

State of the catchments 2010

# Economic sustainability and social well-being

## Hawkesbury–Nepean 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.

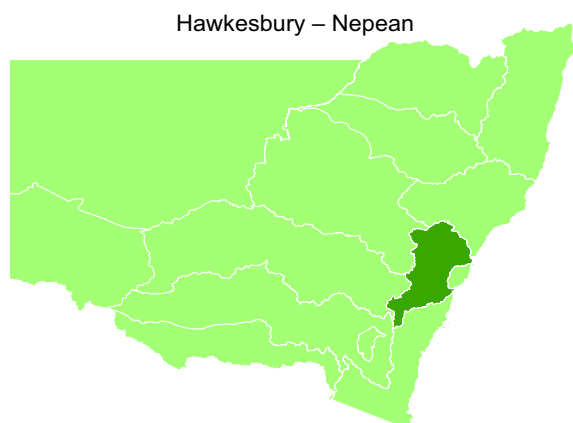
### Understanding ESSW in the Hawkesbury–Nepean region

Landholders were consulted via focus groups and current social research on NRM issues in the Hawkesbury–Nepean region 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](http://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?

Maintaining a rural character, as a retreat from the hustle of Sydney, is critical – people are attracted to the region for its natural amenity. Other important factors include:

- managing subdivision of agricultural land and development in peri-urban areas
- enhancing personal connections, social networks and community participation
- affordable housing and managing an economy in transition towards 'tree change' lifestyles, particularly within the commuting belt around Sydney
- maintaining profitable and sustainable agricultural industries while ensuring a clean environment and improved riverine health.

### What is the state of ESSW across the region?

ESSW across the region is variable. The economy of the region is extensively tied to Sydney's economic circumstances. Other key aspects include:

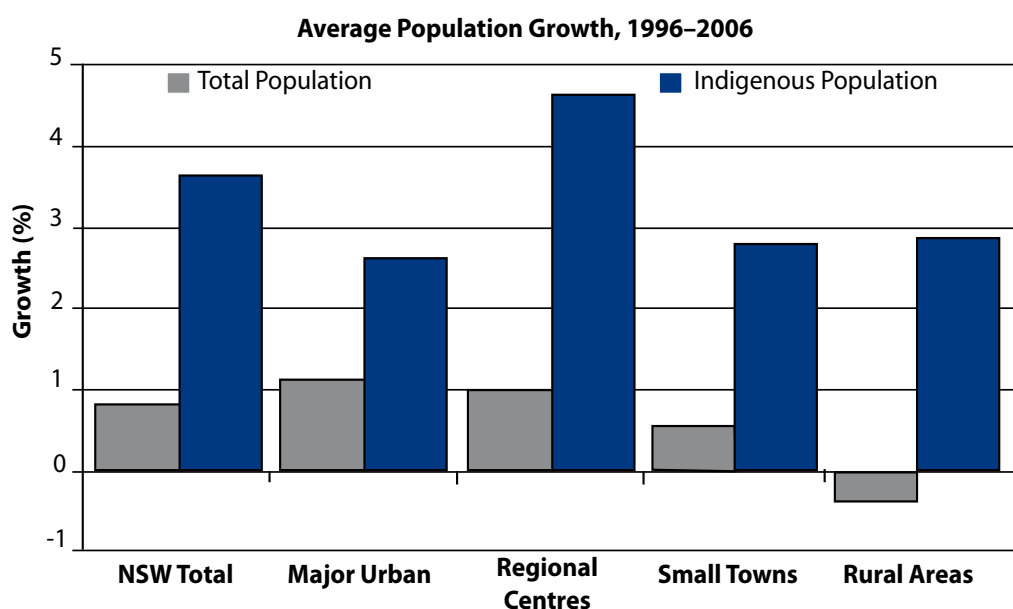
- newcomers generally viewed as positive resources with many skills, but some have not developed an appreciation of the importance of retaining native landscapes as a vital component of the water catchment system
- impact on community cohesion and amenity by absentee owners and commuters.

### 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 the 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:

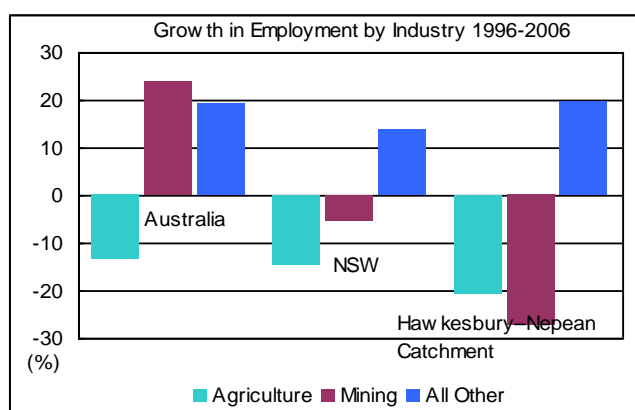
- perceived improvement in water quality, due to changes in agriculture and waste management by local government, as well as increased community awareness
- the impact of recent bushfires leading to better coordination of fire hazard reduction burns and careful management to minimise negative impacts on biodiversity, particularly threatened species
- conservation farming practices and projects, which care for remnant bushland and are increasing community awareness and involvement.

