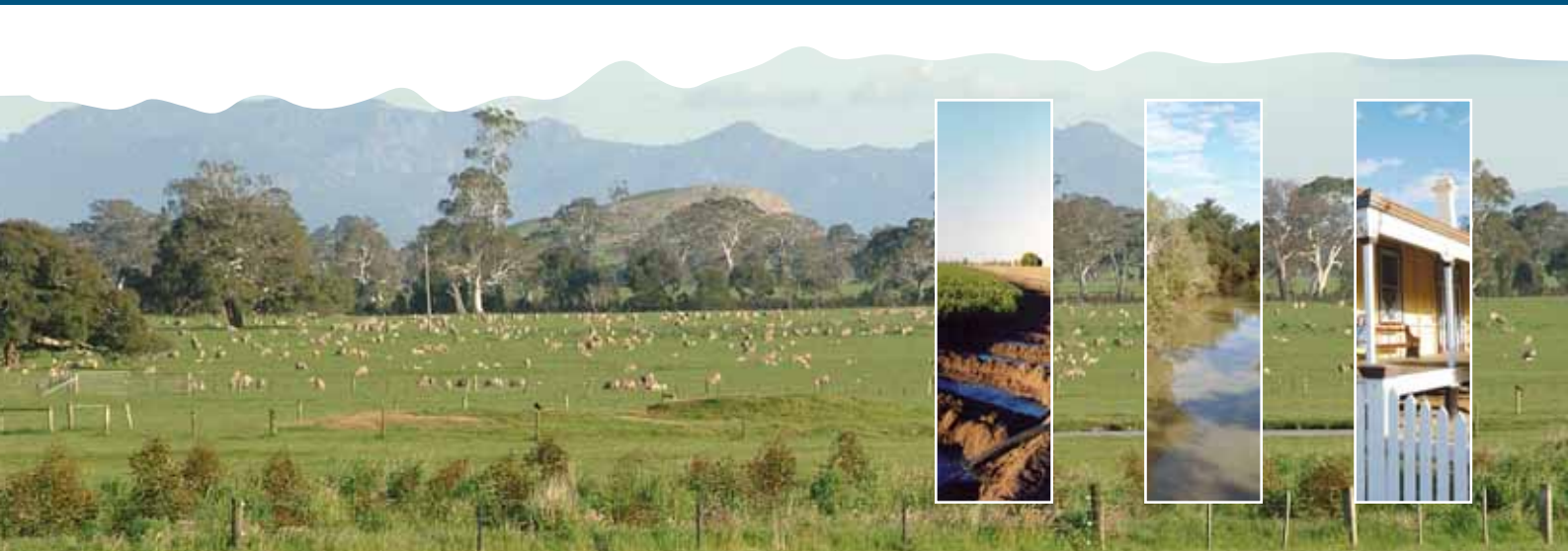




Australian Government
Land & Water Australia

LAND & WATER AUSTRALIA A VISION FOR THE FUTURE



*a snapshot of Land & Water
Australia's plans for 2005–2010*

MANAGING A UNIQUE ENVIRONMENT

The management of Australia's rich and unique endowment of natural resources has never been higher on the national agenda. A range of pressing issues are demanding attention.

Water resources are under extreme pressure, with the majority of our population currently experiencing water restrictions. Australia has a history of extreme climate variability, but it now seems that each drought is hotter than the last. We are currently in the midst of a profound dry cycle, especially in south-western and south-eastern Australia. Climate is a fundamental driver of ecological processes and a major shaper of production possibilities for Australia's primary producers.

Australia is one of the most biologically diverse countries on the planet, and most of our native species exist in no other country. Responsibility for their management and ultimate survival rests solely with us. Introduced species of plants and animals put fierce competition and predation pressures on native species and impose major costs on agricultural production. The management of vegetation, both pastures and trees, is critical for:

- achieving an appropriate hydrological balance
- managing carbon emissions
- minimising further losses of biodiversity
- sustaining many of our grazing systems.

Australian soils are the engine room of agricultural productivity, and soil management is a key to more sustainable production systems.

Australia's landscapes, climates, soils and biota are unique. We are isolated on an ancient continent and have to develop our own solutions for our own problems. Our agricultural production systems have to be smarter and more sophisticated than our international competitors who enjoy younger, richer, more forgiving soils with more reliable climates. Community expectations of agricultural and pastoral landscapes continue to change. Consumers demand healthy rivers and estuaries and viable populations of native animals and plants, in addition to cheap and clean food, fire and water. The community wants a wider range of services from the countryside, including tourist, cultural and heritage experiences and lifestyle opportunities alongside the traditional processes of food and fibre production. Demographic change, especially along the eastern seaboard, will intensify competition for rural land and place pressure on the resource base.

