

coasta! Collaboration Cluster



Understanding the social context - including social networks

Understanding the social context of knowledge generation (science) is essential for its effective transfer into decision making. Both science and decision making operate within the context of diverse concerns, values, and stakes; and transfer of knowledge between science and decision making requires a 'complex labyrinth' of communication and engagement.

The contribution of science to sound coastal management outcomes can be facilitated by explicit consideration by scientific research organisations of the social context (or operating environment) in which science and decision making function. This also requires that scientists, research organisations and research funders effectively monitor the operating environment in which science and decision making are occurring. The Coastal Collaboration Cluster research applied a range of techniques to monitor, evaluate and adapt to the operating environment of coastal decision making. These include:

- **Stakeholder analysis** – recognises the wide range of knowledge and information sources, and facilitates the identification of conflicting values and underlying knowledge. For 'wicked coastal problems' stakeholder analysis aids: the definition of issues; identification of individuals, groups and institutions that are affected or affect the issue; and highlights the constraints in the operating environment.
- **Discourse analysis** – acknowledges that language is used to construct and organise reality. Stakeholders and actors in coastal management processes use different language to express their aspirations and concerns. Analysing language (written, spoken and visual) within the operating environment provides a means for examining knowledge relations, and identifying issues related to representation of reality. Discourse analysis of language within an operating environment can aid the identification of: the issue of interest; the stakeholders, administrative processes and institutions involved in the issue; the forms of knowledge within an operating environment and how they can influence decision making; and the barriers, filters, constraints and enablers that influence knowledge.
- **Network analysis (including social network analysis)** – provides insight into the relationships between people, groups and organisations within an operating environment and the processes of generation, transfer, influence and uptake of knowledge. Post-decision making analysis of social networks may provide explanations for why the most suitable decisions are not made, or provide insight into the structure of social networks generating good coastal management outcomes. Network analysis can: aid adaptive learning within an operating environment as it identifies connections that enhance co-ordination, co-operation and trust between stakeholders; facilitates the diffusion of relevant information rapidly amongst stakeholders; aids identification of 'coastal champions', and flows and blocks to information transfer; and facilitates information transfer to unengaged and disengaged stakeholders so as to build consensus and identify common goals.
- **Institutional analysis** – explores the formal decision making processes through which science and other knowledge inform and are applied in coastal management. Specific attention is given to the roles of responsibilities within and between governmental, community and industry/economic organisations and institutions.
- **Analysis (and fostering) of coastal champions** – A coastal network will typically have nodes or subgroups of stakeholders with competing views and objectives articulated or facilitated by their respective champions. Analysis of coastal champions aims to identify the broad range of characteristics coastal champions possess so that these can be understood within an operating environment. In this way coastal champions who can advocate values, attitudes, objectives and positions to minimise poor decision making and promote good coastal management decision making' can be fostered and developed.

Each of these approaches recognises that knowledge is not 'value-free' and as a consequence knowledge transfer is influenced by values and attitudes of people, groups and organisations within an operating environment. By recognising these values communication methods can take into account flows and blocks to information transfer.

The CSIRO Flagship Collaboration Fund facilitates involvement of the wider Australian research community in addressing the nation's most significant challenges and opportunities. Flagship Clusters are three-year partnerships between Flagships, universities and other public research agencies.