

9-25-1975

Some Economics Effects from Recreational Uses of the Missouri River Reservoirs (Part 1)

Robert L. Vertrees
South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/econ_comm

 Part of the [Agricultural and Resource Economics Commons](#), and the [Regional Economics Commons](#)

Recommended Citation

Vertrees, Robert L., "Some Economics Effects from Recreational Uses of the Missouri River Reservoirs (Part 1)" (1975). *Economics Commentator*. Paper 76.
http://openprairie.sdstate.edu/econ_comm/76

This Newsletter is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Economics Newsletter

Editor:
Robert J. Antonides
Extension Economist

Economics Department

South Dakota State University

Brookings 57006

(605) 688-4141

No. 77

September 25, 1975

SOME ECONOMICS EFFECTS FROM RECREATIONAL USES OF THE MISSOURI RIVER RESERVOIRS

Editor's Note: This is the first of two Newsletters that summarize findings of research about reservoir impacts by Dr. Robert Vertrees, Assistant Professor.

Introduction. The four reservoirs along the Missouri River in South Dakota comprise the largest water resource developments in the state. Construction of the dams and power plants and impoundment of "The Great Lakes of South Dakota" took place from 1948 to 1966, required about \$700 million, and created approximately 10,500 temporary jobs.

Research is being completed about local economic effects of using the four reservoirs within South Dakota for recreation and irrigation. To be sure, evolving impacts of these existing uses have not been nearly as spectacular as the short-term impacts that resulted from construction and impoundment. Yet the effects of recreation and irrigation are important to several communities and industries within counties adjacent to the reservoirs. These effects and the effects of other uses of the reservoirs need to be considered by public planning processes that arrive at decisions about allocation of the Missouri's waters among different uses, states, and regions.

Locations and Trends. Some types of outdoor recreation, such as sightseeing, picnicing, and swimming, have been greatest along Lewis and Clark Lake. This reservoir lies closest to the larger towns and cities within our region. People often travel for relatively short distances to participate in these activities for only a day at a time. Generally speaking, these activities tend to taper off to the west and

north where the other three reservoirs are located. This tendency, however, is not as evident for activities such as fishing and camping that are frequently associated with overnight or longer visits. Fishing has especially been concentrated below the four dams where angler success rates are highest. The most camping has taken place at recreation areas along Lake Francis Case, followed by areas along Lewis and Clark Lake, and then by Farm Island State Park just south of Pierre.

Over the years certain of these recreational uses have not shown steady increases. Fishing reached a peak at the reservoirs from five to ten years after they attained their operating levels. Camping at many public recreation areas was maximum or began to level off in 1970 or 1971.

Expenditures. Information about local expenditures made by out-of-state travelers and by anglers who travel or fish within regions that include the reservoirs have been conducted by the Business Research Bureau at the University of South Dakota. These studies have found that expenditures by these persons have primarily been for goods or services provided by the following types of retail trade or service establishments: food stores, eating and drinking places, gasoline service stations, motels and other places of lodging, and recreational services such as resorts and marinas.

Economic Effects. Angling is the only recreational use for which income effects could be estimated. Based upon results of the study by the Business Research Bureau, it was estimated that anglers who fished the reservoirs in 1973 spent \$3,115,000 for retail goods and \$2,285,000 for selected services. Past relationships between receipts and income in these two industries were examined to arrive at estimates of additional income (before federal taxes) generated by these expenditures. Results were that purchases by anglers added \$550,000 in income to workers in the retail trade industry and \$470,000 in income to workers in the selected services industry. Studies indicate that the income multiplier in the reservoir counties is about 1.65. Using this figure as a multiplier, total personal incomes in these counties were increased by an estimated \$1,680,000 as a result of the initial increase of \$1,020,000. This represented about 0.3 per cent of the area's total personal income in 1973. This per cent was no doubt higher in counties such as Yankton, Charles Mix, Buffalo, Hughes, and Stanley Counties which include the four dams and have sold relatively large numbers of fishing licenses in recent years.

In terms of changes in numbers of establishments, it appears that since the reservoirs were impounded recreation has had a noticeable effect upon the number of resorts, marinas, and similar private recreational facilities. The number of establishments providing such facilities has either remained

the same or increased in all but three of the reservoir counties. Consequently, most of these counties have increased their percentage shares of the total number of recreational service establishments that are located within South Dakota. No such decided trends have been evident for the other types of industries that sell goods or services to persons who visit the reservoirs.

The number of persons employed by most resorts, marinas, and similar private and public recreation facilities is usually small. Therefore, the increase in these facilities has not had a sizable effect upon total employment in the reservoir counties. Other factors besides outdoor recreation have had a greater influence upon the income, number of establishments, and employment within most of the kinds of businesses that sell to people who visit the reservoirs. For instance, counties with the faster rates of increase in retail sales contain Yankton, Pierre, and Mobridge--the three major trade centers near the reservoirs.

In sum, the amount of business activity within several industries that sell to persons who visit the reservoirs appears to have been influenced the most by trends in population and by the location of major trade centers. To a limited degree, however, the presence of reservoir recreation has helped those adjacent counties with decreasing populations and no major trade centers to slow down the rate by which their shares of South Dakota's business activity has been diminishing.

Cooperative Extension Service
U. S. Department of Agriculture
South Dakota State University
Brookings, South Dakota 57006

OFFICIAL BUSINESS
Penalty for Private Use \$300

AN EQUAL OPPORTUNITY EMPLOYER

Postage and Fees Paid
U. S. Department of
Agriculture
AGR 101

Third class mail

