

State of the catchments 2010

Economic sustainability and social well-being

Lachlan region

State Plan target

Natural resource decisions contribute to improving or maintaining economic sustainability and social well-being (ESSW).

Background

This report focuses on links between changes in natural resource management (NRM) and ESSW which can be influenced by government. These changes are hard to measure, due to the complex interactions between the environment, society and individuals.

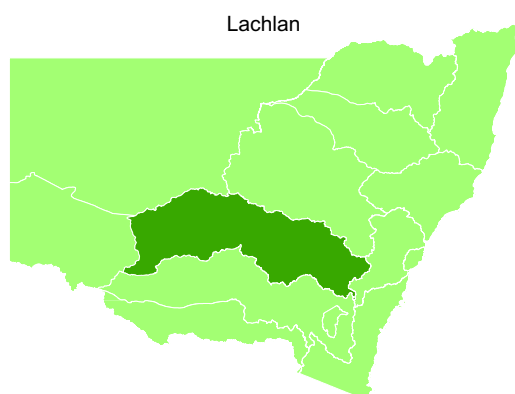
Understanding ESSW in the Lachlan region

Representatives of three key stakeholder groups – landholders, Aboriginal people and townspeople – were consulted via focus groups and interviews. Current social research, focused on NRM issues in the Lachlan region, was reviewed. No overall assessment of the condition (strength and number) of the links between natural resource decisions and ESSW is given, as the distinctions between stakeholders' perceptions and experiences are significant. These differences are critical to understanding the likely contributions of natural resource decisions to ESSW in different parts of the community.

A detailed technical report describes the methods used to derive the information contained in this report. At the time of publication of the *State of the catchments (SOC) 2010* reports, the technical reports were being prepared for public release. When complete, they will be available on the I&I website: www.industry.nsw.gov.au/info/mer.

Note: All data on natural resource condition, pressures and management activity included in this SOC report, as well as the technical report, was collected up to January 2009.

Map of the catchment



Overview

What do people in this region see as important to maintaining community vitality?

Secure employment, especially close to home, was considered critical by all groups. Other important factors include:

- managing land-use and changing land uses to reflect sustainable land capability
- profitable and sustainable agriculture that is diversified with other industries, eg mining
- enhancing personal connections, social networks and community participation
- access to health, education and communication services and good transport systems.

What is the state of ESSW across the region?

ESSW is variable across the region. The eastern end of the region, which has higher rainfall, is seen as faring better, although drought is still affecting local economies. Other important factors include:

- the decline in social involvement and preventative health participation, especially for women, due to financial pressures
- the struggle of some rural areas to maintain population and infrastructure; volunteer numbers steady but few young people are getting involved
- the slow progress for Aboriginal people to influence NRM involvement; iconic modified trees, regarded by many as cultural 'libraries', are being damaged in significant numbers.

Aboriginal interests – connections to culture

The well-being of Aboriginal communities, as well as their ability to access land and its natural resources, is entwined with the health of the environment. Limited access and its associated impacts on cultural practice have created a history of socio-economic disadvantage.

Studies demonstrate that participation by Aboriginal people in the Australian Government's 'Caring for our Country' initiative benefits both the environment and social cohesion. Meaningful NRM jobs provide many tangible, individual and family benefits as well as an increased sense of worth within Aboriginal communities.

Figure 1 shows that, over the past 10 years, the NSW indigenous population has grown at a faster rate than the total population. The indigenous population growth is around 3700 people per year; however, this number is considerably smaller than the total population increase of around 51,000 per year. The Australian Bureau of Statistics (ABS) has suggested that the high level of indigenous population growth may be a result of both high natural growth and more people being prepared to identify their indigenous origins in the census.

