- ARLINGTON HEIGHTS (2250). Sewage treated in settling tanks and in sand filters.
- BARRINGTON (1743). Sewage treated in an Imhoff tank. Sand filters not operating. One iron pickling plant.
- BELLWOOD (1881). In Chicago Sanitary District.
- BERWYN (14150). In Chicago Sanitary District.
- BLUE ISLAND (11424). In Chicago Sanitary District.
- BROADVIEW (430). In Chicago Sanitary District.
- BROOKFIELD (3589). In Chicago Sanitary District.
- BURNHAM (795). In Chicago Sanitary District.
- BURR OAK (1237). In Chicago Sanitary District.
- CALUMET CITY (7492). In Chicago Sanitary District.
- CHICAGO (2,701,705). In Chicago Sanitary District.
- CHICAGO HEIGHTS (19653). Sewage treated in septic tanks and contact beds.
- CICERO (44,995). In Chicago Sanitary District.

DES PLAINES (3451). In Chicago Sanitary District.
 DOLTON (2076). In Chicago Sanitary District.
 ELGIN (Listed under KANE COUNTY).
 ELMWOOD PARK (1380). In Chicago Sanitary District.
 EVANSTON (37234). In Chicago Sanitary District.
 EVERGREEN PARK (705). In Chicago Sanitary District.
 FOREST PARK (10768). In Chicago Sanitary District.
 FRANKLIN PARK (914). In Chicago Sanitary District.
 GLENCOE (3381). In Chicago Sanitary District.
 GLENVIEW (760). In Chicago Sanitary District.
 HARVEY (9216). In Chicago Sanitary District.
 HAZEL CREST (438). Installing sewers, Imhoff tank, and sprinkling filter in 1927.
 HINSDALE (Listed under DU PAGE COUNTY).
 HOMEWOOD (1389). Sewage untreated.
 KENILWORTH (1188). In Chicago Sanitary District.
 LAGRANGE (6525). In Chicago Sanitary District.
 LAGRANGE PARK (1684). In Chicago Sanitary District.
 LANSING (1409). Installing sewers in 1927.
 LEMONT (2322). Sewage untreated.
 LYONS (2564). In Chicago Sanitary District.
 MAYWOOD (12072). In Chicago Sanitary District.
 MELROSE PARK (7147). In Chicago Sanitary District.
 MORTON GROVE (1079). In Chicago Sanitary District.
 MOUNT GREENWOOD (1441). In Chicago Sanitary District.
 NILES (1258.) In Chicago Sanitary District.
 NILES CENTER (763). In Chicago Sanitary District.
 OAK PARK (39858). In Chicago Sanitary District.
 PALATINE (1210). Combined sewer system. Sewage treated in Imhoff tanks.
 PARK RIDGE (3383). In Chicago Sanitary District.
 PHOENIX (1933). In Chicago Sanitary District.
 POSEN (947). In Chicago Sanitary District.
 RIVERDALE (1166). In Chicago Sanitary District.
 RIVER FOREST (4358). In Chicago Sanitary District.
 RIVER GROVE (484). In Chicago Sanitary District.
 RIVERSIDE (2532). In Chicago Sanitary District.
 RIVERVIEW (334). In Chicago Sanitary District.
 ROBBINS (431). In Chicago Sanitary District.
 SCHILLER PARK (390). In Chicago Sanitary District.

SHERMERVILLE (554). In Chicago Sanitary District.
 SOUTH CHICAGO HEIGHTS (949). Installing sewers, tanks and filters in 1927.
 SOUTH HOLLAND (1247). Installing sewers, tanks and filters in 1927.
 STEGER (Listed under WILL COUNTY).
 STICKNEY (550). In Chicago Sanitary District.
 SUMMIT (4019). In Chicago Sanitary District.
 TESSVILLE (355). In Chicago Sanitary District.
 WESTERN SPRINGS (1258). In Chicago Sanitary District.
 WILMETTE (7814). In Chicago Sanitary District.
 WINNETKA (6694). In Chicago Sanitary District.

CRAWFORD COUNTY

OBLONG (1547). Sewage treated in a septic tank. Oil refinery. .
 PALESTINE (1803). Sewage treated in Imhoff tanks and sand filters.
 ROBINSON (3375). Sewage treated in a septic tank. One oil refinery and two creameries.

CUMBERLAND COUNTY

GREENUP (1230). Sewage untreated.
 NEOGA (1149). Sewage treated in a septic tank.

