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# TRACKING OF HAZARDOUS SUBSTANCE SPILLS TO INLAND STREAMS

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## ABSTRACT

Dangers to the biosphere occur from the consumption of waters that have become polluted by accidental discharges of hazardous substances into an aquatic environment. Prompt mitigation of spills and expeditious notification of downstream users is necessary to avoid excessive adverse environmental impacts. Arrival time of the leading edge of a pollutant plume at a sensitive area must be determined rapidly.

It is imperative that every aspect of the plume's progress downstream be known and to determine rates of travel and dispersion. Downstream observers and authorities responsible for water intakes and sensitive environments must be identified and notified. Speed is necessary in order to lessen the impact of an environmental insult.

River miles to the mouth of a stream have proven to be the most useful data for tracking contaminant plumes. Distances to the nearest habitation and community, receiving and tributary streams, flow measurement and water intakes, and potential observers can then be determined from the relationship of river miles to these sensitive environments.

Aids have been developed and incorporated into a handbook to facilitate manipulation of the data base for the Illinois River, which include tables, charts, maps, and diagrams.

## 1. INTRODUCTION

Studies leading to this paper have revealed various aspects of Man's involvement in our current state of environmental degradation and hazardous substance spills in Illinois. The reports of environmental insults to the waters of the state have continually increased due to the fruitfulness of the environment and the people living therein. As productivity increases with population growth and increasing consumer demands, so does the generation of waste and the opportunity for spills during processing and transportation.

The degradation of our biosphere continues due to acute and long-term chronic exposure of its organisms to toxic materials. What we leave to our descendants, in the way of a fruitful environment, depends on how well we protect what is left. We must pursue extending brotherhood to future

generations, for we are only borrowing resources and productivity from their supply that we leave to them. Are we going to limit their options in determining their future? Today we are building upon that which was left to us. We can only build our bridge to the future from that which was left to us from the past. Soon we will become the past. What kind of building materials will we be leaving for our grandchildren's grandchildren to build their bridge to the future?

Let us guide thoughtful progress into the future.

## 2. HAZARDOUS SUBSTANCE SPILLS

Dangers to the biosphere occur from the consumption of waters that have become polluted by accidental discharges of hazardous substances into an aquatic environment. Prompt mitigation of spills and expeditious notification of downstream users is necessary to avoid excessive adverse environmental impacts. Arrival time of the leading edge of a pollutant plume at a sensitive area must be determined rapidly.

It is imperative that every aspect of the plume's progress downstream be known in order to determine rates of travel and dispersion. Downstream observers and authorities responsible for water intakes and sensitive environments must be identified and notified. Speed is necessary in order to lessen the impact of an environmental insult.

An incident control sheet for use by the IEPA Emergency Response Unit (ERU) provides an itemization of data to be provided to the Duty Officer (DO) during the initial notification of a spill. From this information a hazard assessment is made and an appropriate response planned.

The locational aspects of the spill that are normally provided to the DO are the nearest community, adjacent county, and the best available description of the site which may include distances from intersections, roads, bridges, railroads, or streams. Distances to the nearest habitation and community, receiving and tributary streams, flow measurement and water intakes, and potential observers must then be determined from the relationships of river miles (RM) to these sensitive environments. RM to the mouth of a stream have proven to provide the most useful data for tracking contaminant plumes.

Usually the temporal information given to the DO includes only the time of the incident and the time of reporting, but meteorological information is also required. Weather and stream flow data are to be provided by the on-site reporting personnel when possible; which would include direction and speed of the wind and the waters of the receiving waterway. An estimation of the river stage should be made to aid in estimating the stream velocity and flow rate.

It is necessary to assemble all of the above data and information in such a format that it is easily accessible and manipulated in order to accomplish the main purpose of the responsibilities of the DO; namely, to protect the citizenry, biota, and environment of the State of Illinois by predicting arrival time of the pollutant plume at sensitive sites and notification of responsible authorities.

## 3. MANUAL

Aids have been developed and incorporated into a manual to facilitate manipulation of the data base for the Illinois River, which include tables, charts, maps, and diagrams.

The actual sequence of determinations that must be made by the DO following completion of the Incident Control Sheet (Fig. 1) is as follows:

### 3.1 Consult Maps for Locational Information:

1. State of Illinois Basin and County Map (Map 1) to determine county and river basin.
2. Maps of Illinois River Hydrologic Units (Map 2) and Illinois Waterway and its Tributaries (Map 3) and Bed Profile -- Illinois River (Fig. 3) to determine approximate RM.
3. River segment map by RM and lock and dam pools as follows, for more detailed information.

| | |
|---|---|
| 0.0 - 80.2: | Alton Dam Pool (Maps 4 & 5) |
| 80.2 - 157.8: | LaGrange Dam Pool (Maps 6 & 7) |
| 157.8 - 231.0: | Peoria Dam Pool (Maps 8 & 9) |
| 231.0 - 247.0: | Starved Rock Dam Pool (Map 9) |
| 247.0 - 271.5: | Marseilles Dam Pool (Map 10) |
| 271.5 - 286.0: | Dresden Island Dam Pool (Map 10) |
| 286.0 - 291.1: | Brandon Road Dam Pool (Map 11) |
| 291.1 - Over: | Lockport Dam Pool (Map 11) |

### 3.2 Consult Maps 4-11 and Illinois River Waterway River Miles RM table (Table 1) to Locate and Aid in Determination of Arrival Time of Pollutant Plume at:

1. Communities nearby and downstream,
2. Water intakes nearby and downstream,
3. Sensitive environments nearby and downstream,
4. Receiving and tributary streams,
5. Potential observers at river crossings of transportation facilities.

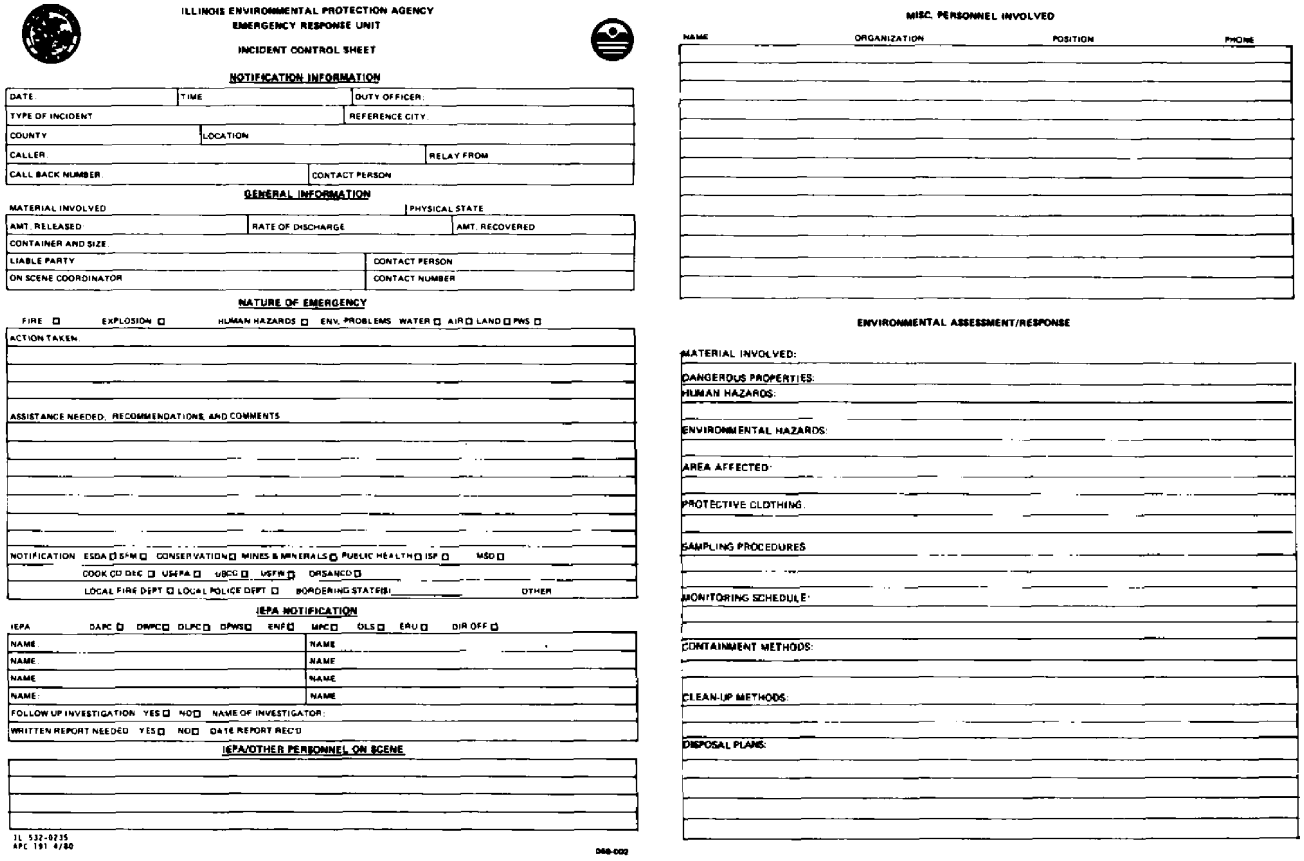
### 3.3 Consult Illinois River Time-of-Travel (Fig. 2), Pollutant Plume In-Stream Velocity (Table 2), and River Segment Maps (Maps 4-11) for Surface Velocities at Low (.9), Medium (.5), and High (.1) Stream Flow:

1. At point of spill by chart, table, measure, or estimate,
2. Through entire navigation pool,
3. Downstream to critical points.