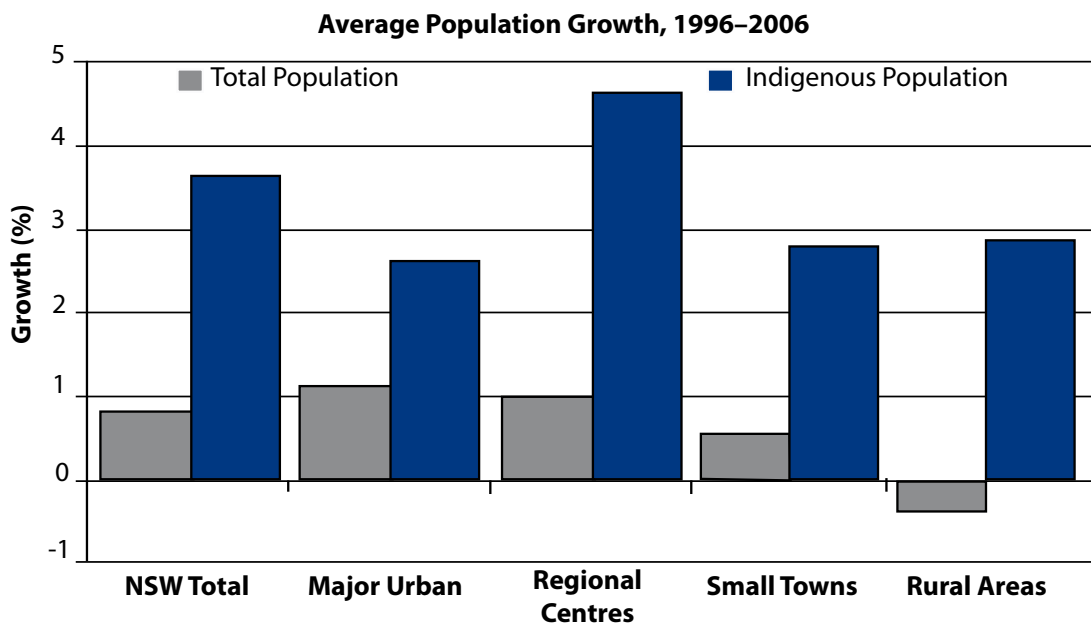


Figure 1 Growth of indigenous population compared with general population

Graph provided by Bureau of Rural Sciences (BRS) from Australian Bureau of Statistics (ABS) data, 2008

Trends – community views

Landscape changes

Changes to the landscape include:

- the overriding influence of the drought on water and vegetation levels, with the number of native trees declining in hilly areas
- a major land-use change from grazing to cropping, which has a negative impact on native grasses but has resulted in increased stubble retention due to the increased use of minimum tillage practices
- an increase in ground cover in pastoral areas, due to conservation grazing including native pastures and reduced stock numbers
- rural subdivision in the east of the region, which is seen as problematic for land management (eg less effective weed control and fire management) but has also resulted in high land prices
- increase in mining activity

- wide conservation corridors of new trees and fenced remnant vegetation which are becoming more common and increasing the number of some native birds and insects.

Primary industry

Environmental impacts on the condition of farm production assets and regulatory changes are diminishing ESSW and motivation for farmers. Other concerns include:

- lack of off-farm income, especially for partners, as farming does not currently provide a stable income except in areas where access to groundwater is possible
- debt, declining profitability from the rising cost of farm inputs and reduced carrying capacity due to drought, although conservation farming has lessened the impact of the drought
- increased land values from population pressure from Sydney and Canberra, which has limited farm expansion and entry into farming by young people – foreign investment in the western parts of the region also contributes to high land prices
- off-farm work opportunities from mining but mining rosters (four days on/four days off) affect community participation, particularly in sporting associations
- prolonged drought negatively affecting mental health and confidence in farming futures
- the reduced employment in agriculture – although employment in this sector declined by more than 10 per cent across NSW (1996–2006), it declined somewhat less in the Lachlan region (Figure 2).

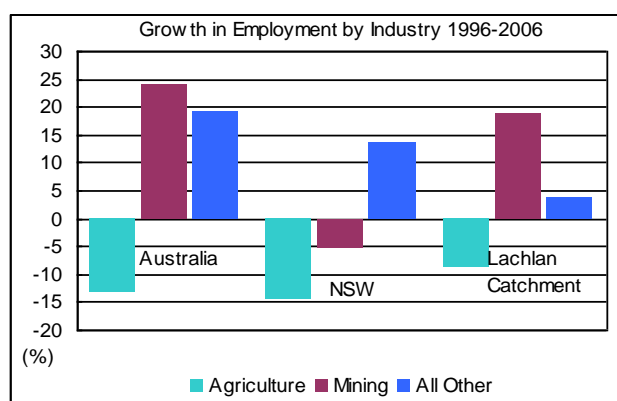


Figure 2 Decline in agriculture employment over 10 years

Graph provided by Industry & Investment NSW (I&I) from ABS data, 2008

Townscapes







The towns within the region are diverse, although none of them are large enough to be considered a major regional centre. This affects ESSW in various ways, eg residents have to travel outside the region to access specialist health and educational services. Other key impacts include:

- a slower agricultural economy reducing retail activity
- bigger towns providing more employment, leaving their communities in better condition
- the impact of peri-urban development on water use, fire management, weed management and the number of bores
- population ageing/decline in some areas reducing the amount of community participation and the future of long-term community roles.

