

June 2006



Environment & Energy News

Welcome to the second edition of *Environment and Energy News*, the newsletter of the ABS Centre of Environment and Energy Statistics (CEES). *Environment and Energy News* is published twice a year, highlighting developments in environment and energy statistics particularly at the ABS.

Improving environmental statistics

Improving Australia's environmental statistics was the focus of discussions at the Centre of Environment and Energy Statistics (CEES) Advisory Board meeting on 30 March 2006.

The CEES Advisory Board agreed that national coordination of environmental information is needed, especially to fill data gaps and deficiencies as well as to prevent duplication of collections. There was agreement that environmental statistics is a large and complex field and variable in quality, frequency, coverage and accessibility.

The Advisory Board discussed an ABS proposal for the development of a national environmental statistics system whereby agencies would work together to deliver a system to better meet the needs of Australians.

Future efforts will focus on a partnerships approach. Where the

ABS is aware of similar activity in particular fields of environmental statistics (e.g. land and water), it would work in partnership with these systems and agencies.

A key aspect of the ABS proposal is that the custodianship of underlying data sets will not change (unless there is agreement to do so). Rather, the system will ensure that users will have a single entry point to access the data, regardless of where the data are physically located.

- For further information, contact Gemma Van Halderen, (02) 6252 6977 or email g.vanhalderen@abs.gov.au



ABS publications in pdf are now available free on the web.

In this issue

- Water use snapshot
- Household survey 2006 and user review
- Regional water statistics
- Water emissions accounting
- Land statistics
- *Measures of Australia's Progress* out now
- Energy program
- *NSW in Focus* out soon
- Upcoming releases
- Contact us

Work in progress

Water use snapshot

The ABS has been engaged as part of a consortium of agencies known as the Water Resources Observation Network Alliance (WRON Alliance) by the National Water Commission to undertake the water use theme of a project called "Australian Water Resources 2005".

This project aims to provide a snapshot of Australia's water resources at the commencement of the National Water Initiative reform process, from which future evaluations can be made. The Project has three headline parameters, namely water quality, water availability and water use. The ABS is leading the Water Use headline parameter.

It will look at the following:

- How much water is under entitlements/licences?
- How much is allocated?
- How much do we use?
- What types of water are used?
- For what purposes?

In addition to answering the questions outlined above, the ABS will also produce estimates on water use at the Surface Water Management Area (SWMA) level.

The ABS 2004-05 *Water Account, Australia* publication will be the primary source of information for this headline parameter. The release of this publication has been accelerated to November 2006 from its original release date of May 2007.

The Water Use headline parameter will be included in the Australian Water Resources 2005 final report which will be delivered in December 2006.

- For more information, contact Mette Creaser (02) 6252 6161, email mette.creaser@abs.gov.au

Did you know?

Australia's total net greenhouse gas emissions in 2004 were approximately 2% higher than they were in 1990.

Per capita, we have one of the world's highest levels of greenhouse gas emissions, although our per capita emissions are decreasing, as are our emissions per \$ of GDP.

Further details are available from the Australian Greenhouse Office web site (www.greenhouse.gov.au) and in *Measures of Australia's Progress* (cat. no. 1370.0) contact Kirsty Leslie
Tel: (02) 6252 5259
kirsty.leslie@abs.gov.au

2006 Environmental Household Survey and User Review

Household waste management and transport use are the two main themes featured in the 12th edition of *Environmental Issues: People's Views and Practices*, (cat. no. 4602.0). Due for release in November 2006, the publication presents the results of a household survey conducted in March 2006 which looked at behaviour and practices of households and individuals in relation to:

- recycling of household waste
- disposal of hazardous household waste materials
- awareness and use of waste disposal/service facilities
- main form of transport to work/study and day-to-day travel
- use of public transport
- motor vehicle ownership and maintenance.

CEES is undertaking a review of this publication and the Environmental Household Survey Program, with the aims of setting the future structure and broad content of the survey and publication to ensure that the data collected are relevant to users. Current environmental household surveys are built around topics including environmental concerns, household water use, energy use and conservation, household waste management, and transport use (rotating over a three-year period).

All stakeholders, interested parties and users of environmental statistics are invited to participate in the review. If you wish to provide some input in terms of new topics and data items, cycles of the survey, spatial output, or any other changes that you would like to see included, contact Kate Maguire (02) 6252 7735, email kate.maguire@abs.gov.au

For more information about the publication contact Apolonio Basilio, (02) 6252 7433, email apolonio.basilio@abs.gov.au

Work in progress cont'd

Regional Water

Water statistics have become an area of intense interest in Australia over the last few years. A number of agencies, including the ABS, are involved in supplying water statistics to government and the community. A key requirement of the newly established National Water Commission (NWC) and associated National Water Initiative (NWI) is to have solid data for undertaking analysis and planning.

