



**GOULBURN
BROKEN**

CATCHMENT
MANAGEMENT
AUTHORITY



ANNUAL REPORT 2015-16



RATINGS LEGEND

Annual performance and long-term strategy implementation progress	Well below target (<50%)	Below target (50-79%)	On target (80-109%)	Exceeded/exceeding target (>109%)
Catchment condition	Very poor	Poor	Satisfactory	Good to excellent
Certainty of rating	Very low	Low	Medium	High
Trend	↓ Declining	● Static	↑ Improving	↑↑ Dramatically improving

The explanation of how and why ratings are applied in Appendix 1: Understanding progress and ratings on page 127 includes discussion on the uncertainty of data in an integrated operating environment and how ratings can trigger a need for further scrutiny. Although annual performance indicators have high certainty relative to long-term indicators, the uncertainty in setting and monitoring annual targets is still significant because of increasingly irregular timing of project proposals and receipt of funds throughout the financial year. The achievement of 'around 100 per cent' as being 'on target' is therefore appropriate, and this has been defined as a range of between 80 and 109 per cent.

ABOUT THIS REPORT

This report provides information on the Goulburn Broken Catchment Management Authority's (CMA) performance and finances, which can be assessed against its 2015-16 to 2019-20 Corporate Plan targets.

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

A separate summary of this Annual Report is available from the website or from the Goulburn Broken CMA offices (see back cover).

This report is prepared in accordance with all relevant Victorian legislation. This includes the requirement under the *Catchment and Land Protection Act 1994* for the Goulburn Broken CMA to submit "...a report on the condition and management of land and water resources in its region and the carrying out of its functions."

Design and print complies with Department of Treasury and Finance Reporting Direction 30C, which aims to achieve consistency and minimise costs and environmental impact across government agencies.

Feedback on this report is encouraged to help improve future annual reports. Please provide comments by 31 December 2016 to guarantee consideration.

A feedback form to help direct comments is available at the website www.gbcma.vic.gov.au.

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Front cover

Main photo:

Opening of indigenous Rock Correa trail walk at Tallis Wines Dookie, March 2016.

Inset photos (from left to right):

Stephen Lindsay, centre pivot irrigation at Picola, funded through Farm Water Program. Photographer: Gillian Mason.

Fish Circus community information and participation day at Avenel. Photographer: Kirsten Roszak.

Shepparton High students take part in fish monitoring on the Goulburn River. Photographer: Jim Castles.

Mansfield Primary school catchment education. Photographer: Kirsten Roszak.



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Recognising major natural resource management contributions – Cathy Olive and Ray Thomas

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Chair's review



I am pleased to present Goulburn Broken Catchment Management Authority's 2015-16 Annual Report.

Improving our approach to catchment management

We welcomed the announcement in May of \$22 million for the state's 10 CMAs to implement the

Our Catchments, Our Communities strategy, Victoria's first state-wide strategy for integrated catchment management. As well as directly responding to a recommendation by the Victorian Auditor-General's Office 2014 report into the Effectiveness of CMAs to develop this overarching strategy, the commitment to four-year funding (rather than annual) will provide greater certainty and support for the catchment community to deliver on-ground works and measure and report on the effectiveness of those works.

This dedicated multi-year funding will also help us continue to work in a co-ordinated way with the community and key stakeholders to address priorities identified in the Goulburn Broken Regional Catchment Strategy (RCS) that aim to improve the resilience of the region's land, water, biodiversity and people, and ensure these priorities align with the local, regional and state plans. In particular, it will allow us to continue to develop local Social-Ecological System (SES) Plans with community and other relevant stakeholders, undertake a Goulburn Broken CMA-led mid-term review of the Goulburn Broken RCS to ensure its directions are still aligned to current State and Commonwealth governments' strategies and policies, and prepare for development of a new RCS in 2019. Additionally, we will be developing a new Regional Floodplain Management Strategy and updating our Biodiversity, Land Health and Water Quality strategies in the next 12 months.

Strengthening partnerships

Fortunately we already have well-established networks and a strong focus on partnerships and relationships. At the state level Goulburn Broken CMA staff provided input into the development of, and helped co-ordinate community and stakeholder consultation on, five Victorian Government strategies that were released as drafts or finalised during the year - Protecting Victoria's Environment Biodiversity 2036; Water for Victoria; Victorian Floodplain Management Strategy; the Food and Fibre Strategy and the above mentioned Our Catchments, Our Communities. Regional stakeholders, via various advisory groups that include community and agency representatives, have completed the Climate Change Adaptation Plan for Natural Resource Management in the Goulburn Broken Catchment; reviewed and updated the Shepparton Irrigation Region Land and Water Management Plan and associated Drainage Program; and are currently updating the Goulburn Broken Catchment Biodiversity Strategy. At the SES scale, all Local Plans are now easily accessible on the WeConnect website allowing the community at any time to comment and add cases studies that are highlighting progress towards the implementation of these plans.

The Farm Water Program, another example of a well-established regional partnership that supports irrigators to achieve farm water savings through improved on-farm water use efficiency, continues to reach significant milestones on time and on budget; 514 projects (out of a possible 517 projects) from Rounds 1, 2 and 3, worth \$138 million have been completed, generating 68 gigalitres of water savings that are shared between the environment and irrigators. Round 4 projects are under way and the opening call in June for Round 5 projects attracted good levels of interest despite the dairy industry reeling after the shock retrospective milk price cut announcements by two processors at about the same time, and the dry conditions experienced during the past 12 months.

With our Tri-State Murray Alliance partners, the Mallee, North Central and North East CMAs, Murray Local Land Services (NSW), and SA Murray-Darling Basin Board, we are continuing to develop NRM projects that build and protect this unique and important landscape and the communities that rely on it. Goulburn Broken CMA is the lead organisation of the Indigenous program with an initial focus on engaging with Traditional Owners and hearing their perspectives on what should occur to enable them to protect and maintain connection to country along the Murray River corridor. The capacity of the Goulburn Broken Indigenous Consultation Group, which includes representatives from Yorta Yorta Nation Aboriginal Corporation and Taungurung Clans Aboriginal Corporation, to be engaged in delivering NRM outcomes in the catchment continues to grow, with the group providing a valuable conduit for agencies, community NRM groups and other organisations (eg. schools) to consult with Traditional Owners on a range of strategies, projects and initiatives.

Embedding resilience

Adapting to changes in climate, water policy and land use while attempting to make the most of opportunities of increased national and international demand for our food and fibre continues to test the resilience of the catchment's communities and natural resources.

To help future proof our catchment to these challenges and demonstrate our catchment's production is clean and green, we continued to help plan and manage environmental water deliveries along the Goulburn River, the lower Broken Creek and a number of wetlands to improve the health of these important waterways as well as the flora and fauna that rely on them for food and shelter. Healthy waterways also support recreational and tourism opportunities that provide a welcome boost for regional economies, while improved water quality benefits irrigators and other water users such as urban water authorities and the local towns and cities they supply. Monitoring of the effects of the environmental water activities indicates that bank-stabilising native vegetation is re-establishing along the Goulburn River. This provided much-needed drought refuge for native fish and water bugs during the long hot dry summer/ autumn and low inflows we experienced this year.

Environmental water delivered to Barmah-Millewa wetlands between July and November boosted native grasses and bird populations before flowing back into the Murray to benefit downstream river users, wetlands and communities.

Unfortunately feral animals in Barmah-Millewa continue to compromise these positive watering outcomes. The potential risks posed by sand and gravel extraction along the Goulburn River floodplain also continue to compromise much of the great work achieved by the community on private and public land to improve and protect the Goulburn and its tributaries. We look forward to resolving both these issues by working closely with the relevant agencies and stakeholders.

Thank you

Thank you to my fellow Board members for their ongoing passion, dedication and support during 2015-16. I especially acknowledge the contribution of outgoing or retiring Directors Ailsa Fox, Mike Dalmau, Ross Runnalls and Dr John Craven and welcome new Directors Adrian Appo, Rowena Ellis and Kate Stothers, whom I'm sure will make a great contribution to the Goulburn Broken CMA.

Our Chief Executive Officer Chris Norman, the management team and staff continue to provide leadership and support at the local, regional, state and national level. I congratulate them on their input at various forums, including the NRM Knowledge Conference held at Coffs Harbour in June and the Victorian Landcare Conference hosted at Dookie. Partnerships continue to be the essential way we do business and I thank our loyal community, as well as industry, government, agencies and community NRM groups for their ongoing efforts to achieve our vision of healthy, resilient, productive landscapes that support vibrant communities.



Murray Chapman

Chair

Goulburn Broken Catchment Management Authority

Responsible Body Declaration

In accordance with the *Financial Management Act 1994*, I am pleased to present the Goulburn Broken Catchment Management Authority Annual Report for the year ending 30 June 2016.



Adrian Weston

Acting Chairperson

Goulburn Broken Catchment Management Authority

25 August 2016

Chief Executive Officer's report



Resilient adaptive communities require support and leadership from flexible and innovative organisations. It is pleasing then that as part of the most recent NRM Organisational Performance Excellence Review (2015) the Goulburn Broken CMA was described as 'among the leading NRM organisations in a number of areas nationally'. Our strengths

included a strong client focus and community engagement approach, playing a key role in facilitating networking across groups, mature and well-developed governance processes, and meeting our state and national investors' expectations.

This link between partnerships and innovation was highlighted by a number of projects that progressed during 2015-16. We are working with a private sector organisation (Agersens) to develop virtual fencing technology to manage stock access near waterways. The project is listed as a priority in the Regional Riparian Action Plan and we are keen to attract additional funding to progress the project trials. Local government, community NRM groups and other agencies are also providing input into investigations into the feasibility of a regional native vegetation offset scheme for the catchment. This work aims to provide a more co-ordinated process for improving strategic management of plantings and remnant vegetation. We have also worked closely with local government to identify the need for, and develop a draft of, the Landscape Plan Guide for Landscapes in the Agricultural Floodplains. These Guidelines will establish common requirements for sustainable and appropriate landscape developments across the municipalities and help those applying for permits to meet planning requirements. These two pieces of work will help improve and protect the region's natural resources, while the expected reduction in red tape will undoubtedly be welcomed by community.

Adapting to water policy reform

Victoria's requirements to achieve water savings under the Murray Darling Basin (MDB) Plan continue to have significant ramifications for our catchment.

The Victorian Government contracted the Goulburn Broken CMA to lead regional input (community engagement and technical studies) into the development of the Goulburn River Constraints Management Business Case between May 2015 and February 2016. This involved two rounds of community information sessions (a total of 34 sessions with communities along the Goulburn). In response to feedback from these sessions and from community advisory groups, some of the earlier constraints proposals were substantially revised: the initial proposal of additional flows of up to 40,000ML/day at Shepparton to water the lower Goulburn floodplain was revised to 25,000 -30,000 ML/day; and the cost of mitigation works was estimated to be more than \$139 million rather than earlier estimates of \$31- \$47 million. The Victorian Government released its business case in May and while we await further detail, the Basin Ministers have agreed to work in a co-operative way to look at constraints in the southern Basin, including further

investigations and community consultation.

As a GMW Connections agreement is a requirement for participants applying for funding through our very successful Farm Water Program that is achieving on-farm water savings that contribute to the MDB Plan's environmental watering activities, we remain very interested in the findings of the project's mid-term review, and its subsequent reset.

At the state level, we welcomed the release of the Victorian Floodplain Management Strategy, which clarifies our role and responsibilities in flood management, and the accompanying funding to review the Goulburn Broken Regional Floodplain Management Strategy in consultation with local communities. Funding linked to the release of the Regional Riparian Action Plan will help build on the excellent results achieved by the community to date along waterways including the King Parrot Creek, Yea River and Hollands Creek and support similar works along the Honeysuckle, Seven, Merton, Hughes and Brankeet Creeks as part of the new Strathbogrie Streams project.

Responding to increasing farm production

The extremely dry conditions that have affected large parts of the west of the state for the past two to three years extended to parts of our catchment, particularly in the Commuting Hills, Upland Slopes and Productive Plains. Almost 100 farmers in our catchment applied for Stock Containment Grants offered as part of the Victorian Government's Drought Plan while thanks to funding from the Australian and Victorian governments a number of our community NRM groups offered workshops covering a range of issues, including managing and planning farm water requirements in dry times.

Factors beyond our control came in to play this year to further test the resilience of our farmers and we are continuing to work with our partners to develop employment and adjustment programs to support dairy farmers, in particular, in the wake of record low prices announced by milk processors in late May.

Adapting to land use changes

As we head into its last year of funding of three Australian Government Biodiversity Fund projects, we look forward to highlighting the projects' achievements. For example, the Creating Biodiverse Carbon Landscapes and Linking Key Habitat Elements project has been a tremendous success, with 1,966 hectares of land already under 10-year management agreements and another 1,000 hectares due to be protected by the end of the project. The Sand Ridge Woodlands project has been a terrific opportunity to engage with Traditional Owners: we employed Yorta Yorta Nations Aboriginal Corporation's Woka Walla works crews to carry out revegetation, cultural heritage assessments and fencing of remnant vegetation to protect this unique landscape that extends across Yorta Yorta country either side of the Murray River. The work crews have also collected seed for various projects that support other revegetation activities across the catchment.

Meaningful engagement with Traditional Owners continues to be a focus. Not only are we committed to the

principles of the recently launched Aboriginal Participation Guidelines for Victorian CMAs, we have signed Service Level Agreements with Yorta Yorta Nations Aboriginal Corporation and Taungurung Clans, and in coming months will enter into an agreement with the Algabonyah Community Cabinet (to commit to Indigenous people making up to at least two per cent of our workforce by 2020). In this regard, the Goulburn Broken CMA sees its role in supporting Indigenous capacity building well beyond employment in our organisation, with a whole range of projects that we now run providing meaningful work, skills and career development in NRM.

Adapting to climate variability

Finalisation of the Australian Government funded NRM Planning for Climate Change strategy has been a major collaborative effort by the state's CMAs and provides a clear way forward for climate change adaptation in the NRM sector. To build on this body of work, over the past year the CMAs continued to work together to develop a list of state-wide adaptation priorities that supports the Victorian Government's vision to become a leader in climate change.

Completion of the Goulburn Broken Climate Change Adaptation Plan to help integrate climate change planning into NRM activities across the Catchment has identified priority landscapes for climate change adaptation and carbon farming in the context of improving the resilience of natural resources, and identifies management options for all groups involved in NRM to consider.

We were also pleased to lead a collaboration between the CMAs, DELWP and Deakin University to survey Victoria's inland wetlands for their carbon sequestration capacity. All indications are that inland wetlands are effective carbon sinks (and could therefore provide carbon offsets), which is of considerable value to NRM agencies in building the case for securing investment to restore wetlands.

Acknowledgements

The support of the Board and the tremendous commitment by all our Agency, community and Traditional Owner partners, along with our dedicated staff, continues to provide solid foundations for Goulburn Broken CMA's ongoing pursuit for increased Catchment environmental, economic and social resilience. I want to particularly acknowledge the dedicated leadership and support provided by our Chair, Murray Chapman, and all Board Directors. I also wish to especially acknowledge the contribution of Geoff Earl who retired this year after 40 years dedication to the water and environment sectors and Brendan Stary who chose to explore other opportunities beyond the Goulburn Broken CMA, and I wish them both well.



Chris Norman

Chief Executive Officer

Delivery against the Goulburn Broken Regional Catchment Strategy

In 2015-16 the Goulburn Broken CMA undertook a number of projects that directly contributed to delivering on the strategic objectives of the Regional Catchment Strategy (RCS). Some of these projects were a continuation of 'base' projects that have run over several years. These projects were revised to ensure alignment with the RCS including consideration of the social-ecological systems (SES) and relevant thresholds. Several strategic projects were continued and several new projects were commenced. A summary of the strategic projects for the 2015-16 financial year, aligned to the strategic objectives of the RCS are shown below.

Progress against strategic objectives of the RCS	Details page
Embed the resilience approach	
<p>Continue to explore opportunities and advocate for SES based funding.</p> <p>Continue to work with regional communities to implement their Local Plans and development of an annual review process.</p> <p>Development and implementation of a research and development strategy based on knowledge gaps identified through the development of the RCS.</p> <p>Continue to promote the importance of ongoing funding for surface drainage as critical in supporting a resilient irrigation industry.</p> <p>Scientific journal paper on Resilience Assessment of the Goulburn Broken Catchment to be published in <i>Ecology and Society</i>.</p>	21, 33
Strengthen partnerships	
<p>Maintain the strong focus on partners and their role in RCS implementation across the Catchment.</p> <p>Continue to implement Community NRM Plan including supporting State-wide bids for Landcare funding.</p> <p>Continue to strengthen partnerships with relevant stakeholders ie. Murray Dairy, Field & Game Victoria, Community NRM Groups, Goulburn Valley Environment Group, Local Government, CFA and interstate NRM organisations to deliver on Australian and State Government priorities.</p> <p>implementation and upcoming review of Regional Operating Agreement.</p> <p>Develop and promote the Murray Corridor concept to all levels of Government. This is a significant project being developed by the newly formed 'Tri-State Murray NRM Regional Alliance', which is a partnership of organisations including the Goulburn Broken CMA (lead), North Central CMA, Mallee CMA, North East CMA, Natural Resources SA Murray-Darling Basin and Murray Local Land Services (NSW).</p>	2, 18, 21
Adapt to land use changes	
<p>Respond to audit on mining on the Goulburn floodplain and develop guidelines for its sustainable development.</p> <p>Play a key role in the review of the Native Vegetation Controls in the Agricultural Floodplains (in particular) and adjust the Whole Farm Planning guidelines to ensure alignment with Government Policy.</p> <p>Continue to support Whole Farm Planning in the Agricultural Floodplains as a crucial regional planning tool applied at a farm scale.</p> <p>Implementation of Goulburn Broken Interim Flood Management Strategy.</p>	33, 43
Adapt to water policy reform	
<p>Take a leadership role in the draft Business Case for the Goulburn River Constraints Strategy.</p> <p>Work within the region to ensure the irrigation footprint is appropriate and planned to reduce the further degradation of soil and water due to salinisation and to reduce the impact of irrigation on the natural environment.</p> <p>Complete the BSMS Register A Review around the Shepparton Irrigation Region. This will include the implications of the GMW Connections Program being incorporated into Basin Salinity Management Strategy (BSMS) accounting.</p> <p>Seek additional or ongoing funding for Whole Farm Planning in the Agricultural Floodplains to support productive and environmental outcomes.</p> <p>Completion of the majority of the Farm Water Round 3 (\$30 million) and roll-out of the Round 4 Project (\$50 million).</p> <p>Continued alignment with the GMW Connections Program roll-out including the identification of opportunities for joint projects, ie. Wetlands and Developments.</p> <p>Development and implementation of 2015-16 Seasonal Watering Plans.</p> <p>Ensure that long-term monitoring is in place and the findings are communicated, to support the delivery of environmental water.</p>	33, 43
Adapt to climate variability	
<p>Continue to integrate planning for climate variability into program and project delivery including through the development and review of regional strategies and programs and local plans.</p> <p>Continue to undertake fire and flood recovery and seek opportunities to secure long-term funding for these increasingly frequent natural events.</p> <p>Develop an improved understanding of the role of the CMA with respect to climate change and position the organisation accordingly.</p>	29
Adapt to increased farm production	
<p>Continue to deliver the VEPP funded Northern Eco-Connections project in partnership with North East and North Central CMAs.</p> <p>Contribute to development of State Biodiversity Strategy and review and update the Goulburn Broken Biodiversity Strategy.</p> <p>Ongoing delivery and communication of suite of projects with a productivity focus, eg. Farm Water Program, Soilcare (dryland and irrigated), Woodlands and Wetlands, Regional Landcare Facilitator (incl. pasture-cropping).</p> <p>Shallow watertable management adjustment and communication of salinity as an ongoing threat and finalise the Shepparton Irrigation Region Shallow Water Table Adaptive Management project.</p> <p>Complete the review of the Shepparton Irrigation Region Surface and Sub-surface Drainage Strategies as a single entity to reflect the current conditions.</p>	33, 56, 64

Goulburn Broken profile

Goulburn Broken Catchment Management Authority

Powers and duties

The Goulburn Broken Catchment Management Authority (CMA) is a Statutory Authority established by the Victorian Parliament in 1997 under the *Catchment and Land Protection Act 1994*. The responsible Ministers for the 2015-16 reporting period were:

- from 1 July 2015 to 22 May 2016, the Hon Lisa Neville MP, Minister for Environment, Climate Change and Water; and
- from 23 May 2016 to 30 June 2016, the Hon Lisa Neville MP, Minister for Water and the Hon Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change.

(See page 123 for names of all persons who were responsible during 2015-16.)

The Goulburn Broken CMA develops and coordinates the Goulburn Broken Regional Catchment Strategy implementation by working with the community, all tiers of government and research and funding organisations. The Goulburn Broken Regional Catchment Strategy sets out the framework for coordinating land, water and biodiversity management in the Catchment.

The Goulburn Broken CMA focuses on private land mostly managed for agriculture and on the interface of private and public land. The Goulburn Broken CMA therefore relies on shared contributions from government and private landholders to undertake works.

The Goulburn Broken CMA's role in water is described under the *Water Act 1989* and is to:

- be the caretaker of river health, including managing the environment's right to water (managing the environmental water reserve) and implementing works on waterways via its operational arm
- provide waterway, regional drainage and floodplain management services.

Water storage, delivery and drainage systems are managed by partner agency Goulburn-Murray Water. Urban water and wastewater services are provided by another partner agency, Goulburn Valley Water.

See the 'Governance' section (page 77) for details.

Funding and staff

Goulburn Broken CMA's income for 2015-16 was \$26.5 million, derived from the Victorian and Australian Governments, regional sources and other government entities. As at 30 June 2016, 54.6 (full-time-equivalent) staff were directly employed. See the 'Human resources' section (page 70) for details.

The Goulburn Broken CMA acknowledges the Traditional Owners of land in the Goulburn Broken Catchment and strongly respects the rich culture and intrinsic connection Traditional Owners have to the land.

Our Vision

Healthy, resilient and increasingly productive landscapes supporting vibrant communities.

Our Purpose

Through its leadership and partnerships the Goulburn Broken CMA will improve the resilience of the Catchment's people, land, biodiversity and water resources in a rapidly changing environment.

Our values and behaviours

Environmental sustainability: we will passionately contribute to improving the environmental health of our catchment.

Safety: we vigorously protect and look out for the safety and wellbeing of ourselves, our colleagues and our workers.

Partnerships: we focus on teamwork and collaboration across our organisation to develop strategic alliances with partners and the regional community.

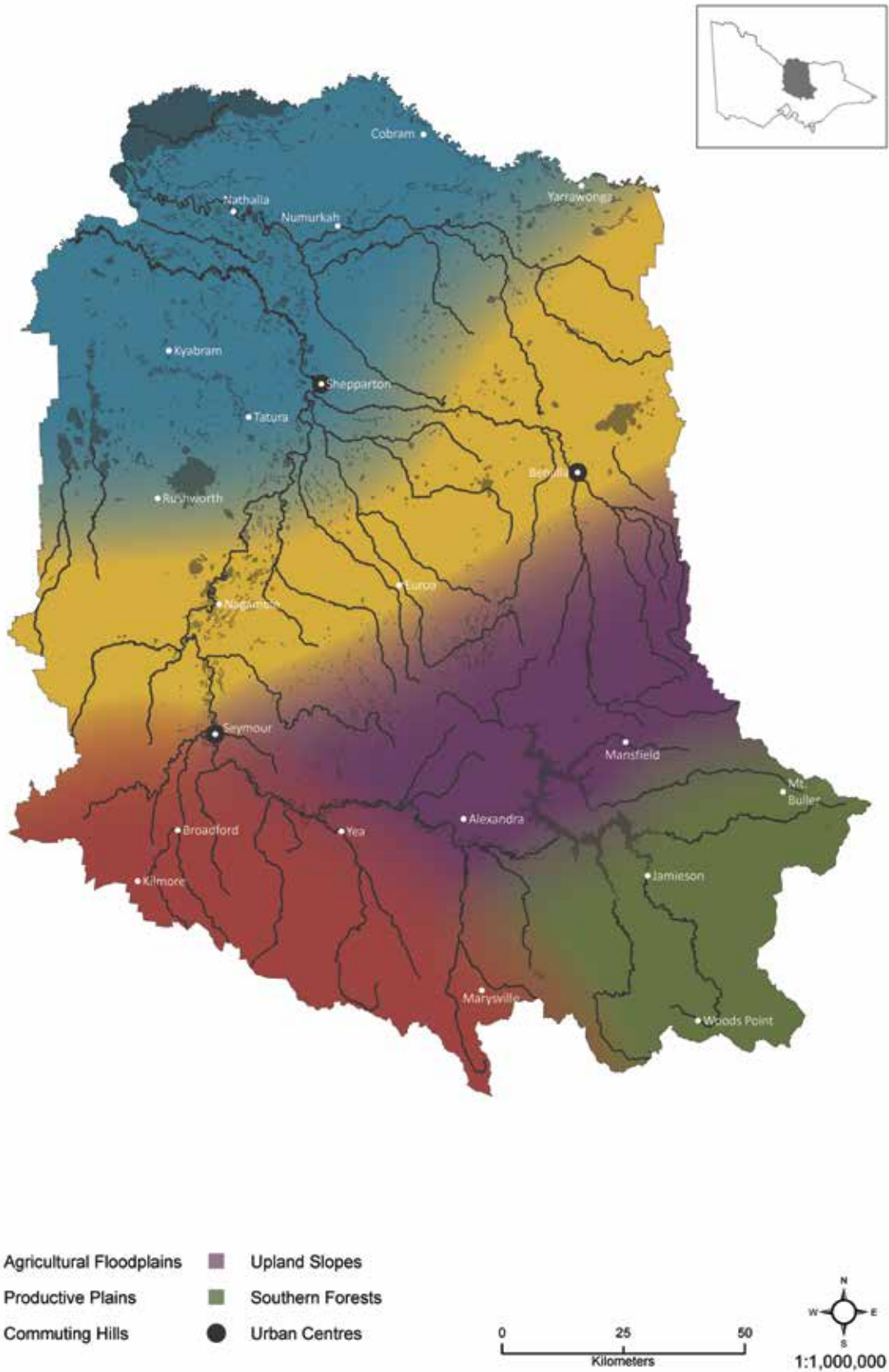
Leadership: we have the courage to lead change and accept the responsibility to inspire and deliver positive change.

Respect: we embrace diversity and treat everyone with fairness, respect, openness and honesty.

Achievement, excellence and accountability: we do what we say we will do, we do it well and we take responsibility and accountability for our actions.

Continuous learning, innovation and improvement: we are an evidence and science-based organisation and we test and challenge the status quo. We learn from our successes and failures and we are continually adapting using internal and external feedback from stakeholders and the environment. We are an agile, flexible and responsive organisation.

Goulburn Broken Catchment ^{i,ii}



- i. The Goulburn Broken CMA Sustainable Irrigation Program oversees delivery in part of the North Central Catchment as well as the Goulburn Broken Catchment.
- ii. Maps of the Catchment showing whole farm plans achieved and onground works sites are included as Appendix 2 and 4 (pages 129 and 132).

Whole of Catchment

The Goulburn Broken Catchment covers 2.4 million hectares, covering approximately 10.5 per cent of Victoria, extending north from near the outskirts of Melbourne to the River Murray on the border with New South Wales.

- An estimated population of 204,000 people, which includes 6,000 Indigenous Australians
- Includes approximately one million hectares of dryland agriculture and 270,000 hectares of irrigated agriculture. Public land covers 800,000 hectares, including extensive areas for conservation.
- Yields more than 3,500 gigalitres or 10.5 per cent of the Murray-Darling Basin's water.
- Agriculture is a significant contributor to the Catchment economy with a gross value of agricultural production of \$2.11 billion in 2014-15.

Agricultural Floodplains

Northern floodplains with Murray River along boundary with NSW.

- Landscape highly modified for agriculture with remaining vegetation fragmented and found mainly on waterways, wetlands and roadsides.
- Irrigation supports dairy, horticulture and cropping and a large food processing sector with recent major investment in on and off-farm irrigation infrastructure.
- Barmah National Park highly valued (Ramsar listed) internationally important breeding site for many bird species.
- Long history of community leadership in managing land and water problems.

Threats: Further loss and decline of vegetation, salinity, poor natural drainage, future farming options and floods continue to threaten production and channel form or stability.

Productive Plains

Foothills and floodplains towards the north of the Catchment.

- Habitat provided by vegetation along waterways, roadsides, ranges and spring soak wetlands.
- Dryland farming includes cattle, sheep, cropping and viticulture and many farms remain in same families for generations with average farming populations ageing.
- Rivers and creeks in moderate condition and wetlands in moderate to good condition.
- Landcare and conservation management networks establish sustainable farming practices and protect threatened species.