### *Primary industry*

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

- decline in agricultural employment over the past decade, due in part to fewer commercial producers with a busier lifestyle and absentee owners
- declining profitability from the rising cost of farm inputs and reduced commodity prices, which impedes landholders' capacity to practise improved NRM

- limits on farm expansion due to increasing land prices and competition from urban development
- conflict between lifestyle residents and farming practices, eg noise, chemical treatments
- the reduced employment in agriculture – although employment in this sector declined by more than 10 per cent across NSW (1996–2006), it fell more significantly in the Hawkesbury–Nepean 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

Peri-urban development is affecting ESSW. People are concerned that adverse environmental impacts of further rural subdivisions are being overlooked by regulatory bodies. Other key impacts include:







- land-use change – the loss of agricultural land and increased development is having an impact on community services and infrastructure, eg busier roads
- the strong involvement of urban people in on-ground activities provides many social and individual benefits, eg exercise, increased skills and networks
- improvement of water quality in the Hawkesbury River and other major waterways is seen important to quality of life in the region.

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		↑	L	Not considered a major issue: all participants work with sustainable systems and can see the benefits.
Increased employment		↑	L	Contracting is a 'boom' business and there has been an increase in NRM workers and professionals.
Gaining more formal and informal skills		↑	L	The Hawkesbury–Nepean Catchment Management Authority (CMA) has begun developing a native plant nursery which assists people in understanding, appreciating and working with the landscape.
Community networks and interaction		↑	L	Community work keeps elderly people fit and healthy.  Working with community groups and schools, and in partnerships with landholders, has ensured that the actions and intentions of the Hawkesbury–Nepean CMA remain transparent.
Participation in NRM		↑	L	Outstanding example of agency and community working together to achieve common goals.
More effective NRM decision-making		↑	L	Since the Sydney bushfires, a lot of effort has gone into coordinating the activities of NRM agencies that have a role in hazard reduction.  The Hawkesbury–Nepean CMA has helped to advance programs established by the Sydney Metropolitan CMA. Together, these two bodies have achieved fantastic outcomes.

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

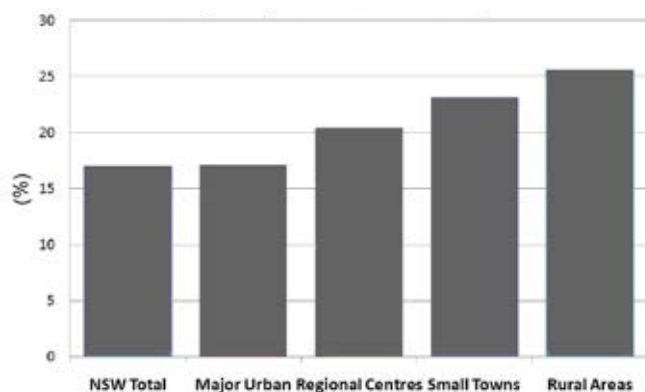
## Pressures

A number of pressures, centred on development, are influencing land-use change and rural adjustment, as well as modifying community 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 population increase, resulting in a stable rural population and a more mobile urban population in the Southern Highlands. 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. However, more people on the fringes of Sydney are volunteering. There is little capacity for more voluntary work in NRM in rural areas, due to reasons such as the decrease in Landcare numbers



**Figure 3 Percentage of population who volunteer (2006)**

Graph provided by BRS from ABS data, 2008

- drought/climate change – increasing climate variability and reduced water availability is identified as a threat to agriculture in the region
- market incentives – easy access to the large Sydney markets, high rainfall and increasing land prices contribute to diversification and more intense agriculture on small landholdings.

## 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 Hawkesbury–Nepean CMA is undertaking the following regional activities in relation to the socio-economic target:

- supporting and enhancing the regional Landcare networks and over 120 individual Landcare groups, based on recommendations from ‘Healing Our Catchment – A report on Landcare in the Hawkesbury–Nepean Catchment’ – a Catchment Support Team was established to support catchment community networks, facilitate field days and demonstration workshops, and develop and provide training and information material
- encouraging Aboriginal participation in NRM, through training and employment support and also providing advice on cultural heritage protection and managing Aboriginal lands
- undertaking two targeted regional communication programs in 2008–09 for the priority areas of Lithgow and Upper Nepean, which will encourage a sense of place within the community and support and encourage connections with local NRM resources and assets, including important biodiversity corridors and improved partnerships within the community

- supporting viable future economic and social systems through delivery of a comprehensive and integrated set of landholder incentive programs.

## 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](http://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.

Hawkesbury City Council 2004, *Hawkesbury Community Survey Part A & B*, Windsor.

Hawkesbury City Council 2005, *Growing Hawkesbury's Future- Hawkesbury Agricultural Retention through Diversification and Clustering Volume One*, Windsor.

Lithgow City Council 2008, *State of the Environment Report 2007–2008*, Lithgow.

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