

# Department of the Environment, Water, Heritage and the Arts

Volume 1  
Outcome 3

ANNUAL REPORT 2007–08

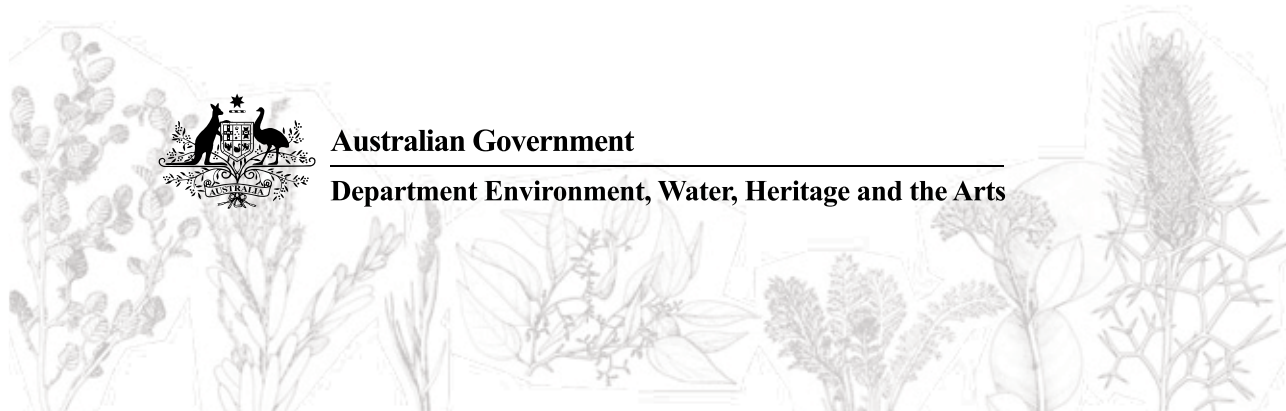
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**Australian Government**

**Department Environment, Water, Heritage and the Arts**





Outcome 3  
**Water**



## Outcome 3 Water

### Introduction

The department is leading national policies and programs to help achieve the more efficient and sustainable use of Australia's water resources. In 2007–08 the Commonwealth's role in Australia's water management was expanded and consolidated through introduction of the Water Act 2007, the Council of Australian Governments Memorandum of Understanding on Murray-Darling Basin Reform, and the major Water for the Future initiative.

#### Main responsibilities for this outcome

- Policy development and strategies for implementing a national water plan by purchasing of water entitlements
- Increasing irrigation efficiency in water delivery
- Water recovery through the Living Murray Initiative and Water for Rivers
- Water market development and reform

**Water Efficiency  
Division, Water  
Reform Division  
and Water  
Governance  
Division**

### Highlights

- On 26 March 2008 the government entered into a Murray-Darling Basin Reform Memorandum of Understanding with all Basin States, to progress necessary water reforms and management arrangements within the Basin. This included changing the existing Murray-Darling Basin Commission into the new Murray-Darling Basin Authority.
- In April 2008 the \$12.9 billion Water for the Future strategy was announced, to provide for a range of major urban and rural water program initiatives to support reform and sustainable management of water resources nationally.
- The department's Water Group, established in early 2007, was expanded into three Divisions—Water Reform, Water Efficiency and Water Governance, to address the significant challenges of water management in Australia.

## Objectives

- Work with governments, industry and community stakeholders to assist them to achieve a more sustainable management of water resources and to increase the efficiency with which water resources are used.
- Implement Water for the Future and its associated policies and programs.
- Protect the environmental values of rivers and wetlands, including wetlands of national and international significance.

## Results

- The Water Act 2007 came into effect on 3 March 2008, creating the Murray-Darling Basin Authority whose major responsibility is to develop a Basin Plan by early 2011.
- On 26 March 2008 the Murray-Darling Basin Reform Memorandum of Understanding was agreed by the Council of Australian Governments (COAG). This brought all Basin states to in-principle agreement on future arrangements for planning and managing of water in the Basin.
- Funding of up to \$52.3 million was set aside for the purchase of water entitlements for the environment.
- The Commonwealth Environmental Water Holder was established.
- To accelerate implementation of Water for the Future, funding was brought forward so that initial project payments could be made in 2007–08 including:
  - \$10 million to support the Rockhampton to Gladstone pipeline
  - \$78 million for the Wimmera–Mallee pipeline
  - \$35 million for an initial contribution to the Harvey Water Piping Project (Western Australia)
- \$12.8 million for Water for Rivers, to allow for the return of more sustainable flows to the Snowy River.
- Five Water Quality Improvement Plans are complete or nearing completion. The remaining six plans are on schedule for completion.
- A revised Schedule E Protocol under the Murray-Darling Basin Agreement for processing interstate transfers of water allocations was finalised. This halves the number of steps that states have to complete to authorise an interstate water trade.
- Draft regulations for the making of water market and water charge rules were circulated for public comment.
- In February 2008 funding of \$4.6 million was approved for 14 projects under the Irrigation Modernisation Planning Assistance program.
- In 2007–08 Water for Rivers (a joint Government enterprise) recovered 56 gigalitres of water and is on track to meet its interim target of 212 gigalitres by June 2012.
- The CSIRO Sustainable Yields project was substantially completed and the methodology for undertaking the assessment of water loss hotspots has been agreed with CSIRO.
- Establishment arrangements for the new urban water programs were put in place and initial funding commenced for the National Water Security Plan for Cities and Towns.
- The Paroo River Wetlands were designated under the *Environment Protection and Biodiversity Conservation Act 1999* as Wetlands of International Importance for inclusion on the list kept under the Ramsar Convention on Wetlands.

