

POPULATION AND ECONOMIC FRAMEWORK

POPULATION¹

In 1980, the estimated population of the St. Joseph River basin (432,565) comprised 7.9 percent of Indiana's total population (5,490,224). Nearly half of the in-basin residents lived within the corporate boundaries of South Bend², Mishawaka, Elkhart, and Goshen, while an estimated 75,000 persons resided in urbanized areas adjacent to these four major cities. An estimated 28 percent of the basin population lived in rural areas (non-urban farm and non-farm areas of less than 2500 residents). Twenty-eight percent of the total in-basin Noble County population lived in Kendallville (7299), while 29 percent of the in-basin Steuben County population lived in Angola (5486).

Total basin population increased from 146,931 in 1900 to 432,565 in 1980 (app. 1). Fig. 3 shows population changes of four major cities, as well as 1980 census totals of cities with at least 2500 residents. Population trends for the in-basin portions of six counties are

shown in fig. 4. (Although not shown in the figure, estimated population within the northwest tip of Dekalb County ranged from 626 in 1940 to 850 in 1980.)

In-basin population is expected to total 450,351 by 1990 and 467,148 by the year 2000. As figs. 3 and 4 show, the recent decline in the population of St. Joseph County closely reflects the sharp drop in South Bend's population. According to data of Marcus

¹ Population data are taken or derived from Marcus (1985) and from the U.S. Census Bureau. Numbers are estimates of in-basin population unless otherwise indicated.

² South Bend's entire population is included, because water supplied from in-basin eastern portions is distributed to western areas lying outside of the basin boundary.

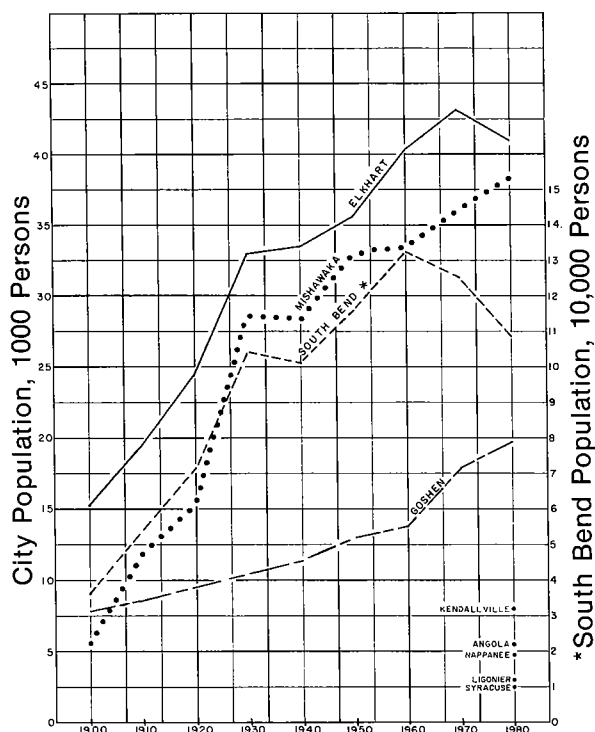


Figure 3. City Population, 1900-1980

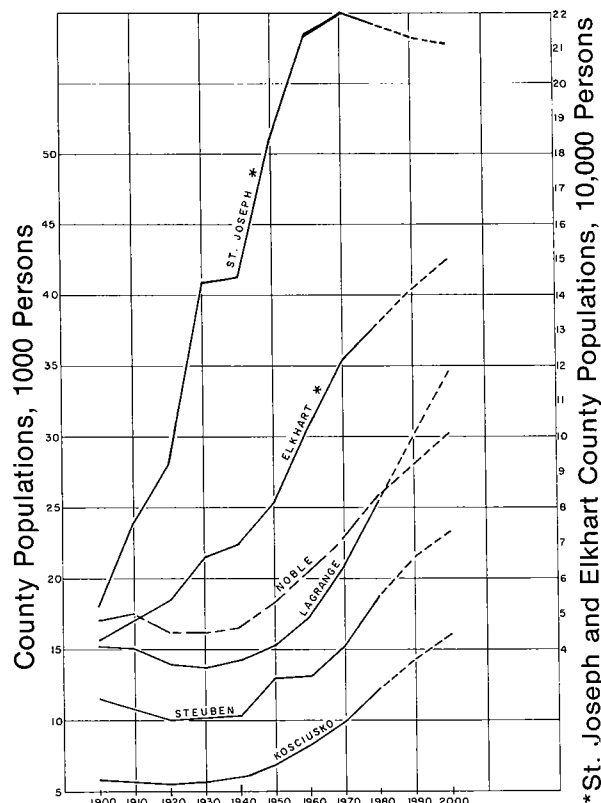


Figure 4. County Population, 1900-2000

(1985), the decline in St. Joseph County's population is expected to continue through the 1990s. Other county populations are expected to increase, although at varying rates.