Against this background, there is a greater need than ever for carefully targeted and well-managed research to:

- generate the uniquely Australian knowledge needed to improve Australian farming systems and consequent profitability
- manage our natural resources more sustainably
- inform large public investments in natural capital
- help governments balance competing demands on both natural resources and rural landscapes.

WHO AND WHAT IS LAND & WATER AUSTRALIA?

We are a national organisation dedicated to promoting and supporting sustainable agriculture. Land & Water Australia's core business is as a research investor, gaining knowledge for managing Australian landscapes. We also act as a leading research broker, coordinator and collaborator in natural resource management.

We work to increase knowledge, understanding and informed debate. We want to inspire innovation and action in managing our natural resources sustainably.

Land & Water Australia is one of 14 Rural Research and Development Corporations within the Australian Government's Agriculture, Fisheries and Forestry portfolio. We have a national mandate and are not constrained by any particular commodity, region, discipline or research provider. Our research investments range across the biophysical and social sciences.

We actively build and maintain collaborative partnerships with industry, government and communities to ensure that our research portfolio is relevant, produces useable results and avoids duplication. Most of our research is conducted within national research programs, supported jointly by several partner organisations. These programs bring resource managers and researchers together to identify priorities and implement research findings.



WHAT ARE WE AIMING TO DO?

Over the next five years we intend to:

- Generate new information that can help us deliver the sustainable management and use of Australia's natural resources.

On farms, new knowledge will help develop more sustainable and productive primary industries.

On the wider landscape scale, new knowledge will enhance the on-ground implementation of policies and programs for sustainability. It will also improve links between landscape-scale goals and farm-scale practice.

At the national level, new understanding will help government to develop improved policies and procedures to accelerate the adoption of sustainable management practices.

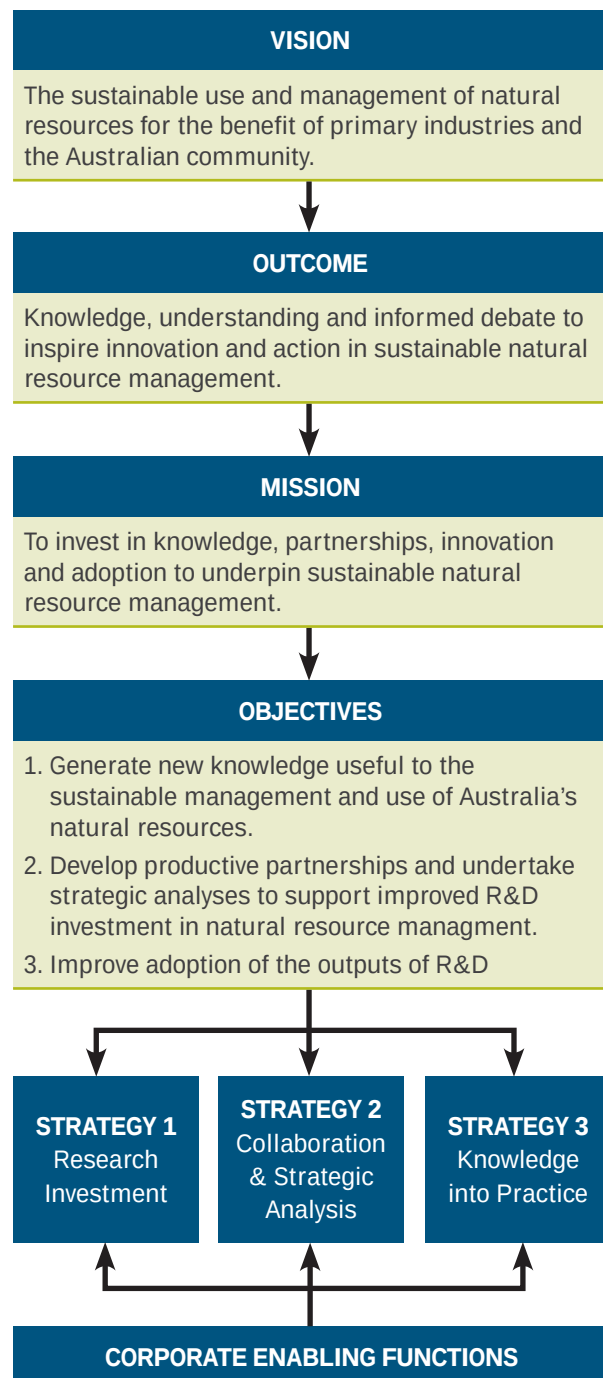
Well managed research is a good investment. An evaluation of more than 25 percent of our research portfolio back to 1990 found an overall return on funds invested through Land & Water Australia of 3.5 to 1.

