

SPATIAL ECONOMICS OF WETLAND MITIGATION BANKING

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Wetland mitigation banking has become prevalent in many states across the US, with the number of banks increasing 780% from 1992 to 2005. Louisiana led the nation in the total number of banks in 2006 with 96. Despite rapid growth associated with this industry, economic data in regards to the market for wetland mitigation bank transactions has been lacking. Mitigation bank transactions were collected (n=165) for the period 1997 through 2006 from the Louisiana Department of Natural Resources and the US Army Corps of Engineers New Orleans District. Data were evaluated for economic, spatial, temporal, and other descriptive characteristics. Average credit price for the period was \$6,382, three to seven times lower than prices of wetland mitigation credits in states adjacent to Louisiana. Evidence of bimodal price trends prompted analysis of market segregation. Wetland credit prices ranged from \$4,000-\$20,000 for coastal mitigation credits and from \$3,000-\$10,000 for non-coastal mitigation credits. A modified hedonic regression model was developed using spatial econometric and statistical software. Twenty-three variables were evaluated for their influence as price determinants, with 11 factors chosen in the final model (Adj. R² = .69). Parallel sub-models were developed for coastal and inland markets with marginal effects estimated for significant and continuous variables. Major drivers of credit price included sales volume, proximity to population centers, time, and rural land values. Competition within a particular market (watershed) had a positive influence on price, an indication that demand is exceeding supply in this infant market. Findings and recommendations from this study could prove beneficial to policy advisors, bank sponsors, as well as prospective investors in the industry.