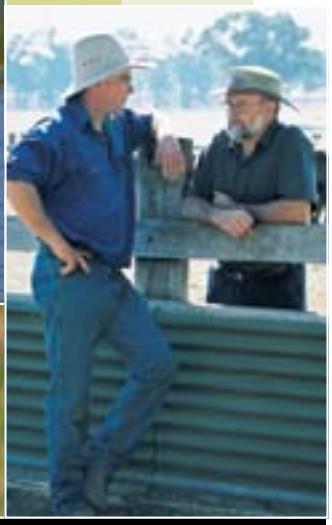


GOULBURN BROKEN CATCHMENT MANAGEMENT AUTHORITY

ANNUAL REPORT **2007 – 08**

GOULBURN BROKEN
CATCHMENT MANAGEMENT AUTHORITY

Highlights

Drought response and environmental water

- Drought Employment Program was again a tremendous success, directly employing up to 80 drought affected people from within our community on high priority environmental projects. $1.4 million from the $2.9 million raised through sale of seven gigalitres of environmental water was used to extend last year's Program from June to December and this employed 30 people to protect 700 hectares of riparian land from overgrazing
- 1.1 gigalitres environmental water allocated to Reedy Swamp, Kinnairds Swamp, Moodies Swamp and Black Swamp
- 1.9 gigalitres from Goulburn water quality allowance used to manage Broken Creek water quality
- $1 billion from State Government to Northern Victoria Irrigation Renewal Project will result in 75 gigalitres for the environment across the Goulburn Murray Irrigation District (include the Goulburn Broken and North Central Catchment Management Authority areas).

Works and incentives

- 715 incentives provided to land managers to fence and revegetate waterways, build stock containment areas, whole farm plan, improve irrigation and install water re-use systems
- Remnant vegetation fencing increased 332 percent to 5,040 hectares
- Number of whole farm plans increased 159 percent to 369
- Blackberry and gorse extension programs, delivered to over 400 landholders through the innovative Rural Extension Program, achieved exceptional voluntary compliance levels of 84 to 92 percent
- Murray Darling Basin irrigation management grants averaging $18,327 for water use efficiency were provided to over 2,000 landholders.

Water reform

- Regional irrigation development guidelines were prepared by three catchment management authorities: Goulburn Broken, North East and North Central
- Water use licences were introduced
- State Government released discussion paper on the *Northern Sustainable Water Strategy*.

Funding

- Extra government investment of $9.7 million over and above original budget largely from Drought Employment Program ($2.9 million), sale of environmental water ($2.9 million) and stream flow funding ($1.5 million), taking total to $37.1 million.

Recognition and milestones

- Muckatah Depression primary surface water management construction was completed with many partners. Area covers 60,000 hectares
- Broken Boosey State Park was completely fenced: 54 kilometres, 412 hectares, 50 landholders
- Goulburn Broken Catchment Management Authority (GB CMA) won Banksia Environmental Foundation's 'Water Award' for 'Vision for the Broken River Basin' (entry in 2007-08, awarded in 2008-09)
- GB CMA won Victorian Certificate of Applied Learning 'partner' award for the RiverConnect Project
- 2006-07 Annual Report won Australasian Reporting Awards Bronze Award and the Australian National Audit Office provided positive feedback
- GB CMA's three implementation committees celebrated 10 years
- CEO Bill O'Kane was a finalist in SACS Award for Leadership in Victorian Government Sector.

ARA
AUSTRALASIAN REPORTING AWARDS

Established 1950
GB CMA 2006-07
Annual Report:
Bronze Award

Introduction and summary

About this report

This report provides information on the Goulburn Broken Catchment Management Authority's (GB CMA's) performance and finances, which can be assessed against the targets as per the Goulburn Broken 2007-08 to 2011-12 Corporate Plan. The Corporate Plan can be accessed online at http://www.gbcma.vic.gov.au.

This report has been prepared in accordance with all relevant Victorian legislation (refer to the disclosure index on page 32 at the beginning of the 'Financial information, governance and risk management' section).

The GB CMA aims to provide information which is easily accessed, easily understood and relevant to readers. More detailed and scientific data can be accessed by visiting the GB CMA website www.gbcma.vic.gov.au.

Feedback on this report is encouraged to help improve future annual reports. Please provide comments by 31 December 2008 to guarantee consideration. A feedback form to help direct comments is available at http://www.gbcma.vic.gov.au/default.asp?ID=154

What's new in this report

- A new section: Investment area F – Our environmental footprint
- A separate summary of this Annual Report is available
- More performance stories to illustrate progress.

Acknowledgements

Contributors to the compilation of this annual report were: Fleur Baldi, Rosalba Camera, Simon Casanelia, Casey Damen, Megan McFarlane, Rod McLennan and Associates Pty Ltd.

Photo acknowledgements

Fleur Baldi, Terry Batey, Simon Casanelia, Jim Castles, Luke Comisso, Damien Cook, Casey Damen, Poppé Davis, Gary Deayton, Megan McFarlane, Carla Miles, Paul O'Connor, Peta Ritchie, Ray Sizer - Shepparton News, Wayne Tennant, Keith Ward

Design: **SASI Marketing** Printing: **Prominent Group**

Contents

Goulburn Broken profile

The Goulburn Broken Catchment Management Authority

What is it?

A statutory authority established as a body corporate by the Victorian Parliament in 1997 under the Catchment and Land Protection Act 1994 (CaLP Act) and then established as an authority under the Water Act 1989. GB CMA objectives, functions, powers and duties are defined in the CaLP Act and waterway management, floodplain management and drainage functions are defined under Part 10 of the Water Act.

This report satisfies the responsibility of the GB CMA under the CaLP Act to submit "…a report on the condition and management of land and water resources in its region and the carrying out of its functions."

The GB CMA reports to the Minister for Environment and Climate Change.

Role

The GB CMA's main role is to develop and implement the *Goulburn Broken Regional Catchment Strategy* (RCS). The RCS sets out the framework for natural resource management in the Catchment.

The GB CMA plays a lead role working with the community, government and research and funding organisations to coordinate land, water and biodiversity management in the Goulburn Broken region. Priority integrated environmental works are achieved by combining the best available science with practical challenges such as running a productive farm or maintaining a waterway for environmental and tourism benefits. All works undertaken fit within State, Murray Darling Basin and National strategies.

Vision

A catchment recognised locally, nationally and internationally for quality agricultural produce and where community values contribute to the benefits of abundant and well maintained environmental assets used for tourism and recreational activities.

The environmental footprint of irrigation and dryland farming will be significantly reduced, with farmers occupying less land and using less water whilst managing their resources more sustainably. New opportunities will arise for increasing ecosystem services provided by the land retired from agriculture and improved environmental flows.

The region's economy will be robust, with much of the agricultural produce processed within the region, generating employment and wealth creation opportunities for a regional community actively engaging in natural resource management programs.

Mission

As a peak natural resource management organisation, the GB CMA will lead the cost effective protection and enhancement of the Catchment's land and water resources to improve social well being, environmental quality and the sustainable productive capacity of the Catchment.

Funding

GB CMA received about $37 million in 2007-08 from Regional, State and Australian Government sources. It is estimated the regional community contributes (in-kind and via products and services) up to double that which governments contribute. An increasing amount of government funding received is from initiative funding sources. Benefit cost analysis is undertaken on parts of the business where it is possible, such as major infrastructure works.

Board

GB CMA Board directors are drawn from within the region. Together they have extensive experience and knowledge of primary industry, land protection, water resource management, waterway and floodplain management, environmental conservation, local government, business and financial management.

Under the direction of the Board, the GB CMA has developed detailed environmental management strategies under the umbrella of the over-arching RCS.

Implementation Committees (ICs) drive implementation of projects including on-ground works to ensure the activities of the GB CMA reflect the views of local communities. The GB CMA and partner agencies offer an array of incentives to landholders wishing to undertake environmental works.

Partners

Landcare, the Department of Primary Industries (DPI), the Department of Sustainability and Environment (DSE), Goulburn-Murray Water (G-MW), Goulburn Valley Water (GVW), Environment Protection Authority (EPA) and industry bodies.

Values

Respect of the community: implementing natural resource management actions cannot occur without the support guidance and active participation of the community.

Quality: the management actions and works actions promoted by the RCS will be delivered to a high standard dictated by community expectations.

Learning and adapting: we must strive for excellence in our monitoring and evaluation processes. They must be transparent and invite community scrutiny, and we must achieve best practice in reviewing and adjusting out efforts to accommodate new research findings and revised community expectations.

Note that the Shepparton Irrigation Region Implementation Committee delivers the Regional Catchment Strategy in that part of the region which is in the North Central Catchment.

The Goulburn Broken Catchment

Land use

The Catchment covers some 2.4 million hectares north of the city of Melbourne to the River Murray (the border with New South Wales).

About 1.4 million hectares is dryland agriculture, 270,000 hectares is intensive irrigated agriculture and 800,000 hectares is public land (with extensive areas for conservation). In addition, the Shepparton Irrigation Region (SIR) includes 70,000 hectares of the adjacent North Central Catchment in its works program for ease of management.

Environmental problems

Degraded river health, reduced extent and quality of native vegetation, reduced water quality and quantity, dryland and irrigated salinity, loss of biodiversity and pest plant and pest animal invasion.

Population

Over 200,000 and includes 6,000 Indigenous Australians, many of them from the traditional owner groups: the Taungurang and Yorta Yorta clans. In the Catchment's north, original settlers from the British Isles have been followed by migrants from Greece, Italy, Albania, Turkey, Iraq, Afghanistan, India, the Democratic Republic of Congo and many other countries.

Industry

Irrigated and dryland agriculture (including irrigated dairy, horticulture, viticulture, dryland grazing, cropping, timber production, and thoroughbred and standard bred horses); food processing; tourism and recreation. The annual economic activity for the Goulburn Broken Catchment is $9.5 billion (2005 estimate) with the bulk of this generated in the SIR.

Chairperson's strategic overview

The continuing low rainfall and poor seasonal outlook is a major challenge for the Catchment. Despite increases in some commodity prices, the ongoing drought threatens the viability of many of our Catchment's farm enterprises and the health of our environmental assets. Without significant winter and spring rains, the impact on the Catchment's agricultural production will be significant. This will be a major consideration as we move to renew and update our Regional Catchment Strategy.

The *Northern Sustainable Water Strategy* is the key planning tool to address water scarcity. The Goulburn Broken Catchment Management Authority has had significant input into the development of the Strategy and looks forward to release of the draft in late 2008. Optimising the benefits of environmental flows in the tributaries as well as the Murray River is a major challenge for the Goulburn Broken Catchment Management Authority in its role as caretaker of river health and manager of the Environmental Water Reserve.

The green papers on *Land and Biodiversity at a Time of Climate Change* and the proposed State and Australian Government green papers on climate change will provide the platform for addressing our changing environment. The Goulburn Broken Catchment Management Authority's current policy is to focus on adaption – developing programs to reduce the social, environmental and economic impacts of climate change.

The Goulburn Broken Catchment Management Authority is still of the view we will not achieve our Regional Catchment Strategy objectives through the adoption of best practice alone. In some parts of the Catchment, change at a landscape scale is required.

In December 2007 it was confirmed that the decommissioning of Lake Mokoan will continue. The Mokoan Return to Wetland project will deliver 44,000 megalitres per year on average to Victoria's rivers for environmental flows. Decommissioning Mokoan is expected to improve water quality in the Broken River and the flow regime will return to 92 percent of natural flows. The governance structures for rehabilitation of the wetland are yet to be determined but the Goulburn Broken Catchment Management Authority has the capacity to play a significant role in implementation.

This year the Goulburn Broken Catchment Management Authority welcomed the announcement of the investment of $2 billion of State and Australian Government investment in the Foodbowl Modernisation Project. The Project will see a total 175 gigalitres of water being made available to the environment as well as providing additional water for agriculture and urban users. It is probably the most significant investment in our Catchment since the soldier settlement schemes.

Next year will see a significant reduction in funding of the Goulburn Broken Catchment Management Authority's activities due to change at the Australian Government level. This will place increased pressure on management. Our objective is to continue to fund on-ground works whilst monitoring organisational capacity.

I would like to acknowledge our implementation committees and partners who deliver parts of our program. Partners include landholders, Department of Primary Industries, Department of Sustainability and Environment, Goulburn Murray Water, Goulburn Valley Water, local government, and Landcare. Our management team continues to deliver on-ground works and is to be congratulated for winning the prestigious Banksia Award. Finally I wish to acknowledge Stephen Mills who was Chair of the Goulburn Broken Catchment Management Authority from May 2002 to December 2007 and John Pettigrew who acted as Chair from December 2007 to March 2008.

Dr Huw Davies
Chairperson – Board of Directors

Chief Executive Officer's report on action

2007-08 saw the Goulburn Broken Catchment Management Authority achieve an expanded level of works thanks to strong and enduring relationships with landholders and partner organisations.

Although we faced funding cuts and the eleventh year of distressing drought, the Goulburn Broken Catchment Management Authority has achieved positive results and reached outstanding milestones.

The Goulburn Broken Catchment Management Authority shares credit for works achieved with partners Goulburn-Murray Water, Department of Primary Industries, Department of Sustainability and Environment, Landcare and, of course, our landholders. It is with their cooperation that the Goulburn Broken Catchment Management Authority achieves the objectives of the Regional Catchment Strategy.

Of particular note was the substantial increase in the number of whole farm plans in 2007-08. Both dryland and irrigation farmers continued to plan and develop despite the drought. This is a testimony to the resilience of our farming community.

The Drought Employment Program, again funded by the State Government in 2008, was a tremendous success. The Program employed 80 people affected by the drought to work on high priority environmental projects between January and June. This is reflected in our outputs. Funds from the sale of seven gigalitres of environmental water were used to initiate a Drought Employment Program between July and December and to implement priority environmental water, water quality and river health initiatives. Further funds were distributed to projects to improve understanding of the impacts of the drought, monitor the impact of drought on native fish communities and to enable real time water quality monitoring at high risk sites within the Catchment.

As caretaker of river health, the Goulburn Broken Catchment Management Authority continued to improve its knowledge of river issues through a range of projects. A dry inflow contingency plan was developed for the region, the Victorian environmental flow monitoring and assessment program was initiated for the Broken and Goulburn Rivers and the impact of changed flow regimes through inter-valley transfers was investigated. This has been an important input into the *Northern Sustainable Water Strategy*.

The ongoing drought conditions prompted significant survival-mode planning for the aquatic environment. Lower Goulburn River flows were reduced under a qualification of rights in the winter/spring to increase water for consumptive use. Active management of Broken Creek flows throughout the year minimised poor water quality occurrence, and four wetlands received water in the autumn to provide strategic drought refuges. 1,878 megalitres of Goulburn 'water quality reserve' water was used in the lower Broken Creek. As part of the qualification of rights (section 33 of the Water Act) a further 10,000 megalitres was sold to Coliban Water for drought supply to Bendigo and associated towns.

The Goulburn Broken Catchment Management Authority received public recognition for its achievements this year. Achievements included:

- Winning the 'Water' category in the prestigious Banksia Award
- Winning the Bronze medal in the Australian Reporting Awards for the Annual Report and compliments from the Australian National Audit Office on innovative reporting techniques
- A finalist in the SACS Public Sector Leadership Award.

From July 2008, a client management approach will be implemented across the Dryland. Each landholder will have a client manager with Goulburn Broken Catchment Management Authority staff focussing on priority waterways and Department of Primary Industries staff focussing on priority areas for salinity and biodiversity. Our goals are to:

- Provide landholders a single point of contact
- Increase investment in high priority areas to 80 percent of the total budget over the next two years
- Reduce transaction costs by 10 percent over two years.

This will complement the Dryland Landscape Strategy which is being prepared as part of the Regional Catchment Strategy review. Management structures will be modified to focus on the implementation of the Dryland Landscape Strategy.

The recently announced Australian Government Caring For Our Country Program resulted in a significant drop in funding to the region for natural resource activities. This will pose a challenge for next financial year but management had prepared for a possible funding reduction and is well placed to manage through it.

WJ O'Kane
Chief Executive Officer

PERFORMANCE STORY

Environmental water use in Goulburn Broken wetlands

Reedy Swamp

Over 1,000 megalitres of environmental water was delivered to four wetlands in April and May, to provide habitat for waterbirds and other aquatic dependent species facing local extinction due to the extended dry conditions.

Environmental water was delivered to Reedy Swamp north of Shepparton (544 megalitres), Moodies Swamp near Yabba North (50 megalitres), Black Swamp east of Wunghnu (90 megalitres) and Kinnairds Swamp at Numurkah (413 megalitres). The water was released into Reedy, Moodies and Kinnairds Swamps via works constructed by the GB CMA and its partners in previous years.

The environmental water has stimulated the growth and germination of aquatic plants and attracted a variety of frogs and water birds including the threatened Freckled Duck, Australian Shoveller and Brolga.

Over 3,500 waterbirds have been recorded at Reedy Swamp, swans have successfully bred and a number of other water bird species are exhibiting breeding and courtship behaviour.

Ongoing monitoring of the wetlands is being undertaken by GB CMA, DSE, G-MW, Field and Game Australia and local bird enthusiasts. DPI is also trialling a new acoustic monitoring technique that is showing tremendous promise.

Outputs achieved

Outputs achieved from funds received through Corporate Plan 2007-08

Output	Achieved	Target	% achieved
Remnant vegetation fenced, hectares	5,040	535	942
Long-term conservation agreements, hectares	373	1,000	37
Indigenous revegetation planted, hectares	460	625	74
Irrigation drains built, kilometres	9	7	129
Reuse systems installed, numbers	48	45	107
Irrigation systems improved, hectares	8,967	6,840	131
Groundwater pumps installed, numbers	25	12	208
Weeds treated, hectares	11,191	331	3,386
Rabbits and foxes treated, hectares	45,770	37,000	124
River or stream erosion treated, kilometres	556	231	241
Fishway structures, numbers	8.3	5.5	151
Fish habitat installed, numbers	30	50	60
Threatened species projects, numbers	37	37	100
Whole farm plans prepared, numbers	369	270	137

Performance

Well below target (< 50%)
Below target (50–79%)
On target (80-109%)
Exceeded target (>110%)

Tailoring outputs for decision making

Outputs are achieved through integrated efforts of individuals and organisations across many different 'investment areas'.

Outputs shown in the table and the graphs on the following two pages are from a more detailed set. For detailed outputs for each implementation committee area, see the table in 'Outputs – detailed list of achievements' section from page 126. Outputs relating to each investment area are shown in 'The Environment – details of annual performance and long-term progress' and 'The Business – details of annual performance and long-term progress'.

Outputs shown in this report are useful for decision making by government investors, GB CMA senior staff and the GB CMA Board. Monitoring finer-scale outputs and inputs are more appropriate for individual project and sub-project decision making and are not shown in this report.

The GB CMA negotiates investment amounts and output targets to be delivered each year with Victorian and Australian Governments. Outputs are often common to several investment areas and targets and achievements are aggregated from projects within those areas.

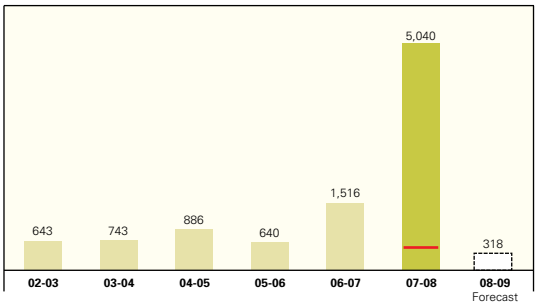
Targets and achievements do not include outputs delivered beyond GB CMA's direct control, especially by landholders who voluntarily pay for and undertake on-ground works. However, this data is critical for decision making and is captured by other means to inform long-term decisions.

Outputs achieved 2002-03 to 2007-08 and forecast 2008-09

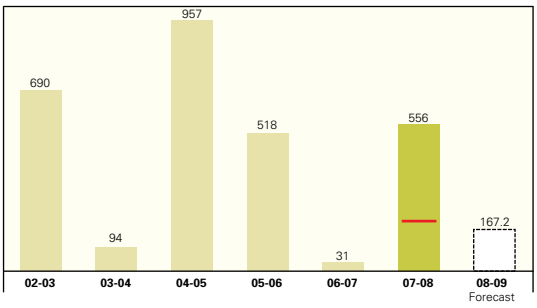
Exceptional achievement due to Drought Employment Project:

332%

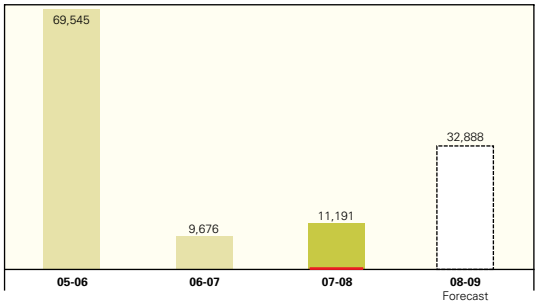
Remnant vegetation fenced, ha



River or stream erosion treated, km



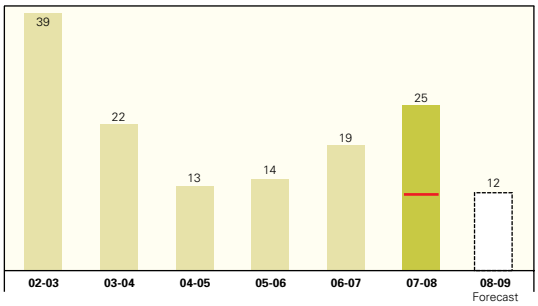
Weeds Treated, ha



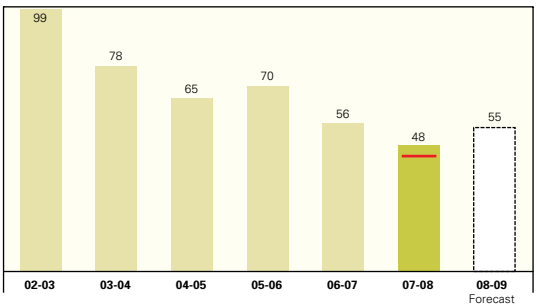
Strong interest due to decade-long dry period:

208%

Groundwater Pumps Installed, no.

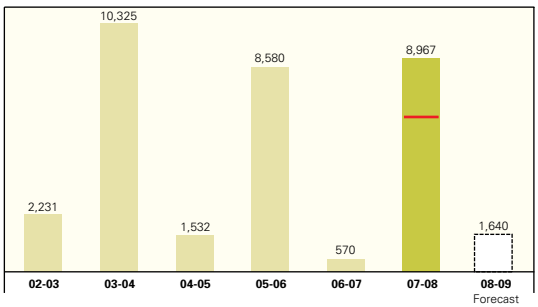


Reuse systems installed, no.

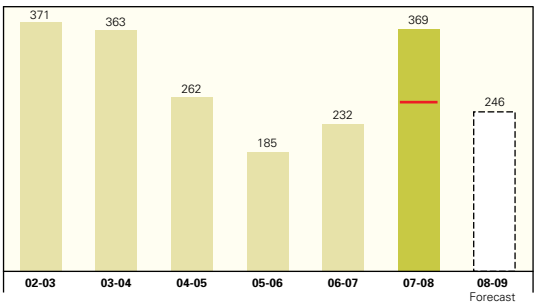


Strong interest due to decade-long dry period and Foodbowl Modernisation project:

Irrigation systems improved, ha



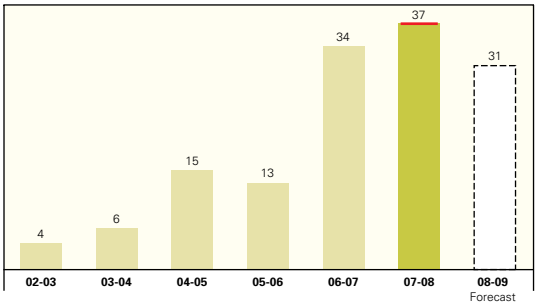
Whole farm plans prepared, no.



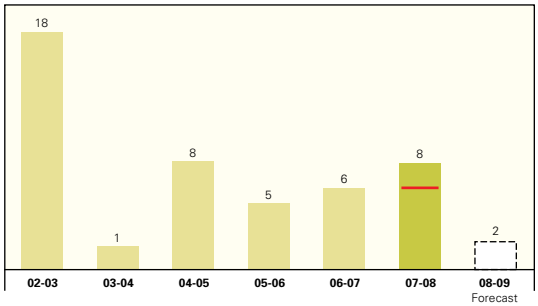
Target for 2007-08

On target:

Threatened species projects, no.

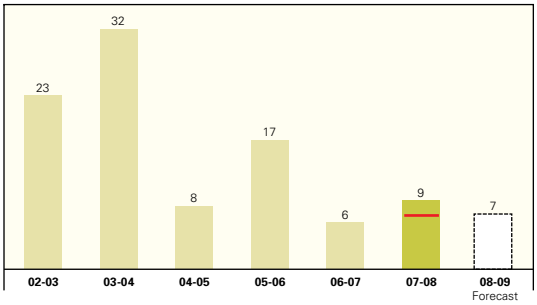


Fishways structures, no.

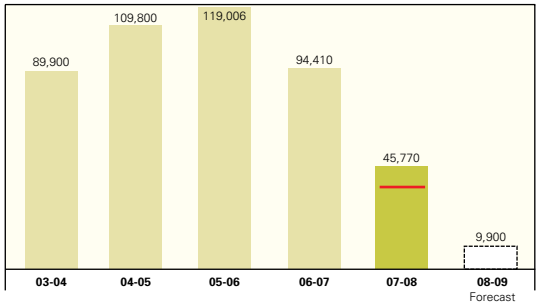


On target but funding availability reducing:

Irrigation drains built, km

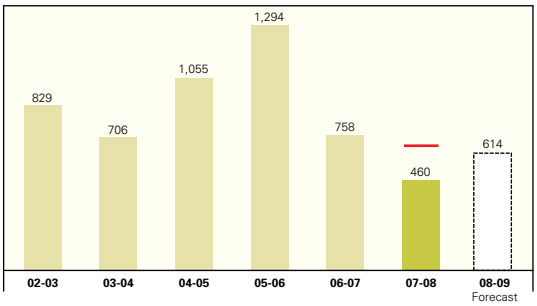


Rabbits and foxes treated, ha

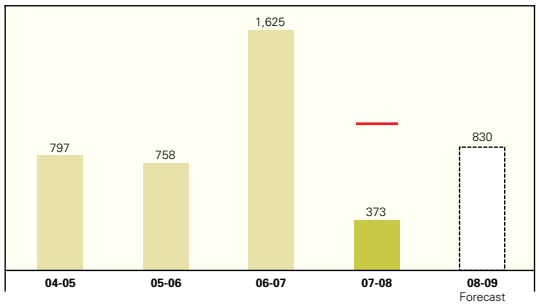


Performance impacted by dry conditions:

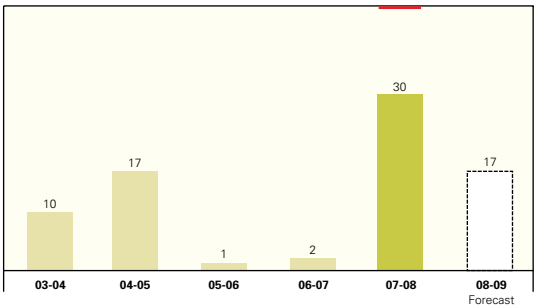
Indigenous revegetation planted, ha



Long term conservation agreements, ha



Fish habitat installed, no.



Resources also directed to Drought Employment Program

Target for 2007-08

Output targets are generally forecast to be low in 2008-09 (as shown in the above graphs) because of reduced indicative funding from Australian and State Government programs. The forecast for the number of whole farm plans is likely to increase on what is shown and exceed 2007-08 achievements due to expected Northern Victoria Irrigation Renewal Project funding (NVIRP) for the Foodbowl Modernisation project.

PERFORMANCE STORY

Banksia Environmental Foundation 2008 Water Award for 'Vision for the Broken River Basin'

In 2008 the Goulburn Broken Catchment Management Authority won the prestigious Banksia Environmental Foundation's Water Award for the 'Vision for the Broken River Basin' project. This recognition reflects the outstanding community environmental programs in the Broken River basin.

Key initiatives included planning for the decommissioning of Lake Mokoan (returning the system to a world class wetland), protecting the Broken Boosey Nine Mile State Park and Natural Feature Reserves program, construction of the Tungamah pipeline and delivery of a three-year large-scale river restoration initiative along the Broken River, Broken Creek and major tributaries.

Goulburn Broken Catchement Management Authority Chairperson, Dr Huw Davies, was presented with the award by the Minister for Environment and Climate Change, the Honourable Gavin Jennings MP.

Analysis of annual performance and long-term progress

Integration of separate investment areas

The GB CMA focuses on 15 highly connected 'investment areas' under 'The Environment' and 'The Business'. These investment areas relate closely to the different investment areas within government.

Service delivery is integrated across these investment areas to varying degrees and occurs at all levels. Integration is obvious at the scale of whole farm plans and is evident in the information in the 'Implementation committees deliver results' section, especially in the performance stories. Integration is not so obvious at the strategic level because strategic approaches are usually required to focus on discrete investment areas framed by government investors. The *SIR Catchment Implementation Strategy* and the *Dryland Landscape Strategy* (DLS, in preparation), provide a cross-investment area perspective and help achieve strategic integration. Planning for large projects is increasingly integrated across the investment areas.

Three levels of analysis

Decision makers need to know annually whether funded actions were achieved.

It is also critical for decision makers to compare progress in implementing actions listed in strategies with the change in condition of the issue of interest. This comparison can alert us to under or over-achievement and force us to consider questions such as:

- Was the original strategy appropriate?
- Have circumstances (such as new knowledge or different weather patterns) changed sufficiently to warrant a revised strategy?
- Does the investment mix need to be modified?

Data is organised to inform three critical and connected levels of analysis, as shown in the table below.

Justification and methodology of ratings

The sections on 'The Environment – details of annual performance and long-term progress' and 'The Business – details of annual performance and long-term progress' justify the ratings in the tables on the following two pages Further details, including graphs and reports, are on the GB CMA's website and in relevant sub-strategies of the RCS.

The methodology behind the ratings of performance and long-term progress shown on the following two pages is described on pages 68 and 69.

Evidence for three levels of analysis

Analysis level	Analysis terminology	Typical question used to assist analysis	Examples of evidence to inform analysis
1	Annual performance	1. How did we go this year against what we said we would do?	Outputs achieved and $ spent against targets set in the Corporate Plan
2	Long-term strategy implementation progress	2. How have we gone against what we said we would do when we wrote the (various) strategies?	Outputs and assumptions of their impact listed in strategies
3	Catchment condition change	3. How healthy is the 'thing' we are managing?	Resource condition; tipping points; indicators of resilience, adaptation and transformation responses

2007-08 investment and performance and long-term strategy implementation progress within investment areas

Investment area	Investment* (including partnership funds)				Performance****			
	2005-06	2006-07	2007-08	Forecast + 2008-09	Annual (2007-08)	Long-term strategy implementation progress		
					Outputs	Strategy life**	Outputs	Certainty of rating
The Environment	$000	$000	$000	$000				
1 SIR salinity: watertables and River Murray salinity	12,837	14,070	12,060	6,620	On target	1990-2020	On target	High
2 Dryland salinity: watertables and River Murray salinity	3,179	3,040	2,960	1,890	On target	1990-2020	Below target	Medium
3 Environmental flows and water supply	n.a.	part of no. 4	part of no. 4	part of no. 4	On target	2004-	Below target	Medium
4 Riparian and instream habitat and channel form	5,941	9,579	13,020	3,780	On target	2005-2015	Below target	High
5 Water quality (nutrients) in rivers and streams	Part of no. 4	Part of no. 4	Part of no. 4	Part of no. 4	On target	1996-2016	Exceeded target	High
6 Biodiversity	1,975	2,065	2,050	1,040	Exceeded target	2000–2020; 2004-2007	On target	Medium
7 Climate change	20	25	25	50	On target	No strategy yet	not applicable	
8 Flood protection	254	379	400	270	On target	2002-2012	Exceeded target	High
9 Pest plants and pest animals	1,142	1,100	1,140	1,200	On target	2000-2005	Below target	Low
The Business								
A Corporate and statutory operations	1,081	1,709	1,700	1,050	On target	Corporate plan	On target	Medium
B Our people	included in all other investment areas				On target	2005-2008	On target	Medium
C Planning and responding	-	Part of A	Part of A	Part of A	On target	Corporate plan	Exceeded target	Medium
D Knowledge	–	Part of A	Part of A	Part of A	On target	2004-2008	On target	Medium
E Relationships, partnerships and community capacity***	1,536	1,490	3,660	1,990	On target	various	On target	Medium
F Our environmental footprint				Part of A	On target	2007-2010	On target	High

* Investment figures do not include interest before 2007-08 and includes funding to other partners.

** Strategies vary in formality and comprehensiveness. Refer to details sections for list of strategies.

*** Estimate; does not include SIR costs prior to 2007-08.

**** Performance ratings are explained in details sections of this Annual Report

\+ Based on confirmed funding advice at August 2008.

Categories:	Catchment condition	Certainty of rating
	Very poor	Very low
	Poor	Low
	Satisfactory	Medium
	Good to excellent	High

Change in condition of the Catchment related to investment areas between 1990 and 2008

Investment area	Catchment condition* change			
	1990**	2008	Certainty of ratings	Comments
The Environment				
1 SIR salinity: watertables and River Murray salinity	Poor	Good	Medium	Very large investment in water-use efficiency since 1990 means system can better withstand a run of wet years. Major investment in Foodbowl Modernisation project in next few years will improve condition in terms of salinity further.
2 Dryland salinity: watertables and River Murray salinity	Poor	Satisfactory	Low	Impact of record decade-long dry period on land salinisation and river salinity has dwarfed the impact of human intervention with reduced rainfall levels reversing the rising watertable trend in much of the upland areas. However, in the riverine plains there is a mixed response: some areas show continued rising trends in groundwater levels and other areas are falling in response to increased groundwater use, at least locally. This affects the confidence we have in targets we have set. Work is underway at regional and Australian Government levels, through the MDBC, to define targets in light of likely climate change and an extended dry climatic phase.
3 Environmental flows and water supply	Poor	Very poor	Medium	Stress on systems from decade long dry period since 1997 has highlighted vulnerability of systems. Dramatically increased water-use efficiencies in some sectors have been countered by reduced availability. Proposed increases in Environmental Water Reserve will improve resilience. There has been increased planning for the lower inflows under expected drier conditions.
4 Riparian and instream habitat and channel form	Poor	Satisfactory	Medium	Extensive works programs have improved state of system for terrestrial and aquatic species and contributed to improved water quality.
5 Water quality (nutrients) in rivers and streams	Very poor	Satisfactory	High	Became an issue in early 1990s. Installation of major waste water treatment facilities, better managed irrigation (including reuse dams) and waterways revegetation means that the whole of catchment system has dramatically reduced phosphorus loads and reduced risk of algal blooms.
6 Biodiversity	Poor	Poor	Medium	Many systems that support biodiversity are vulnerable to changing state. Habitat loss and fragmentation threatens the viability of many ecosystems.
7 Climate change	Poor	Poor	Low	Not considered a major issue in 1990 even though it probably was. Recent dry years have stretched many systems to the limits but people have learnt to adapt. Although we accept that climate change is a reality, we do not know how much of this extremely dry phase is due to a fundamental shift in climate and how much is due to climate variability.
8 Flood protection	Very poor	Poor	Medium	Built environment in better state with improved pre-development planning and flood response systems. Natural environment better placed to receive floodwater, however large opportunities remain uncaptured.
9 Pest plants and pest animals	Poor	Poor	Medium	Terrestrial and aquatic environments remain vulnerable to new and emerging weeds. Better understanding of what and how to target now, although capacity to deliver changes has declined in some areas.
The Business				
A Corporate and statutory operations	Poor	Satisfactory	Medium	Advent of CMAs in 1997 rationalised institutional arrangements.
B Our people	Satisfactory	Satisfactory	Medium	Skills, experience and continuity of regional natural resource management staff remain at high levels. GB CMA processes for managing staff compliance issues, staff succession, and balancing age, gender etc are well established.
C Planning and responding	Poor	Satisfactory	Medium	Strategies and implementation approaches developed for many issues, such as integrated catchment management, water quality, biodiversity, floodplain management, river health management. Positioned to rapidly respond to emerging issues.
D Knowledge	Poor	Satisfactory	Medium	Knowledge base in many areas now far exceeds capacity to apply it. Developing system resilience approach is likely next phase.
E Relationships, partnerships and community capacity	Poor	Poor	Low	Constant focus for effort. Knowledge systems of agency-landowner relationships in the Catchment has improved and this is resulting in better targeting, although capacity of landowners to deliver change has declined in many areas because of drought. Challenge emerging in western world since 1990 is rapid turnover of staff in all jurisdictions. Corporate memory at all levels is a major issue. Better information systems being built to inform new staff quickly so they can more readily respond to needs.
F Our environmental footprint	Very poor	Poor	Low	Environmental concern became mainstream in the early 1990s. Since then, there has been dramatic growth in awareness of how we can improve our everyday practices and behaviours to reduce impacts. There is still significant room for improvement. The inclusion of this issue as an investment area in this year's Annual Report reflects the growth in its importance for organisations.

* Ratings consider evidence of resource condition, resilience, adaptability and transformability of the Catchment related to the investment area such as indicators of resource condition, social and economic health and catchment management systems. Further background on Catchment condition is on page 68 under 'Understanding progress and ratings'.

** Ratings for 1990 have been determined using our understanding in 2008 of what the situation was like in 1990. 1990 is an appropriate reference year because it was about this time that integrated catchment management was born.

Categories:	Catchment condition	Certainty of rating
	Very poor	Very low
	Poor	Low
	Satisfactory	Medium
	Good to excellent	High

Major issues drawn from performance and progress tables

The following is an overview of information presented in the tables on the previous two pages.

The Environment

The biophysical environment has been affected dramatically by the changing climate and the GB CMA and its partners are key participants in the regional response. The GB CMA's strategic responses are adapting to climate change, mitigating greenhouse gases, and aligning bio-sequestration activities with Catchment priorities.

As for 2006-07, interest in natural resource management continued in 2007-08 despite the extended dry period, which now runs to 11 years. This interest can be explained by mutually beneficial activities, such as irrigation reuse systems, good partnerships and networks, and also by generally increased community awareness of the importance of the environment.

During 2007-08, the State and then the new Australian Government committed $1 billion each to the Northern Victoria Irrigation Renewal Project (NVIRP), which will result in water savings to be shared between Melbourne (100 gigalitres), the environment (175 gigalitres) and irrigators (175 gigalitres). Implementation has commenced and the GB CMA is working closely with the NVIRP to make the link between the new delivery system and farm works to maximise the benefits. This has meant a change in targeting of the farm program extension activities and incentives. This massive investment in infrastructure will add to the water savings already made in the SIR from water-use efficiency projects over the past 20 years.

NVIRP is likely to have complementary salinity and water quality benefits. This will help to negate the ongoing decline in funding specifically for irrigation salinity management. However, the long period of drought has meant that irrigators lack funds to invest in complementary farm works and this may slow down irrigation modernisation.

Last year we posed some fundamental questions about the overall strategic direction of salinity, biodiversity and water yield trade-offs. We are dealing with these questions through the *Dryland Landscape Strategy* and the *Shepparton Irrigation Region Catchment Implementation Strategy*. We are pulling together the thinking and setting new directions and these strategies will be completed in 2008-09. See performance stories on pages 20 and 23.

The fencing of 5,040 hectares of remnant vegetation in 2007-08, with major assistance from the Drought Employment Program (4,120 hectares), is a terrific result. Although we are generally meeting strategic targets set in 2000 for native vegetation, the legacy of broad-scale clearance following European settlement coupled with impacts of climate change means that the security of many species of the Catchment's flora and fauna remains uncertain. Our strategic approach to biodiversity management, including targets, will be reviewed in 2008-09.

The Victorian Government injected $2.9 million into the Drought Employment Program between January and June. Up to 80 people from the rural sector affected by drought were employed. This resulted in protection of highly valued assets along waterways, wetlands and terrestrial environments.

The GB CMA manages the environmental water reserve and the following allocations were made:

- 1.0 gigalitres of environmental water allocation to Reedy Swamp, Kinnairds Swamp and Black Swamp
- 1.9 gigalitres of the Goulburn water quality allowance used to manage Broken Creek water quality problems
- 10 gigalitres sold to Coliban Water to provide drought supply to Bendigo and associated towns.

The Business

GB CMA continues to drive efficiency and we believe this has resulted in the lowest percentage of overheads relative to on-ground works of all Victorian CMAs, and the highest levels of on-ground works.

GB CMA partnerships with Victorian and Australian Government agencies are aided by relatively long continuity of regional staff and community involvement in natural resource management.

People are the organisation's most valuable asset. As we move to a more competitive funding and employment situation from 2008-09, challenges from changing natural resource management programs (especially at Australian Government level) heightens the need to retain highly skilled and effective staff in the region.

A staff satisfaction survey yielded over 10 percent higher results than the water sector average for leadership and work conditions including work-life balance. A human resources policy and procedures framework was endorsed and 25 percent of staff completed Certificate IV in project management.

The three Implementation Committees play a vital role in overseeing implementation and ensuring community participation in the decision-making process, especially via Landcare groups and local government.

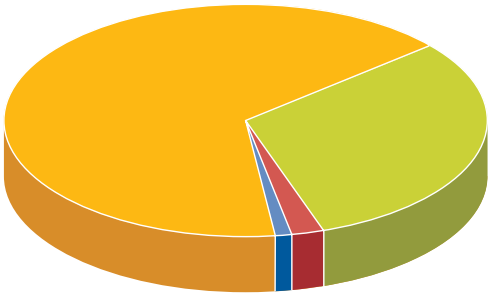
The Victorian Government released a Green Paper on *Land and Biodiversity at a time of Climate Change* in 2008. The Green Paper proposes many approaches to managing Victoria's land and natural resources. The role of CMAs and other partners needs to be clarified in order to achieve a collaborative and efficient approach to natural resource management. The Goulburn Broken approach has been to focus on developing clear strategies focused on achieving long-term outcomes with all partners. Our regional processes and activities would be greatly enhanced by a well developed statewide integrated natural resource management strategy.

This Annual Report includes reports on progress towards long-term outcomes. It is important that the GB CMA is not distracted from achieving long-term natural resource management outcomes but remains agile and flexible to respond to many and varied short-term opportunities. The regional community brings to the table about twice as much funding (cash, in-kind or both) as governments for natural resource activities. The GB CMA enables this to happen in the right spots for the right reasons through networks, partnerships and co-ordination.

The Australian National Audit Office (ANAO) reported in 2007-08 that it had difficulty determining what progress had been made on environmental outcomes in natural resource management at the national and regional scales and this issue of 'accounting for nature' was reinforced by the Wentworth Group of Concerned Scientists. The GB CMA has focused on this problem at the regional scale for several years and the 2007-08 Annual Report provides a clear assessment of how the region is progressing. The ANAO provided feedback on the 2006-07 Annual Report and said that the GB CMA takes ... *"a comprehensive approach using quantitative and qualitative data and measure performance over time. Your report provides what you consider has been satisfactorily achieved and where results are below expectations. Your report is also well presented and easy to read. You also highlight ongoing risks such as the impact of climate change. All of these aspects are consistent with good practice. You correctly point out that there is much in your annual report that would assist national reporting if it was applied more generally."*

The GB CMA's inaugural entry into the prestigious Australasian Reporting Awards yielded a Bronze Award for its 2006-07 Annual Report. This is further evidence of the quality of reporting processes.