DEKALB COUNTY

DEKALB (7871). Sewage treated in tanks and trickling filters. One gas plant and one galvanizing or pickling plant.
 GENOA (1228). Sewage treated in a settling tank.
 HINCKLEY (665). Sewage untreated.
 KINGSTON (235). No sewer system. One creamery.
 SANDWICH (2409). Sewage treated in two-story settling tanks and sand filters.
 SYCAMORE (3602). Combined sewer system. Sewage untreated. One canning factory and one creamery.
 WATERMAN (401). No sewer system. One creamery.

DEWITT COUNTY

CLINTON (5898). Combined sewer system. Sewage untreated. One gas plant.
 FARMER CITY (1678). Sewer system for one-fifth of town. Sewage untreated.

DOUGLAS COUNTY

ARTHUR (Listed under MOULTRIE COUNTY).

NEWMAN (1225). No sewer system. One corn canning factory.

TUSCOLA (2564). Sewage untreated. One corn canning factory.

DU PAGE COUNTY

DOWNERS GROVE (3543). Sewage treated in a septic tank and rock filters.

ELMHURST (4594). Sewage treated in Imhoff tanks and sand filters.

GLEN ELLYN (2851). Sewage treated in sedimentation tanks and trickling filters.

HINSDALE (4042). Sewage untreated.

LOMBARD (1331). Sewage treated in Imhoff tanks and sand filters. One creamery.

NAPERVILLE (3830). Sewage treated in settling tanks. Two creameries.

VILLA PARK (1854). Sewage treated in tanks and sprinkling filters. One malt products company.

WEST CHICAGO (2594). Sewage treated in Imhoff tanks and sand filters. One pickle canning factory.

WHEATON (4137). Sewage treated in Imhoff tanks and sand filters.

CHRISMAN (1101). No sewer system. One corn canning factory.

PARIS (7985). Sewage treated in septic tanks. One packing plant and one gas plant.

VERMILION (318). No sewer system. One creamery.

EDWARDS COUNTY

No towns reported with, sewer systems or waste producing industries.

EFFINGHAM COUNTY

ALTAMOUNT (1352). Sewage untreated.

EFFINGHAM (4024). Combined sewer system. Sewage untreated. One tomato canning factory and one creamery.

FAYETTE COUNTY

FARINA (701). No sewer system. One creamery producing about 200,000 pounds of butter per year.

RAMSEY (772). No sewer system. One creamery.

ST. ELMO (1337). Sewage untreated.

VANDALIA (3316). Sewage untreated. One creamery.

FORD COUNTY

- GIBSON (2234). Sewage treated in tanks. One corn and bean canning factory.
- PAXTON (3033). Sewage untreated. One corn and bean canning factory producing about 125,000 cases of corn and 50,000 cases of beans a year.

FRANKLIN COUNTY

- BENTON (7201). Sewage untreated. Coal mining.
- CHRISTOPHER (3830). Sewage treated in tanks and trickling filters.
- ROYALTON (2043). Sewage treated in a septic tank. Coal mining.
- SESSER (2841). No sewer system. Coal mining.
- WEST FRANKFORT (8478). Sewage treated in tanks. Coal mining.
- ZEIGLER (2338). Sewage treated in septic tanks. Coal mining.

FULTON COUNTY

- ASTORIA (1340). Sewage untreated.
- CANTON (10928). Sewage treated in septic tanks. Two creameries and one gas plant. Coal mining.
- CUBA (1484). Sewage treated in tanks. Coal mining.
- FARMINGTON (2631). Sewage treated in tanks and sand filters. Coal mining.
- LEWISTOWN (2279). Sewage treated in septic tanks.

GALLATIN COUNTY

- EQUALITY (1332). No sewer system. Coal mining.

GREENE COUNTY

- CARROLLTON (2020). Sewage treated in a septic tank. One creamery.
- ROODHOUSE (2928). No sewer system. One cucumber pickling factory.
- WHITEHALL (2954). Sewage treated in a septic tank. One condensed milk plant.

GRUNDY COUNTY

- COAL CITY (1744). Sewage untreated. Coal mining.
- MINOOKA (314). Sewage untreated.
- MORRIS (4505). Combined sewer system. Sewage untreated. One tannery, one pickling or galvanizing plant, and one paper mill.

HAMILTON COUNTY

MeLEANSBORO (1927). About one-half of the town sewerred. Sewage treated in a septic tank.

