

State of the catchments 2010

Economic sustainability and social well-being

Hunter–Central Rivers 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.

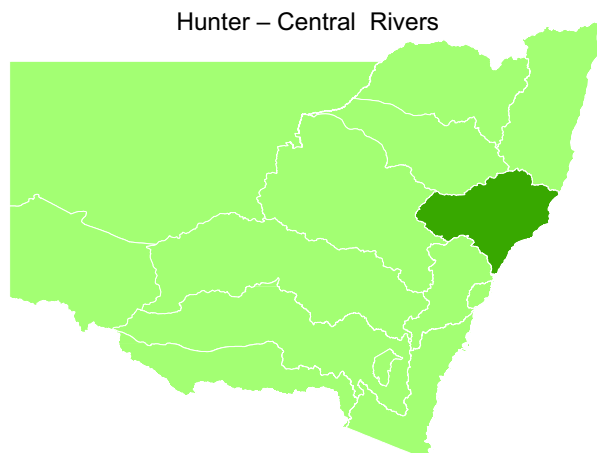
Understanding ESSW in the Hunter–Central Rivers region

Representatives of four key stakeholder groups – landholders, Aboriginal people, townspeople and small business – were consulted via focus groups and interviews. Current social research, focused on NRM issues in the Hunter–Central Rivers 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 rapid development in coastal and peri-urban areas
- profitable and sustainable agriculture
- enhancing personal connections, social networks and community participation
- managing an economy in transition towards 'tree change' and tourism.

What is the state of ESSW across the region?

ESSW is variable across the region. People are concerned about the rapid growth and development in the east, leading to major environmental and community pressures. Other key aspects include:

- skills and enthusiasm brought by newcomers
- some rural areas in the region are struggling to maintain population and infrastructure
- community cohesion and amenity adversely affected by the significant transitory numbers in the mining workforce and absentee owners in the region.

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.

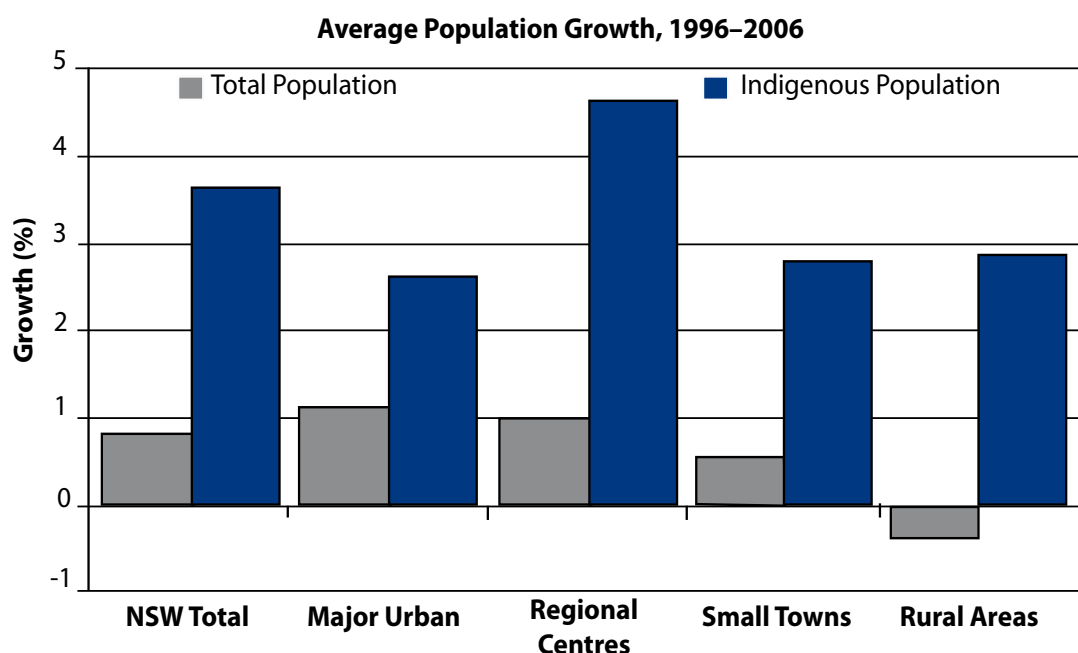


Figure 1 Growth of indigenous population compared with general population

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:

- widespread urban development, vegetation levels and composition (including clearing, regrowth and weeds)
- major localised impacts from specific commercial (mining, forestry) and rehabilitation projects – for example, certain endemic landscapes valued by Aboriginal people were not considered when establishing rehabilitation areas
- the effect of drought on pasture condition and water availability, although water quality was seen as improving in the Hunter River tributaries.

Primary industry

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

- fewer commercial producers with an increased number of lifestyle and absentee owners
- declining profitability from the rising cost of farm inputs and reduced carrying capacity due to weeds and trees which impedes landholders' capacity to practise improved NRM

- increased land prices limiting farm expansion
- mining provides off-farm work opportunities
- environmental improvements benefiting the fishing industry
- the reduced employment in agriculture – employment in this sector declined by more than 10 per cent across NSW (1996–2006), although it was somewhat less affected in the Hunter–Central Rivers catchment (Figure 2).

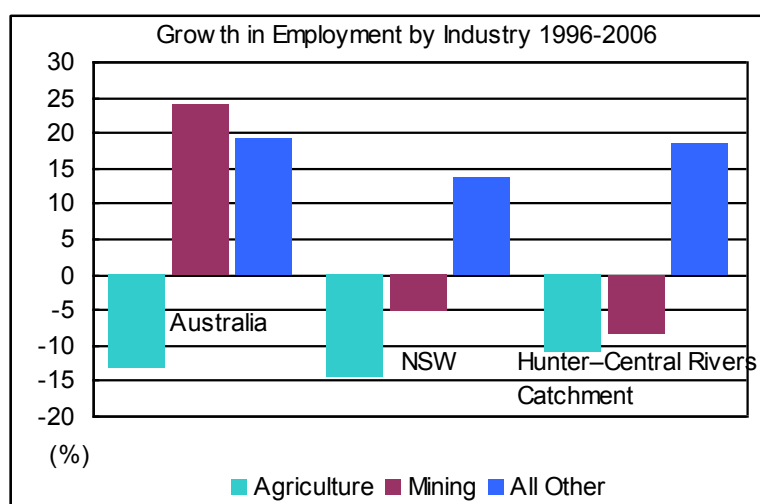


Figure 2 Decline in agriculture employment over 10 years

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

Townscapes

Rapid urban and peri-urban development is affecting ESSW, eg increasing demand on infrastructure and services. Other key impacts include:

- the effect of land-use change on water quality and retention of natural habitat
- urban people strongly involved in on-ground works, which provides many social and individual benefits, eg exercise, increased skills and networks
- population decline in some rural areas, 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 group comments
Business profitability and expansion		↔	H	Riparian fencing leads to cleaner waterways, better use of paddocks and better returns from fertiliser. Catchment landscape is looking better and boosting tourism. The impacts of NRM change are mainly isolated.
Increased employment		↔	M	More employment through direct NRM and suppliers of NRM services and more companies are hiring staff for NRM purposes. There is little direct employment from improved NRM practices, due to an extensive use of contractors.
Gaining more formal and informal skills		↑	M	Volunteers have benefited from networks and increased confidence and skills. People have gained skills through volunteering, making them more employable.
Community networks and interaction		↑	M	An Aboriginal Landcare group was formed to care for their lands. Community interest and participation paralleled NRM change. Some limited social benefits, such as relationships, were hard to quantify.
Participation in NRM		↑	M	The majority of the population is not aware of NRM volunteering. People are now more likely to be active in the environment.
More effective NRM decision-making		↑	M	Hunter–Central Rivers CMA is spreading knowledge and is helping those who are motivated to help the environment. The CMA is largely seen as a government body and funding source.

