

State of the catchments 2010

Economic sustainability and social well-being

Border Rivers–Gwydir region

State Plan target

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

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.

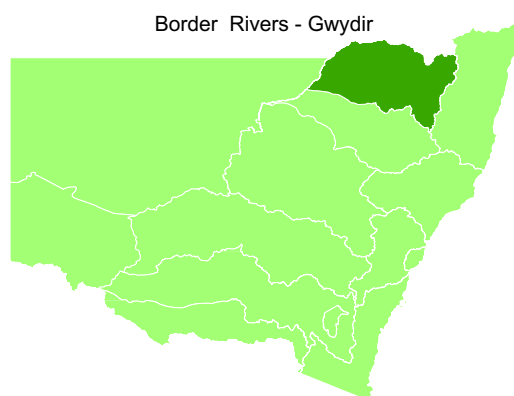
Understanding ESSW in the Border Rivers–Gwydir region

Data was gathered from the results of the 2008 Bureau of Rural Sciences Landholders Survey; landholders and townspeople were interviewed to provide supplementary information. Current social research, focused on NRM issues in the Border Rivers–Gwydir region, was also 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 close to home, and career entry opportunities particularly for young people, are critical. Other important factors include:

- access to basic services in regional towns that will contribute to community vitality
- the long-term maintenance of family farms that is crucial to community integrity – local examples of NRM contributing to income stability, through a balance of profitability and sustainable agriculture, were considered vital
- enhancing social networks, community participation and volunteering in existing and new community groups – social networks have been beneficial during the drought
- diversifying and value adding to the existing economy by taking advantage of opportunities in emerging markets – this will reduce future vulnerability to economic shocks.

What is the state of ESSW across the region?

ESSW is variable across the region. Overall the community is faring well but the western part of the region in particular has been affected by drought. Other key aspects include:

- the considerable interest in sustainable living, such as increased water efficiency, alternative energy sources and recycling
- an ethic of community involvement and innovation, with local groups being developed to address issues, which is considered a strength of the region
- the struggle of some rural areas to maintain population, services and infrastructure, which adversely affects volunteering, with some communities vulnerable to downturns in major local employers
- government regulatory requirements.

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.

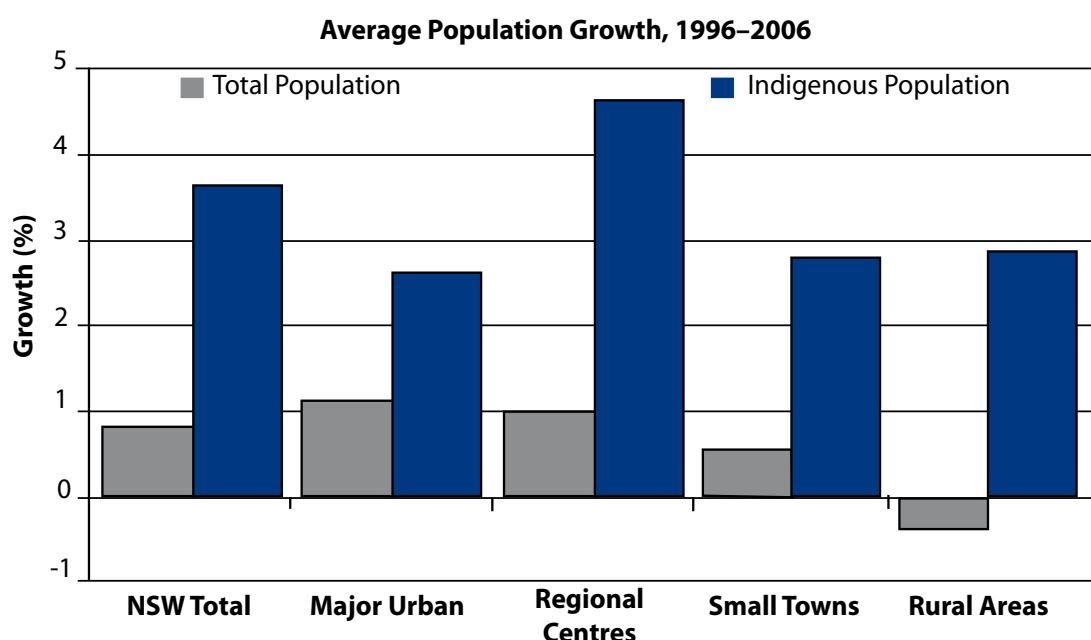


Figure 1 Growth of indigenous population compared with general population

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:

- improved grazing management and farming systems which contribute to higher levels of groundcover and soil carbon, although the spread of particular weeds, eg serrated tussock, has increased
- degradation of soil condition, which has seen soil health and erosion control become important NRM issues for landholders

- drought continues to affect pasture condition and the availability of water
- water quality seen as improving, due to better riparian management and improved ground cover.