HANCOCK COUNTY

CARTHAGE (2129). Sewage treated in a tank.

HAMILTON (1698). Sewage untreated.

WARSAW (2031). Sewage untreated.

HARDIN COUNTY

No towns reported with sewer systems or waste producing industries.

HENDERSON COUNTY

LOMAX (211). No sewer system. Two factories canning tomatoes, strawberries, kraut, pumpkin, and cucumber pickles.

MEDIA (170). No sewer system. One creamery.

HENRY COUNTY

ATKINSON (778). No sewer system. One creamery.

CAMBRIDGE (1335). Sewage treated in two-story settling tanks and sand filters.

GALVA (2974). Sewage treated in two-story tanks and trickling filters. One creamery.

GENESEO (3375). Sewage treated in tanks. One canning factory and one gas plant.

KEWANES (16026). Sewage treated in a septic tank. Two galvanizing and pickling plants, one dye works and one gas plant.

IROQUOIS COUNTY

CISSNA PARK (670). No sewer system. One creamery.

CRESCENT CITY (310). Combined sewer system. Sewage untreated.

MILFORD (1466). Sewage untreated. One corn canning factory producing 200,000 cases a year.

ONARGA (1302). No sewer system. One corn and bean canning factory.

WATSEKA (2817). An incomplete sewer system. Sewage untreated. One chemical manufacturing company manufacturing disinfectants, and two creameries.

JACKSON COUNTY

CARBONDALE (6267). Sewage untreated. One dye works, one creamery, one tie treating plant, and coal mining.

DESOTO (703). No sewer system. Coal mining.
 DOWELL (422). No sewer system. Coal mining.
 ELKVILLE (990). No sewer system. Coal mining.
 MURPHYSBORO (10703). Sewage untreated. One creamery, one
 gas plant, and coal mining.

JASPER COUNTY

NEWTON (2083). Sewage treated in a tank.

JEFFERSON COUNTY

MOUNT VERNON (9815). Sewage untreated. Two creameries, one
 tomato canning factory, one gas works, and one tie treating
 plant treating about 1,000,000 ties annually.

JERSEY COUNTY

GRAFTON (949). No sewer system. One powder manufacturing
 company.
 JERSEYYILLE (3839). Sewage treated in a septic tank.

JO DAVIESS COUNTY

APPLE RIVER (484). No sewer system. One creamery.
 ELIZABETH (687). No sewer system. One creamery.
 GALENA (4742). Sewage untreated. Two creameries.
 HANOVER (737). No sewer system. One creamery.
 SCALES MOUND (356). No sewer system. One creamery.
 STOCKTON (1449). No sewer system. One creamery.

JOHNSON COUNTY

No towns reported with sewer systems or waste producing industries.

KANE COUNTY

AURORA (36697). Sewage untreated. One gas plant, and one
 strawboard factory.
 BATAVIA (4395). Sewage untreated. One galvanizing plant.
 EAST DUNDEE (1303). No sewer system. One canning factory
 producing jams, preserves, etc., and two pickling plants.
 ELBURN (571). No sewer system, One creamery.
 ELGIN (27202). Sewage treated in tanks and sprinkling filters. Two
 creameries.
 GENEVA (2803). Sewage treated in a two-story tank. One iron
 pickling plant.
 HAMPSHIRE (618). No sewer system. One canning factory.

ST. CHARLES (4099). Sewage treated in a two-story settling tank.
 WEST DUNDEE (1587). Sewage untreated.

KANKAKEE COUNTY

BRADLEY (2128). Sewage untreated. One iron pickling plant.
 GRANT PARK (459). No sewer system. One creamery.
 KANKAKEE (16753). Sewage untreated. Two creameries, one distillery, one gas plant, one canning factory, and one dye manufacturing company.
 MANTENO (1182). Sewage treated in a septic tank.
 MOMENCE (2218). Combined sewer system. Part of sewage treated in settling tanks. One tannery.
 ST. ANNE (1067). Sewage untreated.

KENDALL COUNTY

PLANO (1473). Sewage treated in a settling tank.
 YORKVILLE (441). Sewage untreated.

KNOX COUNTY

ABINGDON (2721). Sewage untreated.
 GALESBURG (23834). Combined sewer system. Sewage untreated.
 The only waste-producing industry reported is a gas plant.

