Application of the contingent valuation method to estimate a recreational value for the freshwater inflows into the Kowie and the Kromme Estuaries

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Abstract

This paper assesses the amount recreational users are willing to pay to secure an increase in freshwater inflows into 2 South African estuaries, the Kowie and the Kromme. A questionnaire was administered to 150 respondents at each estuary site during the period December 2002 to January 2003. The values of freshwater inflows into the Kowie and the Kromme Estuaries were calculated at R0.072/m^3 and R0.013/m^3, respectively. Total WTP values were estimated at R938 296.59 and R974 019.20, respectively. A valuation function to predict willingness-to-pay was predicted using the Tobit model estimation of linear bid functions. Annual levies paid (consisting of fishing licences, boat registration fees, etc.), distance of current accommodation to estuary, number of household members, primary use of estuary (i.e. recreation or commercial), how informed the respondent was and investment in boats and vehicles were shown to be important predictors of willingness-to-pay in the case of the Kromme Estuary. Level of education, race of respondent, annual levies paid, investment in estuary access equipment and respondent status (i.e., visitor vs. non-visitor) were shown to be important predictors of willingness-to-pay in the case of the Kowie Estuary. An expectations validity assessment indicated that the estimates were credible.

Keywords: contingent valuation method, recreation, estuary, freshwater inflow*s*