O June 2008

ABS cat. no. 4653.0

# Environment

**Welcome** to the sixth 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.

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PROVIDING GREATER LEADERSHIP AND COORDINATION IN THE FIELD OF ENVIRONMENT AND ENERGY STATISTICS

# Climate Change and Water: Measuring the Impact

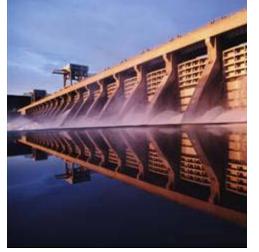
Climate change has potentially significant implications for Australia's environment, economy and society, through its effects on the availability and distribution of water, higher temperatures and increases in the occurrence of droughts, fires and floods.

At a recent United Nations conference, the ABS presented a paper on how water accounts can contribute to our understanding of climate change. Such information can be used to inform our response, for instance, to changing water availability and distribution.

Water accounts enable comparisons of the effects of changes in water use over time, both across industries and sectors and between regions. For example, within the agriculture industry water accounts can help to inform decisions about the cost-effectiveness of irrigating different crops. Water accounts can also be used to track changing patterns of water use associated with evolving water pricing and trading policies, particularly when such policies target specific sectors of the economy to encourage more efficient water use.

The paper presented at the United Nations conference on Climate Change and Official Statistics, *Climate Change and Water: How water accounts can help our understanding*, can be downloaded at: <u>http://unstats.un.org/unsd/climate%5F</u> <u>change/CC\_Conference\_papers.htm</u>

For further information or enquiries, please contact Peter Comisari on (02) 6252 5381 or peter.comisari@abs.gov.au



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	Recent releases		
Feb 2008	Research Paper: Developing An Alternative View of Electricity and Gas Supply Activity in Australia (cat. no 4647.0.55.001)		
March 2008	Water Use on Australian Farms 2005–06 (cat. no. 4618.0)	ĺ	
March 2008	Agricultural Commodities: Small Area Data, Australia 2005–06 (cat. no. 7125.0)		Ni
April 2008	Measures of Australia's Progress (MAP): Summary Indicators 2008 (cat. no. 1383.0.55.001)		C O I Melbo

#### Water Use on Australian Farms, 2005-06 (cat. no. 4618.0)

Irrigation of grazing pasture accounted for more than a quarter of the water used on crops and pastures in 2005–06, according to *Water Use on Australian Farms 2005– 06*, released in March 2008.

About 814,000 hectares of grazing pasture were irrigated using an average rate of 3.5 megalitres per hectare (ML/ha). The total volume of water applied to grazing pastures was 2,888 gigalitres (GL), this accounted for 27% of the 10,737 GL used for all crops and pasture.

Cotton was the next biggest user of irrigation water, using 16% of water used on crops and pastures, followed by rice (12%) and sugar cane (10%). In contrast, rice used the most water per hectare, using a rate of 12.3 ML/ha, almost double the rate of cotton (6.4 ML/ha).

Surface water is the major source of water used by agriculture in most states

and territories, accounting for more than three-quarters (77%) of all water used. Groundwater accounted for 20% of water used nationally by agriculture, and was the major source of agricultural water in the Northern Territory (two-thirds of total water used by agriculture in the Territory).

Almost two-thirds of irrigated land in Australia was in the Murray-Darling Basin and the volume of water applied (7,370 GL) is more than two thirds of irrigation water use nationally.

Results for 2006–07 will be released in July this year, at the national, state and territory level and Natural Resource Management region estimates.

For more information please contact Ron Just on (02) 6222 5842 or email: ron.just@abs.gov.au



The NatStats08 Conference will provide a unique opportunity for key stakeholders from across government, business and academia to discuss strategies for improving statistics for the nation.

The conference has three main themes: Informing the Environment Debate; Informing the Nation; and Measuring the Progress of Society.

The type of statistics required and the role they can play in informing the environmental debate will be discussed in relation to climate change, natural resources and water.

For further information on the conference visit the NatStats08 web site, http://www.nss.gov.au/ natstats



#### Alternative View of Electricity and Gas Supply Activity (cat. no. 4647.0.55.001)

cat. no. 4647.0.55.001)

The February 2008 research paper Developing an Alternative View of Electricity and Gas Supply Activity in Australia, examines ways of providing more detailed statistics on the country's electricity & gas supply.

The paper proposes an alternative view be developed to supplement current gas and electricity supply industry statistics. This would provide additional estimates of key economic and financial data for gas extraction activity and gas transmission activity and present separate estimates for aggregate gas supply activity and electricity supply activity.

Preliminary work suggests an alternative activity view would have a significant impact on gas supply estimates compared with current industry data.