LAKE COUNTY

ANTIOCH (775). Sewage treated in tanks, and sand filters.
 BARRINGTON (Listed under COOK COUNTY).
 GRAYS LAKE (736). Sewage treated in Imhoff tank.
 HIGHLAND PARK (6167). Sewage treated in Imhoff tanks. Part of effluent treated in sprinkling filters, the remainder being chlorinated.
 HIGHWOOD (1446). Sewage treated in Imhoff tanks, sprinkling filters, and secondary sedimentation tanks.
 LAKE BLUFF (819). Sewage treated in an Imhoff tank and then chlorinated.
 LAKE FOREST (3657). Sewage treated in a septic tank and then chlorinated.
 LAKE ZURICK (316). Sewage treated in septic tank. One creamery.
 LIBERTYVILLE (2125). Sewage treated in septic tanks.
 MUNDELEIN (420). Sewage treated in tanks.
 NORTH CHICAGO (5839). Sewage treated in septic tanks and percolating filters. New treatment plant being installed in 1927. The only waste-producing industries reported are four pickling or galvanizing plants and one chemical manufacturing company.

- WAUCONDA (399). Sewage treated in tanks and a gravel filter.
 WAUKEGAN (19226). Sewage treated in tanks and then chlorinated. The only waste-producing industries reported are a chemical manufacturing plant, one tannery, and one gas plant.
 ZION CITY (5580). Sewage untreated. One creamery.

LASALLE COUNTY

- CEDAR POINT (686) Combined sewer system. Sewage untreated.
 Coal mining.
 EARLVILLE (1012). Sewage treated in Imhoff tanks and percolating filters. One creamery producing 450,000 pounds of butter a year.
 LA SALLE (13050). Combined sewer system. Sewage untreated.
 One chemical plant and one gas plant.
 MARSEILLES (3391). Combined sewer system. Sewage untreated.
 One strawboard factory and one paper factory. Coal mining.
 MENDOTA (3934). Sewage treated in a septic tank and intermittent sand filter. One corn canning factory, and one gas plant.
 OGLESBY (4135). Sewage untreated.
 OTTAWA (10816). Sewage untreated. One packing plant, one gas plant and three dyeing works.
 PERU (8869). Combined sewer system. Sewage untreated. Coal mining.
 RUTLAND (618). No sewer system. Coal mining.
 SHERIDAN (476). Sewage treated in a septic tank.
 STREATOR (14779). Combined sewer system. Sewage untreated.
 Two factories canning corn, tomatos, asparagus, and cucumbers.
 One creamery and one gas plant. Coal mining.

LAWRENCE COUNTY

- LAWRENCEVILLE (5080). Sewage untreated. One oil refinery.

LEE COUNTY

- AMBOY (1944). Sewage treated in settling tanks. One creamery handling 40,000 pounds of milk daily.
 ASHTON (882). Sewage treated in a septic tank and sand filters.
 DIXON (8191). Combined sewer system. Sewage untreated. One gas plant, one condensed milk plant and one iron pickling plant.

LIVINGSTON COUNTY

- DWIGHT (2255). Sewage treated in an Imhoff tank.
 FAIRBURY (2532). No sewer system. One creamery. Coal mining.
 PONTIAC (6664). Sewage treated in a tank. One corn canning factory, and one gas plant. Coal mining.

LOGAN COUNTY

- ATLANTA (1173). Sewage treated in septic tank.
 LINCOLN (11882). Sewage untreated. One gas plant. Coal mining.

MCDONOUGH COUNTY

- BUSHNELL (2716). Sewage treated in tanks. One creamery and one conserve company, the latter not operating in 1926.
 MACOMB (6714). Sewage treated in a settling tank. One iron pickling plant and one gas plant.

McHENRY COUNTY

- ALGONQUIN (693). Sewage untreated.
 CARY (463). Sewage treated in tanks. One galvanizing plant. Coal mining.
 CRYSTAL LAKE (2249). Sewage treated in tanks, and sand filters.
 HARVARD (3294). Sewage treated in a septic tank and in filter beds. One canning factory, and one creamery.
 HEBRON (631). No sewer system. One creamery.
 HUNTLEY (720). No sewer system. Two milk products and one cucumber canning factory.
 McHENRY (1146). Sewage treated in Alvord tanks. Two milk products companies.
 MARENGO (1758). Sewage untreated. One creamery.
 SPRING GROVE (363). No sewer system. One fruit canning factory, and one milk products company.
 UNION (399). No sewer system. One milk products company.
 WOODSTOCK (5523). Sewage treated in a septic tank and sand filters.

