

Roundtable

Title: Linking Risk and Sustainability through Decision Science

Abstract: Risk management and sustainability management are critical concerns among organizations and societies. The analysis of these concerns is often conducted in isolation, with methodologies developed within siloed scientific communities. A framework for combining the two is not that common, stemming from the lack of clarity around these constructs. The paper argues that the way forward is to recognize that both risk and sustainability are 'boundary objects': concepts that are found in multiple fields and characterized by interpretive flexibility across those fields. As boundary objects, risk and sustainability share the same framework with the same elements: a utility objective, the constraints to consider in alternative courses of action, the uncertainties in modeling these alternatives, and the main stakeholder who stands to benefit from the utility. These elements are the same as those of a decision model. It is thus argued that rational decision-making offers a robust formalized framework for linking risk and sustainability. The framework can be employed to integrate risk analysis and sustainability analysis, which have related but competing objectives that share the same constraints and uncertainties faced by the same stakeholders. Conceptually linking the constructs through decision science helps advance efforts to simultaneously model risk and sustainability across disciplines and stakeholders.

Contributors: TBD

Organizers

Sandra Alday, University of Sydney and Anca Hanea, University of Melbourne