Threats: More habitat loss, ageing farming populations and declining social connection are threats to biodiversity and farming futures.

Upland Slopes

Includes the slopes and valleys towards the south of the Catchment.

- Grazing and other agricultural enterprises occur in cleared valleys surrounded by partially forested hills and vegetation along waterways.
- Lake Eildon provides water for agricultural production, recreation, tourism and river health along the Catchment and beyond the boundary.
- Generational farmers live alongside increasing numbers of lifestyle properties and absentee landholders.

Threats: Erosion, weeds and fires are among the threats to the amount and quality of highly valued water, used for many purposes.

Commuting Hills

Includes the mountainous southern and south western urban fringe.

- Public and private forests support many plant and animals including the Golden Sun Moth.
- Land use also supports a range of agricultural industries and lifestyle communities.
- Waterways remain largely healthy because of the extent of remaining vegetation.
- People drawn to area for natural beauty and lifestyle and commute to Melbourne for work.

Threats: Fire remains a major threat to safety and properties, along with native vegetation loss through population pressures and development.

Southern Forests

South-east mountains, waterways and snow covered alps.

- Unique alpine vegetation supports endangered mountain Pygmy Possum.
- Most of the area is public land managed for conservation, but also for recreation and timber production.
- Waterways are in good condition with recreation and tourism highly valued.
- People live in small and seasonal communities and travel to and from this area.
- The interface between private and public land is important for management.

Threats: Waterway health threatened by erosion along with threats to vegetation including fire, weeds and pest animals.

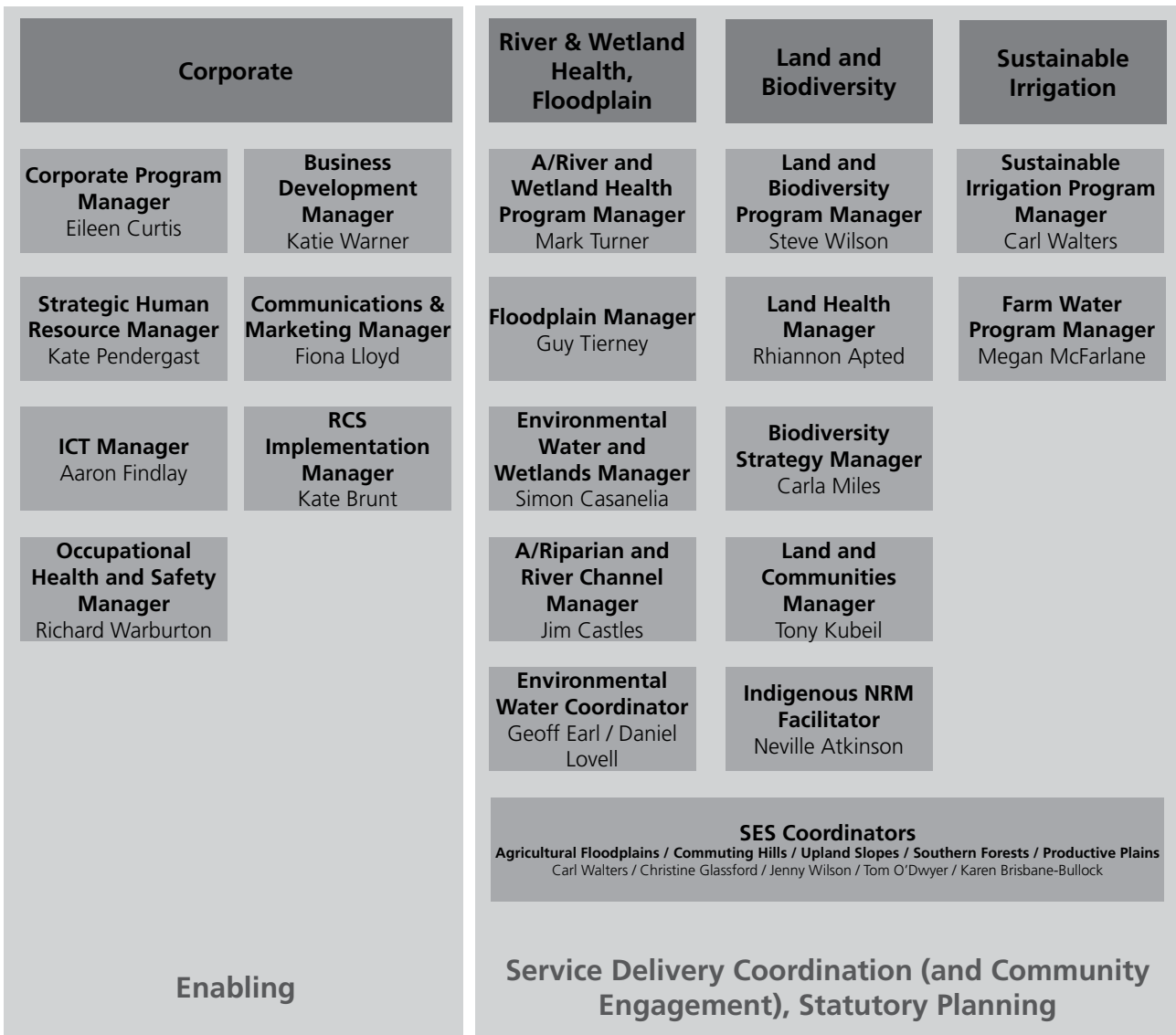
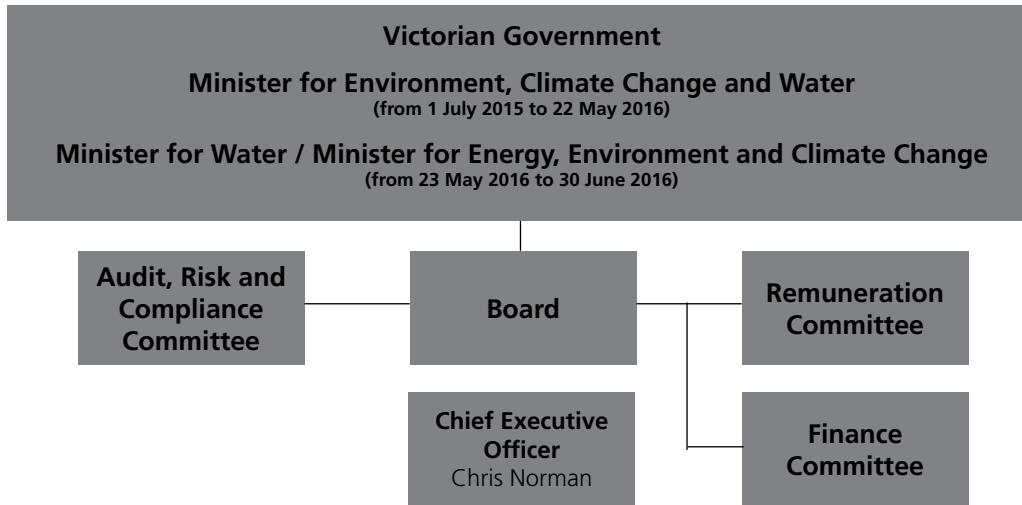
Urban Centres

Major urban centres of Shepparton, Seymour and Benalla.

- Biodiversity is poor but urban people value the rivers and remaining vegetation for recreation.
- Provide employment, housing, schools and services surrounded by farming and lifestyle properties on Goulburn and Broken River floodplains.
- Water is pumped from the rivers for domestic use and runs off into rivers following storms.
- Large diverse populations.

Threats: Pollution, land development and aquatic weeds threaten river health, including water quality and floods are an on-going threat to properties and safety.

Goulburn Broken CMA business structure



Key events 2015

July

Five thousand-plus downloads of the free iSpy Frogs and iSpy Fish apps since their launch in 2013 – 2014. The apps allow smart phone or tablet users to record frog sightings or their fish catch. The data is then used to improve understanding of the distribution of frog and fish populations across the Catchment.

Goulburn River winter fresh started as planned on June 11 but the flow and duration of the event was reduced in July as bridge replacement works at Ghin Ghin Bridge by Murrindindi Council limited flows to a maximum of 2,000 ML/day.

Seventy four Farm Water Round 4 project applications worth over \$15 million received.

200th Board meeting held. The Goulburn Broken CMA was established in 1997 as the peak natural resource management body in the Catchment to develop and oversee the implementation of the Regional Catchment Strategy.

Volunteers from Uniting Church Volunteers and Blaze Aid as well as work crews from Beechworth and Dhurringile prisons finished replacing or repairing fences affected by fires that burnt more than 14,000 hectares near Stewarton, Boweya and Creighton's Creek in mid-December 2014.

August

Eleven Goulburn Constraints Management Strategy community 'Open House' sessions held with attendances ranging from nine to 60.

Parliamentary Secretary Anthony Carbines briefed on joint Goulburn Broken/North East CMA Virtual Fencing concept.

Tri-State participants meet to reach agreement on the promotional brochure, future governance arrangements and a collective Green Army Project.

September

More than 300 people attend Fish Circus held at Hughes Creek.

Goulburn Broken CMA well represented at the International River Symposium in Brisbane with a poster on the Farm Water Program and the CEO presenting on the Tri-State Alliance and chairing a session on the Water Stewardship initiative.

Chinese delegation visits to investigate the virtues of water stewardship (with follow-up discussions held at the International River Symposium).

October

Assessment of damage caused by the Tallarook and Lancefield fires that burnt about 4,500 hectares in the Commuting Hills starts.

Three applications submitted to the River Basin Management Society Awards. Unfortunately they were unsuccessful but Goulburn Broken CMA was a partner in the Y Water Centre initiative that received the Award for innovative Community Engagement.

Fruit Industry Employment Program named a finalist at the Premier's Sustainability Awards.

Launch of the Taungurung Indigenous Garden at Seymour College.

Annual spring environmental flow along the lower Goulburn river starts, peaking at 7000ML/day. The flow will help re-establish river bank and in-stream vegetation that stabilises the river bank and provides valuable habitat and food for native fish, birds and water bugs.

November

Farm Water Program a finalist at the Banksia Sustainable Water Management Awards.

Water Minister Lisa Neville launched Round 4 of the Victorian Farm Modernisation Program (and released the GMW Connections Mid-Term Review).

Virtual Fencing project secures an additional \$250,000 from the Australian Government's AusIndustry initiative.

More than 40 people celebrate the achievements of rural women in agriculture and the environment at the Catchment's inaugural Chicks in the Sticks event at Mt Buller.

Water Minister Lisa Neville announces new appointments to Victoria's Catchment Management Authorities.

A proposed second spring environmental flow along the Goulburn River aimed at providing cues for Golden perch spawning does not go ahead due to low water allocations.

December

Tri-State Alliance initiative a key factor in the Australian Government supporting a variation for the Biodiversity Fund Sand Ridge Woodlands Project (allowing \$900,000 of funds to remain with the Goulburn Broken CMA to continue the project).

Parliamentary Secretary for the Environment Anthony Carbines attends RiverConnect 10th year celebrations to recognise the partnership between Greater Shepparton City Council, Traditional Owners, Goulburn Broken CMA, Parks Victoria and the community.

Key events 2016

January

Two hundred and forty-six people attend 18 Goulburn River Constraints Management Business Case open house community consultation sessions.

All social-ecological systems' Local Plans go 'live' on WeConnect.

Parliamentary Secretary for the Environment, Anthony Carabine launches the Riparian Project at the Y Water Centre in Yea.

February

Goulburn Broken CMA co-ordinates Statewide Climate Change workshop with DELWP and research institutions.

Staff 'Big Idea' forums held in late January – early February to feed into Board's Strategic Workshop.

March

More than 50 people including local politicians, traditional owners and community attend the launch of the interpretive trail at Tallis Winery, Dookie.

Native fish relocated from Rice's Weir along the Broken Creek following alarming drops in dissolved oxygen linked to Blue Green Algae outbreak and unseasonably hot dry weather.

Goulburn Broken CMA CEO participated as an Organisational Performance Excellence co-reviewer of the Cape York NRM Ltd group in northern Queensland.

More than 50 people, including local and regional media attend 'Women in Agriculture' forum in Euroa.

Environmental flow released from Goulburn Weir aims to maintain recently established vegetation on the lower river banks. The flow peaked at 4,500 ML/day with the majority of the water flowing to the Murray River where it provided additional downstream environmental benefits.

April

Delivery of environmental water started to Moodies Swamp aimed at supporting Brolga breeding.

Enterprise bargaining negotiations formally commenced and discussions with staff through nominated bargaining reps under way.

OHS Committee endorses participation in the Victorian Government's Workplace Health and Wellbeing Achievement Program.

Thirty three staff from all NRM bodies participating in the Tri-State Alliance meet in Melbourne to develop five priority projects.

2014-15 Goulburn Broken Community NRM Report Card launched with DELWP Deputy Secretary Kate Houghton and Goulburn Murray Landcare Network Chair John Laing.

May

Staff spent 1¾ days on the witness stand in the VCAT hearing on the Seymour Quarry. This hearing will now be extended with a further week in October.

Goulburn Broken CMA staff, CEO and Board Chair hosted and presented at the Victorian Landcare Council Forum held at Dookie from 13-15 May.

Four-day canoe trip along the Goulburn River from Alexandra to Seymour organised by Taungurung Clans and Goulburn Broken CMA.

Goulburn Broken CMA CEO and colleagues met with MDBA CEO and Chair to discuss progress with the Tri-State Alliance.

\$45 million Round 5 funding for the Victorian Farm Modernisation Program opened receiving a 'warmish' response with uptake affected by dairy downturn.

Environment, Climate Change and Water Minister Lisa Neville launches Our Catchments, Our Communities – Integrated Catchment Management in Victoria 2016-19 – Victoria's first state-wide strategy to integrate catchment management, committing \$22 million to its implementation.

June

Four Goulburn Broken CMA staff presented at the 6th National NRM Knowledge Conference in Coff's Harbour, with the CEO chairing the Climate Change session. The first face-to-face meeting of the Chairs and CEOs from all of the organisations involved in the Tri-State Alliance was also held during the conference.

Jo Wood presented at the Ecoacoustics Congress at Michigan State University and was nominated as the President of the newly formed Australasian Chapter of Ecoacoustics.

The final submission to government for approval for the Goulburn Broken CMA EBA was sent to DELWP.

Eleven organisations share in more than \$230,000 of grants from the Goulburn Broken CMA's Beyond Soilcare project thanks to funding through the Australian Government's National Landcare Programme to support activities and events that promote soil health and sustainable farming.



Long-term scorecard

Ratings in the following table are explained in investment area reports as referenced in the right hand column.

Long-term strategy implementation progress and Catchment condition

Investment area	Long-term strategy implementation progress ⁱ			Catchment condition ⁱ			Details page
	Strategy life ⁱⁱ	Progress	Gov't funding trend	1990 ⁱⁱⁱ	2016	Trend 0-3 years	
The Environment							
1 Sustainable irrigation							
1a Shepparton Irrigation Region salinity	1990-2020	Below target	●	Poor	Satisfactory	↑	33
2 River and wetland health and floodplain management							
2a Environmental flows	2014-2022	On target	↑	Poor	Satisfactory	↑	43
2b Riparian and instream habitat and channel form	2014-2022	On target	●	Poor	Satisfactory	↑	43
2c Water quality (nutrients) in rivers and streams	1996-2016	On target	●	Very poor	Satisfactory	●	43
2d Floodplain management	2014-2016	On target	↑	Very poor	Satisfactory	↑	52
3 Land and Biodiversity							
3a Biodiversity	2000-2030 2010-2015	On target	●	Poor	Poor ^{iv}	●	56
3b Land health including dryland salinity	1990-2050	Below target	●	Poor	Satisfactory	●	64
3c Invasive plants and animals	2010-2015	Below target	●	Poor	Poor	●	68
The Business (Corporate)							
A Governance	Rolling 5 year Corporate Plan	On target	●	n.a.	Good	↑	77
B Community engagement	2005-present	On target	●	Poor	Satisfactory	↑	18
C Planning and responding	Rolling 5 year Corporate Plan	On target	●	Poor	Satisfactory	●	21
D Human resources	various	On target	↑	Satisfactory	Good	↑	70
E Environmental footprint	2012-2014	Below target	↓	Very poor	Poor ^v	●	75

- Strategy implementation progress considers evidence of outputs completed against targets, including onground works and tasks to improve management systems. Catchment condition ratings consider evidence of environmental or business condition, social and economic health and management systems. Catchment condition encompasses more than just biophysical condition. Appendix 1 on page 127 describes the ratings methodology in more detail.
- Strategies vary in formality and comprehensiveness. Refer to detailed sections for lists of strategies. Strategy life includes time taken for capacity building tasks to be completed in medium term (usually three to five years) and for 'The Environment' investment areas, time taken for changes to be achieved over the long-term (usually ten to fifty years).
- Ratings for 1990 have been determined using our understanding in 2016 of what the situation was like in 1990. 1990 is a useful reference year because it was about this time that integrated catchment management began and sufficient time has elapsed since for meaningful questions about long-term change to be asked.
- More than one third of the Catchment's woody vegetation (including riparian vegetation) was burnt by 2006 and 2009 fires (long-term impacts are unknown).
- Ratings are about the condition of the organisation (with respect to its environmental footprint) rather than the condition of the Catchment.

Notes about the long-term scorecard

Significant differences between investment areas in rating long-term strategy implementation progress and Catchment condition change (see table above) are often simply because of varying methods used to assess Catchment condition and set long-term targets. This reflects the infancy of natural resource management and the variation between its disciplines.

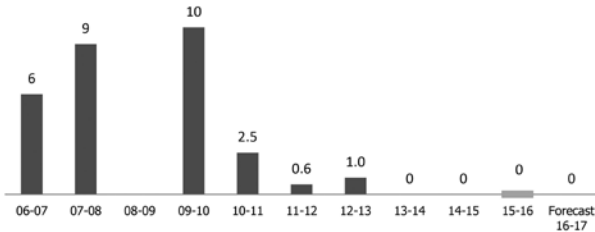
Appendix 1: Understanding progress and ratings (page 127), discusses issues related to measuring progress.

Goulburn Broken CMA strategies generally have a long-term focus, which encourages integration and the achievement of multiple benefits from single actions. This helps to minimise the impacts of fluctuating government commitment to different investment areas.

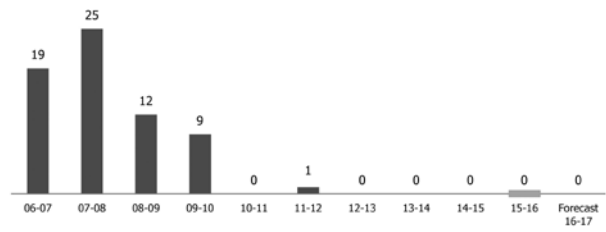
Outputs achieved 2006-07 to 2015-16 and forecast 2016-17

The following outputs were achieved through one or more investment areas (listed on the previous page). They indicate progress towards long-term targets listed in the Regional Catchment Strategy and sub-strategies.

Irrigation drains built, km

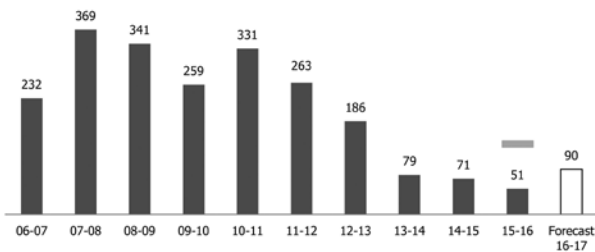


Groundwater pumps installed, no.

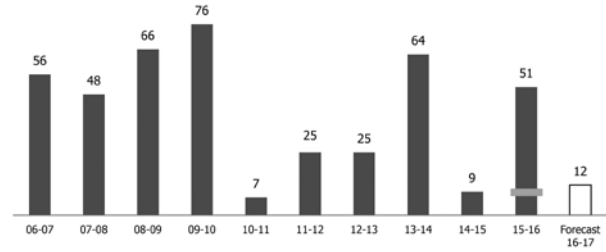


While core actions of the 1990 salinity plan continue to be implemented (page 33), reduced funding for some core actions has resulted in decreased achievement.

Whole farm plans prepared, no.



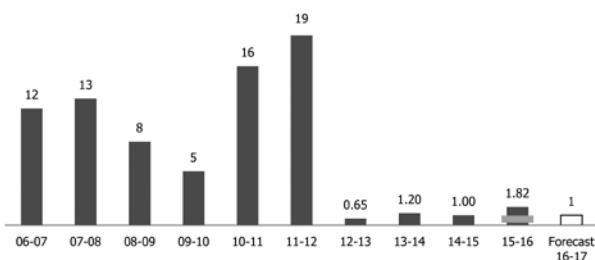
Reuse systems installed, no.



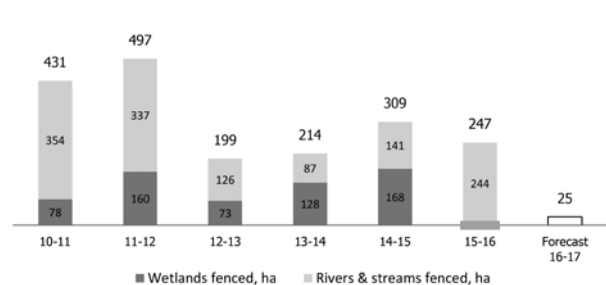
Whole farm plan commitment levels remain high and following changes in the irrigated landscapes, should see increased outputs in 2016-17.

Investment in reuse systems has been via the Farm Water Program since 2010-11.

River or stream bed & bank protection actions, km



Riparian land fenced, ha



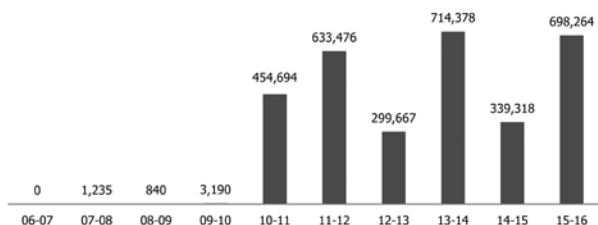
Hard engineering approaches are used less now, with a preference for vegetation. In the absence of significant floods, recent trends are expected to continue.

The Regional Riparian Action Plan should see a sustained level of investment and outputs in riparian protection.

Note on forecast targets:

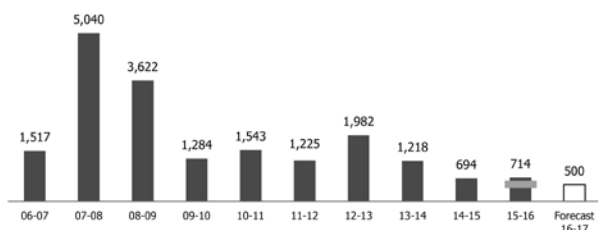
Forecast output targets are generally lower than what was achieved previously because they are based on indicative rather than actual funding received. Forecasts are based on outputs from project submissions for 2016-17 and funded projects as at June 2016. Forecasts may change as new funding opportunities arise and project submissions are negotiated.

Environmental water use, ML



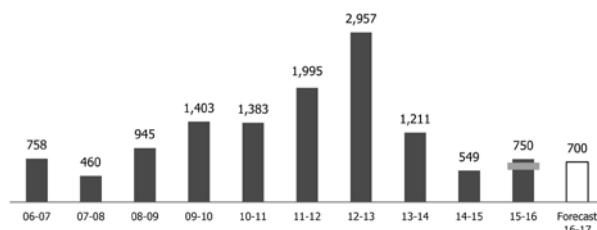
Annual environmental water use is influenced by seasonal conditions and environmental water availability (page 46).

Remnant vegetation fenced, ha



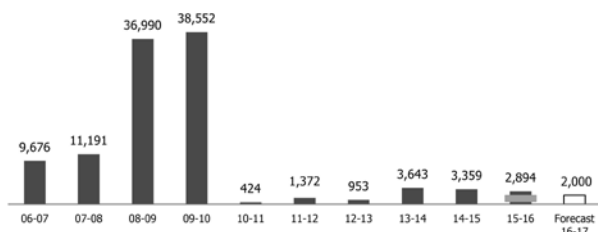
Increased achievements in 2007-08 and 2008-09 were largely due to Drought Employment Program funding.

Indigenous revegetation (planted), ha



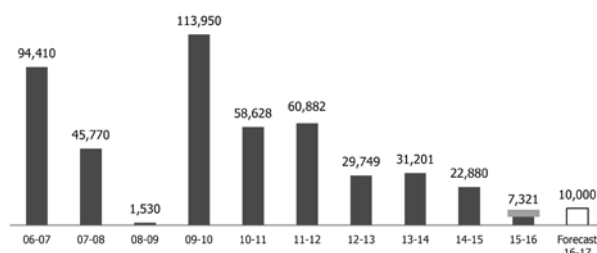
There is still significant community interest in revegetation. Direct seeding is currently the dominant method of revegetating, influenced by seasonal conditions.

Weeds treated, ha



DEDJTR's Biosecurity Victoria's Pest Plan and Animal Program was removed from the Goulburn Broken CMA's investment process from 2009-10.

Rabbits & foxes treated, ha



These activities are being increasingly driven by community groups, sometimes in partnership with local government.



Annual scorecards

Indicative investment and gross output performances in investment areas

Investment area ⁱ	Investment ⁱⁱ (including partnership funds)				2015-16 performance ^{iv} (outputs)	Details page
	2013-14 \$000	2014-15 \$000	2015-16 \$000	Forecast ⁱⁱⁱ 2016-17 \$000		
The Environment						
1 Sustainable irrigation						
1a Shepparton Irrigation Region salinity	35,367	14,713	13,645	21,922	On-target	33
2 River and wetland health and floodplain management						
2a Environmental flows	<i>Combined investment of 2a, 2b and 2c: 6,083</i>	<i>Combined investment of 2a, 2b and 2c: 3,940</i>	<i>Combined investment of 2a, 2b and 2c: 5,626</i>	<i>Combined investment of 2a, 2b and 2c: 3,014</i>	On-target	43
2b Riparian and instream habitat and channel form					On-target	43
2c Water quality (nutrients) in rivers and streams					On-target	43
2d Floodplain management	482	458	894	620	On-target	52
3 Land and Biodiversity						
3a Biodiversity	5,381	5,166	3,517	3,670	On-target	56
3b Land health including dryland salinity	990	990	766	761	On-target	64
3c Invasive plants and animals	0	0	0	0	On-target	68
The Business (Corporate)						
A Governance	1,407	1,758	1,694	1,756	On-target	77
B Community engagement	652	537	537	537	On-target	18
C Planning and responding	Part of A				On-target	21
D Human resources ^v	5,645	5,466	5,840	6,015	On-target	70
E Environmental footprint	25	10	0	0	On-target	75

i. Investment areas and integration between them are described in Appendix 1 on page 127.

ii. Investment figures include funding to partners, except for the Invasive plants and animals investment area.

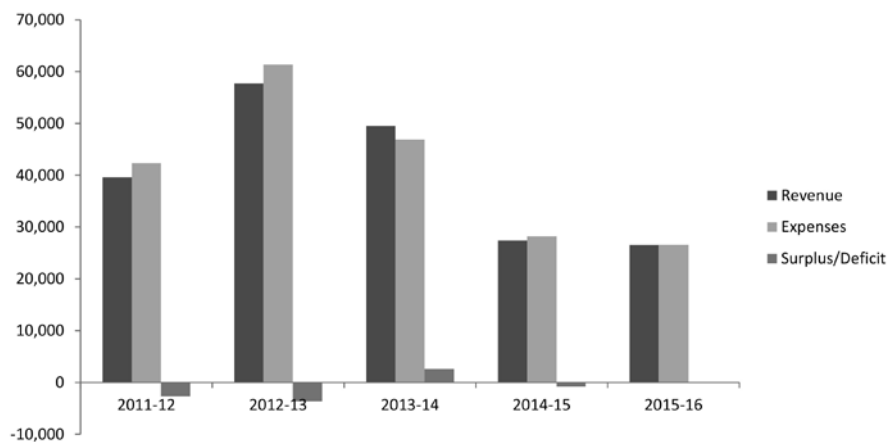
iii. Based on corporate Plan 2016-17

iv. Performance ratings are based on outputs achieved as listed under investment area details in this annual report. Targets are determined by considering levels of government funding received and may be adjusted during the year. Outputs are described in Appendix 3 on page 130.

v. These are costs rather than investments. Costs are embedded within other investment areas.

Financial summary 2011-12 to 2015-16, \$000 ⁱ

i. See Financial results summary on page 92 for details.





