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Title: Measuring the Economic Value of Water Quality

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Abstract:

This study attempts to measure the economic value of water quality using the hedonic model on a sample of 53 lakes in unincorporated areas of Northern Minnesota. It focuses on the value of the lakefront land itself rather than the property values, which includes improvements like housing. By using only land values, the author determines which objective variables are statistically significant to determining land value and the most valuable for researchers using the hedonic model.

This study found that the only objective water quality variable that was consistently significant was WSCD, or the number of feet below the surface a secchi disc can be observed. The data used for the sample lakes found that one additional foot of WSCD will raise the value of a lot ranging from \$206 to \$240. While there are some scenarios where water clarity may not indicate actual water quality, this study finds that WSCD (water clarity) has a definite direct effect on land values.