land & water Fundamentals

The Knowledge Game— brokering knowledge to inform decision making

Looking for information to assist day-to-day natural resource management decisions?

Land & Water Australia is a broker of knowledge on natural resource management R&D for science, management and policy decision making.

The impact of water reforms, droughts and increasing pressure to wisely manage water resources means people are increasingly searching our web site for information on "water", "rivers" and "water resources".

At www.lwa.gov.au there are more than 50,000 abstracts of research publications, 500 full text products (most free to download), 1300 research project summaries and links to research programs with extensive web-based tools, databases and guidelines.

A quick search of "NSW" and "wetlands" in **Streamline** returns 543 research publication abstracts. Add "coastal" and it reduces to 71 abstracts. Scan the titles to uncover research reports covering coastal wetlands from northern NSW to Bega. Searching "community participation" and "NSW" returns 309 hits, refining with "river management" presents 22 abstracts.

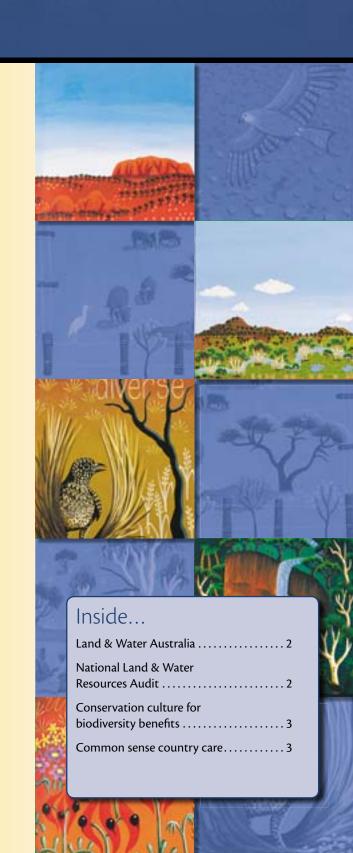
Browse the *Innovations* section of the web site for the top 100 research innovations and find eight for NSW with full descriptions and detailed information on what has been done with the research and how to order any products.

Want more information than an abstract can provide? Order research reports and articles online or explore the publications catalogue. A search of *Our Products* for "rivers" returns 120 titles. Add "Community" and uncover titles such as *Assessing community capacity for riparian restoration*.

Click on the NSW *Geo-map* in *Our Projects*, sorted by program, to take a tour of recent research and find 159 projects that have research sites in NSW. Use the links and arrows for detailed information on any project of interest.

Become your own knowledge broker at www.lwa.gov.au

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Essentials

Land & Water Australia

The Land & Water Australia mission is to provide national leadership in generating knowledge, inform debate and inspire innovation and action in sustainable natural resource management. Land & Water Australia has invested more than \$150 million and managed about the same amount in additional partner investment in R&D since 1990 to underpin sustainable agriculture and thriving communities.

Land & Water Australia's R&D priorities are sustainable primary industries; managing Australian rivers and water resources; managing vegetation in rural landscapes; future landscapes and compatible industries and enhanced understanding and tools to address integrated natural resource management issues.

Land & Water Australia's portfolio of some 1300 projects includes social and institutional research; dryland salinity; land and water management for the wool industry and mixed farming systems; managing climate variability; sustainable irrigation; riparian lands; river contaminants; native vegetation and agroforestry.

Land & Water Australia research is assisting in the implementation of the National Action Plan for Salinity and Water Quality; the CoAG water reforms and on-ground work supported by the Natural Heritage Trust.

Our research portfolio can be searched and analysed by subject, keyword, researcher and spatially, for example by State. There are 159 research projects on vegetation, sustainable primary industries, rivers, future landscapes and NRM policy directly relevant to NSW with many more indirectly useful to be found under a simple www search at

<www.infoscan.com.au/id/profile/
geomaps.htm>.

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National Land & Water Resources Audit

The National Land & Water Resources Audit commenced in the first phase of the National Heritage Trust in 1997. It is now in its second phase, June 2002–June 2007, and will provide data, information and assessments of Australia's land, water and biological resources to support sustainable development. A core function will be to collate natural resource information to support the monitoring and evaluation of the National Action Plan for Salinity and Water Quality and the Natural Heritage Trust.