For more information, contact Andrew Platt on (02) 6252 7437 or email: andrew.platt@abs.gov.au

## Work in progress



#### Gross Value of Irrigated Agricultural Production

Due for release next month, this paper proposes an improved methodology for the Gross Value of Irrigated Agricultural Production (GVIAP) estimates produced by the ABS.

In the past, GVIAP was released four yearly in the ABS Water Account. Using the improved methodology, it will be possible to release estimates on an annual basis and at a sub-state level.

(cat. no. 4612.0.55.001)

GVIAP accounted for one-quarter (\$9 billion) of the total gross value of agricultural production in 2004–05.

For further information contact Steven May on (02) 6252 5593 or email: steven.may@abs.gov.au



### Energy Supply Survey 2007-08

In 2008-09, the ABS will conduct a survey of businesses in the energy supply industries, with reference to the 2007–08 financial year. The last survey of these industries was conducted in 2001–02 with results published in *Energy Statistics, Australia, 2001–02* (cat. no. 4649.0.55.001).

The industries to be covered in the survey are: electricity generation, transmission and distribution; gas extraction, gas pipeline transport and gas distributors.

Information collected will include details of employment, income, electricity supply and gas supply.

This information will assist policy development at Commonwealth and State levels of government, and will be of great interest to industry associations, businesses and research organisations.

Results are expected to be released in late 2009.

For further information about this survey, contact Andrew Platt: (02) 6252 7437 or email andrew.platt@abs.gov.au



## Valuing Australia's Environment

For the first time, the ABS training course, "Valuing Australia's Environment", is open to participants from outside the ABS.

Running on 4 July 2008, the one-day course focuses on the emerging discipline of environmental accounting which strives to organise environmental statistics in a consistent and structured system and within a framework that allows integration of economic and environmental information.

The course would be of interest to anyone requiring an overview of environmental statistics and their use; anyone who is new to environment and natural resource statistics; and/or anyone working in the field of environmental accounting or national accounts.

The course will help participants understand the:

- frameworks that underpin environmental accounting
- various types of environmental accounts and what they measure
- relative benefits of environmental accounting
- ABS experience in compiling environmental accounts
- users and uses of environmental accounts.

To express your interest in attending, or for further information, please contact Peter Comisari on (02) 6252 5381 or email: peter.comisari@abs.gov.au.

# **Work In Progress**



## Water and the Murray Darling Basin A Statistical Profile

(cat. no. 4610.0.55.007)

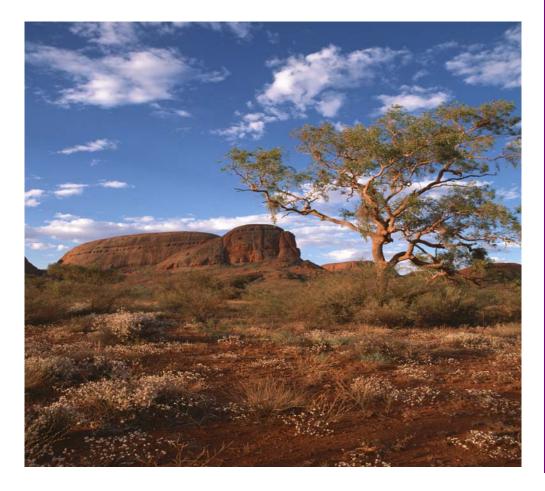
Water and the Murray-Darling Basin – a statistical profile will bring together a range of water, social, environmental and economic statistics relating to the Murray-Darling Basin.

Due for release in July, this publication will include information on climate, water availability, water consumption, agricultural production, gross value of irrigated agricultural production, demographics and natural resource management.

The Basin region produces a high proportion of Australia's agricultural production and uses approximately 70% of the water applied to agriculture in Australia. About two million Australians live in the Basin and are mainly employed in retail, health and agriculture. The region is environmentally significant in terms of internationally recognised wetlands, red gum forests, and the river ecosystem itself.

The publication will cover the time period from 2000–01 to 2005–06 and in some cases will present data for smaller areas within the Basin. Maps will feature extensively throughout the publication.

For further information on water contact Bernard Morrison on (02) 6252 5321 or email: bernard.morrison@abs.gov.au



### Review of ABS NRM Survey: Determining Future Directions

CEES is currently reviewing the ABS Natural Resource Management (NRM) program, both in terms of survey content and future directions.

To date, two surveys have been conducted. Results from the first were published in *Natural Resource Management on Australian Farms 2004-05* (cat. no. 4620.0) and results from the 2006–07 survey are due for release on 26 June 2008.

These statistics contribute to the stock of NRM and land management practice information.

The objectives of the review are to:

- assess the value of current content
- identify any higher priority issues for inclusion in the next survey
- set a longer term (10 year) direction for the survey.

A paper outlining the review process has been prepared.