## Strategies

The new \$12.9 billion Water for the Future strategy is built on four key priorities: taking action on climate change; using water wisely; securing water supplies; and supporting healthy rivers. Water for the Future confirms the primacy of the National Water Initiative (NWI) as the framework for water management in Australia.

The *Water Act 2007* commenced on 3 March 2008 and assists the implementation of many of the elements of the NWI including:

- establishment of a water market and trading scheme for the Murray-Darling Basin
- best practice water pricing
- working with all parties in the Basin to ensure a balance is kept between all water users, including water to sustain wetlands and the health of river systems
- keeping up-to-date records of water availability and use.

The Act also establishes the Commonwealth Environmental Water Holder. This position will manage the Commonwealth's environmental water, to protect and restore the environmental assets of the Murray-Darling Basin and outside the Basin where the Commonwealth owns water. The Act also creates an independent Murray-Darling Basin Authority, which is required to prepare a strategic plan for the integrated and sustainable management of water resources in the Murray-Darling Basin.

The Water Regulations 2008, made under the *Water Act 2007*, came into effect on 30 June 2008. They require people specified in the regulations to give water data to the Bureau of Meteorology to enable it to publish high quality water information, including a National Water Account as required under the Act.

COAG agreed to a Memorandum of Understanding on Murray-Darling Basin Reform on 26 March 2008 with governments committing to sign an Intergovernmental Agreement at the July 2008 COAG meeting. The reforms to be addressed by the Intergovernmental Agreement include:

- bringing the Murray-Darling Basin Authority and the Murray-Darling Basin Commission together as a single institution, to be known as the Murray-Darling Basin Authority
- establishing Commonwealth-State Water Management Partnerships (including funding, subject to due diligence, of Basin State Priority Projects)
- strengthening the role of the Australian Competition and Consumer Commission in regulating the water market and water charging within the Basin
- enabling the Basin Plan to provide arrangements for critical human water needs.

The department is responsible for implementing the Australian Government's national water policies and programs. During 2007–08, the department was given a significantly increased role in helping to achieve a more efficient and sustainable use of Australia's water resources.

To help meet the challenge of this increased role, the department significantly expanded and restructured its water functions into three Divisions, collectively known as the Water Group. The three divisions comprise Water Reform, Water Efficiency and Water Governance. Staff numbers increased from 137 in June 2007 to 204 as at 30 June 2008.

The Water Group is responsible for overall policy development, implementation and governance of water programs and projects.

During the year the Australian Competition and Consumer Commission assumed responsibility for developing water market and charging rules for the Murray-Darling Basin.

## Water for the Future

Water for the Future is a ten year water policy framework that covers urban, regional and rural settings. The plan includes a number of actions to improve rural water management (such as reducing over-allocation of water, increasing the water use efficiency of the irrigation sector and improved water information management) and urban water management (such as improved planning to take account of climate change).

An important initiative was the establishment of a range of new urban water programs to improve water security for towns and smaller cities.

The department has consulted stakeholders, industry, community and environmental groups and research organisations.

### National Water Initiative

The National Water Initiative (NWI) is Australia's blueprint for national water reform. The overall objective of the NWI is to achieve a nationally compatible market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes.

In 2008 the NWI was given greater priority as unsustainable water use and climate change were identified by the government as requiring more urgent responses.

### Murray-Darling Basin Authority

The *Water Act 2007* created the Murray-Darling Basin Authority that has the responsibility to develop a Basin Plan by early 2011 and to determine a sustainable cap on surface and groundwater extractions in the Basin.

The Memorandum of Understanding signed on 26 March 2008 included agreement to merge the Murray-Darling Basin Authority

and the Murray-Darling Basin Commission as a single institution, to be known as the Murray-Darling Basin Authority.

The new, independent Authority will be responsible for developing, implementing and monitoring the Basin Plan, which will include:

- a sustainable cap on surface and groundwater diversions across the Basin
- critical human water needs of communities that use water from the Murray River and its tributaries
- a sustainable industry
- enhanced environmental outcomes
- establish a decision-making process for determining the method for securing this water.

The new Authority will also be responsible for the current functions of the Murray-Darling Basin Commission.

### Improving Irrigation Efficiency

On 11 February 2008, funding of \$4.6 million was announced for 14 projects under Round One of the Irrigation Modernisation Planning Assistance program. Stakeholders are actively supporting the program to enable structured consideration of opportunities to improve water use efficiency—adopting irrigation systems designed for reduced water availability resulting from climate change.

During 2007–08 CSIRO also developed, for the department, an agreed methodology for assessment of hotspots in pipe and channel irrigation delivery systems. Workshops involving industry, consultants and water experts were held in Sydney, Adelaide and Melbourne. Considerable enthusiasm and support has been received from irrigation stakeholders for the consultative approach employed in the development of the methodology.

## Evaluation

The Water Group experienced fundamental changes to its business operations this year as a result of the Government's drive for major water reforms. The Water Group was required to rapidly adapt to a different working environment.

Former policies and programs were amended to fulfil the requirements of Water for the Future, and there was also the introduction of major new initiatives such as urban and rural water reforms.

Planning, development and the establishment of implementation frameworks was a major focus of the Water Group's output in 2007–08. This will ensure that the required major water reforms are delivered efficiently.