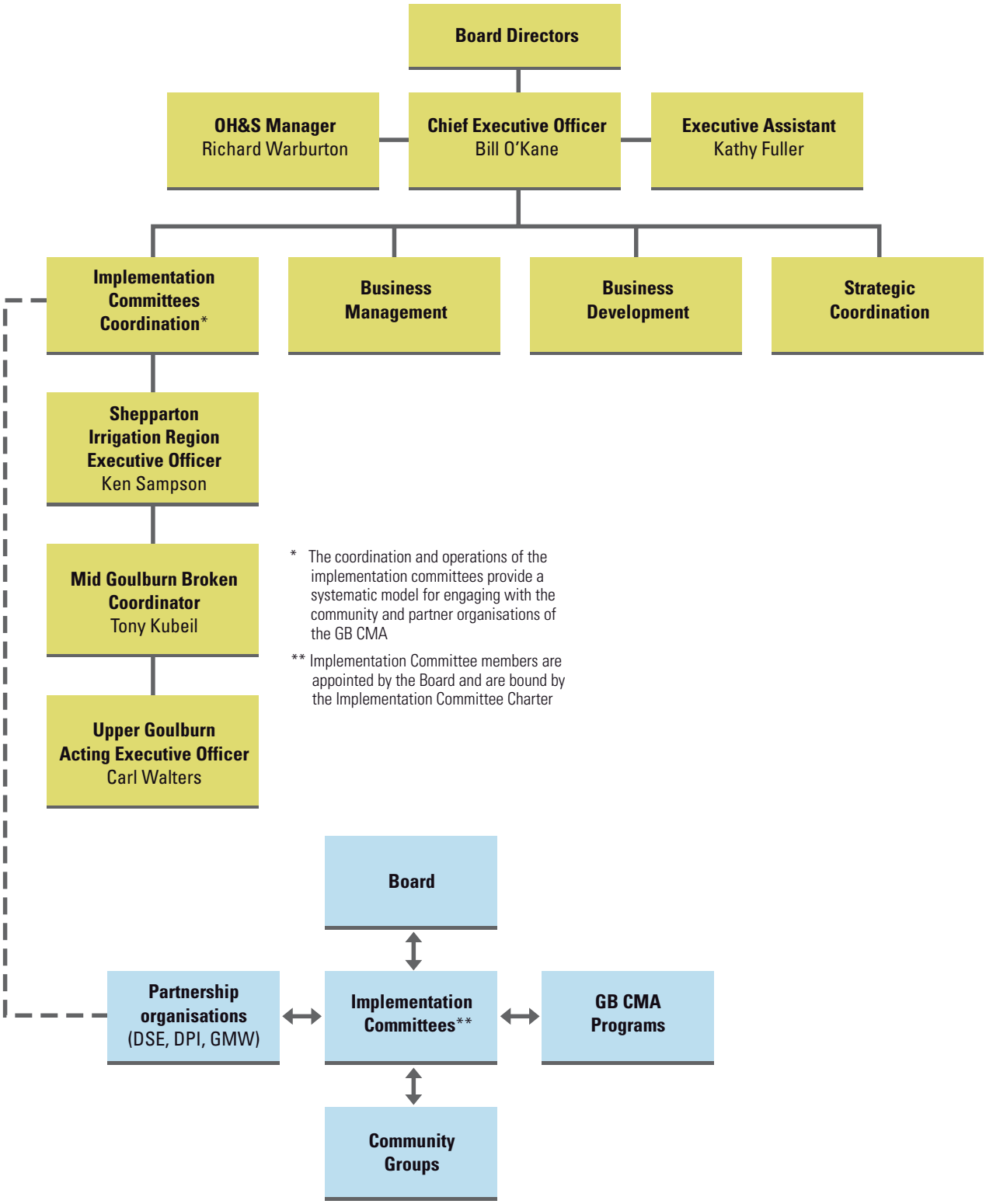
Goulburn Broken investment share



- The Environment - Community investment $63 million – 62.9%
- The Environment - Government investment $31.7 million – 31.7%
- The Business - Relationships, partnerships and community capacity 3.6 million – 3.6%
- The Business - Corporate and statutory operations, Planning and responding, Our people, Knowledge $1.8 million – 1.8%

Environmental water being delivered to Black Swamp

Community engagement structure



Implementation committees deliver the results

Under the provisions of section 122C of the Water Act 1989 and section 19J of the CaLP Act, the GB CMA established three geographically based implementation committees (ICs) that are pivotal to the GB CMA's partnership model:

1 Mid Goulburn Broken Implementation Committee (MGBIC)
2 Shepparton Irrigation Region Implementation Committee (SIRIC)
3 Upper Goulburn Implementation Committee (UGIC).

The areas covered by the ICs are shown in the map on page 3. The ICs develop, oversee and implement an annual integrated natural resource management program within their areas. The ICs have a charter with the Board for responsibilities such as:

- To provide advice to the Board on GB CMA policy, the Regional Catchment Strategy (RCS) and resource management objectives
- To develop sub-catchment strategies which communicate natural resource management issues and priorities and encourage partnerships with agencies, local government and the community
- To prioritise and provide comment on proposed works programs and to negotiate an annual business plan with the Board
- To monitor implementation performance of investment plans and works programs.

The IC model enables strong linkages, communication and consultation with the community, partner organisations and the GB CMA. IC members are encouraged to maintain close contact with their constituency including Landcare, local government and natural resource based industries. ICs ensure implementation of the Goulburn Broken Community Landcare Support Strategy and report on Landcare outcomes achieved for the Catchment.

ICs have eight community representatives appointed by the GB CMA and one non-voting representative from each of DSE, DPI and G-MW.

This section includes performance stories that show how GB CMA ICs are committed to:

- Stakeholder involvement
- Integration of disciplines
- On-ground works.

The table in the 'Outputs – detailed list of achievements' section on pages 126 and 127 provides a breakdown by IC of performance (against output targets) and comparable figures over previous years.

See 'Investment area E – relationships, partnerships and community capacity' in 'The Business – details of annual performance and long-term progress' section for further description of how the community is engaged, especially through ICs to assist delivery of the RCS.

Yallagalorah Creek revegetation site

Mid Goulburn Broken Implementation Committee

Report compiled by: Tony Kubeil, Lilian Parker

Committee members are (L-R): Menon Parameswaran, Tony Kubeil (coordinator), David Dore, Doug James, Sally Simson (Deputy Chair), Bernie Ryan, Melinda Shepherd
Absent: Dougal Gilmour, Heather Bradbury, Dave Smith (DPI), James Burkitt (G-MW), Greg Pell (DSE)

Relationships, partnerships and community capacity

Annual MGBIC Landcare Awards

Alan Neander of the Warrenbayne-Boho Land Protection Group was recognised for outstanding achievement as a volunteer. Alan has been a member of the group since 1997 and was elected Chair in 2002 for four years. He was also Treasurer from 2003 and was instrumental in setting up the position of a part time coordinator. Alan is on the Facilitators Steering Committee and is always involved in all projects, in particular the threatened species project.

The MGBIC added an award to recognise the efforts of groups who have exceptional achievements for the year. This year the Strathbogie Tableland Landcare Group was successful with their presentation of the bridge to bridge project.

The Strathbogie Tableland Landcare Group also gained a community education grant from the MGBIC to produce a locally focussed river health and water quality booklet. This was launched by Member for Benalla Bill Sykes as part of a field day in February and over 60 locals attended.

Victorian Landcare Network Forum – Mt Buller November 2007

Over 120 Landcare coordinators and facilitators from around Victoria attended the three day forum to learn, share and contribute community engagement experiences. The event ran extremely well and was a credit to the efforts of GB CMA Landcare support staff. Through participant evaluation it was revealed that for over half of the people who attended the forum, the main aim was to network with other Landcare professionals and learn new skills. Sixty three percent of participants said that the forum exceeded expectations and 90 percent said that the presentation and delivery of the forum was very good.

Overall the forum was a great success; "the best ever" was one of the comments received.

Groundwater and Salinity Management Working Group

G-MW's Sub-surface Water Management Team coordinated the inaugural meeting of GB CMA's Groundwater and Salinity Management Working Group held in Euroa in September 2007.

The new working group is responsible to each of the Mid Goulburn Broken, Upper Goulburn, and the Shepparton Irrigation Region Implementation Committees. Membership of this committee is comprised of community members from each of the implementation committees, and from each water service committee area.

The new working group provides advice to the GB CMA including its ICs on a range of groundwater and salinity related issues.

Above: Groundwater and Salinity Management Working Group

Planning and responding

Lake Mokoan

The MGBIC continues to be involved in the planning and response to the decommissioning of Lake Mokoan. Having representation on both the Future Land Use Steering Committee and the Return to Wetlands project management group allows for good communication to and from the IC.

MGBIC soil carbon forum

A carbon forum was held by the MGBIC to give landholders an opportunity to participate in a workshop, creating a recipe for improved carbon sequestration in the MGBIC area and beyond. Guest speakers such as 'holistic grass farmer' David March enthralled the 60 community members attending. David demonstrated that allowing native grasses to self seed naturally combined with rotational grazing regimes, he had achieved improved pasture, higher stocking rates with substantially lower inputs such as fertilisers. Other speakers included Ben Keogh from Landcare Australia who explained the very complex carbon trading issue, as well as highlighting the Landcare Australia carbon trading model Carbonsmart. This alerted landowners to the opportunities of increasing income from retired land under indigenous vegetation.

Works and extension

A date with the environment (Broken Boosey Calendar)

Once again the Broken Boosey Conservation Management Network (CMN) has been able to combine quality natural resource management information and extension messages into a calendar that takes pride of place on office walls around the Goulburn Broken Catchment. This is the second year that the network has produced a calendar.

Whole farm planning

Whole farm planning courses covered topics such as land classing, soils management, fire awareness and prevention, drought management, farm water supply, biodiversity and native vegetation management, pest plants and animals, pasture and grazing management.

Environmental management incentives for landholders to undertake works have resulted in 585 hectares of terrestrial remnant vegetation fenced and 176 hectares revegetated. Other works contributing to catchment improvement through revegetation include erosion stabilisation and plantations for greenhouse emission reduction. With ongoing drought conditions more landholders in the MGBIC area installed stock containment areas for livestock feeding.

Vision for the Broken Basin

The project is a State funded Large Scale River Restoration initiative that protects the Broken River, Broken, Boosey and Nine Mile Creeks and tributary systems. It involves the whole of the community, with partners including the GB CMA, G-MW, local government, Parks Victoria, DSE and landowners. Achievements this year included:

- Over 20 kilometres of riparian improvement works, including contributions to full fencing of the Broken Boosey State Park
- Identification of aboriginal cultural heritage assets in priority work zones along the Broken and Boosey creeks
- Planned establishment of habitat pools on Broken and Boosey creeks
- A regulator upgrade at Black Swamp
- Designs for providing fish passage through two barriers on the Broken Creek completed (which will be implemented in 2008-09)
- Monitoring of the impacts of reversing the flow regime in the Broken and Boosey Creeks
- Monitoring of the fishways on the Broken Creek and the Broken River to determine effectiveness.

Engineering options program

This is the final year of the groundwater exploration and development incentives program and technical development project. The program saw one investigation and bore installed to finalise all outstanding commitments to landholders.

A draft report on the engineering options program for the MGBIC and UGIC areas was produced. This report summarises works implemented under the program and learnings gained.

Knowledge

Landcare promotes pasture cropping

The decade long drought and changing market conditions have driven many farmers to the limits of their resources, which has led to the realisation they cannot continue with current farming practices. Over 120 people attended a 'doing it differently' farming workshop to look for new solutions. The worksop was held by Landcare groups within the Goulburn Broken and North East CMA areas. Colin Seis (pasture cropping) and Peter Andrews (natural sequence farming) spoke to the group broadly about their areas of expertise and experiences from on farm application.

Following on from the workshop, over 40 landowners expressed an interest in further information. The Goorambat Landcare Group was successful in obtaining funding to host a two day intensive 'No kill – pasture cropping' workshop. Twenty landowners attended to hear, see and practise the skills and techniques required in the application of no kill farming. It was an extremely valuable exercise and has allowed landowners to learn new techniques and to remain profitable at a time when climatic conditions are testing traditional farming techniques.

PERFORMANCE STORY

GB CMA and local government working together for biodiversity

The Roadside Biodiversity Risk Management Protocols project is a successful partnership between the GB CMA and local government. The project helps local government address biodiversity conservation issues, particularly those relating to road reserves.

Moira Shire Council and GB CMA coordinate the project and the project reference group includes VicRoads, DSE and the seven other councils in the Catchment.

Above: Training is shown to be a key element of effective biodiversity risk management

Mutual goals consistent with objectives of the GB CMA Regional Catchment Strategy, council business plans, roadside management plans and numerous local, State and Australian Government environmental strategies were established at the start of the project.

Roadside biodiversity risk management protocols were developed as a tool to aid development and implementation of procedures to address potential threats.

The next and most essential element of the project is the development and delivery of specialised, relevant and practical training to a broad range of local government staff. Over 160 people have participated in accredited training courses since the project's inception and as the project approaches its second year more courses are planned.

The project has demonstrated that good environmental work practices do not need to conflict with other road management objectives, are not costly and can result in financial savings to councils.

Other benefits to local government include a better informed and more highly skilled and accredited workforce. These benefits will also flow on to improve environmental awareness in the community.

For biodiversity, the benefits lie in the reduced risk of destruction and impact of degrading processes such as weed invasion, herbicide drift, shrub and ground layer removal and loss of tree hollows and ground litter.

There is also clearly a goodwill benefit that flows from the project, which builds and strengthens the relationships between the partners involved. Planning is underway to ensure the continued success of the project.

PERFORMANCE STORY

Dryland Landscape Strategy – A new approach for the Dryland

The GB CMA's Dryland Landscape Strategy (DLS) will be published in late 2008. The DLS has been in development since 2006, following recognition that the landscape of the dryland is changing rapidly, and a new natural resource management approach is needed. The DLS promotes a shift to a new, integrated systems approach in the dryland part of the Goulburn Broken Catchment. This means integration at all levels of the business, from planning to operations and service delivery. The DLS also heralds a change in emphasis from a threat based approach (pest plants and animals, salinity) to focussing efforts on protecting the Catchment's most important natural assets.

The DLS introduces new strategic directions that outline our focus for the next three years.
These strategic directions will possibly include:

- Lift the scale of positive on-ground change across the landscape
- Grow and diversify investment in natural resource management
- Promote environmentally sustainable and viable production systems
- Boost targeted participation in natural resource management
- Strive to be a leader in catchment management
- Adapt to climate change.

The process of developing the DLS has already yielded benefits through bringing different partners (internal, external and the community) together to consider future directions, and assisting the identification of large scale on-ground projects that have been bid for under the Australian Government's Caring For Our Country program.

The DLS will be released for public consultation in late 2008, before being finalised by the end of the year.

PERFORMANCE STORY

Broken Boosey State Park fencing completed

The Broken Boosey State Park is now totally free from live stock thanks to the Broken Boosey Conservation Management Network, staff from the waterways program at the GB CMA and the GB CMA's Drought Employment Program crews.

Incentives valued at more than $300,000 have been provided by the GB CMA to landholders with properties adjoining the Broken Boosey State Park since it was proclaimed in 2002.

More than 50 landholders have completed grants issued by the GB CMA to erect almost 54 kilometres of fencing to protect around 412 hectares of remnant vegetation within the State Park. Incentives for off stream water were also provided to landholders who had previously relied on the creek as a source of water for their stock.

Fencing riparian zones protects remnant vegetation and allows us to manage habitat for a range of native species. It also leads to an improvement in water quality due to a reduction in sediments and nutrients entering the waterway.

PERFORMANCE STORY

Drought Employment Program

The main Drought Employment Program in 2008 was a six month initiative that employed 80 of the region's drought affected farmers, farm workers and other drought affected individuals to carry out projects and works that provided an environmental benefits.

Above: Construction of revegetation plots on Murray River under the Drought Employment Program

The funding for this project was provided by the State Government as part of the drought response package, and allowed for employment costs to be covered as well as materials for project implementation. The flexibility of the project was its greatest strength, where projects that had struggled to be done under the grants programs could be delivered through direct employment of workers.

Over 40,000 hours of on-ground work was completed as part of the program through direct supervision by GB CMA Waterways staff and also through the participation of the partner agencies including DSE, DPI, G-MW, Parks Victoria, Trust for Nature and several local governments.

Over 300 projects were established within the Catchment, which provided improved protection and enhancement of environmental values in the region and achieved:

- 212 kilometres of high priority waterways protected
- 3,780 hectares of frontages protected
- 1,640 hectares of wetlands protected
- 710 water savings projects
- Revegetation
- Weed control
- Public land maintenance initiative.

Shepparton Irrigation Region Implementation Committee

Report compiled by: Terry Batey, Ken Sampson

Committee members are (L-R): Peter Howard (GB CMA), Peter Gibson (Chair), Steve Farrell, John Gray, Nick Ryan, James Burkitt (G-MW), Tony Long (DSE), Roger Wrigley, Carl Walters (G-MW), Ken Sampson (GB CMA Executive Officer), Allen Canobie,
Absent: Peter McCamish(Deputy Chair), Bruce Cumming (DPI), Helen Reynolds

Relationships, partnerships and community capacity

Irrigation Drainage Memorandum of Understanding (IDMOU)

Work on the implementation of the IDMOU in the Catchment focused on completing water quality target setting for irrigation drainage in the Broken Creek catchment using the resource condition and management action decision support system. Total phosphorous and suspended sediment are the key irrigation drainage related water quality parameters.

Work also continued on the development of a catchment and asset operation plan for the whole of the Shepparton Irrigation Region (SIR) and the Barmah-Nathalia sub-catchment. The IDMOU was promoted at two conferences in Melbourne, a poster presentation on the application of the decision support system (DSS) to Broken Creek was made at Enviro08, and an oral presentation of the background to the IDMOU and the implementation of the DSS were made at Irrigation Australia 2008.

Brays Swamp

Works were completed to assist with the delivery of environmental flows to the wetland. This included lowering the existing overflow spillways by 230 millimetres and installation of an automated penstock gate on the flow restriction structure downstream of these spillways. An operating procedure is to be developed to ensure flows are captured during appropriate rainfall events.

Knowledge

Best management practices for farm groundwater use

Groundwater pumping is an essential part of salinity management in the SIR. A research study completed this year looked into the opportunities to improve irrigation water use efficiency through improving the use and management of the region's shallow groundwater resource.

The main finding of the study was that shallow groundwater use occurs within a complex framework of biophysical, institutional and socioeconomic constraints. Each groundwater pump is unique in respect to its enterprise setting, yield, salinity and re-use circumstance. This highlights the fact that any future improvements in the use of that water will require tailoring to suit each pump.

During the course of the study, the impact of reduced surface water availability and declining groundwater levels changed how shallow groundwater is viewed and used. The study highlights that while the shallow groundwater resource is a valuable drought reserve which is used effectively by many enterprises to improve irrigation efficiency and stretch surface water resources further, lack of recharge has highlighted its limits.

The reports produced from this study provide valuable reference documents that capture much of the detail about the nature of the shallow aquifer groundwater resource of the SIR, and how that water is used. This information will help inform policy development and community decisions in the future.

New forage options for saline environments

A five year collaborative study with the Future Farming Industries Cooperative Research Centre (CRC) (formerly CRC for Plant-based Management of Dryland Salinity) came to a close this year. This work has screened five varieties of over 50 valuable salt and waterlogging tolerant plant species at the glasshouse facilities at Tatura.

These trials identified promising cultivars of over 300 grass and legume species that can be used for restoration and improving the productivity of salt affected land. Further testing of promising plants to evaluate the most waterlogging tolerant varieties is being carried out with the CRC interstate. Field trials of selected plants also occurred in the Kyabram area.

The results of this work provide additional options for managing salt affected land in the region. Using the best plant types to restore salt affected land improves catchment condition while also improving the production of that land for the landholder.

PERFORMANCE STORY

Sub-surface Water Management Program (SSWMP)

Goulburn-Murray Water is responsible for implementing many aspects of the Sub-surface Water Management Program (SSWMP) for the Shepparton Irrigation Region Catchment Implementation Strategy (SIRCIS). The SSWMP employs private groundwater pumping, public groundwater pumping and tile drainage to manage groundwater levels for salinity control and salt disposal within the region.

Key performance indicators (KPIs) were developed for the Program in response to a need for annual performance reporting to key stakeholders. KPIs provide a standard method for evaluating and reporting important aspects of program performance to key stakeholders, including government funding bodies, statutory and regulatory agencies, and community organisations and groups. See www.gbcma.vic.gov.au for a copy of KPI Report.

Three categories of KPIs have been used:

- Operations
- Management
- Environmental.

The annual and cumulative achievements for area served by the SSWMP have exceeded the annual and aspirational targets in 2006-07 (note that timelines prevent 2007-08 KPI report data to be reported in this Annual Report). Activity was focussed on the private pump program due to strong community demand because of the continued drought conditions. Additional drought funding in 2006-07 supported the private pump program.

Overall implementation work targets were met with the exception that only one new public pump was installed due to efforts being directed to the private pump program. Annual expenditure closely matched the available budget.

PERFORMANCE STORY

Updating the Shepparton Irrigation Region Catchment Implementation Strategy

The Shepparton Irrigation Region Catchment Implementation Strategy (SIRCIS) is a 30 year plan to protect and enhance the natural and productive environment of the Shepparton Irrigation Region (SIR). The SIRCIS provides the mechanism to leverage government investment in land and water management in the SIR. It sets a comprehensive vision for the region based on how it manages its natural resources to generate environmental as well as economic and social benefits.

2007-08 has been a very busy year for the SIRCIS. Implementation has continued despite the prevailing drought, with landowners continuing to invest in protecting their land resources. Irrigators have also been grappling with the implications of the Foodbowl Modernisation Project, the National Water Initiative, the *Our Water, Our Future* plan, irrigation reconfiguration plans and the *Northern Sustainable Water Strategy* (soon to commence preparation).

Concurrently the SIR has reviewed the four action programs that together make up the SIRCIS: Surface and Sub-surface Water Management, Farm and Environment and the Waterways programs. These were the third five yearly reviews undertaken and set the direction for the SIRCIS for the next five years. These reviews have involved significant community input for which we thank our steering committees and working groups.

The SIRCIS is currently under review. This review should be complete in late 2008 and will help inform the review of the Goulburn Broken Regional Catchment Strategy. Key issues for debate include updating our vision for the region and how we work with projects such as the Northern Victoria Irrigation Renewal Project.

The scenarios used to consider the future have been drawn on heavily as we update our SIRCIS and the programs that underpin it.

We look forward to more community input into this review and welcome any questions or comments on our program to: Ken Sampson, Executive Officer, Shepparton Irrigation Region Implementation Committee, phone: 03 5833 5360.

An extended version of this performance story can be found at www.gbcma.vic.gov.au.

Completion of irrigation infrastructure information atlas

Reconfiguration of irrigation assets in Victoria's northern irrigation regions is an essential activity that is being driven by the need to improve water use efficiency of the diminishing water resources. Good quality and readily available information about the irrigation infrastructure of the region is an essential planning tool to support the renewal process. It is needed to make sound decisions about the changes needed to improve the system.

Data in GIS map formats was put together by spatial scientists at Tatura and delivered to G-MW in February. The data set developed includes such layers as the irrigation system (defined in terms of pods, trunks and carriers), land-use, change in water use over time, local government planning, salinity and environmental data.

The completed data sets are used extensively in irrigation reconfiguration and modernisation planning, but are also an invaluable resource for CMAs, Government agencies and local government. The results of this work are a ground-breaking compilation of many data sets from across the G-MW region. This data is an essential ingredient going into the modernisation process, and shows clearly the value of research into how to meet the data needs required by the Catchment as it adapts to an uncertain future.

Foodbowl modernisation and practice change

The proposed Foodbowl Modernisation initiative offers opportunities to achieve water savings that will provide environmental benefits, and benefits for urban and agricultural water users. To achieve these benefits, the GB CMA and partners needed to consider how these changes affect the current programs and RCS objectives. DPI's practice change research team undertook three projects enabling the GB CMA and partners to develop policy responses and policy instruments that account for the landholder, organisational and technical implications the proposed changes create.

These projects were:

- Policy choice framework
- Understanding landholders in an era of regulatory change
- One policy, different organisational responses.

Environmental assessments

Two environmental assessments for community surface water management schemes were completed. There were approximately 68 final and re-alignment assessments completed to ensure surface water management works conformed to the requirements of the *Environmental Protection and Biodiversity Conservation Act 1999.*

Development of management plans for wetland and terrestrial features

Design and development of environmental management plans for priority wetland and terrestrial sites in the SIR is an important value-adding tool to support improved water management. Management plans are developed with input and strong collaborative processes across multiple agencies. Key partners are DSE (leading development of the plans), DPI, G-MW, Parks Vic, GB CMA and community groups as parties ultimately responsible for implementing management plan recommendations and works.

The following wetland and terrestrial environmental management plans were developed in consultation with stakeholders:

- Mansfield Swamp
- Wyuna River Reserve
- Millewa (previously Cantwells)
- Nanneella Bushland.

Statutory planning

Over 500 statutory planning cases were addressed throughout the year. About 50 percent of the cases were in the Greater Shepparton City Council and the remainder split between Moira and Campaspe Shires. The cases involved aspects such as subdivisions, certification of whole farm plans, new developments (including buildings, dams, quarry activities and centre pivots) and planning scheme amendments. All cases involved development of recommendations to ensure the protection of surface water, ground water and soil.

Mandatory monitoring

Mandatory monitoring was undertaken in 2006-07 at seven allocated sites, including four terrestrial sites and three wetland sites. Ongoing collation of data is stored for each site, including photo-points, species presence and absence and water/macroinvertebrate sampling, where applicable.

Mandatory monitoring has been ongoing since 1992 with data collected at a number of sites around the SIR. In 2007 a paper was developed comparing two wetlands (Reedy Swamp and Kinnairds Swamp) using water quality and macroinvertebrate data collected from the mandatory monitoring project when the wetlands were simultaneously wet. Reedy Swamp is fed by a surface water management system that crosses a landscape which is largely urban, where as Kinnairds Swamp is fed water via a depression that passes through an agricultural landscape. A paper was produced and delivered to the Australian Entomological Conference at Beechworth in September 2007. Observations from the paper concluded that Kinnairds Swamp had better water quality, a more diverse macroinvertebrate taxonomic index and a higher number of pollution sensitive aquatic insects than Reedy Swamp.

Acoustic monitoring

Acoustic monitoring is underway at Reedy Swamp. This is the first time this method has been used with an environmental water allocation in the region. Acoustic monitoring is a relatively new technique that utilised automated acoustic monitors to allow gathering of data via the soundscape without human presence during critical time periods. The recorders have been set to take a sound recording of 30 seconds every hour for a 24 hour period. Sounds are stored and analysed and provide excellent insight into species recorded at the site.

Environmental project review

Monitoring of the environmental project has been ongoing since 2000, with data such as habitat quality and photo points collected at 10 properties (13 sites) in the SIR. Sites were selected where on-ground works to protect and enhance biodiversity assets had been completed, with the aid of advice and financial incentives delivered through the environmental project. Habitat quality was monitored using the assessment of habitat quality method, which provides a score based on the evaluation of ten different habitat components. The results of the 2007 monitoring indicate that the overall health of each site has increased since 2005, with the average habitat quality scores increasing from 7.0 to 9.7.

PERFORMANCE STORY

10-year SIRIC celebration

A decade of sustainable water use was celebrated at the junction of the Goulburn and Broken rivers. The ten year Shepparton Irrigation Regional Implementation Committee's (SIRIC) anniversary also acknowledged completion of the Irrigations Futures project.

Among the SIRIC's achievements has been the reality that it has delivered an $18 million dollar annual program, which has been funded by the Victorian and Australian Governments.

Other achievements include:

- 1,595 whole farm plans completed for 116,850 hectares. It brings the total number of whole farm plans (prepared under this incentive since 1987) to 1940, spanning 131,425 hectares. It covers 42 percent of the irrigated part of the region
- In nine years the surface water management program has seen 105 kilometres of arterial drains and 478 kilometres of community drains built. Combined, they have provided drainage outfall for 63,000 hectares
- Just as importantly from the perspective of the SIRIC is the significant benefit of these drains in community development. This is created by people working together on a mutual task for four to five years as they work towards its completion. Since 1988, there have been 251 drainage groups established in the SIR. The outcome of this sort of community involvement has healed many long term rifts and rebuilt social pride in these catchments
- A revised surface water management strategy (completed in 1995) has resulted in a major reduction in the cost of supplying surface water management to the SIR
- The Waterways Program in the SIR is now making tremendous strides, focusing on targeting specific reaches for the rivers and streams
- In 1999, the SIR Implementation Committee was a finalist in the community group section of the Banksia Awards and its drainage program won the institute engineers award for the environmentally sensitive design of the Muckatah Surface Water Management System.

The Irrigation Futures project has focussed on bringing key stakeholders (in irrigated agriculture and the regional community) together to develop a shared vision for the future of irrigation in the Goulburn Broken Catchment.

PERFORMANCE STORY

Yorta Yorta People's Yeilma project provides benefits for all

The Yeilma project is a shining example of the how Indigenous people can lead the management of culturally and environmentally significant properties to benefit all Australians.

The project also represents tangible reconciliation between Indigenous people and the wider community and is evidence of improving understanding and partnerships between the Yorta Yorta people, the GB CMA and the Australian Government.

Yeilma is a property on a wetland alongside Australia's iconic Murray River and it is surrounded by the largest red gum forest in the world.

The property was purchased by the Yorta Yorta people, the traditional owners of the region, through the Indigenous Land Corporation Fund in 2001.

Yeilma was used by the previous property owners as a productive cattle producing business. (It was gazetted as a farming property in the late 1800s.) The downside to the business was the impact on the wetland and the surrounding environment.

GB CMA and the Yorta Yorta people recently submitted a successful Australian Government funding application. The application includes priorities for improved use of the property that are consistent with Yorta Yorta's environmental concerns and long-term vision for the whole area. Activities to date include:

- Willow – stem injection
- Paterson's Curse – spraying
- Fencing – internal and external
- Various works undertaken by employees under the Drought Employment Program
- Development of a master plan, which will include identification of potential business enterprises.

Protecting Millewa Nature Reserve from salinity (coordination across CMA boundaries)

A feasibility investigation was conducted around the Millewa Nature Reserve to determine the potential for groundwater pumping to provide protection from the threat of salinity.

The Millewa Nature Reserve was determined to be the highest priority high value environmental feature from the SIR strategic plan research and investigation project completed by DPI in 2006-07. A management plan has also recently been completed on the nature reserve.

Regional Irrigation Development Guidelines

Regional Irrigation Development Guidelines were signed in Shepparton in April. The guidelines were developed at the request of the Minister for Water as part of the water white paper reforms.

The Goulburn Broken, North Central and North East CMAs joined forces to develop and sign off these guidelines which are regionally relevant and address local issues. These guidelines ensure local irrigators and the environment are protected from the impacts of irrigation developments.

The guidelines consist of four documents:

- Regional directions for irrigation development
- A memorandum of understanding
- Agency operational procedures
- Landowner information package.

The guidelines are based on 10 years of experience of delivery of previous irrigation development guidelines, which were developed as part of the salinity program.

The guidelines were completed in a partnership between CMAs, DSE, DPI, G-MW and irrigators to secure a workable and efficient process.

GB CMA hosted the signing event for the three CMAs, DPI, G-MW, and DSE.

Managing groundwater in a changing environment

Groundwater levels have fallen significantly across the SIR in recent years as a result of drought conditions and implementation of the SIR Catchment Implementation Strategy. A drier climate and improved irrigation efficiency is likely to lead to further reductions in groundwater levels. While this is good news from a salinity management perspective, it poses significant new groundwater management issues. Catchment managers and groundwater resource managers are working together to develop strategies to deal with this changing environment.

The following conceptual approach has been developed and engagement with key stakeholders has already started:

- Review the SIR total water balance in light of changing climatic conditions and improving irrigation efficiency
- Reassess local, regional and basin salt management requirements
- Assess SIR groundwater resource availability and management options
- Develop salinity and resource management strategies in consultation with key stakeholders
- Implement agreed management strategies with appropriate monitoring and adaptive management.

See www.gbcma.vic.gov.au for further information.

Upper Goulburn Implementation Committee

Report compiled by: Lilian Parker, Carl Walters

Committee members are (L-R): Heather Ingpen, Mike Dalmau, John Thompson, Sally Abbott-Smith, Margaret Hatton, Chris Doyle (Chair), Sue Ablitt, Rita Seethaler, Carl Walters (Acting Executive Officer) Absent: Lilian Parker (Executive Officer to May 2008), Bruce Radford (DPI), Alan Dobson (DSE), Greg Smith (G-MW)

Relationships, partnerships and community capacity

Community Landcare support

Recognition and support for community natural resource management work is an extremely high priority for the Upper Goulburn Implementation Committee (UGIC). UGIC celebrated 10 years of catchment management authorities by recognising the long term contributions of Landcare groups. As part of this groups were asked to prepare a DVD, poster or electronic presentation of their most significant project. The award was presented to Merton Landcare Group for its long term efforts in environment management and its history project created on a DVD. The prize was a trip to the Cranbourne Australian garden for the group and friends.

The Hubert Miller Perpetual Trophy was awarded to Janet Hagen for her untiring efforts in community engagement, in her role as facilitator for the Hughes Creek Catchment Collaborative. Janet has been involved with the collaborative for more than 10 years. The Landcare Award for Excellence, in its seventh year, was awarded to Merton resident John Fraser for his dedication and long service to the Merton Landcare Group Committee. These awards were all presented at the UGIC Landcare Awards Dinner.

Local government

Links with local government continue to be strengthened through UGIC representation on Murrindindi, Mansfield and Mitchell Shire environment committees. These committees provide opportunities for community and agency input into municipal activities and strategies, which is resulting in improved outcomes. Formal and informal presentations were made by UGIC members and staff on topics such as willow control and Landcare.

Sustainability focus

With sponsorship from UGIC, the Murrindindi Climate Network organised a sustainability forum in Yea. The forum included a number of exhibits from organisations and companies that specialise in sustainable development and living. Presentations were given on a range of technologies and community initiatives including:

- Renewable energy policy in Australia and in Victoria and current grant schemes on Australian Government and State level available to the community
- Building a sustainable home
- Information on carbon offset schemes available in Australia and how they fit into a future carbon emission trading scheme
- Community energy programs
- Sustainability services and activities offered to the community by local government.

Community education

The UGIC and MGBIC sponsored many education programs during the year including Salt Week and Water Week.

Salt Week events were held in Benalla and Kilmore areas with more than 600 students from local schools travelling to attend to learn about salt in the environment. Secondary students from Assumption College, Kilmore, helped run some of the activities.

Water Week was celebrated in the Goulburn Broken Catchment with over 1,500 students and community members participating in the week's events. In the Upper Goulburn there were twilight river and wetland walks in Mansfield, Yea and Seymour, and a field trip to Mt Buller was attended by 35 people. The first Aboriginal Corroboree in living memory kicked off the 2007 Womindjeka day celebrations in Yea. An excellent crowd of 120 individuals and family members were attracted to the wetlands on a warm spring evening. Around an open campfire, they watched and joined in a corroboree performed by Wally Coopers' Dance Group. The next day the committee, supported by the Taungurung Clan, Yea Business and Tourism Association, GB CMA, Upper Goulburn Food Wine and Culture Group provided displays, face painting and informative talks on a range of topics such as threatened species, local tucker plants and the fossil walk.

Works and extension

Delatite, Rubicon and Goulburn River rehabilitation program

In addition to the normal program of works the GB CMA secured Recreational Fishing Licence funding for habitat works along the Delatite, Rubicon and Goulburn Rivers.

Works include enhancement of instream habitat – construction of groynes and boulder seeding to improve fish habitat at a number of sites, similar to works undertaken previously at River Rock Quarry, Piries on the Delatite where the river was shallow and flooding out onto the adjacent paddocks. Other habitat works on the Rubicon River upstream of Thornton included the removal of willows, installation of timber lunkers to provide habitat and revegetation of the banks following protective fencing to exclude stock from the River.

Fisheries Victoria has confirmed that habitat degradation in most locations is restricted to the riparian zone. The lack of large shading vegetation (other than willows) and the predominance of stock grazing right up to the stream bank (and into the stream) is the main habitat issue for the Delatite and Rubicon Rivers.

Much of the fencing works undertaken within this financial year were fully funded through the Drought Employment Program that has operated in the Goulburn Broken Catchment. Through the program, the GB CMA supplied materials and employees to erect fencing at no cost to landholders. Some fantastic outputs have been achieved along all rivers and streams in the Upper Catchment with fencing, weed control and revegetation works all being carried out by this program.

Fire recovery funding was also secured for works in the Upper Catchment for areas that were affected by the recent bushfires with weed control, instream habitat restoration works and revegetation works all being undertaken in the upper reaches of the Goulburn, Howqua and Acheron Rivers.

Whole farm planning

This year whole farm planning courses were offered in the Kilmore, Seymour and Taggerty areas of the Upper Catchment. Participants covered topics such land classing, soils management, fire awareness and prevention, drought management, farm water supply, biodiversity and native vegetation management, pest plants and animals, pasture and grazing management. In particular the program now includes options for dealing with climate variability. Local governments such as Mitchell and Murrindindi use whole farm planning as a tool for subdivision and developments in certain zones.

Environmental management incentives

Incentives for landholders to undertake works have resulted in 77 hectares of terrestrial remnant vegetation fenced and 190 hectares revegetated. Other works contributing to catchment improvement through revegetation include erosion stabilisation and plantations for greenhouse emission reduction. With ongoing drought conditions more landholders in the Upper Catchment installed stock containment areas for livestock feeding.

Community tree planting projects have continued in the south west Goulburn with the assistance of some Melbourne Rotary clubs. In 2007-08 approximately 19.75 hectares of trees were planted on land approved for environmental management incentives. The Hughes Creek Catchment Collective was successful in obtaining $250,000 for on-ground works.

Groundwater exploration and development incentives

Over the past four years landholders have been assisted to explore and develop groundwater bores where there is a perceived salinity benefit as well as the opportunity to develop irrigation enterprises. Although now in its final year, three bores were installed in 2007-08.

A draft report on the engineering options program for the Mid Goulburn Broken and Upper Goulburn Implementation Committee areas was produced. This report summarises works implemented under the program and learnings gained.

Knowledge

Landcare history

The history of 20 years of Landcare in the Catchment has been prepared with contributors and campaigners providing their stories from around the region. The history document will be used to archive Landcare's history and promote its activities across the Goulburn Broken Catchment. The book is a comprehensive look at Landcare's early beginnings, the people who campaigned for the principles, the achievements and the challenges. *Milestones, Memories and Messages* will be available in printed form and on compact disc.

Pest plants and animals

The pilot regional Pest Animal Plan for 2008 to 2012 has been prepared with a focus on rabbit and fox control.

The GB CMA has now been offered funding to develop a regional weed plan. The weed plan will take into account new weeds and the new ranking of weeds being undertaken as part of the Victorian noxious weed review process. Recommended changes in category for some weeds have been implemented and have influenced the priority given to community weed projects supported by the GB CMA's Rural Extension Program and Landcare project funds.

These priority weeds are also the focus of projects undertaken by the Good Neighbour Program.

Management of stream flows

The GB CMA is in the process of developing environmental water requirements for a number of priority unregulated rivers and streams in the Catchment. This will provide recommendations for flows required to achieve a healthy ecosystem, as defined in the Victorian River Health Strategy.

Streamflow Management Plans (SFMPs) aim to provide a balanced use of water between all users in unregulated catchments. These are catchments where the flow is not regulated by controlled releases from publicly owned dams to supply water to downstream users. In these systems, flow is generated from rainfall run-off in the catchment. Emphasis of the plans is on water sharing between consumptive users and the environment during periods of flow stress. SFMPs are now recognised under the Water Act 1989 (as amended in 2002) and are legally binding for water users and authorities.

SFMPs develop rules for how entitlements within the stream catchment are to be managed to meet the objectives for the stream developed by a community based consultative committee. Key initiatives undertaken in 2007-08 include:

- Completion of an environmental flow determination study for the Yea River
- Completion of a water supply options project for Seven Creeks
- Initiation of a water supply options project for the Delatite River
- The Yea and King Parrot Creek catchments were declared water supply projection areas.

Climate Change Forum

UGIC's Upper Goulburn Climate Change Forum in Mansfield was well supported by over 130 delegates. The forum presented a diverse and balanced view of the possible outcomes of climate change in the Upper Goulburn Catchment. The film An Inconvenient Truth was shown in the morning to set the scene for the four expert presenters who delivered excellent presentations on global warming and its likely effects.

The highly credentialed speakers were farmer and orchardist John Pettigrew, an Al Gore ambassador, cold climate ecologist Dr Henrik Wahren, retired CSIRO climatologist Dr Barrie Pittock and engineer and commentator on social change Dr Brian Lloyd.

PERFORMANCE STORY

The Goulburn Broken Rural Extension Program

The Goulburn Broken Rural Extension Program (REP) is an extremely successful partnership project between the GB CMA, DPI, the Goulburn Murray Landcare Network, local Landcare groups and local communities.

The project is funded through the Second Generation Landcare Program and provides extension, advice and support to land managers in relation to pest management.

While the REP has existed for some years, it was completely reconfigured two years ago to better align with DPI's pest management program and to target priority areas of the Catchment, which are identified in consultation with the community.

In the past two years, REP staff have delivered extension projects in the Merton, Creighton's Creek, Yea River, Home Creek and Glenaroua areas, inspecting over 49,000 hectares and dealing with over 600 landholders. During these inspections over 106 hectares of gorse and blackberry were identified and over 84 hectares have been successfully treated. New project areas for 2008-09 have already been identified.

The two extension officers visit properties, inspect and map infestations and encourage landholders to participate in coordinated weed management programs. These programs target priority weed species in areas selected through an expression of interest process, which is conducted by a community based steering committee.

Voluntary compliance levels in projects undertaken to date have been quite astounding, particularly in view of the drought conditions prevailing in the Catchment. Levels of voluntary compliance achieved have exceeded 80 percent in all projects, with the Home Creek project achieving over 92 percent.

Participation rates of this magnitude significantly reduce the need for DPI compliance staff involvement and position community groups well to ensure they can maintain the momentum in the years following REP involvement.

The REP approach is an innovative way to involve all stakeholders in project delivery and certainly has the potential for application in other catchments.

PERFORMANCE STORY

Freshwater fish circus

UGIC sponsored the freshwater fish circus held at the Moore's Road Reserve in Strath Creek in February to draw attention to freshwater species in the King Parrot Creek. The Macquarie Perch is a nationally endangered freshwater fish which was once found throughout the cooler, upper reaches of the Murray Darling system in Victoria, but is now limited to just a handful of populations. Macquarie Perch (*Macquaria australasica*) is dark or bluish grey, with a rounded tail and distinctive large white eyes. It can weigh up to 3.5 kilograms but most are around one kilogram. Recreational fishing of Macquarie Perch is prohibited in all waters of Victoria except Lake Dartmouth, the Yarra River, the Upper Coliban Reservoir and their tributaries.

Fish researchers from DSE's Arthur Rylah Institute have been monitoring these populations annually, and a survey in October on the King Parrot Creek rang alarm bells.

The King Parrot Creek survey yielded a 94 percent reduction in catch of Macquarie Perch. While it is possible that some fish retreat to the Goulburn River, it is clear that this population is in serious trouble. A major impact on native fish in creeks such as King Parrot Creek is the loss of flow over summer. The 30 year average annual flow for King Parrot Creek is about 15 gigalitres. For the past five years however, annual flows have been just 1.5 to 4.5 gigalitres. Last summer, flows in King Parrot Creek ceased altogether, and the Creek retreated to a series of pools. Fish seeking refuge in these pools were very vulnerable, especially when levels dropped dramatically, temperatures rose, and dissolved oxygen levels dropped. The current summers are proving very difficult for 'Maccas' and other native fish.

Landcare and other agencies determined that the large number of stock and domestic water users and other frontage users of the King Parrot creek should be informed of the fate of these very special and threatened species. The circus aimed to increase awareness of the Macquarie Perch's water needs and other critical elements of habitat such as debris and snags in creeks, and overhanging and fringing native vegetation. About 110 people attended the circus complete with live music, barbecue dinner, fish craft, the Connies and their threatened species cards as well as successful electro-fishing demonstrations and ponding for macro-invertebrates.

PERFORMANCE STORY

Water Quality Strategy Review

The *Goulburn Broken Water Quality Strategy* (WQS) was developed in the mid 1990s to address nutrient management issues in the catchment. The Strategy aimed to reduce Total Phosphorus (TP) loads leaving the catchment by 65 percent from an estimated 371 tonnes of TP.

In 2007 a review of the WQS was commissioned by the GB CMA. The initial strategy had been in implementation for a decade, and new and emerging water quality issues were present.

The first step in this review process was an examination of the outcomes from the efforts, by the community, towards the goals stated in the WQS. The review assessed implementation progress, reviewed assumptions, reviewed results of monitoring to determine if strategy objectives are being achieved, reviewed water quality parameters of interest and determined the best mechanism for approaching these issues and incorporated relevant new information.

The review concluded that the development of an integrated and coordinated water quality strategy for the Goulburn Broken Catchment was completed and implementation is proceeding well. Substantial reductions of nutrient outputs from major sources have been achieved. The WQS was the correct approach for delivering improvement in water quality in terms of nutrients within the region.

Financial information, governance and risk management

Disclosure Index

The 2007-08 Annual Report of the GB CMA is prepared in accordance with all relevant Victorian legislation.
This index has been prepared to facilitate identification of the Authority's compliance with statutory disclosure requirements.

Information relevant to the headings listed in Financial Reporting Direction 22B of the *Financial Management Act 1994* is held at the Authority's office and is available on request, subject to the *Freedom Information Act 1982*.

GB CMA's performance of statutory responsibilities as a Victorian State Authority and Employer

Act	Board's major tasks	2007-08 issues and status
Statutory Authority		
Catchment and Land Protection 1994	Prepare, coordinate, monitor and review of Regional Catchment Strategy.	Review to be finalised June 2009. Currently reviewing sub-strategies. On track.
	Submit to Minister and Council by 10 October: "A report on the condition and management of land and water resources in the region and carrying out of its functions."	Annual Report on schedule. VCMC annual report on schedule.
	Corporate Plan to be submitted to Minister under the CALP Act by 30 April.	Submitted to Minister on 29th April 2008. Approved under Section 19C (3) of the CALP Act.
	Comply with the Statement of obligations (SOO).	SOO complied with and detailed through KPIs in investment areas.
	Members declare new interests at each (monthly) Board meeting and document it in Pecuniary Interests Register. Members must submit a primary return and an annual return.	Declarations of Pecuniary Interests have been duly completed by all relevant Directors or officers of the Authority and are available for inspection.
Water Act 1989	Corporate Plan available for inspection.	Copy is available for inspection during business hours.
	Review funds at each (monthly) Board meeting. Policy for investment as per the Trustee Act 1958.	All funds invested in accordance with the Trustee Act 1958. Interest earned is included in this Annual Report.
	Submit statement of Borrowings. Review borrowings at each (monthly) Board meeting. Finance leases are borrowings and subject to Treasurer's approval.	Included as part of Corporate Plan.
	Comply with the Statement of obligations (SOO).	SOO complied with and detailed through KPIs in investment areas.
	Meeting Procedures of Authorities.	The Authority adopted the original Schedule 2 of the Water Act – General Provisions About Procedures of Authorities. The Authority adopted Governance Guidelines for Statutory Authority Board Members, DSE 2004 and conducted a training program for all directors. New code of conduct for Public sector – employees adopted.
	Waterway Management Responsibilities	The Authority was established as a body corporate under the Catchment and Land Protection Act and then established as an Authority under the Water Act and given waterway management, floodplain management and drainage functions under Part 10 of the Water Act.
Public Administration 2004	Ensure operations of Board comply with Part 5.	The State Services Authority has developed a range of guidelines to be adopted by public sector organisations. Guidelines cover employment principles, ethics, merit and equity. The GB CMA has reviewed processes to ensure compliance. A recruitment kit has been developed and reviews undertaken of equal opportunity, harassment and bullying policies.