Two key Audit information products are: The Australian Natural Resources Atlas and the Australian Natural Resources Data Library which provide on-line access to data and information for improved NRM decision making at different scales.

To achieve the Audit's objectives will involve establishing partnerships between those that require natural resources data and information, and those that collect and collate it. The Audit's advisory committee has representatives from all jurisdictions (except ACT), CSIRO, Murray-Darling Basin Commission, ANZLIC – the Spatial information Council and Land & Water Australia, which will assist in developing these arrangements.

The National Land & Water Resources Audit is co-located with Land & Water Australia.

Further information is available from the Audit management unit.

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WebSites:

Land & Water Australia <www.lwa.gov.au>



National Land & Water Resources Audit

<www.nlwra.gov.au>



Australian Natural Resources Atlas http://audit.ea.gov.au/ANRA/

atlas_home.cfm>



Natural Resources Information Management Toolkit

<www.nlwra.gov.au/toolkit>



Conservation culture for biodiversity benefits

The Australian Government should be promoting a national culture of conservation to preserve and manage biodiversity according to a new study from Land & Water Australia's Social and Institutional Research Program.

The project, which set out to identify how to boost the adoption of conservation, follows moves to more strategic natural resource management through regional investment.

Researcher Viv Read said the study found the concepts of biodiversity conservation were not always clearly understood within regions.

Other key findings of the report include that funding should be targeted to regions with high conservation value rather than just high community motivation, and that more flexibility is required in funding arrangements and on-the-ground needs do not always coincide with funding cycles.

"Abating threats to biodiversity conservation is not often undertaken in a strategic way at the landscape scale" he said, "but when it is done well, it should be extended to other regions."

"Biodiversity is important to the Australian way of life but is threatened in many ways."

Major issues of salinity and water quality were often considered ahead of biodiversity, Mr Read said, and the opportunities for integrated management to achieve multiple outcomes were not always adopted.

"This report will help to change that," he said.

"Regional plans must provide a strategic framework through which regional communities can identify natural resource management issues, assess social, economic and biophysical questions and develop ways to achieve regional conservation targets, including those for biodiversity."

Recognised bush management programs such as Bushcare should be evaluated and adjusted rather than establishing new programs to achieve the same outcomes, he said.

The project assessed 150 conservation projects all over the country. It was funded by the Natural Heritage Trust and was managed by Land & Water Australia for the Australian Government Department of the Environment and Heritage.

The study will be used as the basis for a guidebook for regional conservation groups to help them include biodiversity in their plans along with their other priorities such as land and water management and sustainable farming systems.

Further information is available from www.sirp.gov.au



Common sense country care

How to care for country and prosper despite the worst drought in 100 years is one of the lessons from the Tilbuster Commons.

The Tilbuster Commons is a cooperative onground research project supported by Land & Water Australia. It involves four neighbouring grazing families on the New England Tablelands in NSW. The Tilbuster group was masterminded by landholder Phil Coop who enlisted the support of Dr David Brunckhorst who has since become a participating Tilbuster landholder.

"What we have learnt along with improvements financially, socially and environmentally were beyond expectations for everyone", Phil Coop commented. The Tilbuster Commons will now continue on after its initial three-year experimental phase led by Dr Brunckhorst.

The properties have combined to form a mixed grazing and cropping enterprise

under common management. From a total area of 1300 hectares, 300 hectares has been put aside for permanent conservation due to its rare basalt woodland with areas of grass trees, some probably 600 years old.

Their story is told in a new book
'Reinventing the Common: Cross-boundary
Farming for a Sustainable Future' jointly
published in a series on environmental
solutions by Land & Water Australia and
Federation Press. The book is authored
by specialist environmental lawyer Sima
Williamson, property lawyer Gerard Kelly
and natural resource scientist Professor
David Brunckhorst.