As water issues are often localised, regional level data is required to assist in decision-making and help inform policy direction. The ABS flagship water output is the four-yearly Water Account, which presents information on the supply and use of water in the Australian economy at the state and territory level. The ABS is evaluating methodologies to produce lower level or regional estimates that will help satisfy the current information demand. In general, the main regional requirement is for Surface Water Management Area (SWMA) level data.

This project has two main directions:

- Modelling the State-level water use data that is being compiled for the 2004-05 Water Account to SWMA's.

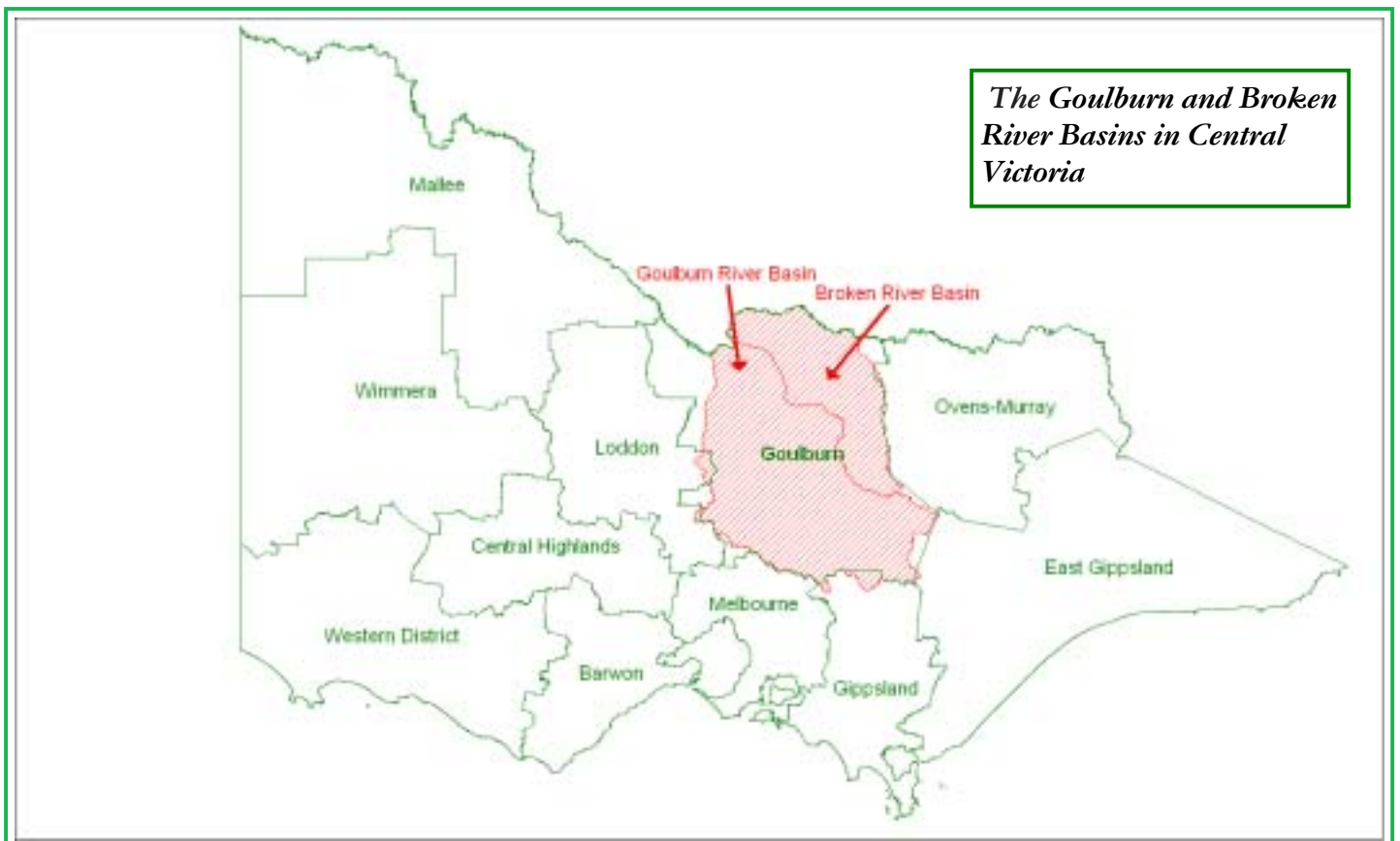
This will result in more detailed water use data being available for most SWMA in Australia; and

- Developing a methodology that can be applied to a user specified region to produce a cut-down version of the national Water Account. The outcome will be a methodology that can be applied to produce a set of water supply and use tables for a specified region.