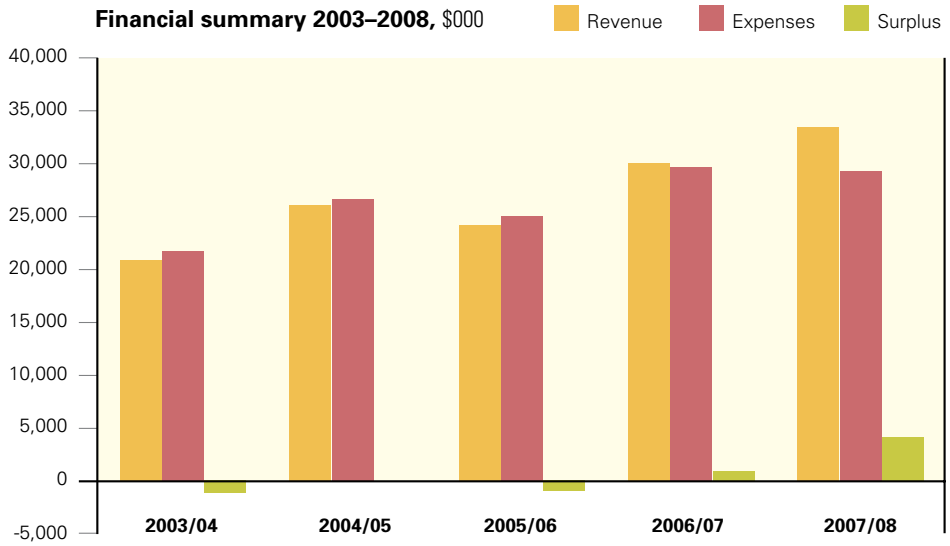
Act	Board's major tasks	2007-08 issues and status
Freedom of Information 1982	Report requests for access to documents in Annual Report. Report requests at each (monthly) Board meeting. The Act gives persons the right to request certain types of information (which are not exempt documents) held by the Authority. The Authority's FOI Officer is authorised to make decisions about access to documents under the FOI Act. The officer has 45 days from the date of receiving a valid request to accede to or reject the applicant's request. There are two costs associated with making an FOI request, the: • Application Fee of $22.70 which is non refundable and an • Access cost which covers the cost to Authority for providing the information.	The Freedom of Information Act 1982 allows the public a right of access to documents held by the GB CMA. Freedom of Information requests are made in writing describing the documents requested and including payment of the $22.70 application fee. Further charges may be payable. FOI fees and charges are not subject to GST. Requests to the Authority should be sent to Freedom of Information Officer, Kathy Fuller. The telephone contact number is (03) 5820 1100. Enquiries can be emailed to reception@gbcma.vic.gov.au. One application was received which was denied on privacy grounds.
Whistleblowers Protection 2001	Report actions in Annual Report. Report actions at each (monthly) Board meeting.	No issues reported. Disclosures of improper conduct by the Authority or its employees may be made to Fleur Baldi (Protected Disclosure Co-ordinator) or alternatively to the Ombudsman. (See details elsewhere in Annual Report.)
Planning and Environment 1987	GB CMA is the Floodplain Management Authority (under Part 10 of the Water Act) and is a Section 55 Referral Authority under the Planning and Environment Act.	The Authority received more referrals than any other CMA in the State (over 1,000).
	As per the Act and Victorian Planning Provision Practice Notes, Board is advised of application refusals at each (monthly) meeting.	Decisions are made in accordance with the Victoria Flood Strategy, the GB Regional Floodplain Management Strategy, the Victorian Planning Provisions Practice Notes and Authority Policy, all of which have largely been incorporated into respective municipal planning schemes as performance-based criteria.
	Local government can request advice but are not required to implement it.	Advice was provided as appropriate.
Privacy 2000	Ensure details of individuals are protected.	The Authority has developed a privacy policy (in accordance with the Act) on how information is stored and under what circumstances it can be accessed or released to third parties.
Environmental Protection and Biodiversity Conservation 1999	As per the Act.	All works have a process which assesses the works against this Act. The Authority and its partners have complied with all requirements. Although the Authority has not referred any projects to the Minister in its own right, projects associated with the Ministers decommissioning of Lake Mokoan, the Deakin Drain 16 Extension project and Broken Creek surface water management were all referred.
Flora and Fauna 1988		The GB CMA continues to support the implementation of Action Statements and Recovery Plans for threatened flora and fauna by the Dept of Sustainability and Environment.

Act	Board's major tasks	2007-08 issues and status
Environmental Protection 1970	Protection agencies need to report in their annual reporting processes, actions taken to implement the Policy (as per their responsibilities in SEPP (WoV) and Schedules), so that EPA can then report to the community.	Initiated a process to conduct priority Ecological Risk Assessment, using Guidelines for Environmental Management Risk-based Assessment of Ecosystem Protection to determine further work required. Participated in the development of the *Regional Goulburn Broken Waterway incident Agreement*. Staff attended training with respect to emergency and incident response. (Australian inter-service incident management system).
	Outlines CMA's roles with respect to set goals, priorities and targets.	
	Refers to water allocations and environmental flows.	
	Relates to responsibilities of various agencies for ensuring sustainable agricultural activities with the catchment	
	Relates to the management of irrigation channels and drains.	
	Refers to vegetation protection and rehabilitation.	
Forest Act	Liaise with DSE as required.	Waterways in areas managed by DSE under the Act, the Authority complied with elements of the code which deal with access to waterways and crossings.
Financial Management 1994	Undertake review of its annual operations and advise Minister regarding compliance with Financial Compliance Management Framework.	Information listed in Part 9.1.3 (iv) is available on request.
Cultural Heritage 1986		Authority complied with requirements.
Building 1993		Authority complied with requirements.
National Competition Policy		Competitive neutrality seeks to enable fair competition between government and private sector businesses. Any advantages or disadvantages that government businesses may experience as a result of government ownership should be neutralised. The GB CMA continues to implement and apply this principle in its business undertakings.
Marine Act 1988	The Authority is the Boating Authority for the Goulburn River downstream from the Eildon Weir pondage and upstream of Hughes Creek.	The Authority reviews boating speed limits and auditing signage and access in its area of responsibility.
Country Fire Authority 1958	As per the Act.	The Authority has developed policies particularly relating to waterway operations which comply with the Act and reduce fire risk. Fire suppression equipment has been purchased.

Act	Board's major tasks	2007-08 issues and status
Employer		
Workplace Relations 1996	As per the Act.	The Authority's policies have been evaluated for alignment against the Act. These policies have been reformatted and are on the Authority's portal (intranet). Current agreement is Professional, Administrative and Technical Staff Enterprise Agreement 2007-2009.
Equal Opportunity 1995	Annual data return reporting gender, diversity and complaints lodged and investigated.	The Authority is an equal opportunity employer. Kate Pendergast is the sexual harassment contact officer. No complaints were received in the reporting period. Of the Authority staff 49 percent are female and 51 percent male.
Long Service Leave 1992 Victorian Long Service Leave regulations 2005 Water Long Service Leave regulations 2001	Long service leave liability is reported monthly to the Board.	Policies comply with Act. Liability is reflected in financial provisions and calculation explained in the notes to the financial statements.
Occupational Health and Safety 2004, amended 2005	Report Occupational Health and Safety issues at each (monthly) Board meeting and in Annual Report.	The Authority has comprehensively reviewed its policies and procedures and inducted all staff. Manuals were developed and distributed and made available for contractors. Designated work groups and health and safety representatives are part of the consultative processes reflecting updates of the Act. Policies and procedures are available on the portal (intranet).

Summary of Financial Results – Current plus Past Four Years

	2003-04 $ 000	2004-05 $ 000	2005-06 $ 000	2006-07 $ 000	2007-08 $ 000
Income and Expenditure					
Government Contributions	19,668	25,556	23,139	29,209	31,838
Other revenues	1,584	1,077	931	1,445	1,657
Total Income	21,252	26,633	24,070	30,654	33,495
Expense	22,487	26,883	25,030	29,938	29,189
Interest	7	6	18	10	7
Total Expenditure	22,494	26,889	25,048	29,948	29,196
Surplus/(Deficit)	(1,242)	(256)	(978)	706	4,299
Balance Sheet Items					
Current Assets					
Cash	8,210	8,357	8,102	6,882	11,393
Receivables	830	981	1,261	540	1,060
Prepayments	12	156	104	47	60
Total Current Assets	9,052	9,494	9,467	7,469	12,513
Fixed Assets	1,144	1,329	1,471	1,513	1,938
Total Assets	10,196	10,823	10,938	8,982	14,451
Current Liabilities					
Trade Creditors	2,598	1,255	2,582	1,220	2,256
GST Liabilities	-	116	-	-	-
Borrowings	48	63	77	74	57
Accruals	1,163	3,214	3,012	1,639	1,434
Provisions	178	165	448	558	867
Total Current Liabilities	3,987	4,813	6,119	3,491	4,614
Non Current Liabilities					
Borrowings	88	77	103	70	46
Other	227	295	56	55	51
Total Non Current Liabilities	315	372	159	125	97
Net Assets	**5,894**	**5,638**	**4,660**	**5,366**	**9,740**
Equity Items					
Contributed capital	4,134	4,134	4,134	4,134	4,209
Reserves	1,760	1,504	526	1,232	5,531
Total Equity	**5,894**	**5,638**	**4,660**	**5,366**	**9,740**
Cash Flow Items					
Net Operating Activities	723	634	216	(775)	5,378
Net Investing Activities	(342)	(435)	(415)	(365)	(862)
Net Financing Activities	45	(52)	(56)	(80)	(5)
Net Cash Movement	426	147	(255)	(1,220)	4,511



Significant changes in financial results for 2007-08

Significant changes in the financial results for 2007-08 compared to the Authority's Corporate Plan are summarised as follows:

Statement of Financial Performance	Corporate Plan $000	Actual $000
Total revenue	25,365	33,495
Total expenditure	25,170	29,196
Net Profit / (Deficit)	**195**	**4,299**
Statement of Financial Position		
Cash and Receivables	7,980	12,453
Other	50	60
Non-current assets	1,546	1,938
Total Assets	**9,576**	**14,451**
Liabilities		
Current	(3,981)	(4,614)
Non-current	(95)	(97)
Total Liabilities	(4,076)	(4,711)
Net Assets	5,500	9,740

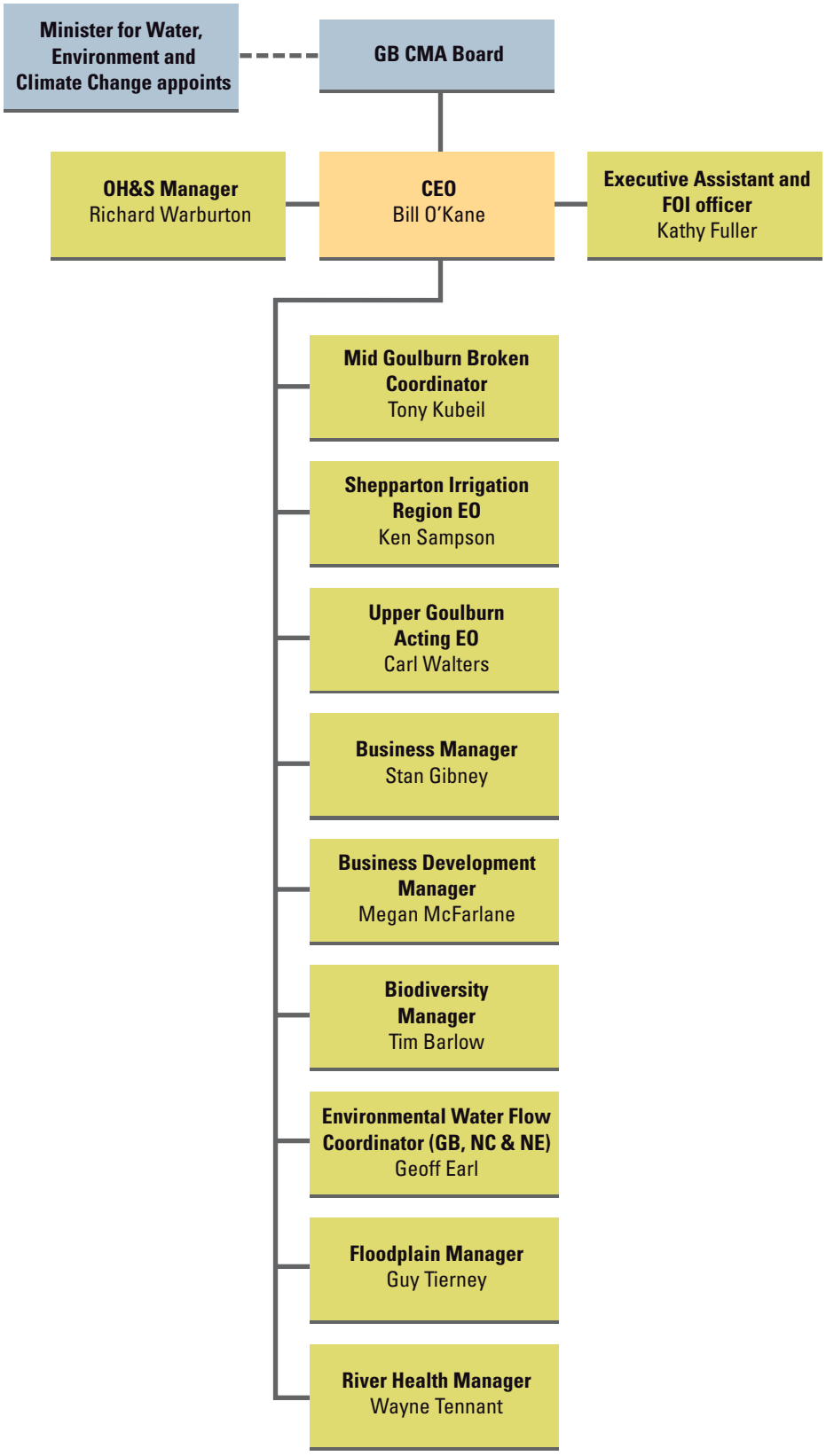
Consultancies	**2005-06**	**2006-07**	**2007-08**
Cost	$1,183,409	$2,209,698	$1,654,699
Number of consultants	15	23	30
Consultancies in excess of $100,000	1	1	3

Consultants for 2007-08 over $100,000

Name	Summary of project	Total cost excluding GST $	Expenditure for 2007-08 $	Future commitments $
Water Technology	Goulburn Environmental Flow Hydraulics Study	252,236	110,083	142,153
Water Technology	Monitoring responses to Environmental Flows	160,730	23,000	137,730
Ecowise Environmental	Monitoring responses to Environmental Flows	108,440	8,840	99,600

Goulburn Broken Catchment Management Authority

Management Structure



Board members of the Authority, as appointed by the Minister for Environment and Climate Change are:

Dr Huw Davies – Chairman (Benalla)
(Chair from 28 March 2008)

Huw has over 20 year senior executive experience in the private sector covering a diverse range of industries in Australia and overseas after having started his career as a geologist.

Huw has 14 years experience as both an executive and non executive director of public, private and government entities. Currently he is the Administrator of the State Electricity Commission of Victoria and Chair of its Executive Committee and a non executive director of Boom Logistics Limited.

John Pettigrew – Deputy Chairman (Bunbartha)
(Interim Chair from 1 December 2007 to 27 March 2008)

John is currently a member of the Goulburn Valley Environment Group, Chair of Environmental Farmers Network, member of Landcare and Victorian Farmers Federation. John was previously a director of Goulburn Murray Water, SPC Ltd and the Goulburn Broken Catchment and Land Protection Board.

John was a former member of the State Rivers Shepparton Advisory Board and a chair of Goulburn Murray Waters State Rivers Shepparton Advisory Board.

John has a background in horticulture and farming and his other interests include resource management, protection and enhancement of the natural environment, pine plantations and irrigation.

Neville Barwick (Lancefield)
Neville has a background in architecture which involves management of large construction and disaster recovery projects. He also brings to the board experience as a top level government administrator and a consultant to the corporate sector on strategy formulation and organisational development and review.

Neville has held leading roles in the fields of homelessness, drug addiction and intellectual disability, local government and Landcare and is chairman of two organisations assisting the development of East Timor.

Don Cummins (Nillahcootie/Mansfield)
Don is currently Chairman of the Goulburn Valley Water. Don's previous positions include chairman of Goulburn Murray Water and Mayor of Delatite Shire.

His other involvements include Mayor of Mansfield Shire, Board member of Mt Stirling Resort and the NevRWaste Group.

He has a teaching background and is also a keen farmer. Don's area of interest includes economics, science, community relations and local government.

Yvonne Davies (St James)
Yvonne is a dryland primary producer and is also a local government councillor.

Yvonne has served eight years as a GB CMA Board member.

Yvonne was formerly a board member of the Tungamah Shire Water Board, a councillor of Tungamah Shire, Bail Justice and on the Moira Tourism Board. Yvonne is also part of the Association of Victorian Regional Waste Management Group and was president of this group for three years. Her many other roles include Director (eight years) and Chair (five years) of the Goulburn Valley Regional Waste Management Group, Inaugural Mayor of Moira Shire and a Councillor of Moira Shire for 11 years.

Peter Fitzgerald (Tongala)
Peter's background is in water policies, irrigation usage and the dairy industry. He is currently a director on the Goulburn-Murray Water Board and involved with the Victorian Farmers Federation.

He is a former Councillor for the United Dairy Farmers of Victoria and a graduate of the Australian Rural Leadership Program. Peter runs a dairy and beef operation at Tongala and Kotupna.

Lyn Gunter (Flowerdale)

Lyn is currently a councillor of Murrindindi Shire and a member of North East Victoria Area Consultative Committee.

Lyn has also held positions as board member of Murrindindi Construction, State Emergency Services Controller for 10 years (especially floods), member on the Mitchell and Murrindindi Floodplain Mapping, the Yea Floodplain Management Study, the Goulburn Drought Recovery Committee, State Rural Zones Review Committee and the GMW Water Quality Reference Committee.

Lyn has an interest in trying to implement and ensure there is a holistic approach to land use planning which includes water use, climate, soil and rainfall and also the integration and implications of ground and surface water within the Catchment.

Anne McCamish (Ardmona)

Anne has a background in teaching, flood recovery, leadership training and local government. Anne is a member of the Community Reference Group, Living Murray and a member of the Latrobe University Regional Advisory Committee. Anne's other interests include community engagement and governance.

Stephen Mills (Numurkah)
(resigned 1 December 2007)

Stephen is a dairy farmer from Numurkah and currently the chairperson of Goulburn Murray Water and a director of Murray Goulburn Cooperative Ltd.

Stephen is involved in other organisations such as board member on the Water Commission, Chair of Australian National Committee on Irrigation and Drainage and committee member of the International Commission on Irrigation and Drainage.

Nick Roberts (Shepparton)

Nick has worked for the Victorian National Parks Association for 6 years and has been involved with Landcare organisations for over a decade. Nick is the conservation representative on the Murray Darling Basin Ministerial Council Community Advisory Committee and a former member of the Shepparton Irrigation Region Implementation Committee.

Nick works closely with aboriginal traditional owners and other community groups to ensure biodiversity, river health and sustainable land use is achieved in the catchment.

The Audit and Compliance and Remuneration Committees comprise of the following Board members:

Audit and Compliance Committee

- Don Cummins (Chair)
- Neville Barwick
- Yvonne Davies
- Peter Fitzgerald
- John Pettigrew

All members of the Audit and Compliance Committee are independent in terms of the State's Financial Management Compliance Framework.

Remuneration Committee

- Anne McCamish (Chair)
- Lyn Gunter
- John Pettigrew
- Nick Roberts

The Chairman is ex-officio of all Board Committees and is able to attend all meetings.

Senior Office Holders

Bill O'Kane – Chief Executive Officer
The Chief Executive Officer is the Accountable Officer under the Financial Management Act and is directly responsible to the Board for the day to day operations of the Authority.

Carl Walters – (Acting) Upper Goulburn IC Executive Officer
The UGIC Executive Officer provides executive liaison with the Implementation Committee to ensure works program targets are met in line with the Corporate Plan. This is in addition to his role as Manager River Health Implementation that oversees the implementation of the waterways works programs across the Authority.

Lilian Parker
– Upper Goulburn IC Executive Officer (resigned 03/05/08)
The UGIC Executive Officer provides executive liaison with the Implementation Committee to ensure works program targets are met in line with the Corporate Plan.

Tony Kubeil – Mid Goulburn Broken IC Coordinator
The MGBIC Executive Officer provides executive liaison with the Implementation Committee to ensure works program targets are met in line with the Corporate Plan.

Ken Sampson – Shepparton Irrigation Region IC Executive Officer
The SIRIC Executive Officer provides executive liaison with the Implementation Committee to ensure works program targets are met in line with the Corporate Plan.

Stan Gibney – Business Manager
The Business Manager's role is to ensure the efficient administration of the Authority and the provision of prompt and timely financial advice to the CEO and Board.

Megan McFarlane – Business Development Manager
The Business Development Manager is responsible for the funding and investment processes across the Authority, as well as providing strategic advice to the CEO on monitoring, evaluation and reporting and managing the update of the Regional Catchment Strategy.

Guy Tierney – Floodplain Manager
The Floodplain Manager coordinates floodplain management activities across the Goulburn, Broken and part of the River Murray basins.

Wayne Tennant – Strategic River Health Manager
The Strategic River Health Manager provides senior professional advice and guidance to the CEO and the Board on policies, programs, implementation strategies, research activities, monitoring, and related projects.

Geoff Earl – Environmental Water Flow Coordinator
The Environmental Water Flow Coordinator works closely with the respective Environmental Water Resources Officers in each CMA region (North East, Goulburn Broken and North Central) and provides strategic advice on maximising the management of stream flow to meet regional ecological and environmental flow targets.

Tim Barlow – Biodiversity Manager
The Biodiversity Manager is responsible for the development and implementation of major Biodiversity strategies.

Kathy Fuller – Executive Assistant and Freedom of Information Officer
Provides administrative support to the CEO and the operations of the GB CMA Board and its sub committees. This includes significant liaison with senior managers and members of the Board. Kathy is also the Freedom of Information Officer for the GB CMA.

Richard Warburton – Occupational Health and Safety Manager
The Occupational Health and Safety Manager develops and maintains statutory obligations for compliance and maintenance of safety management system activities including policies, procedures and manuals. This is in addition to his waterways role.

Culturally appropriate services

The Authority is committed to policies, programs and strategies aimed at delivering culturally appropriate services to all Victorians.

Current practices of inclusive and thorough public consultation ensure that all persons who have an interest in investigations are kept informed and have the opportunity to have input into the Goulburn Broken Catchment Management Authority deliberations.

Objectives, functions powers and duties

The Authority operates principally under the (CaLP Act) Catchment and Land Protection Act 1994, and has additional responsibilities for Waterway management, Floodplain management and regional drainage functions under Part 10 of the Water Act 1989.

Under section 12 of the CaLP Act

(1) The Authority has the following functions in respect of the region for which it has been appointed –
- **(a)** To prepare a Regional Catchment Strategy for the region and to coordinate and monitor its implementation
- **(b)** To prepare special area plans for areas in the region and to coordinate and monitor its implementation
- **(c)** To promote the co-operation of persons and bodies involved in the management of land and water resources in the region in preparing and implementing the Strategy and special area plans
- **(d)** To advise the Minister, and, if requested by any other Minister, that other Minister
  - **(i)** On regional priorities for activities by land resource allocations to bodies involved in the management of land and water resources in the region
  - **(ii)** On guidelines for integrated management of land and water resources in the region
  - **(iii)** On matters relating to catchment management and land protection
  - **(iv)** On the condition of land and water resources in the region.
- (e) To promote community awareness and understanding of the importance of land and water resources, their sustainable use, conservation and rehabilitation

(f) To make recommendations to the Minister about the funding of the implementation of the Regional Catchment Strategy and any special area plan

(g) To make recommendations to the Minister and the Secretary about actions to be taken on Crown land managed by the Secretary to prevent land degradation

(h) To advise the Minister and provide information to the Minister on any matter referred to it by the Minister

(i) To carry out any other functions conferred on the Authority by or under this Act or any other Act.

(2) Each Authority has power to do all things that are necessary or convenient to be done for or in connection with, or as incidental to, the performance of its functions, including any function delegated to it.

(3) Subsection (2) is not to be taken to be limited by any other provision of this Act that confers a power on the Authority.

(4) Each Authority has the duties conferred on it by or under this or any other Act.

Whistleblowers Protection Act 2001

The Authority has established a Whistleblowers Protection Policy in line with its obligations under the Whistleblowers Protection Act 2001.

a) Contact persons within the Goulburn Broken Catchment Management Authority

Disclosures of improper conduct or detrimental action by the Goulburn Broken Catchment Management Authority or its employees, may be made to the following officers:

- The protected disclosure coordinator
  Fleur Baldi (03) 5820 1100
- Protected disclosure officer/s

Lilian Parker (to 03/05/08)	(03) 5736 0100
Carl Walters (from 04/05/08)	(03) 5820 1100
Wayne Tennant	(03) 5820 1100
Peter Howard	(03) 5833 5343

- All correspondence, phone calls and emails from internal or external whistleblowers will be referred to the protected disclosure coordinator
- Where a person is contemplating making a disclosure and is concerned about approaching the protected disclosure coordinator or a protected disclosure officer in the workplace, he or she can call the relevant officer and request a meeting in a discreet location away from the workplace.

b) Alternative contact persons

A disclosure about improper conduct or detrimental action by the Goulburn Broken Catchment Management Authority or its employees, may also be made directly to the Ombudsman.

The Authority operates the current procedures in line with its Whistleblowers Protection Policy.

c) Protected disclosure officers

Protected disclosure officers will:

- Be a contact point for general advice about the operation of the Act for any person wishing to make a disclosure about improper conduct or detrimental action
- Make arrangements for a disclosure to be made privately and discreetly and, if necessary, away from the workplace
- Receive any disclosure made orally or in writing (from internal and external whistleblowers)
- Commit to writing any disclosure made orally
- Impartially assess the allegation and determine whether it is a disclosure made in accordance with Part 2 of the Act (that is, a protected disclosure)
- Take all the necessary steps to ensure the identity of the whistleblower and the identity of the person who is the subject of the disclosure are kept confidential
- Forward all disclosures and supporting evidence to the protected disclosure coordinator.

d) Protected disclosure coordinator

The protected disclosure coordinator has a central clearinghouse role in the internal reporting system. The Protected Disclosure Coordinator will:

- Receive all disclosures forwarded from the protected disclosure officers
- Receive all phone calls, emails and letters from members of the public or employees seeking to make a disclosure
- Impartially assess each disclosure to determine whether it is a public interest disclosure
- Refer all public interest disclosures to the Ombudsman
- Be responsible for carrying out, or appointing an investigator to carry out, an investigation referred to the public body by the Ombudsman
- Be responsible for overseeing and coordinating an investigation where an investigator has been appointed
- Appoint a welfare manager to support the whistleblower and to protect him or her from any reprisals
- Advise the whistleblower of the progress of an investigation into the disclosed matter
- Establish and manage a confidential filing system
- Collate and publish statistics on disclosures made
- Take all necessary steps to ensure the identity of the whistleblower and the identity of the person who is the subject of the disclosure are kept confidential
- Liaise with the Chief Executive Officer of the public body.

Available information

- Declarations of pecuniary interests have been duly completed by all relevant officers of the GB CMA
- Details of publications produced by the GB CMA about the activities of the Authority and where they can be obtained
- Details of changes in prices, fees, charges, rates and levies charged by the GB CMA for its services, including services that are administered
- Details of any major external reviews carried out in respect of the operation of the GB CMA
- Further details of any other research and development activities undertaken by the GB CMA that are not otherwise covered either in the report of operations or in a document which contains the financial report and report of operations
- Summary of the objectives and outcomes of each visit
- Details of major promotional, public relations and marketing activities undertaken by the GB CMA to develop community awareness of the services provided by the Authority
- Details of assessments and measures undertaken to improve the occupational health and safety of employees, not otherwise detailed in the report of operations
- A general statement on industrial relations within the GB CMA and details of time lost through industrial accidents and disputes, which is not otherwise detailed in the report of operations
- A list of major committees sponsored by the GB CMA, the purpose of each committee and the extent to which the purposes have been achieved
- Information relevant to the headings listed in Financial Reporting Direction 22B of the Financial Management Act 1994 is held at the Authority's office and is available on request subject to the Freedom of Information Act 1982.

Other information

Other information such as publications, major external reviews, oversees travel or promotional and public relations activities are available on request, subject to the FOI Act 1982.

Report of operations

In accordance with the Financial Management Act 1994, I am pleased to present the Report of Operations for the Goulburn Broken Catchment Management Authority for the year ending 30 June 2008.

Dr Huw Davies
Chairperson, Board of Directors
19 September 2008

Risk management attestation

I certify that the Goulburn Broken Catchment Management Authority has risk management processes in place consistent with the Australian/New Zealand Risk Management Standard and an internal control system is in place that enables the executive to understand, manage and satisfactorily control risk exposures. The Board of the Goulburn Broken Catchment Management Authority verifies this assurance and that the risk profile of the Goulburn Broken Catchment Management Authority has been critically reviewed within the last 12 months.

Dr Huw Davies
Chairperson, Board of Directors
19 September 2008

VAGO

Victorian Auditor-General's Office

INDEPENDENT AUDITOR'S REPORT

To the Board Members of Goulburn Broken Catchment Management Authority

The Financial Report

The accompanying financial report for the year ended 30 June 2008 of Goulburn Broken Catchment Management Authority which comprises an operating statement, balance sheet, statement of changes in equity, cash flow statement, a summary of significant accounting policies and other explanatory notes to and forming part of the financial report, and the certification to the financial statements has been audited.

The Board Members Responsibility for the Financial Report

The Board Members of the Goulburn Broken Catchment Management Authority are responsible for the preparation and the fair presentation of the financial report in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the financial reporting requirements of the *Financial Management Act* 1994. This responsibility includes:

- establishing and maintaining internal controls relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error
- selecting and applying appropriate accounting policies
- making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

As required by the *Audit Act* 1994, my responsibility is to express an opinion on the financial report based on the audit, which has been conducted in accordance with Australian Auditing Standards. These Standards require compliance with relevant ethical requirements relating to audit engagements and that the audit be planned and performed to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The audit procedures selected depend on judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, consideration is given to internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of the accounting policies used, and the reasonableness of accounting estimates made by the Board Members, as well as evaluating the overall presentation of the financial report.

I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my audit opinion.

Matters Relating to the Electronic Presentation of the Audited Financial Report

This auditor's report relates to the financial statements published in both the annual report and on the website of the Goulburn Broken Catchment Management Authority for the year ended 30 June 2008. The Board Members of the Goulburn Broken Catchment Management Authority are responsible for the integrity of the web site. I have not been engaged to report on the integrity of the web site. The auditor's report refers only to the statements named above. An opinion is not provided on any other information which may have been hyperlinked to or from these statements. If users of this report are concerned with the inherent risks arising from electronic data communications, they are advised to refer to the hard copy of the audited financial report to confirm the information included in the audited financial report presented on the Goulburn Broken Catchment Management Authority web site.

Level 24, 35 Collins Street, Melbourne Vic. 3000
Telephone 61 3 8601 7000 Facsimile 61 3 8601 7010 Email comments@audit.vic.gov.au Website www.audit.vic.gov.au

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Victorian Auditor-General's Office

Independent Auditor's Report (continued)

Independence

The Auditor-General's independence is established by the *Constitution Act* 1975. The Auditor-General is not subject to direction by any person about the way in which his powers and responsibilities are to be exercised. In conducting the audit, the Auditor-General, his staff and delegates complied with all applicable independence requirements of the Australian accounting profession.

Auditor's Opinion

In my opinion, the financial report presents fairly, in all material respects, the financial position of Goulburn Broken Catchment Management Authority as at 30 June 2008 and its financial performance and cash flows for the year then ended in accordance with applicable Australian Accounting Standards (including the Australian Accounting Interpretations), and the financial reporting requirements of the *Financial Management Act* 1994.

MELBOURNE
19 September 2008

D D R Pearson
Auditor-General

Level 24, 35 Collins Street, Melbourne Vic. 3000
Telephone 61 3 8601 7000 Facsimile 61 3 8601 7010 Email comments@audit.vic.gov.au Website www.audit.vic.gov.au

GOULBURN BROKEN CATCHMENT MANAGEMENT AUTHORITY

ABN 89 184 039 725

Certification to the financial statements

We hereby certify that the financial statements of the Goulburn Broken Catchment Management Authority, have been prepared in accordance with Part 7 of the Directions of the Minister for Finance under the Financial Management Act 1994, applicable Australian Accounting Standards and other mandatory professional reporting requirements.

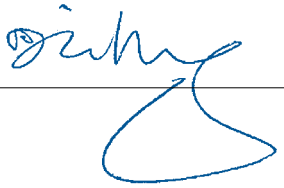
We further state that, in our opinion, the information set out in the Operating Statement, Balance Sheet, Statement of Changes in Equity, Cash Flow Statement and notes to and forming part of the financial statements, presents fairly the financial transactions during the year ended 30th June 2008 and the financial position of the Authority as at 30 June 2008.

We are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.

Signed in accordance with a resolution of the Board of Management dated 19 September 2008

Dr Huw Davies, Chairperson

WJ O'Kane, Chief Executive Officer



SD Gibney, Business Manager

Operating statement for the financial year ended 30 June 2008

	Note	2008 $000	2007 $000
Revenue From operating activities			
Government contributions	3	31,838	29,209
Revenues from non-operating activities	3	1,657	1,445
Total revenue		33,495	30,654
Expenses from operating activities			
Operating costs to works programs	4a	(27,160)	(28,072)
Amortisation of leased assets	4c	(79)	(56)
Depreciation	4b	(397)	(306)
Administration expenses	4d	(1,352)	(1,271)
Interest		(7)	(10)
Provision for doubtful debt		-	(53)
Occupancy expenses		(201)	(180)
Total expenses		29,196	(29,948)
Net result for the period		4,299	706

The accompanying notes form part of these financial statements.

Balance Sheet as at 30 June 2008

	Note	2008 $000	2007 $000
Assets			
Current assets			
Cash and cash equivalents	5	11,393	6,882
Receivables	6	1,060	540
Prepayments		60	47
Total current assets		12,513	7,469
Non-current assets			
Property, plant and equipment	7	1,938	1,513
Total non-current assets		1,938	1,513
Total assets		14,451	8,982
Liabilities			
Current liabilities			
Payables	8	3,690	2,859
Interest bearing liabilities	9	57	74
Employee benefits	10	867	558
Total current liabilities		4,614	3,491
Non-current liabilities			
Interest bearing liabilities	9	46	70
Employee benefits	10	51	55
Total non-current liabilities		97	125
Total liabilities		4,711	3,616
Net assets		9,740	5,366
Equity			
Contributed equity	12	4,209	4,134
Accumulated funds	13	-	-
Reserve	14	5,531	1,232
Total equity		9,740	5,366

The accompanying notes form part of these financial statements.

Statement of changes in equity for the year ended 30 June 2008

	Note	2008 $000	2007 $000
Opening equity balance		5,366	4,660
Contributed capital received in the period	12	75	-
Net result for the period		4,299	706
Closing equity balance		9,740	5,366

The accompanying notes form part of these financial statements.

Cash flow statement for the financial year ended 30 June 2008

	Note	2008 $000	2007 $000
Cash Flow From Operating Activities			
Government contributions		31,721	32,671
Payments to suppliers and employees		(29,467)	(34,503)
GST (remitted to) received from Australian Tax Office		1,384	(352)
Interest received		678	699
Interest paid		(7)	(10)
Other revenue		1,069	720
Net cash provided by (used in) operating activities	20b	5,378	(775)
Cash flow from financing activities			
Proceeds from contributed capital		75	-
Contributed capital transferred		-	-
Borrowings repaid		(80)	(80)
Net cash provided by (used in) financing activities		(5)	(80)
Cash Flow From Investing Activities			
Proceeds from sale of property, plant and equipment		296	248
Payment for property, plant and equipment		(1,158)	(613)
Net cash provided by (used in) investing activities		(862)	(365)
Net (decrease) / increase in cash held		4,511	(1,220)
Cash at beginning of year		6,882	8,102
Cash at end of year	20a	11,393	6,882

The accompanying notes form part of these financial statements.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 1: SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of accounting

General

This financial report of Goulburn Broken Catchment Management Authority is a general purpose financial report that consists of an Operating Statement, Balance Sheet, Statement of Changes in Equity, Cash Flow Statement and notes accompanying these statements. The general purpose financial report complies with Australian Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board and the requirements of the *Financial Management Act* 1994 and applicable Ministerial Directions.

This financial report has been prepared on an accrual and going concern basis.

Accounting policies

Unless otherwise stated, all accounting policies applied are consistent with those of the prior year. Where appropriate, comparative figures have been amended to accord with current presentation and disclosure made of material changes to comparatives.

Classification between current and non-current

In the determination of whether an asset or liability is current or non-current, consideration is given to the time when each asset or liability is expected to be realised or paid. The asset or liability is classified as current if it is expected to be turned over within the next twelve months, being the Authority's operational cycle, see 1(i) for a variation in relation to employee benefits.

Rounding

Unless otherwise stated, amounts in the report have been rounded to the nearest thousand dollars.

Historical cost convention

The financial statements have also been prepared under the historical cost convention, except where specifically stated in Note 1(d).

Critical accounting estimates

The preparation of financial statements in conformity with Australian Accounting Standards requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the entity's accounting policies.

(b) Revenue recognition

Government Contributions

Government grants are brought to account on the earlier of receipt or the right to receive the contributions. The full grant receivable is reflected in the operating statement as government contributions. Instalment receipts on the grant are credited to the receivable account. Consequently, at year-end outstanding instalments on these grants are reflected as receivable from Government.

The value of all goods and services received free of charge are recognised as revenue when the authority gains control of them. The benefits derived from these goods and services are recorded at their fair values in the financial statements.

Grants and contributions for capital works from all sources are disclosed in the operating statement as operating revenue as these grants and contributions relate to expenditure on works written off in the year the expenditure is incurred. Any grants and contributions received from the Victorian State Government which the relevant Ministers have indicated are in the nature of owners' contributions, are accounted for as Equity – Contributed Capital. Gains or Losses on disposal of non-current assets are calculated as the difference between the gross proceeds on sale and their written down value.

Interest and Rents

Interest and Rentals are recognised as revenue when earned or the service provided.

(c) Borrowing costs

Borrowing Costs are recognised as expenses in the period in which they are incurred.

Borrowing costs include interest on finance lease charges.

(d) Recognition and measurement of assets

Property, plant and equipment represent non-current assets comprising infrastructure, buildings, plant, equipment and motor vehicles, used by the Authority in its operations. Items with a cost or value in excess of $1,000 and a useful life of more than one year are recognised as an asset. All other assets acquired are expensed.

Acquisition

The purchase method of accounting is used for all acquisitions of assets. Cost is measured as fair value of the assets given, at the date of exchange plus costs directly attributable to the acquisition.

Assets acquired at no cost or for nominal consideration by the Authority are recognised at fair value at the date of acquisition.

Repairs and Maintenance

Routine maintenance, repair costs and minor renewal costs are expensed as incurred. Where the repair relates to the replacement of a component of an asset and the cost exceeds the capitalisation threshold, the cost is capitalised and depreciated.

Leases

Leases of fixed assets, where substantially all the risks and benefits incidental to the ownership of the asset, but not the legal ownership, are transferred to the Authority, are classified as finance leases. Finance leases are capitalised, recording an asset and a liability equal to the present value of the minimum lease payments, including any guaranteed residual values. Leased assets are amortised on a straight line basis over their estimated useful lives where it is likely that the Authority will obtain ownership of the asset at the end of the lease. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period.

Lease payments for operating leases, where substantially all the risks and benefits remain with the lessor, are charged as an expense in the periods in which they are incurred.

Valuation of Non Current Physical Assets

Infrastructure and buildings are measured at cost.

Notes to the Financial Statements for the year ended 30 June 2008

Plant and Equipment
Plant equipment and Motor Vehicles are measured at cost.

Leasehold improvements
Leasehold improvements are recognised at cost and are amortised over the unexpired period of the lease or the estimated useful life of the improvement, whichever is the shorter. At balance date, leasehold improvements are amortised over a 5 year period.

Impairment of Assets
All assets are assessed annually for indicators of impairment.

If there is an indication of impairment, the assets concerned are tested as to whether their carrying value exceeds their recoverable amount. Where an asset's carrying amount exceeds its recoverable amount, the difference is written-off by a charge to the operating statement except to the extent that the write down can be debited to an asset revaluation reserve amount applicable to that class of asset.

The recoverable amount for most assets is measured at the higher of depreciated replacement cost and fair value less costs to sell. Recoverable amount for assets held primarily to generate net cash inflows measured at the higher of the present value of future cash flows expected to be obtained from the asset and fair value less costs to sell. It is deemed that, in the event of the loss of an asset, the future economic benefits arising from the use of the asset will be replaced unless a specific decision to the contrary has been made.

(e) Depreciation and amortisation of non-current assets
Where assets have separate identifiable components that have distinct useful lives and/or residual values, a separate depreciation rate is determined for each component.

Depreciation is calculated using the straight-line method to allocate their costs, net of their residual values, over their estimated useful lives, commencing from the time the asset is held ready for use. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. Major depreciation rates used are listed below and are consistent with prior year, unless otherwise stated:

Asset Class	*Depreciation rate*
Buildings	2.50%
Plant and Equipment	10% to 40%
Motor Vehicles	20%
Infrastructure assets	2%

(f) Cash and cash equivalent assets
For the purposes of the Cash Flow Statement, cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts. Bank overdrafts are shown within interest bearing liabilities on the balance sheet.

(g) Receivables
Receivables are brought to account at fair value and subsequently measured at amortised cost, less allowance for doubtful debts. Receivables due from the government are due within 14 days; other receivables are due within 30 days. Collectability of debtors is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off. A provision for doubtful debts is recorded when some doubt as to collection exists.

(h) Trade and other payables
These amounts represent liabilities for goods and services provided to the Authority prior to the end of the financial year, which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

(i) Employee benefits
Wages and salaries and annual leave
Liabilities for wages and salaries and annual leave to be settled within 12 months of the reporting date are recognised in employee benefits liabilities in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled, at their nominal values. Employee benefits which are not expected to be settled within 12 months are measured as the present value of the estimated future cash outflows to be made by the entity, in respect of services rendered by employees up to the reporting date. Regardless of the expected timing of settlements, provisions made in respect of employee benefits are classified as a current liability, unless there is an unconditional right to defer the settlement of the liability for at least 12 months after the reporting date, in which case it would be classified as a non-current liability.

Long service leave
The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows. Provisions made for unconditional long service leave are classified as a current liability, where the employee has a present entitlement to the benefit. The non-current liability represents long service leave entitlements accrued for employees with less than seven years of continuous service.

Superannuation
The amount charged to the operating statement in respect of superannuation represents the contributions made by the Authority to the superannuation plan in respect to the current services of current entity staff. Superannuation contributions are made to the plans based on the relevant rules of each plan.

The Authority does not recognise any defined benefit liability in respect of the superannuation plan because the Authority has no legal or constructive obligation to pay future benefits relating to its employees; its only obligation is to pay superannuation contributions as they fall due. The Department of Treasury and Finance administers and discloses the State's defined benefit liabilities in its financial report.

Notes to the Financial Statements for the year ended 30 June 2008

Employee Benefit On-Costs
Employee benefit on-costs, including payroll tax and workcover costs are recognised and included in employee benefit liabilities and costs when the employee benefits to which they relate are recognised as liabilities.

Performance Bonus
Performance payments for the Authority's Executive Officers are based on a percentage of the annual salary package provided under their contracts of employment. A liability is recognised and is measured as the aggregate of the amounts accrued under the terms of the contracts to balance date.

(j) Goods and services tax
Revenues, expenses and assets are recognised net of goods and services tax (GST), except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of an item of expense.

Receivables and payables are stated inclusive of GST. The net amount of GST recoverable from, or payable to, the ATO is included as a current asset or liability in the balance sheet.

Cash flows arising from operating activities are disclosed in the Cash Flow Statement on a gross basis – i.e., inclusive of GST. The GST component of cash flows arising from investing and finance activities which is recoverable or payable to the taxation authority is classified as operating cash flows.

Government Appropriations
For the 2007-08 financial year the Authority was advised by the Department of Sustainability and Environment that contributions to the Authority for the agreed works program were in the nature of appropriations. Consequently as this did not constitute a taxable supply, no GST was payable by the Department on grants paid to the Authority.

(k) Contributed capital
Grants and contributions received from the Victorian State Government which were originally appropriated by the Parliament as additions to net assets or where the Minister for Finance and the Minister for Environment have indicated are in the nature of owners' contributions, are accounted for as Equity – Contributed Capital.

(l) Changes in accounting policy
The accounting policies are consistent with those of the previous year, unless stated otherwise.

(m) Financial instruments
Recognition
Financial instruments are initially measured at fair value, plus in the case of a financial asset or financial liability not at fair value through profit and loss, transaction costs that are directly attributable to the acquisition or the issue of the financial asset or liability. Subsequent to initial recognition, the financial instruments are measured as set out below:

Held-to-maturity investments
These investments have fixed maturities and it is the Authority's intention to hold these investments to maturity. Any held-to maturity investments held by the Authority are stated at cost.