Table 1 provides a summary of comments made by the key stakeholder groups.

Table 1 ESSW check and group comments

Likely impact of NRM decisions on ESSW	Condition	Trend	Data confidence	Typical group comments
Business profitability and expansion		↑	M	Conservation farming equipment is being used; this creates a positive environment and economic benefits.
Increased employment		↔	M	<p>Increased employment has shifted the focus to low-input agriculture.</p> <p>There is concern about employment on the farm for future generations and the loss of the family farm. Conversely, in some ways this encourages a wider variety of people to become more involved in NRM.</p> <p>Aboriginal people are slowly getting involved in NRM – the Lachlan CMA has created many employment opportunities.</p>
Gaining more formal and informal skills		↑	M	<p>Site recognition training for 100–150 Aboriginal people was provided.</p> <p>The Lachlan CMA is encouraging the adoption of conservation farming and cell grazing through training sessions, conferences and bus trips.</p>
Community networks and interaction		↑	M	<p>An Aboriginal reference group has been established and 14 communities identified as cultural heritage project hosts.</p> <p>Farmers are meeting regularly and talking about issues. This networking is mostly a drought response.</p>
Participation in NRM		↑	M	<p>Lachlan CMA incentives and education have helped farmers make the transition to conservation farming.</p> <p>The ongoing drought has led to fewer numbers of volunteers, so smaller Landcare groups have been centralised into one group.</p>
More effective NRM decision-making		↑	M	The Lachlan CMA is working towards 'showcase' projects with councils. Council role in NRM varies, but is slowly improving.

Condition		Trend		Data confidence	
	Very good	↑	Improving	H	High
	Good	↔	No change	M	Medium
	Fair	↓	Declining	L	Low
	Poor	?	Unknown		
	Very poor				
	No data				

Pressures

A number of pressures, centred on drought and demographic change, are influencing land-use change and rural adjustment, as well as modifying links to ESSW in the region. These links affect people’s ability to use environmental services but can be felt individually as financial, relationship and time pressures.

Major pressures come from overall resource condition (eg soil health), availability (eg increased competition for water), access (eg for recreation, traditional foods and medicines) and quality (eg water quality). Additionally, people with long-term associations with an area – particularly Aboriginal people with cultural responsibilities for landscape health – can feel strong emotional and spiritual connections to the land, which increases overall ESSW.

Key pressures include:

- population change – across NSW, rural areas have experienced decline while small towns (200 to 1000 people) have had low growth. However, the Lachlan has several larger, more stable town populations. Maintaining a viable population is critical, as NRM is labour-intensive
- community capacity – community capacity is often measured by a community’s level of volunteering, optimism and participation in community life. Although rural communities traditionally have a high rate of volunteers (as shown in Figure 3), they also have an ageing membership and are experiencing decline. Volunteer numbers are likely to decline sharply over the next five to 10 years. Additionally, ‘tree changers’ may take time to develop the broad civic duty values that rural communities exhibit. There is little capacity for more voluntary work in NRM in rural areas in this region

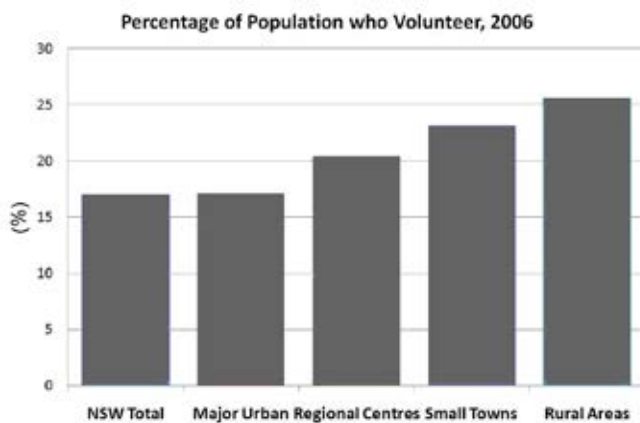


Figure 3 Percentage of population who volunteer (2006)

Graph provided by BRS from ABS data, 2008

- drought/climate change – reduced water availability is prompting a slight reduction in intensive agriculture
- technology – trend towards cropping and the use of GPS has increased the use of marginal lands, but had a negative impact on native grasses
- industry – mining contributes to the economy but can have adverse social impacts, eg reductions in players and volunteers to fill administrative roles in sporting teams, access to land for cultural purposes and skewed social structures from a predominantly transitory, male workforce.