How to order your copy

Contact: The Federation Press Telephone: (02) 9552 2200 (1990) Email: info@federationpress.com.au



Bob Collins (centre) launched the 'Reinventing the Common' book with (L-R) Dr Catherine Mobbs – Land & Water Australia Integration Manager; book authors Gerard Kelly, Sima Williamson and David Brunckhorst; and Tilbusterlandholder Phil Coop.

Mostly Free publications



Rainman + Streamflow v 4.3: promotional edition QLD DPI, 2003. Free CD Rom, code EC030609

Rainman Streamflow software assists farmers and resource managers take advantage of detailed historical data and seasonal forecasting tools. For a limited time, Rainman Streamflow is available in a special free promotional version... Try before you buy!



Property: rights and responsibilities—current Australian thinking.

C Mobbs & K Moore (eds), 2002. Free Book, code PR020440

A collection of papers from leading researchers and analysts representing the leading edge of Australian thinking on property rights and associated institutional issues



Review of farmer-initiated innovative farming systems I Perkins, T Gleeson and B Keating, 2003. Free technical report, code PR030524

Case studies of on-farm innovations with recommendations for major realignment of systems and policies as they relate to Australian landscapes.

One of five new publications from our Futures research programs.



Best practice survey: natural resource management and Australian wool growers

Land Water & Wool Program, 2003. Free brochure, code PB030472

A summary of the findings of the most comprehensive analysis of Australian wool growers' attitudes toward onfarm environmental practices ever undertaken.



Saltland Pastures in Australia: a practical guide E.G. Barrett-Lennard, 2003. \$25.00 + p&h, code PR030563

This book brings together the very latest information on saline land and saltland pastures



N Schofield, A Burt & D Connell, 2003. Free report, code PR030541



A scientifically based contribution to the national debate on what values should shape water management and how aims for a particular hydrological system can be achieved.

To order these publications or discover more about available Land & Water Australia publications visit: www.lwa.gov.au/catalogue

Projects

A selection of projects currently underway. For more information go to www.lwa.gov.au

Native Vegetation Program

Biodiversity dynamics, habitat loss and disturbance in the New South Wales wheatbelt (NNP2) (February 2002–January 2004) Dr Ross Bradstock New South Wales National Parks and Wildlife Service NSW

Land Water and Wool

Improved seasonal forecasts for wool producers in western New South Wales (DAN16) (November 2002–December 2004) Dr Ron Hacker NSW Agriculture Orange NSW

Knowing El Nino: the influences of climate perception on land management decisions in western New South Wales and Queensland (UTA13) (August 2003–July 2004) Mr Peat Leith University of Tasmania Hobart Tas

Managing gully erosion in the New South Wales Tablelands to improve water quality and maintain productive wool pastures (CLW56) (October 2002–April 2006) Dr Gary Caitcheon CSIRO Land and Water Glen Osmond SA

Profitable, biodiverse, wool production systems for the Northern Tablelands of New South Wales (UNE43) (June 2002–December 2005) Assoc Prof Nick Reid University of New England Armidale NSW

Water, soil and salt movement from sustainable salt-tolerant pastures in New South Wales (UWA32) (April 2003–October 2006)
Dr Warren King NSW Agriculture Orange NSW

National Dryland Salinity Program

Determining 'whole-of-system' water use efficiencies for NSW river valleys (DAN14) (November 2000–November 2003) Dr Nick Austin NSW Agriculture Orange NSW

Improving the efficiency and flexibility of contour irrigation design (UME58) (July 1998–April 2001) Dr Hector Malano University of Melbourne Vic

National Riparian Lands and other "Rivers" Programs

Experimental reintroduction of large woody debris into rivers: geomorphic and habitat implications (MQU9) (May 2000–April 2003) Mr Andrew Brooks Macquarie University NSW

Hydrologic effects of floodgate management on coastal floodplain agriculture (DAN13) (July 1999–June 2004) Mr Peter Slavich NSW Agriculture Wollongbar NSW

Improving the management of wetlands on the Murrumbidgee River floodplain (NDW32) (October 2002–July 2006) Mrs Lorraine Hardwick New South Wales Department of Land and Water Conservation

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Australian Government
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