Impairment
At each reporting date, the Authority assesses whether there is objective evidence that a financial instrument has been impaired. Impairment losses are recognised in the Operating Statement.

(n) Comparative amounts
Where necessary, figures for the previous year have been reclassified to facilitate comparison.

NOTE 2: FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Authority's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. This note presents information about the Authority's exposure to each of these risks and the objectives, policies and processes for measuring and managing risk.

The Authority's Board has overall responsibility for the establishment and oversight of the Authority's risk management framework. The Authority's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse on the financial performance of the Authority. The Authority uses sensitivity analysis in the case of interest rate risks.

Risk Management is carried out by a risk management committee under policies approved by the Board of Directors. The finance department identifies, evaluates and hedges financial risks in close cooperation with the Authority's operating units. The Board provides written principles for overall risk management, as well as policies covering specific areas, such as interest rate risk, credit risk and investment of excess liquidity.

2.1 Risk exposures
The main risks the Authority is exposed to through its financial instruments are as follows:

(a) Market risk
Market risk is the risk that changes in market prices will affect fair value of future cash flows of the Authority's financial instruments. Market risk comprises of interest rate risk and other price risk. The Authority's exposure to market risk is primarily through interest rate, there is no exposure to foreign exchange risk and significant exposure to other price risks.

Objectives, policies and processes used for these risks are disclosed in the paragraphs below:

Interest Rate Risk
The Authority has minimal exposure to interest rate risk through its holding of cash assets and other financial assets. The Authority manages its interest rate by maintaining a diversified investment portfolio.

Other Price Risk
The Authority has no significant exposure to other price risk.

Notes to the Financial Statements for the year ended 30 June 2008

Market Risk Sensitivity Analysis

The sensitivity analysis below has taken into consideration past performance, future expectations, economic forecasts and management's knowledge and experience of the financial markets, the Authority believes that a movement of 1 percent in interest rates is reasonable over the next 12 months.

30 June 2008	Carrying Amount $000	Interest rate risk			
		-1 percent		+1 percent	
		Result $000	Equity $000	Result $000	Equity $000
Financial assets					
Cash at Bank	11,393	(114)	(114)	114	114
Receivables	1,060	-	-	-	-
Financial Liabilities					
Payables	3,690	-	-	-	-
Total increase/(decrease)		(114)	(114)	114	114

(b) Credit risk

Credit risk is the risk of financial loss to the Authority as a result of a customer or counterparty to a financial instrument failing to meet its contractual obligations. Credit risk arises principally from the Authority's receivables and financial assets available for sale.

The Authority's exposure to credit risk is influenced by the individual characteristics of each customer. The receivable balance consists of business customers which are spread across a diverse range of industries. Receivable balances are monitored on an ongoing basis to ensure that exposure to bad debts is not significant. The Authority has in place a policy and procedure for the collection of overdue receivables.

(c) Liquidity risk

Liquidity Risk is the risk that the Authority will not be able to meet its financial obligations as they fall due. The Authority's policy is to settle financial obligations within 30 days and in the event of dispute make payments within 20 days from the date of resolution.

The Authority manages liquidity risk by maintaining adequate reserves and banking facilities by continuously monitoring forecasts and actual cash flows and matching the maturity profiles of financial assets and financial liabilities.

The Authority's financial liability maturities have been disclosed in Note 21.

2.2 Fair valuation

The carrying value less impairment provision of trade receivables and payables is a reasonable approximation of their fair values due to the short term nature of trade receivables. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Authority for similar financial assets.

The carrying amounts and aggregate net fair values of financial assets and financial liabilities at balance date have been provided in Note 21.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 3: REVENUES

	Note	2008 $000	2007 $000
Revenues from Operating activities			
Government Contributions	3a	31,838	29,209
Revenues from Non-Operating Activities			
Interest		709	726
Contributions from Third Parties		325	173
Workcover		104	62
Rent Received		14	10
Seedbank Funding		51	8
Joint activities with CMAs		216	225
Ecological Monitoring GMW		-	160
Other		238	86
		1,657	1,450
Non-operating activities			
(Loss) Gain on disposal of property, plant and equipment		-	(5)
Other revenues from ordinary activities		1,657	1,445
Total revenue		33,495	30,654
a. Government Contributions:			
State Government of Victoria			
Catchment Planning		985	985
Floodplain administration		450	240
Environmental Flows monitoring and Assessment		1,856	481
River Health and Water Quality		1,383	1,497
Salinity Infrastructure		2,663	2,860
Second Generation Landcare		525	569
Stressed Rivers / Healthy Rivers Initiative		-	1,186
Sustainable Irrigated Agriculture		1,527	1,304
Sale of Environmental Water		2,872	-
Victorian Water Trust and Water Smart Farms Initiative		2,272	1,620
White paper – River Health Large Scale River Restoration		1,000	1,000
Broken Boosey Conservation Management Network		167	151
Recreational Fish Licence		152	125
Murray River Regional Flood Study		-	15
Waterway Guidelines		-	11
Bushfire Recovery Funding		277	70
Water Savings		40	70
Drought Employment Program		2,853	3,020
Stock Containment Grants		90	346
Other		767	301
		19,879	15,851

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 3: REVENUES (Continued)

	Note	2008 $000	2007 $000
Australian Government			
Natural Heritage Trust			
Regional grants		2,948	1,769
Other AFFA		52	386
National Landcare Program		72	100
		3,072	2,255
Murray Darling Basin Commission		319	475
Victorian State and Australian Government National Action Plan		8,568	10,628
		31,838	29,209

NOTE 4: EXPENSES

Net result for the period has been determined after:			
(a) Operating Costs to Works Programs			
Biodiversity and landscape Change		1,825	1,441
Catchment Planning		2,354	1,887
Salinity and Soils		1,446	2,058
Engineering Options for Salinity Control		214	272
Sustainable Irrigation – Farm, Environment and Other		5,512	5,154
Sustainable Irrigation – Sub-surface Drainage		5,219	6,770
River Health			
Drought Employment Program		2,883	3,020
General		4,143	2,770
Broken River		1,174	2,303
Strategic		896	722
Water Quality and Environmental Flows		931	1,312
Floodplain		563	363
		27,160	28,072
(b) Depreciation of non-current assets			
Buildings		3	4
Plant and equipment		96	51
Motor vehicles		298	251
Total depreciation		397	306
(c) Amortisation of leased assets		79	56
(d) Administration expenses			
Implementation Committees		50	52
Audit fees – Internal Audit		22	15
Auditor General for audit of financial statements		10	9
Other		4	-
Board Governance		48	69
Salaries and on costs		969	951
Other		249	175
		1,352	1,271

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 4: EXPENSES (Continued)

	Note	2008 $000	2007 $000
(e) Employee related expenses			
Total employee related expenses		4,205	4,026
These expenses have been allocated to:			
(i) Operating costs to works programs		3,236	3,075
(ii) Administration Expenses		969	951

NOTE 5: CASH AND CASH EQUIVALENTS

Cash at bank and on hand		11,393	6,882
		11,393	6,882

Cash at bank bears interest rates between 6.75% and 7.15% (2007: 5.75% and 6.15%)

All of these funds are restricted in that they are held to be spent on a range of programs which the Authority currently has underway. (Note 15e).

NOTE 6: RECEIVABLES

Government Grants Receivable		250	134
Net GST amount due from Australian Tax Office		449	40
Trade Debtors		244	279
Accrued Interest		175	145
Tariffs and Charges		10	10
Provision for doubtful debts		(68)	(68)
		1,060	540

(a) Provision for impaired receivables

As at 30 June 2008, current receivables of the Authority with a nominal value of $72,206 (2007: $72,206) were impaired. Of this, it was assessed that an amount of $4,536 is expected to be recovered. Therefore, the amount of the provision was $67,670 (2007: $67,670). The largest debtor being 80% of the total represents a government receivable subject to dispute.

The ageing of these receivables is as follows:

3 to 6 months	-	-
Over 6 months	72	72
	72	72

As of 30 June 2008, trade receivables of $28,694 (2007: $0) were past due but not impaired. These relate to entities for whom there is no recent history of default. The ageing analysis of these receivables is as follow:

3 to 6 months	28	-
Over 6 months	-	-
	28	-

The other amounts within receivables do not contain impaired assets and are not past due. Based on credit history, it is expected that these amounts will be received when due.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 7: PROPERTY PLANT AND EQUIPMENT

	Note	2008 $000	2007 $000
Buildings at cost		44	43
Less accumulated depreciation		(39)	(36)
		5	7
Plant and equipment at cost		802	755
Less accumulated depreciation		(470)	(377)
		332	378
Motor Vehicles at cost		1,817	1,297
Less accumulated depreciation		(426)	(422)
		1,391	875
Office and Computer Equipment acquired under finance lease		254	269
Accumulated amortisation		(187)	(162)
		67	107
Dowdle Swamp Floodway at cost		170	170
Less accumulated depreciation		(27)	(24)
Total infrastructure assets		143	146
Total Property, Plant and Equipment		1,938	1,513

Movements in carrying amounts

Movement in the carrying amounts for each class of property, plant and equipment between the beginning and the end of the current financial year.

2007-08	Dowdle Swamp Floodway	Buildings	Plant and Equipment	Motor Vehicles	Equipment under Finance Lease	Total
	$000	$000	$000	$000	$000	$000
Balance at the beginning of the year	146	7	378	875	107	1,513
Additions	-	1	47	1,110	39	1,197
Disposals	-	-	-	(296)	-	(296)
Depreciation expense	(3)	(3)	(93)	(298)	-	(397)
Amortisation	-	-	-	-	(79)	(79)
Carrying amount at the end of the year	143	5	332	1,391	67	1,938

2006-07	Dowdle Swamp Floodway	Buildings	Plant and Equipment	Motor Vehicles	Equipment under Finance Lease	Total
	$000	$000	$000	$000	$000	$000
Balance at the beginning of the year	149	11	338	854	119	1,471
Additions	-	-	88	525	44	657
Disposals	-	-	-	(253)	-	(253)
Depreciation expense	(3)	(4)	(48)	(251)	-	(306)
Amortisation	-	-	-	-	(56)	(56)
Carrying amount at the end of the year	146	7	378	875	107	1,513

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 8: PAYABLES

	Note	2008 $000	2007 $000
Trade creditors		2,256	1,220
Accruals		1,434	1,639
		3,690	2,859

NOTE 9: INTEREST BEARING LIABILITIES

Current			
Finance Lease Liability	15c	57	74
Non-Current			
Finance Lease Liability	15c	46	70
		103	144

NOTE 10: EMPLOYEE BENEFITS

Current		
Annual leave and unconditional long service leave entitlements representing seven years of continuous service:		
– Short term employee benefits fall due within 12 months after the end of the period measured at nominal value	223	228
– Other long-term employee benefits that do not fall due within 12 months after the end of the period, measured at present value.	644	330
Total Current	867	558
Non-Current		
Conditional long service leave:		
– Other long term employee benefits that do not fall due within 12 months after the end of the period, measured at present value.	51	55
Total employee benefits	918	613
Number of full time equivalent employees at year end	48.8	48.3

(i) All annual leave is treated as a current liability. Long Service leave entitlement representing seven years plus continuous service is also treated as a current liability. Long Service Leave entitlement representing less than 7 years continuous service is treated as a non-current liability.

The following assumptions were adopted in measuring the present value of long service leave entitlements;

- Weighted average increase in employee costs 4.08%
- Weighted average discount rates 6.54%
- Weighted average settlement period 10 years

NOTE 11: SUPERANNUATION

GB CMA makes employer superannuation contributions in respect of its employees to the Local Authorities Superannuation Fund (the Fund) in the absence of any employee declaration to direct contributions to an alternate complying Superannuation fund.

Obligations for contributions are recognised as an expense in profit or loss when they are due. The Fund has two categories of membership, each of which is funded differently.

The Fund's accumulation category, Vision Super Saver, receives both employer and employee contributions on a progressive basis. Employer contributions are normally based on a fixed percentage of employee earnings (9% required under Superannuation Guarantee Legislation). No further liability accrues to the employer as the superannuation benefits accruing to employees are represented by their share of the net assets of the Fund.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 11: SUPERANNUATION (Continued)

The Fund's Defined Benefit Plan is a multi-employer sponsored plan. As the Fund's assets and liabilities are pooled and are not allocated by employer, the Actuary is unable to reliably allocate benefit liabilities, assets and costs between employers. As provided under Paragraph 32 (b) of AASB 119, GB CMA does not use defined benefit accounting for these contributions.

GB CMA makes employer contributions to the defined benefit category of the Fund at rates determined by the Trustee on the advice of the Fund's Actuary. On the basis of the results of the most recent full actuarial investigation conducted by the Fund's actuary as at 31 December 2005, the Trustee has determined that the current funding arrangements are adequate for the expected Defined Benefit Plan liabilities.

GB CMA makes the following contributions:
9.25 percent of members' salaries (same as previous year);
the difference between resignation and retrenchment benefits paid to any retrenched employees, plus contribution tax (same as previous year);

The Fund's liability for accrued benefits was determined by the Actuary at 30 June 2007 pursuant to the requirements of Australian Accounting Standard AAS25 as follows:

	30 June 2007 $000
Net Market Value of Assets	4,102,154
Accrued Benefits (per accounting standards)	3,923,436
Difference between Assets and Accrued Benefits	178,718
Vested Benefits	3,572,589

The financial assumptions used to calculate the Accrued Benefits for the defined benefit category of the Fund were:

Net Investment Return	8.0% per annum
Salary Inflation	5.5% per annum
Price Inflation	3.0% per annum

Contributions

The Authority contributes in respect of its employees, to the following principal superannuation schemes:

- Vision Super
- Colonial
- Governmental Superannuation Office

Contribution details are shown in the following table:

	Type of Scheme	**Rate %**	**2008 $000**	**2007 $000**
Colonial	Accumulation	9	58	12
Government Superannuation Office	Accumulation	Various	52	33
Vision Super	Defined Benefits	9.25	14	8
Vision Super	Accumulation	9	178	189
Other Funds	Accumulation	9	235	201
Total contributions to all funds			537	443

As at balance date, there were contributions payable of $4,595 (2007 $1,478).

NOTE 12: CONTRIBUTED EQUITY

Balance at the beginning of the reporting period	4,134	4,134
Contributed capital received	75	-
Contributed capital transferred	-	-
Balance at the end of the reporting period	4,209	4,134

Notes to the Financial Statements for the year ended 30 June 2008

	Note	2008 $000	2007 $000
NOTE 13: ACCUMULATED FUNDS			
Balance at the beginning of the reporting period		-	-
Net result for the year		4,299	706
Transfer from / (to) reserves		(4,299)	(706)
Balance at the end of the reporting period		-	-
NOTE 14: RESERVE			
Committed Funds Reserve			
Balance at the beginning of the reporting period		1,232	526
Net transfers (to) / from Accumulated Funds		4,299	706
Balance at the end of the reporting period		5,531	1,232

The purpose of the Committed Funds Reserve is to hold funds allocated for expenditure on works programs which have either not yet commenced or have not been completed at balance date. The Committed Funds Reserve is necessary as grant monies are taken to revenue as soon as the Authority has the right to receive those funds and generally there is a time lag between the right to receive the funds and the commencement of the associated works program.

NOTE 15: COMMITMENTS

a. Operating lease commitments:			
– within one year		155	132
– one year to five years		490	567
		645	699
b. Other commitments			
At balance date the Authority had commitments for works expenditure payable as follows:			
– within one year		5,345	3,596
c. Finance leases commitments			
At balance date that Authority had finance lease commitments payable as follows:			
– Within one year		61	80
– One year to five years		50	74
		111	154
Less future finance charges		(8)	(10)
		103	144
Represented by:			
Current Liability	9	57	74
Non-current Liability	9	46	70
		103	144
d. Capital Commitments			
At balance date the Authority had commitments for capital expenditure payable as follows:			
– Within one year		-	180

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 15: COMMITMENTS (Continued)

e. Contributions subject to restrictions

The following table reflects major program funding contributions which are subject to restrictions on expenditure profiles which may only be varied with the agreement of the funding body.

	Revenue recognised $000			Outgoings $000	Unexpended Program Contributions $000	Outstanding Program Commitment $000	Variance $000
Program	Funds c/f 1 July 2007	Funds Current Year	Total	Current Year	Funds c/f 1 July 2008		
Native Vegetation	1,653	2,026	3,679	1,896	1,783	1,783	-
Catchment Planning and Investment	566	3,896	4,462	3,892	570	673	(103)
Salinity and Soils	413	1,951	2,364	1,660	704	1,015	(311)
Sustainable Irrigation	651	12,030	12,681	10,772	1,909	4,464	(2,555)
River Health	2,083	13,667	15,750	10,976	4,774	5,768	(994)
Total	**5,366**	**33,570**	**38,936**	**29,196**	**9,740**	**13,703**	**(3,963)**

Variances under the Salinity and Soils, Sustainable Irrigation and River Health programs are in respect of grants approved in line with a two-year approval cycle which shall be funded from 2008/09 program funding. Indicative 3-year funding allocations are advised to the Authority to enable programs to be accommodated within the 3-year cycle rather than limited only to the funding available for the particular year.

NOTE 16: CONTINGENT ASSETS AND LIABILITIES

At balance date, the Authority was not aware of any material assets not recorded or disclosed in the accounts. In relation to contingent liabilities, an employee may commence legal action against the Authority for an employment related dispute. The Authority has not received any legal claims to the date of this report and it is not practicable to estimate the potential liability at this stage.

NOTE 17: EVENTS OCCURRING AFTER BALANCE SHEET DATE

No matters or circumstances have arisen since the end of the reporting period which significantly affected or may significantly affect the operations of the Authority, the results of those operations, or the state of affairs of the Authority in future financial years.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 18: RESPONSIBLE PERSONS RELATED DISCLOSURES

(a) Responsible persons

The names of persons who were responsible persons at anytime during the financial year were:

Minister for Water, Environment and Climate Change	Honourable John Thwaites MP	1 July 2007 – 3 Aug 2007.
Minister for Environment and Climate Change	Honourable Gavin Jennings MP	3 Aug 2007 to 30 June 2008.

Position		Appointed	Position		Appointed
Board Member	D Cummins	1 July 2003	Chair	S Mills	14 May 2002 (resigned 1 Dec 2007)
Board Member	J Pettigrew Deputy Chair (Acting Chair 1 Dec 2007 to 27 Mar 2008)	1 July 2003	Board Member	A McCamish	1 July 2006
Board Member	L Gunter (Deputy Chair from 14 Dec 2007 to 27 Mar 2008)	1 July 2003	Board Member	N Roberts	1 July 2006
Board Member	Y Davies	1 July 2000	Board Member	P Fitzgerald	1 July 2006
Board Member	N Barwick	1 July 2006	Board Member	H Davies	27 March 2008
			Chair	H Davies	28 March 2008
CEO	W J O'Kane	4 October 1997	Acting CEO	S D Gibney	1-19 Oct 2007 10-30 June 2008

(b) Remuneration of Responsible Persons

The number of responsible persons whose remuneration from the Authority was within the specified bands are as follows:

Remuneration Bands	2008 No.	2007 No.
$1-$9,999	8	8
$10,000-$19,999+	2	1
	10	9

The total remuneration of responsible persons referred to in the above bands was $93,767 (2007 $94,394) which includes $7,742 (2007 $7,794) paid in Superannuation Contributions.

The relevant information of the Chief Executive Officer is reported under the Remuneration of Executives.

The relevant Minister's remuneration is reported separately in the financial statements of the Department of Premier and Cabinet.

Other relevant interests are declared in the Register of Members' Interests which each member of the parliament completes.

(c) Remuneration of Executives

The number of executive officers, other than responsible persons included under 'Remuneration of Responsible persons' above, whose total remuneration exceeded $100,000 during the reporting period are shown below in their relevant income bands:

Remuneration Bands	2008 No.	2007 No.
$100,000 – $109,999	-	1
$110,000 – $119,999	3	5
$120,000 – $129,999	3	-
$130,000 – $139,999	-	1
$140,000 – $149,999	1	-
$180,000 – $189,999	-	1
$190,000 – $199,999	1	-
	8	8

The total remuneration including superannuation of executives whose remuneration was greater than $100,000 referred to in the above bands was $1,052,602 (2007: $1,000,865).

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 18: RESPONSIBLE PERSONS RELATED DISCLOSURES (Continued)

	Total Remuneration		Base Remuneration	
Remuneration Bands	2008	2007	2008	2007
$100,000 - $109,999	-	104,388	-	104,388
$110,000 - $119,999	347,684	573,892	331,351	544,838
$120,000 - $129,999	368,771	-	351,398	-
$130,000 - $139,999	-	134,913	-	120,772
$140,000 - $149,999	140,803	-	130,976	-
$180,000 - $189,999	-	187,672	-	170,723
$190,000 - $199,999	195,344	-	175,116	-
TOTAL	$1,052,602	$1,000,865	$988,841	$940,721

(d) Other Related Party transactions

Loans: There were no loans in existence by the Authority to responsible persons or related parties at the date of this report.

Shares: There were no share transactions in existence between the Authority and Responsible Persons and their related parties during the financial year.

Other: Yvonne Davies and Lyn Gunter were councillors with the Shire of Moira, Murrindindi respectively. During the year, the Authority from time to time had dealings with those Municipalities on normal commercial terms and conditions.

Don Cummins, Stephen Mills and Peter Fitzgerald have been / are Board Members of Goulburn-Murray Water and, from time to time, the Authority had dealings with Goulburn-Murray Water on normal commercial terms and conditions. Don Cummins is a Board member of Goulburn Valley Water and the Authority had dealings with Goulburn Valley Water on normal commercial terms and conditions.

Works to the value of $39,525 were undertaken on the property of Peter Fitzgerald. The works were undertaken as part of the drought employment program and is in lieu of a grant that the landholder would otherwise have obtained for the improvements. The payment is in line with the Authority's grant incentive scheme.

Other than travel reimbursements there were no other transactions between the Authority and Responsible Persons and their related parties during the financial year.

(e) Board members attendance record at meetings (excluding Special Board meeting)

Board member	Board Meetings 10 meetings held	Compliance Committee 1 meeting held	Audit Committee 4 meetings held	Remuneration Committee 6 meetings held
Neville Barwick	9	0	2	2 (of 2)
Don Cummins	10	0	2	-
Yvonne Davies	10	1	4	-
Huw Davies	3 (of 3)	-	-	2 (of 3)
Peter Fitzgerald	10	-	4	-
Lyn Gunter	9	-	-	5
Anne McCamish	10	-	-	6
Stephen Mills	3 (of 4)	-	1	2 (of 2)
John Pettigrew	9	-	4	6
Nick Roberts	9	1	-	4 (of 4)

The Chairman, Dr Huw Davies is ex-officio of all Board Committees and able to attend all meetings.

NOTE 19: ECONOMIC DEPENDENCE

To attain its goals as detailed in its Regional Catchment Strategy, the Authority continues to be dependent upon future funding commitments from both the State and Australian Governments.

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 20: CASH FLOW INFORMATION

	2008 $000	2007 $000
a. Reconciliation of Cash		
Cash at the end of the financial year as shown in the cash flow statement is reconciled to the related items in the balance sheet as follows:		
Cash at bank and on hand (Note 5)	11,393	6,882
	11,393	6,882
b. Reconciliation of cash flow from operations with net result for the year.		
Net result for the period	4,299	706
Non-cash flows in net result		
Depreciation	397	306
Amortisation	79	56
Net loss (gain) on disposal of non-current assets	-	5
Changes in assets and liabilities		
(Increase) / decrease in receivables	(520)	721
(Increase) / decrease in prepayments	(13)	57
Increase / (decrease) in provisions	305	108
Increase / (decrease) in payables	831	(2,734)
Cash flows from operating activities	5,378	(775)

c. Property plant and equipment:
During the financial year, the Authority acquired computer equipment with an aggregate fair value of $39,357 (2007 $44,459) by means of finance leases. These acquisitions are not reflected in the cash flow statement.

NOTE 21: FINANCIAL INSTRUMENTS

Interest risk rate exposures

The following table sets out the Authority's exposure to interest rate risk, including the contractual repricing dates and the effective weighted average interest rate by maturity periods. Exposures are predominantly from liabilities bearing variable interest rates as the Authority intends to hold fixed rate liabilities to maturity.

			Fixed interest rate maturing			
2007-08	**Weighted average interest rate**	**Floating interest rates**	**1 year or less**	**1 to 5 years**	**Over 5 years**	**Non-interest bearing**
	%	**$000**	**$000**	**$000**	**$000**	**$000**
Financial assets						
Cash	7.09	11,391	-	-	-	2
Receivables	n/a	-	-	-	-	1,060
Total financial assets	-	11,391	-	-		1,062
Financial liabilities						
Lease liabilities	6.8	-	57	46	-	-
Payables	n/a	-	-	-	-	3,690
Total financial liabilities	-	-	57	46	-	3,690
Net financial liabilities	-	11,391	(57)	(46)	-	(2,628)

Notes to the Financial Statements for the year ended 30 June 2008

NOTE 21: FINANCIAL INSTRUMENTS (Continued)

			Fixed interest rate maturing			
2006-07	**Weighted average interest rate**	**Floating interest rates**	**1 year or less**	**1 to 5 years**	**Over 5 years**	**Non-interest bearing**
	%	**$000**	**$000**	**$000**	**$000**	**$000**
Financial assets						
Cash	6.09	6,882	-	-	-	-
Receivables	n/a	-	-	-	-	540
Total financial assets	-	6,882	-	-		540
Financial liabilities						
Lease liabilities	6.17	-	74	70	-	-
Payables	n/a	-	-	-	-	2,859
Total financial liabilities	-	-	74	70	-	2,859
Net financial liabilities	-	6,882	(74)	(70)	-	(2,319)

Fair Value

The carrying amounts and fair values of interest bearing liabilities at balance date are:

	2008		**2007**	
	Carrying amount $000	**Fair value $000**	**Carrying Amount $000**	**Fair value $000**
Financial assets				
Cash	11,383	11,383	6,882	6,882
Receivables	1,060	1,060	540	540
Total financial assets	12,443	12,443	7,422	7,422
Financial liabilities				
Lease liabilities	103	103	144	144
Payables	3,690	3,690	2,859	2,859
Total financial liabilities	3,793	3,793	3,003	3,003

Cash, cash equivalents and non-interest bearing financial assets and financial liabilities are carried at cost which approximates their fair value. The fair value of other financial assets and financial liabilities is based upon market prices, where a market exists or by discounting the expected future cash flows at current interest rates.

NOTE 22: AUTHORITY DETAILS

The registered office of the Authority and principal place of business is: 168 Welsford Street, Shepparton 3630, Victoria.

The Environment

– details of annual performance and long-term progress

This section provides further details on the ratings of annual performance and long-term progress for each investment area of 'The Environment' given in the tables on pages 12 and 13.

References to yet further levels of detail are also given in this section, with most details to be found at www.gbcma.vic.gov.au.

This ordering of information into different levels is part of implementing the 2004 Goulburn Broken Monitoring, Evaluation and Reporting (MER) Strategy.

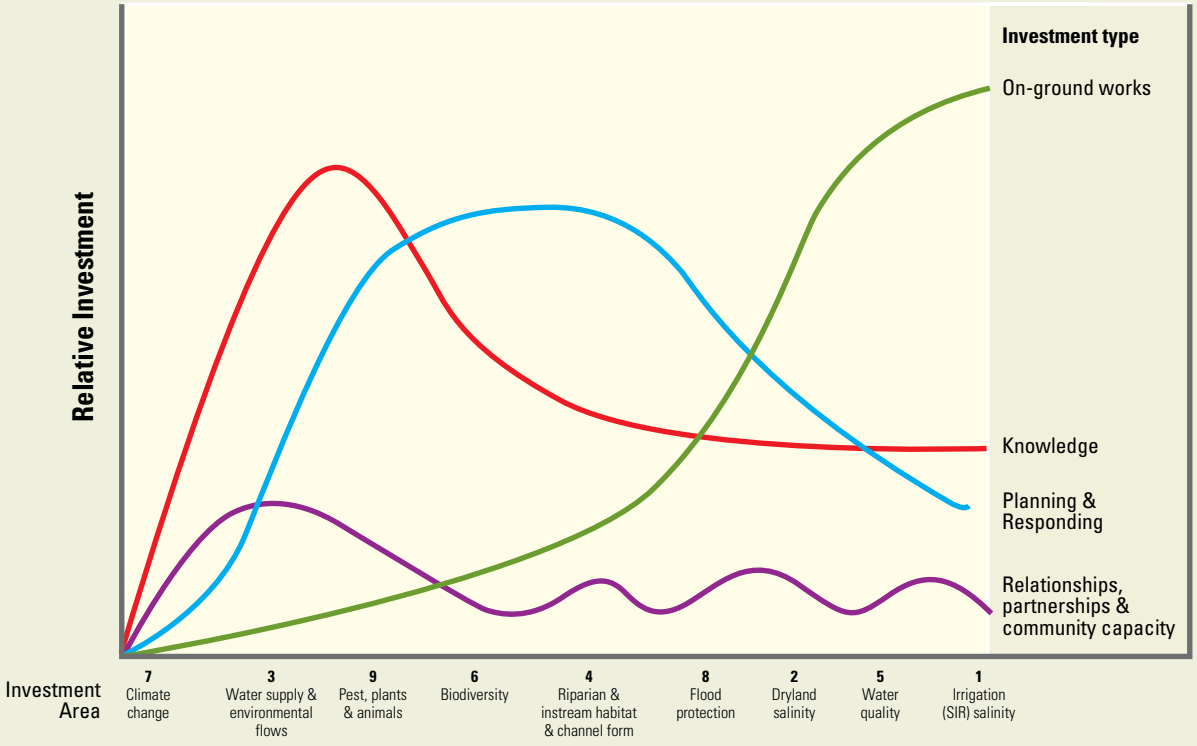
Investment patterns and maturity of approaches*

The stylised investment patterns shown in this graph show we are at different stages of 'maturity' of implementing approaches in our nine environmental investment areas.

For example, investment in irrigation salinity began much earlier than investment in biodiversity, which in turn is more mature than investment in climate change.

The time scale is different for each investment area. Investment in dryland salinity is not likely to follow an exponential uptake because information has emerged that requires us to revisit our plans.

Government investment often dictates the levels of investment in each investment type (on-ground works; knowledge; planning and responding; and relationships, partnerships and community capacity) although the GB CMA attempts to ensure the balance of investment between the different types is appropriate for the issue.



Shows relative maturity for each major GB CMA environmental investment area

* Adapted from the GB CMA's *From the fringe to mainstream – A strategic plan for integrating native biodiversity 2004-07.*

Understanding progress and ratings

"The lack of an environmental accounting framework is a fundamental weakness of Australian environment policy."
– from *Accounting for Nature* by the Wentworth Group of Concerned Scientists, May 2008.

The GB CMA understands that measuring progress in natural resource management is almost universally difficult, and that the quality of data systems used to inform whole of Catchment-scale decisions is often poor. Nevertheless, decisions have to be made and the GB CMA is at the forefront of communicating progress.

"…you take a comprehensive approach using quantitative and qualitative data and measure performance over time… Your (annual) report is also well presented and easy to read...there is much in your (2006-07) annual report that would assist national reporting if applied more generally."
– Australian Nation Audit Office letter to GB CMA, March 2008

Ratings of annual performance and long-term progress help to focus investment decision makers such as the Board and government funding bodies. The use of these ratings for guiding decisions needs to be tempered by an understanding of the degree of objectivity.

In 2008-09, we will involve all key decision-makers in improving the overall ratings framework and the ratings themselves. This will include further consideration of the various frameworks such as 'resilience thinking' that may assist thought processes.

Annual performance and long-term progress

Annual performance is rated by measuring the outputs achieved against the target for the year. The target is determined by the funds available and usually varies from that identified or implied in the relevant long-term strategy. This is because we do not know what funds are available beyond one year and what funds are anticipated to be available at the time the strategy was written.

There is usually a high certainty of the rating for annual performance within a single investment area: funding is known, outputs and other indicators are well documented, and accounting mechanisms are adequate.

Long-term progress ratings are needed for two separate areas of focus for decision-making:

- Outputs achieved against what were intended to be achieved since the relevant strategy's inception (long-term strategy implementation progress)
- Condition of the issue to be managed, such as water quality, native vegetation or community capacity.

There are often several individual components to rate when determining an overall long-term progress rating within a single investment area. These individual ratings have varied data quality and this affects the certainty of the overall rating.

For example, there are several components within 'Investment area E – Relationships, partnerships and community capacity' and progress in implementing strategic approaches for each of these components varies as does the certainty. Similarly, the condition and certainty of rating the condition of the components that make up our 'relationships, partnerships and community capacity' vary.

Where outputs and long-term strategies are well defined and where they are accompanied by solid data management systems, such as for 'Investment area 1 – Shepparton Irrigation Region salinity', then the certainty of our long-term progress ratings increase. Strategies for different investment areas vary in formality and comprehensiveness, which is appropriate, so our certainty of understanding progress varies considerably.

Complete implementation of a strategy does not necessarily translate to desired condition change, because of external factors and perhaps inaccurate assumptions used at the time the strategy was written, especially those related to funding levels and the weather.

What does Catchment condition mean?

Measuring the condition of the Catchment has historically focused on discrete themes, including biophysical investment areas such as salinity, water quality, river health and biodiversity, and non-biophysical investment areas such as community capacity.

The *National Framework for Natural Resource Management Standards and Targets* (2002, under review) lists ten of these types of theme as resource condition matters for target. It also recommends indicator headings and indicators of progress. Resource condition indicator examples are depth to groundwater, soil acidity, total phosphorus levels and extent of native vegetation present by interim bio-geographical regionalisation of Australia sub-region.

'Resource' can be interpreted from the national framework as referring to biophysical assets such as rivers, as well as to, perhaps erroneously, threats such as salinity. 'Resource condition' can therefore be interpreted as being the biophysical state of the biophysical theme (or matter for target).

Resource condition indicators have been very useful in ordering information for decision-makers whose focus is within particular investment areas. However, these indicators only provide part of the picture and there has been wide variability in their interpretation and use.

We need more information on the investment areas in an integrated context to make better decisions. This means we need information on all of the elements that impact on particular investment areas in order to 'rate' the condition of the Catchment for that investment area.

This Annual Report promotes a broadening of focus from environmental elements only to social and economic elements also within each investment area, including the relationships between all elements. Together, these elements form a complex, evolving, integrated 'social-ecological system'* in which humans are a part of nature. Ratings of catchment condition for an investment area are therefore ratings of the social-ecological system's condition related to that investment area.

The quality and availability of indicator data for the environmental (or resource condition) component varies considerably, and we are in the very early stages of formally documenting relevant social and economic indicator data. Despite the uncertainties that this presents, it is far more informative for decision making to present rolled up socio-ecological system ratings for Catchment condition rather than ratings based on resource condition indicators alone. Progress within investment areas are usually rated by considering more than one element. For example, threatened species and native vegetation are two component elements within the 'biodiversity' investment area.

Resource condition indicators are usually not a major consideration in rating progress within investment areas under 'The Business' because these merely have supporting functions.

Resilience, adaptability and transformability

Resilience thinking* helps to expand our thinking to the whole of system. This approach has evolved out of our sustainability and ecosystem services thinking.

Characteristics of desired systems include:

- Resilience – the capacity to withstand shocks and rebuild without collapsing into a different system
- Adaptability – the capacity of participants to influence resilience
- Transformability – the capacity to create a fundamentally new system if necessary.

Together, these characteristics can be considered as part of the resilience package.

Thinking about resilience ensures that fundamental questions are at the forefront of our minds, such as:

- Are our systems sufficiently resilient to withstand a shock?
- Are our systems close to a threshold (or tipping point into a completely different regime)?
  - Is it better to accept that our systems are transforming into a different regime and accept that we should just focus on managing the change?
  - What interventions can or should be made to build resilience?

Resilience, adaptability and transformability are important components of investment areas under both 'The Environment' and 'The Business'.

* The above discussion on social-ecological systems and resilience has drawn heavily from a paper in preparation on *Resilience, Adaptability and Transformability in the Goulburn-Broken Catchment* by Walker, Abel, Anderies and Ryan; the Resilience Alliance website, http://www.resalliance.org and from *Resilience Management – A Guide for Irrigated Regions, Communities and Enterprises*' (2007) by Wolfenden, Evans, Essaw, Johnson, Sanderson, Starkey and Wilkinson.

Investment area 1 – Shepparton Irrigation Region (SIR) salinity: watertables and River Murray Salinity

Report compiled by: Ken Sampson, Terry Batey, Peter Howard, Andrea Smith, Rod McLennan, Terry Hunter, Carl Walters
2007-08 investment: $12,060,000

Managing salt within the SIR landscape and discharges of salt to waterways are high priorities in achieving our contribution to objectives of the Murray-Darling Basin's *Basin Salinity Management Strategy 2001-2015*.

Resource Condition Targets (RCT) or outcomes are:

- Keep groundwater below 2 metres within the SIR (500,00 hectares) by: improved irrigation management on farms, improved surface water management within drainage catchments and consistently pumping groundwater, with appropriate reuse over 216,000 hectares of land
- Keep increases to salinity levels of the River Murray at Morgan from the Shepparton Irrigation Region at or below 6.9 EC.

Actions to manage salinity have significant benefits for agriculture, water security and native vegetation. The impact of environmental flows and water trade down the river also reduces the impact of the SIR on the salinity of the river.

In the event of doing nothing to combat rising watertables, 65 percent of the region was expected to have a watertable at less than 2 metres depth by 2020. Several actions to combat land salinisation and waterlogging have a negative impact on river salinity and are listed as accountable actions on the MDBC salinity register.

The water tables are significantly lower and contributions to Murray River salinity have decreased dramatically. Farm investment in improved irrigation management and investment in regional drainage infrastructure have had a significant impact on this decrease. This has also been influenced by the prolonged dry period over the last decade.

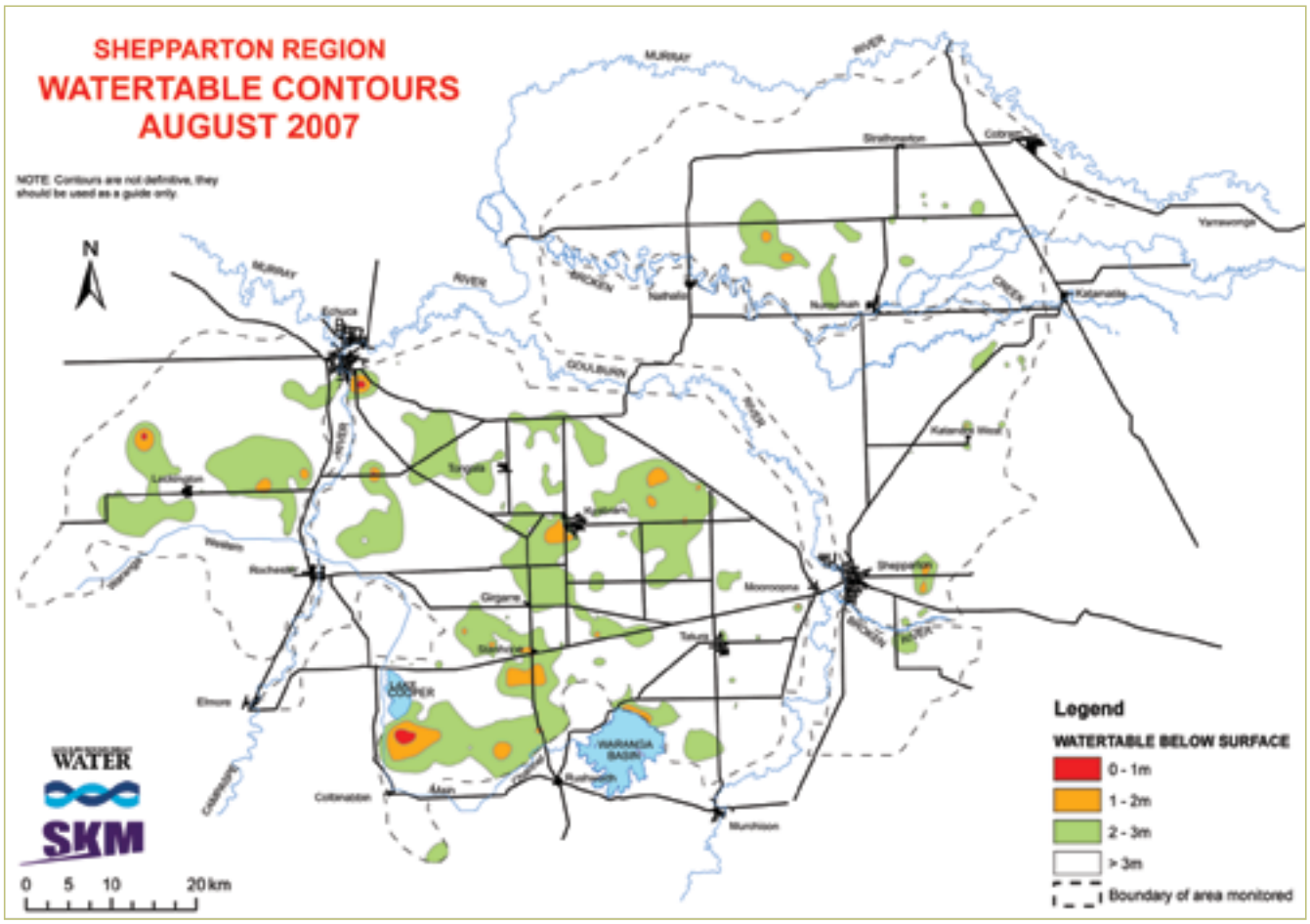
We expect continued implementation of the RCS to continue to reduce water tables and salinity impact on the River Murray. We expect the return of wetter conditions would result in upward pressure on the trends in water tables and contributions to Murray River salinity.