- Develop productive partnerships and support improved R&D investment in natural resource management.

Partnerships and collaborations are crucial for greater efficiencies in research investment and more integrated solutions. Strategic analyses will ensure enhanced reporting of key information to government and the community.

- Improve adoption of the outputs of R&D

We want to make it easier for people to access, synthesise and use the information that we generate. We aim to enhance adoption processes and improve the delivery of knowledge.

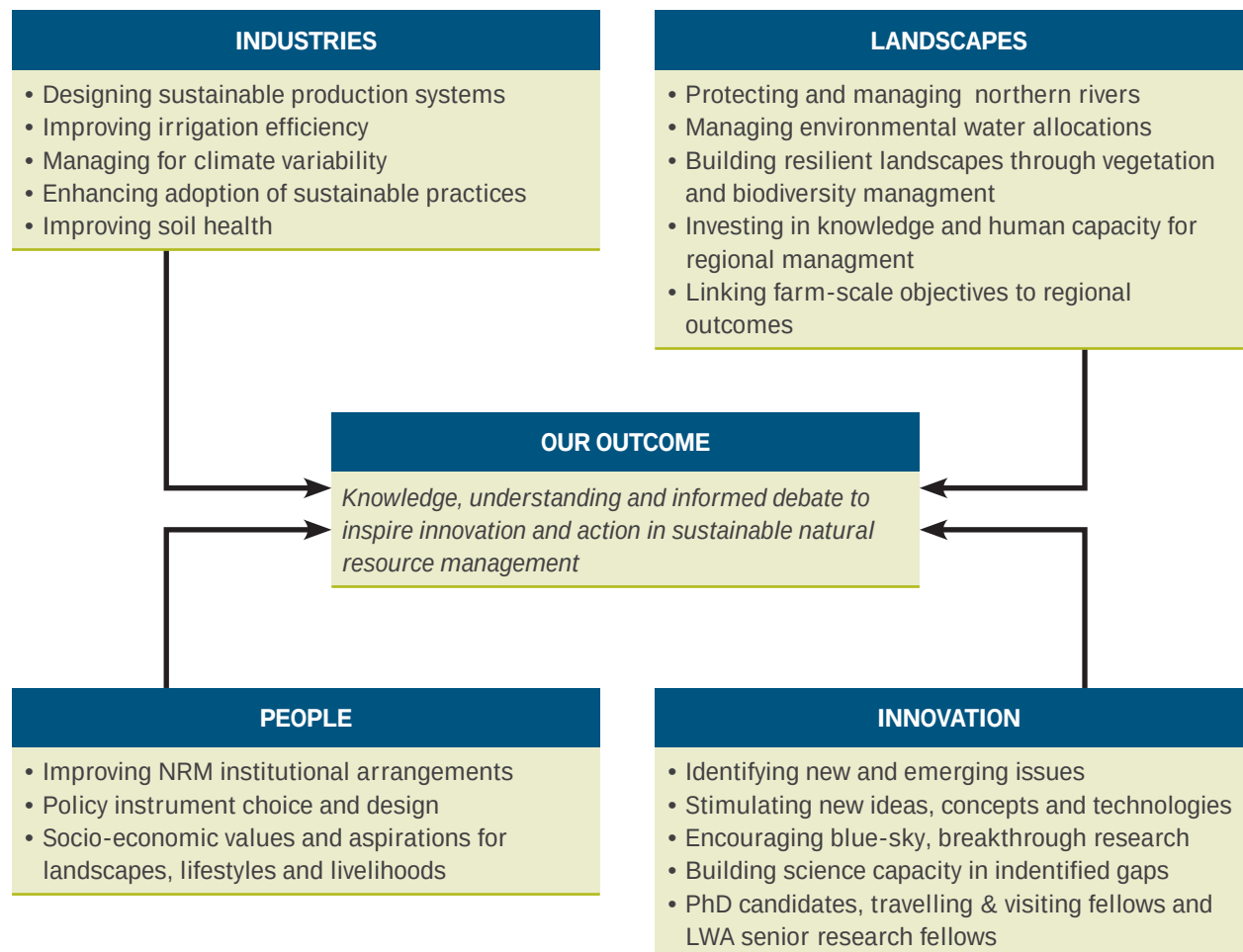


WHAT STRATEGIES WILL WE USE?