App. 1 lists in-basin county population estimates and whole-county census totals (used to derive the in-basin estimates). From 1940 to 1960, whole-county population in St. Joseph and Elkhart Counties increased an average of 47 percent, but from 1960 to 1980 increased only 1 and 29 percent, respectively. Despite these decreased growth rates, St. Joseph County constituted the fourth most populous Indiana county in 1980, and Elkhart County was the seventh most populous.

Whole-county population in Kosciusko, LaGrange and Steuben Counties increased an average 46 percent from 1960 to 1980. The increase in LaGrange County's population from 1980 to 1983 (3.7 percent) was the fourth highest county percentage increase in Indiana for this period. The projected 35 percent increase in LaGrange County's population between the years 1980 and 2000 surpasses the whole-county percentage increase of other basin counties.

ECONOMY

Manufacturing, services and retail trade constitute the three largest employment classes in the basin's economic area³. In 1982, manufacturing comprised 37 percent of the basin area's non-farm labor force, while services and retail trade employed 20 and 16 percent, respectively. Most of the basin's manufacturing, retail trade and service industries were found in St. Joseph and Elkhart Counties.

Manufacturing within the basin accounted for an average of 50 percent of 1983 earnings by industry. In 1982, major manufacturing included machinery, rubber-plastics, lumber-wood, fabricated metal, and printing-publishing. Elkhart County led Indiana in the number of industries which manufacture transportation equipment (137), and was second only to Marion County in the number of fabricated metal plants (116).

Between 1972 and 1982, manufacturing decreased in all counties except Steuben and Kosciusko. However, at least 50 percent increases in non-farm wage and salary employment by industry between 1972 and 1982 have been observed within the following categories: (1) wholesale trade (LaGrange, Noble, Steuben and Kosciusko Counties); (2) finance, insurance, and real estate (Steuben); (3) transportation, communication, and public utilities (Steuben—a 156 percent increase); and (4) agricultural services,

fisheries, and forestry (LaGrange).

Estimated per capita income in 1981 was greatest for St. Joseph County (\$8620) and Elkhart County (\$8374), and least for LaGrange County (\$6671). For the six-county basin area, per capita income averaged 94 percent of the statewide average. Per capita money income in Elkhart and St. Joseph Counties equalled or slightly exceeded the state average in 1981, while per capita personal income in 1983 averaged 9 percent higher than the state average.

Corn, soybeans and winter wheat are the three major crops grown within the basin. In 1983, the average production of corn for grain exceeded average soybean production 5 to 1 and winter wheat production 7 to 1.

Although agriculture comprised less than 3 percent of the basin's employed labor force in 1982, it played a major role in Indiana's overall farm economy. In 1982, Elkhart County (with 1055 farms) was second only to Allen County in the total number of farms⁴. However, Elkhart County had the state's greatest number (209) of small farms (50 acres or less) in Indiana, while LaGrange County had the state's greatest number (594) of 50- to 179-acre farms. (Both counties also led the state in the number of farm operators having full ownership.) Indiana's dairy product sales and hay production also were highest in these two counties, while LaGrange County had the state's second highest oats production. Sales of Indiana poultry and poultry products were greatest in Kosciusko and LaGrange Counties.

Members of the Old Order Amish and Mennonite communities play a major role in the farm economy of Elkhart and LaGrange Counties. An estimated 80 percent (28,000) of the basin's total Amish-Mennonite population reside in these two counties. Approximately three-fourths of LaGrange County's farm population is comprised of Old Order Amish (S.L. Yoder, Goshen College, personal communication, 1986).

