

The Use (and Abuse) of Meta-Analysis in Environmental and Natural Resource Economics: An Assessment

Jon P. Nelson*^a and Peter E. Kennedy**

*Pennsylvania State University, University Park, PA 16802

**Simon Fraser University, Burnaby, BC V5A 1S6

Abstract

Motivated by the 2006 report of a Work Group appointed by the Environmental Protection Agency (EPA), this paper examines the present state of meta-analysis in environmental economics and offers recommendations for its future use. To this end we summarize and assess 130 meta-analyses from 115 published and unpublished studies, covering seventeen topical categories in environmental and resource economics. First, we provide several generic meta-analysis models as reference points and discuss major estimation issues. Five econometric issues are identified as part of a complete analysis: (1) sample selection criteria; (2) basic data summary; (3) primary data heterogeneity; (4) heterosk