We will use three key strategies to achieve our aims over the next five years.

- We will invest in strategic research for sustainable resource management.
- We will use collaboration and strategic analysis as key tools.
- We will actively translate knowledge into practice.

Research investment will take place in four key areas: industries, landscapes, people and innovation. The following diagram outlines our proposed strategy in each of these areas.



- We will invest in strategic research for sustainable resource management.

We need to generate new knowledge that is useful for the sustainable management and use of Australia's natural resources.

In order to do this, our R&D management processes will focus on:

- identification of national priorities
- selection of topics where we can add most value
- development of the most effective interventions
- design and implementation of the research and adoption process
- evaluation of the results.

We have developed robust methods for each of these steps, and are supported by effective research investment planning. Emerging issues and opportunities are scanned, potential R&D investments are assessed and evaluated, and a detailed analysis is undertaken. Potential partnerships are negotiated and finally detailed program plans are submitted to our Board for funding approval. The Board approves those projects that it believes will improve the knowledge base, support innovation and deliver a strong return on investments.

- We will use collaboration and strategic analysis as key tools

Together, collaboration and strategic analysis will help us to reach agreement on priorities and outcomes, and to improve efficiencies.

Collaboration is crucial to the success of our work. We aim to bring together researchers and stakeholders, government agencies, rural industries and community-based groups. We will link research providers and customers in partnerships that maximise the return on our investment, that focus on specific priority issues and that ensure the optimal application of government and industry resources across agencies. We will continue to conduct strategic analyses of the nation's most pressing natural resource management issues and report these results to the government and wider community. Enhanced collaboration will lead to more integrated solutions and improved adoption of these solutions.

- We will actively translate knowledge into practice.

Land & Water Australia recognises that knowledge of our natural resources can take many forms. We place a strong emphasis on high quality scientific knowledge for complex political decision-making and policy formulation, but we also embrace the intimate knowledge of the land held by farmers and Indigenous peoples. Translating that knowledge into practice requires highly skilled processes, whether the knowledge relates to new technologies, practical insights or an understanding of how systems work.

We particularly want to improve the ways in which farmers, rural industries and catchment managers adopt existing or new knowledge into their every-day activities.



WHAT SPECIFIC R&D PROGRAMS ARE UNDERWAY?

Arena	Programs	Partners*
Industries	Grain & Graze www.grainandgraze.com.au	Meat & Livestock Australia Australian Wool Innovation Limited Grains RDC
	Healthy Soils for Sustainable Farms	Department of Agriculture, Fisheries and Forestry
	Land, Water & Wool www.landwaterwool.gov.au	Australian Wool Innovation Limited
	Managing Climate Variability www.managingclimate.gov.au	Grains RDC Department of Agriculture, Fisheries and Forestry Dairy Australia Meat & Livestock Australia Rural Industries RDC Sugar RDC Australian Wool Innovation Limited National Farmers' Federation
	National Program for Sustainable Irrigation www.npsi.gov.au	Department of Agriculture, Fisheries and Forestry/ Natural Heritage Trust; Department of Natural Resources and Mines, Queensland; Department of Primary Industries & Resources, South Australia; Department of Environment, Western Australia; Department of Agriculture, Western Australia; Cotton Research and Development Corporation; Horticulture Australia; Goulburn-Murray Water, Victoria; Harvey Water, Western Australia; Lower Murray Water Authority, Victoria; Sunwater, Queensland; Ord Irrigation Cooperative, Western Australia

Landscapes	Native Vegetation and Biodiversity	CSIRO Greening Australia
	Environmental Water Allocation	Department of Agriculture, Fisheries and Forestry Department of Environment and Heritage Murray-Darling Basin Commission
	Tropical Rivers	Department of Agriculture, Fisheries and Forestry Department of Environment and Heritage Myer Foundation
	Defeating the Weed Menace	The Department of Agriculture, Fisheries and Forestry
	National River Contaminants	Murray Darling Basin Commission
	National Rivers Consortium	Department of Agriculture, Fisheries and Forestry CSIRO Land and Water Murray-Darling Basin Commission NSW Department of Natural Resources SA Catchment Boards WA Department of Environment
	Joint Venture Agroforestry Program+ http://www.rirdc.gov.au/programs/aft.html	Rural Industries RDC Forest and Wood Products RDC Department of Agriculture, Fisheries and Forestry
People	Social and Institutional Research Program	
	Cooperative Venture for Capacity Building+ http://www.rirdc.gov.au/capacitybuilding/	Australian Wool Innovation Limited Dairy Australia Grains RDC Grape and Wine RDC Rural Industries RDC Sugar RDC Meat & Livestock Australia Murray-Darling Basin Commission Department of Agriculture, Fisheries and Forestry
Innovation	Innovation Call	
	Travelling and Visiting Fellowships	
	Postgraduate Scholarships	
	Senior Research Fellowships	

* Program partners as at November 2005. Partnerships also occur at a project level with a range of organisations including research providers, other RDCs, regional bodies including catchment management authorities, commodity groups and government departments and agencies.

