

# Estimating the recreational value of freshwater inflows into the Klein and Kwelera estuaries: An application of the zonal travel cost method

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## **Abstract**

This study estimates the change in aggregate consumer surplus associated with increased freshwater supply into two South African estuaries, namely, the Klein and the Kwelera. The estimation entailed the application of a contingent behaviour, single-site Clawson-Knetsch travel cost model. The value estimates derived reflect the benefit of improved freshwater supplies into the estuaries in question over the status quo. In a survey, a questionnaire was administered face-to-face to 240 households at the Klein Estuary and 231 households at the Kwelera Estuary during the period between December 2005 and April 2006. It was deduced that in 2006 the marginal recreational value of freshwater inflow into the Klein Estuary was 5.7 cents/m<sup>3</sup> (ZAR0.057/m<sup>3</sup>) and into the Kwelera Estuary 1.1 cents/m<sup>3</sup> (ZAR0.011/m<sup>3</sup>).

**Keywords:** estuary, water abstraction, revealed preference, single-site, travel cost method, freshwater inflows