### 3.4 Determine Weather Conditions at Present and Forecast:

### 3.5 Determine Estimated Time of Arrival of Aquatic Pollutant Plume:

### 3.6 Consult List of Telephone Numbers and Notify Individuals Responsible for Water Intakes (Table 3) and Environmentally Sensitive Areas (Table 4); and for Observation Contacts (Table 5) along the Illinois River.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
EMERGENCY RESPONSE UNIT

INCIDENT CONTROL SHEET

**NOTIFICATION INFORMATION**

| | | |
|---|---|---|
| DATE | TIME | DUTY OFFICER |
| TYPE OF INCIDENT | | REFERENCE CITY |
| COUNTY | LOCATION | |
| CALLER | | RELAY FROM |
| CALL BACK NUMBER | CONTACT PERSON | |

**GENERAL INFORMATION**

| | | |
|---|---|---|
| MATERIAL INVOLVED | | PHYSICAL STATE |
| AMT. RELEASED | RATE OF DISCHARGE | AMT. RECOVERED |
| CONTAINER AND SIZE | | |
| LIABLE PARTY | CONTACT PERSON | |
| ON SCENE COORDINATOR | CONTACT NUMBER | |

**NATURE OF EMERGENCY**

FIRE ☐ EXPLOSION ☐ HUMAN HAZARDS ☐ ENV. PROBLEMS WATER ☐ AIR ☐ LAND ☐ PWS ☐

ACTION TAKEN:

ASSISTANCE NEEDED, RECOMMENDATIONS AND COMMENTS:

NOTIFICATION ESDA ☐ SPM ☐ CONSERVATION ☐ MINES & MINERALS ☐ PUBLIC HEALTH ☐ ISP ☐ MSD ☐
COOK CO DEC ☐ USEPA ☐ USCG ☐ USFW ☐ ORSANCO ☐
LOCAL FIRE DEPT ☐ LOCAL POLICE DEPT ☐ BORDERING STATE(S) _____ OTHER

**IEPA NOTIFICATION**

IEPA DAPC ☐ DWPC ☐ DLPC ☐ DPWS ☐ ENF ☐ MPC ☐ OLS ☐ ERU ☐ DIR OFF ☐

| | |
|---|---|
| NAME: | NAME |
| NAME: | NAME |
| NAME: | NAME |
| NAME: | NAME |

FOLLOW UP INVESTIGATION YES ☐ NO ☐ NAME OF INVESTIGATOR:
WRITTEN REPORT NEEDED YES ☐ NO ☐ DATE REPORT REC'D

**IEPA/OTHER PERSONNEL ON SCENE**

IL 532-0235
APC 191 4/80

068-002

**MISC. PERSONNEL INVOLVED**

| NAME | ORGANIZATION | POSITION | PHONE |
|---|---|---|---|

**ENVIRONMENTAL ASSESSMENT/RESPONSE**

MATERIAL INVOLVED:
DANGEROUS PROPERTIES:
HUMAN HAZARDS:
ENVIRONMENTAL HAZARDS:
AREA AFFECTED:
PROTECTIVE CLOTHING:
SAMPLING PROCEDURES:
MONITORING SCHEDULE:
CONTAINMENT METHODS:
CLEAN-UP METHODS:
DISPOSAL PLANS:

**Fig. 1. Incident Control Sheet — Initial Notification of Spill**

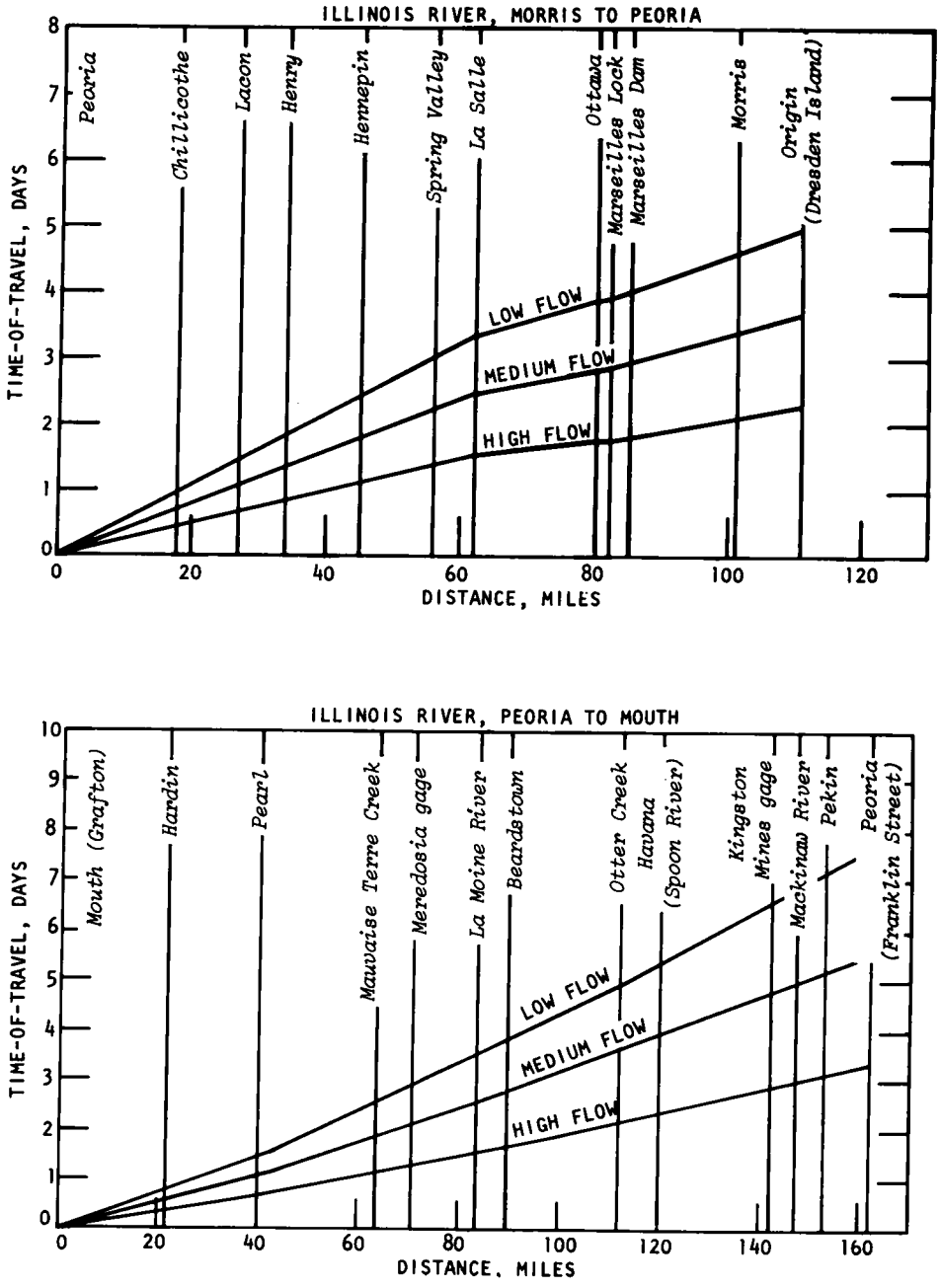



Fig. 2. Illinois River — River Miles & Time of Travel (Stall, 1969)

