LITTLE WABASH RIVER
ILLINOIS

Drawn 35
Memorandum

To: The Director, Bureau of Outdoor Recreation

From: Lake Central Study Team

Subject: Little Wabash River, Illinois

The Little Wabash River in the State of Illinois does not meet the five criteria established for inclusion within the proposed nationwide system of wild rivers. The river does not possess outstanding recreational qualities from a national standpoint. Oil and salt water pollution are potential hazards. Due to the erosive qualities of the uplands, the stream is very muddy and sluggish. Root wads and trash jams are common. In all, the stream does not present a pleasant appearance.

Lake Central Study Team

FOR GOVERNMENT USE ONLY
Wild Rivers Study
For The
LITTLE WABASH RIVER
in
Illinois
September 1963

Lake Central Study Team

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LITTLE WABASH RIVER

CHAPTER III

II. RIVER AREA DEVELOPMENT

III. CRITERIA

IV. FINDINGS
I. RIVER AREA INVENTORY FORM

A. General Information

1. Name of river - Little Wabash River

2. Location of study unit(s) - From State Highway #37 in Effingham County south to State Highway #141 in White County.

3. State(s) - Illinois

<table>
<thead>
<tr>
<th>County</th>
<th>Length</th>
<th>Average</th>
<th>Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length</td>
<td>Width</td>
<td>Area</td>
</tr>
<tr>
<td>White</td>
<td>50.5</td>
<td>120</td>
<td>733</td>
</tr>
<tr>
<td>Edwards</td>
<td>13.0</td>
<td>68</td>
<td>108</td>
</tr>
<tr>
<td>Richland</td>
<td>5.5</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Wayne</td>
<td>34.5</td>
<td>50</td>
<td>209</td>
</tr>
<tr>
<td>Clay</td>
<td>12.5</td>
<td>41</td>
<td>63</td>
</tr>
<tr>
<td>Effingham</td>
<td>26.0</td>
<td>25</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>142.0</td>
<td></td>
<td>1231</td>
</tr>
</tbody>
</table>

5. Major drainage basin (see appendix A) - Ohio River Basin

6. Population within 50 miles 677,000; 150 miles 4,200,000; 250 miles 12,000,000.
7. **Watershed characteristics by seasons and climatic data**

- **Winters are not severe. Summer heat is not excessive or long.**
- **Humidity high. Frequent temperature changes. Considerable and well distributed rainfall throughout the year. Some short-lived summer drought conditions.**
- **Numerous cyclonic storms cross the area. Convection storms of intense precipitation in the summer.**
- **Growing season - 180 days average.**
- **Average temperature - 60° - 80° April to October.**
- **Precipitation - 40" - 45" annually.**

*Source: U. S. Weather Bureau.*

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**Water characteristics of river (by study unit):**

- **Total miles in study unit(s) - 142 miles in study. River is 200 miles in total length.**

**Width characterization:** Average width ranges from 25 feet at beginning of Study unit to 120 feet near end. Surface area is 1231 acres.

**Average Width from south to North**

- **White County** - 120 feet
- **Edwards** - 68 feet
- **Richland** - 60 feet
- **Wayne** - 50 feet
- **Clay** - 41 feet
- **Effingham** - 25 feet

*Source: Bill Harth, State Division of Fisheries*
3. Depth characteristics - Riffles to 5 to 35 foot holes. A canoe or small boat could travel the length of the River. There are quite a few riffles or rock outfalls to portage around or lead a boat over. Numerous trash jams and mixed snags would impede travel by boat.

The average depth of the channel from stream bed to bank line is 25 feet.

Fishing in the deep holes possible. Local people use hoop nets to fish.

Swimming not good because of mud by water and stream bed.

Source: Personal observation.

4. Flow characteristics - Average fall .6 foot per mile. Flow rate .45 feet per second. Stream flows slow and languid. Hard rains cause the stream to fluctuate rapidly.

Source: Corps of Engineers - Wabash River Report.