The trial methodology is being verified in the Goulburn and Broken River region in Central Victoria (see map below) because of existing relationships in the area with both the water suppliers and the Victorian Department of Primary Industries.

Both projects are expected to be completed by November 2006.

- For more information, contact John Ovington (02) 6252 6854, email john.ovington@abs.gov.au



Special releases

Water emissions accounting in Australia - preliminary findings

Water accounting in Australia has focused primarily on physical accounts, such as the *Water Account, Australia 2000-01* (ABS cat. no. 4610.0). Given the latest government initiatives for water resource management in Australia, greater emphasis is being placed not only on the availability of water, but also its quality.

Measuring water pollution is one way to assess water quality. Australia collects data for substances emitted to water, such as nitrogen and heavy metals, but does not present this data in an accounting framework. Internationally, water emissions accounting is a relatively new endeavour. The CEES water team has been investigating the feasibility of producing a Water Emissions Account for Australia, based on the System for Integrated Environmental and Economic Accounts for Water (SEEAW), using emissions data from the National

Pollutant Inventory (NPI) database. The structure closely resembles that of the Water Account to enable comparisons between emissions to water and water use. Ideally, presenting emissions data in an accounting framework should allow for integration of physical accounts such as water use and emissions and financial accounts.

The table below shows gross emissions of point source pollution of selected substances released by industry for 2004-05. Businesses emitting less than the threshold set by the NPI are not required to report. Phosphorus emissions were not available for 2004-05 from the agriculture, forestry, fishing industries nor from the household sector. However, these areas are known to contribute to total phosphorus emissions in Australia.

Preliminary findings suggest there is not the depth of data using the National Pollutant Inventory database to produce a complete emissions account for water. CEES is exploring what additional data would be required to produce a complete water emissions account for Australia.

Selected substance emissions 2004-05											
	Phosphorus		Nitrogen		Heavy Metals						
	tonnes	kg	kg	kg	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	
											Cadmium
Agriculture	-	-	-	-	-	-	-	-	-	-	-
Forestry & Fishing	-	-	-	-	-	-	-	-	-	-	-
Mining	67	470	1,200	100	3.6	0.6	16.0	8.3	26.0	27.0	
Manufacturing	250	1,900	740	14	1.1	0.3	3.9	6.7	1.2	39.0	
Electricity & gas supply	5	24	58	11	0.5	0.2	1.5	0.2	0.4	1.7	
Water supply, sewerage & drainage services	9,200	32,000	62	35	0.4	1.0	100	0.4	7.2	53.0	
Other	170	250	1	0	0.4	0.1	0.5	0.0	0.1	0.0	
Household	-	-	-	-	-	-	-	-	-	-	
Total gross emissions	9,700	35,000	2,000	160	6	2	120	15	35	120	

Source: National Pollutant Inventory Database

Land and Natural Resource Management statistics

The ABS land statistics program is currently adapting the land statistics component of the 'System for Integrated Environmental and Economic Accounts' for use in the collection of Australian land and Natural Resource Management (NRM) statistics. Having completed two trials of a land parcel methodology in the Eurobodalla Shire of NSW and the Fitzroy-Livingstone Shire of Queensland, over the next 12 months the ABS land statistics program will concentrate on determining the feasibility of conducting a national land parcel-based survey.

The 2004-05 Natural Resource Management on Australian Farms survey is progressing well. The collection phase of the survey is drawing to a close and has drawn a good response. Key users have been consulted about possible output options, with preliminary data scheduled for release in July 2006 and more comprehensive data in late September 2006.

- For information on the land statistics program contact John Purcell (02) 6252 5651 or email john.purcell@abs.gov.au
- For information on the NRM survey contact Erica McCoull (03) 6222 5977 or email erica.mccoull@abs.gov.au

Recent releases

Measures of Australia's Progress (MAP)

The ABS has released its latest issue of *Measures of Australia's Progress* (cat. no. 1370.0) that examines whether life in Australia is getting better. Available free-of-charge on the ABS web site, *Measures of Australia's Progress 2006* presents 14 headline dimensions of Australia's progress in the past 10 years that cover many of the areas of life most important to Australians. The Environment and Energy Program contributed to the environmental indicators.