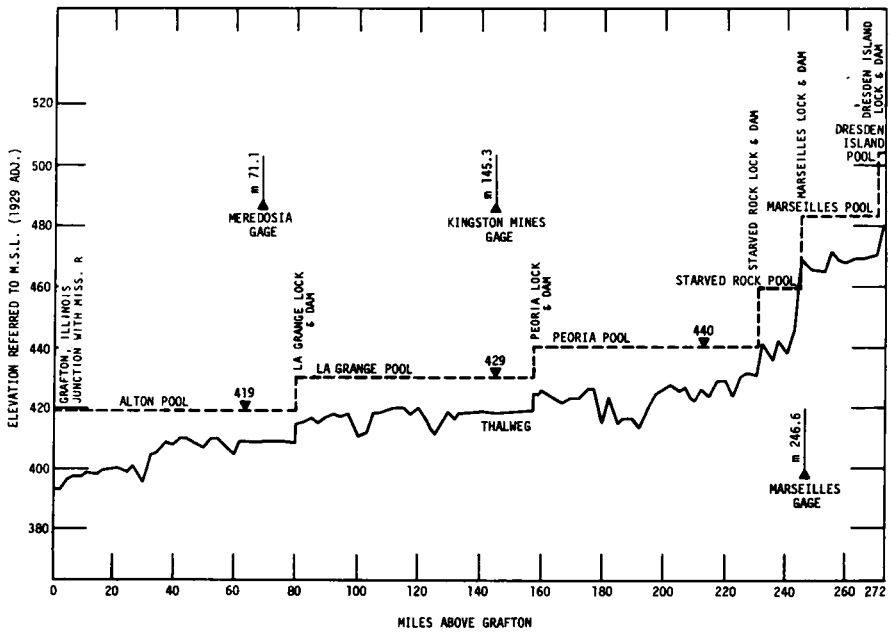
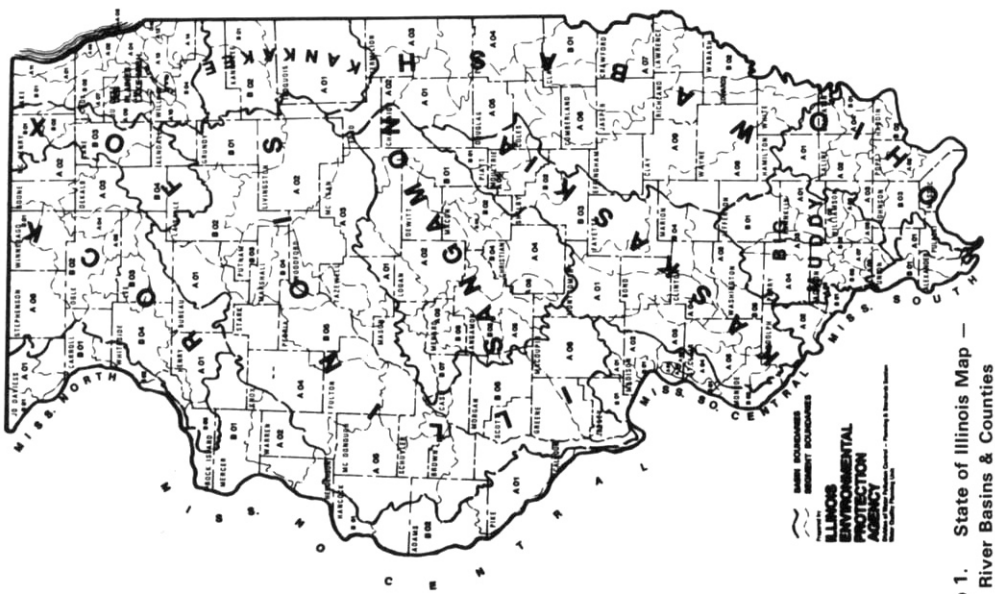
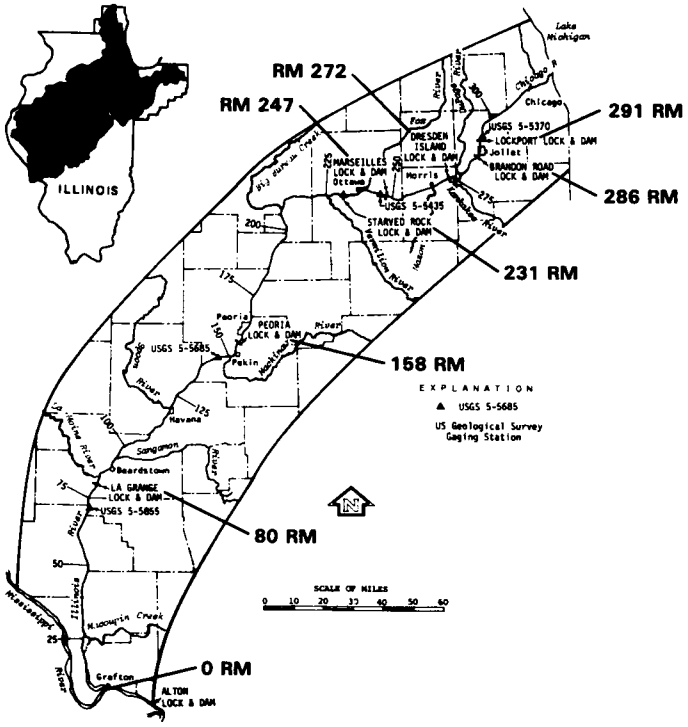