Strategic references:

- Shepparton Irrigation Region Land and Water Salinity Management Plan 1990 (SIRLWSMP)
- (Victorian) Government Response 1990
- SIRLWSMP Strategic Review 1995
- SIRLWSMP Strategic Review 2000
- (Murray-Darling) Basin Salinity Management Strategy 2001-2015
- Draft Shepparton Irrigation Region Catchment Implementation Strategy 2007
- Mid term review of Basin Salinity Management Strategy

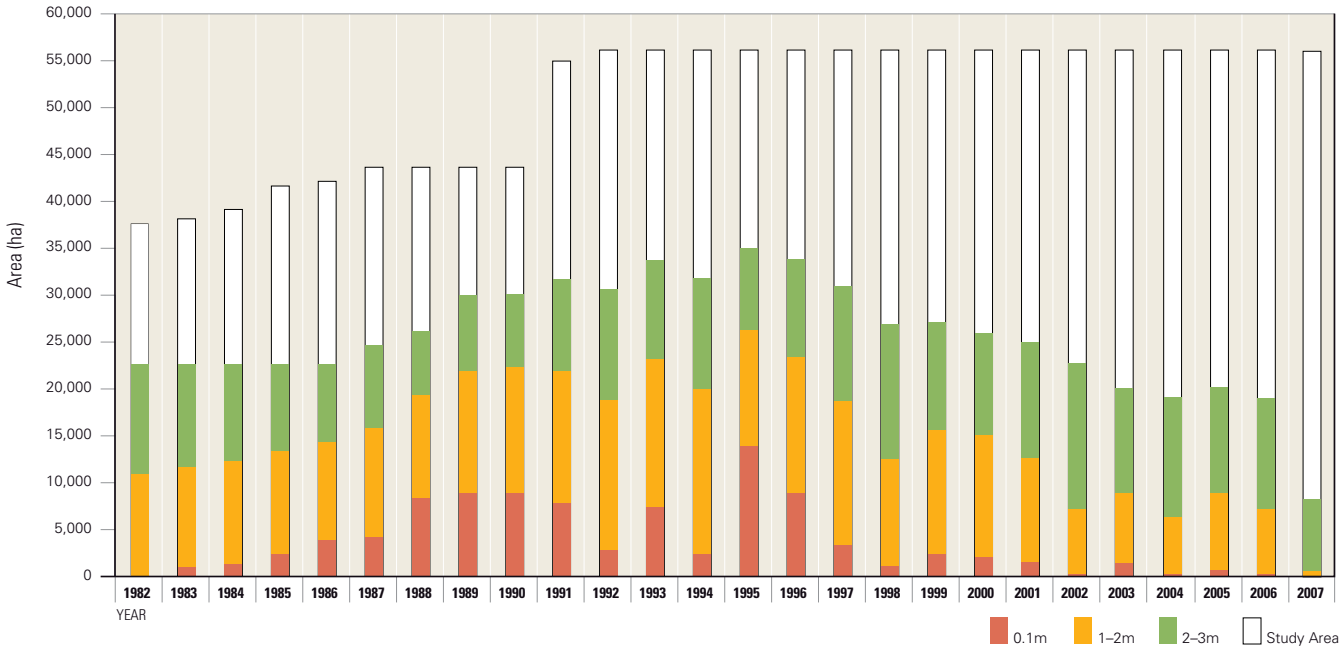
Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 1990 and 2008)	n.a.	On target	High
Catchment condition	Watertable salinity and depths Salinity of environmental features Salt disposed to Murray River Catchment management systems in place	Poor	Good	Medium

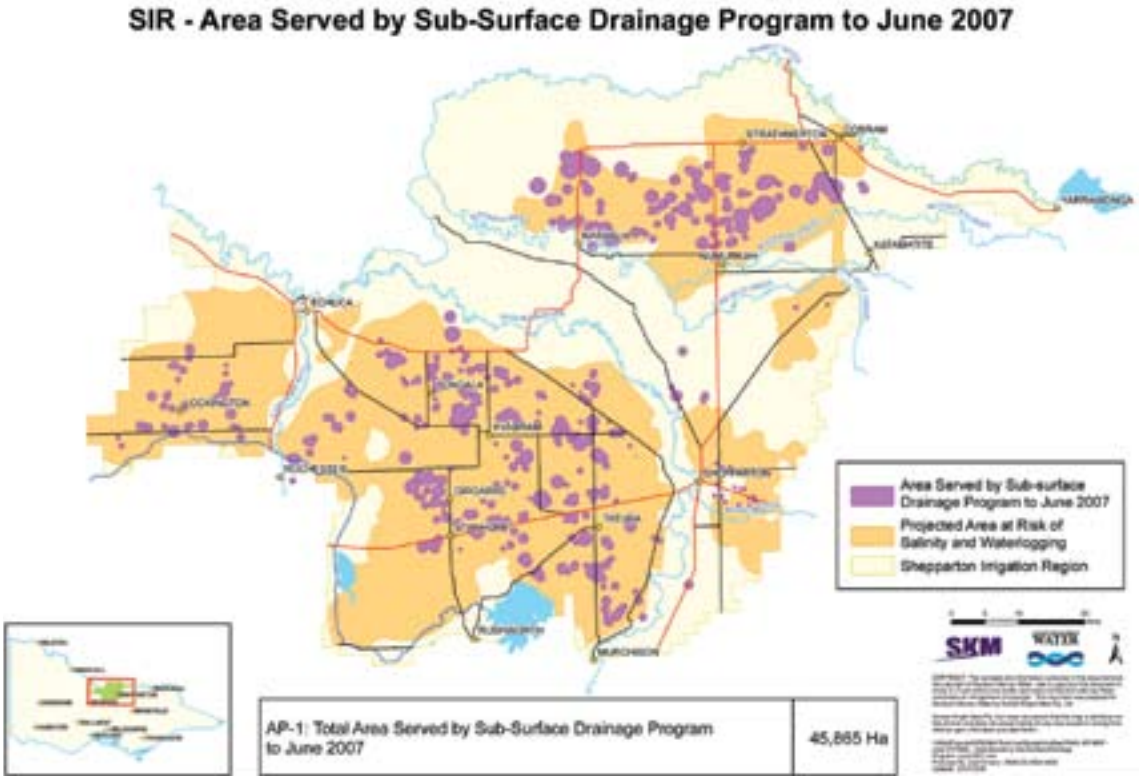


August Depth to Watertable Areas – Shepparton Region

Shepparton Region Watertabe Study 1982 – 2007



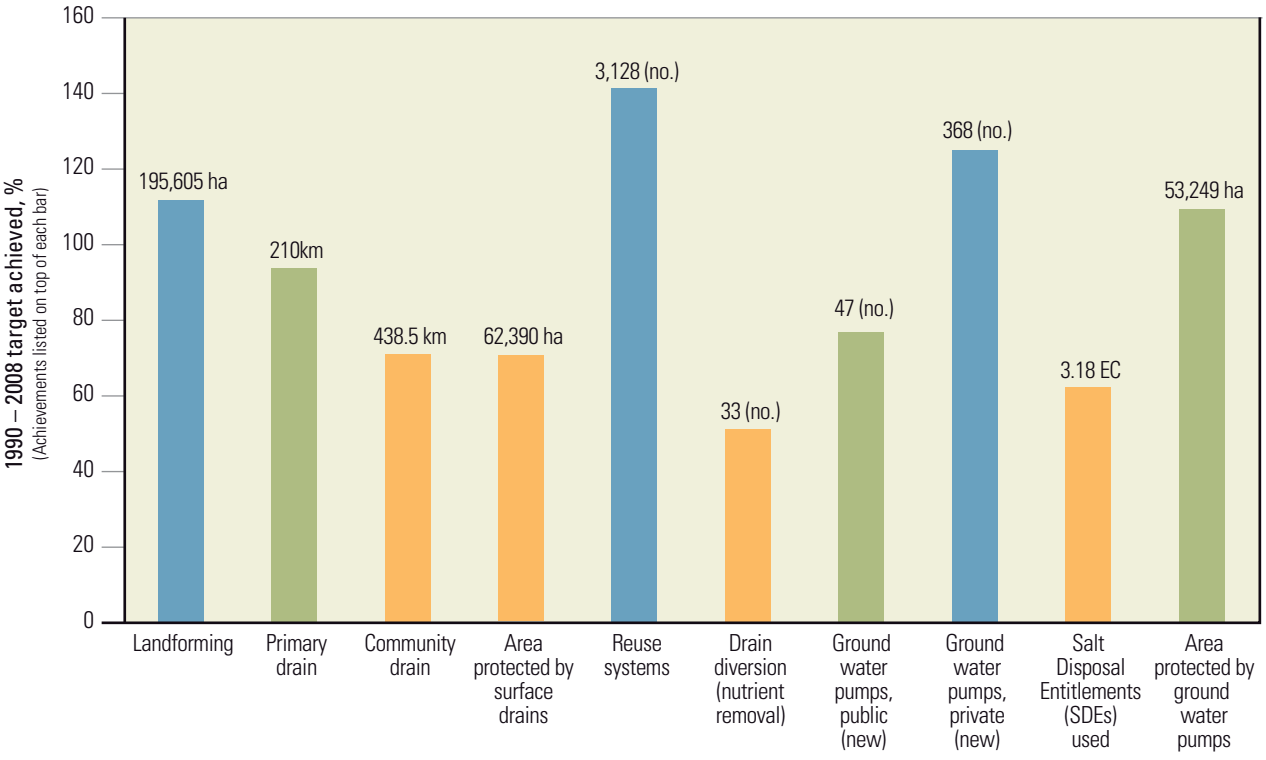
Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High



Several actions to combat land salinisation and waterlogging have a negative impact on river salinity. However, the actions need to be completed as a package simultaneously to warrant investment from landholders, and the net result is progress towards RCTs. These are listed as accountable actions on the MDBC salinity register.

The levels of government funding have declined in real terms since targets were set in the 1990 SIRLWSMP. Therefore, at current investment rates, we will not meet implementation targets for regional infrastructure (public drains and groundwater pumps) until approximately 2030 (rather than 2020 as set in the 1990 SIRLWSMP).

Progress against output and outcome targets for Shepparton Irrigation Region, 1990 – 2008 (Life of Strategy 1990 – 2020)



The impact of SIR salinity management plan activities to the end of 2007-08 has increased the River Murray salinity at Morgan by 3.18 EC. On the Murray Darling Basin Commission (MDBC) Salinity Register this equates to an $824,659 cost. The management of salt disposal will further reduce the impact of increasing salt loads at Morgan to 1.49 EC at a cost of $398,000.

Progressive uptake of Salt Disposal Entitlements (SDEs) in the SIR to June 2008 *

	Uptake of Salt Disposal Entitlements (EC)			
Activity	**Pre 1991**	**Total to 2006-07**	**Uptake to 2007-08**	**Total to 2007-08**
Primary Drains	0.055	-0.190	-0.029	-0.220
Community Surface Drains	0.008	-0.389	0	-0.389
Public Groundwater Pumps	0	1.880	0.040	1.920
Private Groundwater Pumps	0	1.684	0	1.694
Horticultural Sub-surface water management	0.030	1.178	0	0.178
Total	**0.093**	**3.172**	**0.011**	**3.183**

* Includes pre 1991 impacts. Note figures are revised to account for the SIR Salt Audit review. Not yet endorsed by MDBC. The impact of increasing dryland salinity in the Goulburn Broken Catchment is on the MDBC register as 1.8 EC or $466,000 (as at June 2007) with no benefit of on-ground works. Revised methodology used in 2007-08 does not match previous Annual Reports.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

2007-08 performance

Note: Refer also to section on 'Shepparton Irrigation Region Implementation Committee' for further achievements, especially those related to integration of complementary issues and community involvement.

Investment and actions*		From funds received through Corporate Plan				
		Achieved			*Target*	*% achieved*
		2005-06	*2006-07*	*2007-08*		
Government investment*	**$000**	$12,837	$14,070	$12,060	n.a.	n.a.
Surface water action						
Land forming/laser grading	ha	7,700	4,490	8,525	7,700	111
Drain – primary built	km	0**	0***	33*****	3	300
Drain – community built	km	6	0	0	4	0
Farm reuse systems installed	no.	70	56	48	45	107
Drain – additional water diverted from regional drains	ML	235	75	200	570	35
Irrigation systems – improved****	ha	8,580	570	8,967	6,840	131
Sub-surface water action						
New groundwater pumps – public installed	no.	3	0	1	2	50
New groundwater pumps – private installed	no.	11	16	20	6	333
Increased volume of water able to be pumped	ML	1,800	3,302	3,237	1,400	231
Planning for works action						
Whole farm plans	no.	104	152	145	155	94

* Many actions primarily aimed at achieving salinity targets contribute to other targets also, such as those for water quality and biodiversity. Investment shown is for those funds dedicated primarily to achieving salinity outcomes.

** 11km were constructed during 2005-06 but 0km was formally 'handed over' to Goulburn-Murray Water for it to manage.

*** 6.5km were constructed during 2006-07 but 0km was formally 'handed over' to Goulburn-Murray Water for it to manage.

**** Improved systems include laser grading, automatic irrigation and micro-irrigation.

***** Nine kilometres were constructed during 2007-08 and 33 kilometres was formally 'handed over' to Goulburn-Murray Water for it to manage. Handed over drains (not accounted for 2005-06 and 2006-07) was recorded in 2007-08

Sub-surface water management program (SSWMP)

Heavy demand on both the Pasture Farm Exploratory Drilling Scheme (FEDS) and capital grants programs continued in 2007-08 which saw the FEDS complete 44 investigations with six being declared successful and another 13 identified as having potential to be public pump sites. There were seven investigations still in progress and 65 properties on the high priority waiting list.

One successful horticulture FEDS investigation was completed. There are no investigations currently in progress. There is currently no demand for the program.

17 new groundwater pumps were installed along with three being upgraded under the pasture private groundwater pumping program. This brings the cumulative total of new pumps to 293 with 67 existing pumps upgraded. The overall Plan targets to the end of 2007-08 were 279 new installations and 65 upgrades. The estimated area protected is around 3,074 hectares. There are 12 new pumps currently in the process of being installed.

Due to the continuation of drought conditions little work was undertaken in the construction and handover of public salinity control groundwater pumps as the emphasis was to concentrate on the private pumping program. The total of public salinity control groundwater pumps increased to 47 protecting more than 9,670 hectares. No feasibility investigations were completed.

Ongoing extension was provided to Local Area Plan groups and Landcare groups throughout the region.

Salt disposal from private shallow groundwater pumps was terminated in 2006-07 due to research findings. The Victorian Salt Disposal and Investigation Working Group have endorsed the removal and we are currently waiting on advice from MDBC on how to manage the removal of private pumps from the GB CMA salt disposal register.

River Murray trigger levels were not reached and therefore no disposal from public salinity control pumps was available.

2007-08 saw 18 projects being implemented under the SSWMP strategic research and investigation plan which included 13 new projects being initiated. Four projects were completed. The projects addressed research and development issues associated with the Program.

Surface water management program (SWMP)

Progress continued on Stage 1 of Murray Valley Drain 11 with 2.3 kilometres of drain and associated works, and the majority of pump station civil works completed. Tenders for the supply of pumps were received and assessed with Mono Pumps being awarded the contract. The pumps are to arrive in late June and be installed early 2008-09.

Stage 2 of the project is in the design stage and landholder consultation occurred on Stage 3.

Landholders affected by the proposed Murray Valley Drain 11 Wetland Management Plan were advised of the management recommendations and asked if they wish to be involved. Significant resistance to the proposed recommendations was encountered with very few stakeholders prepared to be involved in the development of the Management Plan. Further discussions will take place in order to complete the project.

Delays occurred in completing fencing and minor structure works on both Drain 8 and Stage 4 of the Muckatah Depression drain. The majority of these works were completed during 2007-08.

In March a ceremony was held to celebrate the completion of the Muckatah Primary Surface Water Management System. The Minister for Agriculture, Mr Joe Helper, presented a commemorative plaque to the Muckatah Community Drainage Group to acknowledge the final constructed length of 63 kilometres.

Deakin Drain 16 Extension

On May 28 2007, the new Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2007 came into effect. As the Deakin Drain 16 Extension Project system was not submitted to the City of Greater Shepparton seeking a planning scheme amendment and planning permit prior to this date, a cultural heritage management plan was required to be submitted to the local registered aboriginal party. The plan was completed by a qualified archaeological consultant in April. Amendments were required and the plan resubmitted in May. Once approval is obtained the project will be submitted to the City of Greater Shepparton.

Several new Community Surface Water Management Systems were initiated. Muckatah 18P, Muckatah 4/8P, Muckatah 22P, Muckatah 2/3P and Muckatah 3/8P have all been imitated and working towards the completion of their survey and designs. Muckatah 4P have all their Notice 2s signed which will see construction of this system begin later in the year.

Muckatah 2/8P have tendered for the construction of their Community Surface Water Management Systems under landholder management which is due to begin in May 2008.

The length of Primary Surface Water Management Systems constructed was nine kilometres. However 33 kilometres were formally handed over to G-MW. No Community Surface Water Management Systems were constructed .

The Muckatah scoping project is now completed with five out of the eight Community Surface Water Management Systems deciding to proceed to the next phase of survey and design. The locations of the planned Community Surface Water Management Systems are approximately 40 kilometres north east of Shepparton. The results of the scoping project are encouraging in terms of forward progress during the dry times in the catchment and are a significant reflection on the proactive approach of the Community Surface Water Management Plan during the last planning period of 2005-06.

Farm Program

145 whole farm plans covering 11,300 hectares were prepared and 458 reuse dams were installed. 20 private and one public groundwater pumps were installed, protecting a further 3,227 hectares. Nine kilometres of primary drains were completed. A 200 megalitres storage was constructed through the drainage nutrient removal incentive scheme.

There was a major focus on linking farm irrigation needs with irrigation delivery infrastructure being built through NVIRP.

Environmental and tree-growing projects protected 59 hectares of remnant vegetation (including 11 hectares of wetlands) and revegetated 33.5 hectares for corridors and understorey.

Cattle feedpad

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Investment area 2 – Dryland salinity: watertables and River Murray salinity

Report compiled by: Mark Cotter, Rod McLennan
2007-08 investment: $2,960,000

Managing salt loads in the Goulburn Broken dryland landscape and discharges of salt to waterways are important when considering the objectives of MDBC's *Basin Salinity Management Strategy 2001-2015*. Issues that need to be taken into account include: River Murray salinity, end-of-valley targets for tributaries, and within-valley targets for terrestrial ecosystems, farmland, cultural heritage and built infrastructure.

A resource condition target (RCT) for River Murray salinity was set in 2000 in the background papers for the Strategy. A RCT for land salinisation was developed in 2002. The form of both RCTs has changed since originally written, but their intent remains the same. They now read:

- Save 1,500 hectares of foothills and river valleys of highland areas from salinisation by 2050
- Maintain increases to salinity levels of the River Murray at Morgan from the Goulburn Broken dryland at or below 1.3 ECs by 2050.

The impact of increasing dryland salinity in the Goulburn Broken Catchment is now on the MDBC register as 1.8 EC as at June 2007. This equates to a cost of $466,000 to mitigate the salt loads.

Strategic references:

- Goulburn Broken Dryland Salinity Management Plan 1995-2001 Review (Draft)
- Goulburn Broken Dryland Salinity Management Plan (Draft) 1989
- South West Goulburn: Tree Cover for Salinity Management – final report September 2004 (SKM)
- Predicted Streamflow and Salinity Changes after Afforestation in the South West Goulburn 2004 (CSIRO Land and Water)
- (Murray-Darling) Basin Salinity Management Strategy 2001-2015

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 1990 and 2008)	n.a.	Below target	Medium
Catchment condition	Watertable salinity and depths Salinity of environmental features Salt disposed to Murray River Catchment management systems in place	Poor	Satisfactory	Low

The impact of the record dry period over the last decade on land salinisation and river salinity has dwarfed the impact of other human intervention with reduced rainfall levels reversing the rising watertable trend in much of the upland areas. However, in the riverine plains there is a mixed response, with some areas showing continued rising trends in groundwater levels and other areas falling in response to increased groundwater use, at least locally. This affects the confidence we have in RCTs we have set. Work is underway at regional and Australian Government levels, through the MDBC, to define the targets in light of likely climate change and an extended dry climatic phase.

The medium term impact of reduced rainfall on salt loads is still unknown. While saline inflows from groundwater are likely to decrease higher in the landscape it will be some time before the impact on saline inflows lower in the landscape is known. It is unknown to what extent a return to average rainfall conditions, should it occur, will result in increased mobilisation of stored surface salt, nor is it known how much this would offset the decrease in saline inflows from base flow.

The long-term strategy implementation progress rating is an average of the two separate targets related to salinity:

- Highland salinisation implementation target: on target (medium level of certainty)
- River salinity implementation target: well below target (high level of certainty).

Progress towards the (end-of-valley) River Murray salinity target from the dryland has been behind schedule for several years. It is now known that the RCT is likely to be inappropriate and might need to be reset.

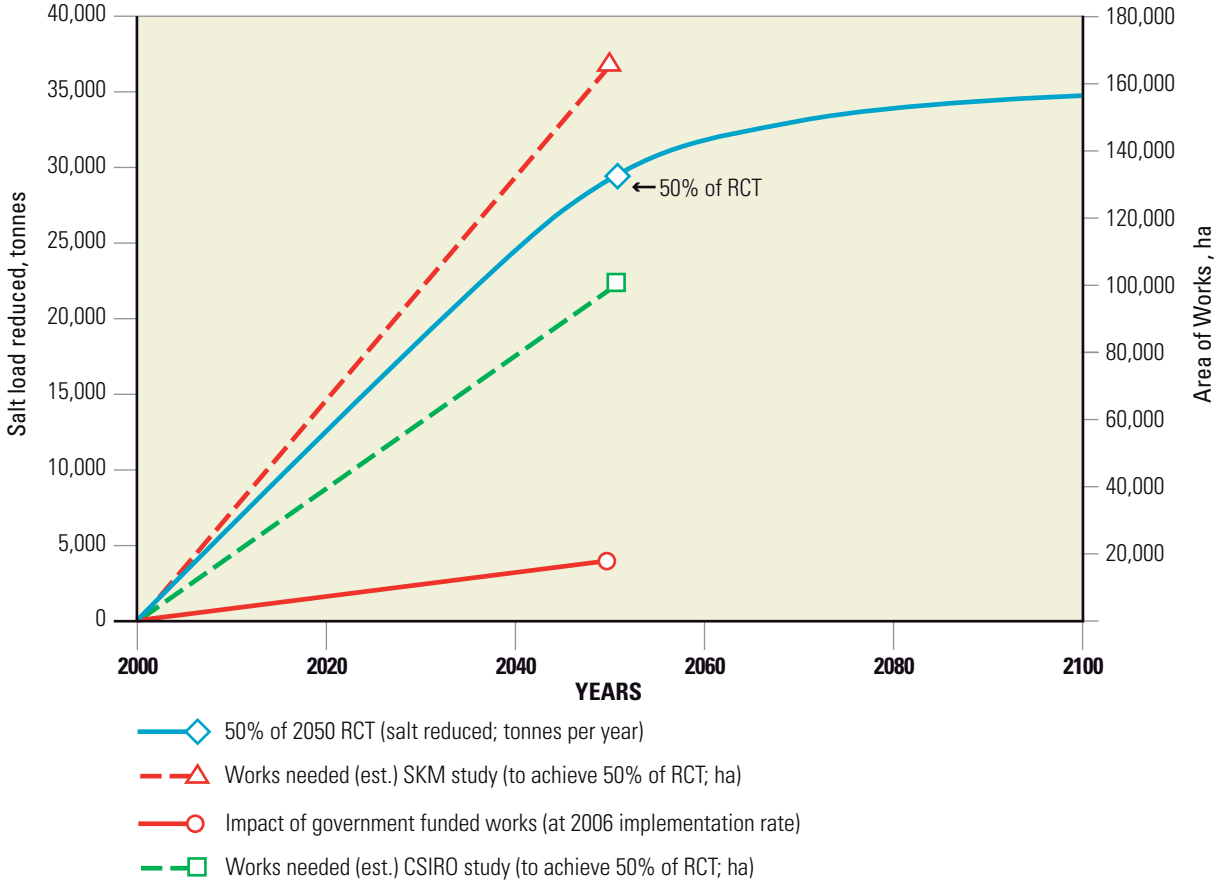
Reduction in salt loads from intervention of around 35,000 tonnes per year is required to meet half of the proposed end-of-valley target. Recent research suggests that this will require somewhere between 23,000 to more than 35,000 hectares to be revegetated. The current trend for works in the dryland is less than 15 percent of what is required to meet the end-of-valley target. The level of non-GB CMA investment in tree planting is thought (with medium-level certainty) to be about equal to that funded under GB CMA programs (for example, other government programs such as Envirofunds, or from private investment). It is not known how well aligned this planting is with priority areas and therefore the current and future impacts are not known. The extent and location of revegetation needs to be determined through non-GB CMA investment to better understand the total impact of revegetation on salt loads and catchment yield (the volume of water running off the Catchment). The review of end-of-valley-targets in light of changed climatic conditions and the impact on water yield will be the subject of on-going discussions with DSE and MDBC.

Findings from the 2004 South West Goulburn report by Sinclair Knight Merz catalysed a major review of strategic issues in the dryland (see Dryland Landscape Strategy under 'Investment area C – Planning and responding'). This review focuses on technical issues within agencies so far. The Co-operative Research Centre for Catchment Hydrology commissioned CSIRO Land and Water to report on the salt and water impact assessment for commercial environmental forestry in the south west Goulburn.

There are a couple of issues with measuring lucerne plantings and their effects. They are the length of time that the lucerne remains planted and maintained as well as the frequency of reestablishment. The other issue is determining the level of lucerne established that is independently funded outside the GB CMA incentives program.

Progress towards RCT for River Murray salinity from the Goulburn Broken Dryland

Progress towards RCT 8.3:
Maintain increases to salinity levels of the River Murray at Morgan from the Goulburn Broken Dryland at or below 1.3 ECs (equates to 67,000 tonnes per year of salt from Dryland) by 2050.



Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

2007-08 performance

Works and extension

In 2007-08 the My Farm Our Landscape (MyFOL) program delivered 95 level 2 whole farm plans. The extended dry period has seen a slight fall off in the percentage of plans resulting in works on the ground. A survey of landholders will be undertaken in 2008-09 to verify how much conditions are affecting their willingness to undertake works after completing the farm plan analysis.

The requirement for a landholder to complete a Level 1 farm plan before applying for incentives means that every application now includes an evaluation of the landholder's property in the context of broader catchment issues. MyFOL continues to be an important element within the statewide Property Management Streamlining project both through improved relations with local government and the possibility of providing a tool for use by urban water authorities.

DPI, over the first six months of 2008, has developed a service delivery model focused on stream and biodiversity assets and links this to the concept of 'big hit' projects. The scale of planning extends from paddock/farm through subregional and regional planning and encompasses major strategic directions outlined in the RCS and Dryland Landscape Strategy.

Knowledge

Modelling in the south-west Goulburn case studies, funded through the National Action Plan (NAP) project exploring trade-offs for NAP resource condition change, is near completion and due to report by 30 September 2008. 2C Salt (a salt and catchment yield model) has been calibrated in the south-west Goulburn. 2C salt is now being applied to a series of land-use scenarios and the effect on stock mobilisation and water yield estimated. Once this is completed the results will be fed back into the local natural resource management trade-off discussion. Indicative results are that significant water savings are to be gained by targeting biodiversity plantings to minimise water use.

A planned extension of work using 2C Salt is to connect its outputs to models REALM and BigMod so that the impacts of works in the dryland on the condition of the River Murray can be estimated.

In 2007-08 the salinity priorities in the Goulburn Broken dryland were modified to take into account the impact of salinity remediation works on catchment water yield, with a consequence the increased emphasis on salinity management will be placed on near asset discharge management.

Planning and responding

The multiple outcomes project in the Sunday Dry Creeks area has been adopted by the Upper Goulburn Implementation Committee and used for planning implementation works with the local community and DPI.

The combined use of biodiversity action plans, the landscape context tool, outputs from SedNet, estimates of catchment water yield and risk of salt load mobilisation have been integrated with community development processes to develop a comprehensive assets-based approach to land management in the dryland.

The GB CMA's service delivery partner DPI has reviewed its training and skills development process and protocols and over the period from 2007 to 2009 will align all training with the Australian Qualifications Framework. Training will be aligned with the service delivery requirements and will result in a better trained and more adaptive workforce.

Relationships, partnerships and community capacity

In 2008 the MyFOL level 1 processes will be enhanced by a planning and assessment spatial database, a modified version of the Bush Tender database. This will allow improved farm planning advice and monitoring of farm activities linked to government programs. It will also allow us to develop more information on landholder demographics, link their environmental works to their broader business aspirations by explicitly taking into account their production needs and their business objectives.

Investment and actions**		**From funds received through Corporate Plan**				
		Achieved			***Target***	***% achieved***
		2005-06	***2006-07***	***2007-08***		
Government investment	**$000**	$3,179	$3,040	$2,960	n.a.	n.a.
Surface water action						
A Discharge – saline pasture woody perennial eg saltbush	ha	- *	- *	- *		
B Discharge – trees (interception)	ha	- *	- *	- *		
C Discharge – buffers – pastures (interception)	ha	- *	- *	- *		
Sub-surface water action						
D Revegetation – plantation / farm forestry only	ha	97	31	0	0	-
E Revegetation – plant natives	ha	1,126	581	460	625	74
F Pasture – plant	ha	1,543	718	391	135	290
G New groundwater pumps – public installed	no.	0	3	1	2	50
Planning for works action						
H Whole farm plans***	ha	81	80	369	270	137

* Data difficult to capture. Outputs against line B are included in E. Outputs against lines A and C are not funded.

** The outputs also include those achieved by complementary investment areas (SIR salinity, riparian and instream habitat and channel form, dryland salinity).

*** Level 2 Whole Farm Plans only.

Investment area 3 – Environmental flows and water supply

Report compiled by: Geoff Earl, Wayne Tennant, Bill O'Kane, Keith Ward, Scott Morath, Simon Casanelia, Rod McLennan

Investment 2007-08: Part of Investment area 4 (total $13,020,000)

Water is a fundamental resource for life, ecosystems and the agricultural systems and businesses we depend on. During the past 10–15 years, State and Australian Governments have been progressively improving water management and providing water for environmental flows. The current string of drought years has added more urgency to this work.

In 2002, the Murray-Darling Basin Ministerial Council established the Living Murray – a program to return the River Murray system to a healthy working river. In the Goulburn Broken Catchment this involves the Barmah Forest and the River Murray channel.

In its 2004 White Paper, Our Water Our Future, the Victorian Government launched a comprehensive program for using the State's scarce water resources wisely; providing for efficient, reliable, flexible water for urban, agricultural and business use; and increased flows to rivers and wetlands to restore and protect their health. Under the program, all elements of the water cycle are to be managed with a sustainable water allocation regime and environmental flows integrated with other catchment management activities.

An Environmental Water Reserve (EWR) has been created to protect the environment's right to water. The reserve includes minimum river flows (all year round), unregulated flows (predominantly in winter/spring) and specific environmental entitlements.

The GB CMA has been given operational management of the EWR. This complements the GB CMA's role as the caretaker of river health and the provision of waterway, regional drainage and floodplain management services. Partner agencies are responsible for allocating water resources, river flow regulation, the delivery of water, water use regulation and wastewater disposal services.

The Government, with Catchment partner support, has continued to pursue water savings in the supply and delivery system. Initiatives have included progressing the planning for Lake Mokoan decommissioning project and the modernisation of the Shepparton Irrigation Region.

Strategic references:

- Victorian Government White Paper: Our Water Our Future (2004)
- Goulburn Broken Regional River Health Strategy 2005 (GB RRHS)
- Victorian River Health Strategy 2002 (VRHS)
- www.thelivingmurray.mdbc.gov.au

The Regional River Health Strategy plans to improve river health by determining environmental flow needs and changing river flow regimes, particularly in the Goulburn River, Broken River, Yea River, Seven Creeks, Broken Creek and King Parrot Creek.

The Regional Catchment Strategy plans to improve the condition of 70 percent of wetlands by 2030.

Water supply and delivery efficiency are critical to improved environmental and productive outcomes, but specific targets are not yet set for the Catchment. Targeting environmental flows and using the water supply system flexibility to deliver environmental benefits are key strategies.

Since the White Paper in 2004, drought conditions have prevailed resulting in the availability of water for irrigation being well below average. Water available to rivers and wetlands has also been very low. During this period minimum flows in the regulated rivers have usually been maintained but there has been low to no winter or spring higher flows. Dry conditions have placed the environmental health of the Catchment's rivers, floodplains and wetlands under stress, including the aquatic dependent species they support such as red gum and Murray Cod. General river health should improve when wet conditions return.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 2005 and 2008)	n.a.	Below target	Medium
Catchment condition	Environmental watering Catchment management systems in place	Poor	Very poor	Medium

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

2007-08 performance

With little water in storage, the 2007-08 year included major drought management activities. Flows in the lower Goulburn River and Broken Creek were significantly reduced. The active support of G-MW in organising and delivering environmental flows was vital to achieving the best environmental outcomes from the limited water available.

The Goulburn River minimum flows at McCoys Bridge were reduced from 400 megalitres per day to 250 megalitres per day by Ministerial Qualification of Rights from 1 July 2007 to 17 September 2007 (when allocations on the Goulburn system reached 20 percent of high reliability water shares). Rain in the first half of July resulted in flows not dropping below the normal minimum flows until 28 August. They then dropped to reach the qualified minimum flows in mid-September, and then steadily recovered back to normal minimum flows by 23 October.

Given the relatively short period of reduced flows, no obvious impacts of the flow reduction were noticed.

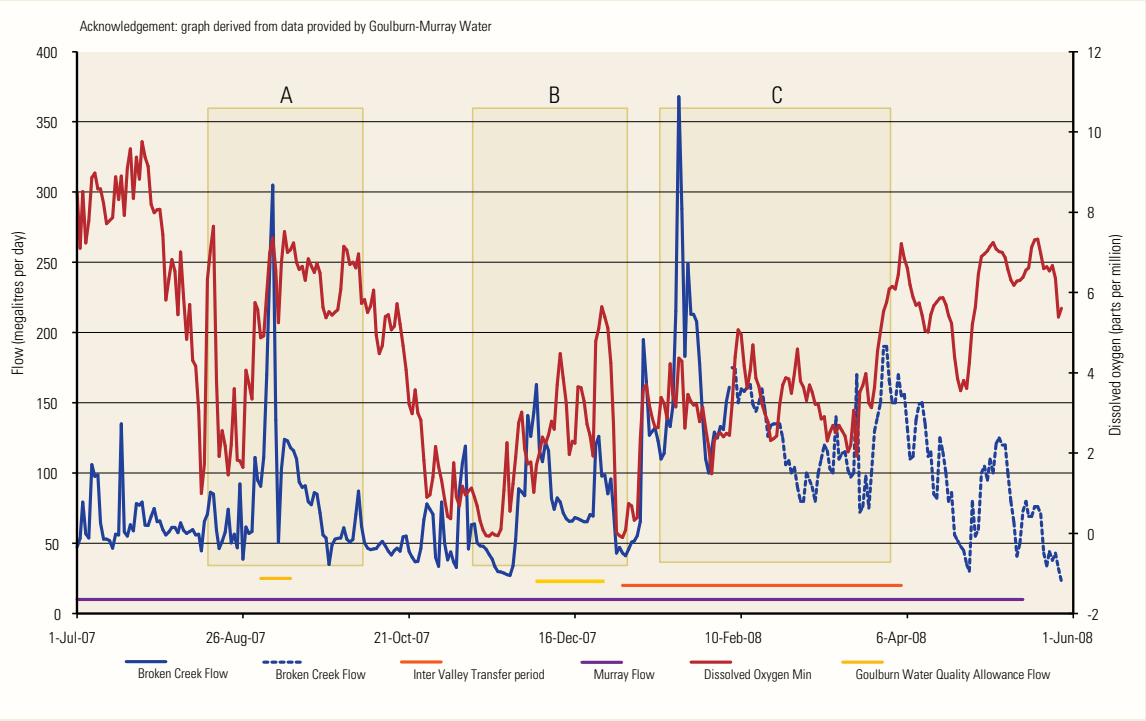
Broken Creek flows were actively managed to minimise the risks to the native fish populations. Some 70 megalitres per day of through-flow was generally provided from the River Murray through the G-MW Murray Valley channel system for the whole year (to 15 May 2008).

In August, a trial was undertaken by the Arthur Rylah Institute for Environmental Research to determine the behaviour of fish in Broken Creek if the Creek was dried out under extreme drought conditions. A weir pool was temporarily drained, but the fish did not respond to the draining nor move to a safer location.

No major azolla blooms occurred in Broken Creek, but local build-ups in the creek were managed by G-MW by manipulating weir heights and flows.

PERFORMANCE STORY

Using flows to manage dissolved oxygen levels in the Broken Creek at Rices Weir



Three periods of low dissolved oxygen levels occurred in lower Broken Creek, all related to difficulty in maintaining adequate creek flows past Rices Weir.

Area A

- The first in August resulted in 886 megalitres of Goulburn water quality allowance water being used to increase flows.
- Following the delivery of the Goulburn water quality allowance, dissolved oxygen improved and the additional flow was subsequently ceased.

Area B

- The second in October and November resulted in another 992 megalitres of Goulburn water quality allowance water being used to increase flows, which was then followed by an improvement in dissolved oxygen levels.

Area C

- The third in late December resulted in the provision of 70 to 100 megalitres per day of Goulburn to Murray transfer water from January to April, improving the dissolved oxygen levels and reducing the risk of very low flows and low dissolved oxygen levels at Rices Weir for the remainder of the summer and autumn.
- No adverse impacts were observed on native fish.

Some 1,878 megalitres of the Goulburn water quality allowance was used to manage Broken Creek water quality problems, and 10,000 megalitres was sold by the Victorian Government to Coliban Water to provide drought supply to Bendigo and associated towns.

In April and May, water from the Murray Flora and Fauna Bulk Entitlement was released into Reedy, Black and Kinnairds wetlands to provide for strategic drought refuge to wetland dependant plant and animals, primarily waterbirds. Refer to performance story on page 6 for further details on this and on opportunistic watering of Moodies Swamp.

Dry inflow contingency plans were also developed for the 2008-09 year for key rivers and wetlands.

Works and extension

$2.9 million raised through the sale of seven gigalitres of environmental water were used to develop the employment program and to implement priority environmental water, water quality and river health initiatives.

This employment program from June to December 2007 was a tremendous success, directly employing 30 drought affected people from within our community to work throughout the Goulburn Broken Catchment on high priority environmental projects.

The impact of drought on native fish communities and real time water quality at priority sites within the Catchment were monitored. This included establishing real time water quality monitoring at Goulburn Weir; monitoring the effectiveness of fishways on the Broken Creek; completing a bathometric survey for the lower Goulburn River; assessing the impact and movement of native fish during low flow in the Broken Creek; further drought planning and a study of the ecological processes in Broken Creek to better understand how low dissolved oxygen levels are generated and what potential mitigation measures there might be.

The regulator controlling flow into the Black Swamp complex has been upgraded to help restore a more natural flooding regime.

A number of priority wetlands have been fenced to improve management.

Relationships, partnerships and community capacity

A GB CMA aquatic and riparian weeds booklet was completed to assist landowners and agencies identify weeds which impact on the quality of riparian lands and instream habitats. This information will be incorporated into the overall *Goulburn Broken Weed Booklet* being reprinted.

Planning and responding

A process was initiated to establish the Consultative Committees for the Yea River and King Parrot Creek Stream Flow Management Plans.

A management plan for peatland and spring soak wetlands in the Highlands and Strathbogie Ranges has commenced. The management plan will identify the key ecological values of the wetlands and their condition and threats.

GB CMA has led the active water management planning activities by developing a proposal paper for River Murray Water to modify intended river flows in an attempt to drown out invading Giant Rush from the bed of Barmah Lake. This included the establishment and monitoring of transects to support adaptive management and improve the knowledge base. The airing of a story about the rush on ABC TV national and local news generated a lot of public and professional interest and comments.

Given the potential for severe drought in 2007-08, the GB CMA participated in planning on how to share the potentially very limited available water. This included preparing a GB CMA dry inflow contingency plan which identified the critical environmental assets that needed to be protected under a survival scenario. Planning was also undertaken for a potentially dry year in 2008-09.

The *Barmah Forest Environmental Management Plan* was updated, a new blueprint plan developed for future directions prepared, and a new vegetation monitoring program implemented.

Knowledge

The Yea River environmental flow determination project was developed and presented to the projects advisory committee. The study will be used as the basis for developing the *Yea River Stream Flow Management Plan.*

Consultants were appointed to explore options available to reduce the impact that Goulburn Valley Water's urban extraction has on the health of Seven Creeks (which is home to the threatened Trout Cod). The study considered the current system operation and infrastructure and how the winter-fill capacity of the system could be increased to reduce the impact on summer flows.

A Resource Allocation Model (REALM) update was initiated for the Delatite River. The project will allow various water allocation and water use scenarios to be modelled including future increased population and climate change scenarios. The GB CMA managed the project on behalf of the Mansfield Shire Council.

To assist the development of the *Northern Sustainable Water Strategy,* the GB CMA developed broad interim environmental flow recommendations for the lower Broken Creek. The recommendations will aim to maintain or improve the condition of aquatic dependent ecological assets in the creek.

Flow and wetting regimes were established on key wetland systems along the Broken Creek, including the Black Swamp complex and Moodies Swamp.

A study into the objectives for use of the Goulburn River from Lake Eildon to Goulburn Weir continued. This work will continue in 2008-09 with the support of partner agencies, implementation committees and the community.

A study into the interaction between environmental flows and flooding continued with development of a hydraulic model and mapping of floodplain assets well underway.

A monitoring program to determine the ecological response to environmental flow releases in the Goulburn River, Broken River and Broken Creek continued.

The assessment of the environmental impacts associated with the Tungamah pipeline (on the Broken and Boosey creeks) continued. These systems are now ephemeral after 100 years of continued flow.

Hydraulic modelling of flooding in the Barmah Forest progressed.

The GB CMA has been involved in developing an environmental monitoring program that will assess the impacts of the final drawdown, decommissioning and rehabilitation of Lake Mokoan on its current and desired future environmental values. A fish management plan, restoration management plan and monitoring plan are proposed. A fish translocation trial from the drying lake to regional waterways was successfully undertaken by partner agencies.

From Corporate Plan – Caretaker of River Health component*

Key Performance Indicator	Measure	Progress
Integrated management of the Environmental Water Reserve (EWR) and the Regional River Health Strategy and River works program.	Develop water management plans and works proposals.	NSWS is the vehicle. Still no water in the EWR. Managed qualification of rights to minimise impact of reduced minimum flows on Goulburn and maximised benefits of transfer of water quality reserve to Coliban.
Management of environmental entitlement under delegation from Minister for Environment.	Develop management strategies Flow regime change Development Goulburn flow capacity study Development of wetland management plans Input into the Northern Sustainable Water Strategy development.	Drought strategies developed for flow management. Project managing Delatite resource allocation study for Mansfield Shire. Goulburn hydraulics study commenced with model development and asset mapping. Murray Flora and Fauna Bulk Entitlement was released into Reedy, Black and Kinnairds wetlands to provide for strategic drought refuge to wetland dependant plant and animals, primarily waterbirds. Seven Creeks urban supply impact study completed. NSWS has been initiated by DSE with sound environmental contribution from the GB CMA (base projects and advice – wetlands, flows and EWR). Supported regional presentations on the discussion paper.

* See also Investment areas 4 and 8

Investment area 4
– Riparian and instream habitat and channel form

Report compiled by: Wayne Tennant, Tom O'Dwyer, Christine Glassford, Peta Ritchie, Simon Casanelia, Rod McLennan
2007-08 investment: $13,020,000 (includes Investment in areas 3, 5 and 6)

Actions focused on improving the condition of rivers and streams will help achieve the Healthy Rivers, Healthy Communities vision set in 2003:

"Healthy rivers, streams, wetlands, floodplains and adjacent land that support a vibrant range and abundance of natural environments, provide water for human use, sustain our native flora and fauna and provides for our social, economic and cultural values."

Resource condition targets for river condition listed in the *Goulburn Broken Regional River Health Strategy* (GBRRHS) act as reference points for measuring progress towards achieving this vision. Other results, such as those for environmental flows, biodiversity and water quality, should also be considered to understand the breadth of progress.

The following are modified versions of resource condition targets listed in the GB RRHS. (The form of these targets has been changed to help communication. The intent has not changed.):

- Prevent a decline in condition of all reaches in high value rivers and streams
- Improve the condition of 30 percent of reaches of rivers and streams by 10 percent by 2015.

Strategic references:

- Goulburn Broken Regional River Health Strategy 2005-2015
- Victorian River Health Strategy 2002
- Our Water Our Future 2004
- Wetlands Strategy for the Goulburn Broken Catchment (Draft August 2003)
- Murray Darling Native Fish Management Strategy
- Threatened Species Recovery Plans

The condition of waterways seems to have stabilised and overall stream condition seems to no longer be deteriorating. Sites targeted for works have generally improved in condition.

Although the links between actions and resource condition targets have not been quantified, the GB CMA believes that targets will not be achieved until well beyond 2015 at current implementation rates and funding levels. Expectations might have to be revisited and links need to be better defined.

The same impact of less than planned funding on progress toward RCTs applies to non-works actions. Establishing long-term capacity to deliver changes, especially filling knowledge gaps, will be further progressed.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 2005 and 2008)	n.a.	Below target	Medium
Catchment condition	Phosphorus loads. Catchment management systems in place.	Poor	Satisfactory	Medium

2007-08 performance

Achievements for riparian and instream activities in 2007-08 were variable because of the impact of the drought and the Drought Employment Program (DEP). Many of the engineering works were not progressed due to diversion of staff to implement the DEP. Conversely, many activities such as fencing and weed control were well above target levels due to the DEP work crews undertaking this work on priority streams. Overall, the work in the river health program was good for such an exceptional year.

Works and extension

A number of wetland inspections were carried out with management recommendations provided to landholders,

Tenders were let for the design, costing and construction of Barmah regulator works at Kynmer Creek and the incorporation of a fishway at the Gulf Regulator.

Major projects continued in the Broken River Basin under the Large Scale Restoration program within the Our Water Our Future initiative. The emphasis was on the Broken River and Broken, Boosey and Nine Mile Creek systems.

Drought Employment Program work crews have carried out works along priority waterways (heritage rivers and icon sites) including fencing, woody weed removal, spraying, maintenance of revegetation sites and rubbish removal.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

*Investment and actions**		From funds received through Corporate Plan				
		Achieved			*Target*	*% achieved*
		2005-06	*2006-07*	*2007-08*		
Government investment*	**$000**	$5,941	$9,579	$13,020	n.a.	n.a.
Stock grazing action						
Fence wetland remnant	ha	6	22	1,794**	28	6,405
Fence stream/river remnant	ha	115	725	2,536**	64	3,963
Off-stream watering	no.	89	73	95	76	125
Nutrient-rich and turbid water & suspended solids action						
Stormwater management projects	no.	2	3	0.5	2.0	25
Instream & near-stream erosion action						
Bank protection actions	km	16	12	13	46	27
Instream & tributary erosion controlled	km	502	19	543	185	294
Changed flow-pattern action						
Water allocated eg wetlands	ML	510,000		0	0	-
Weed invasion action						
Weeds – aquatic weeds controlled (managed)	ha	33	39**	53	21	251
Habitat loss management						
Vertical slot fishway	no.	1		0	0	-
Rock ramp fishway	no.	0		0	0	-
Fish barrier removal	no.	4		8.3	5.5	151
Establish Significantly Enhanced Aquatic Refugia	no.	1.3	2	30	50	60
Construct new wetland	ha	0		0	0	-

* Many actions are undertaken via projects that are primarily aimed at achieving something else, such as water quality and biodiversity RCTs. Also, investment in riparian and instream habitat and bank stability contributes to other RCTs, especially those for water quality and biodiversity.

** Target 94 hectares and over 9,000 hectares achieved because of new investment through Drought Employment Program.

Relationships, partnerships and community capacity

National Geographic magazine filmed drought issues within the catchment in preparation of a feature article.

Support was provided to a National Water Commission project undertaken by MDFRC and ARI that is investigating fish and Murray environmental flows.

Planning and responding

A geomorphologist consultant reported that no works were required on two waterways in Barmah Forest (Black Engine and Cutting creeks) where erosion had been of concern to the community, though further monitoring was recommended.

A Giant Rush management research project was initiated in Barmah Forest for the Yorta Yorta Indigenous community to undertake. Links have successfully been made with CSIRO and Parks Victoria, and this has involved undertaking the first ecological burns (one in spring 2007 and one in autumn 2008). These were lit by Indigenous people and were highly welcomed within the Indigenous community as a return to the first Cultural burns.

Presentations on Goulburn Broken wetlands and management have been provided at a Trust for Nature forum and a native fish management workshop. Field presentations have also been provided at Barmah Forest for Year 11 students from Nathalia and Numurkah secondary schools (including vegetation monitoring activities), to a Parks Victoria managers forum, and to two separate Chinese delegations in the Barmah wetlands (one group's interest was mainly irrigation and factoring in environmental needs, whilst the other group's interest was in Ramsar wetland management).

Strong input has been provided to the Living Murray project monitoring of vegetation at icon sites.

A paper on Barmah-Millewa Environmental Water Allocation (EWA) management was presented to the International River Symposium conference held in Brisbane.