5. Course characteristics and stability - Rises in the wet prairie region of the Wisconsin till plain, through the terminal moraine area. When it reaches the Illinoian till plain, it becomes a meandering stream through a wide flat bottomed valley. Overflows annually and some years, repeatedly. Banks of stream of erosive soil and tend to slough off. Silt deposits on the banks. Numerous oxbows that flood. Stream may change course occasionally during flood periods.

Source: Division of Waterways
Water carries a heavy colloidal sediment load. It is a sluggish stream with an average flow of .45 f.p.s. The water is heavily polluted along some stretches with salt water and oil from adjacent active oil wells. There is a small amount of industrial and small town pollution but this is not serious.

Source: Ward Akers - Bureau of Stream Pollution
Division of Sanitary Engineering

Species caught: channel and flathead catfish, drum largemouth bass, buffalo, carp, and sturgeon in lower stretches.

River is closed to commercial fishing. Oil and salt water pollution causes severe fish losses in some sections of the River. Main Illinois fish management efforts limited toward lakes and ponds.

Source: Al Lopinot - State Division of Fisheries
C. Description and characterization of setting (by study unit(s)):

1. Nature of topography - Rolling in the upper reaches but flattens as the River reaches the valley of the Wabash River. Soil is strongly acid. Subsoil is moisture resisting, non-calcareous. Drainage is slow as subsoil is too tight. Erosion difficult to control. Severe erosion on steeper slopes.

Source: Bill Harth - Division of Fisheries

2. Ecological type (deciduous, coniferous, prairie, desert, sand, or other) and brief description

Deciduous - oak, hickory, and bottomland hardwoods types.

Source: E. E. Nutilla, State Forester - Division of Forestry

3. Important species of wildlife and fishes

| White tail deer - + | Ruffed grouse - = restocked |
| Gray & fox squirrel - + | Raccoon + |
| Rabbit - - | Red & gray fox + |
| Quail - = | Beaver - + |
| Wood duck - = | Mink - = |
| Turtle dove = | Muskrat - = |

Source: Tom Evans, Game Management Supervisor, Dept. of Conservation

+ increase
- decrease
= stable
I. Types and locations of public access (spot on map)

Road bridges, no launching ramp. There are no public access ways on this River.

Source: Bill Harth - Supervisor, Division of Fisheries

II. River/town public access (physical, legal)

Private ownership.

Illinois law states that the River bed is owned by landowner, and anyone floating on stream can be cited for trespass. Permission of landowner is needed to fish a stream from a boat.

Restrictive trespass legislation makes it impossible to utilize any appreciable stretch of a river without the threat of trespass. Hunting licenses sold outnumber fishing licenses due to the trespass situation on the rivers - lack of angling opportunity.

Source: Bill Harth, Supervisor, Division of Fisheries

IV. Outdoor recreation and land use data

Nothing in particular.
2. Reticle - None

3. Metamio -

4. Archeologic None

5. Other -
F. Present quality of recreation and environmental factors limiting quality:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Quality</th>
<th>Environmental Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Bending:</td>
<td>X</td>
<td>Access, drifts, fences</td>
</tr>
<tr>
<td>Motor</td>
<td></td>
<td>Access &quot;</td>
</tr>
<tr>
<td>Non-motor</td>
<td>X</td>
<td>Salt &amp; oil pollution. Agriculture priorities. Lack of soil conservation.</td>
</tr>
<tr>
<td>Fishing:</td>
<td>X</td>
<td>Deer hunting in some areas. Not allowed as yet by law.</td>
</tr>
<tr>
<td>Rig guns</td>
<td></td>
<td>Access and suitable water ponded areas.</td>
</tr>
<tr>
<td>Small guns</td>
<td>X</td>
<td>Access areas</td>
</tr>
<tr>
<td>Water cool</td>
<td>X</td>
<td>Poor quality water, access to river.</td>
</tr>
<tr>
<td>Canoeing</td>
<td>X</td>
<td>Access and no trails.</td>
</tr>
<tr>
<td>Boating</td>
<td>X</td>
<td>Poor roads - narrow and dry weather only.</td>
</tr>
<tr>
<td>Hiking</td>
<td>X</td>
<td>Access</td>
</tr>
</tbody>
</table>

Source: Bill Harth - Supervisor, Division of Fisheries
Tom Evans - " Division of Game Management
Classification of land utilizaion (reduction to six CAPAC classes)

Class II - General outdoor recreation areas. Areas subject to substantial development for a wide variety of specific recreation uses.