Aggregate output performance across all investment areas in 2015-16

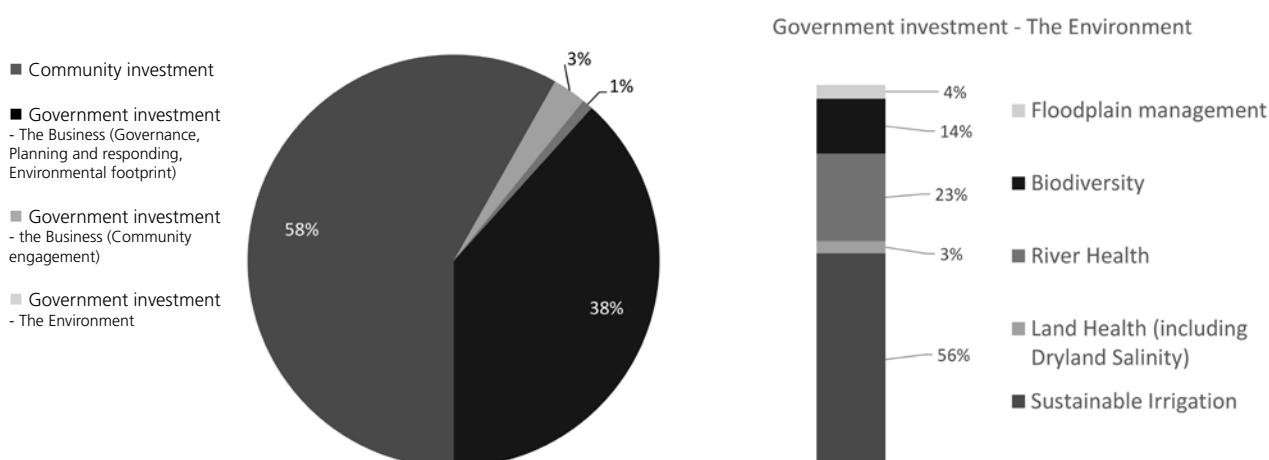
Output ⁱ	Achieved	Target ⁱⁱ	Performance	
			% achieved	Rating
Remnant vegetation fenced, ha	714	508	141	Exceeded target
Wetlands fenced, ha	3	0	-	Exceeded target
Rivers and streams fenced, ha	244	0	-	Exceeded target
Riparian land fenced, ha	247	0	-	Exceeded target
Long-term conservation agreements hectares ⁱⁱⁱ	70	60	117	Exceeded target
Indigenous revegetation planted, hectares	750	625	120	Exceeded target
Irrigation drains built, kilometres	0	0	-	-
Reuse systems installed, numbers	51	9	567	Exceeded target
Laser levelling, hectares	3,553	8,145	44	Well below target
Groundwater pumps installed, numbers	0	0	-	-
Weeds treated, hectares	2,894	1,270	228	Exceeded target
Rabbits and foxes treated, hectares	7,321	7,021	104	On target
Environmental water use, ML	698,264		-	-
River or stream bed and bank protection actions, kilometres	1.82	0.60	303	Exceeded target
Fishway structures installed and barriers modified, numbers	0	0	-	-
Threatened species projects, numbers	0	0	-	-
Whole farm plans prepared, numbers	51	140	36	Well below target

- i. Outputs shown in this table are derived from the more detailed set in Appendix 3 on page 130, including the full list of footnotes. Outputs are described in Appendix 1 on page 127 under 'Annual performance'. Detailed outputs relating to each investment area are listed in sections devoted to each investment area throughout this report.
- ii. Targets are determined by considering levels of government funding as at 30 June 2015 and any subsequent adjustments over the financial year.
- iii. These are shown as 'Binding management agreements' in the detailed outputs on page 130. This target will only be reported once covenants are on title, which takes more than 12 months.

Descriptions of output performance

Investment area details in the environment section pages 33-69 describe actions undertaken in 2015-16 and illustrate integration between programs, government agencies and priorities, regional authorities, community organisations and individuals.

Goulburn Broken investment share ^{i, ii}



i See bar chart on page 18 for cost-sharing details.

ii See investment and gross output performance in investment areas table on page 16 for more detail.



Community engagement

Compiled by Chris Norman, Fiona Lloyd, Katie Warner, Darelle Siekman, Tony Kubeil, Gaye Sutherland and Neville Atkinson

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Catchment condition ^{iv}	Surveys of strengths of relationships Memoranda of understanding Charters for various community engagement groups Uniform regulations developed Joint forums Shared staffing Funds from various sources contributing to natural resources Corporate memory Management systems	Poor	Low	Satisfactory	Low	↑
Long-term strategy implementation progress	Outputs (tasks scheduled to be completed in various engagement strategies)	n.a.		On-target	Medium	● ⁱⁱⁱ
2015-16 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs (see page 88)	n.a.		On-target	Medium	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of what the situation was like in 1990.

iii. Assumed to parallel government funding trend.

iv. The reference point is taken to be the time just prior to European settlement, at which time the Catchment is considered to have been in excellent condition.

Government investment, \$000

2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
652	537	537	537	●

i. Forecast based on Corporate Plan 2016-17.

Major strategic references

- Goulburn Broken Community Engagement Strategy and Action Plan 2015-2017
- Goulburn Broken Communications and Marketing Strategy and action Plan 2015-2017
- Goulburn Broken Community NRM Action Plan 2013-2018
- Our Catchment, Our Communities 2016
- *Aboriginal Heritage Act 2006*
- *Traditional Owner Settlement Act 2010*
- UN Declaration on the rights of Indigenous Peoples 2007
- COAG Closing the Gap initiative 2008
- Yorta Yorta Cooperative Management Agreement 2004
- Yorta Yorta Traditional Land Management Agreement 2010
- Yorta Yorta Whole of Country Plan (2012-2017)
- Reconciliation Australia – Economic Benefits of closing the gap in Indigenous employment outcomes (2014)
- Empowered Communities: Empowered Peoples – Design report (2015)
- Australian Government Indigenous Advancement Strategy (2014)
- Aboriginal Participation Guidelines for Victoria's CMAs (2015) and Implementation Plan (2016)
- Various memoranda of understanding

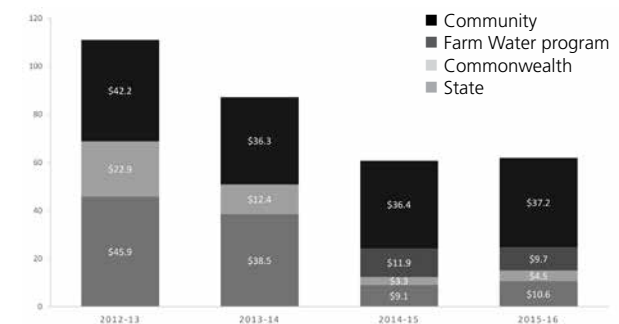
Background

This section demonstrates how the Goulburn Broken CMA is committed to stakeholder involvement, integration of disciplines and onground works.

The regional community typically invests about one dollar for every dollar of government funding despite continuing challenges (see graph below). Influencing how others invest is therefore a very important activity for the Goulburn Broken CMA.

Stakeholders include private landholders, Victorian and Australian government funders, government agencies, corporate and philanthropic funders, Traditional Owners, local government, community natural resource management groups, individuals and politicians. The table in Appendix 5 on page 133 summarises the role of catchment partners in implementing the Goulburn Broken Regional Catchment Strategy.

Major contributions to natural resource management, \$million



In 2014-15 the calculation of community contribution was revised to match the approach taken in the Victorian Catchment Management Authorities Actions and Achievements Report. For 2015-16 Commonwealth investment includes \$3.08 million provided through the Australian Government's National Landcare Programme for regional delivery.

Supporting community natural resource management

The Goulburn Broken CMA relies on landholders, school children, community NRM groups (including Landcare groups, Conservation Management Networks, 'Friends of...' groups and others) and individuals to deliver programs across the Catchment that improve the health of our rivers and creeks, protect and improve habitat for native animals and plants, recognise the region's cultural heritage and bring about practice change. Efforts to boost

the Catchment's resilience lead to increasingly productive landscapes that will support the long-term viability of our communities in the face of constant change. To support the effort of the community undertake activities, a broad range of grants (funded through a combination of State and Commonwealth programs) were provided to community organisations (see table below). Activities funded included revegetation and regeneration of native vegetation, eradication and control of invasive plants and animals, support of capacity building initiatives and education and awareness raising activities.

Total grants paid to community groups and other organisations 2015-16	No. of grants	Amount paid \$ (ex GST)
Australian Government - Biodiversity Fund	25	\$562,206.67
Australian Government - National Landcare Programme	53	\$1,024,066.71
Victorian Government - Regional Riparian Action Plan	3	\$44,500.00
Victorian Government - Victorian Landcare Grants	63	\$246,237.16
Victorian Government - Victorian Water Investment Program	9	\$237,802.00
Victorian Government - other	1	\$21,000.00
Total Grants paid	154	\$2,135,812.54

See Appendix 8 for full list of payments made during 2015-16.

Traditional Owner engagement

Traditional Owners in our catchment are legally recognised through the Victorian Government's *Aboriginal Heritage Act 2006*. The Act establishes a system of Registered Aboriginal Parties in the State that have responsibilities in relation to cultural heritage management within their registered party area. Two Registered Aboriginal Parties are established within the Goulburn Broken Catchment; Taungurung Clans Aboriginal Corporation and the Yorta Yorta Nation Aboriginal Corporation. Cooperative management and Traditional land management agreements and the Yorta Yorta Nation Whole of Country Action Plan also provide direction to the Goulburn Broken CMA in engaging with Traditional Owners in catchment management.

In addition, the Goulburn Broken CMA have established a Memorandum of Understanding with Yorta Yorta Nation Aboriginal Corporation to guide engagement and collaboration in natural resource management activities on Country and supports the Yorta Yorta whole of County Plan as a place-based approach to inclusion of the Yorta Yorta and links to the Australian Government IAS and COAG Closing the Gap policies. The Yorta Yorta Whole of Country Action Plan requires collaboration between all parties: natural resource management sector, education sector and business sectors to generate a pathway for Indigenous people who are highly trained to meet the needs and capacity building requirements of the Traditional Owners, now and into the future to achieve parity. Goulburn Broken CMA are currently working to establish a similar agreement with Taungurung Clans Aboriginal Corporation.

The Australian Government National Landcare Programme project that supports a partnership between the Goulburn Broken CMA and the Taungurung community to work on Country, continued providing opportunities for capacity building, employment and engagement in natural resource management. In addition to protecting the ecological character of Alpine bogs through works on country, the project builds capacity through training opportunities and engages Taungurung in cross-cultural participation through field days and workshops.

Yorta Yorta Nation Aboriginal Corporation, with the support

of Goulburn Broken CMA Australian Government National Landcare Programme funding has continued to deliver works through its Woka Walla business arm. The Woka Walla business model enables Indigenous work teams to undertake contract works in natural resource management across Yorta Yorta country. Woka Walla has undertaken pest plant and animal control and fencing to protect the ecological character of the Barmah Ramsar Wetland and protected sensitive sand ridge woodland sites on private and public land. The projects continue to build skills and qualifications for the work team and build capacity for the Woka Walla business to be self-sufficient, enabling it to compete for contracts in the broader market.

The Traditional Owner engagement activities of the Goulburn Broken CMA integrate well and continue to work with the Indigenous facilitator and the Traditional Owners to develop partnerships to be innovative, to have a commitment to change and pursue actions to achieve socio-economic place based parity between Aboriginal and Non-Aboriginal people to deliver on the Department of Prime Minister and Cabinet's Indigenous Advancement Strategy Guidelines.

Catchment condition

Government and regional communities' objectives are clearly aligned:

- the Goulburn Broken regional community has a reputation for delivering onground changes to improve its natural resources, which reflects the strength of relationships between its many and varied individuals and organisations
- 96 active community NRM groups had a membership of 6,906 people contributing to natural resource management activities every year (these figures are from the groups and networks that responded to a survey in 2014-15)
- 35 per cent of the Goulburn Broken CMA's Municipal Catchment Coordinator position is funded by the three municipalities in the Shepparton Irrigation Region. These municipalities also contribute 17 per cent of funding for the Public Salinity Works operation and

maintenance costs and in some circumstances fund road structures on Community Surface Drains.

- input was provided into the Aboriginal Participation Guidelines for Victorian CMA's Implementation Plan
- Our Catchment Our Communities, the first statewide strategy for integrated catchment management in Victoria has been developed to strengthen integrated catchment management across Victoria
- use of the community engagement charter in the development of the Land & Water Management Plan and Rivers 2040 (Seven Creeks) project.

Long-term strategy implementation progress

The Goulburn Broken CMA's collaborative agreements and strategies for engaging stakeholders reflect the diversity of natural resource management.

All program sub-strategies include community engagement action plans aligned to the Goulburn Broken CMA's overarching Community Engagement Strategy 2015-17.

The Goulburn Broken CMA's Community Engagement Strategy was reviewed and updated in the first half of 2016 to capture changes in the way the Goulburn Broken CMA will engage with its stakeholders as a result of the development of the Goulburn Broken Regional Catchment Strategy 2013-2019, findings from the 2012 Wallis CMA Awareness Survey and subsequent Action Plan (developed late 2012), Community Engagement and Partnerships Framework for Victoria's CMAs (2012), Organisational Performance Excellence Review (Norbert Vogel, 2015), the Victorian Government's Our Catchments, Our Communities strategy and changes in Victorian and Commonwealth government natural resource management funding and priorities.

2015-16 performance

Sixty-seven media releases were prepared in 2015-16, with more than 90 per cent take up by media outlets. A regular monthly column in the Country News (reaching more than 55,000 households) continued as did a monthly session on ABC Goulburn Murray's breakfast show discussing all thing flora and fauna. The weekly river heights table in the Shepparton News continued providing information on how and why environmental water is being delivered and what is being achieved. To target river users in Urban Centres a monthly 'info-graphic' promoting the multiple/shared benefits of environmental water was trialled in the free paper, the Shepparton Adviser, from January to June.

These more traditional engagement and communication approaches continue to be complemented by an increased social media presence that connects with individuals and groups that may not have engaged with the Goulburn Broken CMA previously. Facebook page 'likes' increased by 85 per cent from 388 in July 2015 to 718 in June 2016 and followers of our Twitter account increased by 66 per cent from 489 at the start of 2015-16 to 814 by June 2016. The quarterly Connecting Community and Catchment e-newsletter now has more than 900 subscribers.

Collaborative campaigns between the state's 10 CMAs celebrated Biodiversity Month, Water Week and Volunteer Week. Communication officers from the three northern CMAs and the Commonwealth and Victorian Environmental

Water holders started to meet at least monthly to share information about initiatives, challenges and opportunities presented by environmental watering activities. This supports consistent messaging and helps sell the 'big picture' of environmental watering benefits across the region.

What's next?

Engagement with stakeholders continues to be a priority during the implementation of the Regional Catchment Strategy and will be supported by:

- development of projects aligned to Our Catchments, Our Communities and implementation of statewide guidelines
- continuous investigation and development of the best ways to engage with the community
- inclusion of a community engagement component in all project planning and development (with a focus on the social-ecological systems)
- implementation of the Aboriginal Participation Guideline for Victorian CMAs: Implementation Plan
- increasing staff community engagement capability.

Partnerships with Indigenous communities will be enhanced and the wider community's understanding of traditional ecological knowledge will be expanded.

The Communication and Marketing Strategy 2015-17 was developed to complement all community engagement activities by promoting and sharing information about Goulburn Broken CMA activities. Actions in the strategy to do this include:

- support for Goulburn Broken CMA staff via a suite of communication and marketing tools
- external website upgrade
- embedding innovative communication and marketing approaches
- completion of community awareness and customer satisfaction survey (undertaken every four years)
- support for implementing the RCS.

Liaison with government funders will continue to ensure:

- the impact of potential gaps in funding for regional priorities are minimised
- opportunities for non-traditional investment (eg industry) are explored.

Community-based natural resource management will involve:

- continuing to provide the catchment community with up-to-date information on developing and promoting Australian Government initiatives
- continuing to develop relationships with community natural resource management groups
- delivering Victorian Landcare Program community grants.



Planning and responding (including research and development)

Compiled by Katie Warner, Chris Norman, Fiona Lloyd, Mark Turner, Kate Brunt and Rod McLennan

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Catchment condition ^{iv}	Anecdotal ^v Systems in place related to planning and responding	Poor	Medium	Satisfactory	Medium	●
Long-term strategy implementation progress	Strategies and plans developed, implemented, revised or updated	n.a.		On-target	Medium	↓ ⁱⁱⁱ
2015-16 performance	Corporate Plan KPIs related to planning and responding (see page 88) Strategies and plans developed, implemented, revised or updated	n.a.		On-target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of what the situation was like in 1990.

iii. Assumed to parallel the government funding trend for strategy development.

iv. The reference point is taken to be the time just prior to European settlement, when the Catchment is considered to have been in excellent condition.

v. Examples of anecdotal evidence include feedback from external experts, selection of Catchment for piloting approaches to emerging issues, adoption by other natural resource management regions of approaches developed within Catchment, inclusion of Catchment people in State, National and International knowledge forums.

Government investment

Included as part of investment in 'Governance' (page 77).

Major strategic references

Refer to Regional Catchment Strategy and sub-strategy structure diagram on page 23.

Background

The Catchment community has continually adapted its approach to managing the Catchment's natural resources under changing conditions and new ideas for more than two decades. The major steps in this evolution have been:

- a single-threat focus (salinity) in the late 1980s
- integrated catchment management during the 1990s
- outcomes based on 'ecosystem services' in the early 2000s
- understanding and enhancing resilience of the Catchment's people and environment as an interconnected system from about 2005.

The first comprehensive, community-led natural resource management strategies in Australia were prepared by the Goulburn Broken community in 1990: the Shepparton Irrigation Region Land and Water Salinity Management Plan and the Goulburn Broken Dryland Salinity Management Plan.

During the 1990s, pioneering approaches to strategy and planning in emerging fields, especially water quality and native vegetation management, became part of an integrated approach.

The Catchment has been the focus of international studies on ecosystem services and resilience thinking since the early 2000s. The new Goulburn Broken Regional Catchment Strategy 2013-2019, developed in partnership with the Catchment community, signals an exciting new phase for the Catchment and the Authority. Launched in 2013 by the Minister for Environment and Climate Change, the Regional Catchment Strategy builds on this work, emphasising the resilience of the Catchment's 'social-ecological systems'.

Regional Catchment Strategy and sub-strategies

The Goulburn Broken Regional Catchment Strategy, a requirement of the *Catchment and Land Protection Act 1994*, was first developed in 1997 and revised in 2003. During 2011 and 2012, the Goulburn Broken CMA led the development of the new Goulburn Broken Regional Catchment Strategy 2013-2019.

Working with many stakeholders and the Catchment community, the Regional Catchment Strategy sets the priorities and targets for directing the Catchment's resources from 2013 onwards towards achieving environmental, social and economic benefits.

The resilience approach

Resilience is the ability of the Catchment's people and environment to absorb stress while continuing to function in a desired way. A series of major events in recent years, from bushfires, droughts and floods to the global financial crisis, has severely tested the Catchment's communities and ecosystems, catalysing an emphasis on developing resilience in preparing the Regional Catchment Strategy. The resilience approach to catchment management focuses on the connections between people and nature, how these connections change and what can be done to achieve desired, balanced goals for resilience. Consistent systems of people and nature are called social-ecological systems, which include elements such as land form, vegetation types, land uses, social structure and dynamics. Social-ecological systems exist at a range of connected scales, from site to the whole-of-Catchment. The scale chosen for decision-making considers the balance between being small enough to understand the details sufficiently, while being large enough to allocate resources efficiently.

The resilience approach and social-ecological systems underpin the Regional Catchment Strategy and its implementation.

Setting objectives – Goulburn Broken Regional Catchment Strategy 2013-2019 objective hierarchy

The diagram (below) details the objectives hierarchy for the Regional Catchment Strategy, which has been developed in four levels.

Level 1 is the 50-year vision which provides a general sense of what the community would like the Catchment to be. The vision reflects the important relationship between protection and use of the Catchment's natural assets, which generate environmental, economic and social benefits.

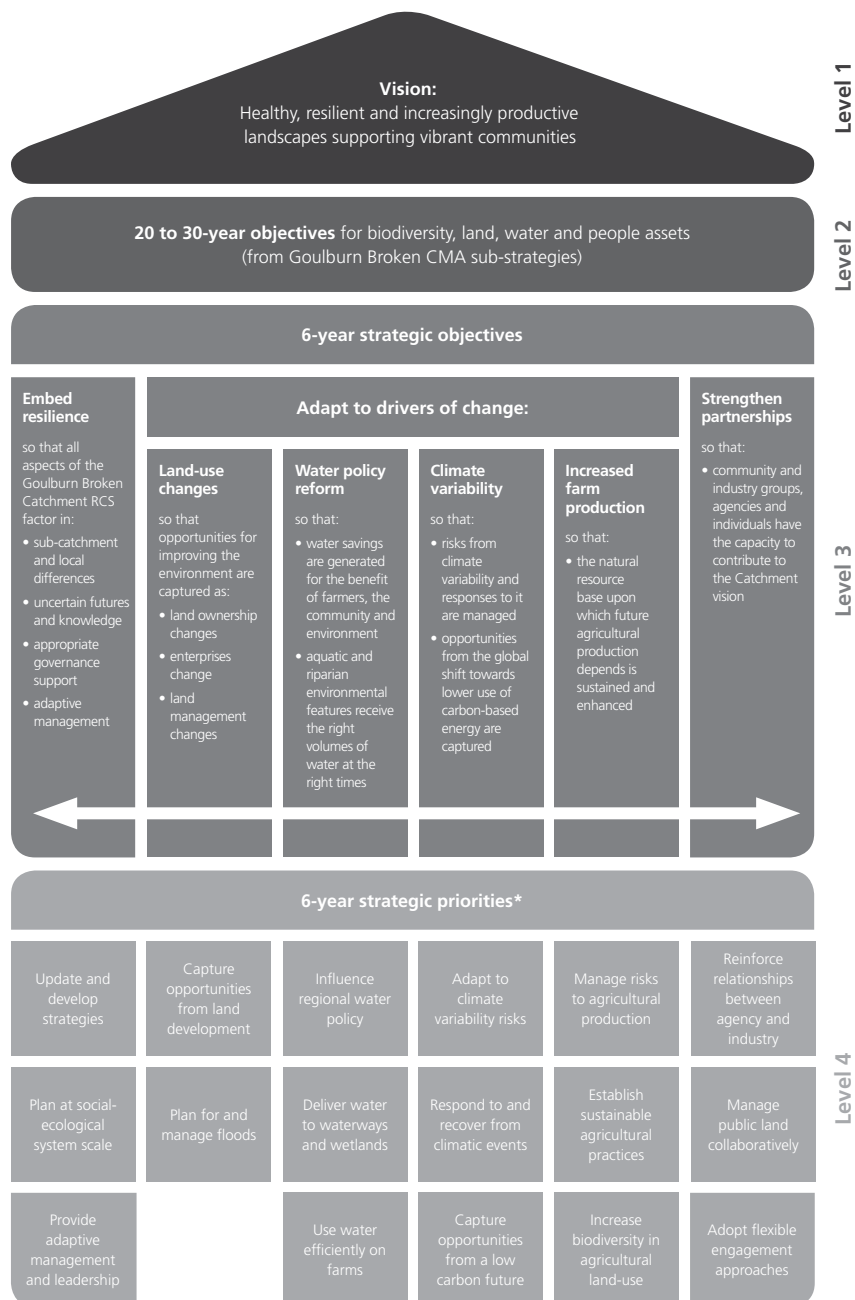
Level 2 holds the long-term 20 to 30-year biodiversity, land, water and people objectives, found in the relevant sub-strategies developed by the Goulburn Broken CMA in consultation with the Catchment community. They

guide effort by defining what is to be achieved within the different asset classes of biodiversity, land, water and people. It is assumed that achieving these objectives will position the Catchment community on the path to achieving the vision.

Level 3 is made up of six-year strategic objectives that help communicate the emphasis for management. It is assumed that achieving these objectives will enable progress towards 20 to 30-year biodiversity, land, water and people objectives.

Level 4 includes six-year strategic priorities, which describe the focus for bundles of management measures needed to address the drivers of change. It is assumed that achieving these strategic priorities will indicate achievement of strategic objectives. Management measures generally describe the tasks to be undertaken over the next six years.

The Goulburn Broken Regional Catchment Strategy 2013-2019 objectives hierarchy



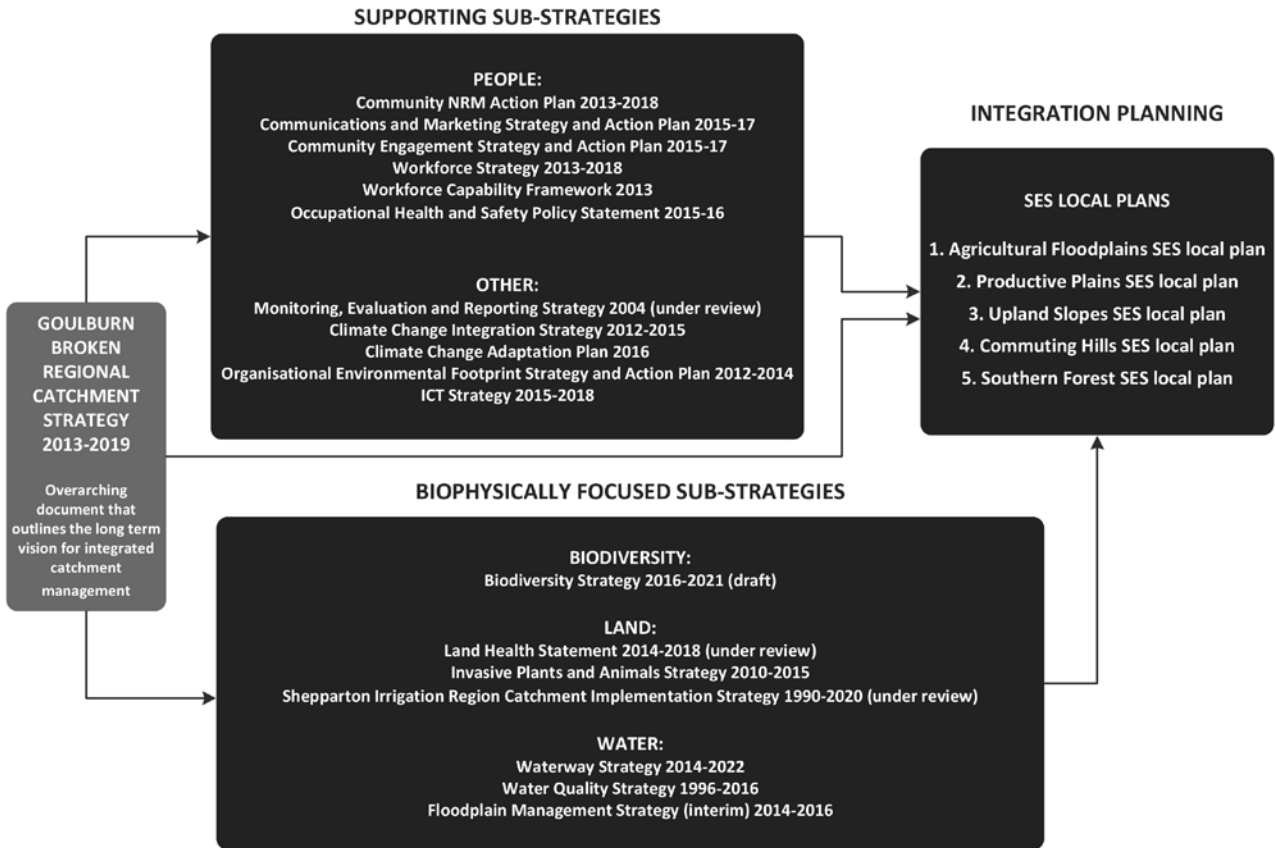
* Strategic priorities describe the focus for bundles of management measures

The Goulburn Broken CMA also uses theme-based sub-strategies to provide direction, especially for investing in onground action. The diagram below demonstrates the relationship between the Regional Catchment Strategy and sub-strategies.

Corporate Plan

The Corporate Plan is prepared annually in accordance with sections 19C and 19D of the *Catchment and Land Protection Act 1994*. It follows high-level directions set in the Regional Catchment Strategy and describes board priorities beyond requirements of government funders. It satisfies new and emerging requirements from the regional community, the Goulburn Broken CMA Board and government funders and includes annual details on investment and expected achievements within programs.

Regional Catchment Strategy and sub-strategies structure



Research and development, evaluation and adaptation

While government funding agencies require project reports on short-term performance and impacts on long-term progress, the lack of a standardised approach in catchment management reporting means that requirements change regularly and often differ between and within agencies. Against this backdrop, the Goulburn Broken CMA has held critical evaluation processes constant, such as monitoring against benchmarks, allowing an understanding of long-term progress (including impact on Catchment condition) to be gained.

