



# fact sheet

*knowledge for managing Australian landscapes*

## Where's Wally? - Integration of social science in NRM organisations 1978-2002

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### Background

Understanding the social dimension of natural resource management (NRM) is a pressing priority for almost every NRM policy, management, or research agency. It is an imperative focused on enhancing public participation, improving the adoption of research findings by stakeholders, and encouraging interaction between biophysical and social scientists.

Documenting and drawing on the participant's experience provided valuable insights into how we might ensure that such interactions might be better managed.

### Objectives

This project aimed to:

- Illustrate the extent of organizational learning that has occurred between five NRM organisations over a 20 year period by analysing how they established and integrated social science programs and the roles of the social scientists into their organisations;
- Enhance understanding of the impediments to integration of social and natural science approaches and knowledge in NRM, and increase knowledge of the conditions that most effectively facilitate this integrated approach;
- Recommend conditions for improving integration of social science knowledge in NRM. The methodology applied an oral history approach based on semi-structured, in-depth interviews with six social scientists (five of whom occupied their respective agency's first social science position) and five of their managers.



## Approach to the project

This project sought to understand the place of social science in NRM through the personal experiences of those involved over the last quarter of a century—using an oral history approach.

Annual reports of the five agencies (1978-2001), participants' publications and other relevant publications and documents were analysed and incorporated into the methodology.

## Key findings

Australian natural resource management agencies were only beginning to understand the importance of social science in NRM over the last 25 years bringing social scientist 'pioneers' into their ranks.

Lessons from the experience of these pioneers and how all five agencies attempted to support social science in their ranks must inform the future.

## The Roles of Social Scientists in NRM

The four major functions of the social scientists interviewed were to:

- establish a social science program and a presence for the social science disciplines within the agencies, including the role of educating other agency staff about the nature and value of the social sciences to NRM;
- carry out research and manage social science research projects through various approaches from engaging industry to educating extension officers to ensuring socially acceptable development;
- facilitate integration of social science and biophysical knowledge; and
- facilitate and maintain relationships between the agency and various groups of the agency's stakeholders.

The history illustrates that:

- natural resource management agencies introduced social scientists in ad hoc ways; with scant idea about what they could do or how they would do it, how 'social science' fitted into the agency, or even what 'social science' was.
- infrastructure for integration of social science knowledge to NRM, commitment of resources and professional logic, was absent;
- organisations structured in silos is often seen as the cause of difficulties in integrating social science disciplines in natural resource management agencies but the greatest issue is the lack of connectors between them. Agencies have been inactive in establishing facilities for knowledge exchange between the social sciences and the biophysical disciplines;
- Without adequately resourced programs to establish large-scale research, there have been limited opportunities for social scientists in natural resource management agencies to gain sufficient influence to demonstrate their specialist knowledge.
- Social scientists adopted a range of approaches to introduce social science into natural resource management agencies and processes; and for some the experience of working in the natural resource management arena was demoralising, both personally and professionally;
- The social science profile is boosted where the social scientist visibly assists agency stakeholders (ie industry) and /or where the social scientist attracts external funds to the agency;
- Opportunities for social scientists to market their own research expertise, assist in establishing acceptance of social scientists among biophysical scientists.

## Recognising the barriers to integration

Institutionalising social science in natural resource management remains a considerable challenge. However, the experiences and perceptions of the study participants reveal a number of persistent constraints to integration, which fall into two broad groups: those about institutional and organizational arrangements and those related to professional impediments.

### Barriers to integration in institutional and organisational arrangements

- Fragmented policy and management functions in large organisations compromise the potential contribution of social sciences in NRM agencies and maintain social scientist on agency / business margins.
- NRM agencies tend to focus on short-term outputs, organisational arrangements and activities as distinct from longer-term behavioural change, which compromises their ability to understand and manage the human dimension of NRM. Agencies expectations of individual social scientists become unrealistic when they combine the functions of research expert and change manager.
- When social programs in NRM are integrated into bio-physical program areas and do not have a defined profile it has tended to be further marginalised, invisible and the potential for the social science disciplines to value-add is limited.
- Rationalist economic management introduced in the 1990s diminished public involvement in policy processes. This resulted in less direct contact between agency staff and resource users, and a consequent gap in the knowledge of agency staff and the opportunities available to influence resource users.
- NRM agencies put little effort into building formal links between their social scientists and their communication, education sections or advisory groups, which removed them from playing a major role in advancing knowledge about the human dimension of NRM.

- A single (solo) social science position cannot be expected to have real influence (or attract adequate resources) in an NRM agency. A solo position usually fails to attract reasonable personal and professional infrastructure or status, and typically involved work across an agency. By comparison, single focus biophysical programs are usually represented at a high level of decision-making by more than one high status position.
- The number of social scientists and resourcing of their programs has generally not met or kept pace with stated plans that include increased focus on and integration of the human dimension by these agencies.

### Professional impediments

- The field of NRM has an entrenched culture of 'hard' biophysical science. It can be difficult for those managing social programs to break through the attitude of biophysical scientists that the social sciences are a matter of common sense not specialised expertise.
- The professional status of social scientists in NRM agencies has also suffered from the lack of designated programs and their appointment below senior position levels.
- Social theory and established social science methodologies receive limited application in natural resource management, a situation that is at odds with the status of the field as an emerging discipline.
- There is a tendency for those in NRM agencies to conceptualise the social sciences as 'servicing' natural resource management, whereas the social sciences are in fact disciplines in their own right. While they are cast in the role of 'service provider' to the biophysical science programs and projects, the social sciences are maintained at a lower level and status.
- NRM agencies assumed that the solo social scientist could coordinate integration in addition to coordinating the social science functions of the agency. The onus for integration has wrongly fallen on the social scientist rather than the agency, and often to a greater degree than it has fallen on staff from other disciplines.

## Ways to facilitate improved integration

Based on the experience of the people interviewed improvement in the integration of social science into natural resource management agencies can be facilitated by.

- applying social science to both policy and management if it is to influence natural resource management directions;
- NRM agencies acquainting themselves with social science theory and methods;
- Establishing structures and encouraging genuine opportunities for knowledge exchange among different disciplines to assist integration.
- Clarifying the role and tasks of integrators within the agency. The role of 'integrator' may, but will not necessarily be the responsibility of social scientists but will need to advocate for inclusion of the social sciences.
- providing social science contributions with adequate resources and equal status to that of the biophysical science disciplines;
- building and maintaining strategic and personal relationships and establishing trust are critical for social science to make a successful contribution in the NRM field;

- ensuring ongoing involvement of social scientists in strategic research planning, and construction and assessment of project briefs in all program areas.

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