Class III - Natural environment areas. Various types of areas that are suitable for recreation in a natural environment and usually in combination with other uses.

Major industry of the entire valley is agriculture of the grain and livestock variety. Secondary industry is oil. Manufacturing is small and limited to the towns within the basin. Recreation development is nonexistent.

Source: Tom Evans - Supervisor, Division of Game Management Personal observation of Study Group.
Agriculture is static to decreasing. Farms becoming larger. Industry stationary.

Source: Tom Evans - Supervisor, Division of Game Management

Major State and U.S. highways cross the area. County roads are numerous in the area but only a few actually cross the River.

Railroads go to the major cities through the area although traffic is light.

Small airports are located at each of the larger cities. No major airlines serve the immediate area.

Bus and truck freight lines serve the larger cities.

Source: Map and Personal observation of Study Group.
1. Wabash Valley Interstate Commission - cooperative project between Illinois and Indiana - study of Wabash Valley. Active (recreational and flood control) lakes.

2. Corps of Engineers proposes to build levies on lower stretches of River - active - Engineering survey underway.

3. Corps of Engineers propose a lake at junction of Big Muddy and Little Wabash - proposal stage - Wilcox Branch Reservoir - public hearings and feasibility studies underway.


Local people agitating for industrial development of the valley.

Source: Ralph Fisher - Division of Waterways.
J. What effect (detrimental or beneficial) will the following uses (present or planned) have on the qualities of the study unit(s):

1. Agriculture - 65% of watershed in cropland. 11% of watershed in pasture and range. Soil erosion a problem. Soil is such that a little activity increases erosion. Soil tight, water does not penetrate.

   Detrimental in its present form.

   Source: Tom Evans - Supervisor, Division of Game Management

2. Forestry - 14% of watershed in forests. Change in ownership from rural to urban. Recreation - interest increasing. Indiscriminate cutting by landowner causes: (1) areas to be denuded, (2) trees felled into river adding to debris, (3) increasing erosion.

   Detrimental if allowed to continue unrestricted.

   Source: E. E. Nutilla, State Forester

3. Mining - Oil and gas drilling to continue. At present, very limited action being taken on the control of salt water pollution by the oil wells. Oil wells have only a passing interest to the traveler or recreationist.

   Detrimental in its present form.

   Source: Al Lopinot - Chief Biologist - Division of Fisheries

4. Transportation - Interstate crossing area in the southern part of the Little Wabash Valley in the vicinity of Carmi, Illinois. The exact location has not been made public.

   Beneficial.

   Source: Ralph Fisher, Division of Waterways
5. Industry
No major industries along the River other than oil pumping wells.

Oil industry detrimental.

Source: Ralph Fisher, Division of Waterways

6. Recreation

There are not any developed recreation areas or facilities. Only minor streamside places on private lands available. These are crude, ill-placed and not too attractive. Use of these is curtailed to the general public.

Recreation could be beneficial if conditions were improved.

Source: Tom Evans, Division of Game Management

7. Residential - Community

Population declining. 10% of watershed in urban and non-farm use. No proposed community subdivisions or developments proposed.

Beneficial.


8. Other
K. Condition of headwater lands and trends in management

Whole watershed lacks good soil conservation practices - turbid streams. Watershed area is 2,237 square miles. Headwaters occur in the wet prairies of the Wisconsin till plain. It does not drain a large part of the upland prairie area, rather a series of tributaries, each an active erosive force, join the main stream in the lower Illinoian Till plain. This causes the uplands around the valley to have the appearance of elongated ridges. The flat tops of the ridges are formed but the breaks are too steep and remain in timber.

