Examining Methods of Ecosystem Services Valuation To Better Inform Watershed Policy

Klancey M. Burford & Dr. Shannon H. Rogers
Center for the Environment, Plymouth State University, Plymouth, New Hampshire

Statement of the Problem

Ecological economists have used many diverse methodologies to elicit use and non-use values of ecosystem services from the public. However, there is concern that different methodological approaches result in different values obtained, skewing the results from the value the public actually has toward an ecosystem service. The implication of this is that current use and non-use values may not be accurately reflecting preferences, and therefore misguiding environmental policy.

In this study we will utilize different methodologies of collecting use and non-use values of ecosystem services held by citizens in the Great Bay watershed in order to test whether it results in significantly different values obtained. The hope is that through this research a stronger case can be made as to whether values obtained using different methods are similar across citizens. This will help inform policymakers as to whether they should be wary of basing policy off of particular valuation methods or if the valuation method does not significantly influence the values obtained.

Research Questions

1) Do the values obtained by individual rating surveys differ from the values obtained through deliberative multicriteria evaluation workshops?

2) Do people self-report a change in valuing nature after deliberative multicriteria evaluation workshops?

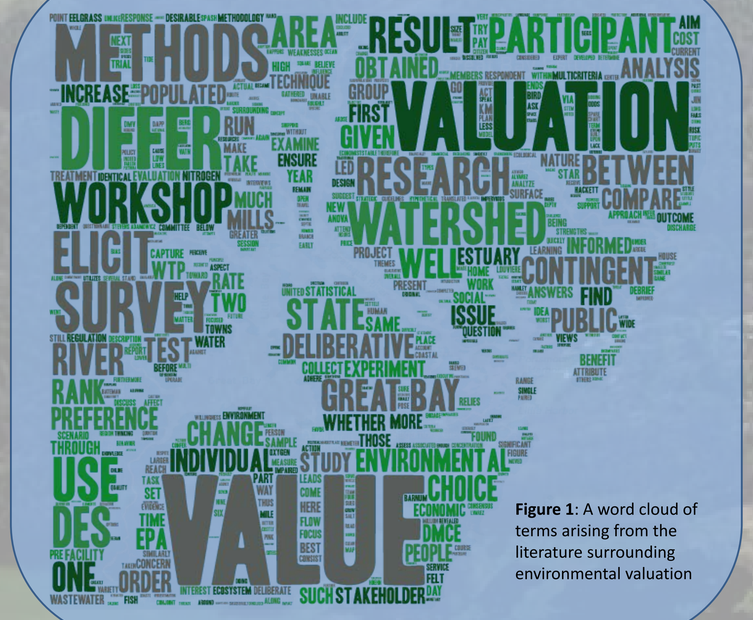

Figure 1: A word cloud of terms arising from the literature surrounding environmental valuation

Methods

The research will take place over the course of an eight hour workshop. After arrival and introductions, participants will be given an individual questionnaire. This questionnaire will be asking the participants to rate environmental scenarios on a scale of 0.0 to 10.0 with the most ideal scenario being a 10.0. Next, expert stakeholders will discuss different environmental problems of the small streams in the subwatersheds surrounding the Great Bay and how these relate to specific ecosystem services.

An artist's rendition of a deliberative workshop from SATORI

The citizens will then break out into groups of six or more to deliberate the environmental scenarios listed in the questionnaire. They will then rate each scenario on a meter stick placing the best scenario at the 100cm mark, and rating the rest of the scenarios based on the 'best' scenario. After all groups are done rating the scenarios, all participants will come together to review the final ratings of all the groups. Finally, the individual questionnaire will again be given to the participants now that they had greater awareness of the ecosystem services affecting the Great Bay.

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