McLEAN COUNTY

- BLOOMINGTON (28725). Sewage untreated. One canning factory, one packing plant, five dye works, two creameries, and one gas plant. Coal mining.
 CHENOA (1311). No sewer system. One canning factory.
 COLFAX (976). No sewer system. Coal mining.
 LEROY (1680). Sewage treated in a tank and a sand filter. One corn canning factory, and one milk products company.
 LEXINGTON (1301). Sewage untreated.
 NORMAL (5143). Sewage untreated.

MACON COUNTY

- DECATUR (43818). Sewage treated in Imhoff tanks, sprinkling filters, and secondary sedimentation tanks. One corn products

plant, two packing plants, one galvanizing plant, seven dye works, one soap and perfume manufacturing company, three creameries, and one gas plant. Coal mining.

NIANTIC (613). No sewer system. Coal mining.

WARRENSBURG (490). No sewer system. One canning factory.

MACOUPIN COUNTY

BENLD (3316). Combined sewer system. Sewage untreated. Coal mining.

BUNKER HILL (977). No sewer system. One condensed milk company.

CARLINVILLE (5212). Sewage untreated. One creamery, and one gas plant. Coal mining.

GILLESPIE (4063). Combined sewer system. Sewage untreated. Coal mining..

MOUNT OLIVE (3503). Sewage treated in Imhoff tanks. Coal mining.

STAUNTON (6027). No sewer system. Two creameries, three packing plants. Coal mining.

VIRDEN (4682). No sewer system. Coal mining.

WILSONVILLE (837). No sewer system. Coal mining.

MADISON COUNTY

ALTON (24682). Sewage untreated. One packing plant, and one gas plant.

BETHALTO (471). No sewer system. Coal mining.

COLLINSVILLE (9753). Sewage treated in tanks. One canning factory, and two chemical manufacturing companies.

EAST ALTON (1669). Sewage untreated. One strawboard factory, two chemical manufacturing plants, and one creamery.

EDWARDSVILLE (5336). Sewage treated in tanks. One tie treating plant. Coal mining.

GRANITE CITY (14757). Sewage untreated. One corn products plant, one chemical manufacturing plant, one creamery, and one gas plant. Coal mining.

HIGHLAND (2902). No sewer system. Two creameries.

LIVINGSTON (1365). No sewer system. Coal mining.

MADISON (4996). Sewage untreated. One packing plant.

TROY (1312). No sewer system. Coal mining.

WOOD RIVER (3476). Sewage untreated. Three oil refineries and one tannery.

WORDEN (1252). No sewer system. Coal mining.

MARION COUNTY

ALMA (366). No sewer system. Cucumber pickle canning factory.
 CENTRALIA (12491). Sewage treated in septic tanks. One packing plant, and two milk products companies. Coal mining.
 SALEM (3457). Sewage treated in Imhoff tanks. One milk products company.
 SANDOVAL (1768). No sewer system. One refinery. Coal mining.

MARSHALL COUNTY

TOLUCA (2503). Sewage treated in a tank.
 WENONA (1203). Sewage treated in tanks.

MASON COUNTY

HAVANA (3614). Sewage untreated. One iron pickling works.
 MASON CITY (1880). No sewer system. One iron pickling works.

MASSAC COUNTY

BROOKPORT (1098). No sewer system. One small canning factory.
 JOPPA (651). No sewer system. One tie treating plant.
 METROPOLIS (5055). Sewage untreated. One small creamery.

MENARD COUNTY

ATHENS (1241). No sewer system. Coal mining.
 GREENVIEW (755). Sewage untreated.
 PETERSBURG (2432). Sewage untreated. One corn and pumpkin canning factory.

MERCER COUNTY

ALEDO (2231). Sewage treated in two-story sedimentation tanks and filters. One creamery.
 MATHERVILLE (886). No sewer system. Coal mining.
 NEW BOSTON (714). No sewer system. One canning factory.

MONROE COUNTY

WATERLOO (1930). No sewer system. One milk products plant.

MONTGOMERY COUNTY

COFFEEN (945). No sewer system. Coal mining.
 DONNELLSON (403). No sewer system. One creamery. Coal mining. One canning factory.

HILLSBORO (5074). Sewage treated in a septic tank. One gas plant. Coal mining.

IRVING (519). No sewer system. One cannery and one creamery.

LITCHFIELD (6215). Combined sewer system. Sewage untreated. One creamery, and one gas plant. Coal mining.