The Goulburn Broken region follows a systematic process of reviewing and updating plans and strategies as set out in the Monitoring, Evaluation and Reporting Strategy, 2004. Progress is monitored regularly and sometimes strategies or plans are updated earlier than scheduled, or new strategies are developed, in response to emerging issues or critical drivers.

Integrated catchment management involves decisions based on information from different backgrounds and disciplines. The Goulburn Broken CMA's efforts to standardise outputs since 2002-03 (see page 127) and to summarise progress via long-term scorecards since 2005-06 (see page 13) are important in developing a uniform language and framework, enabling comparisons over time and helping the Goulburn Broken CMA, the community, agencies and government investors to understand the benefits and trade-offs of decisions. The framework provides a stable and ongoing approach, while government funding frameworks and language change frequently.

The linking and aggregating of site specific actions (or outputs) to long-term outcomes via the McLennan-O'Kane equation, $Outputs \times Assumptions = Outcomes$, has further fostered common understanding between disciplines and identified priority knowledge gaps. This helped drive many regional and national research and development projects over several years.

The research and development strategy for groundwater and salinity management in the Shepparton Irrigation Region has been implemented in partnership for more than two decades by Goulburn-Murray Water, Department of Environment Development, Jobs Transport and Resources research arms and the Goulburn Broken CMA, with integration of additional resources from the Department of Environment, Land, Water and Planning, the National Water Commission, Goulburn-Murray Water Connections Project, Irrigation industry groups, service providers and users and others. This partnership approach is pivotal in enabling the region to adapt quickly, with the focus of research on

improving how farmers can irrigate more efficiently and sustainably. Investment in fast-flow irrigation, pipe and riser irrigation, pressurised irrigation, automation and irrigation scheduling systems and improved utilisation of reuse systems are all examples of outcomes from this research. Although direct investment through the Goulburn Broken CMA programs has reduced the joint effort to increase knowledge is important through changed land and water use data gathering and assessment.

Research and development activities are highlighted within each investment area section of this annual report.

Investment patterns and maturity of approaches

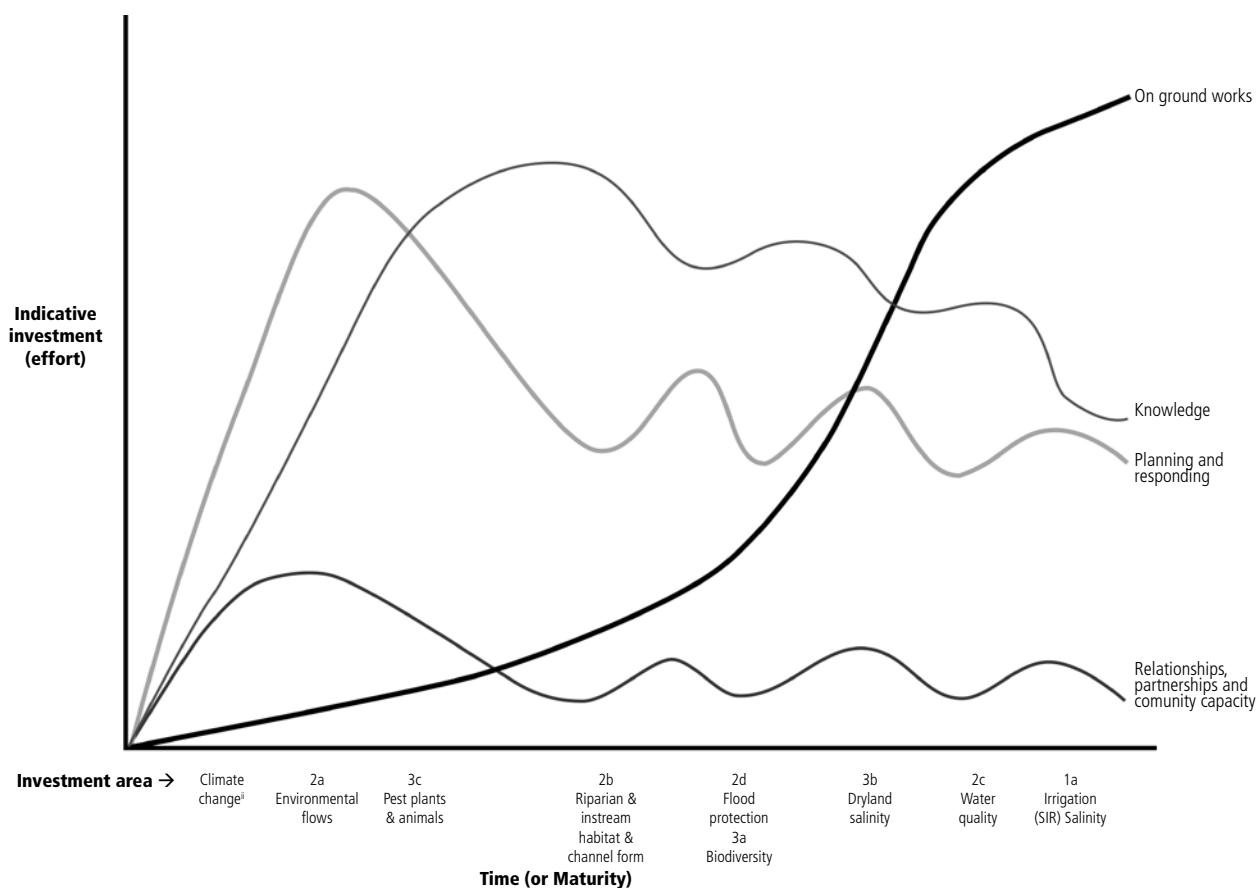
The stylised investment patterns in this graph show the Goulburn Broken CMA is at different stages of maturity of implementing approaches in its eight environmental investment areas.

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

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.

Currently, government investment dictates the levels of effort in each investment type (onground works; knowledge; planning and responding; and relationships, partnerships and community capacity) although the Goulburn Broken CMA attempts to ensure the balance of investment between the different types is appropriate for the issue and efforts are being made to broaden investment to further satisfy our strategy and community needs.

Relative investment (effort) in each investment typeⁱ



Shows relative maturity for each major Goulburn Broken CMA environmental investment area.

- i. Adapted from the Goulburn Broken CMA's From the fringe to mainstream – A strategic plan for integrating native biodiversity 2004-07.
- ii The Goulburn Broken CMA's response to climate change is integrated within each investment area, it is not a separate investment area. It is useful to show its relative immaturity on this graph.

Catchment condition

For more than two decades, comprehensive strategies have been developed and implemented for many issues including salinity, water quality, biodiversity, integrated catchment management, floodplain protection and river health, with evaluation and adaptation being critical parts of the planning cycle since 1990 (see appendix two of the Regional Catchment Strategy 'Evolution of Goulburn Broken RCS and sub-strategies').

The formal and informal systems (including for governance, community engagement and human resources) that have been developed, implemented and reviewed over two decades position the Catchment to respond rapidly to recent issues such as drought, bushfires and floods.

There is wide anecdotal recognition of the regional community as a world leader in natural resource management: the Goulburn Broken CMA is widely regarded as a responsive, leading and action-focused natural resource manager. This was most recently highlighted in feedback from Dr Brian Walker, CSIRO Honorary Research Fellow and Chair of the Board of the International Resilience Alliance who commented that the Goulburn Broken Regional Catchment Strategy 2013-2019 was '...an excellent document that illustrates how well you guys have grasped complex systems and how to deal with them. It is way ahead of most NRM planning'.

Natural resource management challenges

Major challenges include 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.

These challenges are being exacerbated by changes in climate. Recent climate events include:

- 2002-2009 extreme drought: exceptionally low stream flows and historically low water allocations. In combination with federal environmental policy and farm demographic structure, it led to unprecedented irrigated dairy industry restructure.
- 2009 bushfires: covering 185,000 hectares (seven per cent) of the Catchment, with 190 kilometres of vegetation along major rivers burnt. This has changed patterns of settlement in some areas.
- 2010, 2011 and 2012 floods: while improving the condition of floodplain systems, these floods may change patterns of settlement in some affected areas.
- 2014 bushfires: covering approximately 27,800 hectares in the Goulburn Broken catchment – approximately 9,700 hectares in the Wunghnu-Numurkah region, approximately 4,800 hectares in the Kilmore area (total area burnt was approximately 26,800 hectares), approximately 5,000 hectares at Creighton's Creek, approximately 2,600 hectares at Stewarton and approximately 5,700 hectares in the Boweya/Lake Rowan region.

Long-term strategy implementation progress

Refer to 'Background' and 'Long-term scorecard' (that rates progress against strategies under investment areas) on page 13.

2015-16 performance

Embedding resilience

All new Goulburn Broken sub-strategies either approved, eg. Climate Change Adaptation Plan or under development, eg. the Shepparton Irrigation Region Land and Water Management Plan and the Biodiversity Strategy, during 2015-16 have embedded the resilience approach into the plans development through actions aligned to SES's or the identification of thresholds and tipping points.

A broad range of engagement has and continues to occur, to develop local plans for each of the broad geographic areas identified in the RCS.

All Local Plan are now easily accessible on WeConnect (<http://weconnect.gbcma.vic.gov.au/>) (with the exception of Agricultural Floodplains which will align with the Shepparton Irrigation Region Land and Water Management Plan release). They can be viewed in a web-based format or printed. The new format provides case studies which are contributing to the implementation of the Plan and an indication of progress at an SES scale. Community can comment and add cases studies to reflect what is important to them.

Engagement of traditional owners in local planning has been strengthened through the Goulburn Broken Indigenous Consultation Group.

The paper 'Building resilient pathways in transformation when 'no one is in charge': insight's from Australia's Murray Darling Basin' was published in the Ecology & Society journal. This paper further highlights the CMAs leadership in the utilisation of resilience in NRM planning.

A partnerships with RMIT, CSIRO and other CMA's in Victoria has been developed to further investigate adaptation planning and the role that it can play in supporting local SES planning in the Catchment.

Strengthening Partnerships

Three CMA staff attended the Resilience Planning Community of Practice Meeting in Beechworth in November 2015. This forum provided NRM planners from around Australia with the opportunity to engage in professional development about innovation and design practices to support NRM as well as sharing information on implementation of resilience in catchment planning. The Goulburn Broken CMA provided a presentation on the Shepparton Irrigation Region Adaptation Pathways trial which was well received. Adaptation Pathways is somewhat theoretical at this point in time and the workshop enabled us to promote our thinking and gain support for the approach from other NRM organisations. This resulted in the CMA presenting at the June 2016 NRM Knowledge Conference on the approach.

The Goulburn Broken CMA continues to promote partnerships across the catchment through the Partnership Team, The Goulburn Broken Indigenous Consultation Group, Landcare Chairs Forum, Regional Landcare Facilitator Steering Committee and SIRPPIC. The SES Coordinators across the catchment also play a role in identify partnership opportunities.

Organisational Performance Excellence Review

The Goulburn Broken CMA undertook an independent evaluation of performance and capability against the 'Performance Excellence Guide for NRM Organisations, 3rd Edition'. The review involved a semi-structured approach to the collection of information through discussions with members of the board, senior management team, staff and a cross-section of external stakeholders with 22 individuals external to the Goulburn Broken CMA interviewed.

Importantly, the review also involved an assessment of Goulburn Broken CMA's performance against the Australian Government's draft 'Performance Expectations for Regional NRM Organisations'. This assessment was informed by a self-assessment report prepared by GB CMA and was able to validate Goulburn Broken CMA's self-assessment commentary and ratings, with no major gaps identified. Key findings from the independent review included:

- Improvements have been achieved across all Components contained within the NRM Excellence Guide and that Goulburn Broken CMA is among the leading NRM organisations in a number of areas nationally.
- Governance structures and processes are well-developed and mature.
- There has been a focus on building a strong values-based culture within the organisation and there is a high level of respect for the CEO and management team amongst staff and external stakeholders.
- GB CMA continues to have a strong focus on building and maintaining relationships with community groups in the region and plays a key role in facilitating networking across groups.
- Improvements to internal information and data systems have been made, with further scope to streamline and standardise organisation-wide practices such as records and project management.
- Goulburn Broken CMA continues to have a strong people-focus and the need to continue to develop the capability of its people is reinforced by a comprehensive 'Workforce Strategy'.
- Goulburn Broken CMA has achieved strong working relationships with a range of partners that work well together collectively but there is scope to clarify respective roles and accountabilities with individual partners.
- Goulburn Broken CMA is considered to be meeting investor expectations at state and national levels.

Progress against the 2013-19 Goulburn Broken RCS supporting sub-strategies

Note: Progress against the strategic objectives of the Regional Catchment Strategy is summarised under Delivery against the Regional Catchment Strategy on page 6.

Plan or strategy	Summary of plan development and implementation in 2014-15	Further details
Corporate plan	Corporate Plan key performance indicators were satisfied appropriately.	Key performance indicator progress report page 88.
Biophysically focused sub strategies		
Biodiversity Strategy for the Goulburn Broken Catchment 2010-2015	The Biodiversity Strategy for the Goulburn Broken Catchment 2010-2015 is the current step in the journey of improving the resilience of ecosystems so that they can continue to provide habitat for flora and fauna and provide ecosystem services for more immediate human needs such as the filtering of water, the pollinating of crops and the provision of aesthetically pleasing places to live and play. The strategy is in the process of being reviewed.	See investment area 3a – Biodiversity page 56.
Land Health Statement 2012	The purpose of the Draft Land Health Statement is to outline the direction for the Land Health Program and its accompanying activities in the Goulburn Broken catchment as described in the Goulburn Broken Regional Catchment Strategy. The Land Health Statement is currently being updated with the Land Health Strategy to guide investment from 2016	See investment area 3b – Land health page 64.
Goulburn Broken Invasive Plants and Animals Strategy 2010-2015	Prevention and eradication of new incursions remains the highest priority and additional effort is being invested into coordinating community projects that target established species ensuring high levels of stakeholder participation.	See investment area 3c – Invasive plants and animals page 68.
Shepparton Irrigation Region Land and Water Management Plan 2016-2020	A land and water management plan is required for all designated irrigation areas of Victoria to protect land and water resources that underpin irrigated agriculture and regional growth. The plan includes priorities for agencies, community and individual landholders to see the region grow in a sustainable way. Vision and purpose: The Shepparton Irrigation Region community leads Australia in producing food in harmony with the environment. The purpose of the plan is to support and grow the natural base that enables agriculture, biodiversity and people to jointly flourish. The purpose will be achieved by committing to long-term goals for five critical regional attributes: water availability, water quality, watertables, native vegetation extent and farm and food processor viability. This plan is currently in draft, pending finalisation.	See investment area 1 – Sustainable irrigation page 33.

Plan or strategy	Summary of plan development and implementation in 2014-15	Further details
Goulburn Broken Waterway Strategy 2014-2022	The development of this strategy is a statutory requirement under the <i>Water Act 1989</i> (Section 190) and also fulfils the statutory requirement for developing management plans for Heritage Rivers in accordance with the <i>Heritage Rivers Act 1992</i> . The Goulburn Broken Waterway Strategy 2014-2022 identifies key threats to community values and provides recommendations to influence the future management of waterways in the catchment.	See investment area 2 – River and wetland health page 43.
Goulburn Broken Catchment Water Quality Strategy 1996-2016	The Goulburn Broken Catchment Water Quality Strategy focuses on managing the nutrients Phosphorus (P) and Nitrogen (N) to reduce the incidence of blue green algal blooms. This strategy is currently under review, achievements to date are being assessed along with identification of major social, political and environmental changes that may influence water quality. The goal of the strategy is to '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.' It should be noted that this strategy is a surface water quality strategy only. This strategy is currently under review.	See investment area 2 – River and wetland health page 43.
The Regional Floodplain Strategy (interim) 2014-2016	The Regional Floodplain Strategy (Interim) provides the strategic focus for the management of flooding risks across the Goulburn Broken catchment. This interim strategy was primarily prepared to provide the basis for a 3 year rolling plan of priority flood investigations to undertake in the catchment. The strategy is to be reviewed over the next 12-15 months following the release of the Statewide Floodplain Management Strategy.	See investment area 2d – Floodplain management page 52.
Supporting sub strategies		
Community NRM Plan 2013-2018	Aligned to the Community articulated Vision and Goals, the Plan outlines the actions that the Goulburn Broken CMA will undertake and support to deliver on two of the key strategic priorities of the GB RCS, that is 'Strengthening Partnerships' and 'Embedding Resilience'. Embedding resilience is a significant step in helping individuals, communities and organisations achieve their goals in the face of ongoing change.	See Community engagement page 18.
Communication and Marketing Strategy 2015-17 and Community Engagement Strategy and Action Plan 2015-17	The strategies were reviewed and updated to reflect development of the Goulburn Broken Regional Catchment Strategy 2013-2019; findings from the 2012 Wallis CMA Awareness Survey and subsequent Action Plan (developed late 2012); changes in Victorian and Commonwealth government natural resource management funding and priorities. Latest update followed the February 2016 Board Strategic Workshop and further consultation with the board in June 2016.	See Community engagement page 18.
Workforce Strategy 2013-2018	Internal strategy to guide development and delivery of the range of human resources and workplace objectives to ensure the right capability, culture and workplace to enable the operations of the Goulburn Broken CMA. Priorities identified in the strategy is annual workforce planning built into the broader business planning cycle and a focus on leadership development.	See Human resources page 70.
Workforce Plan and Capability 2013-18	Part of the annual business cycle to forecast workforce needs to ensure appropriate staffing mix with the necessary capability to ensure current and future delivery of business objectives.	See Human resources page 70.
Occupational Health and Safety Policy Statement 2015-2016	Annually reaffirms management commitment to Occupational Health, Safety and Wellbeing through adoption of a planned and systematic approach.	See Occupational Health and Safety page 70.
Goulburn Broken CMA Climate Change Integration Strategy 2012-2015 and Climate Change Adaption Plan 2016	The Climate change integration strategy was finalised in 2012 and implementation is underway. The Goulburn Broken CMA undertook major climate change planning activities funded through the Australian Government. The work resulted in a Climate Change Adaption Plan to better integrate climate change adaptation and support the implementation of the RCS.	See Climate change page 29.
Organisational Environmental Footprint Strategy and Action Plan 2012-2014	The Organisational Environmental Footprint Strategy and Action Plan has not yet been reviewed.	See Environmental footprint page 75.

Plan or strategy	Summary of plan development and implementation in 2014-15	Further details
Goulburn Broken Information and Communication Technology Strategy 2015-2017	The Information and Communication Technology Strategy outlines how the Authority will continue to use ICT to enable, support and service community, partners and staff to deliver our roles and responsibilities to achieve both the Authority's operational obligations and our strategic objectives efficiently and effectively. The strategy is being implemented.	See Governance page 77.
Integration planning		
SES Local Plans (Commuting Hills, Upland Slopes, Southern Forests and Productive Plains)	Local Plans have been developed to communicate the priorities and actions supporting the local community as it responds to changes in land use, water policy reform, climate and farm production. Local Plans have been developed to recognise the people living and working in each part of the Catchment are best placed to prioritise the activities needed to build the resilience of the region's critical ecosystem services.	These plans will be updated annually and are available on WeConnect (http://weconnect.gbcma.vic.gov.au/).

What's next?

Implementation of the Goulburn Broken Regional Catchment Strategy 2013-2019 will continue to be the primary focus of the Goulburn Broken CMA in 2016-17. At the half way point of its life, a mid-term review will be undertaken in 2016-17 to assess the Goulburn Broken RCS in terms of: performance and learning to date; any new approaches, information and technologies which need to be considered; and any aspects or issues that are no longer relevant. The review will be forward-looking and be one of the first main inputs in the RCS renewal. Input will be sought from a range of partners and the broader catchment community through a range of mechanisms including workshops and an online survey.

There will continue to be a focus on the review of sub-strategies to ensure alignment with Regional Catchment Strategy objectives and the incorporation of the resilience approach, including social ecological systems. The review and implementation of sub-strategies have been critical in Goulburn Broken Catchment decision-making for over two decades. Because the context behind each sub-strategy varies and in continuously changing, sub-strategies are renewed according to their own context, independent of the over-arching RCS renewal cycle. Sub-strategies are developed in consultation with government and community organisations and individuals, providing details for investment plans and priorities. In 2016-17, sub-strategies that will be reviewed, or a review finalised include the Land Health Statement 2012, Biodiversity Strategy for the Goulburn Broken Catchment 2010-2015, Shepparton Irrigation Region Land and Water Management Plan 2016-2020 and the Goulburn Broken Floodplain Management Strategy (interim) 2014-2016.

The Goulburn Broken CMA will continue to provide input into the finalisation of Victorian Government strategies including Protecting Victoria's Environment – Biodiversity 2036 and Water for Victoria. Where aligned to the objectives of the Goulburn Broken Regional Catchment Strategy, the Goulburn Broken CMA will seek to respond to relevant enquiries held by the Australian or State Government, such as the Victorian Government's inquiry into the Control of Invasive Animals on Crown Land and the Productivity Commission's draft reporting into the Regulation of Agriculture.

The Goulburn Broken CMA will commence the delivery of a \$2 million (over four years) project, funded by the State Government, to implement the Victorian Government's Our

Catchments, Our Communities – Integrated Catchment Management in Victorian 2016-2019. A key focus of this investment will be the development of a integrated catchment management project developed with partners and community that will support the implementation of the Regional Catchment Strategy 2013-2019. This project will focus on delivering targeted on-ground works in two priority landscapes (as identified by community and agency partners) to address the identified critical thresholds.

By contributing to the actions of Our Catchment Our Communities, this investment will also support the achievement of the Goulburn Broken Regional Catchment Strategy 2013-2019, in particular the achievement of the strategic objectives Embed resilience and Strengthen Partnerships, while also contributing to the achievement of several of the six year strategic priorities aligned to the drivers of change identified in the strategy including climate variability (change) and increased farm production.

The focus of business improvement in 2016-17 will be based on the outcomes of the Organisational Performance Review undertaken in October 2015 within the context of implementing the Regional Catchment Strategy and of continuous improvement initiatives undertaken by staff during the year. The four key areas of focus will be:

- Articulating the clear planning framework that aligns the high level GB CMA strategic documents to individual performance plans (with associated communication throughout the organisation).
- Defining and clarifying accountability for all partners, building on the existing Goal Attainment Scaling evaluation methodology in place through the Partnership Team.
- Reviewing board governance processes to be considered with a view to improving overall efficiency and effectiveness by addressing aspects including meeting frequency, level of detail of reports presented to the board and ways of reducing overall costs (resources) associated with running the board.
- Implementing a CMA consistent-wide Continuous Improvement Framework (including broader use of process mapping).

Climate change

Compiled by Kate Brunt and Melanie Haddow

Government investment

Climate change crosses all investment areas, programs, strategies and actions. In 2015-16, the Australian Government continued to invest in the Regional NRM Planning for Climate Change in the Goulburn Broken NRM region project.

Major strategic references

- Goulburn Broken CMA Climate Change Position Paper 2007
- Goulburn Broken CMA Climate Change Integration Strategy 2012
- Victorian Climate Change Adaptation Strategy 2013
- Climate Change Adaptation Plan for Natural Resource Management in the Goulburn Broken Catchment 2016

Background

Climate change is a key issue impacting on the resilience of the Catchment's natural resources and therefore requires a response by key NRM agencies such as the Goulburn Broken CMA. The interactions between climate, natural resources, industries and communities are complex, interconnected and difficult to communicate and respond to. Projections for the future climate in the Murray Basin region will see average temperatures continue to increase in all seasons. By late in the century (2090), less rainfall is projected during the cool season with high confidence. There is medium confidence that rainfall will remain unchanged in the warm season. For the near future natural variability is projected to dominate projected change. Even though mean annual rainfall is projected to decline, heavy rainfall intensity is projected to increase with high confidence along with harsher fire-weather (Timbal, B et al. 2015. Murray Basin Cluster Report. CSIRO and Bureau of Meteorology, Australia). All potential interactions between climate and natural resources need to be considered in climate change adaptation planning. This requires complex modelling, strategies and adaptive management to deal with uncertainty. In recognition of this, climate variability is a 'driver of change' in the Goulburn Broken Regional Catchment Strategy 2013-2019.

It is important to have strategies in place for responding to climate change. Terrestrial and freshwater ecosystems are considered to be most vulnerable to the effects of climate change. Agricultural industries will also need to adapt to a changing climate if they are to be viable in the long term. The Goulburn Broken CMA aims to be a leader in assisting the community and natural environment in adapting to climate change.

The Goulburn Broken CMA's policy statement on climate change is:

'In dealing with climate change and the likely impacts, the Goulburn Broken CMA will focus on adaptation strategies to increase catchment resilience; greenhouse gas sequestration activity (eg. carbon brokering) will be engaged for the purpose of assisting adaptation responses; and mitigation initiatives led by local government will be actively supported.'

The Goulburn Broken CMA is implementing this statement via its Climate Change Integration Strategy 2012-2015, which aims to:

- integrate climate change into the Goulburn Broken CMA's programs
- improve understanding of climate change
- pool and attract resources
- build catchment resilience into sequestration activities
- support community mitigation and
- minimise Goulburn Broken CMA's footprint.

To support the implementation of the Climate Change Integration Strategy the Goulburn Broken CMA has developed a Climate Change Adaptation Plan for NRM. This Plan:

- Identifies priority landscapes for climate change adaptation and mitigation in the context of improving the resilience of natural resources
- identifies options for change adaptation and mitigation, including carbon sequestration, with a focus on priority landscapes
- identifies risks to catchment processes from carbon sequestration activities and mitigation actions.

The Goulburn Broken CMA is a member of the Victorian CMA NRM Planning for Climate Change Forum that has been in operation since 2013. The Forum is now supported by a part-time climate change coordinator, housed at the Goulburn Broken CMA. The Forum, through its coordinator, is actively working with the Victorian Government to influence and embed the recently-developed regional climate change adaptation plans and strategies into State policy development. The Forum is also supporting a number of projects, including investigating the carbon storage potential of freshwater wetland systems, progressing Adaptation Pathways Planning and developing a Catchment Carbon Offsetting Model in partnership with the Department of Environment, Land, Water & Planning and water authorities.

Catchment condition

Currently, the catchment condition is considered to be poor. Under climate change scenarios the trend in general will be for decreasing condition as climate change will negatively affect the functioning of systems in the catchment.

Biodiversity

Climate change is anticipated to have a negative influence on the condition of biodiversity. Reduced water availability and increased temperature will drive how biodiversity responds to climate change. Predicting how populations, species and communities will respond is challenging as each is likely to react differently. Almost all biodiversity will be affected by climate change but some areas of the Catchment will be more affected – alpine areas and freshwater systems are likely the most vulnerable. Climate change is anticipated to exacerbate existing pressures on biodiversity condition, primarily relating to habitat loss, resulting in flora and fauna being unable to move through

fragmented landscapes, increasing the risk of extinction through elevated inbreeding and subsequent loss of sub-populations.

In response to loss of habitat, revegetation projects are being implemented to increase connectivity across landscapes. Revegetation is anticipated to be beneficial to biodiversity. Planting large areas of native species will result in increasing native vegetation extent to connect and protect existing native vegetation remnants, allowing species to more easily move across the landscape. Strategic planning is required to ensure that limited funds result in positive outcomes.

Land

Climate change is anticipated to generally have a negative effect on soils and production.

Climate change is likely to affect the distribution and viability of agricultural enterprises such as cropping and grazing because of extreme weather and climate events and changes in the distribution of pests and diseases.

Most farmers are cognisant of the projected changes and impacts posed by climate change to their land and business. Currently, the most obvious change is expressed through seasonal variability in rainfall, both in amount and seasonality of rainfall. The Beyond SoilCare project, funded by the Australian Government's National Landcare Programme, is working with farmers to adapt to and mitigate climate change through mechanisms such as

improving ground cover management, both through grazing and stubble management, to protect soil and improve its condition to increase resilience to seasonal variation in rainfall and temperature. In a grazing setting, improving ground cover management most often involves enhancing perennial grass cover, including native species and litter cover. So at the same time as enhancing water infiltration and water holding capacity of soil, practices that increase and protect ground cover also contribute to increased soil carbon storage.

Water

Climate change will particularly affect water supply, use and management. The interactions of environment, water policy and use, community desires and increased unpredictability of the amount, seasonality and distribution of water are complex. Climate change is anticipated to lead to new pressures through changes in rainfall and snow regime, reduced average runoff and increased air and water temperature, resulting in increased evaporation rates.

Reforms put in place may help to mitigate these effects to some degree. Issues such as wetland management through artificial watering, changes in groundwater extraction and river health will all be affected by climate change.

Most indicators of water condition were assessed to be following a negative or neutral trend (the latter reflecting NRM program outcomes and water policy reforms). Climate change is projected to exacerbate pressures on the condition of water.