Primary industry

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

- declining profitability from the rising cost of farm inputs and increasing environmental and agricultural weeds are the most important issues affecting landholders
- maintaining farm families in rural areas, which is crucial to a viable population
- the availability of basic services, particularly in small communities
- sharing knowledge and information, via demonstrations of better practices, which has improved land management
- maintaining soil fertility, achieved by increased use of legumes and diverse crop rotations
- NRM improvements, particularly in grazing practices, which have increased carrying capacity, production and profitability – two thirds of landholders agree that the overall benefits of native vegetation make maintaining or replanting vegetation worthwhile (BRS 2008)
- the reduced employment in agriculture – employment in this sector declined by more than 10 per cent across NSW (1996–2006), about the same as in the Border Rivers–Gwydir region (Figure 2).

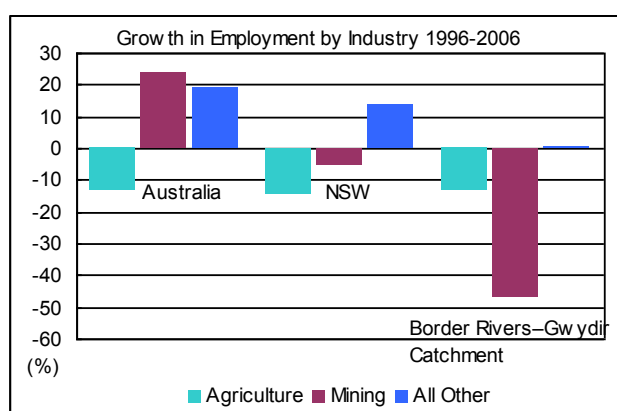


Figure 2 Decline in agriculture employment over 10 years

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

Townscapes







Many people felt that there had been major changes in community attitudes, in terms of sustainable production and sustainable living such as water efficiency and recycling. Other key impacts include:

- the region's motivated community groups that have formed to address specific NRM issues
- a strong interest in improving the environment by urban dwellers who believe that greater local government support and CMA engagement is needed
- population decline in some rural areas of the region, which reduces the amount of community participation and the capacity for additional roles to be undertaken.

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 comments
Business profitability and expansion		↑	H	NRM interventions, such as improved grazing management, shelter belts and salinity management, have increased carrying capacity and production. NRM investment has improved the turnover of NRM service businesses.
Increased employment		↔	M	Technology has improved farm production efficiency but reduced employment.
Gaining more formal and informal skills		↑	M	Consideration of NRM issues, such as grazing management, has improved skills and knowledge. The CMA has provided education and resources that allow land managers to better achieve NRM outcomes.
Community networks and interaction		↑	M	Greater participation in NRM issues has led to stronger social networks and contacts in the community.
Participation in NRM		↔	M	Many motivated community groups have been established, due to greater awareness of sustainability issues and concern about environmental decline. Participation is limited in smaller communities as it is difficult to attract and maintain volunteers.
More effective NRM decision-making		↑	L	The Border Rivers–Gwydir CMA was largely seen as a government body and funding source, although local staff were considered important to community relationships.

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 forces, centred on water availability, 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. In a Border Rivers–Gwydir survey 'declining communities' was listed as one of the top five most important issues affecting locals. One-third of landholders surveyed are likely to pass their property on to family members in the next five years. 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 ageing membership and are experiencing decline. In many community organisations, it is difficult to engage young people

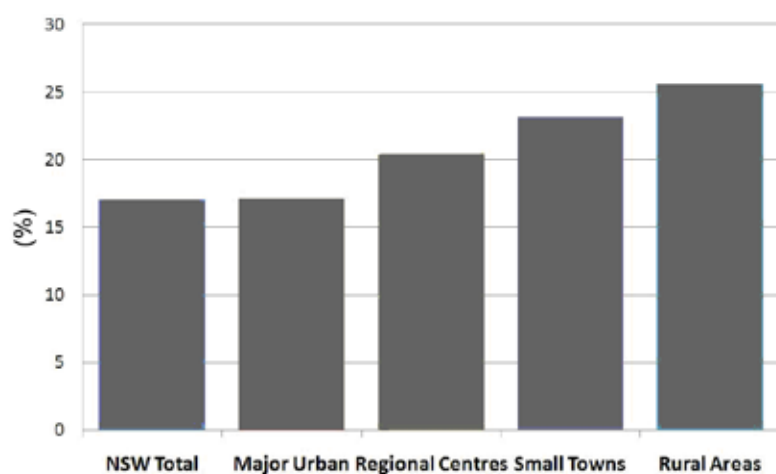


Figure 3 Percentage of population who volunteer (2006)

Graph provided by BRS from ABS data, 2008

- drought/climate change – reduced water availability has had a major effect, especially in the western part of the region
- market incentives – there are emerging opportunities for trading environmental assets, eg forestry, carbon trading, biobanking, water conservation and alternative energy sources such as wind farms
- land-use change – there has been minimal broad-scale land-use change, although more than half of landholders surveyed indicated that they are likely to intensify their current enterprises in the next five years.

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
- 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

The Border Rivers–Gwydir CMA is undertaking the following regional activities in relation to the socio-economic target:

- social benchmarking to identify stakeholder priorities and attitudes to NRM
- substantial education and training on improved farm management systems, leading to financial and environmental outcomes.

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.

BRS 2008, *Understanding Natural Resource Management from a Landholder's Perspective - The Border Rivers-Gwydir CMA Regional survey 2007-2008 Results*, Bureau of Rural Sciences.

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

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