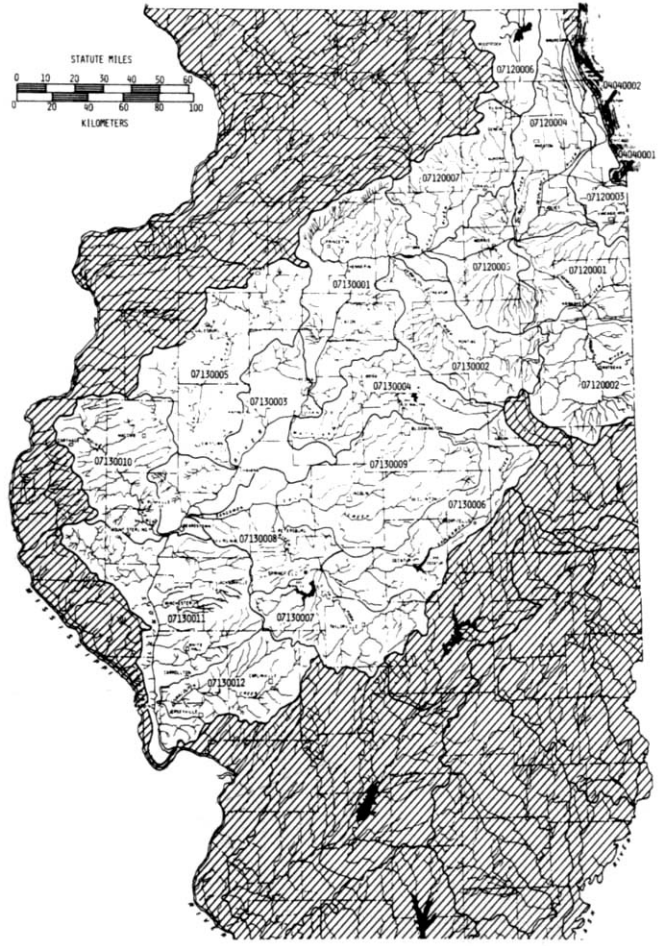

**Fig. 3. Illinois Waterway and River Bed Profile — River Miles (Singh, 1973)**



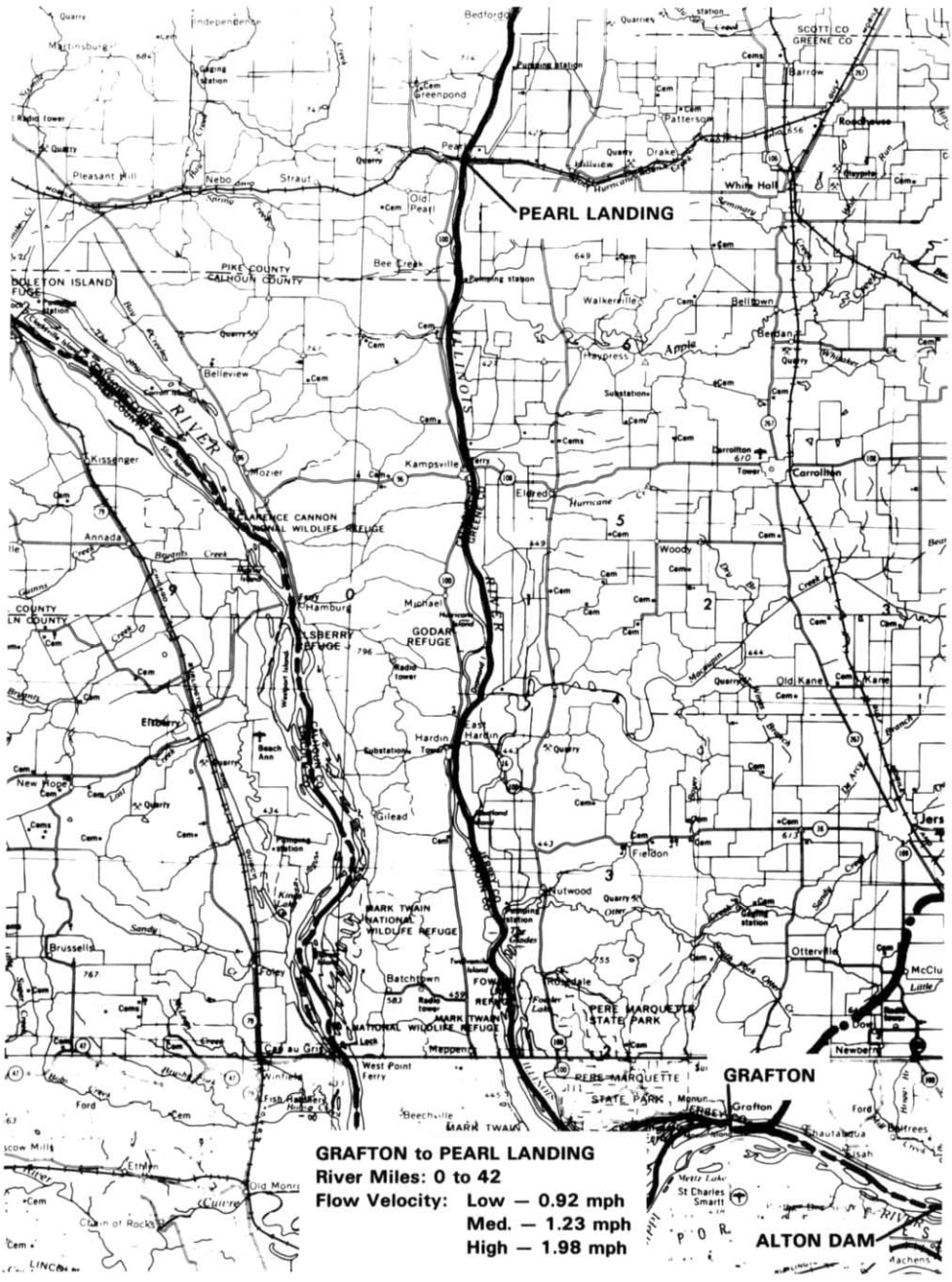

Map 1. State of Illinois Map — River Basins & Counties



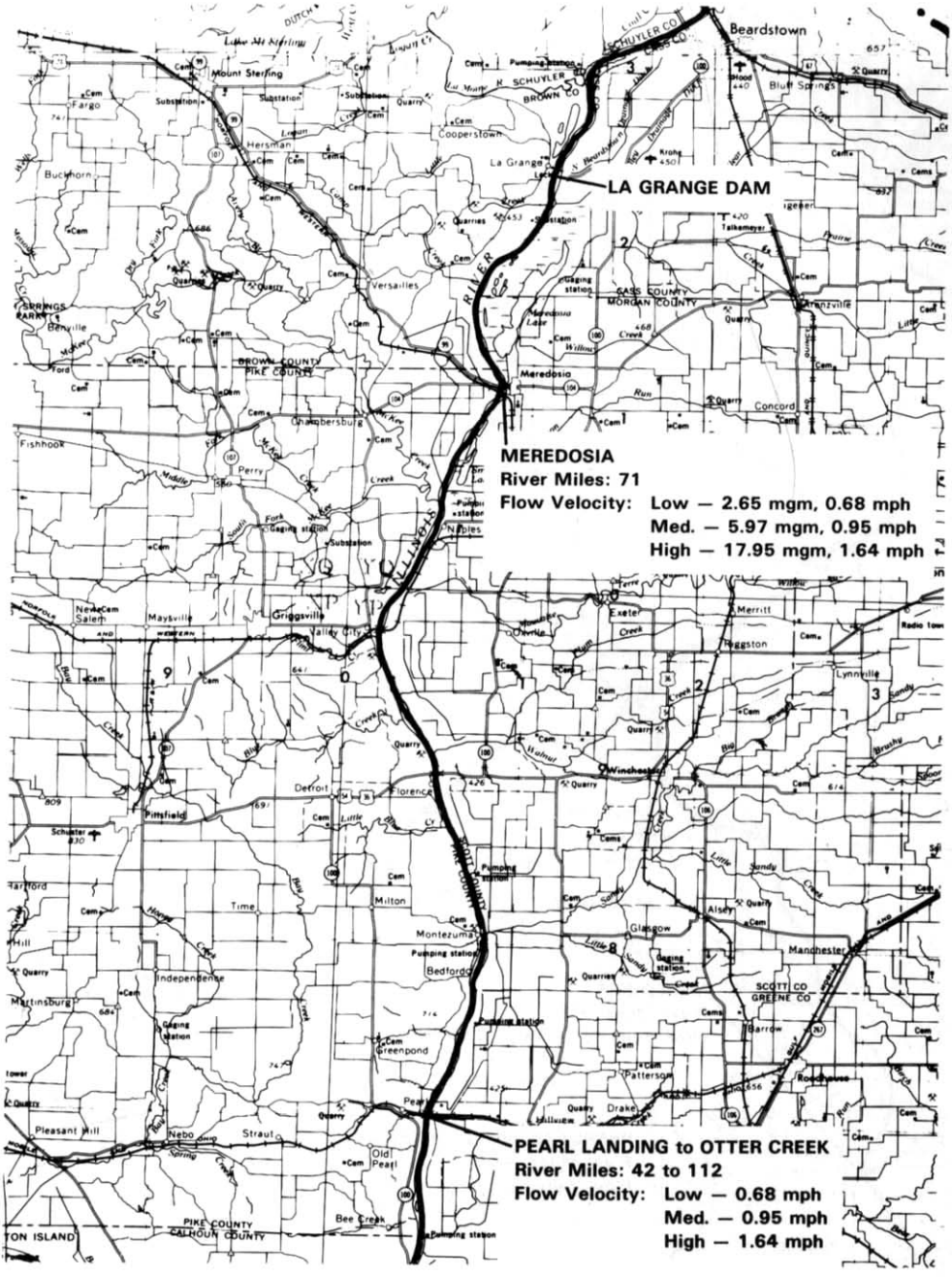

Map 3. Illinois Waterway — Tributaries, Dam Pools, & River Miles (Kothandaraman, 1971)



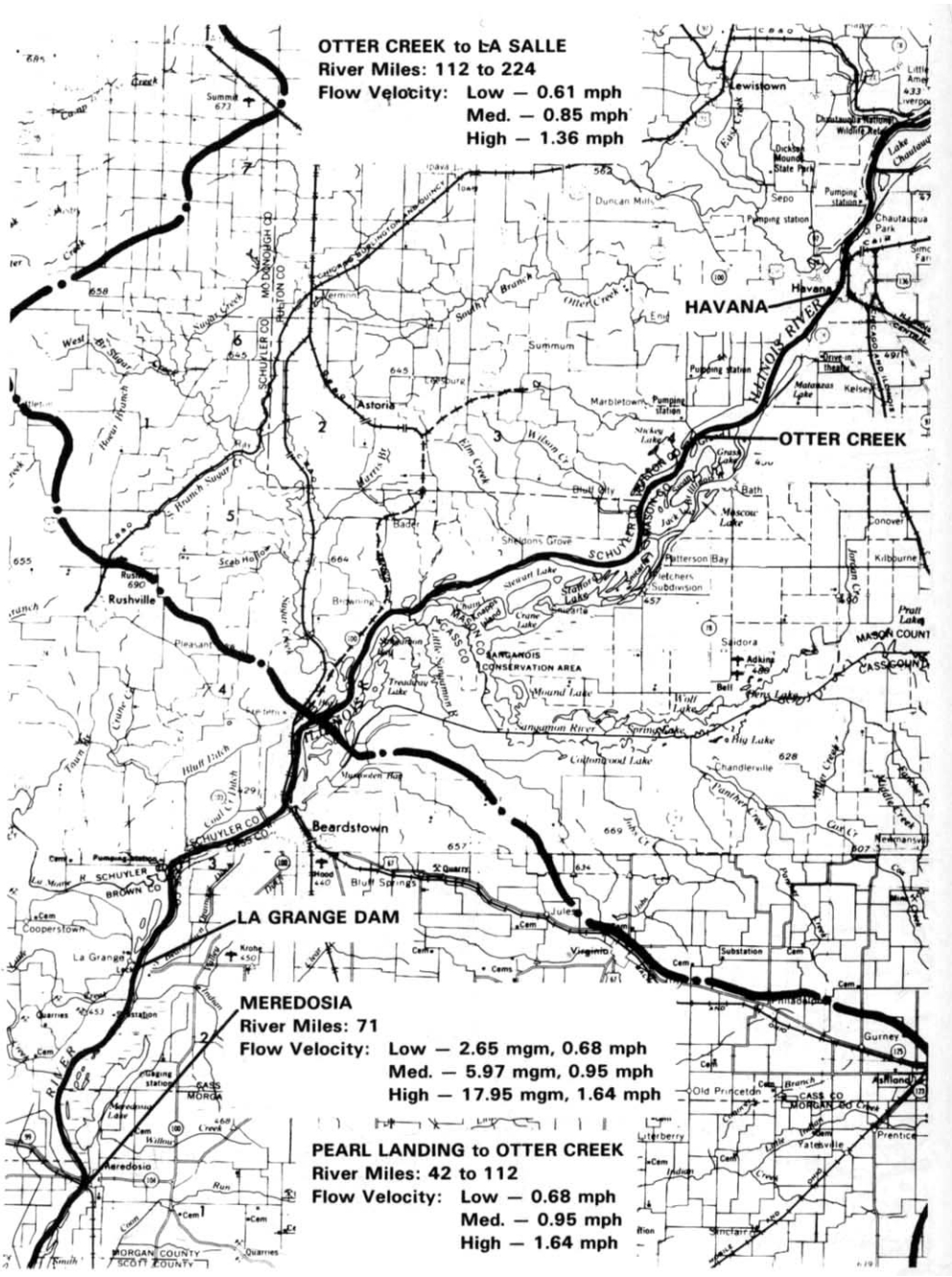

Map 2. Illinois River Map — Hydrologic Units (USGS, 1979)