Long-term strategy implementation and 2015-16 performance

Progress towards the Goulburn Broken CMA Climate Change Integration Strategy 2012 is outlined below:

Outcomes	Goals	2015-16 Progress
Integrate climate change into Goulburn Broken CMA programs	100 per cent of all sub-strategies include climate change analysis and actions as they are renewed or developed.	On target – Climate change has been considered in the development of the Biodiversity Strategy and the Regional Catchment Strategy. The Waterway Strategy was reviewed and climate change has again been considered. The Goulburn Broken CMA has developed the Climate Change Adaptation Plan for NRM in the Goulburn Broken Catchment which aims to further incorporate climate change into NRM Planning. The Biodiversity Strategy is currently under review and is incorporating much of the current thinking around climate change adaptation planning and climate change projections outlined in the Climate Change Adaptation Plan.
	80 per cent of biophysical projects include contributions to the Climate Change Integration Strategy's purpose in funding bids and reporting by 2015.	On target – Biophysical projects funded through the Australian and State Governments continue to contribute to these goals, through the implementation of on-ground activities including, soil, biodiversity, riparian and wetland restoration projects.

Outcomes	Goals	2015-16 Progress
<p>Improve understanding of climate change</p>	<p>Ensure adequate climate change information is available to add value to planning and investment decisions.</p>	<p>On target – The Climate Change Adaptation Plan provides a strong basis for decision making, identifying priority areas for climate change adaptation activities based on the most recent science and climate change adaptation planning processes.</p>
	<p>Help grow the capacity of our partners in understanding and responding to climate change.</p>	<p>On target – The Climate Change Adaptation Plan is a useful tool to grow the capacity of our partners in understanding climate change; the Department of Environment, Land, Water & Planning, The Goulburn Broken Greenhouse Alliance and local government have been involved in the development of the plan.</p> <p>More than 70 engagement activities were undertaken in the development of the Climate Change Adaptation Plan, enabling a range of partners to increase their understanding of climate change adaptation planning.</p> <p>The Goulburn Broken CMA remains a member of the Goulburn Broken Greenhouse Alliance which provides a forum to share information and increase the understanding of the effects of climate change.</p>
	<p>Improve the Goulburn Broken CMA's knowledge of potential impacts of climate change by initiating or partnering one climate change research project each year.</p>	<p>On target – This year the Goulburn Broken CMA have partnered with the Department of Environment, Land, Water & Planning and other CMAs across Victoria in a project to increase the understanding of the carbon storage capacity of freshwater wetland systems and, in turn, the impact of wetland disturbance on carbon sequestration.</p>
	<p>Develop a quantitative measure that determines the contribution to the Climate Change Integration Strategy's purpose by 2015.</p>	<p>On target – The work undertaken in the development of the Climate Change Adaptation Plan provides an opportunity to assess how NRM works undertaken within the region are contributing to climate change adaptation.</p>
<p>Pool and attract resources</p>	<p>Source at least \$2 million of new funds through climate change avenues for the Goulburn Broken CMA and partners by 2015.</p>	<p>Exceeded target - \$7.2 million has been sourced through Australian Government funds. This includes the Biodiversity Fund and the Regional NRM Planning for Climate Change Fund.</p>
	<p>Increase the ability of organisations across the catchment to attract climate change funding, by partnering six climate change related projects led by other organisations by 2015.</p>	<p>On target – the Goulburn Broken CMA has supported the Goulburn Broken Greenhouse Alliance in three projects and has also partnered with:</p> <ul style="list-style-type: none"> – RMIT to investigate Adaptation Pathway techniques – Deakin University to understand carbon storage capacity in Victorian freshwater wetlands – the Department of Environment, Land, Water & Planning to investigate Catchment Carbon Offsetting models.
<p>Build catchment resilience into sequestration activities</p>	<p>Ensure 100 per cent of carbon sequestration activities undertaken by the Goulburn Broken CMA take into account and align with standards to promote resilience of the catchment by 2015.</p>	<p>On target – All projects undertaken through the Biodiversity Fund align with the CMA's standards and promote resilience. No further opportunities through the Emissions Reduction Fund have been identified as yet. However, the Victorian CMAs Regional NRM Planning for Climate Change Forum, in partnership with the Department of Environment, Land, Water & Planning and water authorities, will be investigating opportunities for a model to achieve multiple outcomes from carbon offsetting.</p>
	<p>Encourage other government agencies and industry to take into account and align with standards to promote resilience of the catchment.</p>	<p>On target – The Regional NRM Planning for Climate Change in the Goulburn Broken Region project provides the base information to engage with government and industry. The Victorian CMAs Regional NRM Planning for Climate Change Forum is lobbying the Emissions Reduction Fund developers to consider broader outcomes from the Fund.</p>

Outcomes	Goals	2015-16 Progress
Support community mitigation efforts	Partner five community climate change projects/organisations by 2015.	On target – The Goulburn Broken CMA has partnered with the Goulburn Broken Greenhouse Alliance on three projects and projects with community NRM groups.
Minimise the Goulburn Broken CMA footprint	Implement the 2012-14 Reducing our Footprint targets and actions.	See Environmental footprint Section page 75.
	Update and further develop the Reducing our Footprint Action Plan for 2015-18.	See Environmental footprint Section page 75.

Included below are additional activities that have occurred mainly through other Goulburn Broken CMA programs.

- participation in the Murray Basin Cluster Stream 2 climate change research project as Cluster Leader
- membership of the Goulburn Broken Greenhouse Alliance.

Community engagement

The Goulburn Broken CMA continued to support the Goulburn Broken Greenhouse Alliance. The Goulburn Broken Greenhouse Alliance is implementing an 'Agricultural transformation under climate change' project which will provide vital planning information for the CMA and partners.

Planning and responding

Climate change planning activities that the Goulburn Broken CMA embarked on in 2013 continues, supported by funding from the Australian Government. This work has informed the development of a Climate Change Adaptation Plan for NRM to identify the major impacts of climate change to the catchment's natural resources. It outlines priorities for climate change adaptation and provides information to inform regional NRM planning for climate change. The Plan aims to maximise opportunities for carbon bio sequestration and climate change adaptation activities in the Goulburn Broken Catchment.

What's next?

The next year will see the implementation of the Climate Change Adaptation Plan, including embedding information into Goulburn Broken CMA project planning systems, identifying key projects in priority areas for climate change adaptation and advocating the use of regional climate change NRM plans in the development of Victorian and Australian government policy development.

The Climate Change Integration Strategy will be reviewed and updated, informed by the Climate Change Adaptation Plan.

The Goulburn Broken CMA will continue to support the Victorian CMAs Regional NRM Planning for Climate Change Forum, the Victorian CMA state-wide Climate Change Coordinator, currently hosted by Goulburn Broken CMA, the Goulburn Broken CMA Climate Change Coordinator and associated projects.

Actions

Considerable work has been undertaken since 2013 to understand the impacts of climate change and develop a process for integrating climate change into the Goulburn Broken CMA planning frameworks, including:

- review of the Goulburn Broken CMA's regional NRM planning framework to understand and assess how climate change has been considered
- broad assessment of how climate change may influence landscape processes and the condition and value of regional assets and social-ecological systems using a Drivers, Pressure, State, Impacts, Response model
- assessment of the vulnerability of the Catchment's natural resources to climate change
- development of a Spatial Assessment Tool to assist with identifying areas within the Catchment that are vulnerable to climate change and therefore a focus for adaptation management
- review and incorporation of new climate change predictions into planning tools
- kitchen table discussions with community members about climate change
- trial of the Adaptation Pathways process



Investment area 1 – Sustainable Irrigation

Compiled by: Carl Walters, Helen Murdoch, Rebecca Caldwell, Rebecca Pike (DEDJTR), Terry Hunter (GMW), Mark Potter (GMW), Megan McFarlane, Gillian Mason, Simon Casanella, Jenny Wilson

This year's sustainable irrigation report has been expanded significantly to better match the scope of natural resource management issues addressed, reflecting the Shepparton Irrigation Region Land and Water Management Plan (SIRLWMP). The report continues to include Shepparton Irrigation Region salinity (watertables and River Murray salinity), which is shown again as investment area 1a in the Goulburn Broken CMA's long-term scorecard on page 13.

Catchment condition, long-term strategy implementation progress and annual performance ratings

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	3 year trend
Catchment conditionⁱⁱⁱ (of critical attribute)						
Water availability	Water volumes available for agriculture	Poor	Low	Good	Medium	↓
	Water volumes available for the environment					↑
						Overall
Water quality	Phosphorus loads in rivers and streams Blue-green algal blooms Salt disposed to River Murray	Very poor	Low	Satisfactory	High	↑
Watertables	Watertable salinity and depths Salinity of environmental features	Poor	High	Satisfactory	High	↑
Native vegetation extent	Native vegetation cover	Poor	Medium	Poor	Medium-High	●
Farm and food processor viability	Farm sector production, \$ Food processor production, \$	To be determined				
Long-term strategy implementation progress						
Outputs (scheduled between 1990 and 2016; see bar chart page 42)		n.a.	n.a.	Below	High	↓ ^{iv}
Annual performance						
Overall (considering all of below)		-	-	On target	High	●
Farm	2015-16 performance delivery of outputs (against targets set as a result of funds received)	not applicable	not applicable	On target	High	↑
Environment				On target	High	↓
Drainage				not funded	High	↓
People				On target	High	●
Governance and partnerships				On target	High	●

i. See Appendix 1 for notes on the analytical framework, including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of the situation in 1990.

iii. The reference point is taken to be the time just prior to European settlement, when the Catchment is considered to have been in excellent condition.

iv. Parallels government funding trend. Trend is declining due to funding levels being below strategy requirements – especially for drainage.

Government investment, \$000

2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
35,367	14,713	13,645	21,922	●

i. Forecast based on the Corporate Plan 2016-17.

Major strategic references

Strategies for many disciplines, such as biodiversity and river management, prepared by the Goulburn Broken CMA and state and national organisations, are integrated in the Shepparton Irrigation Region Land and Water Management Plan 1990-2020 (the final update, 2016-2020 is nearing completion). Murray-Darling Basin Authority and Victorian government water and agricultural strategies are particularly pertinent references.

Background

The Sustainable Irrigation Program delivers onground works, mostly in the Shepparton Irrigation Region (SIR) of the Goulburn Broken Catchment. Implementation is supported by the community-based SIR People and Planning Integration Committee (SIRPPIC), which evolved from the Shepparton Irrigation Program Advisory Group during 2014-15.

Salinity has been the biggest natural resource challenge in the SIR over the last three decades, but as part of the current update of the SIRLWMP, the focus is evolving from salinity alone to all attributes critical to the functioning of the SIR as a system of people and nature (a 'social-ecological system'): water availability, water quality, watertables, native vegetation extent and farm and food processor viability. The updated plan is consistent with Goulburn Broken CMA's move to local area planning as part of its resilience approach.

Although the SIR's five 'critical attributes' have been considered previously, the updated plan further

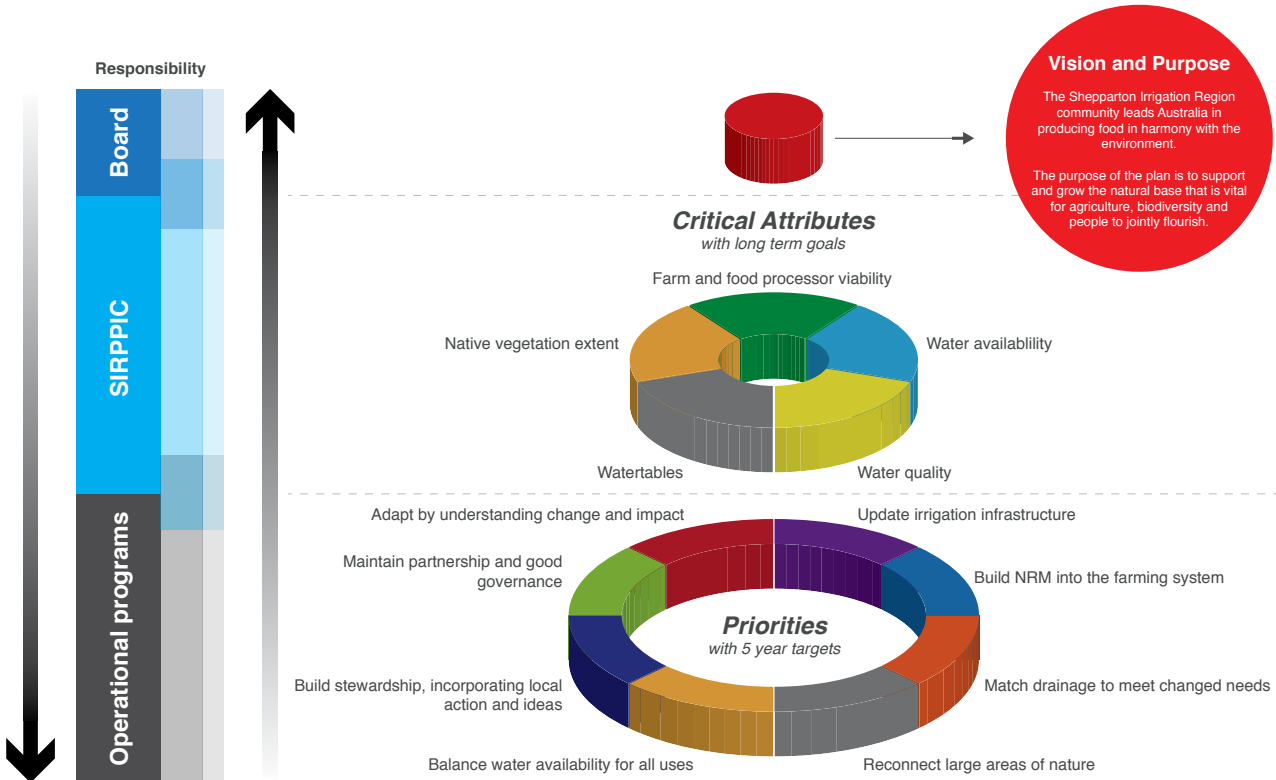
concentrates efforts when planning and implementing works. Long-term targets for the SIR's five critical attributes have been compiled (and set where there were gaps) as part of updating the SIRLWMP.

Reporting on SIR salinity, including land salinisation within the SIR and River Murray salinity, is now included under 'watertables'. Further salinity management in the Goulburn Broken Catchment is reported under investment area 3b – Land health (including dryland salinity), page 64.

SIRLWMP's programs were adjusted in 2016 to implement integrated priorities identified in the updated SIRLWMP, with the aim of achieving increased multiple benefits from single actions. The five programs are:

- farm
- environment
- drainage
- people
- governance and partnerships.

SIRLWMP planning hierarchy showing how vision is achieved by implementing integrated priorities



Long-term goals for critical attributes

Long-term goals for critical attributes have two parts: the general direction (shown below) and detailed quantitative targets (which consider threshold levels and are listed in the SIRLWMP). Goals and targets are subject to change as new knowledge emerges.

Watertables: To manage shallow watertables so that soil zones at risk are not salinised or waterlogged.

Water availability: Ensure that water is available to match the needs of the environment, agriculture and social consumption when required.

Native vegetation extent: Increase the extent of native vegetation within focus landscapes (native vegetation quality is included as a 5-year target under the priority 'Reconnect large areas of nature').

Water quality: To maintain and improve water quality for the range of beneficial uses (values).

Farm and processor viability: To help farm and food-processors be viable, by supporting the natural base in a way that helps them adapt quickly to changing agricultural markets and demands.



Catchment condition

The 1990 condition is rated according to our understanding in 2016 of what the conditions were like in 1990. This format is consistent with the Goulburn Broken CMA's annual report: the format is expected to evolve towards a greater emphasis on high-level risks to the system, considering the associated threshold-oriented objectives (as indicated by the quantitative targets listed in the updated SIRLWMP).

Catchment condition ratings for the SIR, with summaries of overall risks to the SES ⁱ

Critical attribute	Catchment condition				
	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	3 year trend
Water availability	Poor	Low	Good/Poor	Medium	●
<p>The GB CMA recognises the Murray, Goulburn and Campaspe Rivers as 'working rivers', aiming to sustain environmental values while meeting economic and social needs. The ratings of good/poor in 2016 are from the perspectives of environment/consumption. River flows have changed markedly since previous generations dammed the rivers. A sophisticated approach to sharing water between consumptive, environmental and recreational users has been developed through collaborations over many years. Rules secure the supply of good quality water for irrigated food production and food-processing industries, placing the region at a significant advantage. Increased environmental needs, population growth, changing markets and agricultural demands drive the need to better understand how to optimise the use of available water, especially when conditions are dry, as they largely have been since 2000. Trading rule changes in recent years is resulting in less controlled irrigation-water transfers between regions. Environmental water continues to be delivered to key wetlands and river reaches, as per environmental water management plans and Victorian Environmental Water Holder and Commonwealth Environmental Water Holder seasonal watering plans. Irrigation deliveries in the SIR reduced from about 1200+ GL in the 1990s to about 800 GL now, with an associated reduction in the irrigation footprint. Irrigation deliveries could be further reduced due to drought, water trade and industry changes.</p>					
Water quality	Very poor	Low	Satisfactory	High	↑
<p>There is continued uncertainty about the SIR's impact on River Murray salinity, particularly with the significant changes in the SIR that impact on River Murray salinity that need to be accounted for. MDBA modelling suggests the impact of reduced tail-water fraction (less dilution flows from drainage) is large, but the actual salt entering river is significantly reduced. While groundwater salinity was one of the initial (1990) plan's key risks to farm production, assets and environmental features, salinity levels are generally below threshold levels of concern now. Salinity contributions from the region comply with targets managed under the MDBA. Targeted programs have significantly reduced nutrient loads in waterways and therefore improved water quality. The five-year rolling average phosphorus load from the Goulburn Broken Catchment is below the long-term target set in 1996, equating to a reduction of 80 per cent from the benchmark year of 1993-94. Monitoring and responses are supported by well-established inter-agency agreements and shared strategies.</p>					
Watertables	Poor	High	Satisfactory	High	↑
<p>The risks of salinisation and waterlogging have increased in recent years due to the return of wetter conditions. Watertables dropped about three metres during the millennium drought but quickly bounced back, with 170,000 hectares having a watertable within three metres of the surface in 2014. Subsequently, water tables have dropped due to the return of dry conditions. The trend of the shallow watertable rise is concerning given how long it took for watertables to drop during the drought. The increased risk is clearly linked to rainfall on a wet (irrigated) catchment and limited funding over the last decade, particularly towards surface and sub-surface drainage works, has not helped mitigate this risk. A much better understanding of watertable and salinity behaviour and risk has been gained through the sub-surface drainage program's salt water balance project: the area at risk of salinity from high watertables is much less than during the mid-1990s due to a combination of program implementation and drought. Annual August watertable maps demonstrate resource condition to a high level of confidence.</p>					
Native vegetation extent	Poor	Medium	Poor	Medium-High	●
<p>The regional landscape has been transformed since the 1880s, with more than 97 per cent of native vegetation on private land cleared for settlement and agriculture. Most remaining native vegetation is in public land reserves (such as the river red gum-dominated 28,500 hectare Barmah National Park) and corridors along waterways and roadsides. Areas of native vegetation away from these reserves and corridors are mainly isolated fragments and generally lack the shrubs, ground layers, fallen logs and other habitat elements needed to host a diversity of flora and fauna. Many local species have become extinct and others are under threat.</p>					
Farm and food-processor viability	To be determined				
<p>The region as a system is dominated by irrigated agriculture, with food production and processing being large contributors to the economy. Farmers face challenges to remain profitable in the face of a variable climate, variable domestic and world markets and increasingly expensive inputs, such as land, water, nutrients, oil, technology and skills. Industry diversity has helped develop the region's resilience to variable domestic and world markets, but this varies depending on enterprise type, with lower value enterprises under significant pressure. Larger-scale farm enterprises have emerged in an attempt to increase production and profitability. The shift in farm type, size and mix has been accompanied by a change in the region's food processing industries. Several long-established companies have either closed or been amalgamated over the last two decades, although smaller niche industries have emerged.</p>					

ⁱ References are listed in the Shepparton Irrigation Region Land and Water Management Plan 2016-20 (draft 18 July 2016).

Long-term strategy implementation progress and 2015-16 performance

Progress towards long-term strategy implementation is satisfactory in some areas, but falling behind in others (see the bar chart on page 42). All five SIRLWMP programs delivered as funded in 2015-16. Further details are provided below.

Long-term strategy implementation progress	2015-16 performance
Farm Program	
Priority: Update irrigation infrastructure, including the irrigation delivery system and farm design	
<p>The Shepparton Irrigation Region community's irrigation modernisation project, which began implementation in 2008 through the GMW Connections project and the on-farm programs from 2009, are helping to reduce salinity threats. These works are also aimed at achieving water savings for the benefit of the environment and the sustainability of irrigators.</p> <p>Water-use licensing is managed as a GB CMA, GMW, DEDJTR and DELWP partnership, ensuring that new developments meet requirements and existing irrigators minimise off-farm impacts.</p>	<ul style="list-style-type: none"> — 60% of committed whole farm plan funds awaiting public system modernisation, which will allow final decisions on farm layout to be made by landholders. — GB CMA (via Sustainable Irrigation Program) is part of various GMW Connections technical groups to align future irrigation needs with project design. — See the Farm Water Program achievement table and further details in the separate story box. — 8 water-use licences were issued for new irrigation developments. — Whole farm plan delivery continues to be reviewed and improved, including energy use, automation and reuse system size and farm business alignment.
Priority: Build natural resource management into the farming system	
<p>Progress is generally on track or ahead due to increased investment in the Farm Water Program (on-farm irrigation efficiency works) by the Australian and State governments and irrigators over the past six years. These works result in improved land management practices on irrigation properties, which will help reduce groundwater accessions and waterlogging on farms.</p>	<ul style="list-style-type: none"> — Whole farm plans on 51 properties covering 4,613 hectares were completed in the SIR, including 16 'revised modernised' plans (see separate table for cumulative figures). — 600 people were directly involved in the SIR Beyond SoilCare project and 27 landholders covering 3,000 hectares reported they had changed practices (see separate story box for further details). — Close liaison with regional stakeholders when responding to DELWP-led review of native vegetation regulations and DELWP-led draft State Biodiversity Strategy and when highlighting timber management after fires, particularly on roadsides. — Personnel from GB CMA, Goulburn-Murray Water (GMW), local governments and Aboriginal Affairs Victoria developing shared understanding of cultural heritage legislation and how it applies in the irrigation context.
Drainage Program	
Priority: Match drainage to meet changed needs, aligning it with modernised irrigation delivery	
<p>Regional infrastructure works (public drains and public groundwater pumps) continue to fall behind schedule due to revised State priorities and a significant decline in government investment over recent years.</p> <p>The SIR Drainage Strategy identifies drainage needs in intensively irrigated areas that have poor natural drainage and are within the region's long-term irrigation footprint.</p>	<ul style="list-style-type: none"> — SIR Drainage Strategy review, linked to statewide review of irrigation drainage and involving significant stakeholder consultation, approved by GB CMA board. — Modified delivery under the reviewed drainage strategy indicates a positive benefit/cost (1.3) and long-term regional benefits (additional criteria made environmental and social impacts more prominent). — Feasibility study into relocating disposal of water via public groundwater pumps from channels to drain completed, with implementation funding expected in 2016-17; stormwater drainage to channels remains a GMW risk, but preferred alternative to surface drains is not yet funded. — Further drainage harvesting considered during SIR Drainage Strategy review, but still to be progressed. — Significant contributions to MDBA's salinity management strategy (BSMS) review; GB CMA is aligning with BSMS, including reviewing its register entries.

Long-term strategy implementation progress	2015-16 performance
<p>Groundwater resources in the Goulburn Broken Catchment are managed by GMW, supported by partner agencies.</p> <p>More than 1,600 observation bores in the SIR are monitored annually by GMW, resulting in maps of shallow groundwater levels across the Murray Valley, Shepparton, Central Goulburn and Rochester irrigation areas. The maps inform plans for managing salinity.</p>	<ul style="list-style-type: none"> — Salt and water balance project developed a web-based risk-assessment tool, including information for landholders on managing rising watertables risks and the potential for land salinisation through inappropriate saline groundwater-use for irrigation and data and videos on improved understanding of broader salinity program and actions. — 2015 watertable map again showed that part of the SIR's watertables are rising. — Triggers for operating public groundwater pumps in terms of the water quality impact on receiving waterways identified to be reviewed. — Public groundwater pump program awaits higher risk weather patterns and funding, while managing existing private and public groundwater pumps.
<p>Environment Program</p>	
<p>Priority: Balance water availability for all uses</p>	
<p>The 2016 Land and Water Management Plan Review connected stakeholders, establishing a common vision and approach. The irrigated landscape's five critical attributes and associated threats direct efforts. Understanding water availability and how it aligns with farm and food processor viability and the environment is a key construct and change in emphasis from this review, informing efforts involving MDBA's Basin Plan and water-sharing in Victoria's north.</p> <p>A continued emphasis on understanding the regional environment's water needs creates the appropriate balance and integration with irrigation and other needs.</p> <p>The Goulburn Broken Water Quality Strategy is now 20-years old and is being reviewed.</p>	<ul style="list-style-type: none"> — Understanding thresholds or tipping points with irrigated water supply for agricultural production is the focus of a key piece of work. — Integrated landscape planning and management of Corop Lakes, such as Gaynors Swamp, remains a priority, while connectivity of other Agricultural Floodplains wetlands, is pursued via joint efforts through GMW Connections. — Water quality continued to be monitored, especially flows from important contributors, such as drainage catchments, in accordance with the Irrigation Drainage MoU; a review of irrigation-related runoff risk indicated significantly reduced risks due to improved practice and reduced water availability and changed outfall from channels; drainage systems are now almost 'no rain, no-flow'. — GB Water Quality Strategy review is informing broader statewide water quality reviews related to the State Environment Planning Policy.
<p>Priority: Reconnect large areas of enhanced nature</p>	
<p>Much of the region's remaining native vegetation is found along waterways, roadsides and in and around wetlands, providing some continuous habitat that act as key thoroughfares for wildlife to move through the landscape. Important objectives of environmental flows include provision of water to protect and enhance this native vegetation.</p>	<ul style="list-style-type: none"> — Kotupna-Wyuna focus landscape used as a pilot for working with partners to target integration of native vegetation into whole farm plans. — A study into the feasibility of a regional native vegetation offset scheme, including potential income opportunities for landholders and/or a voluntary contributions scheme began. See breakaway box for further details. — 9.9 hectares of riparian areas along priority reaches and wetlands were revegetated, with 6.9 km of rivers and streams fenced.

Long-term strategy implementation progress	2015-16 performance
People Program	
Priority: Build stewardship, incorporating local action and ideas	
<p>People and their relationship with the region's natural resources is critical to the success of the SIRLWMP over the next five years. Stewardship of natural resources and the environment is being encouraged. Community leaders are promoting the region within and beyond its boundaries and manage issues of community concern in partnership with agencies and policy-makers.</p>	<ul style="list-style-type: none"> — Updated SIRLWMP has a new style: Part A is for a broad audience and Part B provides details; Part A provides the basis for a regional prospectus and marketing campaign. — Priority areas for adapting the environment to climate change and biosequestration (identified in GB CMA's NRM Climate Change Adaptation Plan) began to be explored; GB CMA supports the Goulburn Broken Greenhouse Alliance, which focuses on climate change mitigation through local governments. — Water stewardship project involved continuing discussion with the Water Stewardship Board to align water quality efforts. — SIRPPIC members are part of regional water discussions, including linking to the Victorian Water Plan and SIRPPIC is seen as a significant group for irrigation. — Stakeholders involved with various working groups and workshops in responding to Victoria's Water Plan; Senior Combined Partners Forum well attended.
Governance and Partnerships Program	
Priority: Maintain partnerships and good governance	
<p>The community-based SIRPPIC evolved from the Shepparton Irrigation Program Advisory Group and includes skills, geographic and industry-based representatives from the local community, GB CMA, GMW, Moira Shire Council, Department of Economic Development, Jobs, Transport and Resources (DEDJTR), Goulburn Valley Environment Group.</p> <p>The Local Government Agricultural Floodplains Reference Group (LGAF) had its 25th year of operation. The group seeks workable and collaborative solutions to improve efficiency and effectiveness of natural resource management delivery by participating organisations in the Shepparton Irrigation Region. Representation includes Moira Shire Council, Campaspe Shire Council, Greater Shepparton City Council and GMW Connections, led by Goulburn Broken CMA who convenes and jointly funds the group.</p>	<ul style="list-style-type: none"> — Greater than 80% attendance at SIRPPIC meetings, with working groups realigned to new strategic directions; greater than 90% attendance at the four local government reference group meetings. — Annual work plan prepared. — Wayne Tennant Cadetship instigated, supporting opportunities for young Traditional Owners (TOs) - first recipient, Ash Hurd; increased alignment with TO plans; TO water literacy promoted; TOs involved with numerous RiverConnect projects. — Co-funded projects remain a strength, such as: RiverConnect; groundwater management and monitoring; water quality partnerships; GMID land use survey (with Dairy Australia, Murray Dairy, DEDJTR, GMW and GMW Connections, NCCMA and local government); Municipal Catchment Coordinator (with Moira, Campaspe and Greater Shepparton municipalities). — MDB SMS compliance needs met. — Case studies completed on best practice and returning water to the environment through on-farm modernisation. — GB CMA working with DELWP to resolve tree cover data issues.
Priority: Adapt by understanding change and impact	
<p>Information from a range of 2014-15 reviews was used to prepare the fifth SIRLWMP update. The adaptive process, which has been in place since the SIRLWMP was developed in the late 1980s, was strengthened by more explicitly adopting resilience principles in the latest update.</p>	<ul style="list-style-type: none"> — SIRPPIC oversaw development of updated SIRLWMP. — Thresholds for SIR's five critical attributes were defined, with goals and targets (where possible). — SIRPPIC evaluated risk of breaching thresholds of critical attributes and established responses for 2016-17; each implementation program then developed an actions list that will become their works program as funding is finalised; the reviewing of critical attributes, their thresholds and the changing context and risks is now part of the annual process.