The entire stream is bordered with a narrow to wide strip of hardwood trees.

Trend in land use is continued farming by fewer farmers on larger farms.

Source: Illinois Geology and personal observation of Study Group.

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L. Land ownership (general pattern of Federal, State and private ownerships) (show on map)

Corps of Engineers owns land along River near New Haven for old locks and dams that are now non-existent. 100% private ownership except for road rights-of-ways. Ownership varies from small lots to large farms.

Source: Elvis Bennett - Member - Shawnee Port Authority
M. Actions that have been taken or are planned to protect the natural qualities of the river and its environment (such as special state legislation, zoning, easements, etc.).

None.

Wabash Valley Commission studying the area for development - recreation wise by building recreation and flood control lakes, dikes, etc. Cooperation between the Corps of Engineers, Illinois Division of Fish & Wildlife, Illinois Division of Forestry, etc.

No PL-566 programs proposed but the State Agriculture Dept. making a statewide survey of needed PL-566 type projects. No specific information at this time. Completion of this survey is due in 1966.

Source: Ralph Fisher - Division of Waterways.

N. Other
SOURCES OF REFERENCE AND INFORMATION (MAPS, REPORTS, NEWSPAPER ARTICLES, ETC.)

Elvis C. Bennett, New Haven, Ill. Shawnee Port Authority Board Member
Tom R. Evans, Supervisor - Division of Game Management, Dept. of Conservation
Bill Harth, Supervisor, Div. of Fisheries, Dept. of Conservation
Al Lopinot, Chief Fisheries Biologist
E. E. Nutilla, State Forester, Division of Forestry
Richard Thom, Area Forester, Little Wabash Basin - Division of Forestry
Ward L. Akers, Sanitary Engineer, Bureau of Stream Pollution, Division of Sanitary Engineering
Verdun Randolph, Asst. Chief Sanitary Engineer
Miss Flint, State Librarian, O.O.B.
Ralph Fisher, Principal Engineer, Division of Water Ways
U. S. Forest Service
U. S. Park Service
Bureau of Outdoor Recreation
Bureau of Sport Fisheries
1. Looking downstream from Highway #141 at New Haven, Illinois. Two miles upstream from the confluence with the Wabash River.

2. Looking upstream from Highway #141 at New Haven, Illinois. Two sets of shallow riffles are in the far bend of the River.
3. Looking upstream from a point 2 miles above Highway #141.

4. Looking downstream from county road paralleling River - 7 miles east of Burnt Prairie, Illinois. Heavy sediment load of stream causes the surface to cast mirror reflections.
5. Looking upstream from exact location listed under photograph #4. Note large oil slicks near debris.

7. Looking upstream from county road bridge 6 miles west of Grayville, Illinois.

8. Looking east at a roadside drainage ditch 5 miles west of Grayville, Illinois, on county highway. Oil and salt water drains from active wells into this ditch which empties into a tributary of the Little Wabash River.

10. Downstream from same bridge listed under photograph #9. Note mud banks. Fallen trees and debris nearly block stream. Note oil slicks flowing around the fallen tree.
11. Looking downstream at erosion of the shore line. This severe erosion creates unattractive mud banks and exposes unsightly root tangles. Point is 7 miles east and north of Burnt Prairie, Illinois. Low grade county road parallels River for a short distance.

12. Looking downstream from exact location listed under photograph #11. Mud banks and channel plugged with debris. Note oil slicks just below debris and in center of channel.
13. Private picnic area along the same low grade county road as within 100 feet of point on the River where photographs #11 and #12 were taken.

14. Looking upstream from county road bridge 5 miles south of Golden Gate, Illinois. Mud banks and channel choked with debris.
15. Looking downstream from same county road bridge listed under photograph #14. Debris lined steep mud banks and sediment deposits on lower toe of bank.

17. Cabin on left bank. Note mud bank sediment deposits and debris in channel. View upstream from same county road bridge listed under photograph #16.