Knowledge

Aquatic biodiversity

Arthur Rylah Institute for Environmental Research (ARI) was engaged to survey the Freshwater Catfish population at Tahbilk Lagoon, to provide recommendations on the management of the Lagoon for fish and to develop educational and interpretive material for the Lagoon. In addition, the MDBC has commenced the development of a carp management plan for the Lagoon.

Ongoing projects for the 2007-08 threatened species projects include:

- Macquarie Perch, in Hollands Creek and Hughes Creek
- Trout Cod within Sevens Creek
- Spotted Tree Frog and Barred Galaxias in the upper Goulburn River.

CSIRO has begun a series of three-year research projects in Barmah Forest on Giant Rush, River Red Gum and Arrowhead.

Dry inflow contingency planning has occurred. Specific surveys for stranded threatened fish and turtle species occurred in dry waterways in Barmah Forest.

An ARI research article on fish being trapped behind the gulf regulators (Barmah Wetland) was published in the journal Fisheries Management and Ecology. The paper interprets data to show thousands of native (and exotic) fish are being trapped behind the regulator and to recommend river management and regulator operation modifications in an attempt to overcome this.

A standing water (drought refuge) survey of floodplain wetlands in the Goulburn Broken Catchment was completed as part of a broader Northern Victoria project to ascertain the relative priorities for planning EWA application.

Benchmark surveys were conducted to assess the impact of returning the Broken Boosey creeks into an ephemeral system. Water quality, habitat, fish, bugs and vegetation were monitored.

Understanding of fish recruitment responses to restoration of the lower Goulburn River was improved. The movement dynamics and the reliance of native fish populations in the Goulburn River on River Murray recruits were investigated.

Further funds were distributed to projects to understand the impacts of the drought, monitor the impact of drought on native fish communities and to enable real time water quality monitoring at priority sites within the Catchment.

Communities and Capacity

Social research: Charles Sturt University through the Institute for Land, Water and Society have conducted a social research study on the Goulburn River from below Lake Eildon to Goulburn Weir. The study aims to better understand landholder attitudes towards managing licensed Crown water frontages in this reach.

Staff contributed to statewide river health forums and product development processes, including the Victorian Waterway Managers' Forum, Environmental Water and Wetland Networks and the Co-operative Research Centre for eWater Product P6.

Funds through the sale of seven gigalitres of environmental water were used to extend the Drought Employment Program and to implement priority environmental water, water quality and river health initiatives.

The Program was a tremendous success, directly employing 80 drought affected people, from within our community, throughout the Goulburn Broken Catchment on high priority environmental projects. Participants were employed in valuable resource management projects which resulted in significant protection of key environmental assets within the region.

Habitat

Habitat preferences were designed and are to be monitored as part of the assessment of the environmental impacts associated with commissioning of the Tungamah Pipeline.

A process to assess refugia throughout the Catchment following works undertaken in 2006-07 is being planned. This project will need to link with projects planned by DSE and will feed into the development of the dry inflow contingency plan.

Flows

Barmah-Millewa hydro-dynamic model development nears completion.

Assessment of physical habitat, fish, macroinvertebrates and vegetation commenced in 2007-08 as part of the VEFMAP initiative. The Broken River, Broken Creek and Goulburn Rivers are the focus of this initiative.

Frontage and Riparian Zone

A Crown frontage assessment was carried out on the Goulburn River from Lake Eildon to Gilmore's Bridge. A literature review of existing strategic documents associated with the management of the Goulburn River was completed.

The condition of 30 works sites on the Delatite, Jamieson, Howqua and Goulburn Rivers and King Parrot Creek were assessed for the third time to identify condition trends.

Woody debris that has been reintroduced into the lower Broken River was assessed in terms of their contribution to instream diversity and flow variability.

Rapid assessments of river health have been carried out in a number of the Catchment's high priority rivers subjected to fire. Modified standard methods were used to score riparian condition, instream habitat and water quality at a number of sites on each of the Yea and Delatite Rivers, and the King Parrot, Seven, Broken, Holland and Hughes Creeks.

Strategy

In partnership with DSE and the Corangamite CMA, the GB CMA has commenced a project that is exploring the causal relationship between management actions and the index of stream condition (ISC) score of a river reach. The results of the project will seek to:

- Inform the development and evaluation of performance indicators and resource condition targets for Victorian river health programs
- Clearly communicate these causal assumptions
- Guide the development of ISC monitoring programs
- Identify knowledge gaps in our understanding of the relationship between management actions and riparian condition.

A program prospectus was developed which targeted a number of key projects:

- Return to the Winton Wetland
- Acceleration of the *Regional River Health* and *Water Quality* strategies
- Bush Returns
- Complementary initiatives for NVIRP.

Pest Species

Further investigations into the extent of *Cabomba caroliniana* in the Broken River and Broken Creek were conducted.

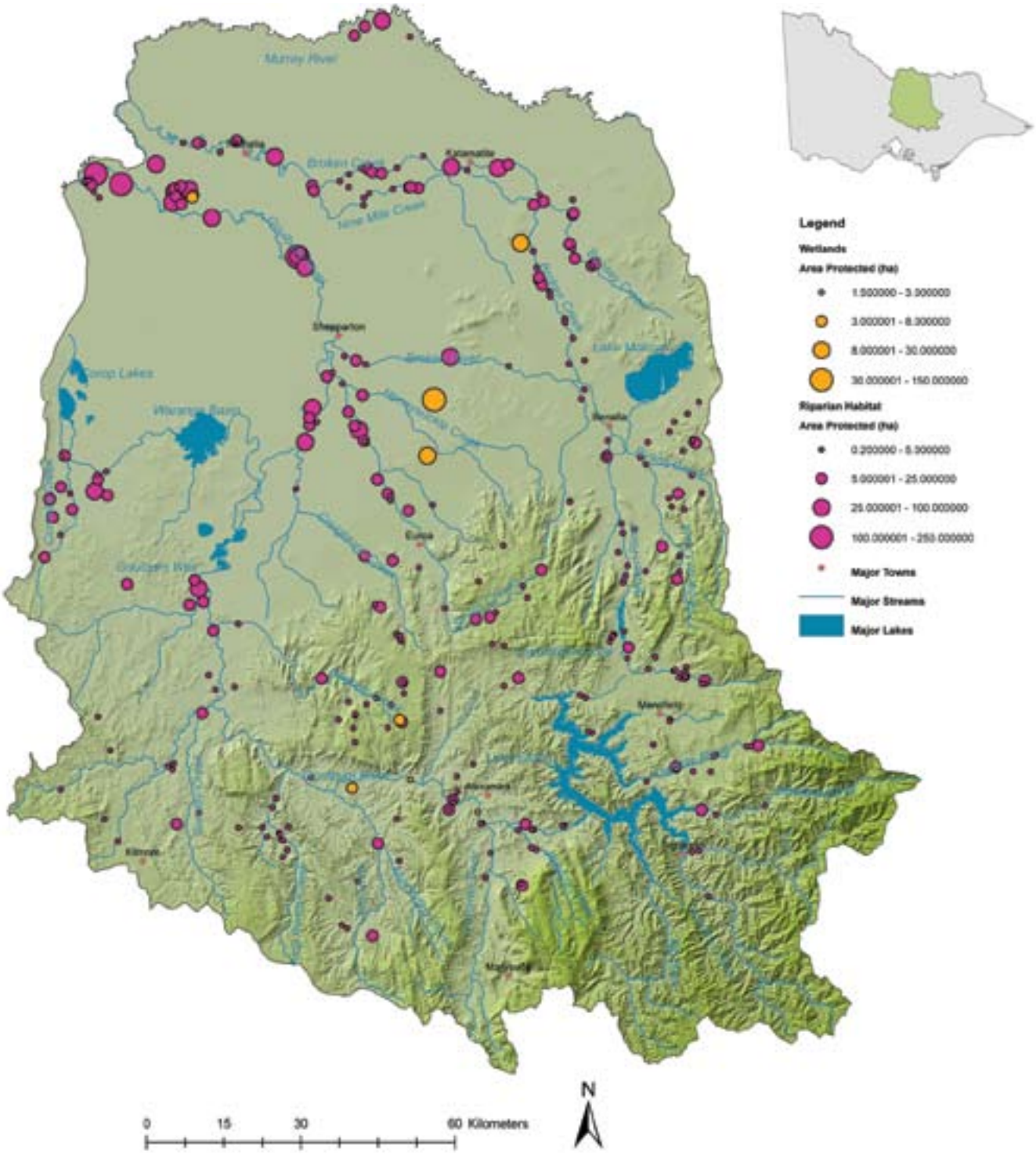
GB CMA staff participated in the MDBC alien fish taskforce and the MDBC community taskforce.

From Corporate Plan – Caretaker of river health component*

Key Performance Indicator	Measure	Progress
Development and implementation of on-ground river restoration works programs.	Projects and studies delivered on time and within budget.	Achieved.
Authorisation of works on waterways permits.	Respond to 95% of applications within 30 working days of application.	Measure not correct as they are not section 55 referral authorities. Performance in first half was poor. Back on track second half.
Referral Authority for any proposed works on or in relation to a dam.	Respond to 95% of applications within 30 working days of application.	Program concluded and being wound up. Still taking requests to purchase water.

* See also Floodplain protection component under Investment area 8

Riparian and wetland protection works



Investment area 5
– Water quality (nutrients) in rivers and streams

Report compiled by: Wayne Tennant, Ken Sampson, Greg Smith, David Hodgkins, Carl Walters, Rod McLennan

2007-08 investment: Co-funded in other investment areas, especially 1, 2, 4 and 6

Elevated nutrients have been identified as a high priority issue for water quality in the Goulburn Broken Catchment because of the potential to contribute towards excessive algal growth that impact on social, economic and environmental values within waterways. Phosphorus loads indicate for water quality in rivers and streams because it is a limiting factor in the development of toxic blue-green algal blooms and flow-dependant blooms of aquatic weed in the region.

The Goulburn Broken Catchment community's goal for water quality set in 1996 and reviewed in 2002 is:

- Improve and maintain water quality at optimum levels within and downstream of the Catchment for native ecosystems, recreation, human and animal consumption, agriculture and industry.

Targets for phosphorus loads are therefore reference points for progress toward this goal.

The resource condition target set in 1996 is to reduce potential phosphorus loads by 65 percent by 2016. This is to be achieved by reducing phosphorus loads from:

- Irrigation drains by 50 percent
- Dryland and diffuse sources by 20 percent
- Wastewater management facilities by 80 percent
- Urban stormwater
- Intensive agricultural industries and local water quality issues

Targets were not set for nitrogen loads because the reduction of phosphorus and subsequent increase in nitrogen-to-phosphorus ratio was the strategy's emphasis. Opportunities to reduce nitrogen, particularly where they were associated with phosphorus reductions, were pursued if it was cost effective.

Strategic references:

- Goulburn Broken Water Quality Strategy 1996-2016
- Goulburn Broken Regional River Health Strategy 2005-15
- Review of Goulburn Broken Water Quality Strategy 1996-2016 (Brian Garrett and Associates 2001)
- Goulburn Broken Water Quality Strategy 1996-2016 review (in prep.)

Phosphorus loads (five-year rolling average) from the Goulburn Broken Catchment are below the long-term targets. This currently equates to a reduction of 80 percent from the benchmark year of 1993-94. However, it has been influenced by extended drought since 1997-98.

Estimated total phosphorus loads discharged from irrigation drains are still below the long-term target. The five-year rolling average has levelled out and remains well below target. This correlates with substantially lower volumes of drain flows. Statistical and trend analysis of irrigation drainage water quality and quantity, which has been undertaken every two years, shows significant declines in flows and nutrient loads leaving drains.

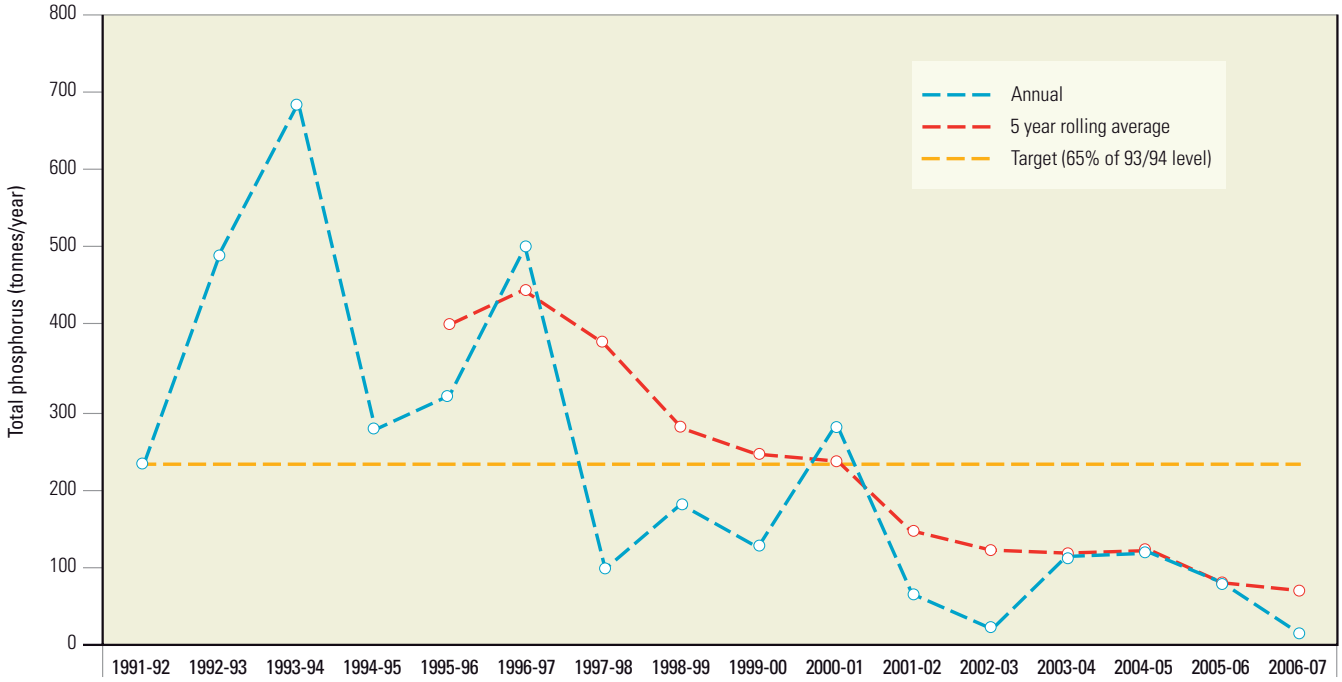
It is the sixth successive year the Goulburn Broken Catchment has been below long-term nutrient targets. It is an excellent environmental result. Preliminary information from 2007-08 indicates another low year for phosphorus from drains.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 1996 and 2008)	n.a.	Exceeded target	High
Catchment condition	Phosphorus loads. Catchment management systems in place.	Very poor	Satisfactory	High

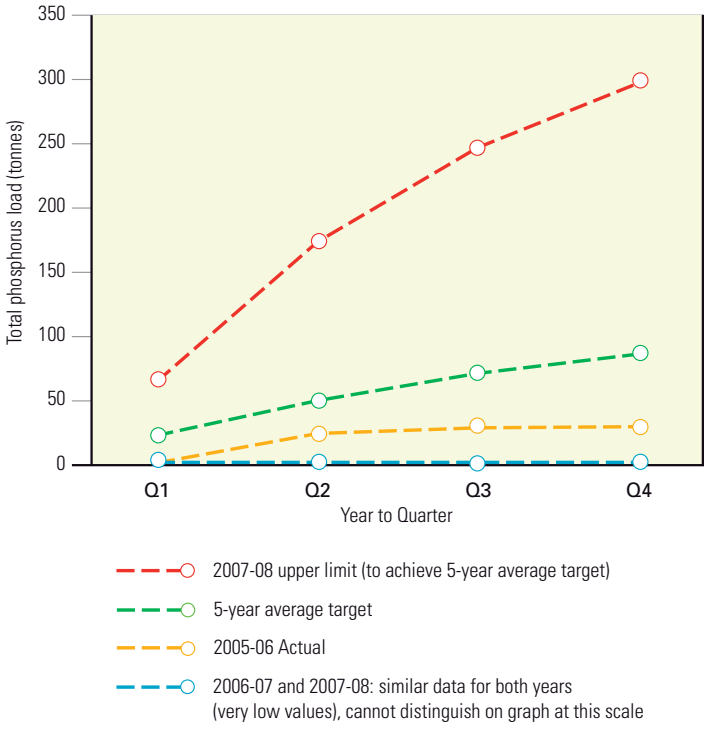
Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Total phosphorus exported from Goulburn Broken Catchment



Notes: 2007-08 data not available for the graph to be updated in time to meet deadlines for this Annual Report: 2006-07 data are the most recent available.

Shepparton Irrigation Region drains total phosphorus exported 2007-08*
(MV 6 Shep 11 & 12, Rodney, Deakin, Warrigal, Bamawn)



* More graphs and notes associated with this graph can be found at www.gbcma.vic.gov.au

Upgrading the region's wastewater management facilities resulted in the wastewater management facilities program meeting its targets by 2002.

A new water quality plan is being developed in consultation with other CMAs and DSE. The plan will align with the *Regional River Health Strategy*. It will also incorporate programs from the *Goulburn Broken Water Quality Strategy* (1996-2016) and the application of ecological risk assessments, which is required by State Environment Protection Policy (Waters of Victoria).

The review of the *Water Quality Strategy* 1996 being prepared found that the targets set in the strategy have largely been met or exceeded. The review has also found that strategy development, implementation and review are closely aligned with best practice (as set out in the *National Water Quality Management Strategy*) and that implementation has occurred in many ways: the key is to maintain coordination and a sense of purpose and to focus on objectives.

There has been significantly greater investment in communicating achievements of reducing phosphorus from irrigation drains. This includes developing a multi-agency memorandum of understanding.

2007-08 performance

Works and extension

Excavation work for the stormwater treatment wetland at Gordon Drive (Kialla Lakes) is continuing. Stages one and two are being delivered in partnership with the Greater Shepparton City Council.

DPI continued its nutrient program within the SIR to assess the cost benefit of nutrient testing, mapping and budgeting. It involved field days, demonstration farms, soil analysis and community field days.

Continued support remains for the riparian grants program, which buffer streams and reduce grazing pressure. Major advances have been made in the protection of frontages through the drought employment initiative and partnership programs.

There has been ongoing support for Goulburn Broken dryland offstream catchment protection incentives and ongoing riparian grants throughout the dryland catchment in line with the target areas identified within the *Goulburn Broken Regional River Health Strategy.*

Investment and actions[1]		From funds received through Corporate Plan				
		Achieved			*Target*	*% achieved*
		2005-06	*2006-07*	*2007-08*		
Stock grazing management action						
Fence wetland remnant	ha	6	22	1,794*	28	6,405
Fence stream/river remnant	ha	115	725	2,536*	64	3,963
Off-stream watering	no.	89	73	95	76	125
Surface water[2]						
Drain – primary[6]	km			9	3	300
Drain – community	km			0	4	0
Farm reuse system[3]	no.	70	56	48	45	107
Drain – divert water	ML	235	75	200	570	35
Irrigation systems – improved[4]	ha			8,967	6,840	131
Nutrient-rich and turbid water and suspended solids						
Stormwater management projects[5]	no.	2	3	0.5	2	25
Instream and near-stream erosion						
Bank protection actions	km	16	12	13	46	27
Instream and tributary erosion controlled	km	502	19	543	185	294
Habitat loss management – wetlands						
Construct new wetland	ha	0	0	0	0	n.a

1 Many actions are undertaken via projects that are primarily aimed at achieving something other than water quality targets, such as riparian health and salinity targets. (Through integration, water quality outcomes are also achieved through complementary projects.) Investment shown is for those funds dedicated primarily to achieving water quality outcomes, which are mainly for coordination and education (Waterwatch).

2 Surface water management enables the removal of excess rainfall run-off from irrigated lands, alleviating soil salinity. Nutrient loads collected by the drains are managed through drainage reuse and management plans, and monitored against the resource condition target (6.1.1).

3 Reuse dams allow for the collection and re-irrigation of high nutrient run-off, reducing the water and nutrient loads leaving the farm.

4 Improved systems include laser grading, automatic irrigation and micro-irrigation.

5 Stormwater management projects are undertaken on a one-to-one funding basis with local government. Projects include gross pollutant traps at Asim Drive and Colliver Road in Shepparton and Lowry Street in Benalla.

6 4.8 km of fencing and 2.3 km of laneways relocated along primary drains to control stock (Murray Valley Drain 13). 17.4 km of drains also hydro-mulched and seeded to provide vegetative cover on bare batters.

* Exceptional achievements due to Drought Employment Program.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Relationships, partnerships and community capacity

The highly successful Waterwatch program continued to involve communities from the region in water quality monitoring activities and events. The program contributed to the Upper Goulburn Catchment fire recovery initiative. Community members collected and analysed water quality samples as part of the ashwatch initiative.

Planning and responding

Water quality projects completed included:

- Mid-term review of Goulburn Broken Water Quality Strategy 1996-2016 (in preparation)
- GB CMA State Environmental Protection Policy review
- GB CMA dissolved oxygen project
- GB CMA dryland nutrient loads report
- GB CMA water quality and climate change report.

The GB CMA contributed to the statewide water quality coordinators network and maintained involvement in the north east water quality monitoring network.

As part of implementing the Irrigation Drainage Memorandum of Understanding with GB CMA partners (EPA, DSE, G-MW), an annual report is being prepared. This will include reports on key performance indicators at receiving waterways and management actions undertaken for improving water quality.

Knowledge

- Goulburn Weir: increased early warning monitoring (extra dissolved oxygen and water level sites connected to the supervisory control and data acquisition system)
- Goulburn River: drought monitoring, continuous monitoring of dissolved oxygen, temperature and salinity
- Broken Creek: additional continuous monitoring of dissolved oxygen and temperature needs to be installed within and upstream of Rices Weir pool to bolster our understanding of impending conditions. In addition, cameras to monitor azolla build-up and passage need to be installed.

Rapid assessments of river health were carried out in a number of the Catchment's high priority rivers that were exposed to fire. Modified standard methods were used to score riparian condition, instream habitat and water quality at a number of sites on each of the Yea and Delatite Rivers, and the King Parrot, Seven, Broken, Hollands and Hughes creeks.

Black Swamp 25 days after environmental water was delivered

Investment area 6 – Biodiversity

Report compiled by: Tim Barlow, Vanessa Keogh, Carla Miles, Simon Casanelia, Wayne Tennant, Jim Castles and Rod McLennan

2007-08 investment: $2,050,000 plus co-investment with all other investment areas

In accordance with the Australian and Victorian Government's commitment to reverse the national decline in native vegetation extent and quality, the GB CMA has, over the last seven years aimed "…to secure the future of native species of plants, animals and other organisms within the Catchment".

The resource condition targets (RCTs) set to achieve this vision are:

- Maintain extent of all native vegetation types at 1999 levels in keeping with the goal of net gain as stated in Victoria's Biodiversity Strategy
- Increase the extent of all endangered and applicable vulnerable ecological vegetation classes (EVCs) to at least 15 percent of their pre-European vegetation cover by 2030
- Improve the quality of 90 percent of existing (in 2000) native vegetation by 10 percent by 2030
- Increase the 2002 conservation status of 80 percent of threatened flora and 60 percent of threatened fauna by 2030.

To date the GB CMA has focussed attention on reporting against the native vegetation RCTs. Currently there are no adequate tools or indicators to enable measurement of progress towards the above threatened species RCT. Further investigation into the relevance of this target (as currently expressed) is required and it may be appropriate in the future to alter the RCT to enable monitoring and reporting progress towards threatened species conservation.

Further targets relating to the health of wetland and riparian biodiversity within the Catchment are discussed in 'Investment area 4 – Riparian and instream habitat and channel form'.

A qualitative assessment suggests that biodiversity condition across the Catchment is no worse than it was in 1990 (possibly better in some respects, worse in others). Never-the-less, long-term threats persist; impacts of climate change are looming ominously; and evidence exists that the extinction-debt incurred as a result of broad-scale vegetation clearance following European settlement is becoming increasingly apparent.

Strategic references:

- Goulburn Broken Native Vegetation Management Plan 2003 (updated the Native Vegetation Management Strategy 2000)
- From the Fringe to Mainstream – A strategic plan for integrating native biodiversity 2004-07
- GB CMA Biodiversity Status and Condition Report January 2007

The rate of legal and illegal vegetation clearance has declined; important sites have been purchased or covenanted for conservation; natural regeneration of woodlands is increasing; and considerable revegetation has occurred. Box-ironbark woodlands are better protected as a result of changes in land tenure and improved appreciation by the community.

Environmental water allocations are being delivered to important swamps and floodplains (but more is needed), and eutrophication has diminished. However, large old trees that are of high significance for fauna continue to decline in quality and number, and represent a major conservation concern. Threatened species, particularly woodland birds, continue to decline – a legacy of past vegetation clearance that requires sustained action to redress. A substantial increase in resources allocated to revegetation and regeneration, protection of remaining vegetation, and threatened species recovery is required to achieve large scale improvement.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	Exceeded target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 1990 and 2008)	n.a.	On target	Medium
Catchment condition	Native vegetation quality and extent. Threatened species populations. Catchment management systems in place.	Poor	Poor	Medium

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

One of the greatest challenges facing biodiversity management is the difficulty in quantitatively measuring biodiversity (compared with, for example, phosphorus loads), and access to monitoring approaches that can readily measure any changes that are either attributable to management actions, or require management attention.

Increasing progress towards protecting and restoring native vegetation is being made (see graph below). Importantly, ecological outcomes have been achieved with limited resources, larger sites have been targeted and there is increasing focus on improving landscape connectivity.

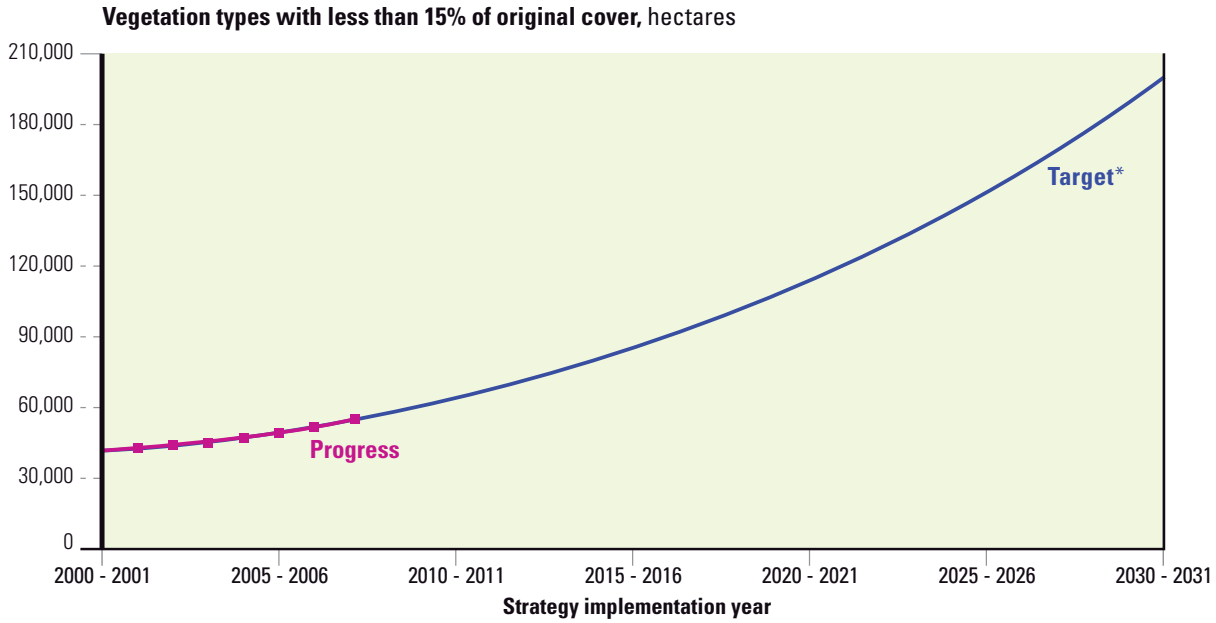
Since 2000, 5,494 hectares have been secured by Trust for Nature's covenanting and revolving fund program, and 1,188 hectares of threatened EVCs have been purchased for conservation through the National Reserve System program. Riparian and dryland revegetation (including Bush Returns) has resulted in 3,914 hectares of vegetation re-established.

The Drought Employment Program has been extremely successful with 4,120 hectares of remnant vegetation fenced in 2007-08, protecting sites from inappropriate grazing, assisting water quality outcomes, and increasing the potential for natural regeneration. Much of this work has focussed on protecting existing vegetation and contributes mostly to the vegetation quality. In addition to this, innovative approaches to achieving landscape scale changes continue to be developed.

Market-based approaches, such as Bush Returns and Green Graze, where landholders nominate their own price for management activities in a competitive tender, have proven particularly effective in implementing large, secure and ongoing, value-for-money biodiversity restoration projects. However these programs have not been active in 2007-08 which has influenced the rate of increase in vegetation extent shown in the graph below.

Progress is being made in making sense of available data to inform strategic thinking. For example, the ability to understand the effectiveness of actions has been improved by organising data on outputs and linking this to outcomes. This prompts key issues that will be addressed in the current review and forthcoming update of the Strategic Plan for Integrating Native Biodiversity 2004-07 and the Native Vegetation Management Strategy 2003. An interim review of these major strategies indicates that most major tasks are on schedule or completed. The updated strategy will address the appropriateness of the current biodiversity RCTs.

Native vegetation: assumed impacts of intervention on extent



* Resource condition target: "Increase cover of all endangered and applicable vulnerable Ecological Vegetation classes to at least 15% of their pre-European vegetation cover by 2030"

Assumptions and notes associated with this graph can be found at www.gbcma.vic.gov.au.

2007-08 performance – Native vegetation and wildlife habitat

Works and extension

460 hectares of indigenous vegetation were established through revegetation programs. Drought has obviously been of considerable influence in the lower level of activity this year, as well as an absence of initiatives present in previous years such as Green Graze and Bush Returns, which have previously secured substantial areas for natural regeneration.

The Drought Employment Program continues and has resulted in 4,120 hectares of remnant vegetation fenced to protect sites from inappropriate grazing, assist water quality outcomes, and increase the potential for natural regeneration.

Trust for Nature secured 373 hectares of high priority vegetation through its conservation covenant program. An additional 39 hectares was purchased and incorporated into the National Reserve System, and 25 hectares of existing crown land was converted to conservation management.

Some of the Bush Returns landholders entered into their third year under the program. Despite two years of drought, many of the sites are showing signs of recovery through tree regeneration and ground layer restoration. The summer rain produced great results for native grasses, allowing additional seed to be set for the coming year.

A field day on biodiversity and grazing in native pastures was held at a Green Graze property in November 2007. The event was well-attended and reflects the increasing interest landholders have in developing ecologically sustainable grazing systems.

The best practice revegetation project continues to seek and apply the latest research to revegetation in the Goulburn Broken Catchment. New methods to establish broad-scale vegetation on steep hill country has been a focus this year, with hill country direct seeding trials to commence in the 2008 planting season.

A statewide best management practice project is being developed through collaboration with all Victorian CMAs. The project is aimed at improving standards of native vegetation management across the State. The information will be delivered via a website VicVeg Online which provides information under three main themes:

- Plantscapes – the different native vegetation types/communities
- Species – the different plant species that exist in native vegetation
- Tools and techniques for revegetation and vegetation management.

Incentive schemes are introducing the development of more detailed management plans to assist landholders to better manage protected remnants and areas undergoing revegetation. Workshops have been held in the Goulburn Broken dryland with extension staff to identify relevant issues and appropriate levels of delivery. These management plans will be provided to landholders who receive an incentive and will provide useful information on managing weeds, desirable species for revegetation, and improving habitat values such as provision of ground litter or hollows.

The Goulburn Broken seedbank, based at the University of Melbourne, Dookie campus, continues to provide an essential resource for landscape restoration in the Catchment. The extended dry conditions have inhibited both seed production and seed sales for revegetation, and financially impacted the seedbank. The sponsorship support of Kraft Foods is gratefully acknowledged for its support during this period. Increasing emphasis is being placed on the role of seed production areas as a long-term, secure, and reliable supply of seed, as well as a means of reducing pressure on the recruitment capacity of small remnant populations. The Euroa Arboretum is actively participating in this development.

Actions*		**From funds received through Corporate Plan**				
		Achieved			***Target***	***% achieved***
		2005-06	***2006-07***	***2007-08***		
Government investment*	**$000**	$1,975	$2,065	$2,050	n/a	n/a
Stock grazing management action						
Fence terrestrial remnant vegetation	ha	519	769	710	443	160
Fence wetland remnant	ha	6	22	1,794	28	6,405
Fence stream/river remnant	ha	115	725	2,536	64	3,963
Binding management agreement (licence, Section 173, covenant)	ha	758	1625	373	1,000	37
Grazing regime change**	ha		1,189			
Habitat loss management						
Revegetation – plant natives***	ha	1,294	758	460	625	74

* The outputs also include those achieved by complementary investment areas (SIR salinity, riparian and instream habitat and channel form, dryland salinity)

Categories:	**Catchment condition**	**Long-term strategy progress and 2007-08 Performance**	**Certainty of rating**
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Relationships, partnerships and community capacity

A project to improve the identification and understanding of EVCs in the Catchment has been completed. This electronic tool is being trialled by DPI extension staff in the Dryland and updated information sheets will be available on the GB CMA website.

The Goldfields Conservation Management Network (CMN) was established in the Goldfields biodiversity action planning zone of the Goulburn Broken Catchment. A coordinated fox control program on private and public land in the Goldfields CMN area is being planned for early 2009.

The Broken Boosey CMN has produced 11 biodiversity education packages aimed at primary school students in grades Prep to 6 and secondary school students in Years 7 to 10. These packages have been used by members of the Broken Boosey CMN implementation group and staff from GB CMA, DPI, Goulburn Valley Water and Parks Victoria during biodiversity education days held at schools within the Broken Boosey CMN area.

The Broken Boosey CMN also produced 6,000 copies of its popular biodiversity management calendar. These were distributed to local schools, businesses and landholders within the Broken Boosey CMN area.

An interactive community-based, wiki-style, website called Nature Web is being supported by the GB CMA. This site will allow people to upload project details, coming events, queries, details on specific species of flora and fauna, as well as provide a source of information on biodiversity projects around the Catchment.

Preparations were made for a three day course on the ecology of floodplains, to be held in spring of 2008.

Roadside risk mitigation protocols were prepared by the Shire of Moira as a result of work led by them and involving all other local governments in the Catchment. During 2007–08, Moira developed training modules in which over 160 local government staff participated (see performance story).

The Regent Honeyeater Project and Superb Parrot Project are community-based projects seeking to augment habitat through revegetation and remnant protection for these critically endangered taxa. The Biodiversity program supports the coordination of these projects, which have added hundreds of hectares of additional habitat to the Catchment over the years.

Planning and responding

Biodiversity Strategy update: reviews have commenced on the *Native Vegetation Management Strategy 2003* (Vol 1 of the Native Vegetation Plan) and the Strategic Plan for Integrating Native Biodiversity 2004-2007 in preparation for the development of a comprehensive biodiversity strategy for the Catchment.

The GB CMA prepared detailed responses to the Victorian Government's *Land and Biodiversity at a Time of Climate Change* green paper, and to the *Summit Paper on Climate Change*.

A submission on relevant issues identified (or not) in the project impact assessment prepared for the Sugarloaf inter-connector pipeline was prepared, and spoken to at the convened panel hearing.

Mapping of priority sites associated with the Biodiversity Action Planning (BAP) process has now been completed for the catchment and conservation plans have been developed for 18 BAP zones. This information provides a valuable resource for anyone planning Biodiversity activities in the catchment. Conservation plans are available on the GB CMA website, and an interactive compact disc has been developed which contains all BAP information.

The native vegetation retention project promotes uptake of policy guidelines, technical documents and tools to support the implementation of Victoria's Native Vegetation Framework by working in partnership with local governments, the GB CMA and other stakeholders. Key components of the project are the scrutiny and assessment of planning permit referrals for clearing of native vegetation; the provision of tools and capacity building programs to assist local governments and public authorities to better assess development impacts on native vegetation; and the promotion of market based instruments such as BushBroker (and where appropriate BushTender and EcoTender) to all stakeholders to help better manage native vegetation on private land. This function is undertaken by DSE regional services.

Knowledge

Properties involved in Bush Returns and Green Graze are participating in on-going monitoring of natural regeneration through their annual progress / activity reports. Detailed vegetation monitoring by researchers from the University of Melbourne and DSE's Arthur Rylah Institute is continuing and providing valuable information on factors affecting successful regeneration.

CSIRO has published a book from the national biodiversity conference held in Launceston in June 2007. The book, *Biodiversity: integrating conservation and production, case studies from Australian Farms, Forests and Fisheries* includes a chapter on the GB CMA's Bush Returns program, written by Carla Miles. To order the publication go to http://www.publish.csiro.au.

Vegetation incentives analysis – a project has been completed to identify the strengths and weaknesses of various biodiversity incentives programs delivered across the GB CMA. Outcomes will be used to inform the forthcoming Dryland Landscape Strategy.

Assumptions review: assumptions used to report on progress towards biodiversity targets (that is linking outputs to outcomes) are updated annually to reflect new information and thinking. This year has seen a focus on gaining a better understanding of increases in native vegetation extent and quality that is occurring outside of GB CMA funded activities, with a project designed to determine the degree of works occurring outside those funded through the GB CMA. Preliminary results indicate that a substantial amount of activity with presumed positive native vegetation outcomes is taking place in the Catchment that isn't funded through GB CMA (a similar amount to that funded through GB CMA).

Landscape Logic (Victorian Retrospective Study): the GB CMA is a partner in this four-year multi-regional and multi-state Australian Government Environmental Research Facility project. This year, the project has made progress towards improving our understanding of the links between land management actions and environmental outcomes relating to native vegetation. In doing so, the project will assist the GB CMA to better determine progress towards resource condition targets. See weblink www.landscapelogic.org.au.

The GB CMA continues to be involved in an Australian Research Council linkage project with Monash University that explores the effect of habitat loss and fragmentation in agricultural landscapes on native birds. This project will use genetic information to improve our understanding of how habitat fragmentation affects the dispersal ability and therefore long-term viability of native bird species and populations, and also provide information on which components of the landscape can most effectively be manipulated to enhance population survival.

In partnership with Charles Sturt University, the GB CMA is supporting research that is examining changes in vegetation cover in the Box-Ironbark region since 1945.

2007-08 performance – Threatened species recovery

A range of nationally threatened species occur in the Goulburn Broken Catchment which are associated with terrestrial, waterways and/or wetland environments. This section focuses on the work that has been done specifically on threatened species. It should be noted that activities described in the previous section also aim to improve security of threatened species in the Catchment.

Relationships, partnerships and community capacity

A landscape-scale fox control program was implemented throughout the Broken Boosey CMN area to help protect (particularly) the Bush Stone-curlew, Brolga and Carpet Python. This involved more than 100 landholders and public land managers and covering about 80,000 hectares. A number of farm chemical users and 1080 endorsement training courses were organised to allow landholders to purchase and use 1080 baits as part of the program.

Threatened species seedlings for four plant species were propagated and planted in autumn as part of the Broken Boosey CMN Action Plan for threatened flora species within the Broken Boosey State Park, natural features reserves and surrounding private land.

Macquarie Perch populations in the Hollands, Hughes and King Parrot Creeks have been the focus of active and well-supported community partnerships. A Perch in Peril campaign in the King Parrot Creek area has addressed threats to the population there. A Hollands Creek Demonstration Reach project has been initiated in the Tatong Valley in partnership with a community reference committee, DSE's Arthur Rylah Institute and the MDBC.

Biodiversity Action Planning continues to be an effective planning tool for a number of projects in the Catchment. These include projects focussing on the Carpet Python, Grassy Woodlands, Brolga and Bush Stone-curlew.

Community volunteers were involved in surveys of a number of threatened species including the Golden Sun Moths, Striped Legless Lizard, Grey-crowned Babbler and Brush-tailed Phascogale.

With the cooperation of the adjoining landholders and government agencies a project was established to monitor and protect the largest remnant population of Catfish in Victoria, which is located within the lower Goulburn River floodplain. The project also aims to protect Watershield which is also present at the site. Major community-based activities have complemented these initiatives.

The Regent Honeyeater Project and Superb Parrot Project are two successful and well supported community-based projects seeking to augment habitat through revegetation and remnant protection for these taxa.

Works, planning and responding

The following projects were implemented focusing on improving the security and understanding of threatened species:

Species	Actions
Spot-tailed Quoll	Remote cameras deployed. Effective monitoring tool for a range of species including the Long-nosed Bandicoot. No Quolls detected to date.
Barred Galaxias	Captive populations returned to previously fire affected streams. Drought affected populations remain in captivity. A predator control structure has been installed at Marysville. Monitoring continues.
Spotted Tree Frog	Surveys revealed pronounced population declines at some sites. Citrid fungus infection confirmed. Captive breeding program has been initiated.
Golden Sun Moth	Ongoing monitoring of habitat condition and moth populations conducted. Grazing management plan to improve the coverage of wallaby grass (critical habitat component for Golden Sun-moth) developed and implemented. Community surveys completed.
Mountain Pygmy Possum	Captive breeding program initiated. Surveys, habitat reconstruction and predator control work continues (with significant contributions from the Mt Buller Resort Management Board).
Striped Legless Lizard	Ongoing project encouraging protection and appropriate management of grassland ecosystems. Surveys produced new records.
Threatened flora	Monitoring conducted for: Purple Eyebright, Lima Stringybark, Various threatened leek orchids, Violet Town spider orchid, Purple diuris, Donkey Orchid, Swainson's pea, Ridged Water-milfoil. Seed collection and propagation trialled for a number of species in collaboration with Euroa Arboretum.
Grassy Woodlands/ Grasslands	Detailed assessments conducted on mapped remnants. Ongoing monitoring sites established.
White bellied Sea Eagle (State listed)	Three to four breeding pairs identified at Lake Eildon. Similar numbers identified in 2002.
Leadbeater's possum	Nest boxes (made from recycled plastic) trialled with promising results. Optimum locations for more nest boxes determined. National reserve system formally signed off.
Trout Cod	Habitat enhancement and population monitoring conducted, with sampling detecting larval fish.
Macquarie Perch	Habitat requirements of various life stages investigated. Populations located, and management actions prioritised.
Catfish	Population habitat and threat monitoring completed. Healthy self-sustaining population present in the Goulburn River floodplain
Watershield	Population monitoring and protection continues.

In addition to the above, the GB CMA partnered DSE and three other CMAs to deliver a recovery program for nationally threatened species impacted by drought and fire. Activities included detailed surveying of specific locations, habitat assessment, and maintenance (and planned release) of captive breeding populations.

Knowledge

Continued input has been made into developing and implementing the Actions for Biodiversity Conservation database, which is managed and curated by DSE to guide effective implementation and monitoring of investment in threatened species recovery activity.

Comments on relevant threatened species action statements and recovery plans have been provided as requested.

Actions**		From funds received through Corporate Plan				
		Achieved			*Target*	*% achieved*
		2005-06	*2006-07*	*2007-08*		
Habitat loss – Threatened Species Threatened species recovery plan and action statements	no	13	34	37	37	100

** Funding also provided via Investment Area 4.

Investment area 7 – Climate change

Report compiled by: Kate Brunt, Tim Barlow
2007-08 investment: $25,000

Climate change poses significant risks and opportunities for all investment areas.

An annual warming of 0.3 -1.6 degrees centigrade by 2030 and 0.8 -5.0 degrees centigrade by 2070 is predicted for the Goulburn Broken Catchment. Annual rainfall decreases and more intense rainfall events are likely. Longer and more frequent droughts and a 10-40 percent increase in the frequency of days with extreme fire weather risk are likely (DSE 2004).

The GB CMA's emerging strategic directions for climate change are being driven by DSE's *Sustainable Water Strategy (Northern Region Discussion Paper)*, DSE's *Land and Biodiversity in a Time of Climate Change* (Green Paper) and State and Australian Government greenhouse strategies.

Strategic references:

- GB CMA Climate Change Discussion Paper 2007
- Victorian Greenhouse Strategy 2002
- National Greenhouse Strategy 1998
- Several other Australian Government and State strategic documents that address climate change.

The GB CMA's strategic directions are:

- Adapting to climate change (initially this will involve incorporating adaptation strategies into regional sub-strategies)
- Mitigating greenhouse gases at a catchment level by supporting the establishment and activity of the Goulburn Broken Greenhouse Alliance Group
- Aligning bio-sequestration activities with catchment priorities by influencing carbon brokers and associated groups.

2007-08 performance

The GB CMA has significantly increased its efforts in addressing climate change at a regional level. The strategic directions (listed above) were developed and agreed. A climate change coordinator was appointed.

The Goulburn Broken *Climate Change Discussion Paper* and a paper looking into soil carbon opportunities were prepared. A policy position and an implementation process for engaging with carbon brokers, associated groups and landholders were prepared in collaboration with DPI.

Strong links with research organisations are being developed to ensure that the most relevant and up-to-date information is available.

The GB CMA was selected to participate in The National Climate Change in Agriculture and Natural Resources Working Group's project: information and communication on vulnerability of NRM regions to climate change. The project supports NRM regions to disseminate regionally relevant information for raising awareness of climate change vulnerability and for building climate change into NRM planning and programs.

Submissions were made to the Victorian Government's *Land and Biodiversity at a Time of Climate Change* Discussion Paper and Green Paper, as well as to the Victorian Government's Summit Paper on Climate Change, which is developing specific climate change strategies and policies.