Farm Water Program

The Farm Water Program (FWP) successfully completed Round 3 in 2015-16 with 135 of 136 projects delivering around 14,000 hectares of water savings works on farms. The works generated an estimated 16 GL of water savings; 9 GL was transferred to the Commonwealth Government for environmental purposes and 7 GL was retained on farms to increase productivity.

Overall the FWP has delivered more than 500 projects that have generated more than 60 GL of water savings and over 55,000 hectares of works for funding of around \$130 million. Feedback from irrigators continues to be very positive despite (or perhaps because of) concerns around water availability in recent drier conditions.

Round 4 projects are underway now, but this round was significantly undersubscribed due to issues around increasing water market prices and concerns around water availability. Round 5 registrations are being called for currently with a priority call component that will see shovel-ready projects fast tracked through the application and assessment process to enable irrigators to get started on works in spring 2016.

FWP consortium partners continue to pursue opportunities for further funding beyond Tranche 3 of the Victorian Farm Modernisation Project (Round 6 of the FWP). Discussions are centred on the impacts of water markets on uptake, linkages with GMW Connections and future demand for farm irrigation upgrades.

The FWP, on behalf of the region's irrigators and consortium of partners, was a finalist for the National Banksia Awards this year, which is a wonderful acknowledgement of the work the region's irrigators have put into water savings works over the last five years.

Annual achievements are recorded by Goulburn Broken CMA's Farm Water Program section.

Native vegetation offsets

Following a 2013 scoping study, a feasibility study of a regional native vegetation offset scheme and/or a voluntary contributions scheme was started. The study identified significant problems with pursuing a regional over-the-counter based scheme in the current regulatory climate. A facilitator model, which provides landholders opportunities to be involved in the regulatory market and a voluntary contributions scheme, where, for example, investors can achieve local and regional natural resource management gains, continue to be developed as part of the study.

Beyond SoilCare

In 2015-16, 600 people were directly involved in the SIR Beyond SoilCare project, funded by the Australian Government's National Landcare Programme and 27 landholders covering 3,000 hectares reported they had changed practices.

Project activities publicised in various media included workshops, discussion groups, field days, demonstration trials, symposiums, visitor tours and whole farm planning soil discussions.

Topics included composting, nutrient and groundwater salinity risk management, holistic farming and cropping, co-operatives and rapid assessment of soil health.

Over 70 activities were delivered by DEDJTR and Goulburn Broken CMA staff and through Goulburn Murray Landcare Network and Goulburn Valley Environment Group's GV21 projects. Other organisations participating in activities included Dairy Australia, Kilter and Madowla Park. The number and range of Beyond SoilCare activities showed how effective community and industry groups can be in engaging farmers and the broader community in soil management.

Demonstration trials continue to be an important part of SoilCare delivery. The ongoing composting demonstration trail revealed better top-soil structure where compost was applied, although there was little visible difference in crop growth. Heavy-vehicle traffic during compost application on wet soil was the likely cause of soil compaction at depth, probably offsetting the compost's benefits. A field day on the effective use of compost on-farm raised awareness of soil compaction and how it could be avoided.

Four new demonstration trials were initiated in 2016 for delivery by June 2017, investigating maize yield variability, compost banding, the effect of compaction and amelioration in irrigated soils and management of climate change impacts on perennial horticulture.

Evaluation remains important and the Beyond SoilCare Health Impact Survey was again undertaken to report on the project's success and help plan for future delivery. Ninety past event participants responded to a survey, with 74 per cent reporting they had changed practices because of the project. The survey also tested the project's SoilCare Goal Attainment Scale as a repeatable, objective measure of practice change in soil management.

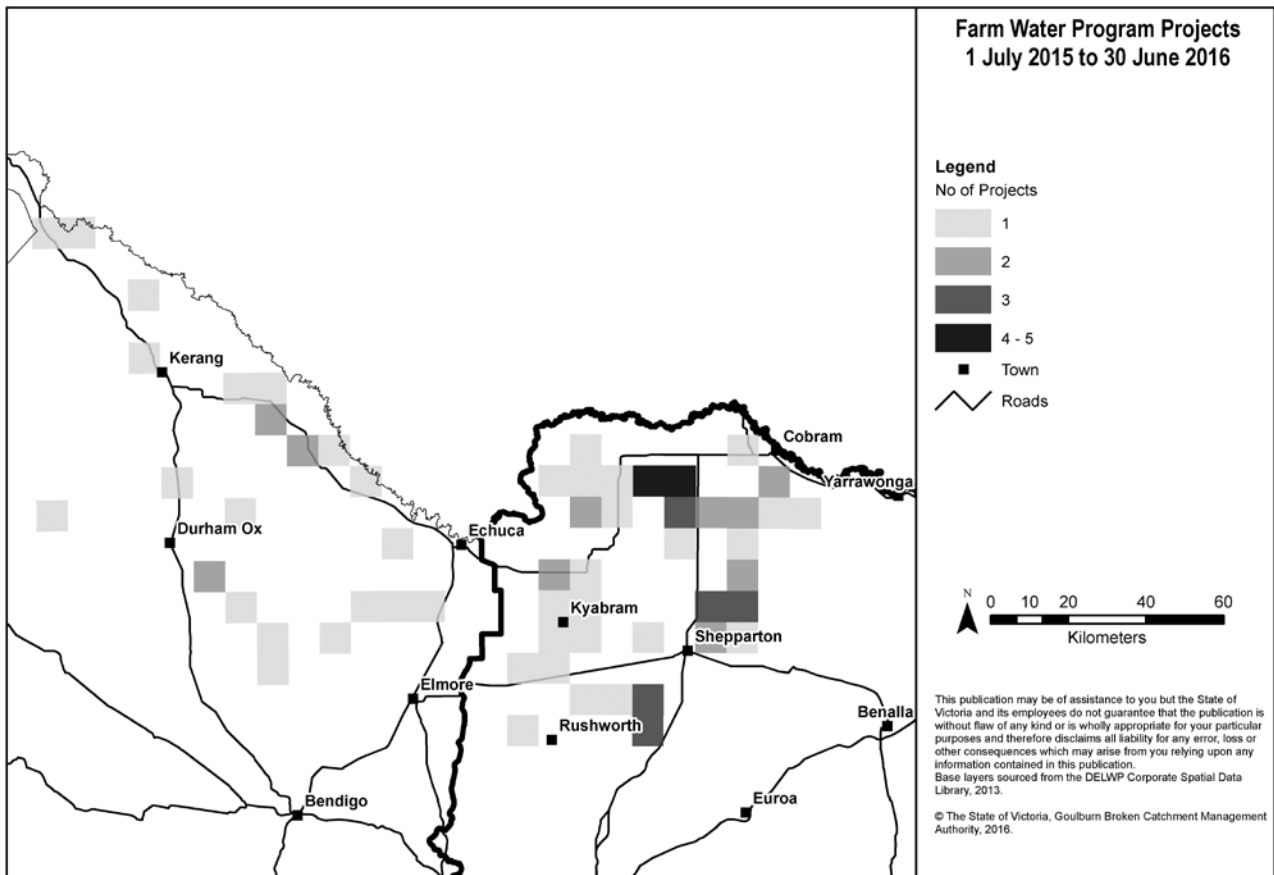
Ratings



Farm Water Program achievements, whole-of-life to date (July 2010 to June 2016) ⁱ

Action		Whole of Farm Water Program ⁱⁱ			Shepparton Irrigation Region ⁱⁱⁱ		
		Achieved	Target	Achieved, %	Achieved	Target	Achieved, %
Laser levelling ^{iv}	ha	14,292	14,613	98	9,393	9,412	100
Farm reuse systems ^v	no.	246	248	99	172	113	152
Farm reuse systems	ha	11,916	12,175	98	7,357	7,360	100
Gravity channel surface irrigation	ha	12,356	12,600	98	9,580	9,833	97
Pipe and riser irrigation	ha	14,041	14,266	98	7,127	7,353	97
Farm delivery channel upgrade ^{vi}	km	10	10	100	8	8	100
Irrigation scheduling systems	ha	1,234	1,318	94	1,003	1,003	100
Pressurised irrigation systems - micro or drip ^{vii}	ha	44	178	25	44	44	100
Pressurised irrigation systems - sprinkler	ha	1,844	1,845	100	1,545	1,545	100

- i Annual achievement records are held by Goulburn Broken CMA's Farm Water Program section.
- ii The Farm Water Program covers parts of the Goulburn Broken, North East and North Central CMA areas.
- iii The Shepparton Irrigation Region is a subset of the Farm Water Program area and covers parts of the Goulburn Broken and North Central CMA areas.
- iv Until 2014-15, named 'Laser grading'.
- v Until 2014-15, named 'Drainage reuse systems'. From 2014-15 the number of new farm reuse systems installed is assumed to be: 67% of projects install a new system and 33% reconnect the project area to an existing system. In 2012-13 and 2013-14 the number of new systems was assumed to be: 100% of projects install a new system ie. new systems and extensions of existing systems were both counted as 'new systems'.
- vi Until 2014-15, two categories named 'Plastic lined channel' and 'Farm channel upgrade'.
- vii Until 2014-15, combined with 'Pressurised irrigation systems sprinkler' in one category.





Measures 2013-14, 2014-15 and 2015-16

Measure ⁱ	From funds received					
	Achieved			Target ⁱⁱ	% achieved	
	2013-14	2014-15	2015-16			
Surface water action ⁱⁱⁱ						
Laser levelling ^{iv}	ha	6,671	4,220	3,553	8,145	44
Drain – primary built ^v	km	-	-	-	-	
Drain – community built	km	-	-	-	-	
Area protected by surface drains	ha	-	-	-	-	
Farm reuse systems installed ^{vi}	no.	64	9	51	9	567
Farm reuse systems installed ^{vi}	ha	3,258	344	1,742	1,079	161
Gravity channel surface irrigation	ha	3,315	537	1,858	1,228	151
High flow drain diversion - dams built ^{vii}	no.	-	-	-	-	
High flow drain diversion - dams built ^{vii}	ML	-	-	-	-	
High flow drain diversion - high nutrient water removed ^{vii}	ML					
Pipe and riser irrigation	ha	3,382	448	732	602	122
Irrigation scheduling systems	ha	154	196	269	233	115
Farm delivery channel upgrade ^{viii}	km	0	0.7	0	0.7	0
Pressurised irrigation systems - micro or drip	ha	0	9	0	4	0
Pressurised irrigation systems - sprinkler	ha	705	516	160	272	59
Irrigation systems - improved ^{ix}	ha	7,330	4,745	3,713	-	
Sub-surface water action						
Groundwater pumps – public installed (new)	no.	-	-	-	-	
Groundwater pumps – public installed (new)	ha	-	-	-	-	
Groundwater pumps – private installed (new)	no.	-	-	-	-	
Groundwater pumps – private installed (new)	ha	-	-	-	-	
Volume of water pumped - increase	ML	-	-	-	-	
Area protected by groundwater pumps	ha	-	-	-	-	
Tile drains - installed	ha	-	-	-	-	
Salt disposal entitlements used (SDE)	EC	3.2	3.2	3.2	-	
Planning for works action						
Whole farm plans - new	no.	44	49	35	140 ^x	
Whole farm plans - new	ha	4,224	4,143	2,576	-	
Whole farm plans - modernised	no.	35	22	16	^x	
Whole farm plans - modernised	ha	4,403	2,572	2,037	-	

ⁱ Measure include actions and outcomes. Several measures were included in this list for the first time from 2014-15, although they were listed elsewhere before. Many actions primarily aimed at achieving salinity targets contribute to other targets, such as those for water quality and biodiversity. Fencing remnant vegetation and revegetation achievements are shown in the table on page 67.

ⁱⁱ Targets are adjusted as funding is confirmed. Figures do not include the part of the Farm Water Program that is outside the Shepparton Irrigation Region. 2015-16 targets have been calculated using 50 per cent of the contracted areas for the entire Round 3 of the Farm Water Program which runs over two years.

ⁱⁱⁱ Surface water management enables the removal of excess rainfall runoff from irrigated lands, alleviating soil salinity. As part of an overall management plan for nutrients, nutrients loads are managed by collecting and reusing water from drains. Nutrient loads are monitored against the Goulburn Broken Water Quality Strategy nutrient target for drains.

^{iv} Assumptions: 2013-14 = Farm Water Program's SIR onground achievements (3,736) + 60 per cent of area put under Whole Farm Plans [new (4,224) + modernised (4,403) - Farm Water Program's SIR onground achievements (3,736)]; 2014-15 & 2015-16 = Farm Water Program's SIR onground achievements (478 & 1,963) + 60 per cent of area put under Whole Farm Plans [new (4,143 & 2,576) + modernised (2,572 & 2,037) - Farm Water Program's SIR onground achievements (478 & 1,963)]. Target = Farm Water Program's SIR target (1,253 & 1,253) + 60 per cent of [area to be put under Whole Farm Plans (110 & 140) x average area of Whole Farm Plans (91) - Farm Water Program's SIR target (1,253 & 1,253)].

^v Fencing and laneways are relocated along primary drains to control stock. Drains are also hydro-mulched and seeded to provide vegetative cover on bare batters.

^{vi} Reuse dams allow for the collection of high nutrient run-off and re-irrigation, reducing the water and nutrient loads leaving the farm. In 2014-15 the number of new farm reuse systems installed is assumed to be: 67 per cent of projects install a new system and 33 per cent reconnect the project area to an existing system. In 2012-13 and 2013-14 the number of new systems was assumed to be: 100 per cent of projects install a new system ie. new systems and extensions of existing systems were both counted as 'new systems'.

^{vii} High flow diversion. None completed because of no demand and previous dry conditions.

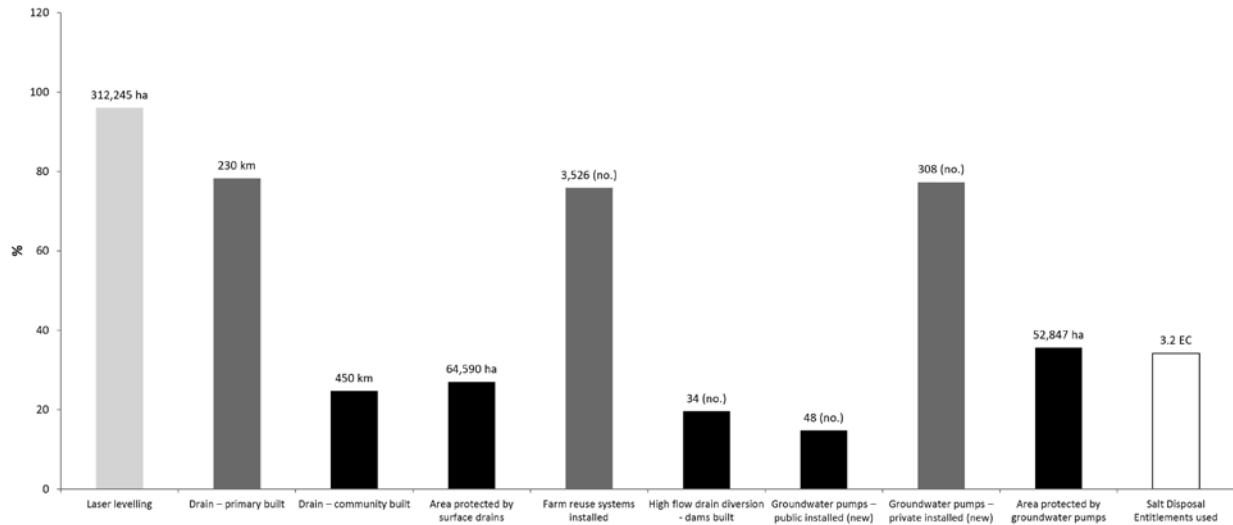
^{viii} Measured directly from WFPs. This refers to the on-farm delivery system (to get water to the irrigation bays) rather than the area serviced. Includes earthen channels that have been rock or plastic lined or replaced with pipe, with each means assumed to achieve the same water savings.

^{ix} Assumptions: From 2014-15, area improved = laser levelling (which itself includes an assumption based on whole farm plan area - see footnote iv) + pressurised irrigation systems (micro or drip + irrigation); 2013-14 = Farm Water Program's SIR onground achievements (laser grading + overhead spray + drip; 3,736 + 567 + 0) + 70 per cent of area put under Whole Farm Plans [new (4,224) + modernised (4,403) less Farm Water Program's SIR onground achievements].

^x Combined target for the number of new and modernised whole farm plans was 140 in 2015-16.



Shepparton Irrigation Region Catchment Implementation Strategy's 1990-2016 target achieved, %ⁱ (achievements listed on top of each bar)



i. The method to set the cumulative target was modified from 2012-13 to be: 1990-2020 plan target multiplied by the number of years since 1990 divided by 30.

What's next?

Relationships and partnerships with stakeholders, including local community NRM groups, industry groups and local, state and national government agencies will remain critical to implementing the SIRLWMP. Program priorities for 2016-17 include:

Drainage

- Make information on salinity accessible to farmers.
- Assess the feasibility of relocating drainage water disposal via public groundwater pumps from channels to community surface drains.
- Review triggers for operating public groundwater pumps in terms of water quality impacts of receiving waters and risks to groundwater levels.
- Review drainage research and the Goulburn Broken Water Quality Strategy 1996-2016.
- Pursue the reinvigoration of the SIR Drainage Strategy.

Environment

- Improve integration of native vegetation, including paddock trees, into whole farm plans and extend the targeted approach beyond the Kotpuna-Wyuna Focus Landscape.
- Complete and pilot implementation of the Goulburn Broken Native Vegetation Offset and Management Scheme.
- Identify environmental thresholds in the Goulburn River and beyond.
- Manage the Corop Lakes system in an integrated way.

Farm

- Continue implementing the large-scale Farm Water Program and continue to identify opportunities for further water-use efficiencies.
- Maintain a targeted approach by updating understanding of the many pressures and changes that agricultural industries are experiencing, including

changing land use and water-use patterns, impacts of (and responses to) climate change, regulation changes, regional wellbeing and social changes, private and public sector service delivery.

- Respond to major water plan changes, such as the Water for Victoria Plan, considering issues such as water leaving the Goulburn-Murray Irrigation District.
- Stage 2 review of whole farm planning products and processes at a statewide level to reflect the changing irrigation industry.
- Work with service providers and industry to investigate management options and extend information to farmers, such as soil-health farm trials.

People

- Develop a clear, factual description of key water projects (the water literacy project).
- Establish a regional voice and link with decision-makers at state and federal levels.
- Engage the irrigation community in the broader irrigation and environmental water delivery process.
- Develop the next generation of regional leaders via mentoring and other means.

Governance and partnerships

- Contribute to the Murray-Darling Basin Authority's Basin Salinity Management Strategy.
- Respond to the Water for Victoria Plan.
- Respond to the State Environment Protection Policy (Waters of Victoria) Review.
- Align with delivery of GMW's Connections Project.



Investment area 2 - River and wetland health and floodplain management

Investment areas: 2a Environmental flows, 2b Riparian and instream habitat and channel form and 2c Water quality (nutrients) in rivers.

Compiled by: Mark Turner, Simon Casanelia, Geoff Earl, Daniel Lovell, Annie Squires, Keith Ward, Tim Barlow, Meegan Judd, Jim Castles, Jo Wood, Christine Glassford, Corey Wilson, Geoff Brennan, Sue Kosch, Kirsten Roszak and Lisa Duncan.

Annual performance

Decision focus ⁱ	Examples of evidence used to inform decisions	2016	Certainty of rating
2a Environmental flows	Outputs (against targets set as a result of funds received)	On-target	High
2b Riparian and instream habitat and channel form	Outputs (against targets set as a result of funds received)	On-target	High
2c Water quality (nutrients) in rivers	Outputs (against targets set as a result of funds received)	On-target	High

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

Government investmentⁱ, \$000

2013-14	2014-15	2015-16	2016-17 ⁱⁱ	Trend
6,083	3,940	5,626	3,014	●

i. Includes all three investment areas under River and wetland health (2a Environmental flows, 2b River and instream habitat and channel form and 2c Water quality (nutrients) in rivers).

ii. Forecast based on Corporate Plan 2016-17.

Major strategic references

- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
- *Aboriginal Heritage Act 2006*
- *Australian Heritage Commission Act 1975*
- *Building Regulations 1996*
- *Catchment and Land Protection Act 1994*
- *Environment Protection and Biodiversity Conservation Act 1999*
- *Flora and Fauna Guarantee Act 1988*
- *Mineral Resources (Sustainable Development) Act 1990*
- *Native Title Act 1993*
- *Planning and Environment Act 1987*
- *Subdivision Act 1988*
- *Water Act 2007*
- *Water Act 1989 (Victorian)*
- *Water Amendment Act 2008*
- The State Environment Protection Policy (Waters of Victoria) 2003
- Goulburn Broken Regional Catchment Strategy (GB CMA 2013)
- Goulburn Broken Regional Floodplain Management Strategy (Interim) 2014-2016
- Goulburn Broken Water Quality Strategy 1996-2016 (GB CMA 1996)
- Goulburn Broken Waterway Strategy 2014-2022 (GB CMA 2014)
- Murray-Darling Native Fish Management Strategy (MDBA 2004)
- Ramsar Convention on wetlands 1971
- Review of Goulburn Broken Water Quality Strategy 1996-2016 (Brian Garrett and Associates 2001)
- The Murray-Darling Basin Plan (MDBA 2012)
- Victorian Floodplain Management Strategy (DELWP 2016)
- Victorian Waterway Management Strategy (DEPI 2013)
- www.thelivingmurray.gov.au
- Yorta Yorta Nation Whole of Country Plan 2012-2017

Background

Three highly connected investment areas are reported in this section: 2a Environmental flows, 2b Riparian and instream habitat and channel form and 2c Water quality (nutrients) in rivers.

Rivers, floodplains and wetlands are highly valued for many environmental, social and economic reasons. They underpin our livelihoods (providing water for agriculture, commercial and domestic uses), contain significant flora and fauna habitat and have high recreational and aesthetic values. Importantly they are often central to the culture of Indigenous Australians. The water generated in the Goulburn Broken Catchment provides major benefits for Victoria and beyond, providing 11 per cent of the Murray-Darling Basin's water resources despite covering only two per cent of its area.

River and wetland health and floodplain management in Victoria is the responsibility of catchment management authorities and Melbourne Water, as described in Part 10 of the *Water Act 1989*. Catchment management authorities are considered to be the regional 'caretakers of river health'.

Riparian and instream habitat and channel form

Land that adjoins, regularly influences, or is influenced by a creek or river, is considered riparian land. Riparian vegetation is vitally important to the health of waterways as it:

- provides organic matter, a major food source for instream plants and animals
- provides essential instream habitat for many fish and invertebrates in the form of woody debris and roots
- provides stability to banks, minimising erosion
- provides shade, which protects instream plants and



animals from temperature extremes and can also control the growth of nuisance aquatic plants and blue-green algae

- traps and filters sediments and nutrients from runoff, protecting and improving water quality.

Riparian vegetation is also an important part of the terrestrial landscape. It acts as a refuge in dry times, is often the largest remnant of native vegetation in cleared catchments and acts as a wildlife corridor. The capacity of riparian vegetation to perform the functions outlined above will depend on its width, connectivity and condition.

The Goulburn Broken CMA, in conjunction with individuals, communities and agencies, undertake natural resource and community-based activities to maintain and improve riparian and instream areas. Activities include fencing, revegetation, pest plant and animal control, resnagging and monitoring.

Environmental flows

Environmental entitlements can be called out of storage as planned and delivered to streams or wetlands to protect or enhance their environmental values. Environmental entitlements are held by the Victorian Environmental Water Holder, the Commonwealth Environmental Water Holder and the Murray-Darling Basin Authority. Catchment management authorities are responsible for determining environmental water requirements of streams and wetlands, developing and submitting seasonal watering proposals to the Victorian Environmental Water Holder for consideration

and managing the delivery of environmental water in accordance with the Victorian Environmental Water Holder's Seasonal Watering Plan. Seasonal watering proposals are prepared for streams and wetlands and aim to:

- identify the environmental water requirements of the streams and wetlands in the coming year under a range of climatic scenarios to protect and improve their environmental values
- inform the development of environmental water priorities in the Victorian Environmental Water Holder's seasonal watering plan.

Where possible, the Victorian Environmental Water Holder, the Commonwealth Environmental Water Holder and the Murray-Darling Basin Authority seek to coordinate delivery and management of environmental water with managers such as Goulburn-Murray Water to maximise ecological benefits.

Water quality (nutrients) in rivers

Elevated nutrients was identified as a high priority issue for water quality in the Goulburn Broken Catchment because of its potential to contribute to excessive algal growth that can impact on social, economic and environmental values within waterways, as seen by the significant and extended blue green algae outbreak in the Murray River earlier this year. Phosphorus loads are an indicator for water quality in rivers and streams because phosphorus is a limiting factor in the development of toxic blue-green algal blooms and aquatic-weed blooms.

Catchment condition ⁱ

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Environmental flows	Water regimes of environmental features Management systems	Poor	Low	Satisfactory	Medium	↑
Riparian and instream habitat and channel form	Index of Stream Condition Management systems	Poor	Low	Satisfactory	Medium	↑
Water quality (nutrients) in waterways	Phosphorus loads in rivers and streams Blue green algal blooms Management systems	Very poor	Low	Satisfactory	Medium	●

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of the situation in 1990.

The condition of riparian and instream habitat and channel form has been impacted by past and present clearing, groundwater extraction, pest plant and animal invasion, the removal of woody debris, stock access, waterway regulation, flow diversion and urban and agricultural development.

Since 2000, condition has also been impacted by prolonged drought, fires and to a lesser extent, floods. During this time riparian and instream habitat and channel-form management has been supported by improved:

- private landholder, government and agency partnership arrangements
- onground management approaches informed by research and monitoring
- administrative, institutional and legislative arrangements, including the establishment of the environmental water reserve

- community appreciation and support of waterways values.

River and wetland condition in Victoria is assessed using the Index of Stream Condition and the Index of Wetland Condition. These measures assess factors including changes in hydrology, water quality, form, vegetation health and species diversity.

Recent Index of Stream Condition assessments (2010) of selected river reaches in the Goulburn and Broken basins indicated that most reaches are in moderate (53 per cent) and poor (21 per cent) condition, with a small proportion of reaches in very poor condition (11 per cent). About 10 per cent of reaches were assessed to be in good condition and five per cent in excellent condition. The overall condition of reaches has not significantly changed since they were last assessed in 2004.

