HOUSING PRICES AND LAKE ELEVATION ON LAKE KEOWEE

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Abstract. Abstract will be downloaded directly from the database. Lake Keowee, a Duke Energy lake located in Oconee and Pickens Counties in South Carolina, in addition to its role in supplying water to the Keowee-Toxaway nuclear energy plant, is used by area residents and tourists for recreation, and is surrounded by high-end residential development. As a portion of its FERC relicensing, Duke Energy asked the Strom Thurmond Institute to evaluate the impact that changes in water elevation in Lake Keowee have on the regional economy. Among these impacts was the effect that lake elevation has on lakefront property market value, as measured by sale price.

A hedonic pricing model was used to estimate the correlation between lake elevation and sale price for Keowee lakefront parcels in the two counties. Residential property data were obtained from the GIS and tax assessor's offices of each county; these data included sale date and sale price and property attributes, such as lot size, square footage and number of rooms of any homes located on the site, the presence of boat docks, and so forth. Additionally, regional economic data and Census tract-level economic and demographic data were obtained, as well as GIS data on distance from golf courses and urban centers. The hedonic model held constant for these factors.

Due to interaction with Hartwell Lake, a USACE lake that also borders Oconee and Pickens Counties, non-linear models had to be utilized for the hedonic analysis.

Overall, the analysis indicates that there is a small but statistically significant relationship between water level and housing values.