18. View upstream from county road bridge 2 miles south of Wynoosce, Illinois. Oil slicks present but not too apparent in photo.
19. Mud banks and debris choked channel. View downstream from same county road bridge listed under photograph #18.

21. Sediment deposits and debris choked channel. Typical view in the upper reaches of the River. Point is located 1/4 mile upstream from where U. S. Highway #50 crosses River.

23. Looking upstream from bridge on State Highway #37, 12 miles south and west of Effingham, Illinois. Gravel and silt bar.

24. Looking downstream at railroad bridge south of bridge on State Highway #37, 12 miles south and west of Effingham, Illinois.
Q. Method of study

Personal contacts with State and local people. Aerial observation of River. Ground observation from as many ground contact points as possible.

E. Period of study

Based on the information and impressions gained during the study, evaluate the river area against the following five criteria. To qualify for further consideration for status in a national system of wild rivers, a river area should meet all of these criteria:

or reach

1. The river is still relatively undeveloped, unpolluted, and free-flowing and the scene as viewed from the river is pleasing whether primitive or rural-pastoral, or these conditions must be capable of restoration as far as practicable and within foreseeable legislative, financial and technical capabilities.

   Yes __________________
   No X __________
   Explain __________

Oil and salt water pollution. Erosive qualities of the uplands. Suspended sediment in the stream in spite of its sluggish water movement. Undesirable sediment deposits on the bottom and banks of the stream.

Present Illinois law allows control of the land under the stream to the private landowner.

The landowner has exclusive control of the use of the water flowing across his land.

2. The river area possesses recreation, scientific, historic, or esthetic values of outstanding quality.

   Yes __________________
   No X __________
   Explain __________

There is nothing outstanding about this stream.
3. The river area is large enough to sustain existing public recreation use or accumulate more without resulting in appreciable reduction of the quality of the experience or damage to the resource (rule of thumb: 50 miles long and 10 feet wide).

Yes  X

No

Explain

At present the main use is of a local nature and is primarily fishing. Very little other recreation taking place on or near the River because of the restrictive trespass regulations.

4. The quality, size, and uniqueness of the river and its setting is of sufficient importance to attract use from beyond the boundaries of the locality and state(s) and would appear to outweigh other uses of the river.

Yes

No  X

Explain

The mud banks, imbedded snags, root wads, trash jams, muddy, sluggish water, oil slicks, and salt water pollution far outweigh the beauty and attractiveness of the wooded shorelines.
5. Plans for other uses of the river or its setting that would permanently and drastically impair the natural conditions have not progressed to the point that construction has commenced.

Yes__________________

No__________________

Explain

To date the Corps of Engineers has proposed and studied such points as:

1. Channel clearing.
2. Channel straightening.
3. One flood water retaining dam.
4. Dikes.
III. FINDINGS

If the river area meets the five criteria and thereby qualifies for further consideration for status in a national system of wild rivers as an alternative to other uses that may be proposed:

1. Summarize briefly the basis for your conclusion.

2. Identify the river unit(s) that are worthy of wild river status and delineate on a map the lands that should be included in order to effectively protect the river and its setting.
3. Identify problems that may be encountered should efforts be made to protect the river area and its watershed, and suggest possible solutions.

4. Other
Red lines and numerals outline areas covered by the annual reports on surface water supply of the United States.

Purple lines and circles outline district boundaries and offices.

○ District office

O Principal field office

June 1959

Edition of May 1959, registered 1967

Polyconic projection.
Legend

1. North Atlantic slope basins (St. John River to York River)
2. South Atlantic and eastern Gulf of Mexico basins (James River to Mississippi River)
3. Ohio River Basin
4. St. Lawrence River Basin
5. Hudson Bay and upper Mississippi River Basins
6. Missouri River Basin
7. Lower Mississippi River Basin
8. Western Gulf of Mexico Basin
9. Colorado River Basin
10. The Great Basin
11. Pacific slope basin in California
12. Pacific slope basins in Washington and upper Columbia River Basin
13. Snake River Basin
14. Pacific slope basins in Oregon and lower Columbia River Basin