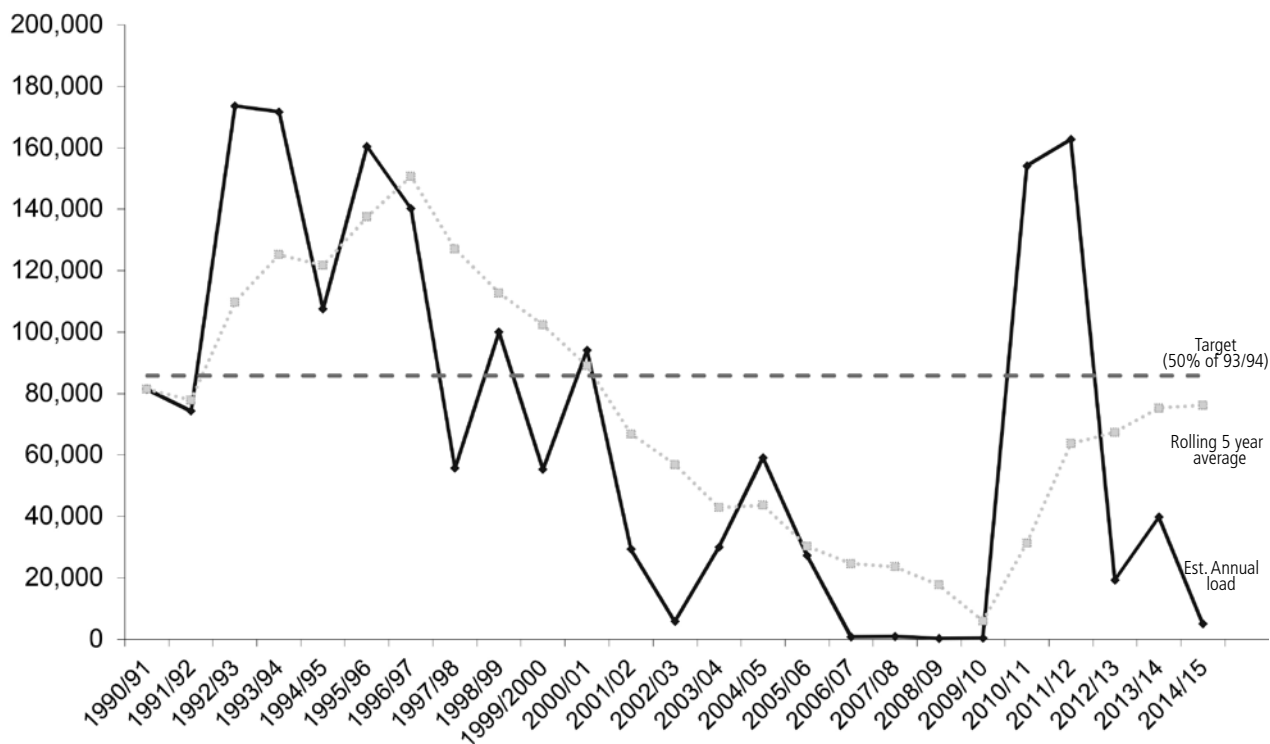


Since 2009 Index of Wetland Condition assessments have been carried out on 116 wetlands across the region. Results indicate that most are in good (38 per cent) and moderate (40 per cent) condition and a small proportion are in excellent (six per cent), poor (15 per cent) and very poor condition (less than two per cent). The results also indicate that wetlands on public land are generally in better condition than those on private land.

The five-year rolling average phosphorus load from the Goulburn Broken Catchment is below the long-term target, equating to a reduction of 80 per cent from the benchmark year of 1993-94.

Institutional arrangements to manage water quality threats continued through several regional participant forums.

Total phosphorus loads from all Irrigation Drains in the Goulburn Broken Catchment, kg/year



Long-term strategy implementation

Investment area	Strategy life	2016	Certainty of rating	Trend ⁱ
Environmental flows	2014-2022	On-target ⁱⁱ	Medium	↑
Riparian and instream habitat and channel form	2014-2022	On-target ⁱⁱⁱ	High	↑
Water quality (nutrients) in waterways	1996-2016	On-target ^{iv}	Medium	●

See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

- i. Assumed to parallel government funding trend.
- ii. Outputs (scheduled for 2016).
- iii. Outputs (tasks and works scheduled for 2016).
- iv. Outputs (tasks and works scheduled between 1996 and 2016).

The Goulburn Broken Regional River Health Strategy 2005-15 was the first attempt to combine all elements of river management under one umbrella. Actions focused on improving the condition of rivers, floodplains and wetlands to help achieve the Healthy Rivers, Healthy Communities vision set in 2003.

The second generation Goulburn Broken Waterway Strategy was completed in 2014. The strategy has close links with the 2013-19 Regional Catchment Strategy and will guide waterway and wetland programs, funding and implementation from 2014 to 2022.

The 2013 review of the Goulburn Broken Regional River Health Strategy indicated that a substantial program

of works and complementary initiatives have been implemented across the Catchment. The Catchment has experienced fires, floods and drought during the life of the strategy. The program has responded by securing funding and implementing recovery programs and initiatives.

With the assistance of partner organisations, the Goulburn Broken CMA has played a key role in delivering and managing environmental water since early 2000 to maintain and enhance ecological values of rivers, floodplains and wetlands. The table on page 46 shows the annual volume of environmental water delivered with the Goulburn Broken CMA since 2005.

Environmental water use

Wetland or stream	Volume, ML										
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Barmah-Millewa Forest (Vic)	256,500	0	0	300	1,850	184,500	184,500	2,959	195,386	0	109,351
Barmah-Millewa Forest (NSW)	256,600	0	125	0	520	243,500	243,500	0	167,700	0	328,044
Black Swamp	0	0	90	40	80	0	0	0	50	0	80
Lower Broken Creek	Goulburn River Water Quality Allowance deployed ⁱ						10,366	41,230	38,593	34,306	30,319
Upper Broken Creek	0	0	0	0	0	0	0	51	0	387	0
Broken River	0	0	0	0	0	24.2	0	0	0	0	0
Doctors Swamp	0	0	0	0	40 (trial)	0	0	0	0	0	594
Goulburn River	0	0	0	0	0	26,670	195,110	255,427	312,349	304,125	228,252
Kinnairds Wetland	0	0	426	0	400	0	0	0	179	0	696
Moodie Swamp	0	0	50	0	0	0	0	0	121	500	500
Reedy Swamp	0	0	544	500	300	0	0	0	0	0	475
TOTALS	513,000	0	1,235	840	3,190	454,694	633,476	299,667	714,378	339,318	698,264

- i. The proportion of environmental water delivered to the Victorian and NSW sides of Barmah-Millewa Forest was not formally measured. The volumes represent an estimate based on water delivery plans.
- ii. Environmental water only became available for use in the lower Broken and Nine Mile Creeks in 2010-2011. Prior to this flow was managed by: regulated and unregulated flows; redirecting Goulburn River and Murray River flows through the lower Broken and Nine Mile Creeks; and deployment of the Goulburn River Water Quality Reserve.

In recent years, the Goulburn Broken CMA has managed the delivery of environmental water to the Goulburn River, Broken Creek, Barmah Forest and a number of priority wetlands. This has been to improve water quality, promote the growth and establishment of native vegetation, promote and support waterbird and fish breeding, provide drought refuge for native fauna, provide habitat for native fish and water bugs and to reduce the growth of nuisance aquatic plants.

The Victorian Government, with support from the Goulburn Broken CMA and its partners, is increasing water availability by saving water in supply and delivery for farming through projects such as the Commonwealth Government's On-farm Irrigation Efficiency Program and the GMW Connections Project.

The Goulburn Broken CMA, in partnership with landholders and partners, continues to undertake natural resource and community-based activities to protect and improve the condition of rivers and wetlands across the Catchment. To date, over 1,000 kilometres of fencing has been erected, approximately 24,000 hectares has been treated for weeds along waterways and 312 kilometres of waterways have been opened to fish passage. More recently, the Goulburn Broken CMA has focused on resnagging waterways to improve instream habitat. Approximately 2,779 instream woody habitat pieces have been added to a number of priority waterways across the Catchment including the Goulburn River, Broken Creek, Hughes Creek, Hollands Creek and Tahbilk Lagoon.

Water quality issues identified in the Goulburn Broken Regional Water Quality Strategy focused on the impacts of nutrients and their potential to cause toxic algal blooms. The Goulburn Broken Catchment community's goal for water quality is to '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 reference points for progress towards this goal.

Opportunities to reduce nitrogen, particularly where it is

associated with phosphorus reductions, are pursued if it is cost effective. A review of the strategy was completed in 2008, highlighting a range of successes under the individual programs, including major improvements in wastewater treatment, irrigation reuse, dryland natural resource management programs and protection of riparian lands. As the strategy expires in 2016 it is currently being reviewed and consideration will be given to the need to renew it. Strategy development, implementation and review processes are closely aligned with best practices identified in the National Water Quality Management Strategy (ARMCANZ and ANZECC 1992).

2015-16 performance

Community engagement

The Broken and Goulburn Environmental Water Advisory Groups and the Goulburn Broken Wetland Management Group continued to meet and guide environmental water-use planning and complementary works. The groups are comprised of agency, stakeholder and community representatives.

The Living Murray program continued to fund a range of activities to improve the health of Barmah-Millewa Forest including the coordination of an Icon Coordinating Committee, a Technical Advisory Committee and an Indigenous Partnership Program. These groups guide the implementation of monitoring, research, works and environmental water management in the Forest. Cross-state water management continued between New South Wales and Victorian agencies and the Murray-Darling Basin Authority.

The sixth Floodplain Ecology Course was successfully held at Barmah during October. Funded by the Australian Government's National Landcare Programme, the event was managed by the Goulburn Murray Landcare Network.

The successful RiverConnect initiative, which promotes the Goulburn and Broken rivers as the heart and soul of the Shepparton-Mooroopna community, continued to be supported. A key achievement of RiverConnect was the

'Activities in the Park' program, which involved a number of free community activities including canoeing, spotlight walks and turtle education. Over 500 local school students participated in river protection and improvement works through the RiverConnect program.

Waterwatch continued to be a highly successful community education and water quality data collection program. This year more than 6,000 students participated in the Waterwatch Program, including water week and water quality and catchment education.

Goulburn Broken CMA staff presented to a variety of interest and community groups on river, wetland and environmental water management, including the 'Talking Wild Trout' Conference, the Ecoacoustics congress – Michigan, the Fairley Leadership program, Goulburn Broken Indigenous Consultation Group, Land and Biodiversity Implementation Forum and Mooroopna Kiwanis.

The reengaging with past program participants program was continued, with a total of 36 past program participants ie. landholders, were interviewed to understand their experience in a riparian and instream project with the Goulburn Broken CMA. Results have largely been positive and have also guided some areas of improvement. The survey also assessed the condition of project investment on site.

Around 300 people enjoyed the Fish Circus, which was held on the Hughes Creek in Avenel in September. The event aimed to raise awareness of threats to the endangered Macquarie perch population in Hughes Creek. Representatives from Arthur Rylah Institute, Waterwatch and Turtles Australia assisted with presentations and displays on the day.

To support the development of the Goulburn Constraints Measure Business case, the Goulburn Broken CMA with the assistance of the MDBA ran a number of open house meetings in August 2015 to inform and seek feedback from the local community on the rationale and aims of the project. Approximately 200 people attended the meetings. In January 2016, a second series of open house meetings were run to discuss and seek feedback from the local community on identified target flow rates and the costs to mitigate or offset identified impacts. Approximately 250 people attended these meetings.

Planning and responding

Strategic

The development of a second generation Goulburn Broken Waterway Strategy was completed in 2014. Key changes to the Strategy included:

- Incorporation of wetlands.
- Priority streams and wetlands and associated strategic works and activities are being presented on a social-ecological system basis ie. aligning to the Goulburn Broken Regional Catchment Strategy 2013.
- Resilience thinking is applied.
- Updated stream and wetland condition data is used.
- New roles and responsibilities in Natural Resource Management identified, eg. establishment of the Victorian and Commonwealth Environmental Water Holders to manage environmental water.

- Incorporation of lessons learnt from the drought and recent fires and floods.

Water quality (nutrients) in rivers

The Water Quality Forum continued to meet and monitored the significant low flow conditions that occurred across the year. Water quality monitoring was intensified across summer and autumn. An example action as a result of the increased effort in water quality monitoring was the translocation of native fish that took place from Rices Weir when dissolved oxygen levels fell to low levels in March 2016. A review of the 1996 – 2016 Goulburn Broken Water Quality strategy was also initiated.

Environmental flows

A Goulburn River environmental water management plan was prepared. The document is a ten-year management plan that describes the ecological and hydrological objectives of the Goulburn River and is based on both scientific information and stakeholder consultation. The plan will help inform the State Governments long-term watering plan for northern Victoria and will be used by the Goulburn Broken CMA to guide annual watering decisions.

A draft multi-year watering plan for the Goulburn River was developed. The plan establishes principles and a set of rules to guide annual environmental water deployment and reservation over successive years.

Seasonal watering proposals were prepared for the Broken Creek, Goulburn River, Barmah Forest and priority wetlands in the region in consultation with key stakeholders and partners. Seasonal watering proposals identify the environmental water requirements of a stream or wetland in the coming year under a range of climatic scenarios to protect or improve its environmental values and health. The proposals inform the Victorian Environmental Water Holder's seasonal watering plan.

As part of the Basin Plan, the Victorian Government contracted the Goulburn Broken CMA to lead regional input (community engagement and technical studies) into the development of the Goulburn River Constraints Management Business Case between May 2015 and February 2016. The business case assessed the feasibility of adding environmental water to natural flow events in the Goulburn River to increase the frequency of low level flooding along the lower Goulburn River floodplain, with the aim of improving the health of riverine ecological values. The business case also sought to assess the public and private impacts of the increased flows and the cost to government to mitigate or offset these impacts. Further information on the work undertaken including a summary of community engagement and the final business case is available on our website.

A number of technical investigations were undertaken to inform environmental water management and works including:

- An evaluation of mid Goulburn River baseflow recommendations to ensure the hydraulic habitat they provide supports their ecological objectives.
- An assessment of the composition and distribution of macrophytes along the lower Broken and Nine Mile Creeks.

- An assessment of the diversity, abundance and condition of macroinvertebrates in the mid Goulburn River, lower Broken Creek and Nine Mile Creek.
- An assessment of the hydraulic habitat along the lower Broken and Nine Mile Creeks provided by environmental flow targets.
- The identification and costing of works to improve the efficiency of environmental water deliveries to Moodie Swamp.

Monitoring

Monitoring of threatened species continued and included:

- Monitoring of the condition of native fish communities in the mid Goulburn River and Broken Creek.
- Threatened species recovery monitoring (Macquarie Perch in Holland, King Parrot, Seven and Hughes Creeks and the Broken and Yea Rivers).

A number of native fish (including a threatened Freshwater catfish) were caught, tagged and released during electrofishing surveys around recently re-snagged areas in Tahbilk Lagoon and the Goulburn River.

Effort continued to build the resilience of the Barmah Forest Ramsar site through funding from the Australian Government's National Landcare Programme. During 2015-16 a range of pest plant and animal control activities were undertaken, many by the Woka Walla works crew.

- The successful implementation of the project continues to be informed by a range of monitoring activities that measure changes to the cover and abundance of pest plants in priority vegetation communities, the number of fox baits taken, the number of pigs trapped and the number of turtle nests raided by foxes and pigs. These monitoring activities are also supported by information collected through remote cameras.

- Cabomba populations in Lake Benalla, Broken Creek, Broken River and Barmah Forest were assessed, showing effective control of this aquatic weed. Of note, Cabomba has not been recorded in Lake Benalla for over five years.

The Living Murray program continued to fund a range of activities to improve the health of Barmah-Millewa Forest including monitoring the ecological response of birds, fish, vegetation and frogs to environmental water management.

The five year Goulburn River Long-term Intervention Monitoring Program funded by the Commonwealth Government continued monitoring in the lower Goulburn River.

Monitoring focuses on native fish, macroinvertebrates, vegetation, geomorphology and ecosystem metabolism responses. Goulburn Broken CMA staff have assisted with fish, macroinvertebrates, vegetation and geomorphology monitoring activities. Goulburn Broken CMA staff have also assisted with project communication and promotion.

Input was provided into the Victorian Environmental Flow Monitoring and Assessment Program, undertaken on eight priority waterways across Victoria, including sites on the Broken and Goulburn Rivers and the Broken Creek. Monitoring of fish occurred in 2015-16. A review of six years of Victorian Environmental Flow Monitoring and Assessment Program fish monitoring data was carried out throughout the year.

Vegetation, water quality, waterbird and frog responses to environmental water were assessed at Reedy Swamp, Moodie Swamp, Black Swamp, Doctors Swamp and Kinnairds Swamp. The project was funded by the Victorian Environmental Water Holder.



Works and operations

River and wetland health Actions 2013-14, 2014-15 and 2015-16

Action	From funds received					
	Achieved ⁱ			Target	% achieved	
	2013-14	2014-15	2015-16			
Stock grazing action						
Fence riparian land (= wetland + stream/river remnant below)	ha	214	309	247	-	
Fence wetland remnant	ha	128	168	3	-	
Fence stream/river remnant ⁱⁱ	ha	87	141	244	-	
Fence stream/river remnant	km	14	70	38	30	128
Off-stream watering	no.	3	15	19	3	633
Nutrient-rich and turbid water and suspended solids action						
Stormwater management projects ⁱⁱⁱ	no.	0	0	0	0	
Instream and near-stream erosion action						
Bank protection actions	km	0.20	0.40	0.91	0.30	303
Instream & tributary erosion controlled	km	1.00	0.60	0.91	0.30	303
Changed flow-pattern action						
Environmental water use ^{iv}	ML	714,378	339,318	698,264	-	
Weed invasion action						
Weeds – aquatic weeds controlled (managed)	km	3	97	14	-	
Habitat loss management						
Rock ramp fishway	no.	2	0	0	0	
Fish barrier removal	no.	0	0	0	0	
In-stream woody habitat - snags ^v	no.	337	357	334	200	167
Surface water action^{vi}						
Drain - primary built ^{vii}	km	0	0	0	0	
Drain - community built	km	0	0	0	0	
Farm reuse systems installed ^{viii}	no.	64	9	51	9	567
High flow drain diversion - high nutrient water removed ^{ix}	ML	0	0	0	0	
Irrigation systems - improved ^x	ha	7,330	4,745	3,713	-	

- i. Achievements include those from investment areas: Environmental flows, Riparian and instream habitat and channel form and Water quality and complementary investment areas (SIR salinity, Land health including dryland salinity and Biodiversity). Outputs delivered through each fund source are available from the Goulburn Broken CMA.
- ii. Area figure supplied by River health implementation manager.
- iii. Stormwater management projects are undertaken on a one-to-one funding basis with local government.
- iv. Target cannot be set with any confidence because achievement is prone to extreme variation, being affected by climatic and seasonal conditions. Volumes used since 2000-01 were reconciled in 2014 and some figures were adjusted. The NSW component of water delivered to Barmah Forest is included in these figures.
- v. Output included for the first time in 2015-16.
- vi. Surface water management enables the removal of excess rainfall runoff from irrigated lands, alleviating soil salinity. As part of an overall management plan for nutrients, nutrient loads are managed by collecting and reusing water from drains. Nutrient loads are monitored against the Goulburn Broken Water Quality Strategy nutrient target for drains.
- vii. Fencing and laneways are relocated along primary drains to control stock. Drains are also hydromulched and seeded to provide vegetative cover on bare batters.
- viii. Reuse dams allow for the collection of high nutrient runoff and reirrigation, reducing the water and nutrient loads leaving the farm. In 2014-15 the number of new farm reuse systems installed is assumed to be: 67 per cent of projects install a new system and 33 per cent reconnect the project area to an existing system. In 2012-13 and 2013-14 the number of new systems was assumed to be: 100 per cent of projects install a new system ie. new systems and extensions of existing systems were both counted as 'new systems'.
- ix. High flow diversion. None completed because of no demand and previous dry conditions.
- x. Assumptions: From 2014-15, area improved = laser levelling (which itself includes an assumption based on whole farm plan area see footnote iv) + pressurised irrigation systems (micro or drip + irrigation); 2013-14 = Farm Water Program's SIR onground achievements (laser grading + overhead spray + drip; 3,736 + 567 + 0) + 70 per cent of area put under Whole Farm Plans [new (4,224) + modernised (4,403) less Farm Water Program's SIR onground achievements].

The Goulburn Broken CMA partnered the community and government agencies in a range of natural resource and community based activities, including fencing, revegetation, pest plant and animal control, improving instream woody habitat, monitoring and employment.

Works were funded through a range of programs, including the Victorian Government's Onground Works Program, Regional Riparian Action Plan and Recreational Fishing

Grants Program as well as the Australian Government's National Landcare Programme.

Work to control the aquatic weed Cabomba continued along the Broken River and Broken Creek systems with funding from the Australian Government. The program has achieved relative success with little Cabomba now present within these systems. Work this year focused on the eradication of a small population within an impoundment on the Broken River (Casey's Weir).

The Goulburn Broken CMA, Yorta Yorta Nation Aboriginal Corporation and Parks Victoria continued work in partnership on a project to address 'Weeds of National Significance' and pest animals in the Barmah Forest to protect the ecological character of this icon site. Targets for pest plant and animal management were met or exceeded in the Australian Government funded National Landcare Programme project.

Large scale instream habitat continued along the Broken Creek in line with recommendations from Arthur Rylah Institute. Funds raised through recreational fishing licences contributed to this project.

Instream habitat works were also carried out in the lower Goulburn River and the Delatite River near Mansfield and Arrowhead (an aquatic weed) control was completed on the Broken, Boosey and Nine Mile Creeks.

A large rock chute on a section of You You Creek (one of a number of waterways that form part of the Deep Creek anabranch network on the lower Goulburn River floodplain) will help stop further creek-bed erosion and help protect the Goulburn River. The rock chute is designed to reduce the likelihood of the Goulburn River abandoning its current position on the floodplain in favour of a shorter, straighter and steeper course through You You Creek.

The first year of funding through the Victorian Government funded Regional Riparian Action Plan resulted in significant on-ground works on streams flowing from the Strathbogie Ranges, including the Hughes Creek, Seven Creeks, Honeysuckle Creek and Pranjip Creek. Community interest in the Strathbogie Streams project has been encouraging and the project will continue to gather momentum and lead to an improvement in the health of target streams in coming years.

Environmental water used during 2015-16

Quantity, ML	Timing	Source
Water used WITHIN the Goulburn Broken Catchment		
Goulburn River		
190,572	July 2015, October 2015, March 2016 to June 2016	Commonwealth Environmental Water – Goulburn River System
10,000	March 2016	Victorian Environmental Water – Goulburn River System
Lower Broken Creek		
5,171	October 2015, March 2016 to May 2016	Commonwealth Environmental Water – Goulburn River System
6,006	August 2015 to September 2015	Goulburn River Water Quality Allowance – Goulburn River System
18,342	September 2015 to October 2015 and January 2016 to May 2016	Commonwealth Environmental Water – Murray River System
800	September 2016	Victorian Environmental Water – Murray River System
Barmah-Millewa Forest		
366,800	June 2015 to November 2015	Commonwealth Environmental Water – Victoria and NSW
70,593	June 2015 to January 2016	The Living Murray allocation – Victoria and NSW
Black Swamp (Lower Broken Creek)		
80	September 2015	Victorian Environmental Water – Goulburn River System
Doctors Swamp (Lower Goulburn River)		
594	September 2015 to December 2015	Victorian Environmental Water – Goulburn River System
Kinnairds Swamp (Lower Broken Creek)		
696	September 2015 to January 2016	Victorian Environmental Water – Goulburn River System
Moodie Swamp (Upper Broken Creek)		
500	April 2016 to May 2016	Victorian Environmental Water – Broken River System
Reedy Swamp (Lower Goulburn River)		
475	August 2015	Victorian Environmental Water – Goulburn River System
Water used DOWNSTREAM that benefited waterways in the Goulburn Broken Catchment		
Murray River		
48,967	November 2015 to March 2016 and May 2016	Inter-Valley Transfers (Goulburn River) ⁱ
27,680	August 2015 to October 2015	The Living Murray allocation (Goulburn River)
17,609	November 2015 to March 2016	Inter-Valley Transfers (lower Broken Creek) ⁱ
0	nil delivered 2015-16	Murray Unregulated Flows (lower Broken Creek)
9,209	November 2015 and January 2016	Murray consumptive water in transit (lower Broken Creek)

i. Intervalley transfers are not considered to be environmental water but can provide environmental benefits. These volumes are not included in total environmental water use figures.

A total of 698,264 megalitres of environmental water was delivered in 2015-16 to support fish, macroinvertebrate, water bird and vegetation ecological objectives in the lower Goulburn River, lower Broken Creek, Barmah Forest, Doctors Swamp, Black Swamp, Kinnairds Wetland, Reedy Swamp and Moodie Swamp. Significant ecological outcomes in response to the environmental water included:

- golden and silver perch spawned in the Murray River channel through Barmah-Millewa Forest
- a small flock of Magpie geese were recorded feeding and roosting at Kinnairds Wetland and Black Swamp. This was the first time Magpie geese were recorded at Kinnairds Wetland in over ten years and the first time Magpie geese were recorded at Black Swamp
- continued improvement in bank vegetation cover and abundance along the lower Goulburn River
- thousands of waterbirds successfully bred in Barmah-Millewa Forest including ibis, royal spoonbills, cormorants and eastern great egrets
- approximately 45 male Australasian bitterns (nationally endangered) were heard calling in Barmah Forest.

Environmental water was delivered in accordance with Victorian Environmental Water Holder processes and with the assistance and cooperation of partners. The majority of priority watering actions were achieved at all sites.

Over 600,000 ML of the environmental water used in the catchment continued to the Murray River to benefit downstream water quality, recreation, wetlands and rivers and approximately 75,000 ML of consumptive water in transit provided environmental benefits in the lower Goulburn River and the lower Broken Creek.

With funding from Department of Environment, Land, Water & Planning the Goulburn Broken CMA, in partnership with North East CMA contracted Agersens to progress early stages of development of a virtual fencing system that could be used to better manage stock grazing in riparian areas. Prototype collars were built and trialled with the CSIRO.

What's next?

The promotion and implementation of the new Goulburn Broken Waterway Strategy 2014-2022, in partnership with regional agencies and the community, will continue. The new Waterway Strategy will be the primary mechanism for implementing statewide waterway and wetland policy. The overarching aim of the Waterway Strategy is to provide a single, regional planning document for whole-of-catchment rivers and wetlands management and an action plan for achieving integrated waterway outcomes.

The Strathbogie Streams Regional Riparian Action Plan project will continue to focus on streams flowing from the Strathbogie Ranges. The project targets priority streams in the Goulburn Broken Waterway Strategy, such as the Seven Creeks and Hughes Creek and these targeted works will be complemented by addressing threats to the Goulburn River by focusing on improving the condition of tributary waterways, such as Creighton's Creek, Honeysuckle Creek, Pranjip Creek and Castle Creek. The Strathbogie Streams Steering Committee will be established early in 2016-17.

Opportunities for multiple uses of environmental water will continue to be explored with neighbouring catchment management authorities, the Victorian Environmental Water Holder, the Commonwealth Environmental Water Holder and the Murray-Darling Basin Authority.

Seasonal watering proposals and environmental watering plans will continue to be prepared so that environmental water is used effectively and efficiently. The 2016-17 proposals aim to:

- provide flows in the lower Broken Creek to allow native fish passage, increase native fish habitat during the migration and breeding seasons and manage threats to native fish from low dissolved oxygen levels and/or excessive Azolla growth
- provide minimum flows and freshes in the lower Goulburn River to support native fish, macroinvertebrates and native vegetation habitat and recruitment
- promote the growth and establishment of Moira Grass and support colonial waterbird breeding in Barmah Forest
- promote the health of native vegetation communities and support waterbird breeding at Black Swamp, Kinnairds Wetland, Moodie Swamp, Reedy Swamp and Doctors Swamp.

The Goulburn Broken CMA will continue to support the implementation of the Goulburn River Long-term Intervention Monitoring Program and the development and implementation of the Victorian wetland monitoring and assessment program.

Engagement and partnerships with the community to deliver changes will continue. In partnership with the community, past sites will be evaluated to ensure that investment is protected and sites are maintained.

Habitat Pools will be created in a priority area of the Broken Creek between Numurkah and Nathalia and woody habitat will be introduced to these pools to increase habitat for native fish.

Native fish surveys will continue in the Hughes, Seven, King Parrot and Holland Creeks and Broken and Goulburn Rivers. The effectiveness of the large scale re-snagging project on the Broken Creek between Numurkah and Nathalia will be assessed.

It is hoped that further development of a virtual fencing system will continue in 2016-17 with on-farm trials conducted in both NSW and Victoria.

It is likely that further work will be undertaken to investigate opportunities to address physical and policy constraints to the delivery of higher flows to the Lower Goulburn River.



Investment area 2d – Floodplain management

Compiled by Guy Tierney and Dean Judd.

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Catchment condition ⁱⁱⁱ	Flood regimes provided for ecosystems from flood protection planning Financial savings from prevention of flood damage Systems in place related to flood protection	Very poor	Low	Satisfactory	Medium	↑
Long-term strategy implementation progress	Strategy tasks implemented (scheduled to be completed between 2014 and 2016)	n.a.	n.a.	On-target	Medium	↑
2015-16 performance	Outputs (against targets set as a result of funds received) Corporate Plan KPIs related to flood protection (see page 88)	n.a.	n.a.	On-target	Medium	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of the situation in 1990.

iii. The reference point is taken to be the time just prior to European settlement, when the Catchment is considered to have been in excellent condition.