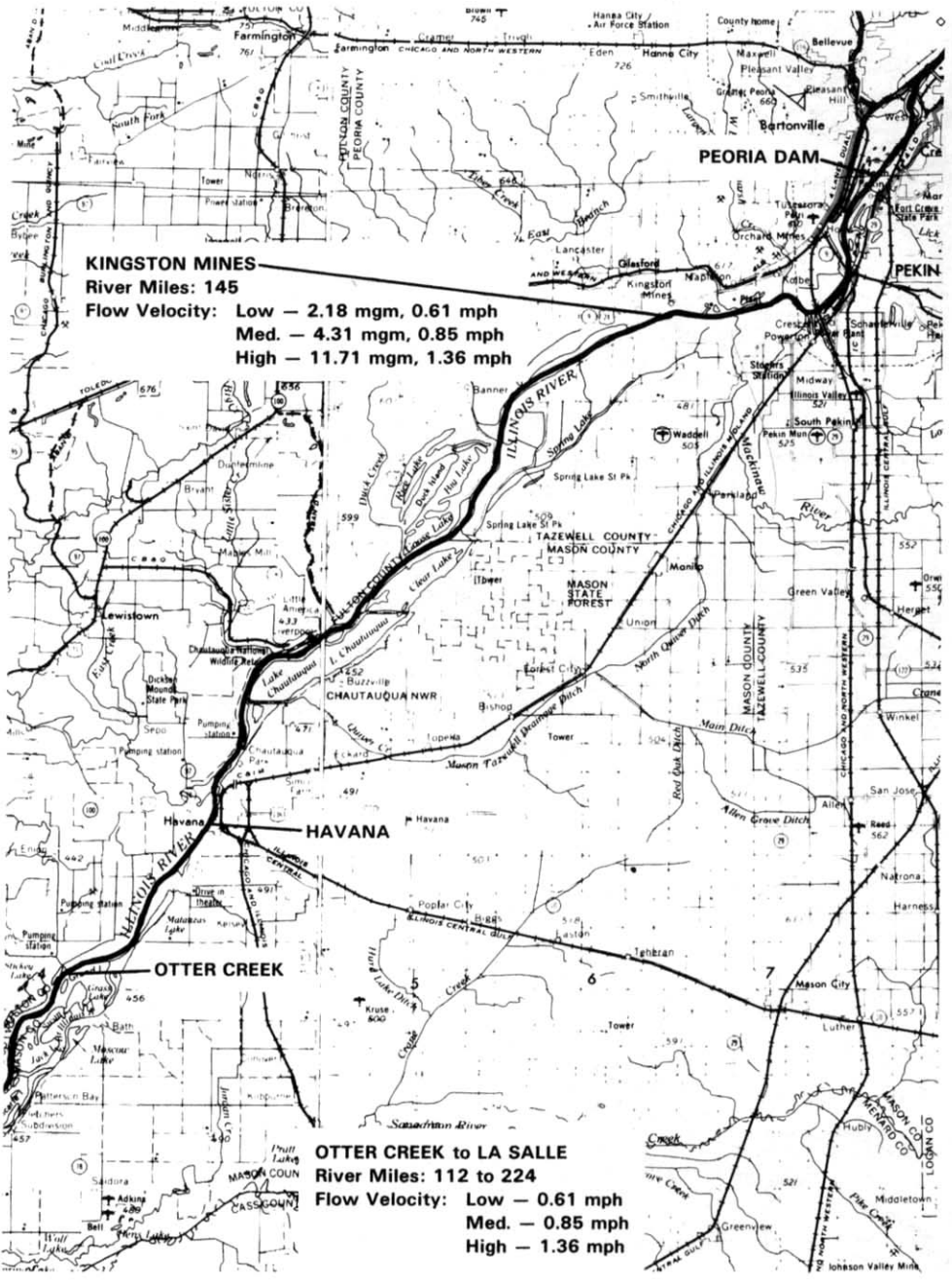

**Map 4. River Miles 0-43.2: Alton Dam Pool: Grafton-Pearl (Maps, 4-11)**



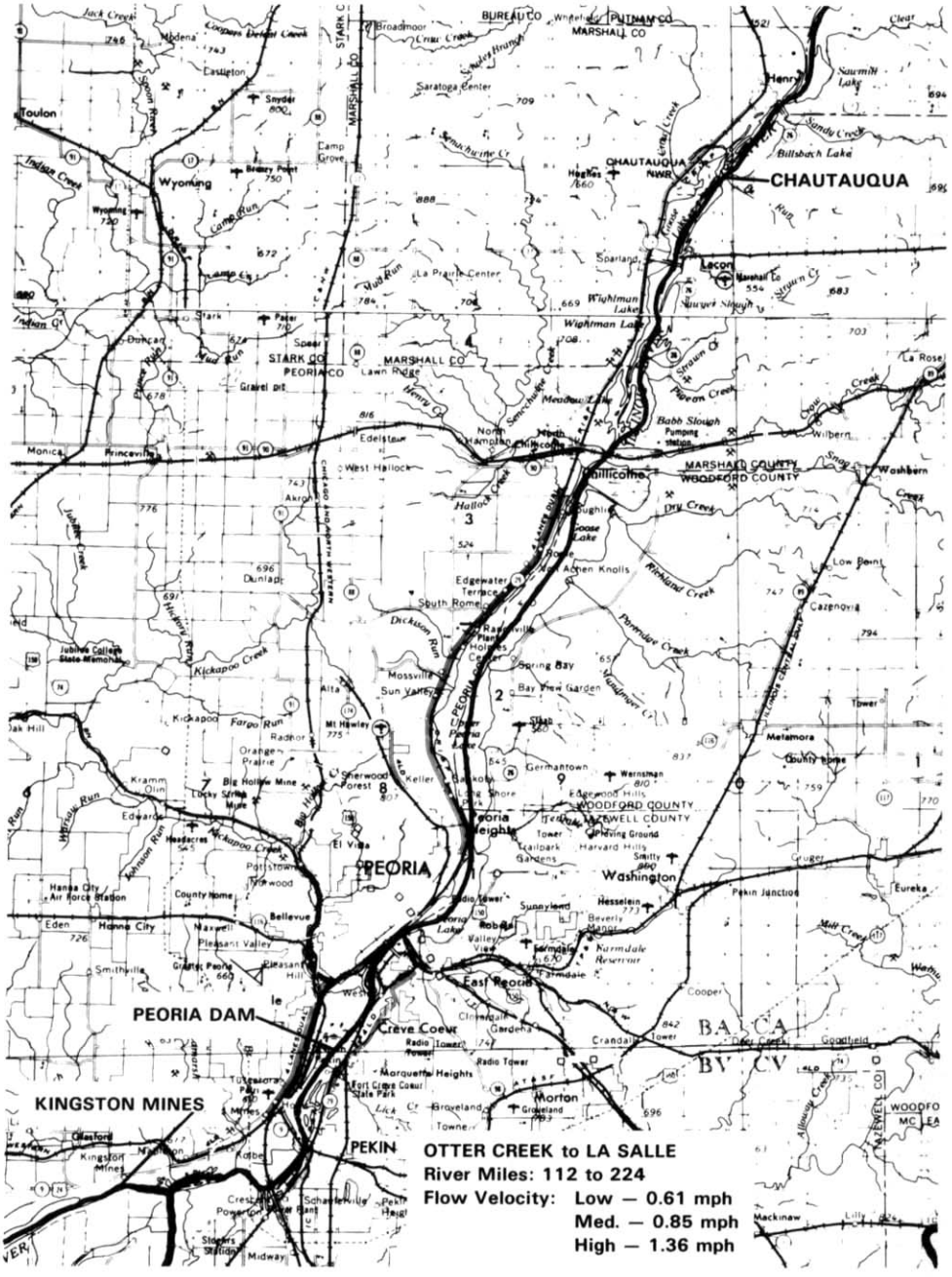

**Map 5. River Miles 43.2-80.2: Alton Dam Pool (Cont'd): Pearl-LaGrange (Maps, 4-11)**



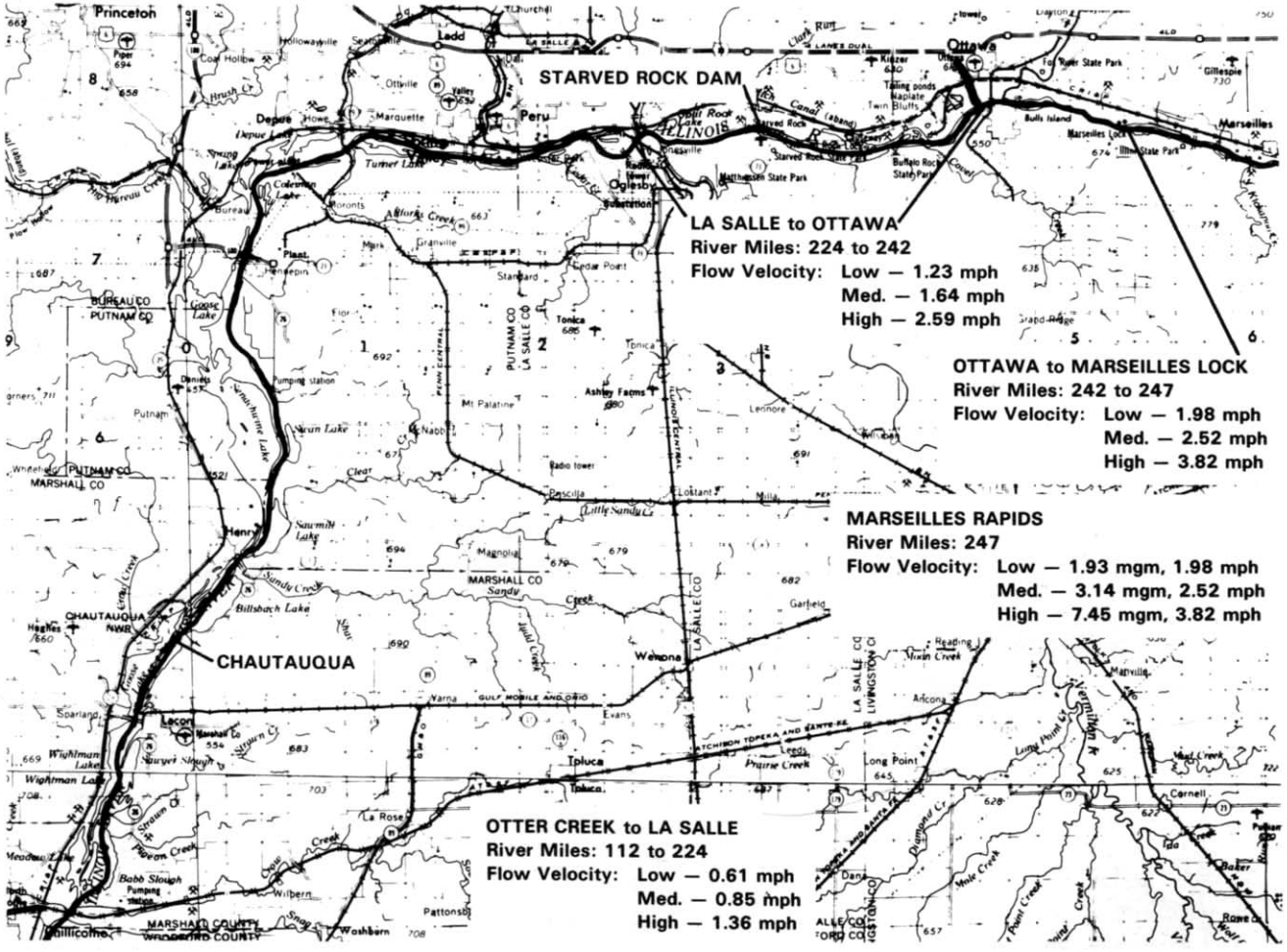

Map 6. River Miles 80.2-120.0: LaGrange Dam Pool: LaGrange-Havana (Maps, 4-11)



