# Economic benefits of national parks and other reserves in New South Wales



Department of **Environment, Climate Change and Water** NSW



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Published by: Department of Environment, Climate Change and Water NSW 59–61 Goulburn Street PO Box A290 Sydney South 1232

Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)
Phone: 1300 361 967 (national parks information and publications requests)

Fax: (02) 9995 5999 TTY: (02) 9211 4723

Email: info@environment.nsw.gov.au Website: www.environment.nsw.gov.au

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#### Introduction

Individuals, businesses and communities derive socio-economic benefits from national parks and other reserves – known collectively as protected areas (PAs) – in a variety of ways. These benefits include recreational experiences from visiting PAs, direct and indirect income from goods and services sold to park visitors, biophysical functions (ecosystem services) occurring in PAs, healthy environments protected by PAs, and in some cases the use of wild resources from PAs.

This summary describes the findings of studies produced by DECCW in recent years which estimate the impact of national parks and other reserves on local economies and communities in NSW.

### Benefits to regional economies

The establishment and ongoing management of national parks and other reserves generates expenditure on capital works and park management services, and attracts visitors who generate demand for accommodation, meals, souvenirs and other entertainment.

DECCW's management of PAs involves significant purchases of local goods and services. Expenditure on major capital works such as the upgrading or construction of roads and infrastructure in PAs generates local economic activity when local contractors and/or locally purchased goods and services are used.

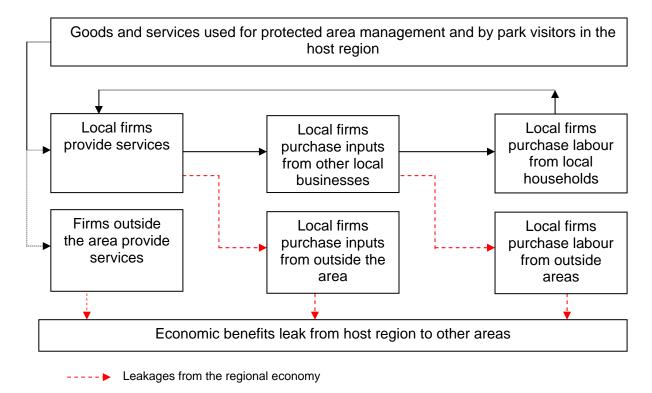
Local business activity is stimulated by continuing expenditure on goods and services required for park management, generating further expenditure throughout the economy and creating local jobs. Local expenditure, from wages and salaries of regional DECCW staff who live in rural and regional centres across NSW, also contributes to local economies.

Protected areas attract visitors into these regions who buy goods and services such as accommodation, food and beverages, and souvenirs, and spend money on motor vehicles and recreational activities. This expenditure has a positive direct impact on local businesses, and those businesses providing inputs to these suppliers.

Businesses that directly and indirectly provide services to park managers and park visitors also employ labour and make payments to households. These households then also purchase local goods and services. Thus expenditure on goods and services made by park managers and park visitors has direct and flow-on impacts on the economies around national parks. If a local economy is unable to supply these goods or services, the flow-on effects of local spending 'leak' out of the area and benefit a different region instead, as shown in Figure 1 below.

The direct and flow-on effects of park management expenditure and park visitor expenditure on regional economies can be estimated through the use of regional input-output analysis, a technique which calculates the direct and flow on-effects of expenditure on goods and services in a local economy.

Figure 1 Protected areas and local services



#### **DECCW** studies

Since 1998, DECCW (and its predecessors NPWS, DEC and DECC) has produced a number of studies using input—output analysis to estimate the direct and flow-on impacts of individual parks and other reserves on local economies as well as studies examining different aspects of the economic value of national parks, marine parks and other reserves in NSW.

DECCW has recently widened the scope of this research to consider the impacts of PAs in several broad regions of NSW. These studies focus on the economic structure of the regions in which the PAs are located, and examine potential strengths and weaknesses of these economies, and trends which may affect the future contribution that the PAs can make to regional economic activity.

The findings of these studies are summarised below.

## Impacts of protected areas on the regional economy of north-east NSW

In 2006, DECC commissioned Gillespie Economics to carry out a study of the impacts of PAs on the regional economy of north-east NSW. This study used input-output analysis to assess the direct and indirect contribution of park management expenditure and park visitor expenditure to the regional economy.

This study area comprises the coast and tablelands south from the Queensland border to Coffs Harbour, and encompasses 167 national parks and other reserves. It was estimated that each year the reserves in the area are visited by almost six million people.