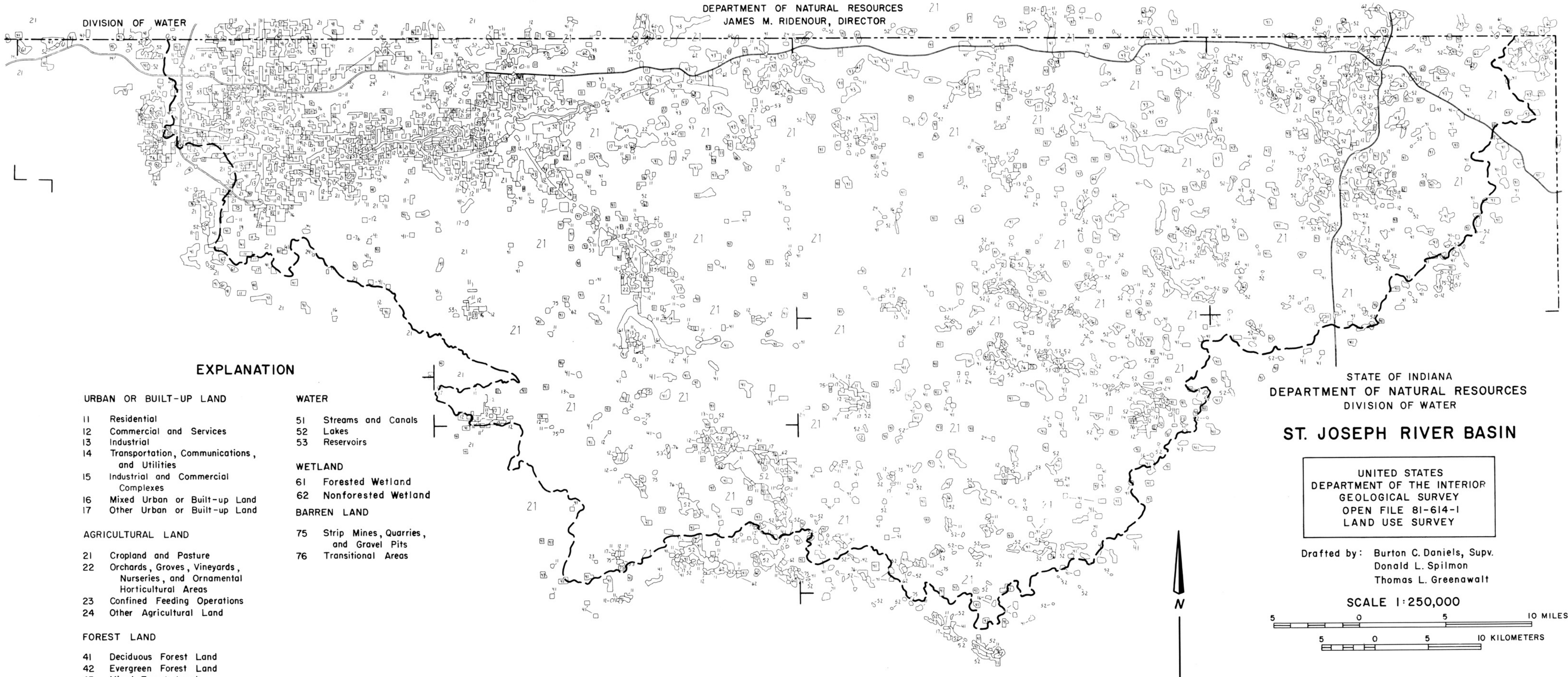
LAND USE

The St. Joseph River basin constitutes 4.7 percent of Indiana's total land area. Lakes, wetlands and small

³ "Basin" in this section refers to entire county areas, because economic data (taken from Marcus, 1985) are available only on a county-wide basis. Furthermore, DeKalb County is excluded from the discussion, because only 2.5 percent of its land area lies within the topographic basin. Economic data are based on 1982 County Business Patterns unless otherwise indicated.

⁴ "Farms" refers to those with sales of at least \$10,000. All farm data are for 1982.

DIVISION OF WATER



EXPLANATION

URBAN OR BUILT-UP LAND

- 11 Residential
- 12 Commercial and Services
- 13 Industrial
- 14 Transportation, Communications, and Utilities
- 15 Industrial and Commercial Complexes
- 16 Mixed Urban or Built-up Land
- 17 Other Urban or Built-up Land

AGRICULTURAL LAND

- 21 Cropland and Pasture
- 22 Orchards, Groves, Vineyards, Nurseries, and Ornamental Horticultural Areas
- 23 Confined Feeding Operations
- 24 Other Agricultural Land

FOREST LAND

- 41 Deciduous Forest Land
- 42 Evergreen Forest Land
- 43 Mixed Forest Land

WATER

- 51 Streams and Canals
- 52 Lakes
- 53 Reservoirs

WETLAND

- 61 Forested Wetland
- 62 Nonforested Wetland

BARREN LAND

- 75 Strip Mines, Quarries, and Gravel Pits
- 76 Transitional Areas

STATE OF INDIANA
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF WATER

ST. JOSEPH RIVER BASIN

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY
 OPEN FILE 81-614-1
 LAND USE SURVEY

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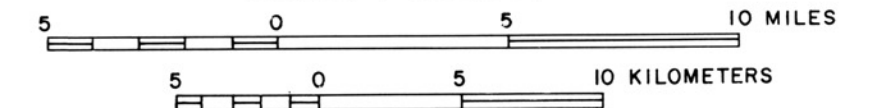


Figure 5. Land Use and Land Cover 1975-81

parcels of forested land are scattered throughout the basin, as fig. 5 shows. Several forested areas are also classified as wetlands and are found along the floodplains of major streams such as the Pigeon, Fawn and Elkhart Rivers, the north and south branches of the Elkhart River, and lower reaches of Turkey Creek.

Agriculture is the primary land use in the basin.

(App. 2 contains county profiles of agricultural land use.) Industrial and residential development is most extensive in and near the cities of South Bend and Elkhart. Heavy residential development also exists around many of the basin's lakes, and to a lesser extent along the larger streams such as the St. Joseph and Elkhart Rivers.