

The Determination of an Environmental Service for a Contingent Valuation Study – Using R to Compute Estimates

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The tension when contrasting the trade-offs between environmental conservation and development growth is an acknowledged fact. Environmental conservationists are pro-active in defending estuarine quality arguing in favour of maintaining or improving environmental conditions. Unfortunately many conservationists ignore the economic implications in their arguments (King & Brown, 2009). This is not the case for development driven advocates, who tend to highlight the financial advantages of development projects.

This paper considers a contingent valuation study of the Bushman's estuary on the Southern coast of South Africa (van der Westhuizen, 2007). We use the R software to bootstrap density estimates of the median, the trimmed mean and the mean predicted willingness-to-pay for a log-linear estimated model. This valuation provides conservationists with a method for attaching an economic value for a recreational service.

References

King, J. (2009). *Building blocks and flow sessions: steps towards integrated flow management*, International conference on Implementing Environmental Water Allocations, (Port Elizabeth, South Africa) February 2009, pp1-2.

Van der Westhuizen, H. (2007), *Valuing preferences for freshwater inflows into the Bira, Bushmans, Kasouga, Keiskamma, Kleinemonde East, Nahoon and Tyolomnqa estuaries*. Unpublished masters dissertation, NMMU, Port Elizabeth.