New consultative process structures were formed, ensuring close cooperation and exchange of knowledge with the states and other Australian government agencies. Water Group officials actively participated in a wide range of Commonwealth-State forums.

## Case studies

### Case Study 1

#### 2007–08 Water Entitlement Purchase

On 26 February 2008 the Australian Government launched a public tender to purchase water entitlements for the environment in the Murray-Darling Basin. This was the first time the Australian Government had entered the water market in its own right as an environmental water purchaser.

The budget for the initial round of water entitlement purchases was \$50 million. Between 26 February and 16 May 2008, 992 expressions of interest were received and assessed for value for money, using a mix of criteria covering price and potential environmental benefit.

The purchased water entitlements will provide water for the environment. They will be used to protect and restore water-dependent environmental assets of the Murray-Darling Basin, such as Ramsar wetlands, and to help reverse the decline in the health of the Murray-Darling Basin's ecosystems. The water will also help to protect against algal bloom outbreaks, salinity and other water quality risks, that threaten the health of our rivers.

A review of the first round of water entitlement purchases is now underway. The review will receive advice from a stakeholder consultative committee on how best to respond to community concerns about the water purchase program.

### Case Study 2

#### Contingency Planning in the Murray-Darling Basin

Drought contingency planning in the Murray-Darling Basin commenced in November 2006. It involves the Australian Government, the New South Wales, Victorian, South Australian and Australian Capital Territory (ACT) governments and the Murray-Darling Basin Commission. The department chairs the senior officials group advising Basin governments.

Extreme dry conditions emerged in 2006 and continued through 2007–08, particularly affecting the water supplies of the southern Murray-Darling Basin. The two-year period to the end of 2007 was the lowest two-year River Murray inflow period on record. Dry conditions continued through the first half of 2008, placing critical water supplies at risk.

Senior officials met frequently during 2007–08 to discuss contingency planning arrangements, and these issues were also discussed at the Murray-Darling Basin Ministerial Council. Several senior officials' reports have been provided to the Prime Minister, Basin State Premiers and the Chief Minister of the ACT.



Dry conditions in the Murray-Darling Basin Photo: Nerida Sloane

Water saving measures recommended by senior officials have been implemented, and altered water sharing arrangements between jurisdictions have been put in place to operate until May 2009. Water for critical human needs was provided to communities dependent on the Basin's water resources. Where it could not be provided through the river and channels other arrangements have been put in place. While only partial allocations to entitlement holders were made, this enabled some limited irrigation activity.

On-going dry conditions through the first half of 2008 are continuing to place critical water supplies at risk in 2008–09 and contingency planning work is continuing.

### Case Study 3

#### Paroo River Wetlands Ramsar Site

##### *Ramsar Designation*

In September 2007 the Paroo River Wetlands were designated under the *Environment Protection and Biodiversity Conservation Act 1999* as a Wetland of International Importance for inclusion on the list kept under the Ramsar Convention on Wetlands. Designation of the site was the culmination of ten years of discussion and negotiation among stakeholders.

The Paroo River Wetlands Ramsar Site is located in far north-west NSW, and is

Australia's sixty-fifth Ramsar site. It meets six of the nine Ramsar criteria. The Paroo site has two components: the 71,133 hectare Nocolleche Nature Reserve; and the 67,171 hectare Peery component, which is located within the Paroo-Darling National Park. They lie within the Murray-Darling Basin and the Great Artesian Basin.

The Paroo River is the last remaining free-flowing river in the northern Murray-Darling Basin. It supports a number of threatened plant and animal species, significant native fish communities and is one of the most important wetland systems for migratory waterbirds in south-eastern Australia. The climate in the Paroo catchment is semi-arid to arid, with an annual average rainfall of 250 mm. As well as receiving water from upstream, the site includes many small wetlands and claypans that fill from local rainfall. The site also includes artesian mound springs; those at Peery Lake are the largest active complex in NSW.

The Paroo has significant cultural and spiritual values for the traditional Indigenous owners of the Paroo River country, the Baakandji and Budjiti people. Some of the interesting flora and fauna found in the Ramsar site include: the Water Rat; Freckled Duck; Painted Snipe; Striped Burrowing Frog; a genetically distinct population of Golden Perch; endemic crustacean species; Salt Pipewort (one of the rarest vascular plants in NSW); and the Yapunyah gum.

Ramsar sites are protected under the *Environment Protection and Biodiversity Conservation Act 1999* and are to be managed under wise-use principles that preserve the ecological character of sites. Both portions of the Paroo site are also protected areas and are gazetted under the *NSW National Parks and Wildlife Act 1974*. A Memorandum of Understanding has been signed by the Baakandji and Budjiti people and the National Parks managers of the Ramsar site, to recognise the input of the

traditional owners in the site's nomination and establish a mechanism for their participation in the ongoing management of the wetlands. The NSW and Queensland Governments have signed the Paroo River Agreement. Under this agreement, both Governments have agreed to work cooperatively to maintain the natural water flows in the Paroo River system.

#### Case Study 4

##### *CSIRO Murray Darling Basin Sustainable Yields project*

The CSIRO Murray-Darling Basin (MDB) Sustainable Yields project is delivering, for the first time, a consistent and comprehensive assessment of water availability in the Basin, taking into account the interaction between surface water and groundwater, the impacts of climate change, and risks from likely expansion in farm dams and forestry plantations, and changes in groundwater use. Importantly, it is also examining how these factors will affect current state water resource plans.

