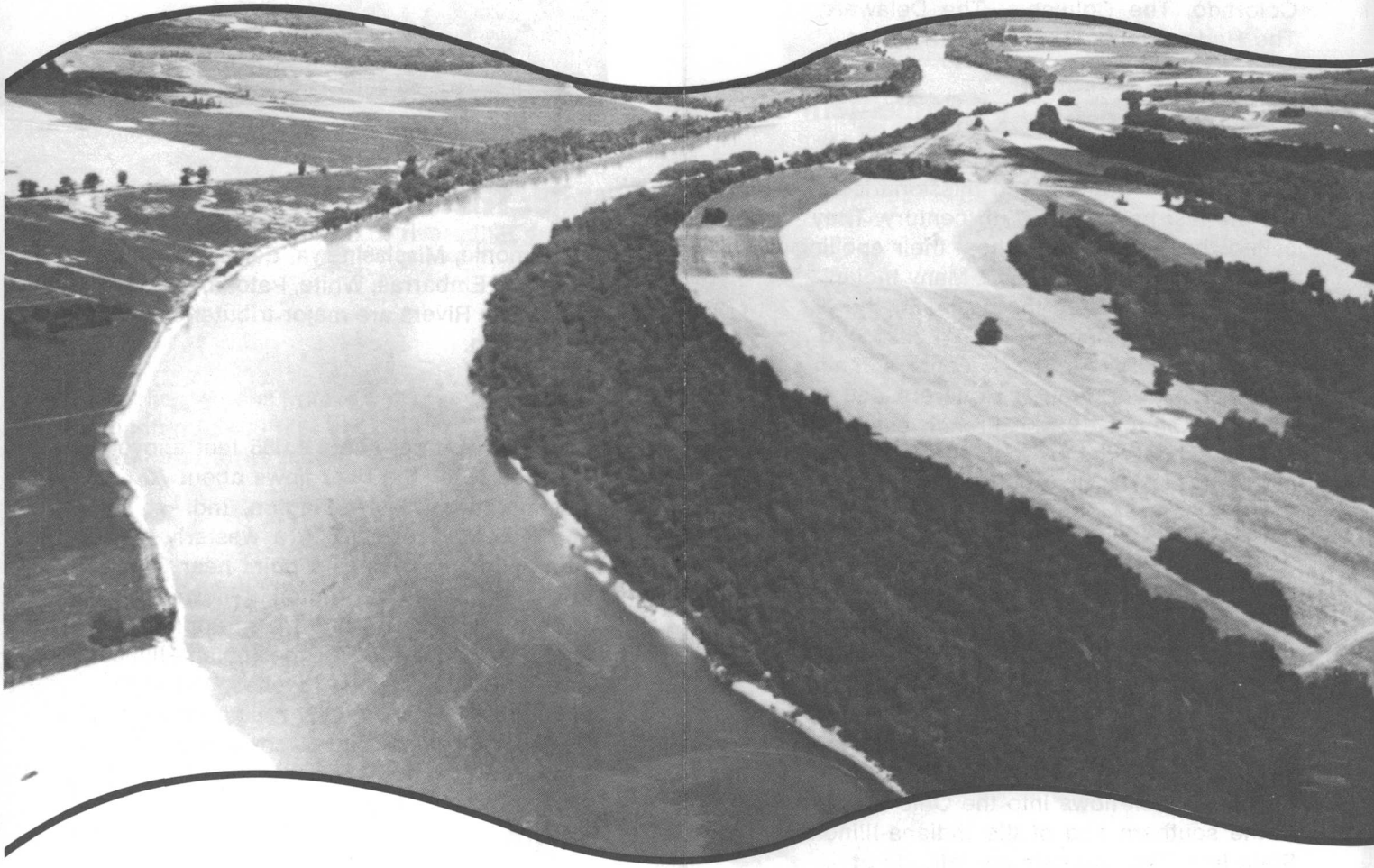
As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

River Basins of the United States:

The Wabash



U.S. Department of the Interior/Geological Survey

River Basins of the United States:

The Wabash

by William G. Weist, Jr.

This leaflet, one of a series on the river basins of the United States, contains information on the Wabash River Basin, including a brief early history, a description of the physical characteristics, and other statistical data. At present, other river basins included in the series are The Colorado, The Columbia, The Delaware, The Hudson, and The Potomac.

Early Exploration and Settlement

The Wabash was discovered by French explorers, fur traders, and missionaries during the last half of the 17th century. They called the river "Ouabache," their spelling of the Indian word for white. Many Indian tribes once inhabited the basin. By the end of the 17th century, the Wabash and the Maumee Rivers had become a main thoroughfare for French explorers and fur traders. About 1719, the French established an outpost near the present city of Lafayette, Ind., and in 1730 they built an outpost at Vincennes, Ind.

Headwaters

The Wabash River rises south of Grand Lake about 12 miles east of the Indiana-Ohio State line, in Darke County, Ohio.

Mouth

The Wabash flows into the Ohio River at the southern end of the Indiana-Illinois State line. The approximate latitude at the mouth is 37°41′ N. and the approximate longitude is 88°01′ W.

Major Tributaries

Salamonie, Mississinewa, Eel, Tippecanoe, Vermilion, Embarras, White, Patoka, and Little Wabash Rivers are major tributaries of the Wabash.

Course

From its source, about 1,065 feet above mean sea level, the river flows about 70 miles northwest to Huntington, Ind. Then it flows 120 miles in a westerly to southwesterly course to a point near Covington, Ind. From Covington it flows south to the Ohio River forming approximately the lower third of the Indiana-Illinois State line. In its upper reaches, the river flows through flat to gently rolling land, but the southward land becomes hillier and the ravines are deeper.

