

Evaluating Recreational Benefits of Water Resources on Small Geographical Areas: An Application to Rivers in Puerto Rico

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Abstract. In Benefit Cost Analysis of water resources Travel Cost Models (TCM) and Contingent Valuation Methods (CVM) are commonly used by National and International agencies. The purpose of this work is to point at a previously unrecognized limitation of one of these recommended tools, the TCM. In valuation assessments that take place at small geographical areas (such as islands) the assumption of a continuous spatial market might not hold. In other words, visitors might not be able to reveal their full willingness to pay through their travel costs because these are limited by the space available. This could cause the valuation estimates coming from TCM to be biased downwards. To deal with this problem, researchers can use CVM studies to obtain results that better reflect how valuable a water resource is. This paper reports on a case study of the effect of the underestimate from using the TCM to estimate recreation use benefits for two rivers in Puerto Rico.