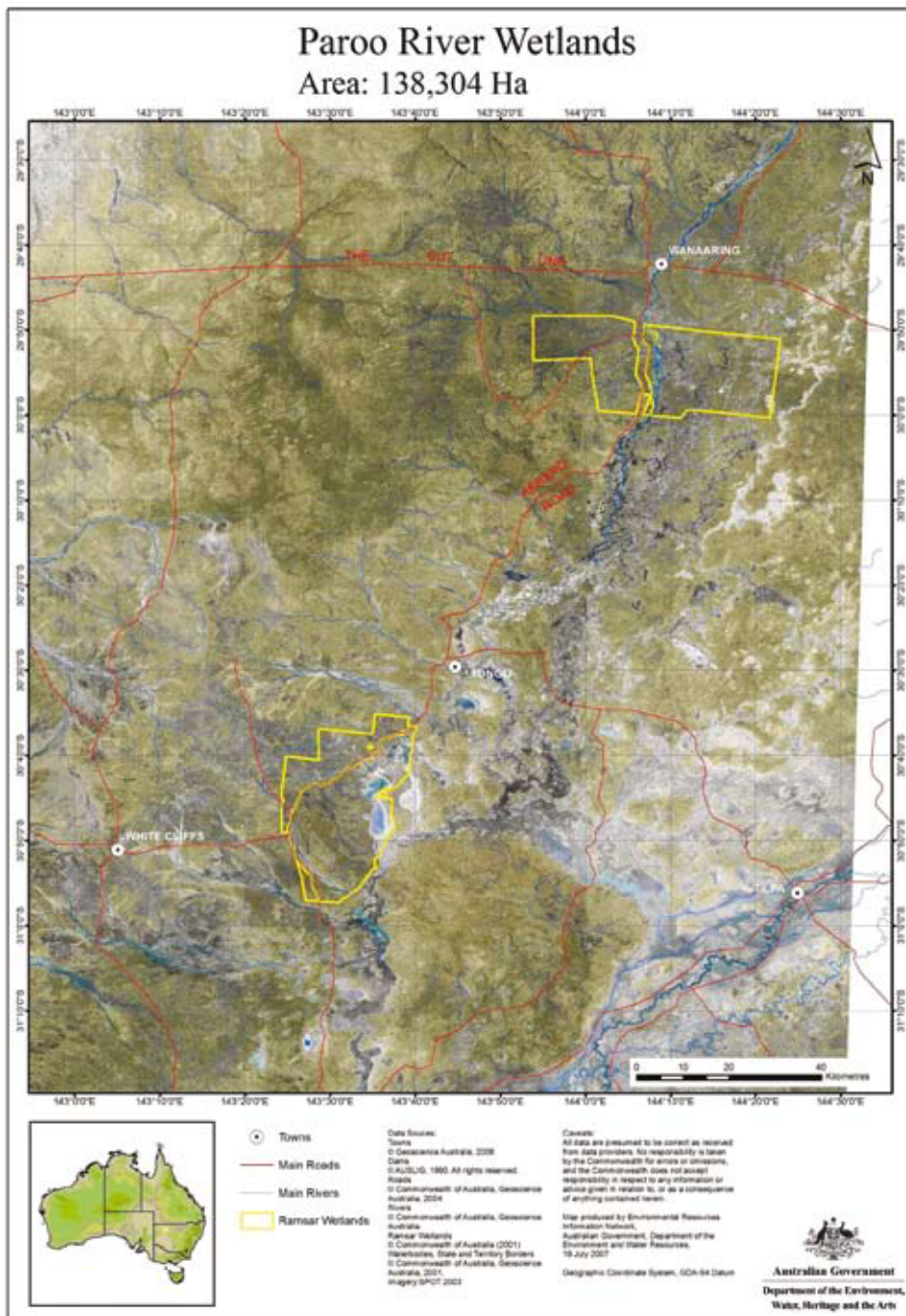
The project fills major gaps in the information required to plan water reform in the Basin. The results will be made widely available, and will be useful to the new Murray-Darling Basin Authority that is developing a plan for the management of the Basin's water resources. The plan will include, for the first time, new sustainable diversion limits on both surface and groundwater diversions.

This ground-breaking project consists of eighteen regional reports and a synthesising, Whole-of-Basin report. At the end of June 2008, 17 of the 18 regional reports had been released.

The relevance of this project, and the wealth of necessary information it is producing, has led to the recent decision by the Council of Australian Governments to extend the analysis to other major river systems in Northern Australia, Western Australia and Tasmania.



Royal Spoonbill, Narran Lakes, north-west NSW.  
Photo: Em. Prof. Ian Falconer AO