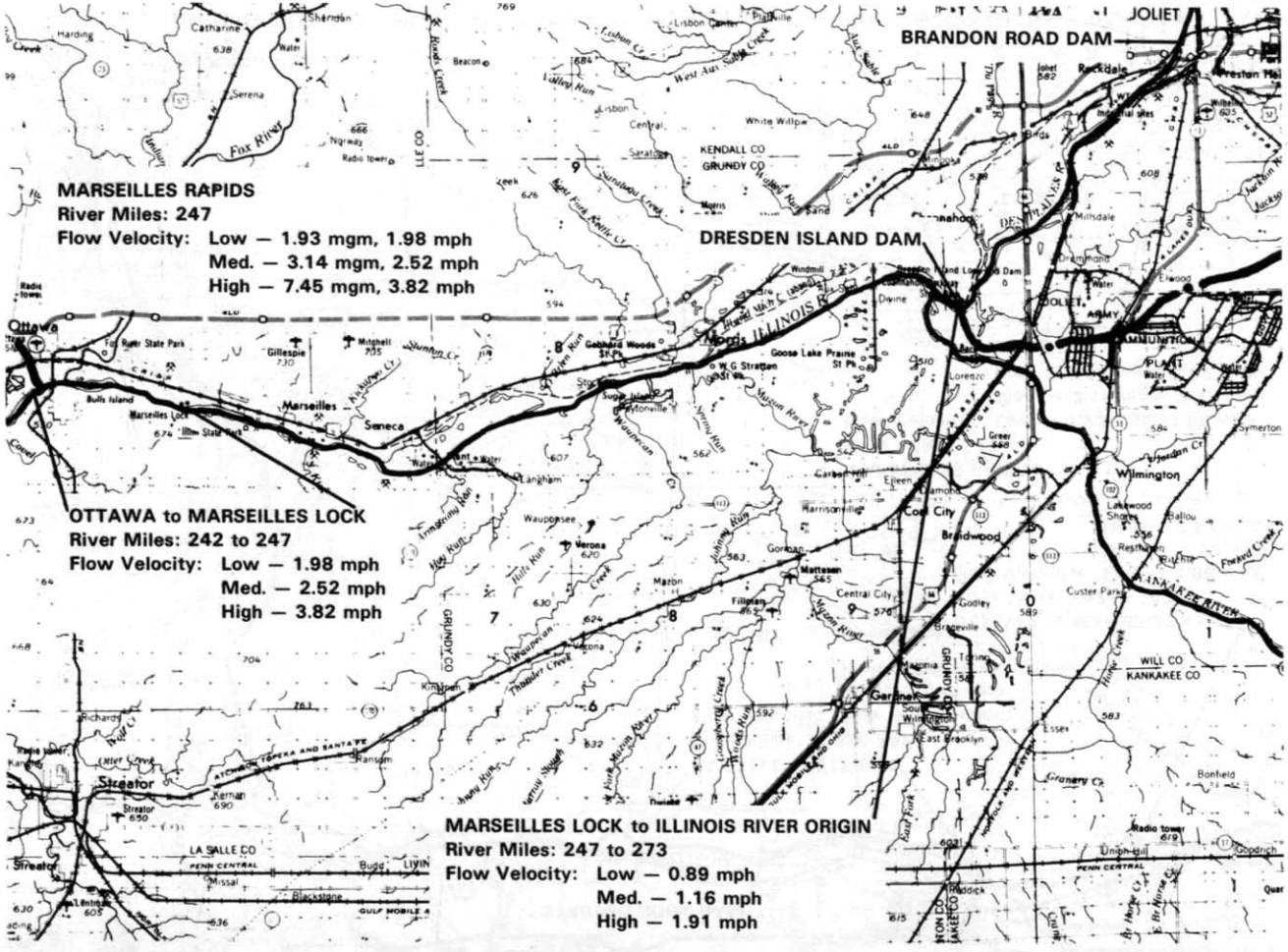

**Map 7. River Miles 120.0-157.8: LaGrange Dam Pool (Cont'd): Havana-North Pekin (Maps, 4-11)**



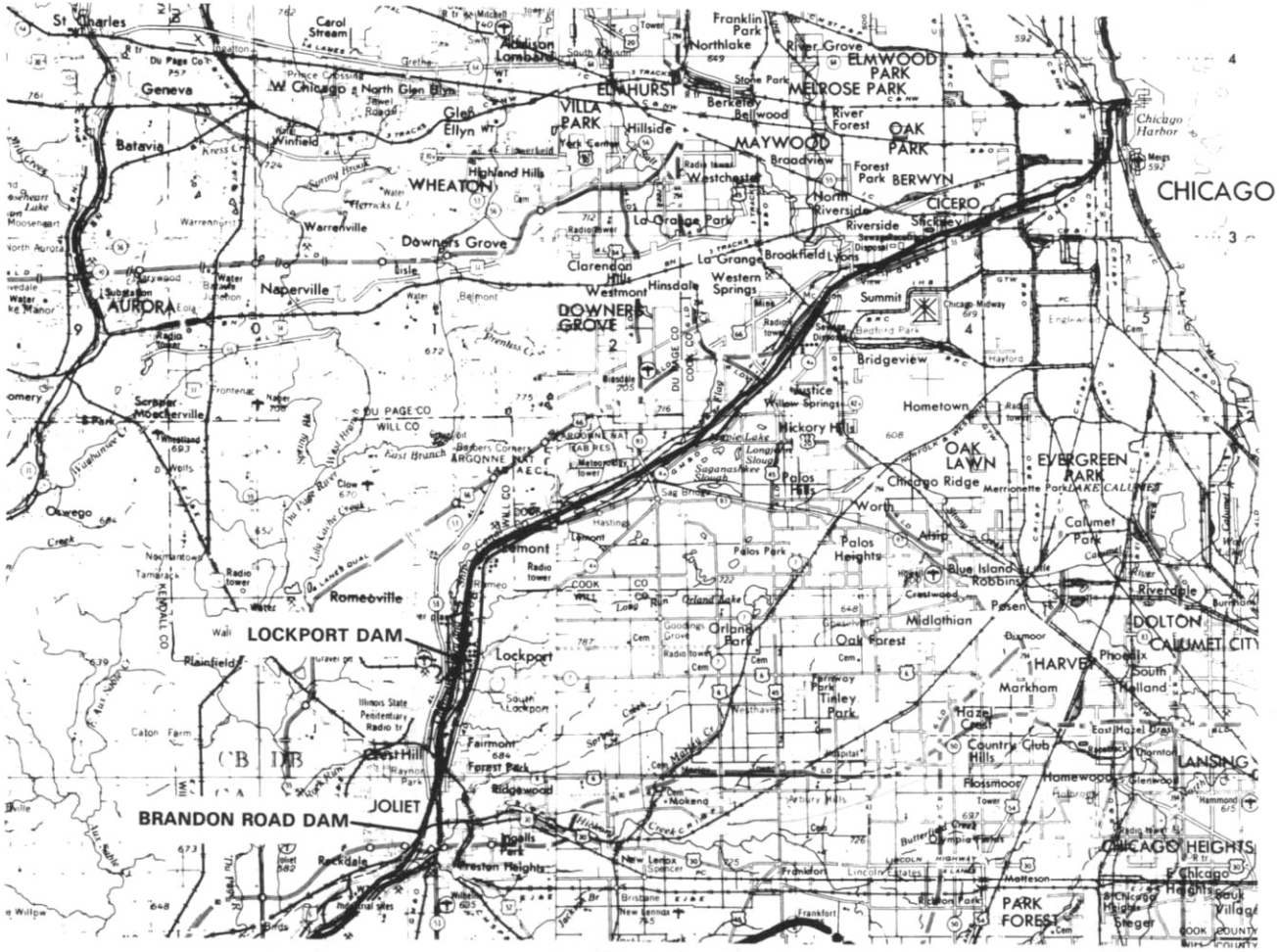

**Map 8. River Miles 157.8-193.0: Peoria Dam Pool: North Pekin-Chautauqua (Maps, 4-11)**




Map 9. River Miles 193.0-247.0: Peoria Dam (Cont'd) & Starved Rock Dam Pools: Chautauqua-Marseilles (Maps, 4-11)




**Map 10. River Miles 247.0-286.0: Marseilles Dam & Dresden Island Dam Pools: Marseilles-Joliet (Maps, 4-11)**




**Map 11. River Miles 286.0-Over: Brandon Road Dam & Lockport Dam Pools: Joliet-Lake Michigan (Maps, 4-11)**

Table 1. Illinois River Waterway River Miles (Note 1)

| RM | Location | Water Supply | Observer |
|---|---|---|---|
| 298.6 | Above Lockport | Multiple Intakes | |
| 297.7 | Above Lockport | Multiple Intakes | |
| 291.1 | San & Ship Canal/MSD | | Lock & Dam |
| 290.0 | DesPlaines R/S&S Canal | Multiple Intakes | Railroad |
| 288.8 | Joliet | Joliet | Bridges |
| 287.6 | DesPlaines/I&M Jct | | Railroad |
| 286.0 | Joliet | | Lock & Dam |
| 285.0 | Below Joliet | Multiple Intakes | |
| 278.0 | Above I-55 | Mobil Oil | |
| 276.8 | DuPage R/DesPlaines Jct | | |
| 273.7 | | Commonwealth Edison | |
| 273.0 | Kankakee R+DesPlai=IL R | | |
| 271.5 | | | Lock & Dam |
| 270.6 | Above Morris | | Railroad |
| 269.9 | Above Morris | Jon T Chemicals | |
| 268.1 | Aux Sable River | | |
| 263.5 | Mazon River, Morris | | |
| 254.1 | Seneca | | Drawbridge |
| 248.8 | Above Marseilles | Illinois Nitrogen | |
| 247.0 | Marseilles | | |
| 246.7 | | Illinois Power | |
| 244.6 | Marseilles | | Lock & Dam |
| 240.0 | Ottawa | | |
| 239.7 | | | RR Drawbrg |
| 239.6 | Fox River | | |
| 237.6 | Naplate | L-O-F Glass | |
| 231.0 | Starved Rock State Park | | Lock & Dam |
| 226.3 | Vermillion River | | |
| 225.4 | LaSalle | | Drawbridge |
| 224.7 | | | Highway |
| 223.0 | I&M Canal | Foster Grant | |
| 222.5 | Peru | | |
| 213.9 | Above Hennepin | | Railroad |
| 212.0 | Coleman Lake F& W Area | Illinois Power | |
| 210.2 | I&M Canal | | |
| 209.0 | Hennepin | Jones&Laughlin Steel | |
| 207.5 | Hennepin | | |
| 198.5 | Senachwine Lake | | |
| 196.0 | Henry | | |
| 193.0 | Chautauqua Refuge | | |
| 189.2 | Lacon | | |
| 188.5 | Marshall County Conser | | |
| 180.6 | Chillicothe | Chillicothe Power | |
| 179.0 | Woodford County Refuge | | |
| 174.0 | Spring Bay | | |
| 171.0 | Peoria Lake Refuge | | |
| 167.0 | Peoria Heights | | |
| 166.1 | Ten Mile Creek | Peoria Water | |
| 162.6 | US Coast Guard Base | CILCO | Hwy & RR |
| 162.0 | E. Peoria, Farm Creek | | |
