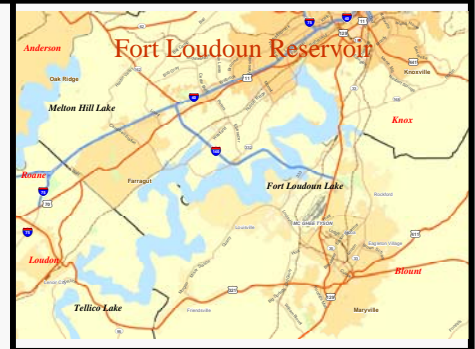




Economic Impacts From Tennessee Valley Authority's Fort Loudoun Reservoir's Shoreline Property Owners Recreational Expenditures

Fort Loudoun Reservoir Facts: The reservoir is the uppermost reservoir in a series of nine TVA reservoirs that form a continuous navigable channel from Knoxville to Paducah, Kentucky, which is 652 miles away. The reservoir is estimated to have 379 miles of shoreline with a water surface area of 14,600 acres. Flood storage capacity is estimated at 111,000 acre-feet.

Approximately 1,256 Fort Loudoun Reservoir shoreline property owners with dock permits were surveyed September through December in 2006. Approximately 87.3 percent (1,096) of the shoreline property owners were permanent residents; the remaining (160) were part-time. The annual mean expenditure for all fixed expenses was \$2,278.12 (Table 1). The top five mean fixed expenditures were watercraft purchases at \$14,237.50, followed by dock/dock maintenance (\$4,411.88), other expenses (\$841.61), dock/marina fees (\$505.90), and boat repairs/service (\$444.47). For annual variable expenses, the average mean expenditure across all categories was \$135.30 (Table 2). Likewise, for annual mean variable expenditures, the top five expenditures were food and beverage at \$959.51, followed by fuel for watercraft (\$854.30), fishing supplies (\$131.44), fuel for vehicles (\$82.76), and purchases of retail goods (\$59.36).



This analysis employed an input-output model, IMPLAN, to measure the economic impacts from Fort Loudoun Reservoir shoreline property owners. Numerous communities and/or towns around the lake are impacted economically. Using survey data, annual multi-county (counties surrounding the reservoir) and state-wide economic impacts were conducted from property owners along the reservoir (Table 3). For the multi-county analysis, estimated direct and total impacts (economic activity) were \$28.4 million and \$57.3 million, respectively, as measured through total industry output. This impact financed over 600 jobs. Total value added was estimated at \$36.1 million. For the state model, total impacts were estimated at \$60.7 million of economic activity. Estimated total impacts for value added were \$37.7 million. Estimated total number of jobs was 623.

Multipliers measure the additional total industry output, employment, or total value added for an additional million dollars in economic activity. Total industry output (economic activity) multipliers ranged from 2.01 for the multi-county analysis and 2.13 for the state. For every dollar Fort Loudoun Reservoir shoreline property owners spent, an additional \$1.01 was generated throughout the multi-county analysis or \$1.13 throughout the state. Like-

Table 1. Annual Mean Fixed Expenditures from Fort Loudoun Reservoir Shoreline Property Owners

Category	Average
<i>Annual Fixed Expenses</i>	
Watercraft Purchases	\$14,237.50
Dock/Dock Maintenance	\$4,411.88
Other Expenses	\$841.61
Dock/Marina Fees	\$505.90
Boat Repairs/Service	\$444.47
Private Land Access Fees	\$28.51
Vehicle Repairs/Service	\$16.13
Fishing License/Fees	\$12.24
Hunting License/Fees	\$4.83
<i>Overall Average</i>	\$2,278.12

Table 1. Annual Mean Variable Expenditures from Fort Loudoun Reservoir Shoreline Property Owners

Category	Average
<i>Annual Variable Expenses</i>	
Food & Beverages	\$959.51
Fuel for Watercraft	\$854.30
Fishing Supplies	\$131.44
Fuel for Vehicles	\$82.76
Retail Goods	\$59.36
Hunting Supplies	\$19.52
Entertainment	\$14.54
Boat Rental Fees	\$9.80
Camping Supplies	\$8.48
Lodging Expenses	\$6.39
Other Expenses	\$5.58
Other Equipment Rentals	\$5.19
Guide/Outfitter Fees	\$4.59
Souvenirs/Gifts	\$2.73
Horseback Riding	\$0.68
Tour Fees	\$0.00
<i>Overall Average</i>	<i>\$135.30</i>

wise, employment multipliers ranged from 1.92 for the multi-county analysis and 1.96 for the state. For every job created based on Fort Loudoun Reservoir shoreline property owners expenditures, an additional .92 to .96 jobs are created in other industries throughout the state.

For indirect impacts, the top five industries impacted were real estate, management of companies and enterprises, banking, telecommunications, and wholesale trade. Likewise, for induced impacts, owner-occupied dwellings, state and local education, wholesale trade, real estate, and health care professionals (doctors, dentists, etc.) were the top five industries impacted.

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 Fort Loudoun Reservoir shoreline property owners 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 shoreline property owners' activities



Table 3. Annual Estimated Economic Impacts from Fort Loudoun Reservoir Shoreline Property Owners

	Total Industry Output ^a		Employment		Total Value Added ^a	
	<i>Direct</i>	<i>Total</i>	<i>Direct</i>	<i>Total</i>	<i>Direct</i>	<i>Total</i>
	<i>(Million \$)</i>		<i>(Number)</i>		<i>(Million \$)</i>	
Multi-County ^b	\$28.4	\$57.3	318	610	\$18.4	\$36.1
State	\$28.4	\$60.7	318	623	\$18.5	\$37.7

^a2006 dollars; ^bMulti-County region includes Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Hancock, Jefferson, Knox, Loudon, Morgan, Roane, Scott, Sevier, and Union counties.

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