Paroo River, Queensland

## Results for performance indicators

Performance indicator	2007–08 Results
<i>Sustainable management of water resources</i>	
<b>Sustainable water allocations</b>	
New strategic plan for the Murray-Darling Basin, incorporating a revised cap on diversions, taking into account groundwater use and other factors that reduce river inflows	The Commonwealth <i>Water Act 2007</i> came into effect on 3 March 2008. The Water Act establishes the Murray-Darling Basin Authority (MDB Authority) that will be responsible for developing and implementing a Basin Plan for the management of the Basin water resources.
Water savings are achieved to meet the annual targets specified in the Murray-Darling Basin Commission's three year rolling investment plan	The Basin Plan will set new sustainable limits on the amount of water that can be taken from surface and groundwater in the Murray-Darling Basin (referred to as the long-term average sustainable diversion limit).
<b>Water recovery for environmental flows</b>	
Environmental water is allocated to rivers and wetlands	<p>The MDB Commission's Living Murray Initiative and the Water for Rivers Initiative contribute to this performance indicator. The department contributes to the funding of these initiatives on behalf of the Australian Government.</p> <p>As part of The Living Murray Initiative 16.9 gigalitres of recovered water was available in 2007–08 for the environment. The water was used to provide critical drought refuges to help protect threatened species. This included watering River Red Gums at the Chowilla, Lindsay-Wallpolla and Gunbower icon sites; providing flows to replenish waterholes in the Wakool system to protect threatened Murray Cod and other species; and providing water to a wetland in the Barmah-Millewa Forest to protect the threatened Southern Pygmy Perch.</p> <p>Eleven gigalitres of 'temporary water' was also purchased by the MDBC for the Narran Lakes to sustain the largest colonial bird breeding event at this site for nearly a decade. The additional water maintained lake water levels, delaying abandonment of nests, with an estimated 80,000 birds successfully fledging. Breeding species were primarily Straw Necked Ibis but there were also large numbers of Glossy Ibis, White Ibis and Royal Spoonbills. The water also helped provide valuable habitat for other bird species including swans, great egrets, pelicans and thousands of ducks.</p> <p>For further information refer to the Annual report for the MDB Commission.</p>
<b>Protected wetlands management</b>	
Percentage of Ramsar-listed wetlands with management plans in operation	85 per cent (55 of 65 sites, based on findings of a recent Ramsar Snapshot report; an additional five sites have management plans in preparation)
<b>Water quality</b>	
Number of water quality improvement plans and associated interim projects completed or under development (other than for the Great Barrier Reef)	Five Water Quality Improvement Plans are complete or nearing completion. Interim projects for these five are also complete. The remaining six Water Quality Improvement Plans are either on schedule or have made significant progress. Two regions are completing interim projects to support comprehensive Water Quality Improvement Plans if circumstances allow.

### Achieving efficiencies in water use

#### Removing barriers to trade

Increased ability to trade in water entitlements across borders

The Australian Competition and Consumer Commission will provide advice on water market rules by December 2008 and water charge rules by June 2009. Refer to ACCC Annual report for more information.

Taking into account public comments, the department developed regulations setting out the process that must be followed in making the water market rules and the water charge rules. The regulations are expected to be implemented by August 2008.

The department supported work of the COAG Working Group on Climate Change and Water. The work program will cover a review of the four per cent limit on out-of-district permanent trade in the southern Murray-Darling Basin; ensuring that compatible water registers are in place by April 2009 and examining the feasibility of moving to a common national register; and developing actions to reduce transaction times and costs and remove barriers to trade.

#### Water efficiency and irrigation

Total irrigation water use to be around 25% more efficient by 2018

Water for the Future, as announced on 29 April 2008, involves funding of \$5.8 billion allocated to improving the efficiency and productivity of water use and management. Core investment principles under the Sustainable Rural Water Use and the Infrastructure element of Water for the Future are:

Efficiency of irrigation delivery systems to be increased from 75% to 90% by 2018

1. Projects must secure a long-term sustainable future for irrigation communities, taking into account climate change and reduced water availability.
2. Projects must deliver substantial and lasting returns of water to the environment to secure real improvements to river health.
3. Projects must deliver value for money in the application of the first two tests.

A Target of 1200 gigalitres of water to be saved and shared with irrigators by 2018

On 11 February 2008, funding of \$4.6 million was announced for 14 projects under the Irrigation Modernisation Planning Assistance program.

Funding of \$3.67 million has been allocated to CSIRO to develop an irrigation 'hotspots' methodology, in support of a \$70 million national 'hotspots' assessment program.

The On-farm Irrigation Efficiency (Pilot Projects) Program was launched in September 2007 to provide funding for irrigators to improve their on-farm water use efficiency, in return for a share of the water savings they achieve. The Pilot Program will trial program delivery arrangements with a range of organisations with direct links to irrigators. Following an expression of interest process in late 2007, nine organisations have been invited to proceed to the next stage of the process and submit a detailed proposal for funding.

Modernising irrigation	
<i>Administrative milestones (2007–08):</i> Hotspot assessments commence	CSIRO was commissioned to establish an agreed methodology for hotspots assessment. Workshops involving industry, consultants and water experts were held in Sydney, Adelaide and Melbourne.
Information tools for irrigators commence	
<i>Outputs delivered (likely indicators for future years):</i>	A call for panel members has commenced for the assessment of irrigation water delivery systems for water loss hotspots, in line with CSIRO developed methodology.
Water loss hotspot assessments completed	
System modernisation plans completed in key areas across Australia including length of channel lining and piping completed (kilometres)	On 11 February 2008, funding of \$4.6 million was announced for 14 projects under Round One of the Irrigation Modernisation Planning Assistance program. Round Two of the program was announced on 20 May 2008.
Metering upgrades in place across Australia.	A national audit of on-farm irrigation tools was completed in early 2008. The follow-up project, involving a needs and gaps analysis of on-farm irrigation tools, was completed in April 2008. The final reports will be made publicly available on the department's website.
Water savings achieved through modern irrigation methods	In-principle agreement was reached in March 2008 for the Australian Government to contribute \$1 billion or 90 per cent of the cost of Stage Two of the Foodbowl Modernisation project in northern Victoria, subject to availability of water savings and to a due diligence assessment. A substantial amount of this funding is expected to be for water meter upgrades.
Addressing over-allocation	
<i>Administrative milestones (2007–08):</i> Australian Government Water Management Holder established	The Secretary appointed Mr Ian Robinson, First Assistant Secretary of the Water Governance Division, as the Commonwealth Environmental Water Holder (CEWH) on 16 April 2008. The department dedicated staff to support the CEWH and established procedures for the management and deployment of the Commonwealth's environmental water holdings.
Commencement of water entitlement purchase	
<i>Outputs delivered (likely indicators for future years):</i> Roll out of structural adjustment and entitlement purchase as identified in the Basin Strategic Plan	On 26 February 2008, the Australian Government launched the first round of water entitlement purchasing, with \$50 million initially allocated to the purchase of water entitlements in 2007–08. This tender closed on 16 May 2008.
Number of entitlements purchased and funds expended on structural adjustment	The department is finalising the purchase of 35 gigalitres of water entitlements, worth \$45 million, from seven catchments across the Murray-Darling Basin. This comprises both high reliability and general security water. The mix of entitlements will ensure the pressing short-term needs of the Basin are met, as well as securing water for the environment over the long-term.