| 161.4 | Peoria | Archer Daniels Midland | |
| 160.7 | Peoria | | Railroad |
| 159.7 | Kickapoo Creek | | |
| 157.8 | Peoria | | Peoria Lock |

Table 1. Illinois River Waterway River Miles (Continued)

| RM | Location | Water Supply | Observer |
|---|---|---|---|
| 156.0 | Pekin Lake, Lick Creek | | |
| 154.4 | Tuscarora | CILCO | |
| 152.9 | Pekin | | Railroad |
| 152.8 | Pekin | | Highway |
| 151.7 | | Corn Products | |
| 151.3 | Pekin | | Railroad |
| 151.0 | Lost Creek | | |
| 147.7 | Mackinaw River | | |
| 147.4 | Mapleton | Caterpillar | |
| 122.6 | Quiver Creek | | |
| 120.4 | Spoon River | | |
| 120.0 | Havana | | |
| 118.5 | Havana | Illinois Power | |
| 111.8 | Otter Creek | | |
| 110.0 | Anderson Lake Conservation | | |
| 100.7 | Sanganois Conservation | | |
| 98.0 | Sangamon River | | |
| 97.0 | Browning | | |
| 94.2 | Sugar Creek | | |
| 88.9 | | | Railroad |
| 88.8 | Beardstown | | |
| 83.5 | LaMoine River | | |
| 80.2 | LaGrange | | Lock & Dam |
| 78.7 | Indian Creek | | |
| 70.8 | Meredosia | CIPS | |
| 67.0 | McKee Creek | | |
| 65.5 | Naples | | |
| 63.2 | Mauvaise Terre Creek | | |
| 61.3 | Valley City | | Railroad |
| 58.2 | Pike County Conservation | | |
| 56.0 | Florence | | Highway |
| 55.5 | Florence | | |
| 50.0 | Montezuma, Sandy Creek | | |
| 48.5 | Bedford | | |
| 43.2 | Pearl | | Railroad |
| 38.3 | Apple Creek | | |
| 32.1 | Kampsville | | Ferry & Hwy |
| 31.7 | Godar Refuge | | |
| 23.2 | Macoupin Creek | | |
| 21.5 | Hardin | | |
| 21.4 | Hardin | | Hwy & RR |
| 21.3 | East Hardin | | |
| 19.5 | Fowler Lake Refuge | | |
| 14.7 | Otter Creek | | |
| 8.8 | Mark Twain Refuge | | |
| 7.0 | Pere Marquette State Prk | | |
| 3.6 | Brussels | | Ferry |
| 1.3 | Grafton | Grafton | |
| 0.0 | Mississippi River | | |

Note 1: Compiled from Waterways 1969 & 1971, USCG 1979 & 1981, and PWS 1983

Table 2. Pollutant Plume In-Stream Velocity (Graf, 1982)

| | | | | |
|---|---|---|---|---|
| Marseilles to Starved Rock | 246.5 231.0 RM | Leading = .80 mph<br>Peak = .60<br>Trailing = .50 | | 9,320 CFS |
| Marseilles to Starved Rock | 246.5 231.0 RM | Leading = .45 mph<br>Peak = .38<br>Trailing = .25 | | 6,070 CFS |
| Starved Rock to Hennepin | 231.0 207.6 RM | Leading = .54 mph<br>Peak = .47<br>Trailing = .36 | | 5,180 CFS |
| Hennepin to Chillicothe | 207.6 180.5 RM | Leading = .57 mph<br>Peak = .50<br>Trailing = .40 | | 6,200 CFS |
| Chillicothe to Peoria Water Co. | 180.5 166.1 RM | Leading = .68 mph<br>Peak = .52<br>Trailing = .34 | | |
| Peoria Water Co. to Peoria Lock & Dam | 166.1 157.8 RM | Leading = .34 mph<br>Peak = .31<br>Trailing = .28 | | |