Staff are continuing to engage with the carbon bio-sequestration industry to ensure that revegetation is located in appropriate areas (ie does not impact water yield or compromise biodiversity values), and that revegetation is implemented to an acceptable standard. To this end, a paper has been prepared outlining revegetation standards and engagement processes.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed: no schedule yet developed)	n.a.	n.a.	n.a.
Catchment condition	Impact of climate change on assets (not yet quantified). Catchment management systems in place.	Poor	Poor	Low

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Investment area 8 – Flood protection

Report compiled by: Guy Tierney, Rod McLennan
2007-08 investment: $400,000

The GB CMA coordinates the implementation of the *Goulburn Broken Regional Floodplain Management Strategy (2002)*. Following the completion of a number of floodplain management plans, responsible authorities are implementing the plan recommendations with funding through local, State and Australian Government grants.

The vision set in 2002 to plan for and manage floods is:

> "….to achieve best practice floodplain management for the benefit of current and future generations…."

To achieve this vision, understanding of engineering concepts such as hydrology (the study of rainfall run-off) and hydraulics (the study of water movement over land) is required.

This helps to better understand flood impacts on urban and rural communities. Once the likelihood and consequences of flooding are understood (i.e. flood risks), mitigation and/or management techniques are explored with the community. Options include flood warning and emergency management arrangements, structural solutions such as levees, and planning controls.

A performance story that illustrates how risks of flooding in Shepparton-Mooroopna are being managed can be found at www.gbcma.vic.gov.au.

Strategic references:

- Goulburn Broken Regional Floodplain Management Strategy 2002

Two long-term targets have been proposed to provide measurable reference points of progress towards achieving the vision:

- Reduce the impact of flooding on the built environment
- Provide ecosystems with natural flooding patterns where appropriate.

Since 2002, the prolonged dry period has made flood damage negligible with the exception of significant flooding of the Barmah-Millewa Wetlands during 2005-06.

Implementation of the strategy is opportunistic and is subject to funding under Australian and Victorian Government incentives. The strategy has nine programs. An in-house review is shown below.

A technical model that shows the benefits of investing in flood management has been prepared and a new model is under development to better communicate with the community what targets have been set and progress made in reducing the cost of flood damage.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 2002 and 2008)	n.a.	Exceeded target	High
Catchment condition	Flood regimes provided for ecosystems. Financial savings from prevention of flood damage. Catchment management systems in place.	Very poor	Poor	Medium

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Program	percent progress against tasks scheduled to be completed		
	by 2012	by 2008	Comments
Asset management	70	70	No further progress likely.
Flood studies and floodplain management plans	60	80	All high priority studies are completed or progressing. Low priority studies are unlikely to proceed. Some lower priority studies have also been completed. Areas which have undergone major investigations since 2002 include Benalla, Shepparton, Nathalia, Tatura, Violet Town, Yea, Mansfield, Merrigum, Seymour, lower Goulburn, River Murray region, Barmah-Millewa, and Numurkah and the Goulburn Broken flood level declaration. These complemented previous studies on the Goulburn Broken flood level reconnaissance, Euroa, Seymour and Jamieson. Many study recommendations have been implemented. Numurkah and Tallarook Flood Studies are underway.
Floodplain works	70	70	Started to accelerate in 2006-07 and continuing. Euroa, Benalla, Nathalia and Tatura are well under way as priority urban centres. Shepparton Mooroopna Emergency Flood Warning arrangement finalised. Works on Public Works Department levees carried out on behalf of DSE.
Statutory land use planning	75	100	Planning reforms gazetted into five municipal planning schemes, including updated mapping, strategic statement, schedules and local floodplain management plans for Campaspe, Greater Shepparton, Murrindindi, Mitchell and Strathbogie shires. Moira Shire is ready to advertise. These initiatives ensure flood risk are managed and to streamline planning referrals and remove the need for unnecessary referrals. The 100-year annual return interval flood levels have been gazetted for Benalla, Euroa, Seymour, Shepparton and Mooroopna following public exhibition. Further flood level declarations gazetted for Jamieson, Mansfield, Yea, Merrigum, Tatura and Nathalia.
Infill (improve) flood mapping	75	100+	Priority areas surrounding urban centres have been included in most planning schemes. Flood mapping within most rural areas have been reviewed during planning scheme amendment exhibition. Considerable field inspection with community consultation has improved flood mapping. Improved flood mapping in remote rural areas is reliant on flood data capture including flood photography and flood levels. Lack of ground level data is the largest and most expensive impediment that prevents improved flood mapping. As more digital terrain information is captured, flood mapping improvements may follow. Given little demand on development in remote areas priority will remain low and unlikely to be reviewed. New mapping including the River Murray and lower Goulburn regional areas incorporated into the Moira planning scheme review.
Development assessment guidelines	100	100	This is strongly linked to program statutory land use planning program above. Ongoing reviews are needed. Input into Victoria best practice and policy manual will commence 2008/09.
Control of works and activities	N/A	100	This is no longer regarded as a program and it highlights the number of tools available.
Emergency response planning	20	100	The North East Regional Monitoring Network Agreement (2005) has largely resolved many of the issues listed in the strategy. Municipal Emergency Management Plans Flood Sub Plan requires significant work across the GB CMA. Four major flood warning upgrades have been installed at Benalla, Euroa, Eildon to Seymour and recently Shepparton-Mooroopna.
Flood monitoring action	80	100	GB CMA has developed GIS platform integrating flood intelligence and stream gauge related flood mapping which has been tested.
Information management systems	70	100	GIS platform developed to provide access to documents. GB CMA portal now provides access for staff of the floodplain library, and floodplain management file predating the GB CMA.
Education and communication	40	100	Has started, with an emphasis on Lake Mokoan. The program was widened with a heightened profile again this year. GB CMA is leading continuing the development of a statewide flood web-portal (Flood Victoria), with consultant engaged in July 2007.

2007-08 performance*

Investment and Actions*		From funds received through GB CMA's Corporate Plan	
		Achieved	Performance* or progress in 2007-08
Government investment*		$400,000	n.a.
Integrating knowledge into planning			
Subdivisions	no.	220	Responded within statutory time frames to applications to the eight municipalities in the GB CMA
Dwellings	no.	320	
Retail, shop or office buildings	no.	100	98.5 percent of the time.
Planning scheme amendments	no.	40	
Whole farm plans	no.	70	
Flood level enquiry	no.	24	
Planning other	no.	145	
Flood planning amendments gazetted	no.	0	90 percent completed – Two planning scheme flood amendments are finalised for Mitchell and Campaspe Planning Scheme and awaiting Ministerial gazettal.
These included new mapping, exemptions and incorporated performance-based criteria documents into planning schemes.			
Flood levels declared	no.	0	Violet Town ready for declaration
VCAT and panel hearings attended	days	3	
Floodplain implementation	no.		Benalla Rural City Council finalised sensitive vegetation management under the approved Ministerial Water (flood mitigation) Management Scheme for Benalla. Council is designing railway culvert enlargements. Moira Shire Council has substantially designed levee upgrades for Nathalia and called for tenders for construction. Also, tenders have been submitted for an emergency management and flood warning system for Nathalia. Greater Shepparton City Council has finalised design and called for tenders of mitigation works at Tatura.
Gathering new knowledge			
Ground level Information	no.	1	Digital bare earth terrain models for Goulburn and Broken Rivers
Urban flood studies and management plans	no.	1	80 percent of tasks completed. Barmah and Tallarook Townships
Regional flood studies and management plans	no.	3	85 percent of tasks completed. Regional Murray, Goulburn River and Barmah Forest
Creating awareness			
Flood education and awareness program	no.	2	Further significant investment in raising awareness of flooding issues with Lake Mokoan. Statewide flood web-portal is advancing.

* Most actions are performed reactively so no targets are set annually.

From Corporate Plan – Floodplain component

Key Performance Indicator	Measure	Progress
Floodplain management: provide advice about flooding and controls on scheme amendments, planning and building approvals to local councils in the capacity as a Referral authority: Section 55 of the Planning and Environment act 1987.	Provide advice within 28 working days for referral / advice.	Achieved 98%
Provide technical advice to councils and community on flooding	Provide advice as required within a reasonable timeframe.	Achieved.
Develop and coordinate implementation of Regional drainage management plan.	Provide percentage of drainage management plan implemented.	Not applicable

Investment area 9 – Pest plants and pest animals

Report compiled by: Greg Wood, Lilian Parker, Wayne Tennant, Tony Kubeil, Tim Barlow, Rod McLennan

2007-08 investment: $1,140,000 million

Managing the impact of pest plants and animals on agriculture and the environment is a critical element of all NRM programs in the Goulburn Broken Catchment.

While private land managers make the most significant contribution to pest management, they receive strong support from DPI and public land managers such as Parks Victoria and DSE.

Private land managers target a wide range of pest species, and typically focus on those that are well established.

The DPI Pest Program manages the impacts of new and emerging weeds, Victorian priority weeds, established weeds, foxes, wild dogs and rabbits.

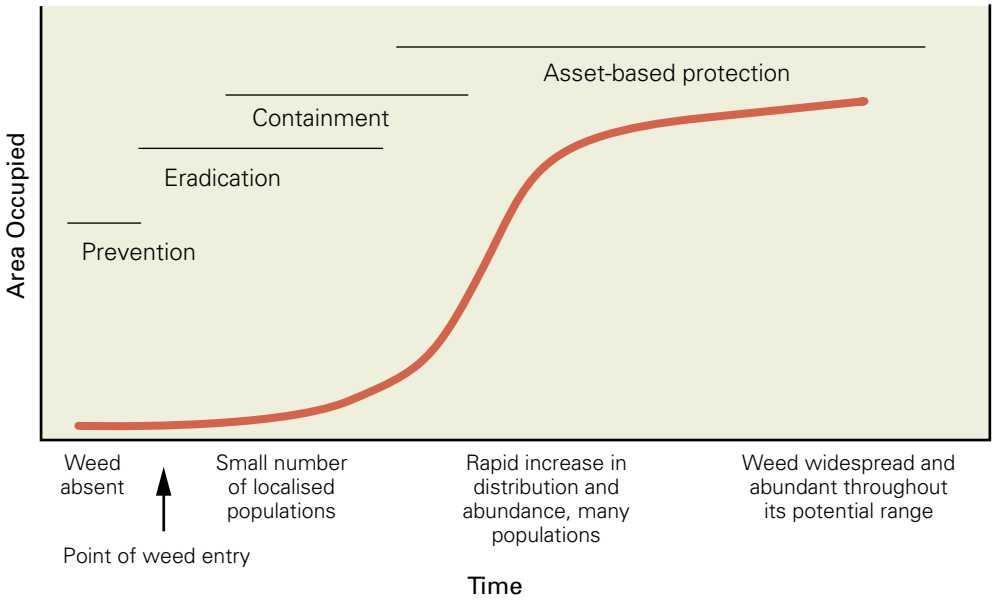
In recent years, the DPI weed program has increased emphasis on new and emerging and highly threatening weed species, because preventing the establishment of new species is by far the most cost effective use of government weed management resources.

Strategic references:

- Catchment and Land Protection Act 1994
- Goulburn Broken Weed Action Plan 2001-05
- Wild Dog Management in North East Victoria 2005-08
- Goulburn Broken Regional River Health Strategy 2005-15
- Victorian Noxious Weeds Review (2004 to present)
- GB CMA Pest Animal Plan (in preparation)
- Goulburn Broken Rabbit Management Action Plan 2000-05
- Victorian Pest Management Framework 2002

Investment in pest management is guided by the following diagram:

The four phases of a plant invasion (derived from draft working papers from DSE 2007)



Annual performance, long-term strategy implementation progress and Catchment condition change

		Pest plants		Pest animals		
Decision focus	**Examples of evidence used to inform decisions**	**1990**	**2008**	**1990**	**2008**	**Certainty of ratings**
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed between 2001 and 2008)	n.a.	Below target	n.a.	Below target	Very low
Catchment condition	Impact of pest plants and animals on assets. (Not available at Catchment scale.) Catchment management systems in place.	Poor	Poor	Poor	Poor	Medium

A number of extremely dry seasons have contained the spread of many established and new weed infestations. In many cases, improved access to weed infestations, particularly along waterways has resulted in dramatically more effective control programs.

Land managers need to remain vigilant however, as considerable quantities of drought fodder have been brought into the region, with the potential to introduce new weed species.

Our understanding of setting targets for weed management in 2001 was in its infancy and targets were unspecific, making it difficult to measure progress. Although new targets have not yet been formalised, the GB CMA has continued to refine its approach and a new weed management plan will be prepared in 2008-09.

The most important achievement in recent years has been to promote the message that preventing new weed incursions is far more cost effective than trying to manage them once they have established.

DPI Pest Management programs

State Prohibited Weeds	All known infestations have been mapped, management plans have been developed and all infestations will be treated annually until they are eradicated.
New and Emerging Weeds	Management plans have been developed for all known infestations of ragwort and serrated tussock and all sites are treated annually. Surveillance programs for serrated tussock are continuing and new infestations are dealt with promptly and included in the annual control program.
Regional Priority Weeds	The target species are gorse and blackberry. The initial aim of the gorse program is contain the weed to the southern extremities of the Catchment where it is already well established. Satellite infestations north of the Kilmore/Broadford concentration are considered a high priority for treatment and all known sites are under annual treatment plans. Two small pockets in the Merton and Nillahcootie areas are being managed through coordinated extension and compliance programs. Coordinated community control programs are being developed along the northern fringe of the Kilmore/Broadford concentration to prevent weed spreading northward. Priority areas for blackberry control are developed in consultation with the community. Treatment plans are prepared for all properties in priority project areas and compliance action is taken where necessary to ensure participation. The output achievement figures for weeds reported on page 7 do not include achievements through the Second Generation Landcare Program, as community group reports are not received in time to be included in this report. Second Generation Landcare achievements are therefore reported on a five-yearly basis.
Wild Dog Management	The DPI wild dog program continues to operate in the Mansfield and Alexandra areas, implementing proactive trapping and baiting activities, as well as responding to requests for assistance from landholders. Local area control plans have now been developed in cooperation with the North East Wild Dog Management Group and the general community and these plans now guide the implementation of wild dog control activities.
Rabbit control	Priority areas for rabbit control are also developed in consultation with the community. Extension and compliance services are delivered in these areas to ensure a high level of coordination and participation. Despite extended dry periods and reduced income, land managers have been prepared to continue and even accelerate rabbit and fox control efforts across the Catchment.
Pilot Pest Action Plan	A pilot pest action plan is currently being developed for the Goulburn Broken Catchment. The plan will clearly define regional roles in pest management, monitoring and evaluation.

2007-08 performance: Weed Management Programs

Works and extension

The new and emerging weeds project aims to prevent the introduction or establishment of new species to the Catchment. During 2007-08, management plans were developed for all known infestations of State Prohibited Weeds and all sites were treated. Follow up treatment will occur annually until eradication is achieved.

Blackberry, gorse, serrated tussock and ragwort were again targeted under the Victorian community weeds project.

Extension and compliance programs for gorse and blackberry were completed in the Merton, Home Creek, Creighton's Creek and Swanpool areas. These programs involved over 450 landholders and voluntary compliance levels of between 84 and 92 percent were achieved. DPI compliance officers have followed up all landholders who chose not to participate in the initial effort.

Blackberry and gorse programs are also continuing in the Yea River and Howqua Valley areas and new programs have commenced in the Glenaroua, Longwood East and Ruffy areas. DPI compliance activities will continue in these areas next summer to ensure high levels of participation.

Investment and actions*		From funds received through Corporate Plan				
		Achieved			*Target*	*% achieved*
		2005-06	*2006-07*	*2007-08*		
Government investment*	$000	$1,142	$1,100	$1,140		
Weed invasion						
Weeds – woody weed management (ha)	ha	75	0	0	0	n.a.
Weeds – aquatic weeds controlled/eradicated (km)	km	33	39	53	21	251
Targeted infestations of weeds in high priority areas covered by control programs (ha) *	ha	69,437	9,637	11,138	310	3,599
Pest animals						
Area of high priority rabbit infested land that are covered by control programs (ha)	ha	10,150	0	200	200	100
Area of high priority fox infested land covered by control programs (ha)	ha	108,856	94,410	45,570	36,800	124

* Weeds outputs from 2007-08 include DPI, river health and Drought Employment Program works only. Second Generation Landcare outputs are included every five years.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Relationships, partnerships and community capacity

More than 100 Weed Spotters (community and government agency volunteers) have now been registered and trained to report new infestations of high threat weed species. The weed surveillance capacity across the Catchment will increase through continued training of these weed spotters.

During 2007-08 over fifty of the region's retail nurseries were inspected to ensure that no high threat species were being traded or offered for sale. Extension information and advice was provided and no breaches were recorded.

The Rural Extension Program (REP) continued in its new format during 2007-08 and has been extremely successful. Over 600 landholders have now been involved in the project and a number of Landcare groups have new projects planned for next season. The REP is a partnership between Landcare, DPI and the CMA and is funded through the Second Generation Landcare Program. (See performance story on page 29.)

An enhanced community engagement approach was developed during 2007-08, to ensure that community groups involved in pest management projects fully understand their role and the role of participating government agencies. A project plan is now developed prior to project commencement to ensure all parties agree to the delivery approach.

Planning and responding

Serrated tussock is one of the highest weed threats to the Catchment. Only a few infestations occur in the Goulburn Broken and an intensive surveillance program ensures that new infestations are located quickly and treated before they become established. The main pathway of spread for serrated tussock into the Catchment is along VicRoads highways and freeways. To address this issue, VicRoads has developed a Serrated Tussock Management Plan specifically to halt the northern spread of this weed.

A serrated tussock awareness program involving properties adjacent to known VicRoads infestations was undertaken during 2007-08. Over 30 properties were inspected and landholders were provided with information regarding the identification and management of serrated tussock. This program will be expanded during 2008-09.

A number of new weed incursions were reported to DPI throughout 2007-08 and were quickly assessed by DPI pest management staff. Where incursions of high threat species were validated, infestations were treated and management plans put in place for future seasons.

Knowledge – Pest plants

The popular weed identification booklet *Weeds of the Goulburn Broken* was revised and reprinted during 2007-08. The booklet now includes an additional 25 species after it was decided to increase the focus on environmental weeds and incorporate weeds of riparian and aquatic zones.

DPI pest management staff adopted an improved mapping system to enable them to produce accurate maps of weed and rabbit infestations at the farm level. These maps are now provided to landholders involved in extension and compliance programs, giving landholders a much clearer understanding of what they need to do to meet their pest management obligations.

2007-08 performance: Pest Animal Management Programs

Works and extension

Despite ongoing drought conditions, landholders continue to support coordinated pest management programs.

The Broken Boosey fox management project was again a success, involving 76 landholders. This project targets properties along Broken and Boosey Creeks in an effort to protect Bush Stone-curlews from fox predation.

Relationships, partnerships and community capacity

During the year, the authority to sell 1080 bait products was transferred to the private sector and a number of retailers across the catchment are now licensed to sell 1080 bait products for rabbit and fox control.

Following consultation with Landcare groups, DPI extended the highlands rabbit compliance program during 2007-08 to involve a further 50 properties. The aim of this project is to consolidate works achieved through many years of Second Generation Landcare funding and to ensure rabbit numbers remain at very low levels.

Planning and responding

A key task undertaken during the year was the development of the pilot draft Goulburn Broken Pest Animal Plan. When completed, this plan will provide direction for pest management investment into the future, and as a pilot, the plan will guide other CMA's in the development of their next generation Pest Animal plans.

Knowledge

The Euroa rabbit monitoring project continued during 2007-08, with transects monitored in December and April. The program involves spotlight counts and assessment of warrens along predetermined transects. Results are collated and incorporated into the statewide database, providing valuable information on population trends and rabbit impacts.

The Business
– details of annual performance and long-term progress

This section provides further details on the ratings of annual performance and long-term progress for each investment area of 'The Business' given in the tables on pages 12 and 13.

References to further levels of detail are also given in this section, with most able to be found at www.gbcma.vic.gov.au.

Investment area A – Corporate and statutory operations

Report compiled by: Stan Gibney, Bill O'Kane, Megan McFarlane, Rod McLennan
2007-08 investment: $1.7 million

Victorian Government funding for corporate and statutory operations enables the GB CMA to perform tasks required by legislation and detailed in the Statement of Obligations (SOO).

This includes the governance required to ensure works programs are managed in a financially prudent manner, within an agreed operational risk framework.

Long-term performance

The GB CMA aims to fulfil its corporate and statutory obligations efficiently and effectively.

Costs and achievements are benchmarked regularly against those of peer organisations and similar industries and the ratio of tasks performed by employees in-house to those outsourced is also closely monitored. Benchmarking results according to DSE's assessment tools indicate that the GB CMA compares extremely favourably with its peers. Costs are funded from a direct corporate allocation plus interest earned with the balance recovered from a variable corporate charge to internal only projects of up to a maximum of three percent. Corporate charges are not applied to funding to community groups or other partners.

Strategic references:

- Goulburn Broken Catchment Management Authority Corporate Plan 2006-07
- DSE Assessment of Corporate and Statutory Costs, December 2005
- Governance Guidelines for DSE Portfolio Statutory Authority Board

2007-08 targets achieved

The GB CMA has performed all obligations for the past 12 months, as detailed in the table under the 'Financial, governance and risk management' section: GB CMA statutory responsibilities as a Victorian Statutory Authority and Employer.

The ongoing improvement in information management, confirms the GB CMA's position as a leader of managing the business aspects of natural resource management (see also 'Investment area D – Knowledge').

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed over the long term)	n.a.	On target	Medium
Catchment condition	Efficiency and effectiveness ratios. Catchment management systems in place.	Poor	Satisfactory	Medium

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

From Corporate Plan – indicators relevant to 'Corporate and statutory operations'

Key Performance Indicator	Measure	Progress
High standard of Corporate Governance		
Conduct the business affairs of the Board in a manner consistent with best practice principles of corporate governance.	Adoption of DSE Corporate Governance Guidelines. Directors' approvals checklist. Review of policies and procedures, Board Charter.	Ongoing. Guidelines adopted. Reviewed statutory responsibilities and updated delegations and policy as required by change from Water Act to CALP Act.
	Board and individual Director's performance reviews by August 2007.	In progress.
	Time allocated within Board meeting for corporate governance and financial management training.	Special meetings addressed Board governance. Financial management training concluded June 2007.
	Favourable audit opinion from Auditor General	Achieved.
Develop, implement and review annual Corporate Plan.	Corporate Plan prepared in accordance with Ministerial Guidelines and submitted to Minister by 30 April each year.	Achieved
	Comparison of actual results to Corporate Plan.	Results generally well above targets (see results table).
	80 % of project activities delivered on time and in line with agreed outputs.	
Solvency: Seamless transition to new funding sources arising from conclusion of the NAP & NHT program funding in 2007-08.	Identification of dates as trigger points by which replacement programs need to be confirmed or alternate plans are in place to protect the Authority's solvency.	Seamless transition achieved. $9.7 million of non RCIP investment received in 2007-08.
Financially sound organisation which complies with its obligations		
Measure the Authority's financial resources in a responsible and accountable manner.	Use of internal KPIs, measured and reported on annually through Annual Report.	Achieved
	Monitoring of fixed costs and on-ground works.	DEP has increased on ground works. Fixed cost (the cost of opening the door and fulfilling statutory functions) is covered by State funding of $1.255 million. GB CMA has the highest ratio of : • Annual budget to staff. • Floodplain referrals to staff
Optimise extent of funding grants carry-over.	Project management and forward projections of percentage of works completed.	Achieved. Carryover increased because of uncertainty with 08-09 funding but cash holdings still within DSE target of 35 percent of annual revenue.
Ensure that the Authority meets its obligations in line with Ministerial Directions under the Financial Management Act.	Comprehensive internal audit works program to ensure compliance.	Achieved. Annual financial management checklist completed October 2007 and presented to Audit Committee.
Financial management compliance framework (FMCF)	FMCF submitted annually to Minister of Finance by 30th September 2007	Achieved.

Key Performance Indicator	Measure	Progress
Reporting		
Maintain performance management and reporting procedures that ensure accountability to the Government and other stakeholders.	Responsibilities under Statement of Obligations.	Achieved. Quarterly reports detailed progress to Board. Annual Report demonstrates achievements to Government and stakeholders.
	Continue to work with Government to have confirmed funding approvals on time.	First quarter funding delayed but improved thereafter.
Production of Annual Report to Minister for tabling in Parliament.	Annual Report submitted to Minister by mid October 2007.	Achieved. Report a substantial improvement because it detailed our impact on the condition of the catchment. Letter from ANAO and Bronze ARA award confirms this.
Monitoring and reporting against Corporate Plan quarterly	Monthly and detailed quarterly reports against Corporate Plan by mid August and November 2007, and February and May 2008.	Achieved. Monthly financial reports also detail any exceptions.
Risk management		
Apply a risk-based approach to planning, budgeting and decision making processes.	Review of Risk Management Framework.	Internal auditors engaged, risk management report adopted at February Board meeting.
	Implementation of risk register. Risk identification and mitigation incorporated into project plans.	Work program for 2008 completed with HR and project management audits completed.
Monitoring of risk	Ongoing monitoring of risks identified in the framework and their mitigation strategies.	Risk profile updated. Business Manger to report monthly to the Board on changes to the Authority's risk profile.

Investment area B – Our people

Report compiled by: Kate Pendergast, Stan Gibney, Bill O'Kane, Rod McLennan
2007-08 investment: $4.2 million (total GB CMA payroll including staff, Board and committee members);
$3.8 million (total GB CMA employees only); $210,000 (training expenditure, human resource support and activities)

The GB CMA recognises that to strive for success today and to position for the future then a highly capable and engaged workforce is needed. The GB CMA's Workforce People Strategy articulates key strategies and actions, including:

- Ensuring the attraction, development and retention of employees
- Driving engagement and performance
- Further building organisational effectiveness and capability.

Strategic references:

- GB CMA Workforce People Strategy (2005)
- Public Sector Management Act 2004 (various guidelines)
- Relevant public sector and GB CMA policies and procedures
- Human Resources Review (PKF May 2008)
- People Matter Survey
- State of the Public Sector in Victoria 2006-07
- Victorian Public Sector Code of Conduct

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be completed over the long term)	n.a.	On target	Medium
Catchment condition	Workforce data. Catchment management systems in place.	Satisfactory	Satisfactory	Medium

Our stable workforce has provided the continuity necessary for a strong and long corporate memory. Staff stability has also allowed the GB CMA to provide strong leadership within and outside the Catchment. In a labour market which has tightened over the past 12 months and will continue to do so, it is pleasing that the GB CMA has filled 90 percent of its vacancies with skilled staff. To ensure we have the necessary skills and knowledge our staff access training specific to the needs of the position and the staff member.

A Human Resources Review was conducted by auditing firm Pannell Kerr Forster (PFK) in early 2008. This included compliance and continuous improvement and was the first formal review of the human resources function and operations of the GB CMA. The main findings from the audit were very satisfactory.

Opportunities for improvement from Human Resources Review, 2008:

Item	Summary of Recommendations and Findings	Importance Level	Hazard or Opportunity	Comment/ Progress
1	Implement timeline and schedule for human resources policy and procedure development	Medium	Hazard	Completed
2	Extend succession policy to include workforce planning	Low	Opportunity	Progressing
3	Annual review of human resource policy and procedure	Low	Hazard	Progressing
4	Selection panel members for recruitment to declare prior knowledge of applicant	Medium	Hazard	Completed
5	Recruitment activities approved in writing by CEO	Medium	Hazard	Completed
6	Exit interview action report compiled	Medium	Opportunity	Progressing
7	Workforce plan and forecasting	Medium	Opportunity	Progressing

Progress in implementing tasks listed in Workforce People Strategy

Program	Percent progress against tasks scheduled to be completed by		
	2009	2007-08	Key activities undertaken
Workforce Planning	50	50	• Preparation and analysis of workforce data undertaken • Successful HR Audit undertaken in May 2008 • Workforce planning and forecasting model developed • Retained current staffing levels through recent budget reductions • Introduction of floodplain graduate who will undertake placements across CMAs over a two year period.
Developing People and Leaders	50	40	• Individualised plans within relevant performance plans • Individual coaching for managers offered • Management skills program completed.
Employee Relations	100	100	Enterprise Bargaining Agreement 2007 – 2009 completed and implemented. Key components: – 27 month agreement – Increased flexibility for staff (ability to work any five days in seven); ability to purchase additional leave – Translation of all agreement covered staff to one classification structure – Introduction of a three percent bonus payment for performance.
Health and Safety	100	100	• Training for Dealing with Public Aggression • Review of Designated Work Groups to be based on functional units • Committed Occupational Health and Safety committee.
Morale, Reward and Recognition	80	100	• Three percent lump sum bonus implemented • 10 years of service award introduced • People Matter Survey results excellent.

People Matter Survey 2007

Element	GB CMA Result*, percent	Water Sector Result*, percent	Summary of findings
Response Rate	71	42	The results continue to be better than the water sector in all elements. The results indicate that there is no one area of specific concern. The results indicate success in achieving an organisation which is professional, allows staff to be self directed yet outcome focussed and promotes individual empowerment.
Demonstration of public sector values	89	86	
Demonstration of public sector employment principles	92	84	
Experience within work environment ie occupational health and safety wellbeing	88	86	
Awareness of organisation policy and procedures	84	13	

* Results are an average calculated for all components within the element

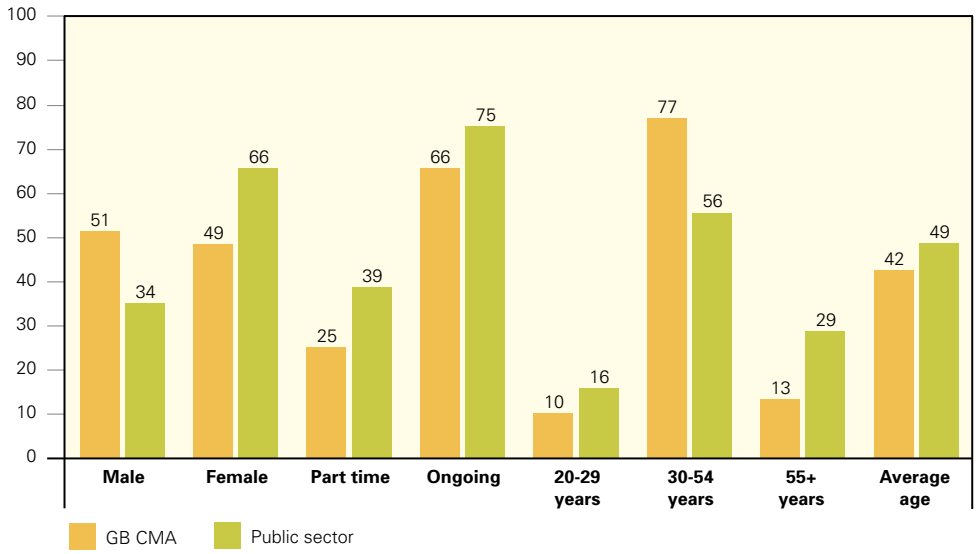
Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

General workforce statistics

	GBCMA 2006-07 no.	GB CMA 2007-08 no.	GB CMA 2007-08 percent	Victorian Public sector 2007-08 percent	Comment
Gender and employment type					
Male		27	51	34	GB CMA result is more consistent with data for all Victorian workforces where 45 percent are female.
Female		26	49	66	
Part-time male	1	2	4	39	Only 9 percent of employees in the land and water sector work part time. The recording of 25 percent total part time employment type achieved by the GB CMA indicates flexibility and family friendly options.
Part-time female	9	11	21		
Full-time male	26	25	47	61	
Full-time female	15	15	28		
Total employees	51	53			
Total full time equivalents		48.3			
Employment status					
Fixed term	17	18	34	25	45 percent of fixed term employment is senior managers employed under performance based contracts.
Ongoing	34	35	66	75	
Age Profile (years, by tally)					
20–24	1	1	2	16	
25–29	6	4	8		
30–44	26	25	47	56	The higher representation of staff in the 30-55 age grouping is encouraging given the trend in the public sector to an aging workforce.
45–54	13	16	30		
55-59	4	3	6	29	
60-64	1	4	7		
65+	0	0	0		
Average age		42		49	Average age is within acceptable range when taking into account that the type of workplace requires a high proportion of employees to have a minimum undergraduate degree to be eligible for employment.
Years of service					
12 months or less	11%		11		
1-3 years	32%		15	No data available	
3-5 years	14%		28		
5+ years	43%		46		
Average years of service		5.39			
Salary distribution					
<$40,000		10%	19	21	
$40,000 – 59,999		23%	44	42	
$60,000-79,999		10%	19	31	
$80,000+		10%	18	8	

	GBCMA 2006-07 no.	GB CMA 2007-08 no.	GB CMA 2007-08 percent	Victorian Public sector 2007-08 percent	Comment
Turnover	19%		9%	No data available	Turnover is within the desired range for the GB CMA while absenteeism continues to be extremely low.
Absenteeism	2.1%		1.8%		
Training expenditure (% of salary budget)	1.5%	$102,000	2.7%		

GB CMA people profile %



From Corporate Plan – indicators relevant to 'Our people'

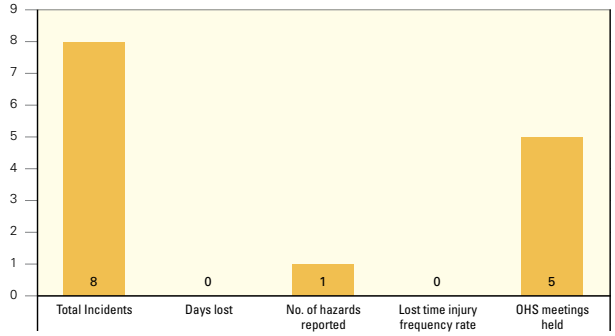
KPI	Measure	Progress
Flexible and capable organisation		
Develop and retain a skilled workforce.	Staff turnover ratios.	Staff turnover 9%. *Our People Strategy* nominate a range of 7-10 percent is acceptable.
Develop an innovative culture which utilises cost-effective new techniques and technologies.	Quantification of productivity savings.	$108,000 against a target of $112,000.

Health and safety

The GB CMA continued to achieve a high level of staff awareness and compliance with occupational health and safety. Specific initiatives in 2007-08 included:

- Review of designated work groups resulting in functionally based groupings (as opposed to the previous location grouping)
- Election of Occupational Health and Safety Committee representatives and members. The Committee maintained 50 percent previous membership and the introduction of new members providing fresh input. All new representatives participated in the compulsory five day Occupational Health and Safety representative training
- The Drought Employment Program was improved for 2007 specifically the introduction of formal training for supervisors in the program incorporating a specific module entitled *Understanding your OH&S Responsibility as a Supervisor*

Occupational health and safety summary report for 2007-08



- In December 2007 a risk assessment of escalating public aggression was conducted. All field staff participated in formal training to manage public aggression and new procedures on working alone and public aggression have been drafted.

PERFORMANCE STORY

Flexibility aids retention

The GB CMA leads the way in offering flexible work options to all our valued employees. Employees everywhere are asking for a workplace that helps them balance the demands of their work and family lives, rather than forcing them to choose one over the other. Workplace flexibility is a cornerstone of what working for the GB CMA offers to its staff. Flexibility provides a customised solution to the work life balance problem. The GB CMA prides itself in offering employees flexibility in how they work, when they work and often where they work. Offering this level of flexibility is a win-win for both the GB CMA and the staff member. The employees are able to meet personal responsibilities while the GB CMA benefits from a productive and engaged employee.

One staff member who has utilised flexible work options is Simon Casanelia. Simon is a Project Coordinator within the Strategic River Health team, a husband, father of two children under school age and a keen recreational cyclist. Simon and his wife share home and family responsibilities so upon the birth of Simon's second daughter the GB CMA worked with Simon to put in place a plan which enabled him to work three days per week and share childcare with his wife. That was just over 12 months ago and since that time Simon has increased to four days per week.

Simon has had the opportunity to play a role in the challenging and important areas of river health, wetland protection and environmental flow management and as Simon says, "The challenges of balancing work and child caring responsibilities over the last year has been made easier by the GB CMA and my work colleagues who have been very supportive and flexible in regards to my working hours."

Approximately 20 percent of our workforce over the 2007-08 year worked part time. Female staff accounted for 85 percent of our part time employees who were taking advantage of workplace flexibility to successfully blend work and family. Megan McFarlane, Business Development Manager, works full time but sees the flexibility the GB CMA offers as a significant benefit. "My position is full time but I can work the hours that enable me to participate in my children's after-school sport. You sometimes take for granted the flexibility we have but it is a part of our workplace that all staff value."

Investment area C – Planning and responding

Report compiled by: Megan McFarlane, Rod McLennan, Bill O'Kane
2007-08 investment: Included as part of investment area A.

Planning and responding are standard activities for all investment areas. However, strategic planning, analysis and responding are needed to integrate plans, take advantage of opportunities and recognise emerging challenges.

Long-term performance

The GB CMA has a reputation for being a responsive, leading, innovative and action-focused natural resource manager. The regional community invests about $2 for every $1 of government funding, despite continuing drought conditions in 2007-08. This level of interest is evidence that implementation and development of GB CMA programs is highly relevant to community needs. As a result, the GB CMA has a high success rate of attracting funds when project bidding processes are open and transparent and linked to achieving strategic objectives.

The first comprehensive integrated natural resource management strategy in Australia was developed by the Goulburn Broken community in 1990: the Shepparton Irrigation Region Land and Water Salinity Management Plan. Subsequent pioneering regional approaches in emerging fields were documented in the Goulburn Broken Water Quality Strategy (1997), Native Vegetation Management Strategy (2000), An Inventory of Ecosystem Goods and Services in the Goulburn Broken Catchment (2001), the Strategic Plan for Integrating Native Biodiversity (2004) and the Monitoring, Evaluation and Reporting Strategy (2004).

Strategic references:

- Goulburn Broken Regional Catchment Strategy (GBRCS) 2003-08 (and predecessors)
- Corporate Plan 2007-08 to 2011-12
- Update of GB RCS 1997-2003 Process review 2004

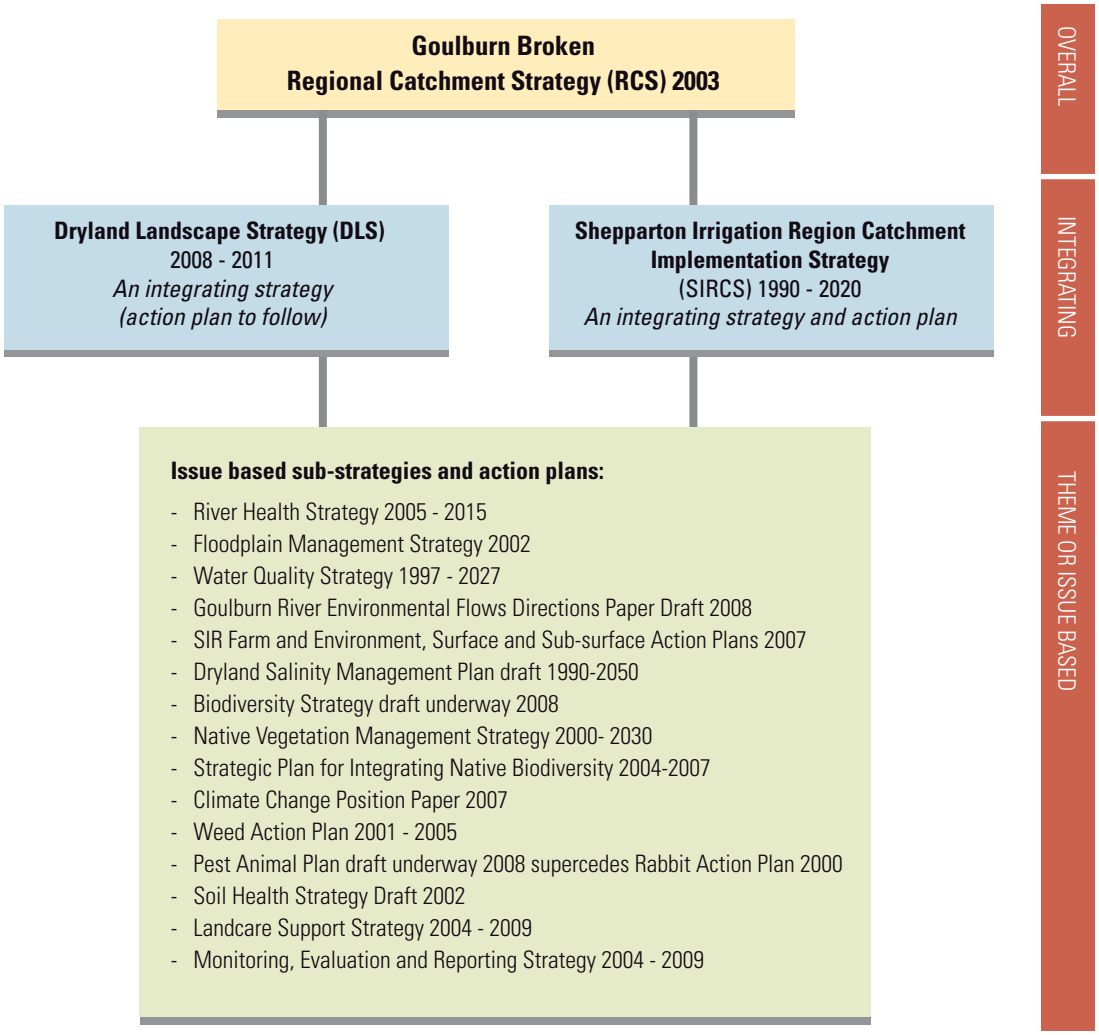
Implementation and integration of these strategies occurs annually through numerous and coordinated planning processes and documents.

The GB CMA has simplified and linked disparate planning demands from government funding agencies: Regional Catchment Investment Plan, Corporate Plan, Regional Catchment Strategy, Monitoring, Evaluation and Reporting Strategy and the Annual Report. This has increased the clarity of planning processes and fostered community ownership of strategy development and implementation.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	Medium
Long-term strategy implementation progress	Outputs (scheduled to be completed over the long term)	n.a.	Exceeded target	Medium
Catchment condition	Selection of Catchment for piloting approaches to emerging issues Adoption by other natural resource management regions of approaches developed within Catchment Catchment management systems in place	Poor	Satisfactory	High

RCS and Sub-Strategies Structure



Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

The RCS is the main reference document for natural resource management in the Goulburn Broken. The first RCS was developed in 1997, with an update in 2003. Work is currently underway reviewing the RCS with the intention of producing a third update in 2009. There are many methodologies and approaches available to natural resource managers to develop plans and strategies, such as scenario planning, visioning exercise, asset based approaches, prioritisation tools and pressure, state, response models. The approach adopted in the Goulburn Broken region is to analyse and select the most appropriate frameworks and tools to develop effective planning processes to aid decision making.

Two main integrating strategies inform the RCS and they are the Shepparton Irrigation Region Catchment Implementation Strategy (SIRCIS) and the Dryland Landscape Strategy (DLS) – see diagram. Both integrating strategies draw on information from the issues based sub-strategies to articulate a vision for these different landscapes and a way forward through high level actions. Both of these integrating strategies have different histories, communities and drivers. The DLS will be completed in late 2008 and the SIRCIS will be completed in early 2009 and both will be critical in informing the 2009 RCS Update.

The Goulburn Broken region follows a systematic process of reviewing and updating plans and strategies as set out in the 2004 Monitoring, Evaluation and Reporting Strategy. Progress is monitored regularly and sometimes strategies or plans need to be developed or updated early in response to emerging issues or critical drivers.

2007-08 performance

Planning

The original Corporate Plan budget for 2007-08 of $27.4 million, including partnership funds, was exceeded by 35% or $9.7 million to $37.1 million. This was due largely to the additional funding of the Drought Employment Program of $2.9 million, proceeds of $2.9 million from the sale of environmental water and additional stream flow funding of $1.5 million.

The Board held two strategic planning workshops in 2007-08, including one with senior managers, implementation committee chairs and partner organisations in March.

Various plans or strategic documents were reviewed or developed in 2007-08 and they are:

- Shepparton Irrigation Region Catchment Implementation Strategy
- Dryland Landscape Strategy
- Climate change (various documents)
- Water Quality Strategy
- A Strategic Plan for Integrating Native Biodiversity
- Pest Animal Plan

Responding

Under the State Government's Drought Employment Program, up to 80 farmers, farmhands and farm service providers were employed for up to six months. This Program received a funding boost of $1.4 million through the sale of environmental water reserve released from Eildon to irrigators.

The State and then the new Australian Government committed $1 billion each to NVIRP, which will result in 225 gigalitres of water savings to be shared between Melbourne, the environment and irrigators. Implementation has commenced and the GB CMA is working to make the link between the new delivery system and on-farm works to maximise the benefits.

The State Government commenced development of the Northern Region Sustainable Water Strategy. GB CMA management provided substantial input through its roles on various working groups and committees, particularly on environmental water management issues and needs.

