

Measuring and Mobilizing Citizen Preferences for Source Water Protection

Principal Investigator – Dr. John Janmaat, University of British Columbia, 2013-2015

Challenge

Three themes dominate environmental management: public participation, use of the best science, and cost effectiveness. While economic valuation has grown in prominence as an aid to achieving cost effectiveness, its methodology has been challenged as inappropriate for complex situations outside of respondents' knowledge and experience. Preferences may be constructed through education and experience. Further, particularly for public goods, preferences may develop through a social discourse that confronts multiple value frames and in response to equity concerns. Some recent experiments have sought to elicit values for cost benefit analyses from deliberative groups with access to scientific information or expertise. This project furthers the development of deliberative valuation techniques through application in the Okanagan, and collaborative adaptation with other projects in the network. With a focus on source water protection in the Central Okanagan, a series of choice experiments will be conducted.

Project

Water provides many services that cannot easily have a dollar value assigned to them. Many of these services are 'collective', in the sense that the services are enjoyed by the community as a whole and not easily divided into parts that individuals enjoy privately. Protecting water resources so that these services can be provided is often most effectively done by government. However, governments have limited resources, and must decide how to prioritize spending among multiple demands. Many economists argue that valid estimates of the dollar equivalent to the value of these services can help improve government decisions around investing in the provision of these services.

This research has the objective of better understanding the validity of assigning dollar values to ecological goods and services. Firstly, the research examines the role that social networks play in determining how much people are willing to pay for ecological goods and services. The information people have and the norms they adhere to are likely related to the social networks that they are part of. By measuring these networks, it is possible to see how they contribute to explaining an individual's expressed values. Social network measures have been included in the project's survey instrument, and analysis of results.

Additionally, the project examines the stability of people's expressed value. If people's valuation is somewhat socially constructed, then social interactions may lead to changes in people's valuations. An experiment was conducted where a subset of survey participants join a deliberative process where they more deeply explore the issues set out in the survey. The project examines changes in the stated values that can be explained by participation in the discussions.

Outputs

The research team hosted a series of deliberation sessions to develop research design and enable partners to participate in a collective decision making process that confronted participants with the challenge of making tradeoffs.

This research anticipates the following outputs:

- Dissertation (2016). Develop econometric theory and analyze the results of the project.
- Chapters from dissertation will be published (2017).

Outcomes

Outcomes include:

- Strengthened relationships with partners. This project enhanced the partners' understanding of conducting sound economic valuation research and created opportunities for future collaboration.

Research Team and Partners:

Research Team:

Dr. John Janmaat, University of British Columbia

Partners:

Regional District Central Okanagan (RDCO)
Okanagan Basin Water Board (OBWB)

Highly Qualified Personnel (HQP):

Darwin Horning, PhD
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