The estimated economic contribution resulting from park management and park visitor spending is shown below.

**Table 1** Summary of economic impacts of PAs on the north-east NSW region

	Regional activity associated with:	
	DECC expenditure (p.a.)	Visitor expenditure (p.a.)
Regional value-added activity	\$17m	\$107m
Household income	\$13m	\$59m
Employment	265 jobs	1,650 jobs

The study found that DECC expenditure contributed \$17 million per year in direct and indirect income (known as 'value-added activity') to the regional economy. About \$13 million a year of this comprised household income. DECC expenditure directly and indirectly generated the equivalent of 265 jobs in the region.

The study suggested that visitors to parks and reserves contribute about \$107 million per year in regional value-added activity, which included \$59 million as household income. Visitor spending represented the equivalent of 1650 jobs in the region. That is, national parks in north-east NSW help generate the equivalent of more than 1900 jobs.

## The economic impact of national parks and other reserves on the NSW Far South Coast

In 2006, DECC commissioned the Centre for Agricultural and Regional Economics to undertake a regional input—output analysis to assess the direct and indirect contribution of park management expenditure and park visitor expenditure to the regional economies of Eurobodalla and Bega Valley Shires on the NSW Far South Coast.

The area includes the coast and escarpment south of Durras Lake to the Victorian border, and contains 27 national parks and other reserves which provide a range of visitor facilities and recreation opportunities. Many of these PAs have been created in the last few years. Biamanga and Gulaga National Parks have recently been returned to Aboriginal ownership and are now leased back to the NSW National Parks and Wildlife Service (NPWS), which is part of DECCW. The parks will be jointly managed by the Aboriginal owners and NPWS.

It was estimated that the coastal and inland parks and other reserves of Eurobodalla and Bega Valley Shires were visited by around 972,000 people a year; 624,000 (65%) of these visitors were tourists who visited the reserves in these areas from other parts of NSW, Australia, or overseas.

The estimated economic contribution from DECC park management and spending by visitors who come from outside the region, is shown below.

**Table 2** Summary of economic impacts of PAs on the NSW Far South Coast region

	Regional activity associated with:	
	DECC expenditure (p.a.)	Visitor expenditure (p.a.)
Regional value-added activity	\$8m	\$54m
Household income	\$4.8m	\$19.5m
Employment	108 jobs	813 jobs

The study estimated the amount of income added to the Far South Coast economy each year ('value added activity') and found that DECC expenditure contributed \$8 million per year in direct and indirect regional value-added activity. About \$4.8 million a year of this comprised household income. DECC expenditure directly and indirectly generated the equivalent of 108 jobs in the region.

The study indicates that those visitors to Far South Coast parks and other reserves who come from outside the region contributed \$54 million per year in direct and indirect regional value-added activity, which included \$19.5 million as household income. Visitor spending helped generate the equivalent of 813 jobs in the region. That is, DECC-managed parks and other reserves in Far South Coast NSW help generate the equivalent of more than 920 local jobs.

## The economic impact of national parks and other reserves in the NSW Far West Region

The Far West region of NSW comprises the pastoral region extending over the western part of the State to the Victorian, South Australian and Queensland borders. The region covers approximately 38% of NSW, with a population of 45,000 people and contains some 25 national parks, nature reserves, State Conservation Areas, Aboriginal Areas and historic sites. Around 109,000 visitors each year visit the Far West parks and other reserves. Some 103,500 (95%) of these visitors are tourists from other parts of NSW, Australia, or overseas.

In 2006, DECC commissioned the Centre for Agricultural and Regional Economics to undertake a study of the impacts of national parks and other reserves on the NSW Far West Region in order to estimate the economic contribution resulting from DECC park management and from spending by park visitors who come from outside the region The results are detailed below.

**Table 3** Summary of economic impacts of PAs on the NSW Far West region

	Regional activity associated with:		
	DECC expenditure (p.a.)	Visitor expenditure (p.a.)	
Regional value-added activity	\$6.25m	\$6.1m	
Household income	\$4.02m	\$2.55m	
Employment	101 jobs	102 jobs	

DECC expenditure contributed \$6.25 million per year in direct and indirect regional value-added activity to the Far West regional economy each year. About \$4.02 million a year of this comprised household wages and salaries. DECC expenditure directly and indirectly helped generate the equivalent of 101 jobs in the region.