MAP 2006 found good news on the economic and social indicators, tempered by less positive findings for the environmental indicators. During the last decade, the health of Australians has improved, unemployment has declined, real incomes have increased significantly and the population has become more educated. However, on the environmental side, it was difficult to obtain national time series data that encapsulated the changes in Australia's natural capital. Several of the headline indicators presented in MAP suggest regress for some aspects of the environment during the past decade, in particular, plant and animal biological diversity and the quality of some of Australia's waterways.

Biodiversity cannot be measured comprehensively and up-to-date data are not available for some indicators. The available data suggests some decline in Australia's biodiversity in the past decade, partly encapsulated in a rise in the number of threatened bird and mammal species. Land clearance, one influence thought to be reducing biodiversity, may have mitigated the decline as it decreased by 38% between 1993 and 2003. The area of land protected in national parks and the like increased.

Detailed national time series data are not available, but a variety of partial evidence points to a decline in the quality of some of Australia's waterways. In 2000, about one-quarter of Australia's surface water management areas were classed as highly used or overused.

Australia's air remains relatively clean when compared with other developed nations. The available indicators, such as the incidence of fine particle pollution in several cities, suggest that Australian air quality has improved during the past decade, despite increased motor vehicle use. Australia's total net greenhouse gas emissions in 2003 were 1.1% higher than they were in 1990. Per capita, we have one of the world's highest levels of greenhouse gas emissions, although our per capita emissions are decreasing, as are our emissions per \$ of GDP.

- For more information, contact Kirsty Leslie (02) 6252 5259, email kirsty.leslie@abs.gov.au

Energy statistics program

The CEES energy statistics team has a number of projects planned for the next 12 months, including developing an alternative industry view of Australia's energy supply industry using existing ABS electricity and gas industry data. It will also be participating in processes to streamline the collection and reporting of energy and greenhouse gas emission statistics in Australia.

The CEES energy statistics team is developing a statistical leadership role in energy statistics through its role in promoting awareness of, developments in, and changes to, statistical standards, classifications, frameworks and definitions.

Other projects include researching the feasibility of developing an *Experimental Monetary Account for Energy*.

- For more information, contact Kai Wallenius (02) 6252 6019, or email kai.wallenius@abs.gov.au



Upcoming releases

NSW in Focus

If you have ever needed to find out anything about the state of New South Wales, an extensive array of statistical information is available in *NSW in Focus* (cat. no. 1338.1), to be released on 28 June 2006.

NSW in Focus is a contemporary record of activity within the State, providing a wide range of statistics on the environment from both ABS and non-ABS sources. It contains 10 chapters, each representing areas of social/economic importance: population, family and community, health, education and training, crime and justice, housing, household economic resources, economic activity, transport and environment. Within each chapter, a summary table presents a time series of key indicators, followed by more detailed statistics.

It is an easy-to-use reference for government agencies, universities, other education facilities, research organisations and the general community. *NSW in Focus* will be available on the ABS web site from 11.30am (Canberra time) 28 June 2006.

- For more information about the publication, contact Kellie Browning (02) 9268 4492 or email kellie.browning@abs.gov.au

Expected release dates

June 2006	NSW in Focus (cat. no. 1338.1)
July 2006	Water Supply Australia 2004-05 (cat. no. 4622.0)
July 2006	Natural Resource Management on Australian Farms, Preliminary (cat. no. 4624.0)
July 2006	Water Use on Australian Farms 2004-05 (cat. no. 4618.0)
Sept 2006	Natural Resource Management on Australian Farms 2004-05 (cat. no. 4620.0)
Nov 2006	Environmental Issues: People's Views and Practices (cat. no. 4602.0)
Nov 2006	Water Account 2004-05 (cat. no. 4610.0)
Dec 2006	Australia's Environment: Issues and Trends 2006 (cat. no. 4613.0)



Contact us

Environment and Energy News features articles and developments in relation to work done within the ABS Environment and Energy program.

- For more information on water, contact Michael Vardon, (02) 6252 7348 or email michael.vardon@abs.gov.au
- For more information on land, energy or environmental household statistics, contact Adam Sincock, (02) 6252 5436 or email adam.sincock@abs.gov.au
- If you would like to be placed on our free electronic mailing list, please contact Kay Barney and leave your address details, (02) 6252 6766 or email k.barney@abs.gov.au