

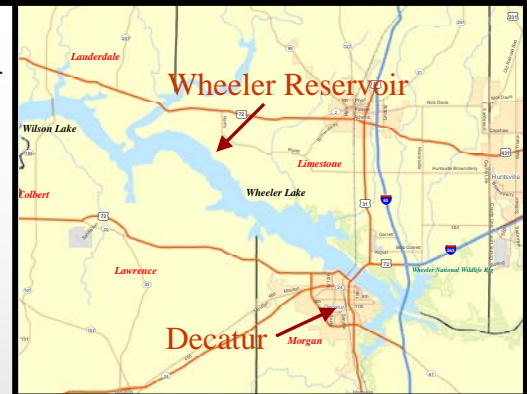


# Tennessee Valley Authority's Wheeler Reservoir

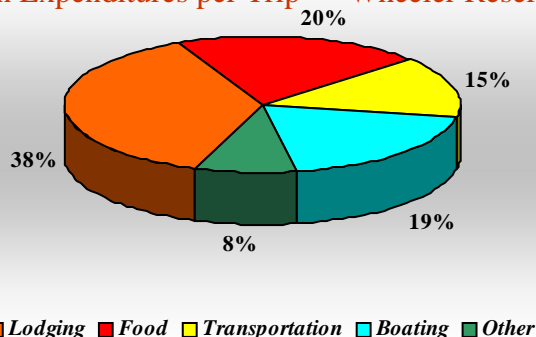


**Wheeler Reservoir Facts:** The reservoir has close to 1,027 miles of shoreline and about 67,070 acres of water surface. Electrical generating capacity is 411,180 kilowatts. Flood storage capacity is estimated at 326,484 acre-feet. Between the two locks — one 110- by 600-foot lock and the other at 60- by 360-foot — barges can be lifted and lowered as much as 52 feet between reservoirs. Decatur, Alabama, the largest city on the reservoir, has invested about \$1.3 billion in waterfront plants and terminals.

Approximately 453 Wheeler Reservoir recreational users were surveyed between May through mid-September in 2008. Results indicate mean expenditures per trip were \$277.49. Of the four main expenditure categories (lodging, food and beverage, transportation, boating, and other expenses), lodging had the largest mean expenditure per trip at \$104.06, followed by food and beverages (\$56.68), boating (\$52.94), transportation (\$40.66 per trip), and other expenses (\$23.15 per trip). More specifically, for lodging, the largest expenditures were for rental homes, cottages, or camper overnight stays. For food and beverages, groceries purchased at a food store were the largest expenditure. For this same category, food and drinks purchased at



Mean Expenditures per Trip — Wheeler Reservoir



restaurants were the next largest expenditure. Fuel and oil were the largest expenditures for vehicle transportation and boating. Boat repairs and services was the next largest expenditure for the boating category. The largest expenditure categories for other expenses included fishing, followed by hunting and camping supplies.

This analysis employed an input-output model, IMPLAN, to measure the economic impacts from Wheeler Reservoir recreation users. Numerous communities and/or towns along the

**Total Industry Output** represents the estimated annual dollar value of production summed across all industries and is a measure of total economic activity. Employment represents the estimated number of total wage and salary employees (both full- and part-time), as well as self-employed. **Total Value Added** represents the estimated dollar value of wages and salaries including benefits, self-employed income, interests, rents, royalties, dividends, profits, plus excise and sales taxes.

**Direct Impacts** represent the estimated economic impacts of activities from recreational users on Wheeler Reservoir from the survey conducted. **Total Impacts** are the sum of direct impacts, plus the estimated economic impacts from businesses (i.e., restaurants, lodging, fuel, retail sales, etc.) providing goods and services (**Indirect Impacts**), and increased expenditures of new household income (**Induced Impacts**) as a result of the recreational users' activities.

**Table 1. Estimated Economic Impacts from Wheeler Reservoir Recreational Users**

	Total Industry Output <sup>a</sup>		Employment		Total Value Added <sup>a</sup>	
	<i>Direct</i>	<i>Total</i>	<i>Direct</i>	<i>Total</i>	<i>Direct</i>	<i>Total</i>
	(Million \$)		(Number)		(Million \$)	
<b><u>Multi-County<sup>b</sup></u></b>						
May-Sept	\$627.6	\$1,048.5	8,240	12,442	\$395.6	\$639.2
Annual	\$1,142.3	\$1,908.4	14,997	22,647	\$720.1	\$1,163.5
<b><u>State<sup>c</sup></u></b>						
May-Sept	\$627.6	\$1,150.8	8,165	13,175	\$390.5	\$695.5
Annual	\$1,142.3	\$2,094.7	14,861	23,980	\$710.7	\$1,266.0

<sup>a</sup>2008 dollars; <sup>b</sup>Multi-County region includes Lauderdale, Lawrence, Limestone, Madison, and Morgan Counties in Alabama and Giles, Lawrence, and Lincoln Counties in Tennessee; <sup>c</sup>State region is for Alabama.

lake are impacted economically. Using survey data, multi-county (counties surrounding the reservoir) and state-wide economic impacts were conducted for Wheeler Reservoir recreational users (Table 1). In addition, economic impacts were estimated for May through September, the actual timeframe of the survey, along with estimated annual projections. For the multi-county analysis, estimated direct and total impacts were \$627.6 million and \$1,048.5 million, respectively, for total industry output for the May through September timeframe. This impact financed more than 12,400 jobs. Total value added was estimated at \$639.2 million. Likewise, annual impacts for the multi-county model were estimated at \$1,142.3 million for direct and \$1,908.4 million for total. Estimated total number of jobs was over 22,600, with total value added estimated at \$1,163.5 million. For the state model, total impacts were estimated at \$1,150.8 million and \$2,094.7 million for total industry output for the May through September timeframe and annually, respectively. Estimated total impacts for value added were \$695.5 million for the May through September analysis period and \$1,266.0 million annually. Estimated total number of jobs exceeded 13,170 and close to 24,000 for the May through September survey period and the annual projected analyses, respectively.

Multipliers measure the additional total industry output, employment, or total value added for an additional million dollars in economic activity. Total industry output multipliers ranged from 1.67 for the multi-county analysis and 1.83 for the state. For every dollar Wheeler Reservoir users spent on recreational activities, an additional 0.67 cents was generated throughout the multi-county analysis or 0.83 cents throughout the state. Likewise, employment multipliers ranged from 1.51 for the multi-county analysis and 1.61 for the state. Interpreted, for every job created based on Wheeler Reservoir recreational user expenditures, an additional .51 to .61 jobs are created in other industries throughout the state.



For indirect impacts, the top five industries impacted were real estate, federal electric utilities, nonresidential buildings maintenance and repair, telecommunications, and services to buildings and dwellings. Likewise, for induced impacts, owner-occupied dwellings, electronic computer manufacturing, state and local non-education, state and local education, and health care professional (doctors, dentists, etc.) were the top five industries impacted.

*AIM-AG/AGRI-Industry Modeling & Analysis Group: (Dr. Burton English, Dr. Kim Jensen, and Mr. Jamey Menard), Department of Agricultural Economics, University of Tennessee Institute of Agriculture. For more information concerning AIM-AG, please contact the group at 865/974-7231 or visit the web site at <http://aimag.ag.utk.edu/>. Data generated for this report from IMPLAN pro, Minnesota IMPLAN Group, 2006.*