Length

The Wabash River is approximately 475 miles long from its headwaters to its mouth at the Indiana-Illinois State line. It ranks 49th among 135 U.S. rivers that are more than 100 miles long.

Width

The river widens from 200 feet at Huntington to 400 feet at Covington, and it is 1,200 feet at its mouth.

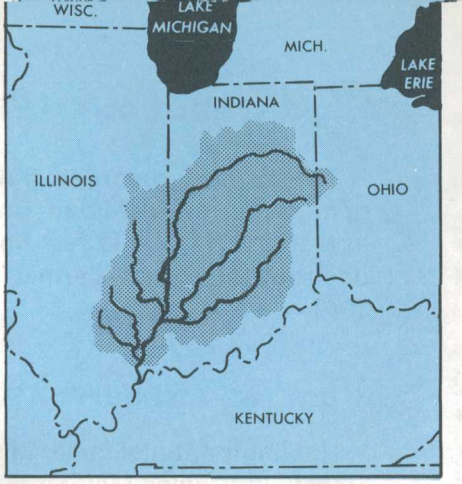
Depth

The river is about 30 feet deep in the lower 50 miles, but it is usually less than 5 feet deep above Huntington, Ind.

Rate of Flow

At Covington, Ind., the river's rate of flow is 3 million gallons per minute (gpm); at Mount Carmel, Ill., the rate of flow is 12 million gpm. The Wabash ranks 15th in average discharge among the rivers of the United States.

Wabash River Basin



INDIANA

ILLINOIS

OHIO

KENTUCKY

Fort Wayne
Huntington
Huntington Lake
Logansport
Wabash
Peru
Salamonie Lake
Mississinewa Lake
Kokomo
Marion
Grand Lake
Lafayette
Danville
Covington
Urbana
Vermilion River
Tippecanoe River
Eel River
Salamonie River
Mississinewa River
White River
Muncie
Anderson
Morse Res.
Geist Res.
Eagle Creek Res.
INDIANAPOLIS
Mansfield Lake
Cagles Mill Res.
Terre Haute
Charleston
Embarras River
Effingham
Bloomington
Columbus
Monroe Lake
Bedford
Vincennes
Little Wabash River
Skillet Fork
Mt. Carmel
Princeton
East Fork White River
Patoka River
Evansville
WABASH RIVER
WHITE RIVER
OHIO RIVER

N

0 15 30 45
MILES

Highest and Lowest Flow

The highest recorded flow, 192,086,400 gpm, occurred at Mount Carmel, Ill., in March 1913; the lowest flow, 740,520 gpm, occurred at Mount Carmel in September 1941.

Dams and Reservoirs

Huntington, Salamonie, Mississinewa, Mansfield, Cagles Mill, Morse, Geist, Eagle Creek, and Monroe Reservoirs in Indiana; and Grand Lake in Ohio.

Geologic Setting

The Wabash River Basin lies in two physiographic provinces: Central Lowland and the Interior Low Plateaus. Most of the basin is in the Till Plains section of the Central Lowland. The entire basin has been nearly covered three times by continental glaciers. Glacial drift, in places up to 500 feet thick, now covers most of the basin. Underlying bedrock consists of gently dipping beds of limestone, shale, and sandstone. The bedrock surface was eroded in preglacial times and has numerous ridges and crevices.

Drainage Area

The basin area is 32,910 square miles; 285 are in Ohio, 23,921 are in Indiana (nearly two-thirds of the State), and 8,704 are in Illinois.

Average Rainfall

An average of 40 inches of rain falls annually over the entire basin, ranging from 36 inches in the northern part to 44 inches in the southern part.

Quality

From its headwaters to its mouth, the water is fresh. Chemically it is of calcium-magnesium-bicarbonate type, hard to very hard, and moderate 250 parts per million (ppm), to very high, 1,400 ppm in dissolved solids. Contaminants include industrial waste (including acid mine drainage and oil-field brines), municipal waste, and sediment. Ground water, generally available in the basin, is very hard and high in dissolved solids and iron.

Major Cities

Champaign-Urbana and Danville, Ill.; Bloomington, Columbus, Indianapolis, Lafayette, Muncie, Terre Haute, and Vincennes, Ind., are major cities of the Wabash River Basin.

Municipal and Industrial Water Use

About 2½ million people use 500 million gallons of surface and ground water each day. About 1 million people on farms and in small towns use 170 million gallons each day, mostly ground water.

Commercial Water Use

In addition to flood control, the river and its system of dams and reservoirs provide facilities for various recreational activities. Hydroelectric power has not been developed because of the unfavorable topography.

Agriculture

Agricultural products which come from the basin are: corn (about 35 percent of farm income), soybeans, wheat, hay,

vegetables, fruit, dairy products, livestock, and forest products.

Industry

Industry in the basin includes: machinery, chemicals, fabricated metal products, and automotive and electrical equipment and supplies.

Minerals

Minerals found in the basin are: petroleum, coal, natural gas, sand and gravel, clay, limestone, and gypsum.

Water Data

The Hydrologic Data Network, maintained by the U.S. Geological Survey in cooperation with the individual States, is the chief source of basic data on water in this country. In cooperation with other agencies, the U.S. Geological Survey maintains 16,500 gaging stations that measure high and low flow of rivers, lakes, and streams; 27,500 observation wells that collect data on levels and pumpage of ground water; and 8,200 stations that measure water quality.

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