Table 3. Illinois River Water Intakes (USCG 1981 & PWS, 1983)

| Mile | Location | User | Telephone |
|---|---|---|---|
| 1.3 | Grafton | Grafton | 618/786-3344 |
| 70.8 | Meredosia | CIPS Co. | 217/523-3600 |
| 118.5 | Havana | IL. Power Co. | 309/543-2227 |
| 147.4 | Mapleton | Caterpillar Tractor | 309/675-1000 |
| 151.7 | Pekin | Corn Products International | 309/346-1121 |
| 154.4 | Tuscarora | CILCO | 309/672-5151 |
| 161.4 | Peoria | Archer Daniels Midland | 309/673-7828 |
| 162.6 | E. Peoria | CILCO | 309/672-5151 |
| 166.1 | Peoria | Peoria Water Co. | 309/671-3758<br>676-2024 |
| 180.6 | Chillicothe | Chillicothe Power Plant· | 309/274-8060 |
| 209.0 | Hennepin | Jones & Laughlin Steel | 815/925-2521 |
| 212.0 | Hennepin | Il. Power Co. | 815/223-1775 |
| 223.0 | Peru-Below I & M | Foster Grant Co. | 815/224-1525 |
| 237.6 | Naplate | Libby-Owens-Ford Glass | 815/433-0932<br>(H3221) |
| 246.7 | Marseilles | Il. Power Co. | 815/223-1775 |
| 248.8 | Above Marseilles | Illinois Nitrogen Co. | 815/795-4151 |
| 269.9 | Above Morris | Jon T. Chemicals | 815/942-1222<br>(H0112) |
| 273.7 | 0.5 Kankakee R. | Commonwealth Edison-Dresden Nuclear | 815/726-6111 |
| 278.0 | Above I-55 | Mobil Oil | 815/423-5571 |
| 285.0 | Below Joliet | Commonwealth Edison - Joliet | 815/726-6111 |
| 285.0 | Below Joliet | Public Service Co. of Northern IL | 815/727-5561 |
| 288.8 | Joliet | Joliet | 815/740-2370 |
| 289.9 | Above Joliet | Water Intake Cribs | 815/726/5494 |
| 297.7 | Above Lockport | Water Intake Cribs | 815/726-5494 |
| 298.6 | Above Lockport | Water Intake Cribs | 815/726-5494 |

TABLE 4. Illinois River Environmentally Sensitive Areas (Note 1)

ILLINOIS DEPARTMENT of CONSERVATION.
DIRECTOR'S OFFICE: Dr. David Kenney - 217/782-6302
LAND & HISTORIC SITES: Charles Tamminga 217/782-6752 (H498-8432)
PUBLIC LANDS: Raymond Norbut - 217/782-1395
NATURAL RESOURCES: Glenn Harper - 217/785-8285
FISH AND WILDLIFE RESOURCES: Mike Conlin - 217/782-6424 (H438-3556)

[2] FIELD OFFICES

Region IV (0.0-133.3 RM): Mike Cochran - 618/462-1181 (H664-4587)
Pere Marquette State Park (7.0): Dick Brown - 618/786-3323 (H786-2104)
Mark Twain National Wildlife Game Refuge (4.9-8.8) - 618/462-1181
Fowler Lake Refuge (8.8-19.5) - 618/462-1181
Godar Refuge (22.9 - 31.7) - 618/462-1181
Pike County Conservation Area (58.2): Rick Messinger - 618/376-3303
[3]Sanganois Conservation Area (92.0 - 100.7): Gary Senn - 309/546-2628 (H217/322-6595)
[3]Chautauqua National Wildlife Refuge (125.0 - 193.0) - 309/822-8861

Region I (94.2-253.8RM): Herman Hier - 815/625-2968
189-247 (Lacon-Marseilles): Lt. Jim Liston - 815/625-2968 (H857-2121)
[3]Anderson Lake Conservation Area (110.0): Roger Cox - 309/759-4484
Pekin Lake (156): Charles Oest - 309/968-7135(H7412)
Fort Creve Coeur State Park (159.0) - 309/694-3193
[3]Peoria Lake Refuge (171.0) - 309/822-8861
[3]Woodford County Refuge (179.0): Richard Brooks - 309/566-8861
Marshall County Conservation Area (188.5): Lawrence Rice - 309/246-8351
Coleman Lake Fish & Wildlife Area (210.5): Mike Resetich - 815/447-2082
Starved Rock State Park (231): Jon Blume - 815/667-4726, 4389 (H4270)
Buffalo Rock State Park (235.5): 815/942-0796, 3848 (H433-2220)
Illini State Park (247.5): William Carlson - 815/795/2448

Region II (> 253.8 RM): Jim Langbein - 815/675-2385 (H695-5546)
(> 247 Marseilles): Lt. Ken Young - 815/935-8940 (H937-1538)
DesPlaines Conservation Area (275): Dennis Doyle - 815/423-5326 (H6192)
Illinois-Michigan Canal: Dave Carr - 815/942-0796 (H3848)

Notes:

1 -- Compiled from DOC 1983, Waterways 1969 & 1971, USCG 1979 & 1981, Telephone Books and Calls.

2 -- Regional Field Offices are to be contacted following spills and fish kills.

3 -- Migratory bird routes must be considered in the event of an oil or hazardous substance discharge or spill on the Illinois River. Immediate action to protect wildlife (primarily ducks and geese) must be taken during the months of September through April for these locations.

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REFERENCES

DOC, 1983 - "Personnel Directory", Illinois Department of Conservation, Springfield, Undated (Received January, 1983).

Table 5. Illinois River Observation Contacts (Note 1)

| Mile | Location | Observation Point | Telephone |
|---|---|---|---|
| 3.6 | Brussels | Dyer Plain Ferry | 618/786-3636 |
| 21.5 | Hardin | Hwy 100 GM & O RR | 618/576-2316 |
| 27.5 | Below Kampsville | COE Boat Landing | |
| 32.1 | Kampsville | Hwy 108 & 96, Ferry | 217/653-4578 |
| 43.2 | Pearl | ICG RR | 217/829-4222 |
| 56.0 | Florence | US36 Bridge | 217/742-5286 |
| 61.3 | Valley City | N&W RR | 217/833-2696 |
| 80.2 | LaGrange | LaGrange L & D (COE) | 217/225-3317 |
| 88.9 | Beardstown | BN RR | 217/323-4214 |
| 139.7 | Banner | COE | 309/647/6463 |
| 151.3 | S. of Pekin | C & NW RR | 309/347-4965 |
| 152.8 | Pekin | Hwy 9, CRI & P RR | 309/346-0402 |
| 157.8 | Peoria | Peoria Lock (COE) | 309/699-6111 |
| 160.7 | Peoria | P & PU RR | 309/694-8612 |
| 162.4 | Peoria | Franklin St., P & W RR | 309/699-1814 |
| 164.5 | Peoria | COE Moorings, Boat Yard | 309/676-4601 |
| 213.9 | Above Hennepin | Penn NY Central Conrail (Peoria YD) | 309/694-1471 |
| 224.7 | LaSalle | Hwy 351, Shippingsport | 815/223-1208 |
| 231.0 | Starved Rock | Starved Rock L & D (COE) | 815/667-4114 |
| 239.7 | Ottawa | BN RR | 815/434-0018 |
| 247.0 | Marseilles | Marseilles Dam (COE) | 815/795-2593, 2728 |
| 254.1 | Seneca | CRI & P RR (Peoria Yd) | 309/674-0511 |
| 270.6 | Above Morris | EJ & E RR | 815/942-1869 |
| 271.5 | Illinois R. Head | Dresden Is. L&D (COE, Chicago) | 312/353-6400 |
| 273.0 | Illinois R. | DesPlaines & Kankakee Confluence | ---- |
| 286.0 | Des Plaines R. | Brandon Road Lock (COE) | 815/744-1714 |
| 286.8 | Joliet | COE | |
| 287.5 | Joliet | CRI&P RR (Chicago Switchboard) | 312/435-7300 |
| 288.4 | Joliet | State of Illinois Div. of Waterways | 815/726-5494 |
| | Joliet Bridges | Brandon Road | 815/744-1987 |
| | | Jackson | 815/727-9352 |
| | | Jefferson | 815/727-9484 |
| | | McDonough | 815/727-9507 |
| | | Romeo Road Lockport | 815/838-1641 |
| | | Ruby Road | 815/722-3120 |
| | | W. Cass | 815/722-4031 |
| 290.0 | Above Joliet | EJ & E RR (Morris) | 815/942-1869 |
| 291.1 | Lockport | Lockport Lock (COE) | 815/838-0536 |
| 10.3 | Kankakee R. | Wilmington Dam (ESDA) | 815/476-2334 |

Note 1: Compiled from Waterways 1969 & 1971, USCG 1979 & 1981, Telephone Books and Calls.

Graf, 1982 - Graf, J.B., Correspondence to Eisenhart, August 13, 1981, and Conversation, October 29, 1982, U.S. Department of the Interior-Geological Survey, Urbana.

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