

4 The cultural imperative: broadening the vision of long- term ecological monitoring to enhance environmental policy and management outcomes

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SUMMARY

To inform the management of Australia's natural and cultural resources, conservation science needs to better engage with the broader public who ultimately have control over what knowledge and priorities are applied. This chapter explores some of the key cultural drivers and challenges that influence the way that we, as a nation, engage with the environment and how we reconcile environmental investments against social and economic aspirations.

By 'culture', we refer to the diverse values and subsets of society that generate different knowledge systems and priorities from which decisions are made. These values are shaped by (and characterise) cultural groupings of people based on their nationality (or nationalities), and socio-economic, educational and employment backgrounds. The challenge for conservation is to set priorities and develop coherent policies that respect the diversity of interests held within our society while also maintaining environmental values for future generations. This will require collaboration between ecologists, social scientists, government, industry stakeholders and the community to produce

a long-term vision that not only facilitates ecological sustainability but also facilitates inclusive and adaptive approaches to land use and management.

In this chapter we explore the main cultural drivers of ecological monitoring and conservation in Australia. We examine the culture of science itself, the influence of different land-use industries, and the cultures inherent to education, Indigenous Australia, economics and policy. We also present an overview of the socio-cultural engagement of researchers undertaking long-term ecological monitoring in Australia, with a focus on the plot networks currently supported by the Long Term Ecological Research Network (LTERN, within the Terrestrial Ecosystem Research Network – see Chapter 1) that feature heavily in this book. This survey showed that most researchers have engaged with the conservation and higher education sectors, but had very limited engagement with other dominant land-use sectors such as agriculture and Indigenous land. A brief look at some socio-ecological considerations of similar international initiatives suggests that other countries have started to broaden the focus of research to