Visitors to the Far West PAs contributed \$6.1 million per year in direct and indirect regional value-added activity, which included \$2.55 million income as household income. Visitor spending helped generate the equivalent of 102 jobs in the region.

DECC-managed PAs in the NSW Far West region helped generate the equivalent of approximately 200 local jobs.

# The economic impact of national parks and other reserves in the NSW Wheat Sheep Belt

The New South Wales Wheat Sheep Belt encompasses 43 Local Government Areas in the central area of the State between the Queensland and Victorian borders. The region covers approximately 32% of the State, with a population of over

500,000 people. The region contains around 77 national parks, nature reserves, state conservation areas and historic sites.

Around 285,000 visitors each year visit Wheat Sheep Belt parks and other reserves. Approximately 262,000 (92%) of these visitors are tourists from other parts of NSW, Australia, or overseas.

DECC commissioned the Centre for Agricultural and Regional Economics in 2006 to undertake a study of the impact of DECC-managed PAs on the regional economies of the northern, central and southern zones of the New South Wales Wheat Sheep Belt. This study estimated the economic contribution from DECC park management and from spending by park visitors who come from outside the region, as shown in the table below.

The study found that DECC expenditure contributed \$7.5 million per year in direct and indirect regional value-added activity. About \$5.3 million a year of this comprised household income. DECC expenditure directly and indirectly generated the equivalent of 138 jobs in the region.

 Table 4
 Summary of economic impacts of PAs on the NSW Wheat Sheep Belt

	Regional activity associated with:	
	DECC expenditure (p.a.) Visitor expe	
Regional value-added		
activity		
–Northern	\$2.3m	\$2.8m
-Central	\$3.3m	\$5.1m
-Southern	\$1.9m	\$0.9m
Total	\$7.5m	\$8.8m
Household income		
–Northern	\$1.6m	\$1.3m
-Central	\$2.3m	\$2.4m
-Southern	\$1.3m	\$0.5m
Total	\$5.3m	\$4.1m
Employment		
–Northern	47 jobs	51 jobs
-Central	56 jobs	88 jobs
-Southern	35 jobs	17 jobs
Total	138 jobs	157 jobs

Figures may not add due to rounding

The study indicates that visitors to parks and reserves in the Wheat Sheep Belt contributed \$8.8 million per year in direct and indirect regional value-added activity, which included \$4.1 million income as household income. Visitor spending helped generate the equivalent of 157 jobs in the region.

DECC-managed parks and other reserves in the Wheat Sheep Belt help create the equivalent of approximately 295 local jobs.

# The economic impact of protected areas on the Greater Shoalhaven Region

The Greater Shoalhaven region as defined in this study is located within commuting distance of Wollongong and Sydney; 25 per cent of the employed residents work outside this region. The resident population of the Shoalhaven has been growing rapidly over the past 20 years and has a similar age profile to NSW as a whole. However, population projections indicate that it will be subject to rapid ageing with immigrant retirees.

The economy of the Greater Shoalhaven region represents 1.4 per cent of the NSW economy and has a significant industry in food manufacturing, paper products and a range of smaller operations producing mainly for export. Primary production is small. The economy is dominated by the provision of services to the residents including those working outside the region. Some of the specialised personal services are limited but presumably are readily accessed in nearby Wollongong. Business services tend to be relatively weak.

The Greater Shoalhaven region has been a high growth area and that is expected to continue and to be based on the quality residential characteristics of the region. The average income of households in the region is close to the NSW average and is currently less dependent on welfare and retirement incomes.

An analysis of the socio-economic impact of the DECC, Commonwealth and NSW Marine Parks Authority PAs on the regional economy of the Greater Shoalhaven region was carried out for DECC in 2004 by the Centre for Agricultural and Regional Economics using input—output analysis, and produced the findings below.

 Table 5
 Summary of economic impacts of PAs on the Greater Shoalhaven region

	Regional activity associated with:		Regional economic activity
	DECC	Visitor	attributable to PAs, as % of
	expenditure (p.a.)	expenditure (p.a.)	total regional economy
Regional value-			
added activity	\$13.0m	\$152.9m	5.15%
Household	\$8.0m	\$67.8m	6.30%
income			
Employment	208 jobs	3,219 jobs	7.73%

The following points are notable:

- Regional economic impacts associated with the expenditure of visitors were much greater than the impacts of park management expenditure.
- Park management expenditure and visitor expenditure together contributed over 5% to regional value added activity, over 6% to household income, and over 7.5% to regional employment.