From Corporate Plan – indicators relevant to 'Planning and responding'

Key performance indicator	Measure	Progress
Integrated regional planning and coordination		
Develop an annual Regional Catchment Investment Plan and Corporate Plan in line with RCS objectives.	Development of Regional Catchment Investment Plan (RCIP) by 7th April 2008.	Achieved.
	Development of a Corporate Plan by 28th April 2008.	Achieved.
Administration of State and Australian Government investment in natural resource management program funds in the region.	Service Level Agreement (SLA) signed annually for funds by September 2007.	Achieved, but SLA not received from DSE until April 2008.
	Funds acquitted annually as required by DSE.	Achieved.
	Quarterly reports on programs/sub-programs with colour coding for progress.	Achieved.
	Fourth quarter report is an acquittal of the program outputs and will be the Final Report as defined in the SLA with DSE.	Achieved.
Annual review and identification of issues affecting RCS objectives.	Annual review to measure progress against targets in RCS by October 2007.	Achieved.
Review RCS every 5 years to ensure relevance and test assumptions.	Undertake appraisal of review of previous RCS. Commence the update of the RCS.	Achieved.
Provision of advice to governments on regional priorities	Provision of advice as requested.	Achieved.
Service Level Agreements signed with partners delivering work on the RCS.	Four SLAs with DPI, G-MW, Pirvic, DSE-Regional Services by December 2007	Achieved in all areas where budgets were confirmed.
Other strategic management		
Review strategies every five years or as required	SIR 5 year review	Completed. Part way through presentations to the Board.
Develop strategic information as required	A climate change /greenhouse discussion paper / strategy.	Completed.
	Dryland Landscape Strategy	On target.
	Pest Animal Action Plan	At consultation stage.
Salt disposal	Annual report on salt disposal entitlements to the minister as requested.	Completed.

Investment area D – Knowledge

Report compiled by: Rod McLennan, Megan McFarlane, Bill O'Kane, Annie Squires
2007-08 investment: Included as part of investment area A.

Communicating, managing and acquiring knowledge are becoming increasingly complex tasks. This is due to:

- An increase in data availability as a result of the information age
- Community desire for increased transparency and accountability
- Rapidly changing agency personnel within and outside the Catchment
- Rapidly changing land ownership
- A changing emphasis of the GB CMA's activities in response to a shifting climate
- Centralised government bureaucracies wanting to know the region's knowledge needs.

Knowledge includes information technology and management; monitoring, evaluation and reporting; succession planning and research and development.

Knowledge is managed in the various disciplines that make up natural resource management. Each discipline has evolved its own approach over several decades to monitor, evaluate and report on, research and develop, and communicate its programs.

Integrated catchment management involves decisions based on information from different disciplines, such as salinity, biodiversity and sociology. Presenting information from these disciplines so that benefits and trade-offs are well understood results in better decisions and helps build trust between the community, agencies and government investors. The GB CMA is developing a structured approach to knowledge management for each of the disciplines areas. Much of this structure includes elements advocated in various national and state policy documents. Knowledge management should be directed by needs identified in strategies and plans.

Strategic references:

- Monitoring, Evaluation and Reporting Strategy for the Goulburn Broken Catchment 2004
- IT Strategic Plan 2005-08

The GB CMA is involved with many state, national and international knowledge improvement projects. A list of projects with summaries can be found at www.gbcma.vic.gov.au. Projects include Landscape Logic; Riparian Rehabilitation Experiment; and MDBC Native Fish Strategy Community Stakeholder Taskforce and Bayesian Modelling – Index of Stream Condition.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	Medium
Long-term strategy implementation progress	Outputs (scheduled to be progressed between 2004 and 2008)	n.a.	On target	Medium
Catchment condition	Inclusion of Catchment people in State, National and International knowledge forums Catchment management systems in place.	Poor	Satisfactory	High

Major conferences where GB CMA papers were presented in 2007-08

- Inaugural Irrigation Australia Conference, Melbourne
- Australian National Committee on Irrigation and Drainage, Bundaberg
- International salinity conference, Adelaide
- International Riversymposium, Brisbane
- 5ASM, (Stream Management Conference), Albury
- National NRM Knowledge Conference, Melbourne
- Victorian Flood Management Conference, Warrnambool
- Victoria Water 2008, Melbourne
- Australasian Pacific Extension Network, Albury

The Monitoring Evaluation and Reporting (MER) Strategy 2004 lists actions of a general MER capacity building nature. Significant progress has been made, although many actions are ongoing. The following table shows a summary of progress in implementing the GB MER Strategy.

Implementation summary: Monitoring, Evaluation and Reporting Strategy for the Goulburn Broken Catchment (2004)

MER Strategy action area	Progress of actions to June 2008	
	% done*	Comments
1. Participative decision-making	90	• Engagement strategies are developed as part of preparing or updating all sub-strategies. Engagement processes are being implemented for major integrating sub-strategies, Dryland Landscape Strategy and Shepparton Irrigation Region Catchment Implementation Strategy. • Feedback loops are included in project management frameworks, including this Annual Report. • The engagement process to develop the Regional Catchment Strategy in 2009 will be confirmed when guidelines for preparing the Strategy become available (expected to be during 2008-09).
2. Community and industry MER activities	80	• Large efforts began in 2005-06 to link information between government agencies, regional decision makers, community groups, land managers and the general public. • This Annual Report reflects an additional step in this convergence of information, tying the Victorian Government's Statement of Obligations KPIs against the GB CMA's major investment areas. • Ongoing and new partnerships with industry and academic researchers have helped to keep the region at the forefront of evaluative thinking. Partners include Murray Dairy, Australian National University, Arthur Rylah Institute, the University of Tasmania, CSIRO, cooperative research centres.
3. Data knowledge and quality – environment, economic, social and institutional	100	• Great progress in linking often uncertain understanding of complex issues to the reality of business management. The McLennan O'Kane formula: Outcomes = Assumptions x Outputs provides the structure to make sense of the vast amounts of available data. • Significant progress is being made in several disciplines and is influencing statewide processes. The GB CMA's Biodiversity Monitoring Action Plan (2006, updated 2008) is an example of current thinking. • A targets information gap summary based on the national matters for target was prepared in 2006-07 and trajectory graphs of progress are being prepared. The GB CMA's consolidated list of works outputs have appeared in the past four Annual Reports and from 2005-06 explicit ratings and discussion of progress towards targets have been given. • Consistency in MER is critical in integrated decision making. The GB CMA assisted this by leading the development of output standardisation and resource condition target reporting. • Efforts to develop a data management framework that fosters resilience thinking are increasing (see discussion on pages 68 and 69 of this Annual Report.
4. Project and issue management	75	• The structure of this Annual Report, initiated in 2005-06, shows how the GB CMA's business structure and associated performance indicators are being aligned to more accurately reflect its role: to deliver environmental outcomes efficiently and in a socially responsible way. • Government funding agency data demands generally remain relatively unrefined, uncoordinated and require close scrutiny and involvement of GB CMA staff.
5. Database management and information exchange	70	• This Annual Report is part of GB CMA's efforts to converge information needs of monitoring, evaluation and reporting, research and development and information technology disciplines. • Further enhancement of GB CMA's website is needed to provide greater access to available information. Several improvements are emerging from cross-catchment initiatives, such as VicVeg Online. • See also the 'data' category in the IT Strategy progress report (table on next page).

* Estimate from commentary and ratings of progress updated 16 April 2008.

The IT Strategic Plan 2005-08 ensured that information technology (IT) projects were aligned with GB CMA's business objectives. The following table shows a summary of progress in implementing the IT Strategic Plan 2005-08. Several low-order priority projects not completed are included in the updated IT Strategic Plan 2008-11.

An external review of GB CMA's information and communication technology services resulted in relatively high ratings in much of the planning, sourcing, build and support activity/groups. Minor gaps found in IT policy are being addressed and existing procedures are being documented to aid future business process reviews and assist succession planning.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

IT Strategy progress report

Category	Progress against tasks to be completed		
	During 2007-08	By end of strategy 2005-08	Comments
Application (Initiatives to deploy and/or improve use and understanding of software applications and systems)	110	100	• Statewide common financial system (Axapta) continues to be implemented satisfactorily. • Major project – Electronic Document Management System (EDMS) implementation utilising Microsoft SharePoint (intranet) completed. Project included digital photo and library publication management. • Internet site further refined during 2008 to ensure up to date and relevant content. Ongoing.
Data (Initiatives to improve the quality and availability of data to all users regardless of their location)	85	85	• Electronic documents now managed via intranet based EDMS aimed at reduced duplication and increased efficiency and availability of relevant data for all staff regardless of physical location. • GIS Strategy initiatives during 2007-08 have resulted in an up to date common data and imagery set for all GIS users and completion of all high priority tasks under that strategy. • Considerable in-house progress was made towards improved reporting at ground level (works programs) and mapping of key data sources for reporting against KPIs. The expected development by DSE of linkages between current key systems such as CAMS and Axapta was not undertaken during 2007-08.
Infrastructure (Network and Hardware installation and upgrade/ improvement projects)	80	90	• An IT capacity planning exercise was undertaken in 2005-06 and this continues to be reviewed as an ongoing project. • Deployment of wireless broadband devices during 2007-08 further expanded staff options for secure remote access to the corporate data network. • Video conferencing investigation project was not undertaken due to increased usage of existing teleconference capabilities.
People and processes (Initiatives to review and improve current work practices to improve effectiveness and efficiency)	75	85	• The completion of the information technology disaster recovery plan review highlighted the need for a whole of business continuity plan which is now nearing completion. • GIS Strategy initiatives are continuing to provide improved data management and training in this area. • IT skills training during deployment of new technologies/ software was undertaken in-house during 2006-07 and 2007-08. Formal gap analysis of individual needs was not completed. • Completion of several low priority projects (Service Level Agreements and workflow/process mapping) was not completed and will be included in the IT Strategic Plan 2008-11.
Total	85	90	

Expenditure on implementing the Information Technology Strategy

2005-06	$102,000	budget
2006-07	$156,900	budget
2007-08	$70,700	Expenditure (budget $138,170) – savings achieved through use of internal IT staff and reduced cost of Axapta implementation and development
2008-09	$106,000	Forecast budget (waiting on finalisation of IT Strategy 2008-2011).

2007-08 targets achieved

Knowledge highlights are reported under each investment area and demonstrate progress towards a consistent approach. See www.gbcma.vic.gov.au for further reports:

- GB CMA knowledge inventory: state, national or international projects that GB CMA is involved with
- 2008 GB MER scoreboard
- MER Strategy action plan implementation report
- Targets information gap summary
- Biodiversity monitoring action plan
- Key performance indicator annual report for Sub-surface Water Management Program in SIR
- The Shepparton Irrigation Region Implementation Committee convenes a quarterly combined agency meeting with senior representatives from G-MW, GB CMA, DPI, DSE, NVIRP and EPA.

Investment area E – Relationships, partnerships and community capacity

Report compiled by: Ken Sampson, Lilian Parker, Carl Walters, Tony Kubeil, Bruce Cumming, Terry Batey, Rick Felton, Megan McFarlane, Bill O'Kane, Neville Atkinson, Rod McLennan, Wayne Tennant
2007-08 investment: $3,660,000

Most investment in natural resource management is controlled by individuals and organisations other than the GB CMA, so there is a heavy emphasis on targeted engagement and partnerships with government and philanthropic funders, community groups and individuals and politicians.

Nurturing relationships and partnerships can be challenging due to an extremely diverse population of 200,000 people including 6,000 Indigenous Australians (many of them from the traditional Taungurung and Yorta Yorta Nations). In the Catchment's north, original settlers from the British Isles have been followed by migrants from Greece, Italy, Turkey, Iraq, Afghanistan, India, the Democratic Republic of Congo and many other countries. The Iraqi community alone numbers 2,300.

Three geographically-based implementation committees (ICs) play pivotal roles in establishing the most effective and efficient ways of engaging communities, providing a conduit between the community and the GB CMA and its Board of Directors. The Board appointed Upper Goulburn, Mid Goulburn Broken and Shepparton Irrigation Region ICs comprise community representatives and non-voting members from partner agencies.

IC works programs reflect priorities of the Regional Catchment Strategy and are delivered by the GB CMA and partner organisations notably DPI, DSE, G-MW, Landcare and local government. ICs receive strategic and administrative support through the GB CMA to undertake their responsibilities.

Based on extensive community engagement, the ICs develop locally meaningful sub-catchment strategies, prioritise works programs and monitor implementation of integrated natural resource management programs in their areas. (See the quantities of work undertaken in the 'Outputs – detailed list of achievements' table on pages 126 and 127.)

Waterway working groups draw in skills and networks of community members with a particular interest in water, river health and recreational issues.

Strategic references:

- Goulburn Broken Community Landcare Support Strategy 2005-2010
- Goulburn Broken Monitoring Evaluation and Learning Plan
- Goulburn Broken Landcare Annual Performance Story 2005-06
- Shepparton Irrigation Region Implementation Committee Communication Strategy
- Goulburn Broken Communication and Community Engagement Plan for preparing the RCS (draft 2007)

Mid Goulburn Broken

The Mid Goulburn Broken Implementation Committee (MGBIC) is responsible for implementation of the GB CMA's Regional Catchment Strategy in the Mid Goulburn Broken area. Some of the main functions are integration of the various sub-programs, community and stakeholder engagement and overseeing the roll-out of the annual programs. Many activities are conducted jointly with the other dryland implementation committee, the Upper Goulburn Implementation Committee.

Shepparton Irrigation Region

The Shepparton Irrigation Region Implementation Committee (SIRIC) plans and delivers an $18 million annual program funded by the Victorian and Australian governments through programs including Our Water Our Future, National Action Plan for Salinity and Water Quality and the Natural Heritage Trust (NHT).

The continued success of SIRIC is due to strong community links, partnerships with other agencies, local, State and Australian Governments, Landcare, Goulburn Murray Landcare Network and via Local Area Planning.

Working groups cover the four program areas overseen by the IC – Farm and Environment; Sub-surface Water Management; Waterways and Surface Water Management. The groups comprise agency staff and community members including representatives from G-MW, Water Services Committees, the Victorian Farmers Federation (VFF), local government and environment groups.

SIRIC receives support from an executive support team, and agency staff provided technical input through a technical support committee and project teams.

Upper Goulburn

The Upper Goulburn Implementation Committee (UGIC) is responsible for the implementation of the GB CMA's Regional Catchment Strategy in the Upper Goulburn area. Some of the main functions are integration of the various sub-programs, community and stakeholder engagement and overseeing the roll-out of the annual programs. Many activities are conducted jointly with the MGBIC.

Summary of relationships between GB CMA, implementation committees and partners

Multiple agency, community groups, individuals	• A Catchment Partnership Memorandum of Understanding was signed during 2006-07 to acknowledge the major partners' ongoing commitment to work together for the environment. Signatories were GB CMA, G-MW, DSE, DPI and EPA Victoria • RiverConnect was initiated by the GB CMA in the Shepparton-Mooroopna area in 2005 and the Steering Committee includes representatives from the GB CMA, City of Greater Shepparton, education, the aboriginal and broader communities, Goulburn Murray Landcare Network, Parks Victoria, DSE Forests and DPI • Diverse activities such as tree planting projects, fish circuses, drought breakfasts, and strategy development, involve equally diverse groups such as Landcare, GB CMA, DPI, Rotary, MDBC, local government, Goulburn Valley Water, EPA, Trust for Nature and Goulburn Valley Resources • Involved in several NVIRP forums such as the technical advisory group, business plan development and other working groups.
Individuals	• Extension advice and 715 incentives were provided to land managers via agency partners in 2007-08 • Programs tailored to working with individuals and their needs
Indigenous people	• Indigenous participation is being increased across the three ICs through fostering mutual understanding and trust between the wider and Indigenous communities by our Indigenous facilitator who was appointed in 2005. This is occurring through formal and ad hoc involvement of the Indigenous facilitator in various forums, such as the Gemmill's Swamp Steering Committee and the Barmah indigenous biodiversity project. There is separate Indigenous representation of the Taungurung people on the Upper Goulburn Waterways Working Group • The Indigenous facilitator liaises with a broad range of works program planners and on-ground supervisors • Close links with the Yorta Yorta Joint Body are provided by the Indigenous facilitator • The Yorta Yorta Joint Body Agreement was signed off by the Victorian Government in 2004 at a site at Echuca on the Murray River on Yorta Yorta traditional lands. The agreement is a land and water joint management agreement of designated areas of Yorta Yorta Country of the Goulburn and Murray Rivers. The GB CMA has been supporting the spirit and implementation of the Agreement • The Yorta Yorta Joint Body is the foundation to build towards recognising Yorta Yorta People as the traditional owners for the region. This is resulting in Yorta Yorta people taking up valued positions of responsibility in managing public assets and ensures Yorta Yorta cultural and environmental values are protected for all Australians • The Indigenous facilitator chairs the Aboriginal Participation Working Group of the RiverConnect Steering Committee. The RiverConnect project is making huge steps in conveying Indigenous knowledge and understanding to the broader community in the Shepparton area
Landcare and community groups	• Landcare has been identified as a priority organisation supported by the dryland ICs • Implementation of Community Landcare Support Strategy through eight facilitators and coordinators, one Regional Landcare Coordinator, National Landcare Program Facilitator and Regional NRM Facilitator. Projects include grants on the gateway, weeds road shows, biological soils farm courses and field days, dung beetle field days, history of Landcare in the GB, and a wine grower NRM course and local area planning in the dryland and funding seminars • Twenty-seven groups and three networks in Upper Goulburn, 28 groups and three networks in Mid Goulburn Broken. Links with Goulburn Murray Landcare Network in SIR – 48 groups • Community Catchment Education and Awareness Grants • Implementation of eight Local Area Plans in SIR. Evaluation report for review done • Land management directories have been reviewed with local government • Support for school cluster projects on wetlands, biodiversity and threatened species • UGIC sub-catchment meetings with community groups including Landcare, environment groups, field naturalists and recreational groups in each shire

Local government	• Three local governments (City of Greater Shepparton, Moira and Campaspe Shires) contribute to, and are represented by, the municipal catchment coordinator on SIRIC and various forums. SIRIC has annual meetings and annual briefings at each municipality • Some GB CMA Board Directors are local government councillors • UGIC holds sub-catchment meetings with each local government (Mitchell, Murrindindi and Mansfield Shire Councils) • CMA representatives (Implementation Committee Executive Officers) on Murrindindi Shire Council and Benalla Rural City drought and fire recovery committees • UGIC is represented on Mitchell Shire Council's Environment Committee and Murrindindi Shire Environment Advisory Committee • CMA and IC representation on Murrindindi Shire Rural Living Guidelines reference committee, Tackling Weeds on Private Land project steering committee and Rail Trail Advisory Committee • Direct liaison at project level is enhanced by at least one environment officer in each local government • Regular and ad hoc meetings between CMA staff, ICs and councillors and senior staff
Department of Primary Industries	• Representative sits on each IC • Service agreement and partnership Memorandum of Understanding (MoU) is signed off with GB CMA • Delivery of bulk of extension and grant assessment services, including whole farm planning, for SIRIC's Farm and Environment Programs, and UGIC and MGBIC's Sustainable Landscape Program and stock containment area program • Provide research services in such fields as fisheries (UGIC area), irrigation, salinity, soil health and pest plants • Contributing to development of GB Pest Plan • Provides technical support to SIRIC and its processes
Goulburn-Murray Water	• Representative sits on each IC • Service agreement and partnership MoU is signed off with GB CMA • Project management and delivery of most of Surface and Sub-surface Water Management Programs in SIR and Engineering Options in the Dryland • Provide research services in areas such as water quality, dams and irrigation and deliver engineering, irrigation and groundwater management options and groundwater mapping • Provides technical support to SIRIC and its processes
Department of Sustainability and Environment - regional	• Representative sits on each IC • Service agreement and partnership MoU is signed off with GB CMA • Manage extensive areas of public land in the Catchment – especially forests in the Upper Goulburn and the Barmah Wetlands • Deliver projects that assist threatened species such as Woodland Birds, Barred Galaxias, Mountain Pygmy Possum, Striped Legless Lizard, and Spotted Tree Frog • Manager of community engagement and fire recovery in Upper Goulburn and Ryans and Hollands creeks and reported to Board and ICs on fire implications and recovery processes • Contributing to development of GB Pest Plan
Department of Sustainability and Environment – head office - and Australian Government	• GB CMA's Regional Catchment Investment Plan (funding proposal) is developed for DSE • DSE Pest Action Planning Working Group • DSE State Landcare team • Statewide Sustainable Irrigation Landscapes Team • Victorian Salt Disposal and Investigations Working Group
Other groups	• ICs develop close relationships as needs arise during research, planning and implementation with many organisations. Some of the more commonly involved groups include Parks Victoria, Victorian Farmers Federation (VFF), Goulburn Valley Environment Group, and other local environment groups (Mansfield, Alexandra, Broadford), Goulburn-Valley Water, Murrindindi Climate Network, Goulburn Valley Greenhouse Alliance and Trust for Nature.

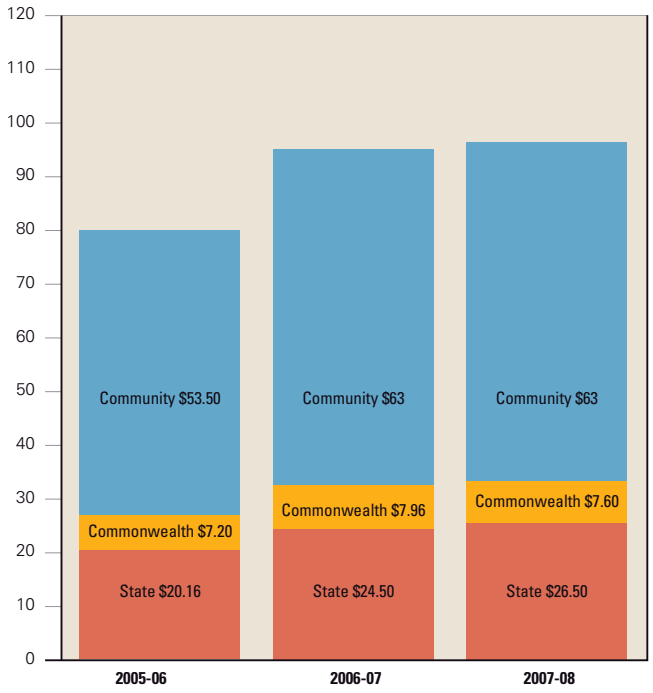
Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be progressed between 2005 and 2008)	n.a.	On target	Medium
Catchment condition	Surveys of strength of relationships Funds from various sources contributing to natural resource management Catchment management systems in place	Poor	Poor	Low

The Goulburn Broken regional community has a wide reputation for delivering on-ground changes to improve its natural resources. This reflects the strength of relationships between its many and varied individuals and organisations.

When a MOU was signed in 2006 between the GB CMA, DPI, DSE, G-MW and the EPA, a method of evaluating (Goal Attainment Scaling) was developed to monitor progress of the health of relationships. Initial analysis of 2006-07 data indicates that the relationship is strong.

Major contributors to natural resouce management, $million



The contribution by governments and community is shown in the above graph. The estimated community contribution is derived from cost sharing estimates as part of the annual Regional Catchment Investment Plan.

2007-08 performance

The GB CMA received over $37 million from Australian and State Governments and other partners in 2007-08 including contributed capital. These funds leveraged close to two dollars from the regional community for every dollar of government funding for natural resource activities, or over $60 million resulting in a total investment in natural resource management in the region of over $100 million.

There are still waiting lists for many incentives for environmental works which indicate that the regional community could do more if more funds were available from governments. For a region that is in the unrelenting grip of a severe drought, this is impressive and is possibly a result of decades of environmental awareness and engagement efforts by both the community and governments.

Several performance stories throughout this Annual Report demonstrate integration and engagement in the IC areas. (Also see the 'Implementation committees deliver results' section).

The GB CMA continued to strengthen its relationship with the traditional owner groups within the region. An Indigenous facilitator, appointed in 2005, maintained strong links with Indigenous communities. Work on major projects included:

- Barmah-Millewa wetlands: input to key cultural issues, ecological burns and asset protection
- Supported significant environmental asset implementation plan: water planning and drought planning (dry inflow)
- Guidance for the preparation of cultural heritage plans (as part of the Aboriginal Heritage Act, 2006)
- RiverConnect: strategic direction through Indigenous participation at a grassroots level
- Engagement of traditional owner group elders on key relevant issues: Yielma, Victorian Environmental Assessment Council, Mokoan, Barmah, Aboriginal Heritage Legislation (registered aboriginal parties)
- Mokoan – return to wetlands project: future land use and site planning
- A project for traditional knowledge exchange within Indigenous and broader communities
- Waterway management program support: identification and protection of cultural assets
- Cultural training programs
- Involvement in SIRIC's Surface Water Management Program.

From Corporate Plan – indicators relevant to 'Relationships, partnerships and community capacity'

Key Performance Indicator	Measure	Progress
Community Engagement - Well informed and capable communities		
Highly functioning Implementation Committees performing in line with their Charter.	Monthly and detailed quarterly reporting to Board. Authority Chair and IC Chairs meet every six months. Annual review of IC Charter.	Achieved
A well informed catchment community which understands the objectives of the RCS and their role in its implementation.	Effective Landcare network.	Reported on in Annual Report and rated satisfactory for this year and long term.
	Review progress on Regional Landcare Support Strategy annually.	Full review underway and on target. A Landcare program logic will be developed as part of the process
	Landcare facilitators to monitor expressions of interest / grants / relationships.	Covered in the report card. 2007-08 data collated in August. Activity level similar to last year.
	Survey of CMA's role within their Catchment (Statewide survey).	Statewide survey received - similar to past years. North south pipeline appeared to impact.
Community Engagement - Healthy relationships		
Effective working relationships with the Minister for Environment and Minister for Water, Minister for Agriculture as well as advisors, both State and Australian Government	Accessibility to Minister.	Visits by Ministers to Catchment increased in 2007-08.
	Number of pilot studies requested.	Pest Animals. Dryland landscapes. Foodbowl connection. Yorta Yorta biodiversity in Barmah
Effective working relationship with partners e.g. DSE; DPI; G-MW; GV Water; Local Government and EPA.	Annual review of relationships.	DPI review positive. Relationship with GMW and GVW good at officer and Board level. Relationship with DSE good at both regional and head office.
Effective working relationship with key stakeholders as per the Hierarchy of Target Audiences.	Annual review and appraisal.	Achieved.
Effective working relationship between the Board and management.	Formal protocols between Board and management contact. Senior managers invited to attend Board meetings to give briefings.	Achieved.
Development of partnership agreements	As required. Monitor the IDMOU Monitor the DPI, DPI, G-MW, DSE MOU	Achieved. Development and launch of new Irrigation Development Guidelines and water use licence an excellent example of the partnership approach.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Investment area F – Our environmental footprint

Report compiled by: Kate Pendergast
2007-08 investment: $6,000 (expenditure on training and consultancy for reducing environmental impacts)

The GB CMA has been minimising the environmental impacts of its workplace for several years. The approach to reducing GB CMA's environmental impacts was formalised in 2007-08: in July the GB CMA initiated the Reducing our Footprint (RoF) project and this is the first time this section has appeared in the Annual Report.

The RoF analyses current practices and behaviours and identifies areas for reducing environmental impacts such as improving waste management, energy and water consumption and carbon dioxide emissions. A complementary benefit is the generation of awareness among staff, their families and local communities.

Strategic references:
- FRD 24C – Reporting of Office Based Environmental Data by Government Entities
- GB CMA Reducing our Footprint Action Plan 2007
- ResourceSmart

Environmental practices already in place

Vehicle fleet	• Since July 2006 we have achieved 100 percent of our sedan vehicle fleet with a greenhouse rating in the top 15 percent of greenhouse vehicle ratings • All (26) sedans are either diesel, liquefied petroleum gas or four cylinder with a maximum allowable carbon dioxide emission of 240 grams per kilometre placing our vehicles in the top 20 percent of carbon dioxide vehicle emissions • From a bottom line perspective, our improvements in the composition of our vehicle fleet will save $25,000 in 2007-08
IT initiatives	• Double sided printing is the default setting • Power management settings applied to 50 percent of computers
Energy consumption	• Energy costs in the new Shepparton office per square metre have been reduced by 21 percent per annum. A total saving of $113 (approx $5,500 across the Shepparton office) per year per staff member.
Paper usage	• Recycling 320 kilograms of paper per annum. Our paper usage and recycling places us (according to Waste Wise) in the top 10 percent for an organisation of our size.

Annual performance, long-term strategy implementation progress and Catchment condition change

Decision focus	Examples of evidence used to inform decisions	1990	2008	Certainty of ratings
2007-08 performance	Outputs (against targets set as a result of funds received)	n.a.	On target	High
Long-term strategy implementation progress	Outputs (scheduled to be progressed between 2007 and 2008)	n.a.	On target	Medium
Catchment condition	Energy consumption Paper consumption Catchment management systems in place	Very poor	Poor	Low

2007-08 performance

Progress in implementing tasks listed in Reducing our Footprint Action Plan

Strategic objective	% progress against tasks scheduled to be completed by		
	2010	2007-08	Key activities undertaken
Develop and implement an organisational environmental management framework by June 2008	50	90	• Environmental Policy endorsed by management and Board (January) • Action plan drafted (February) • Purchased web-based environmental data recording and reporting software (June)
Create an organisational culture that actively supports operating in an environmentally sustainable manner by December 2010	50	80	• RoF logo and branding introduced (August) • Project team formed (August) • Internal information and communication site put together for RoF (September) • Awareness campaigns conducted (October) • Environmental awareness statement included in position descriptions (June)
Improve our ability to measure, monitor and communicate our environmental impacts by December 2008.	30	80	• Conducted baseline audit to identify current Greenhouse emissions for energy (electricity only) (June) • Software for tracking and reporting greenhouse emissions purchased to be implemented (June)
Reduce our greenhouse gas emissions by 15% by December 2010	15	50	• Energy consumption for year ending 30 June 2008 (for Yea and Shepparton offices only) was 166,000 kilowatts per hour, equating to total carbon dioxide emissions of 190 tonnes • Further targeted strategies and actions to be implemented
Improve our waste management practices by December 2010	15	80	• Baseline waste audit conducted resulting in excellent results (August) • Waste separation in tea rooms (September) • IT practices to reduce usage on track. • Continued awareness campaigns to be continued
Encourage communities, partner agencies and stakeholders from within the catchment to adopt the principles of sustainability	20	80	• Incorporated environmental reporting into Annual Report (June)

Priorities for 2008-09 are to:

- Implement action plan incorporating opportunities for improvement contained in the environmental audit report
- Set specific reduction targets to be incorporated into action plan
- Develop a monitoring and reporting framework utilising Carbonmetrix
- Expand program into field operations.

Categories:	Catchment condition	Long-term strategy progress and 2007-08 Performance	Certainty of rating
	Very poor	Well below target (< 50%)	Very low
	Poor	Below target (50–79%)	Low
	Satisfactory	On target (80-109%)	Medium
	Good to excellent	Exceeded target (>110%)	High

Outputs – detailed list of achievements

GB Threat or Impact Managed	Output	Shepparton Irrigation Region Target*	Achieved	% achieved	Mi Target*
Threat					
Land and water use practices					
Stock grazing					
(ha = terrestrial; km = riparian)	Fence terrestrial remnant vegetation (ha)	38	48	126	265
	Fence wetland remnant(ha)	8	285	3,567	0
	Fence stream/river remnant (ha)	8	1,910	23,880	25
	Off-stream watering (no.)	20	23	115	25
	Binding Management Agreement (licence, Section 173, covenant) (ha)	100	80	80	600
Induced Threat					
Saline water and high watertables					
Surface water	Landform/lasergrading (ha)	7,700	8,525	111	
	Drain – primary (km)	3	9	300	
	Drain – community (km)	4	0	0	
	Weir – replace (no.)				
	Farm reuse system (no.)	45	48	107	
	Drain – additional water diverted from regional drains (ML)	570	200	35	
	Irrigation systems – improved** (ha)	6,840	8,967	131	
	Pasture – plant (ha)				125
Sub-surface water	New groundwater pumps – public (no.)	2	1	50	
	New groundwater pumps – private (new and upgrade no.)	6	20	333	1
	Volume water pumped (ML)	1,400	3,237	231	
	Tile drains – install (ha)				
	Revegetation - Plantation / Farm Forestry (ha)				
Nutrient-rich & turbid water & suspended	Waste water treatment plants – install (no.)				
	Stormwater management projects (no.)	1.0	0	0	1.0
In-stream and near-stream erosion	Bed and bank protection actions (km)	12	0.96	8	16
	In stream & tributary erosion controlled (km)				75
Soil erosion, acidity, sodicity & structural	Application of lime (ha)				
	Minimum tillage (ha)				
Changed flow pattern	Water allocated - eg wetlands (ML)				
Weed invasion****	Weeds – woody weed management (ha)				
	Weeds – aquatic weeds controlled/eradicated (km)				19
	Targeted infestations of weeds in high priority areas covered by control programs (ha)******	93	10,501	11,292	65
Pest animals****	Area of high priority rabbit infested land covered by control programs (ha)				200
	Area of high priority fox infested land covered by control programs (ha)	8,000	11,500	144	14,400
Impact					
Habitat loss – terrestrial**	Revegetation – plant natives within or next to remnants (ha)	98	94	96	273
	Revegetation – plant natives away from remnants (ha)				
Habitat loss – in-stream	Fish release (no.)				
	Vertical slot fishway (no.)				
	Rock ramp fishway (no.)				
	Fish barrier removal (no.)	2	5	250	2
	Establish SEAR (Significantly Enhanced Aquatic Refugia) (no.)	50	30	60	
Habitat loss – wetlands	Reinstate flood regime (ML)				
	Construct new wetland (ha)				
Habitat loss – threatened species	Threatened Species Recovery Plan and Action Statements (no. projects)	8	8	100	17
Planning	Whole Farm Plans (no.)	155	145	94	65

Long-term strategy progress and 2007-08 performance

- Well below target (< 50%)
- Below target (50–79%)
- On target (80-109%)
- Exceeded target (>110%)

* Targets are determined by considering level of government funds received (as listed in Corporate Plan) and do not include contributions from other fund sources. Refer to separate Results Summary for analysis of progress towards long-term targets.

** There are several different ways to 'improve' irrigation systems. The figures included for 2005-06 for SIR assume that figures for laser grading cover the area for all improvements.

*** 11 km were constructed during 2005-06 but 0 km were formally "handed over" to Goulburn-Murray Water for it to manage.

id Goulburn Broken		Upper Goulburn			Total for 2007-08			Total achieved				
Achieved	% achieved	Target*	Achieved	% achieved	Target*	Achieved	% achieved	2006-07	2005-06	2004-05	2003-04	2002-03
585	221	140	77	55	443	710	160	769	519	771	512	539
166	1,656,700	20	1,343	6,716	28	1,794	6,405	22	6	24	13	-
477	1,908	31	149	480	64	2,536	3,963	725	115	91	218	104
47	188	31	25	81	76	95	125	73	89	74	86	-
260	43	300	33	11	1,000	373	37	1,625	758	797	(no.) 231	-
					7,700	8,525	111	4,490	7,700	7,700	9,000	-
					3	9	300	6	11***	8	12	16
					4	0	0	0	6	0	20	7
					45	48	107	56	70	65	78	99
					570	200	35	75	235	675	160	-
					6,840	8,967	131	570	8,580	1,532	10,325	2,231
337	270	10	54	540	135	391	290	718	1,543	544	330	138
					2	1	50	0	3	3	3	5
1	100	3	3	100	10	24	240	19	11	10	19	34
					1,400	3,237	231	3,462	1,800	1,071	tba	tba
								31	97	129	156	224
0.5	50				2.0	0.5	25	3	2	2	1	-
3.3	21	18	8.4	46	46	13	27	12	16	41	11	9
121	161	110	423	384	185	543	294	19	502	916	83	681
									510,000	266		
								0	75	70	79	59
52	274	2	0.7	35	21	53	251	39	33	21	0	-
125	192	152	512	338	310	11,138	3,599	9,637	69,437	281,200	259,920	-
200	100				200	200	100	0	10,150	56,800	35,700	-
28,883	201	14,400	5,187	36	36,800	45,570	124	94,410	108,856	53,000	54,200	-
176	64	254	190	75	625	460	74	758	1,177	981	459	428
									117	74	248	401
									1	3	1	0
								0	0	5	-	-
1	50	1.5	2.3	155	6	8	151	6	4	0	-	18
					50	30	60	2	1.3	17	10	
								0	0	3	0	0
17	100	12	12	100	37	37	100	34	13	15	6	4
89	137	50	135	270	270	369	137	232	185	262	363	371

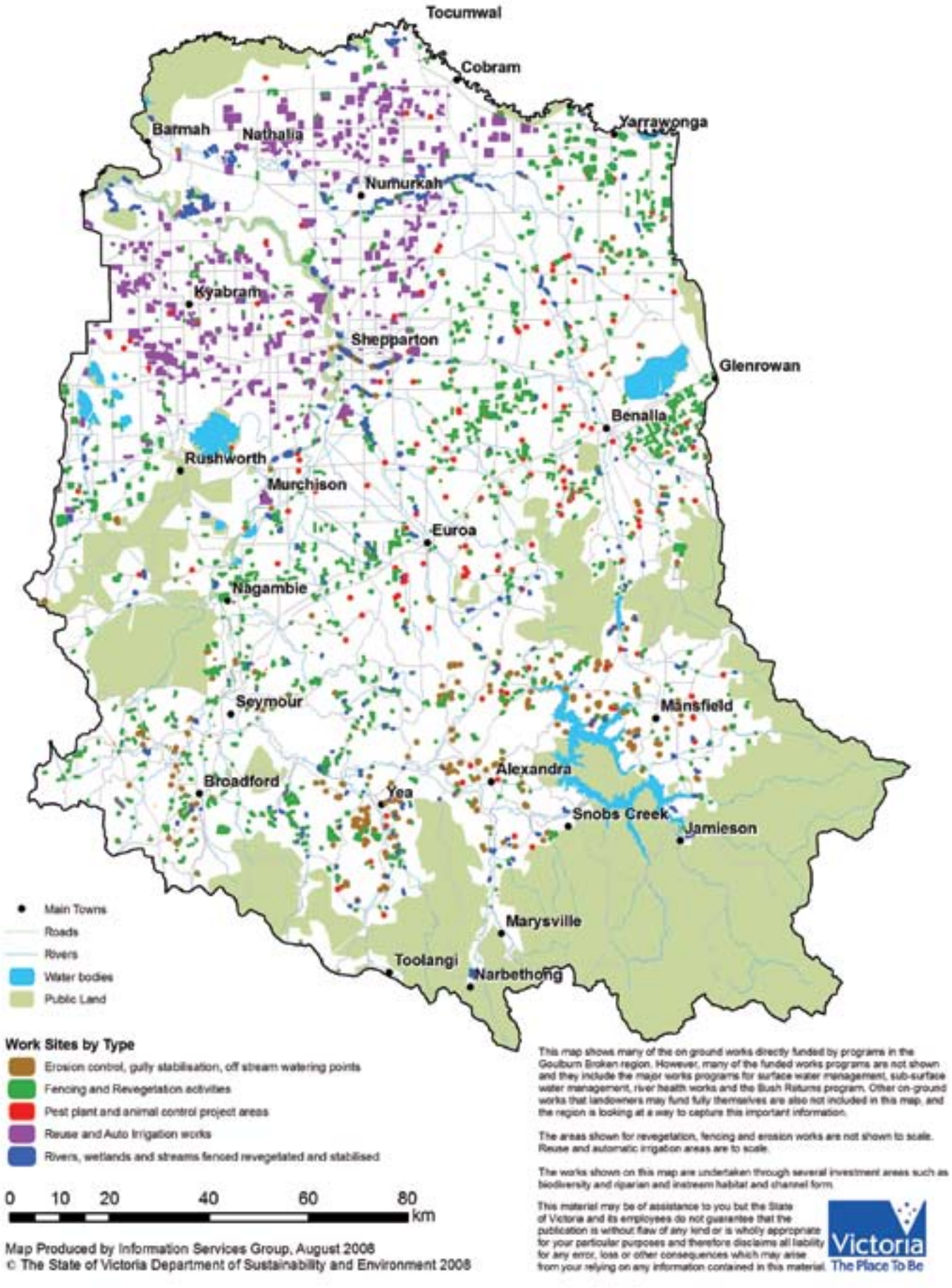
**** The Pest plant and animal outputs also include Second Generation Landcare Funded Program (mainly areas of pests treated). The achievements are not collected in time for the 4th quarter report as community groups are usually still completing their projects. These outputs are collated every five years as part of the Second Generation Landcare review and added in that year's outputs.

***** The Green Graze program contributed 1,189 hectares the grazing regime change works output, which is not included in the revegetation figures.

****** The hectares treated for Weeds - woody weed management has been included in this figure. Weeds outputs from 2007-08 include DPI, river health and Drought Employment Program works only. Second Generation Landcare outputs are included every five years.

Goulburn Broken on ground work sites

July 2001 to June 2008



Map Produced by Information Services Group, August 2008

This map shows many of the on ground works directly funded by programs in the Goulburn Broken region. However, many of the funded works programs are not shown and they include the major works programs for surface water management, sub-surface water management, river health works and the Bush Returns program. Other on-ground works that landowners may fund fully themselves are also not included in this map, and the region is looking at a way to capture this important information.

The areas shown for revegetation, fencing and erosion works are not shown to scale. Reuse and automatic irrigation areas are to scale.

The works shown on this map are undertaken through several investment areas such as biodiversity and riparian and instream habitat and channel form.

Victoria
The Place To Be

Glossary

Foodbowl Modernisation plan was a proposal put to the State Government of Victoria by a consortium of community leaders in the Goulburn Murray Irrigation Area to share the water savings created as a result of upgrading irrigation infrastructure.

Northern Victoria Irrigation Renewal Project is the new organisation responsible for delivering the $2 billion program of works to modernise and upgrade aging infrastructure.

Regional Catchment Strategy is a blueprint for integrated natural resource management across a geographic area.

Resource Condition Target relates to the condition of the resource and can be measured over the short term or the long term depending on ease of measurement.

Abbreviations

AASB	Australian Accounting Standards Board
AFFA	Agriculture Fisheries and Forestry Australia
ANAO	Australian National Audit Office
ANCID	Australian National Committee on Irrigation and Drainage
ARA	Australasian Reporting Awards
ARI	Arthur Rylah Institute
BAP	Biodiversity Action Planning
CaLP	Catchment and Land Protection Act 1994
CAMS	Catchment Activity Management System
CEO	Chief Executive Officer
CMA	Catchment Management Authority
CMN	Conservation Management Networks
CRC	Cooperative Research Centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEP	Drought Employment Program
DLS	Dryland Landscape Strategy
DPI	Department of Primary Industries
DSE	Department of Sustainability and Environment
DSS	Decision Support System
EC	Electrical Conductivity unit
EDMS	Electronic Document Management System
EPA	Environment Protection Authority
EVC	Ecological Vegetation Class
EWA	Environmental Water Allocation
EWR	Environmental Water Reserve
FEDS	Farm Exploratory Drilling Scheme
FMA	Financial Management Act
FMCF	Financial Management Compliance Framework
FOI	Freedom of Information Act
FRD	Financial Reporting Direction
GB CMA	Goulburn Broken Catchment Management Authority
GB RRHS	Goulburn Broken Regional River Health Strategy
GIS	Geographic Information System
G-MW	Goulburn-Murray Water
GST	Goods and Services Tax
GVW	Goulburn Valley Water
Ha	hectare
HR	Human Resources
IC	Implementation Committee
IDMOU	Irrigation Drainage Memorandum of Understanding
ISC	Index of Stream Condition
IT	Information Technology
Km	kilometre
KPIs	Key Performance Indicators
MDBC	Murray Darling Basin Commission
MDFRC	Murray Darling Freshwater Research Council
MER	Monitoring, Evaluation and Reporting
MGBIC	Mid Goulburn Broken Implementation Committee
ML	Megalitre
MoU	Memorandum of Understanding
MyFOL	My Farm Our Landscape
NAP	National Action Plan for Salinity and Water Quality
NHT	Natural Heritage Trust
No.	Number
NRM	Natural Resource Management
NSWS	Northern Sustainable Water Strategy
NVIRP	Northern Victoria Irrigation Renewal Project
OH&S	Occupational Health and Safety
PIT	Passive Integrated Transponder
RCIP	Regional Catchment Investment Plan
RCS	Regional Catchment Strategy
RCT	Resource Condition Target
REALM	Resource Allocation Model
REP	Rural Extension Program
RoF	Reducing our Footprint
SACS	SACS Consulting Leadership in Victorian Public Sector Award
SD	Standing Direction
SDE	Salt Disposal Entitlements
SEPP (WoV)	State Environment Protection Policy (Waters of Victoria)
SFMP	Streamflow Management Plans
SIR	Shepparton Irrigation Region
SIRCIS	Shepparton Irrigation Region Catchment Implementation Strategy
SIRIC	Shepparton Irrigation Region Implementation Committee
SIRLWSMP	Shepparton Irrigation Regional Land and Water Salinity Management Plan
SLA	Service Level Agreements
SOO	Statement of Obligations
SSWMP	Sub-surface water management program
SWMP	Surface water management program
TP	Total phosphorus
UGIC	Upper Goulburn Implementation Committee
VCAT	Victorian Civil Administration Tribunal
VCMC	Victorian Catchment Management Council
VEFMAP	Victorian Environmental Flows Monitoring and Assessment Program
VFF	Victorian Farmers Federation
WQS	Water Quality Strategy

Our Catchment, Our Landscape, Our Footprint

This canvas compiled by Glenda Cornell was commissioned by the GB CMA in 2008.

The canvas shows traditional owner values and changing values. Through knowledge and action we aim for healthy rivers and healthy communities.

The canvas is one of 18 requested by the International Riverfoundation as part of its 'River Tapestries' art project to help celebrate ten years of the Thiess Riverprize. The art project consisted of 18 individual canvasses which are connected by a river flowing through each one of them, and represents all of the 18 national and international Riverprize winners of the past decade. The canvasses were designed individually by the catchment groups and depict unique landscapes and catchment characteristics from different places around the globe. The tapestry was unveiled during the 11th International Riversymposium in September 2008.

The Goulburn Broken Catchment was the first National Riverprize winner.

See http://www.riverfoundation.org.au/ for further information, including an image of the 18 canvas tapestry.

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