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tchments 2010 Economic sustainability and social well-being

Western 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 Western region

Representatives of three key stakeholder groups – landholders, townspeople and those heavily involved in NRM activities – were consulted via a survey, focus groups and interviews. Current social research, focused on NRM issues in the Western 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 l&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?

All groups considered secure local employment as critical, especially for young people. People are concerned that the needs of the region's small population are easy to overlook by the State and Australian governments. Other important factors include:

- reliable transport routes and access to retail
- high-quality health and education services
- the profitability and sustainability of agriculture, expanded to other industries in the region, eg mining and tourism
- networks and community participation underpinning the social fabric of the community, which has been especially crucial during drought years
- managing an economy in transition, due to drought and reduced water availability.

What is the state of ESSW across the region?

ESSW across the region is variable. The Cobar and Broken Hill districts are seen as faring better than the river towns due to employment opportunities in the mining industry. People are concerned about low water allocations and commodity prices. Other key aspects include:

- government policies are driven by urban perspectives and can have a disproportionately strong
 effect on this region, due to the region's extreme dependence on natural resources
- the region is struggling to maintain population and infrastructure
- community cohesion and amenity has been impacted by absentee land owners and mining work practices, eg four-day rosters with 12-hour shifts
- although responding to difficult conditions has strengthened social bonds and increased understanding between different industry sectors, many people are becoming 'burnt out'.

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

The major impacts on the landscape have been the ongoing drought, low flows of waterways and a large increase in the number of invasive native species and woody weeds. Changes to the landscape include:

• an increase in timber cover has reduced native grasslands, ground cover and contributed to hard, capping soils

- a reduction in native grasslands has resulted in a decrease in biodiversity
- there has been a significant increase in introduced weeds, kangaroos and feral animals, eg pigs, wild dogs, foxes, goats and cats, especially in wetter years. Sheep and rabbit numbers, however, have reduced significantly
- conservation grazing practices and riparian fencing are having positive effects, although
 overstocking and wind erosion are contributing to increased dust storms.

Primary industry

Grazing, irrigated and rain-fed agriculture, along with mining and tourism, are the major industries in the region and contribute the majority of economic activity. Environmental impacts on the condition of farm production assets, particularly low rainfall and regulatory changes, are diminishing ESSW and the motivation of farmers. Other issues include:

- reduced access to water, which has strongly affected irrigators' profitability and, in many cases, business viability
- declining profitability from the rising cost of farm inputs and reduced carrying capacity due to invasive native species, which impede landholders' capacity to improve NRM practices, eg labourintensive wool production has decreased dramatically due to reduced wool prices and the aforementioned factors
- increased fencing to enable the management of total grazing pressure has greatly improved the condition of many farms, although some people feel that 'exceptional circumstances' drought funding is temporarily masking the extent of change the region is experiencing
- access to off-farm work opportunities is very important to farming families remaining on the land, although agricultural employment is reducing overall
- the reduced employment in agriculture although employment in this sector declined by more than 10 per cent across NSW (1996–2006), it has fallen more significantly in the Western 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

Western towns are heavily reliant on profitable agricultural and mining industries. Ongoing drought and low prices for some minerals are negatively affecting ESSW in the region, eg through reductions in employment opportunities. Other key impacts include:

- the general public and business community are becoming more aware of environmental issues and are actively seeking ways to use resources wisely, eg mines in Broken Hill are adopting recycled water systems
- economic leakage from small towns is encouraged by mining rosters (eg four days on/four days off) which enables residents of small communities to routinely travel to regional centres for shopping and entertainment purposes and also allows sporting teams and miners to take on community-based roles
- population decline in some areas in the region reduces the amount of community participation and the capacity for additional roles to be undertaken, with those remaining often feeling an increasing pressure to maintain services.

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

Likely impact of NRM decisions on ESSW	Condition	Trend	Data confidence	Typical group comments
Business profitability/ sustainability and expansion		\leftrightarrow	Н	Water access has fallen by about two-thirds. This has reduced the value of farms and contributed to difficulty in managing loans.
				Invasive native species have significantly reduced carrying capacity, eg the numbers of sheep have dropped dramatically.
Increased employment		↓	м	Reduced sheep numbers have caused a major reduction in agricultural employment both directly and indirectly, eg shearers, service businesses and agricultural contractors.
				There is little direct employment from improved NRM practices.
Gaining more formal and informal skills		1	М	Western Catchment Management Authority (CMA) incentive programs have been beneficial for innovative newcomers who receive grants for resources such as riparian fencing and solar pumps.
Community networks and interaction		↑	М	The Western CMA is well known in only a few sectors of the community; this has been achieved through primary schools and landholder/Landcare involvement.

Table 1 ESSW check and group comments

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Participation in NRM	1	M	There has been a substantial change in the way the country is managed. People are becoming more aware of conservation grazing, horticulture continues to improve and the cotton industry is changing and promoting greater water efficiency.
More effective NRM decision-making	^	Μ	The Western CMA has become more relevant and community-minded in recent years, with the strong potential to play an important role in an inter- governmental approach. The <i>Native Vegetation Act 2003</i> is considered to unnecessarily restrict producers' ability to manage timber cover. Reducing the cost of kangaroo licences would assist with more effective NRM.

Condition		Trend	Data confidence		
	Very good	ſ	Improving	н	High
	Good	\leftrightarrow	No change	М	Medium
	Fair	\downarrow	Declining	L	Low
	Poor	?	Unknown		
	Very poor				
	No data				

Pressures

A number of pressures, centred on drought, are influencing land-use change, rural adjustment and 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. The Western region has experienced a decline in growth over the past few decades. 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. Additionally, absentee owners and population impacts from land-use change to national parks are not regarded as contributing to local communities. A small regional population, an extensive area and limited time available has resulted in little capacity for further voluntary work in NRM in rural areas. Many volunteer organisations in the Western region have noted difficulties in recruiting younger members and have said that the capacity of many rural and regional community organisations is 'wearing thin'



Figure 3 Percentage of population who volunteer (2006)

Graph provided by BRS from ABS data, 2008

- drought/climate change reduced water availability is prompting enterprise change, eg goats and camels are emerging industries
- market incentives there are emerging opportunities for increased Aboriginal involvement in the management of landscapes
- industry mining underpins the economy, but can have cumulative pollution and social impacts, eg skewed social structures from a transitory 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.

Specific NSW Government actions to address the target in the Western region 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

- developing 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 socioeconomic 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

The Western CMA is undertaking the following regional activities in relation to ESSW:

- assessing existing socio-economic information to identify gaps and undertaking social benchmarking on community awareness and perceptions of NRM
- community consultation on important NRM issues, eg establishing an Aboriginal reference group
- increasing project scrutiny to ensure greater public benefit
- providing support to individuals and community organisations for NRM activities.

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.
- Department of Transport and Regional Services 2005, A Regional Profile Darling Matilda Way Region, NSW and QLD, Canberra.
- Graphs for employment change by Information and Library Services 2008, NSW Department of Primary Industries, Orange.
- Western Research Institute CSU 2006, The Impact of the Current Drought on the Bourke Economy and Community, Bathurst.

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DECCW 2010/333 ISBN 978 1 74232 646 7 November 2010

Cover photo: Michael van Ewijk/DECCW - 'canoeists on river'