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 development, 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, this region has experienced high coastal growth over the past few decades. This has resulted in a relatively stable rural population and a larger, more mobile, urban population. 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, 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

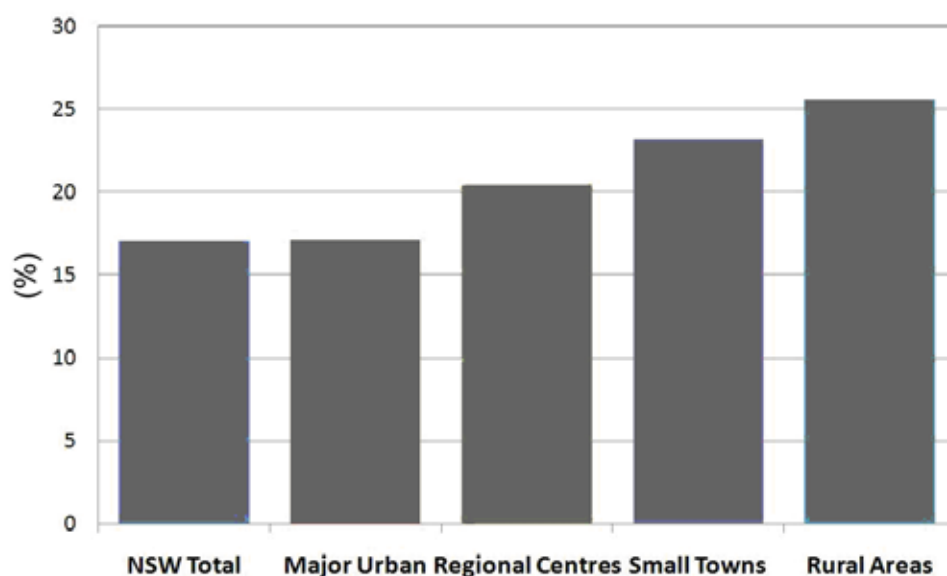


Figure 3 Percentage of population who volunteer (2006)

Graph provided by BRS from ABS data, 2008

- drought/climate change – reduced water availability is prompting enterprise change
- market incentives – there are emerging opportunities for trading environmental assets, eg forestry, carbon trading, biobanking and Aboriginal management of vegetation
- industry – mining underpins the economy but can have cumulative pollution and social impacts, eg reduced access to land for cultural purposes and skewed social structures from ‘fly-in’/‘fly-out’ workers with minimal local attachment.

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 Hunter–Central Rivers CMA is undertaking the following activities in relation to the socio-economic theme:

- establishing incentive funding programs to enable landholders to adopt better land management practices without being financially disadvantaged
- providing technical advice and training to landholders
- engaging the local Aboriginal community in NRM activities, through the continuation of the CMA's Aboriginal Community Environment Network
- providing funding for Aboriginal cultural heritage projects and supporting and engaging the Aboriginal community directly, via Aboriginal Project Officers.

Local level

Aboriginal NRM – Lake Macquarie

A group, assisted by the CMA, is rehabilitating a site used by the Eraring power station. The site has been reshaped to improve biodiversity by recreating wetlands. By propagating and planting local seeds, they are creating habitats and increasing native birdlife.

Performance Story – sphere of influence

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

- on-farm management, employment in rural services, sustainability and profitability (in rural areas)
- more community participation in improving the environmental quality of specific areas (in urban areas)
- supporting landholders' NRM implementation
- enhanced social networks and well-being of those involved (opinion of all stakeholder groups).

The benefits from CMA investments were seen as largely restricted to motivated landholders. Many people believed that the social and economic benefits of NRM were swamped by overall community change.

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.

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

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Hunter Valley Research Foundation 2006, *Upper Hunter Region Environmental Attitudes Survey 2006*, HVRF Working Paper No 2/07.

Hunter Valley Research Foundation 2006, *Well-being Watch: A Monitor of Health, Wealth and Happiness in the Hunter*, No 1, Newcastle.

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Hunter Valley Research Foundation 2007, *Hunter Region Economic Indicators*, HVRF No 111.

Hunter Valley Research Foundation 2007, *Upper Hunter Region Economic Indicators*, HVRF No 8.

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