+ Managed by Rural Industries RDC

HOW WILL FUNDS BE ALLOCATED?

For more information about Land & Water Australia's research portfolio and current programs visit www.lwa.gov.au.

Land & Water Australia receives a core appropriation from the Australian Government of around \$12.5 million each year. Additional funds, usually exceeding this amount, are sourced from co-investors in external partnerships within collaborative programs and other activities.

Land & Water Australia allocates its forward funding according to its key strategies. The exact amounts allocated will depend on future decisions of the Land & Water Australia Board and ongoing development of R&D program partnerships.

Based on experience and the directions set out in the Strategic Plan it is likely that more than 80% of our total expenditure (combined Land & Water Australia and partner funds) will be directed to R&D activities and strategic work such as the National Land and Water Resources Audit (Strategies 1 and 2). At least 10% of total funds are invested in managing knowledge outputs for adoption (Strategy 3), and less than 10% of total funds support corporate services.



HOW WILL WE JUDGE OUR SUCCESS?

It is notoriously difficult to evaluate the impact and effectiveness of natural resource management. We deal with large variables across space and time, and cause and effect are often hard to disentangle. To measure our performance as research investors we rely on evaluating:

- i. the extent to which we are generating relevant and adoptable knowledge
- ii. the extent to which our research outputs are being taken up and adopted
- iii. the estimated improvements in resource condition that could reasonably be
- iv. expected if the research was widely adopted
- v. measurable changes in resource condition that can be attributed to our research
- vi. outputs.

A comprehensive corporate evaluation strategy helps us to assess our performance each year against the key strategies outlined in this document. We also evaluate individual programs and projects to provide feedback to stakeholders, and we seek direct feedback from stakeholders through commissioned surveys on a regular basis.

By improving our accountability, we can encourage further investment and make more effective use of the resources and skills available to us. We will ultimately judge our success through achieving our vision of ...

... the sustainable use and management of natural resources for the benefit of primary industries and the Australian community.



WHO ARE OUR STAKEHOLDERS AND CLIENTS?

The Australian Government, in particular:

- the Minister for Agriculture, Fisheries and Forestry
- the Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry
- the Minister for Transport and Regional Services
- the Minister for the Environment and Heritage
- the Minister for Education, Science and Training
- the Department of Agriculture, Fisheries & Forestry
- the Department of Environment and Heritage
- the National Water Commission
- the Department of Transport and Regional Services
- the Department of Education, Science and Training
- the Chief Scientist

Land & Water Australia's Representative Organisations:

- the National Farmers Federation
- the Australian Conservation Foundation

Australian Government NRM Initiatives:

- Natural Heritage Trust
- National Action Plan for Salinity and Water Quality
- National Landcare Program
- National Water Initiative

R&D Program Funding Partners, in particular:

- other Research & Development Corporations
- the Murray Darling Basin Commission
- State Government Departments

Key target audiences for Land & Water Australia's outputs, in particular:

- regional NRM bodies and catchment bodies
- industry organisations, farmers and other land managers, and the people who advise them
- State agencies, local government, NGOs and indigenous organisations
- others involved in the use, management, regulation or conservation of Australia's land, water and vegetation resources.

The research and development community, in particular:

- Universities and CRCs
- CSIRO and other Australian Government research organisations
- State agencies and consultants

The public at large who have an interest in the sustainability of Australia's land, water and vegetation resources.



Our natural resources are unique, invaluable and irreplaceable. Through a strategic research portfolio, Land & Water Australia is working to protect them for future generations of Australians.

We have prepared this booklet as an overview of our plans for the next five years. Our aim is to inspire innovation and action in sustainable natural resource management through increased knowledge, understanding and informed debate.

The full text of the Land & Water Australia Strategic R&D Plan 2005–10 can be accessed through our website, which also provides on-line access to over 600 publications in natural resource management.

Browse the website, download as you wish, or order hard copies delivered free to your address from CanPrint through freecall: 1800 776616.



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