*Sustainable management of water resources*  
**Reforming the Murray-Darling Basin Commission**

*Administrative milestones (2007–08):*

Commonwealth, states and ACT enact mirror legislation to enable the referral of powers for water management in the Murray-Darling Basin

A Memorandum of Understanding was made by COAG on 26 March 2008 to enable the implementation of co-operative, efficient and effective arrangements in the Murray-Darling Basin. The Agreement also set out the basis upon which the MDB Commission and the MDB Authority will be brought together.

COAG agreed that:

- the new, independent MDB Authority will be responsible for developing, implementing and monitoring the Basin Plan, which will include a sustainable and enforceable cap on surface and groundwater diversions across the Basin
- the Basin Plan will provide for the critical human water needs of communities that use water from the River Murray and its tributaries, a sustainable industry and enhanced environmental outcomes
- the MDB Authority will provide a Basin Plan in early 2011, consistent with the requirements of the *Water Act 2007*
- as provided for in the *Water Act 2007*, the Commonwealth Minister is the decision-maker on the Basin Plan
- a new Ministerial Council will be established, comprising all Basin States and chaired by the Commonwealth.
  - The new Council will provide advice to the Commonwealth Minister on the Basin Plan, including the sustainable cap on surface and groundwater diversions, and monitoring the Plan's performance.

Establish Murray-Darling Basin Authority reporting to a single minister

Transition arrangements in place to ensure continued management across the Murray-Darling Basin

The Commonwealth and Basin States have been working cooperatively on bringing together the two organisations. Working groups have been established to progress key transition issues such as business continuity, program commitments and human resources.

Completion of CSIRO Sustainable Yields project by the end of 2007 for catchments and aquifers in the Murray-Darling Basin.

The CSIRO sustainable yields project has delivered seventeen individual catchment reports, which have been publicly released (the Warrego, Wimmera, Eastern Mount Lofty Ranges, Border Rivers, Paroo, Namoi, Gwydir, Ovens, Lachlan, Macquarie-Castlereagh, Goulburn-Broken, Campaspe, Loddon-Avoca, Barwon-Darling, Moonie, Condamine-Balonne and Murrumbidgee reports).

*Outputs delivered (likely indicators for future years):*

Sustainable Cap established across the Murray-Darling Basin.

The minister has announced that a new sustainable cap will be in place by early 2011. The *Water Act 2007* lays out the process for revising water sharing plans consistent with that sustainable cap.

Water sharing plans revised for valley's in the Murray-Darling Basin.

The department is currently undertaking a range of technical projects designed to be of use to the MDB Authority in its development of the Basin Plan. Outputs from this work will be made available to the MDB Authority when completed.

The results of the Sustainable Yields project will be available to the MDB Authority to assist its work on developing a new sustainable limit on water diversions in the MDB.

New strategic plan for Murray-Darling Basin developed.

The Water Act 2007 (the Act) provides statutory planning obligations and specifications for the Murray-Darling Basin. The Murray-Darling Basin Authority must prepare a Basin Plan in accordance with the requirements of the Act, which sets out the mandatory content. The Basin Plan must:

- describe the Basin water resources
- identify water resource plan areas
- identify risks to the water resources and strategies to manage those risks
- determine the Plan's objectives and required outcomes
- set long-term average sustainable diversion limits and temporary limits for the Basin and each water resource plan area
- include an environmental water plan, a water quality and salinity management plan and trading rules
- specify requirements for state water resource plans
- include monitoring requirements.

The Act requires states to prepare water resource plans for each of the specified areas and it obliges Commonwealth agencies to act consistently with the Basin Authority and the plans. State agencies, operating authorities, infrastructure operators and water access right holders must not act in a way that is inconsistent with the plan.

#### Northern Australia

##### *Administrative milestones (2007–08):*

Task force established to investigate potential for further land and water development in northern Australia

First progress report to government and stakeholders is published by 30 June 2008

##### *Outputs delivered (likely indicators for future years):*

For each key basin in northern Australia, key ecosystems, community and Indigenous assets and watering needs are identified

Final report on the ability of each basin to support increased consumption is published by 30 June 2012

The department supported three visits by the Taskforce to northern Australia between July and September 2007 to meet stakeholders and consider the potential for further land and water resources development.