NOKOMIS (3465). Sewage treated in tanks. One creamery. Coal mining.

PANAMA (1281). No sewer system. Coal mining.

WITT (2443). No sewer system. Coal mining.

MORGAN COUNTY

JACKSONVILLE (15713). Combined sewer system. Sewage untreated. Two packing plants, one dyeing works, one gas plant, and two creameries.

MOULTRIE COUNTY

ARTHUR (998). Sewage untreated. One tomato canning factory, producing about 1500 cases a year.

LOVINGTON (1479). No sewer system. -Coal mining.

SULLIVAN (2532). No sewer system. One creamery.

OGLE COUNTY

BYRON (855). Sewage untreated.

CRESTON (327). No sewer system. One creamery.

FORRESTON (884). No sewer system. One milk products company.

OREGON (2227). Combined sewer system. Sewage untreated. One milk products company.

POLO (1867). Sewage untreated. One creamery spending \$100,000 for raw products in a year.

ROCHELLE (3310). Sewage treated in a septic tank and trickling filters. Two corn and pea canning factories and one dyeing works.

PEORIA COUNTY

AVERYVILLE (3815). Sewage untreated.

BARTONVILLE (1588). No sewer system. One pickling or galvanizing plant.

ELMWOOD (1242). Sewage untreated.

GLASFORD (645). No sewer system. Coal mining.

HANNA CITY (975). No sewer system. Coal mining.

PEORIA (76121). Sewage untreated. One strawboard factory, two paper factories, one creamery, one gas plant, one chemical manu-

factoring plant, two canning factories, three malt products companies, three packing plants, three distilleries. Coal mining.
 PEORIA HEIGHTS (1111). Sewage probably not treated.
 PRINCEVILLE (1035). No sewer system. One canning factory, producing 140,000 cases a year.

PERRY COUNTY

CUTLER (363). No sewer system. One creamery. Coal mining.
 DUQUOIN (7285). Sewage treated in a septic tank. One packing plant, and one gas plant. Coal mining.
 PICKNEYVILLE (2649). Sewage treated in septic tank. One creamery. Coal mining.
 TAMAROA (1115). No sewer system. One milk products company. Coal mining.

PIATT COUNTY

BEMENT (1663). Sewage untreated.
 MONTICELLO (2280). No sewer system. One chemical manufacturing company.

PIKE COUNTY

No towns reported with sewer systems or waste producing industries.

POPE COUNTY

No towns reported with sewer systems or waste producing industries.

PULASKI COUNTY

MOUNDS (2661). Sewage treated in a septic tank.
 MOUND CITY (2756). Sewage untreated. One canning factory.

PUTNAM COUNTY

GRANVILLE (1427). No sewer system. Coal mining.

RANDOLPH COUNTY

BALDWIN (353). No sewer system. One creamery.
 COULTERVILLE (1407). No sewer system. Coal mining.
 RED BUD (1141). No sewer system. One creamery.
 SPARTA (3340). Sewage treated in septic tank and filters. Coal mining.
 TILDEN (1137). No sewer system. Coal mining.

RICHLAND COUNTY

OLNEY (4491). Sewage treated in Imhoff tanks and filters. One creamery.

ROCK ISLAND COUNTY

- CORDOVA (271). No sewer system. One chemical manufacturing plant.
- MOLINE (30734). Sewage treated in Imhoff tanks. Three chemical manufacturing plants, two pickling plants, and one gas plant.
- ROCK ISLAND (35177). Sewage untreated. Three dyeing works, and three creameries.
- SILVIS (2541). Sewage untreated.

ST. CLAIR COUNTY

- BELLEVILLE (24823). Sewage treated in septic tanks. One packing plant, two creameries, coal mining, and three dyeing works.
- EAST ST. LOUIS (66767). Sewage untreated. Pour packing plants, two chemical manufacturing plants, two oil refineries, one gas plant, one acid plant, and one zinc smelter.
- FREEBURG (1594). No sewer system. Coal mining.
- LEBANON (1883). No sewer system. Coal mining.
- LENZBURG (502). No sewer system. Coal mining.
- MARISSA (1900). No sewer system. Small creamery. Coal mining.
- MASCOUTAH (2343). No sewer system. Two creameries. Coal mining.
- MILLSTADT (907). No sewer system. One creamery.
- NEW ATHENS (1406). Sewage untreated. Two milk products companies.
- O'FALLON (2379). No sewer system. Coal mining.
- SMITHTON (357). No sewer system. One creamery.