If you would like a copy of the paper or wish to be involved in the review, please contact John Ovington on (02) 6252 6854 or email: john.ovington@abs.gov.au



## **Work In Progress**



#### Changes to Environmental Household Statistics

Three new publications will provide environmental information on households, replacing the publication *Environmental Issues: People's Views and Practices* (cat. no. 4602.0). Prior to 2008, this publication focused on one of three rotating topics each year: energy use and conservation; waste management and transport use; and water use and conservation.

To provide users with easier access to environmental household data, this publication has been replaced with three new publications:

Environmental Issues: Energy use and conservation (cat. no. 4602.0.55.001) will present results from the energy use and conservation survey previously published in Environmental Issues: People's Views and Practices in 1994, 1999, 2002 and 2005. Results from the 2008 survey will be published under the new title in November 2008.

Environmental Issues: Waste management and transport use (cat. no. 4602.0.55.002) will present results from the waste management and transport survey previously published under Environmental Issues: People's Views and Practices in 1996, 2000, 2003 and 2006. The next survey is planned for March 2009.

*Environmental Issues: Water source, use and conservation* (cat. no. 4602.0.55.003) presents results from the water source, use and conservation survey that were previously published in 1994, 1998, 2001, 2004 and 2007). The next survey is in March 2010.

For more information, contact Fiona Clarke on (02) 6252 5180 or email: fiona.j.clarke@abs.gov.au



### Sample size reductions to affect environmental household survey

Environmental household survey data collected in 2008 and 2009 will be affected by sample size reductions. The data will be published in *Environmental Issues: Energy Use and Conservation* (Nov 2008) and in *Environmental Issues: Waste Management and Transport Use* (Nov 2009).

The environmental household survey sample is based on part of the Labour Force Survey (LFS) sample that will see a 24% reduction due to the ABS' tight budget situation in 2008–09. This is on top of an 11% reduction being gradually introduced between November 2007 and June 2008 as part of the five-yearly review of the LFS. These sample size reductions mean that relative standard errors (RSEs) for estimates from the energy use and conservation survey are expected to be about 3% higher, while waste management and transport use survey RSEs are expected to be about 24% higher than estimates from the previous survey. This may affect the availability of small area data.

The 24% sample size reduction is being conducted in such as way that it can be easily restored, should the ABS funding position improve in the following financial year.

For more information on reductions in sample size, please contact Graeme Brown on: (02) 6252 5920 or email:graeme.brown@abs.gov.au

# Did you know?

More than half of all Australian households (54%) collected grey water for re-use in 2007.

Victoria had the highest percentage of households reporting collecting grey water (72%), followed by the ACT (63%).

Grey water is water from the shower/bath, laundry or kitchen that households collect for re-use.

Nearly a quarter of households (24%) reported grey water as their main source of water for gardening.

Further details are available in Australia's Environment: Issues and Trends 2007 (cat. no. 4613.0)

### Having trouble finding ABS statistics? It's easy if you know the ABS catalogue number:

- Take note of the ABS cat. no. of the publication you want to find. For example, if you wish to look at Water Account, Australia 2004–05, the cat. no. is 4610.0.
- On the ABS homepage under the heading "All Statistics" on the left hand menu, click "Access to all ABS products & statistics".
- Under the heading "Statistics" choose "By catalogue number" on the left hand menu.
- Take the first two digits of the cat. no. for the Water Account, Australia 2004–05 example this is 46. Scroll down the page until you reach "46. Environment". Click this link.
- Publications are presented in order of their cat. no. Using the cat. no., scroll down the page until you find the publication you are looking for and click on the title.
- This will bring up the "Summary" page for the publication. If you want the whole publication, click on the "Details" tab at the top just under the publication title. Then select the "Free download" link you wish to view. You may save a PDF copy of the publication.
- For previous editions of the publication, click on the "Past and Future Issues" tab.

#### ABS website: <www.abs.gov.au>

# Upcoming releases

Expected release date:June 2008NRM on Australian Farms 2006-07 (cat. no. 4620.0)July 2008Gross Value of Irrigated Agricultural Production (cat. no. 4612.0.55.001)July 2008Water and the Murray-Darling Basin – A Statistical Profile (cat. no. 4610.0.55.007)Nov 2008Environmental Issues: Energy Use and Conservation (cat. no. 4602.0.55.001)



# **Contact us**

*Environment and Energy News* features articles and developments in relation to work done within the ABS Environment and Energy program. If you would like to be placed on our free electronic mailing list, please contact Dayani Gunawardana and leave your address details.

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## CEES welcomes two new directors

#### Kirsty Leslie has

responsibility for Water, and Environmental Accounts. Contact Kirsty on: (02) 6252 5436 or email: kirsty.leslie@abs.gov. au



Robyn Elphinstone has responsibility for Land and Agriculture. Contact Robyn on: (02) 6252 5502 or email: robyn.elphinstone@ abs.gov.au