- The Taskforce advertised a call for Public Submissions between July and August 2007.
- In April 2008 the Taskforce was transferred to the department of Infrastructure, Transport, Regional Development and Local Government, to be supported by the new Office of Northern Australia.
- The department retains responsibility for the Northern Australia Water Futures Assessment, a multi-year multi-disciplinary program being delivered jointly with the National Water Commission.
- The Assessment aims to provide essential information on the water resources of northern Australia and the watering needs of key ecosystem, community and cultural assets.
- The Assessment has commenced and includes an extension of the CSIRO Sustainable Yields study to the key basins of northern Australia.

### The Great Artesian Basin Sustainability Initiative

Extent of engagement of stakeholders in the Great Artesian Basin Sustainability Initiative (GABSI) that results in improved management of groundwater resources in the Basin.

Progress towards target pressure recovery in priority areas in the Great Artesian Basin and the Carnarvon Artesian Basin

Minimum pressure surface target determined (target: pressure target set by 30 June 2008)

Deadline for all bores to be capped and piped determined (target: deadline set by 30 June 2008)

The mid-term review of GABSI Phase 2 found that it had generally made significant and positive achievements against all of its objectives (including “partial pressure recovery” and “adoption of sustainable management practices by water users of the groundwater resources of the Basin”).

Phase 2 was deemed to be highly successful by the majority of stakeholders. There was strong support for GABSI Phase 3.

A Framework to discuss implementation of Phase 3 has been endorsed by Basin Ministers (including consideration of a deadline for bores to be capped and piped).

Consideration of a minimum pressure surface has been deferred by agreement, pending further data being acquired.

Remediation works on bores in the Carnarvon Artesian Basin is progressing steadily after initial delays were encountered in obtaining materials and drillers.

### The Living Murray Initiative

The extent to which the Australian Government’s policy outcomes and priorities in addressing the over-allocation of water in the Murray-Darling Basin are reflected in the implementation of the Living Murray Initiative

The Eligible Measures Register now contains measures that, if implemented in full, exceed the 500 gigalitre average target for the Living Murray Initiative First Step Decision.

The Australian Government has bilateral investment agreements with all Living Murray partners and agreed project investment schedules are in place for seven projects listed on the Eligible Measures Register that will recover up to 395 gigalitres. These include:

- contributing a further \$11.019 million (\$26.181 million to date) to the Goulburn-Murray Water Recovery package, as part of the Australian Government’s \$37.2 million investment in this package. This package has recovered 120 gigalitres of water to date with a further 25 gigalitres to be recovered by June 2009.
- contributing \$5.575 million to the South Australian project Securing Government Held Water for Environmental Use. This project has recovered 13 gigalitres of water.
- contributing \$75 million of a total Australian Government investment of \$58.786 million in the NSW Market Purchase Measure, which anticipates recovering 125 gigalitres of water by June 2009.
- contributing \$12.416 million to the Shepparton Irrigation Area Modernisation Project out of an Australian Government investment of \$24.632 million. This project will recover 30 gigalitres of water.

On 7 March 2008 the Murray-Darling Basin Ministerial Council agreed to list 133 gigalitres of water on the MDB Commission Environmental Water Register (recovered water entitlements available for use). This is a significant milestone for The Living Murray initiative in that they are the first water entitlements to be listed on the Register. Availability of this water for use at Icon Sites will depend on annual allocations associated with the entitlements.

See the MDBC Annual Report for details of the management of the water recovered by The Living Murray initiative.

#### Water for Rivers—Joint Government Enterprise

Contribution of Joint Government Enterprise (trading as Water for Rivers) activities and investments to the Australian Government's environmental flow priorities for the Murray River

Water for Rivers is tasked with obtaining an average of 282 gigalitres of water for the Snowy and Murray Rivers by 2012. This will be sufficient to return the average annual flow in the Snowy River to 21 per cent average natural flow and provide 70 gigalitres per annum to environmental flows in the Murray River. The Australian Government's contribution is \$75 million over 10 years to source up to 70 gigalitres of flows for the Murray River. New South Wales and Victoria will both contribute \$150 million over ten years for up to 212 gigalitres for the Snowy River.

During 2007–08 Water for Rivers aimed to recover 62 gigalitres of water entitlement which would bring the total volume recovered after four years of operation to 159 gigalitres of entitlement. Allocations resulting from these entitlements are determined for the Snowy and Murray rivers in accordance with the Snowy Water Licence. Use of the water recovered for the River Murray will be consistent with the objectives of The Living Murray initiative.

The Australian Government has committed to providing a further \$50 million to Water for Rivers to assist it in meeting the target of increasing flows in the Snowy River to 21 per cent of natural flow; \$12.8 million of this was expended in June to allow for the return of more sustainable flows to the river.

#### Murray-Darling Basin Commission

Contribution of MDB Commission activities and investments to the sustainable and equitable use of natural resources in the Murray-Darling Basin, including the shared water resources of the Murray River

The Australian Government is one of the partner governments in the MDB Agreement, along with NSW, Vic, SA, Qld and the ACT. The department is represented on the Commission and contributes the Australian Government's funding share.

Provision of efficient and effective services to the Murray-Darling Basin Ministerial Council and delivery of council decisions within agreed timeframes

The River Murray Water division of the Commission has continued to ensure the delivery of water supplies down the river system during the period of lowest inflows on record. Since the seriousness of this drought became apparent in 2003, the MDB Commission has worked hard to communicate the worsening news to a broad range of people within and outside the Basin.