SALINE COUNTY

- CARRIER MILLS (2343). No sewer system. Coal mining.
- DORRISVILLE (1740). No sewer system. Coal mining.
- ELDORADO (5004). Sewage untreated. One milk products company. Coal mining.
- GALATIA (863). No sewer system. One packing plant. Coal mining.
- HARRISBURG (7125). Sewage untreated. One packing plant, one milk products company and coal mining.
- LEDFORD (673). No sewer system. Coal mining.
- MUDDY (336). No sewer system. Coal mining.

SANGAMON COUNTY

- AUBURN (2660). No sewer system. Coal mining.
- CANTRELL (187). No sewer system. Coal mining.

DAWSON (602). No sewer system. Coal mining.
 DIVERNON (2382). No sewer system. Coal mining.
 PAWNEE (1200). No sewer system. Coal mining.
 PLEASANT PLAINS (1078). No sewer system". Coal mining.
 RIVERTON (1916). No sewer system. Coal mining.
 SPRINGFIELD (59183). Sewage untreated. One canning company, canning corn, peas, and beans; three milk products companies, one gas plant. Coal mining.
 THAYER (1254). No sewer system. Coal mining.
 WILLIAMSVILLE (652). No sewer system. Coal mining.

SCHUYLER COUNTY

RUSHVILLE (2275). No sewer system. One milk products company.

SCOTT COUNTY

No towns reported with sewer systems or waste producing industries.

SHELBY COUNTY

MOWEAQUA (1591). No sewer system. Coal mining.
 SHELBYVILLE (3568). Sewage untreated. One creamery, and one gas plant.
 STEWARDSON (731). No sewer system. One packing plant, and one creamery.
 STRASBURG (469) No sewer system. One creamery.

STARK COUNTY

TOULON (1235). Sewage treated in tank and filters.
 WYOMING (1376). Sewage treated in tank. Coal mining.

STEPHENSON COUNTY

DAKOTA (248).. No sewer system. Pour cheese factories.
 DAVIS (337). No sewer system. One cheese factory.
 FREEPORT (19669). Sewage untreated. One gas plant, and two galvanizing plants.
 LENA (1149). No sewer system. One laundry, two milk and cream stations.
 ORANGEVILLE (423). No sewer system. One condensed milk factory.
 PEARL CITY (468). No sewer system. One milk products company.

ROCK CITY (159). No sewer system. One cheese factory making \$5000 worth of cheese per month.

WINSLOW (371). No sewer system. Five cheese factories.

TAZEWELL COUNTY

EAST PEORIA (2214). Sewage untreated.

MORTON (1179). No sewer system. One canning factory.

PEKIN (12086). Sewage untreated. One strawboard factory using 30 tons of straw per day, one corn products plant using 50,000 bushels per day, and one distillery using 5000 bushels of corn per day. One gas plant. Coal mining.

WASHINGTON (1643). Sewage untreated. One factory canning corn and peas.

UNION COUNTY

ANNA (3019). Sewage treated in septic tanks.

VERMILION COUNTY

DANVILLE (33776). Sewage untreated. One malt products company, one packing plant, one pickling works, two creameries, and one gas plant. Coal mining.

GEORGETOWN (3061). No sewer system. Coal mining.

HOOPESTON (5451). Sewage treated in septic tank. Two canning factories, one chemical manufacturing company, one creamery, and one gas plant.

RANKIN (944). Sewage treated in septic tank.

ROSSVILLE (1588). No sewer system. One canning factory and one creamery.

WESTVILLE (4241). No sewer system. Coal mining.

WABASH COUNTY

MOUNT CARMEL (7456). Sewage untreated. One strawboard factory, one gas plant, and two canning factories.

WARREN COUNTY

MONMOUTH (8116). Combined sewer system. Sewage treated in a septic tank. One dairy.

WASHINGTON COUNTY

ASHLEY (751). No sewer system. One dairy.

DUBOIS (443). No sewer system. Coal mining.

NASHVILLE (2209). No sewer system. One dairy. Coal mining.

OKAWVILLE (614). No sewer system. One dairy and one laundry.

WAYNE COUNTY

FAIRFIELD (2754). Sewage treated in tanks.

WHITE COUNTY

CARMI (2667). Sewage untreated. One canning factory and one small creamery.

NORMS CITY (1300). No sewer system. Coal mining.