Management activity

Monitoring ESSW is an evolving field for government and, as such, monitoring work has been developed to mesh with national approaches. Fieldwork has gathered qualitative data on the impact of CMA actions and also larger scale government investments in NRM. Monitoring occurs through several processes, including key stakeholder focus groups and interviews, with larger community samples improving reliability where possible.

State level

The State Plan target requirement is to ‘contribute more effectively to natural resource investment decision-making achieving socio-economic outcomes’. The NSW Government aims to achieve this through improved priority identification and decision-making capacity of CMAs and agencies. A socio-economic training module, designed to extend Industry & Investment NSW’s (I&I) monitoring, evaluation, reporting and improvement processes, is currently being developed. I&I is working with several CMAs and state target themes to ensure the effectiveness of this module.

Other socio-economic activities being undertaken at the state level include:

- developing common guidelines for country-wide socio-economic analysis
- identifying Aboriginal cultural heritage assessment priorities and progress assessments to assist land-use planning and NRM investment decision-making
- implementing the Aboriginal BioBanking Program
- I&I’s work with Lachlan CMA to demonstrate the integration of socio-economic and invasive species monitoring and evaluation
- development of a state-wide Aboriginal Land and NRM Action Plan ‘Healthy Country – Healthy Communities’ – this will assist in developing clear policies, principles and tools to improve socio-economic outcomes for Aboriginal people through enhanced capacity to participate in land management and NRM
- the Aboriginal Heritage Mapping and Assessment Program, which is a whole-of-Government program that provides a coordinated and consistent approach to collecting, managing and using spatial information for Aboriginal heritage values – the program incorporates cultural mapping standards, regionally based assessment and appropriate management of Aboriginal information. It aims to develop inter-agency priorities and key deliverables for Aboriginal heritage information, assessment and mapping.

Regional level

At the regional level, the Lachlan CMA's NRM investments have seen more than \$50 million injected into the region's economy over the past four years. This has generated significant co-investment from landholders and other partner organisations across all programs. During a time of severe drought, this investment and the flow of activity has helped to maintain ESSW.

The Lachlan CMA is undertaking the following regional activities in relation to the socio-economic theme:

- supporting projects promoting Aboriginal employment
- providing educational opportunities including workshops, training days and centres, eg Lake Cowal Conservation Centre
- implementing the Lachlan Farm Family and Community Support Project, which provides support for local government and local community events that help to maintain mental health and social well-being during the height of the current drought.

Local level

Aboriginal NRM – Forbes

In 2007, the Lachlan Aboriginal Natural Resource Corporation took the Lachlan Aboriginal NRM Cultural Heritage Canoe Tour to three schools. Environmental awareness was the focus of the day activities and cultural awareness was taught at night. Representatives included:

- DECCW, who discussed cultural heritage
- I&I staff who talked about fisheries
- Lachlan CMA vegetation planning staff who talked about the effect of willows on river landscapes
- community elders who discussed culture, eg totem stories.

The Lachlan CMA funded this trip and the Lachlan Aboriginal Natural Resource Corporation is seeking funding for future years.

Performance Story – sphere of influence

NRM investments are cumulative and longer-term, but are resulting in the following ESSW outcomes:

- improved on-farm management, sustainability and profitability (in rural areas)
- supporting landholders' NRM implementation
- enhanced social networks and well-being of those involved.

The benefits from NRM investments were seen to have been restricted to motivated landholders, with the broader community largely unaware of the CMA. Many people thought that the social and economic benefits of NRM were swamped by the impact of the drought.

Further reading

Australian Bureau of Statistics 2006, *Map Stats by Natural Resource Management Region*, [www.censusdata.abs.gov.au/ABSNavigation/prenav/TopicList?method=Place%20of%20Usual%20Residence&subaction=1&producttype=MapStats&areacode=NRM104&action].

Australian Bureau of Statistics 2006, *Population Characteristics, Aboriginal and Torres Strait Islander Australians: New South Wales*, Cat. no. 4713.1.55.0001.

Byron I, Curtis A & Mackay J 2007, *Benchmarking Community Attitudes Towards Natural Resource Management in the Lachlan Catchment*, Bureau of Rural Sciences, Canberra.

Graphs for employment change by Information and Library Services 2008, NSW Department of Primary Industries, Orange.

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