The most active period of environmental management in the history of the River Murray, since its regulation, has occurred since June 2005. Application of small volumes of water at icon sites (17.71 gigalitres in total for 2007–08) has resulted in localised ecological responses such as fish spawning at the barrages, growth responses of river red gums and black box and breeding of water birds and frogs, including the nationally vulnerable Southern bell frog.

The department has provided efficient and effective advice to the Australian Government ministers on the MDB Ministerial Council through briefings requiring Out-of-Session decisions, and for MDB Ministerial Council meetings.

For further information refer to the Annual Report for the MDB Commission.

#### Murray-Darling Basin Commission—Boosting Capital Works

The extent to which additional funding contributions from the Australian Government accelerates and achieves agreed objectives and activities consistent with Scenario 2 of the MDBC Strategic Plan 2005–2010

The list of projects agreed by the MDB Ministerial Council on 19 May 2006 to spend \$500 million provided by the Government, have all been initiated and progress made towards further investigations or concept design.

The additional money has given the Environmental Works and Measures Program much more scope for investigating and implementing the most beneficial works and measures to ensure the best use of the water recovered for the six Icon sites of The Living Murray.

The additional money has enabled the MDB Commission to instigate and invest in water recovery projects under The Living Murray Initiative.

For further information refer to the Annual Report for the MDB Commission.

#### Murray-Darling Basin Commission—Contribution to Salinity Mitigation

The contribution of Murray-Darling Basin Commission activities and investments to removing salt and meeting river salinity targets, including agreed targets at Morgan, South Australia

The salt interception works program continues to lay the foundation for effective salinity management in the Basin. The salt interception schemes are removing about 1370 tonnes of salt per day from the River Murray. The current program is expected to offset the predicted future increase on the average salinity at Morgan by 2010–2011.

Other achievements include the completion, and Ministerial Council endorsement, of the Mid-term review of the Basin Salinity Management Strategy (BSMS) 2001–2015. Key messages from the review are that significant progress has been made in implementing the BSMS; no significant changes to the BSMS or Schedule C of the MDB Agreement are required; and there is a need for greater emphasis on preventive salinity actions; managing salinity through real time operations and investment in flexible and sustainable joint works and measures. The recommendations of the review will provide strategic direction for future salinity management in the Basin.

While these achievements are significant, salinity remains a concern for the health of the Basin. In-river salinity increased in 2007–08 when very low water availability reduced the capacity of river regulators to off-set the effect of water from aquifers and saline wetlands entering the River.

For further information refer to the Annual Report for the MDB Commission.

#### Water Resources Assessment and Research—Grants

Extent to which water resources assessment and research grants promote the sustainable use and management of water resources; in particular the uptake of recycled water and sustainable irrigation practices

The department measures performance for this administered item by demand for research and publications released to the public, and by the usefulness of the research in policy advice and development

The department has invested funds in a range of research projects. These range from the development of technical advice to irrigators (e.g. National audit of on-farm irrigation information tools; water-loss hot spots manual for irrigation systems), through to strategic policy advice on the operation of water markets, use of recycled water and groundwater availability in remote areas. The information gained supports the principle of fact-based decision making both for government and water sector stakeholders.

Tasmanian Water Infrastructure	
Output 3.1 Sustainable management of water resources and 3.2 Achieving efficiencies in water use	
<b>Policy advisor role</b>	–
95% of briefs and correspondence meet department quality control standards	
<b>Provider role</b>	100%
Percentage of payments that are consistent with the terms and conditions of funding (Target: 100%)	
Price	See Resources table

Output 3.1: Sustainable Management of Water Resources		
Departmental outputs	Budget prices \$000's	Actual expenses \$000's
Output 3.1: Sustainable Management of Water Resources	19 352	14 433
Total (Output 3.1: Sustainable Management of Water Resources)	19 352	14 433
Administered items		
Water for the Future – Restoring the Balance in the Basin #1	6 308	6 308
Great Artesian Basin	290	290
Murray Darling Basin Commission	13 517	13 517
Murray Environmental Flow	7 500	7 500
Water for the Future – Living Murray Initiative	8 271	6 680
Great Artesian Basin – (SPP)	8 148	8 148
Water for the Future – Living Murray Initiative (SPP)	60 766	60 765
Total (Administered)	104 800	103 208
Administered items		
#1 Water for the Future – Restoring the Balance in the Basin	49 692	27 022
<p>Contracts for Capital Purchases of Water Entitlements were signed by both parties on 30/06/08. As required by accounting standards these contracts were not recorded in the accounts for 2007-08 as control is dictated by timing issues associated with the registration processes governed by the states.</p>		

Output 3.2: Achieving Efficiencies in water use		
Departmental outputs	Budget prices \$000's	Actual expenses \$000's
Output 3.2: Achieving Efficiencies in water use	28 451	22 571
<b>Total (Output 3.2: Achieving Efficiencies in water use)</b>	<b>28 451</b>	<b>22 571</b>
Administered items		
Water for the Future – Sustainable Rural Water Use and Infrastructure	122 001	122 001
Water Resources Assessment	175	175
Tasmanian Water Infrastructure (SPP)	1 100	500
Water Efficiency Labelling and Standards Scheme	150	108
Water for the Future - National Water Security Plan for Cities and Towns	10 000	10 000
<b>Total (Administered)</b>	<b>133 426</b>	<b>132 784</b>