WHITESIDE COUNTY

FULTON (2445). No sewer system. One oil refinery and two creameries.

MORRISON (3000). Combined sewer system. Sewage untreated. One condensed milk plant and one gas plant.

ROCK FALLS (2927). Sewage untreated. (See STERLING.)

STERLING (8182). Combined sewer system. Sewage untreated. Three pickling plants, two dye works, two milk products companies, one strawboard factory, one canning factory (canning corn and peas), one gas plant, and two packing plants.

WILL COUNTY

CRETE (945). Installing sewers, tanks and percolating filters in 1927.

JOLIET (38442). Combined sewer system. Sewage untreated. Two paper factories, one packing plant, four galvanizing and pickling plants, three dyeing works, four chemical manufacturing plants, one oil refinery, two milk products companies, and one gas plant.

LOCKPORT (2684). Combined sewer system. One oil refinery.

PEOTONE (1090). Sewage treated in tanks.

PLAINFIELD (1147). Combined sewer system. Sewage untreated.

ROCKDALE (1478). Sewage untreated.

STEGER (974). Installing sewers, Imhoff tanks, and sprinkling filters in 1927. One gas plant.

WILMINGTON (1384). Combined sewer system. Sewage untreated. One strawboard factory.

WILLIAMSON COUNTY

CARTERVILLE (3404). No sewer system. Coal mining.

HERRIN (10986). Sewage treated in septic tanks. Coal mining.

JOHNSTON CITY (7137). Sewage treated in Imhoff tank and sprinkling filters. Coal mining.

MARION (9582). Sewage treated in septic tank. Two tanneries, two dyeing works, two milk products plants, and coal mining.
 PITTSBURG (670). No sewer system. Coal mining.

WINNEBAGO COUNTY

DURAND (549). No sewer system. One creamery.
 PECATONICA (1088). No sewer system. One milk products company.
 ROCKFORD (65651). Sewage untreated. Seven knitting mills using dyes, one tannery, one gas plant, and two galvanizing or pickling plants.
 SOUTH BELOIT (1436). Combined sewer system. Sewage untreated.
 WINNEBAGO (495). No sewer system. One creamery.

WOODFORD COUNTY

EL PASO (1638). Sewage treated in tanks. Two factories canning peas, corn, and tomatoes.
 EUREKA (1559). No sewer system. One factory canning corn and peas.
 METAMORA (683). No sewer system. One factory canning tomatoes, beets, and spinach.
 MINONK (2109). Sewage untreated.
 ROANOKE (1368). No sewer system. Coal mining.

PUBLICATIONS OF THE STATE WATER SURVEY.

- No. 1-9. *Out of print.*
- No. 10. Chemical and biological survey of the waters of Illinois. Report for 1912. 198 pp., 19 cuts.
- No. 11. Chemical and biological survey of the waters of Illinois. Report for 1913. 473 pp., 106 cuts.
- No. 12. Chemical and biological survey of the waters of Illinois. Report for 1914. 261 pp., 32 cuts.
- No. 13. Chemical and biological survey of the waters of Illinois. Report for 1915. 381 pp., 36 cuts.
- No. 14. Chemical and biological survey of the waters of Illinois. Report for 1916. 192 pp., 40 cuts.
- No. 15. Chemical and biological survey of the waters of Illinois. Report for 1917. 136 pp., 8 cuts.
- No. 16. Chemical and biological survey of the waters of Illinois. Report for 1918 and 1919. 280 pp., 36 cuts.
- No. 17. Index to Bulletins 1-16. 1921. 17 pp.
- No. 18. Activated sludge studies. 1920-1922. 150 pp., 31 cuts.
- No. 19. Solubility and rate of solution of gases. Bibliography. 1924. 49 pp.
- No. 20. Comparison of chemical and bacteriological examinations made on the Illinois River during a season of low water and a season of high water—1923-1924. 33 pp., 4 cuts.
- A preliminary notice of a survey of the sources of pollution of the streams of Illinois. 1924. 26 pp., 4 cuts.
- No. 21. Public ground-water supplies in Illinois. 1925. 710 pp., 11 cuts. (Price \$1.00).
- No. 22. Investigations of chemical reactions involved in water purification, 1920-1925. 130 pp., 17 cuts. (Price 50 cents.)
- No. 23. The disposal of the sewage of the Sanitary District of Chicago. 1927. 195 pp., 30 cuts.

For copies of these bulletins or for other information address:
Chief, State Water Survey, Urbana, Illinois.