Government investment, \$000

Investment area	2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
2d Floodplain management	482	458	894	620	↑

i. Forecast based on Corporate Plan 2016-17.

Major strategic references

- Goulburn Broken Regional Floodplain Strategy (Interim) 2014-2016
- *Planning and Environment Act 1987*
- *Subdivision Act 1988*
- *Building Regulations 2005*
- *Water Act 1989*
- *Minerals and Resources (Sustainable Development) Act 1990*
- *Environment Protection Act 1970*

Background

Floodplain management functions have been delegated to the Goulburn Broken CMA, which are described under Section 202 of the *Water Act 1989*. A specific function is to provide advice about flooding and controls on development to local councils, the Secretary of the Department of Environment, Land, Water and Planning and the community.

The use of engineering techniques such as hydrology (the study of rainfall and runoff) and hydraulics (the applied science of water movement across floodplains, rivers, streams and stormwater networks) assists in understanding impacts of floods on urban and rural communities. In recent years, these techniques have been used to understand environmental flow regimes in river and wetland systems.

Understanding flood risk (likelihood and consequences) is paramount in any flood study that underpins the investigation of mitigation and management options. Such options include structural solutions (levees, retardation basins, floodways) and non-structural solutions (flood warning and awareness, emergency management arrangements and land use planning controls).

Long-term strategy implementation

The Goulburn Broken CMA coordinates implementation of its Regional Floodplain Management Strategy (2002) in partnership with agencies and communities. The vision is: 'to achieve best practice floodplain management for the benefit of current and future generations'. This includes the building of community resilience by understanding the nature of flooding through flood studies, planning for floods through emergency response, education and awareness programs and land use planning. The Goulburn Broken CMA has since prepared an Interim Floodplain Management Strategy focused on a three year plan for new flood study priorities with agencies. Following the release of the new Victorian Floodplain Management Strategy (April, 2016) initial work commenced on a new ten year Regional Floodplain Management Strategy that will include a full consultation plan.

Two long-term targets have been proposed to provide measurable reference points of progress in achieving the floodplain management vision:

- Reduce the impact of flooding on the built environment (and land use planning to steer inappropriate developments and uses away from flood hazards).
- Provide ecosystems with natural flooding patterns where appropriate.

Implementation of the Goulburn Broken Interim Regional Floodplain Management Strategy is opportunistic and is subject to funding under Australian and Victorian Government incentives through programs such as the Natural Disaster Resilience Grants Scheme.

It is assumed that tasks completed will result in reduced impact of flooding on the built environment (when it floods). Following completion of a number of floodplain management plans, responsible authorities are implementing recommendations, including structural and

non-structural works using local, Victorian and Australian government grants.

Improving the natural flooding patterns of ecosystems via sensitive floodplain protection planning is a task in progress.

2015-16 performance

Community engagement

Community engagement is an integral part of floodplain management through flood studies and floodplain management plans and their implementation assisted by a number of government agencies. The Goulburn Broken CMA currently manages and hosts the Flood Victoria website on behalf of the Victorian Government.

Planning and responding

The table below provides a summary of the studies and implementation plans progressed for 2015-16. All studies are carried out under a partnership approach with local government, State and Commonwealth agencies and local communities. Implementation of the recommendations is a shared responsibility. Civil works such as a town levee system generally rest with local government.

A key initiative in the Mansfield Shire was the approval and government gazettal of a major Council-wide Planning Scheme Amendment C15 to include flood overlays, zones, floodplain policy and control.

Flood studies and implementation plans for 2015-16

Project Name	Lead Agency	Status
Seymour Town Levee Implementation Plan	Mitchell Shire Council	Call for tenders for town levee design has been issued.
Granite Creeks Regional Flood Mapping Project (Hume Freeway to the Goulburn River)	DELWP	Consultants commissioned mid-2015. Hydrology completed and preliminary mapping presented at community open-houses.
Numurkah Floodplain Management Study	Moira Shire Council	Draft Numurkah Floodplain Management Study completed together with public consultation. Public submissions in late 2015 indicated further options to be explored, which is progressing.
Nagambie Flood Study	Goulburn Broken CMA	Final report and mapping forwarded to DELWP and Strathbogie Shire Council.
Flowerdale Flood Study	Goulburn Broken CMA	Final report and mapping forwarded to DELWP and Murrindindi Shire Council.
Shepparton East Overland Flood Study	Goulburn Broken CMA	Final report and mapping forwarded to DELWP and Greater Shepparton City Council.
Shepparton Mooroopna Flood and Intelligence Study	Greater Shepparton City Council	Complexity in modelling effort. The model calibration finalised May 2016. Expected completion date in October 2016.
Planning Framework for Sand and Gravel Mining in the Goulburn Valley	Goulburn Broken CMA	Stage 1: Risk assessment of legacy quarries – completed. Stage 2: Preliminary risk treatment of legacy quarries – completed. Stage 3: Model planning scheme amendment – drafted.
Violet Town Flood Mitigation Detailed Design	Strathbogie Shire Council	Advanced.
Rural flood mapping (Eildon & Nillahcootie catchments)	Goulburn Broken CMA	Final draft reviewed. Report to be finalised October 2016.
Hydrology of the Acheron catchment	Goulburn Broken CMA	Continuing.
Kilmore Flood Mapping and Intelligence Study	Mitchell Shire Council	Hydrology report completed and hydraulic report for presented for review April 2016.
Flood warning improvements for Benalla	Benalla Rural City Council	FloodSafe Guide drafted. Site-specific flood-chart information has been prepared.

Input into finalisation of FloodSafe Guides was provided for the Jamieson and Benalla townships.

Input into the Floodplain Working Group continued throughout 2015-16 to prepared guidelines for the preparation of regional floodplain management strategies and to advance some of the Actions of the Victorian Floodplain Management Strategy. These include: Vegetation Guidelines, Guidelines for Development in Flood Prone Land and the development of guidelines for Regional Floodplain Management Strategy.

Significant preparation into a VCAT hearing relating to a high profile case of quarrying in the Goulburn River.

The floodplain team made significant technical contribution in preparing project briefs and a range of consultants relating to the Goulburn River Constraints Management Business Case.

Goulburn-Murray Water commissioned the floodplain management team to carry out a strategic assessment of non-backbone irrigation channel across the region.

Floodplain management actions 2015-16

Action	From funds received		
	Achieved	% of responses	
Integrating knowledge into planning			
Land Use Development Direct Applications (LUD)	no.	151	17.1%
Planning Scheme Amendment	no.	1	0.1%
Flood Information Request Direct Applications (FIR)	no.	52	5.9%
Other Direct Applications (DAOTH)	no.	1	0.1%
Land Use and Development [Formal] (S 55)	no.	505	57.3%
Land Use and Development [Advice only] (S 52)	no.	47	5.3%
Certification of Subdivision (S 8)	no.	82	9.3%
Subdivision and Certification (S 55 & S 8)	no.	13	1.5%
Notice of Planning Scheme Amendment (S 19)	no.	10	1.1%
Victorian Building Regulations [VBRs] (R 802)	no.	12	1.4%
Other LGA Applications (LGAOTH)	no.	6	0.7%
Query & Notification of Unauthorised Work	no.	1	0.1%
Work Plan [Minerals and Energy] (S 77)	no.	1	0.1%
Total		882	100%
Victorian Civil Administration Tribunal and Planning Panels Victoria hearings	days	128	
Floodplain implementation			
Gazettal of Flood Amendment	no.	1	Shire-wide introduction of flood mapping and land use planning controls for Mansfield Shire Council
Urban flood studies and management plans	no.	1	Nagambie Flood Study
Regional flood studies and management plans	no.	1	Rural flood mapping (Eildon & Nillahcootie catchments)
Creating awareness			
Flood education and awareness program	no.	5	Assisting with the development of Flood Safe Guides and Municipal Flood Emergency Plans

i. Most actions are performed reactively so no targets are set annually, however there are KPIs relating to regulatory waterway/water functions (see page 83).

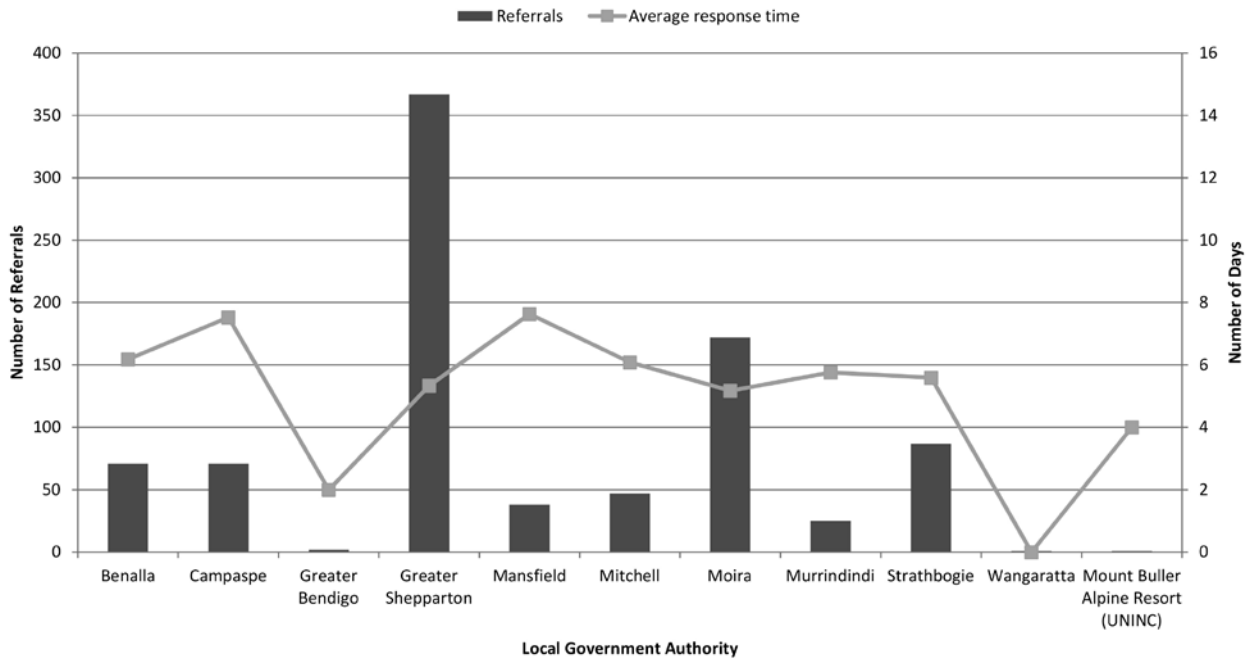
Works within or across a waterway require a licence from the Goulburn Broken CMA to ensure risk to river health and stability are not compromised.

A total of 950 applications and referrals were processed, which included 882 floodplain management and 68 works on waterways applications. The response time for floodplain applications was 5.7 days on average, with 99 per cent of all responses within the allowed timeframe of 28 days.

A breakdown of the number of floodplain applications and referrals received from each local government area and the average response time is shown in the figure below.

Number of Referrals by Local Government Authority and Average Response Times for 2015-16

The average response time for statutory referrals and direct enquiries was 5.70 days and 5.75 days respectively. Response time for works on waterways was 20 days.



What's next?

- Revised flood mapping online ArcGIS.
- Local government planning scheme amendments to incorporate new mapping and performance based assessments will continue priority Benalla Rural City Council, Violet Town and Nagambie.
- Flood warning and emergency management arrangements with partners, particularly the Victoria State Emergency Service and local government, will be supported. Capital works and further flood studies will also be supported. Priority is Numurkah.
- Preparation of a new Goulburn Broken Regional Floodplain Management Strategy.



Investment area 3 – Land and Biodiversity

Compiled by: Steve Wilson, Jenny Wilson, Carla Miles, Tony Kubeil, Kate Brunt, Greg Wood (DEDJTR), Rhiannon Apted, Janice Mentiplay-Smith, Jim Begley, Karen Brisbane, Mel Haddow, Gaye Sutherland, Neville Atkinson and Chris Burnett.

Government investment ⁱ, \$000

Investment area	2013-14	2014-15	2015-16	2016-17 ⁱⁱ
3a Biodiversity	5,381	5,166	3,517	3,670
3b Land health, including dryland salinity	990	990	766	761
3c Invasive pests and animals	0	0	0	0

i. Not including co-investment in biodiversity from other investment areas.

ii. Forecast based on advice at July 2016.

Major strategic references

Investment in the Catchment's biodiversity and land health is guided by the Biodiversity Strategy for the Goulburn Broken Catchment 2010-2015, the Goulburn Broken Land Health Statement 2014 and other regional, state and national policies and strategies, see below.

- Goulburn Broken Regional Catchment Strategy 2013-2019
- Goulburn Broken Biodiversity Strategy 2010-2015 (under review)
- Goulburn Broken Land Health Strategy 2016 (Draft)
- *Environment Protection and Biodiversity Conservation Act 1999*
- *Aboriginal Heritage Act 2006*
- *Catchment and Land Protection Act 1994*
- *Flora and Fauna Guarantee Act 1988*
- Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines (2013)
- Basin Salinity Management Strategy 2001-2015 (2001)
- Soil Health Strategy (DEPI 2012)
- Dryland Salinity Management Plan 1989 (and reviews 1995, 2001, 2008)
- Goulburn Broken Invasive Plants and Animals Strategy 2010-2015
- Goulburn Broken Waterway Strategy 2014-2022 (2014)
- Victorian Landcare Program Strategic Plan (DEPI 2012)
- Goulburn Broken Community Engagement Strategy and Action Plan 2015-2017

Background

The Land and Biodiversity program focuses on two main features: soil, which is a fundamental part of the natural environment and supports ecosystems and livelihoods of the catchment community; and biodiversity, which encompasses the variety of ecosystems, including native vegetation, wetlands and waterways and the associated plants, fungi, animals and genetic diversity they contain. The Land and Biodiversity program recognises the connections between the need for ecosystem resilience and the importance of maintaining and enhancing productive land and as a result, healthy and sustainable communities.

Ecosystem resilience is critical in supporting productive and sustainable landscapes by providing ecosystem services such as pollination, pest control, habitat, healthy soils, clean air and providing an aesthetically pleasing place to live and recreate. There are opportunities to improve the

resilience of our land and biodiversity, as many of our ecosystems, plant and animal communities and species are threatened with extinction and soils can be degraded. There is much work occurring to reverse these trends such as soil conservation practices, remnant native vegetation protection and revegetation, pest plant and animal control and whole farm planning.

The Land and Biodiversity team delivers various projects funded from state and federal programs. Activities funded include: protection and enhancement of remnant native vegetation and wetlands from inappropriate grazing regimes through fencing and revegetation in and around remnants to increase diversity of habitat and buffer remnants from edge effects; revegetation and regeneration to create functional linkages between remnants and along waterways. Soil-focused projects include soil health tests and education to encourage practice change such as retaining 100 per cent ground cover.

Community engagement is critical to the successful delivery of projects. Extension and education events are developed and implemented, often through delivery by community networks, to increase awareness of the importance of creating healthy landscapes and conserving biodiversity. For example, Conservation Management Networks have held 'new and part-time landholder days' to engage with landholders that may be unaware of the programs and information that exist to help them manage their land sustainably.

A systems-based approach to delivery of projects is a focus, with soils, waterways, wetlands and terrestrial habitat works integrated to recognise the interconnectedness of all elements in creating resilient systems within and beyond the farm fence. This highlights the need for continued and growing partnerships between Goulburn Broken CMA programs and relevant agencies and community groups; including: Parks Victoria; Department of Environment, Land, Water and Planning; Local Government Agencies; water authorities; Country Fire Authority and individuals. The Land and Biodiversity team continually seeks opportunities to integrate investment actions and participates in a range of agency reference groups, sits on committees of community groups and leads various forums. For example, the Land and Biodiversity Implementation Forum (LaBIF) provides an opportunity for agencies and community networks to work together on better ways of implementing land and biodiversity outcomes.

Close partnerships among the NRM sector ensure that investment into the catchment is strategic. For example, the State government offered funding directly to community groups and we worked together to develop projects and



understand where there were synergies, to deliver projects aligned with the Regional Catchment Strategy. The Land and Biodiversity team assisted with funding applications and provided support and resources. Funding to community groups included: the Victorian Government's Landcare grants, Communities for Nature projects and delivery through the CMA of the National Landcare Programme Regional Allocation.

The Goulburn Broken CMA recognises that climate change exacerbates risk to land and biodiversity and is a major consideration in the Biodiversity Strategy.

Three discrete but highly connected investment areas are reported in this section under the Land and Biodiversity Program:

- 3a Biodiversity
- 3b Land health, including dryland salinity and
- 3c Invasive plants and animals (managed largely by the Department of Environment, Land, Water and Planning).

3a Biodiversity

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Catchment condition	Native vegetation extent and quality Threatened species populations Water regimes of environmental features Management systems	Poor	Medium	Poor	Medium-High	●
Long-term strategy implementation progress ⁱⁱⁱ	Tasks (scheduled between 2000 and 2016)	n.a.	n.a.	On-target	Medium-High	● ^{iv}
2015-16 performance	Outputs (against targets set as a result of funds received)	n.a.	n.a.	On-target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. The rating of Catchment condition is determined using the reference point of pre-European settlement as excellent, although see discussion below regarding the intention to change this reference point from an often unattainable pre-European condition.

iii. Refers to Biodiversity Strategy only. Evidence related to aquatic, including wetland biodiversity outcomes from environmental share of water supply and environmental water is described in Investment area 2 River and wetland health.

iv. Assumed to parallel government funding trend, which includes some funding from Investment area 2 River and wetland health. Although the symbol is a static trend, this implies that Strategy tasks are successfully being implemented. If there was a significant increase in funding and capacity to achieve biodiversity outcomes, the trend would be reflected with an 'improving' symbol.

Catchment condition

It is important that we understand the condition of the catchment's biodiversity (from genes to ecosystems) to determine what policies, programs and projects are required to best conserve our natural environment. This understanding needs to consider that the ecology of the Catchment has been transformed since European settlement, that the transformation is irreversible and hundreds of thousands of people will continue to live here and use the land for many purposes. Within this current environment we can aim for and achieve more resilient ecosystems and more viable populations of native species by delivering strategic projects.

Measuring changes in catchment condition with regards to biodiversity, is challenging. A reference point is required to determine which direction condition is trending. Pre-European condition has been used previously but this is not a condition that we aspire to. Therefore, we are exploring ways to show the current trend in biodiversity condition without benchmarking it against the unattainable pre-European condition. The extent of native vegetation has been identified as a critical attribute that can be used as a measure to identify trends in catchment condition, as extent has been shown to be important for a range of biota (but note that there are many complexities and assumptions). Loss of habitat is one of the key drivers of extinctions and this is important in driving the need for change in the catchment.

The scale at which we measure change is also important. At the catchment scale, more than 70 per cent of native vegetation has been cleared and modified for agriculture. However, this figure does not reflect the true effect that this has had on the various ecosystems in the catchment. Changes in native vegetation extent vary between SESs, which results in different 'conditions' across the catchment. For example, there is nearly 100 per cent native vegetation extent in the Southern Forests SES but only 10 per cent in the Agricultural Floodplains SES. There is an obvious need therefore to have different goals and targets for each SES. The use of SESs to measure change in condition may make measurements more meaningful as trends away from current condition can be considered in ways that reflect the quantity of change that is required relevant to each SES. These measures can then be aggregated to determine catchment condition.

In measuring catchment condition, there is a need for targets so that we can measure attributes that are considered important in biodiversity conservation. A key guiding document for the Land and Biodiversity Program is the Biodiversity Strategy for the Goulburn Broken Catchment 2010-2015 (currently under review). Targets will be updated but currently are:

1. maintain extent and quality of all native vegetation at 2005 levels in keeping with the goal of 'net gain' listed in Victoria's Biodiversity Strategy 1997

2. increase the extent of native vegetation in fragmented landscapes by 70,000 hectares by 2030 to restore threatened Ecological Vegetation Classes and to improve landscape connectivity
3. improve the quality of 90 per cent of existing (2005) native vegetation by ten per cent by 2030.

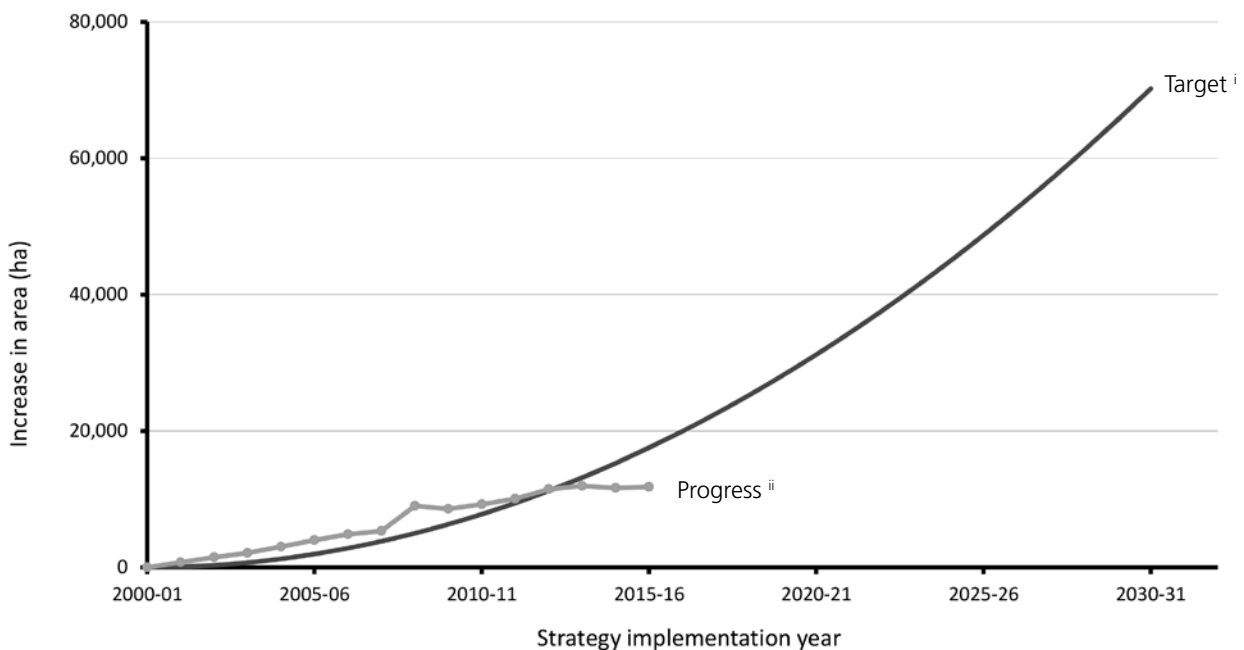
The second target 'increase extent' is currently the only one that is measured annually. The quality target is difficult to measure but it is envisaged that the strategy review will provide a platform for improving measurement of changes in habitat quality. Measurements over time for changes in extent are shown in the graph below. It includes the changes in extent due to native vegetation management carried out by the Goulburn Broken CMA and partner organisations and considers assumptions about other factors that are likely to change vegetation extent, such as losses due to legal and illegal clearing and gains by landholders carrying out their own native vegetation management (see footnotes for details). However, there is still much uncertainty in actual losses and gains and the inability to measure changes in extent with certainty, especially with poor recording of actual loss through permitted clearing and exemptions under the permitted clearing process, remains a major impediment to tracking progress effectively. The measurement of changes in native vegetation extent at the State level could be improved, particularly in measuring the goal of 'net gain' (although estimates are that 4,000 hectares of native vegetation are being lost each year in Victoria, based on a 2008 DSE

report). A direct measure of native vegetation extent is critical in understanding native vegetation extent changes to inform policies and decision making.

It is recognised that understanding if we are creating resilient landscapes is complex and beyond just the extent of native vegetation. There are a range of incremental losses and changes that are difficult to track and measure. In particular, the increased likelihood and frequency of fire, together with the largescale and frequent fuel reduction burning, is likely to create losses that are not easily measured or well known. Other factors to consider in changes to catchment condition include: the continued decline in threatened species as the 'extinction debt' from past clearing is realised; weed invasion; habitat loss through, for example, logs used for firewood and 'cleaning up' by landholders (removing important leaf litter and fallen logs); and fragmentation effect of clearing, which results in the inability of flora and fauna to move through landscapes, increasing the risk of extinction through elevated inbreeding and subsequent loss of sub-populations.

While acknowledging uncertainty and recognising that our gains often offset losses, the graph below shows that we are trending away from the native vegetation extent target of increasing extent by 70,000 hectares by 2030. Therefore there is a need for increased investment in native vegetation management, particularly revegetation and improved policy to reduce clearing rates. The amount of revegetation possible is currently restricted by funding and not by the communities' or individual landholders' desire to revegetate.

Progress towards native vegetation extent targetⁱ, increase in area, hectares



- i. Resource condition target (revised 2009): Increase the extent of native vegetation in fragmented landscapes by 70,000 hectares by 2030 to restore threatened Ecological Vegetation Classes and to improve landscape connectivity. Note that native vegetation extent is just one indicator of biodiversity. Other indicators such as native vegetation quality are more difficult to measure and it is probable that the trend may not be as positive as it is for native vegetation extent.
- ii. Based on assumptions of gains in vegetation (such as revegetation and natural regeneration) and losses of vegetation (such as legal and illegal clearing). Vegetation burnt by major fires in natural areas is not included as a loss of extent, as it is assumed the area burnt will regenerate by 2030. However, direct vegetation removal associated with fires, such as removal of 'high risk' trees on roadsides and private land or death of scattered paddock trees from fire, is assumed as a loss in the net outcome in the year of the fire (for example, the 2009 Black Saturday fires, the 2014 Wunghnu fires and the 2015 Lake Rowan, Stewarton and Strathbogie fires) and includes an ongoing loss due to fire suppression activities. Detailed explanation of these assumptions can be found in the Goulburn Broken CMA's Biodiversity Monitoring Action Plan upon request.



Long-term strategy implementation progress and 2015-16 performance

The Biodiversity Strategy's initiatives and actions, which are aligned with Australian and Victorian government strategies and priorities, provide ways in which to increase biodiversity conservation and progress towards targets. Project funding results in implementation of the Biodiversity Strategy and funding continues to be diverse. Through its Biodiversity Strategy, the Goulburn Broken CMA has demonstrated to investors the links between project proposals and catchment-scale strategies in both biodiversity-focused and multiple-themed projects. While focused more on terrestrial biodiversity, waterways and wetlands are obviously a critical part of biodiversity, these are described in 'Investment area

2 River and Wetland Health' (page 43).

The final review of the Biodiversity Strategy (2010-2015) showed that of the 64 actions identified in the strategy most were either completed or ongoing. Progress towards the Biodiversity Strategy's five strategic directions is summarised in the table on pages 59-63 and shows long term progress of the strategy and 2015-16 performance. Many achievements are documented, including in this annual report, reflecting the emphasis on integrating biodiversity into complementary programs.

Actions 2013-14, 2014-15 and 2015-16

Action		From funds received				% achieved
		Achieved ⁱ		Target	2015-16	
		2013-14	2014-15	2015-16		
Stock grazing management action						
Fence terrestrial remnant vegetation	ha	1,004	385	468	508	92
Fence wetland remnant	ha	128	168	3	-	
Fence stream/river remnant ⁱⁱ	ha	87	141	244	-	
Binding management agreement (licence, Section 173, covenant)	ha	0	112	70	60	117
Grazing regime change	ha	0	0	0	0	
Habitat loss management						
Revegetation – plant natives	ha	1,211	549	750	625	120

ⁱ Achievements include those from complementary investment areas (SIR salinity, Riparian and instream habitat and channel form and Dryland salinity). For a full list of footnotes please see Appendix 3 on page 130.

ⁱⁱ Area figure supplied by River health implementation manager.

Long-term strategy implementation progress	2015-16 performance
Biodiversity Program	
Strategic direction 1: Adapting to change	
Natural resource management policy and socioeconomic drivers are changing rapidly, providing significant threats and opportunities for biodiversity conservation. The Biodiversity team continues to adapt to changes in a variety of ways by: Responding to and influencing, strategies of all CMA programs and other NRM agencies; adapting a resilience approach to strategic planning and project delivery; improving understanding of and responding to, relationships between social and economic factors in biodiversity conservation, in particular the interactions and opportunities in agricultural landscapes; looking for opportunities for diversification of funding; supporting community engagement opportunities within a changing social and media environment; and working with researchers to improve practices.	Review of Biodiversity Strategy for Goulburn Broken Catchment 2010-15 and development of updated draft Strategy.
	Developed projects for 20 Million Trees and Green Army (Australian Government's National Landcare Programme).
	Successfully delivered one Victorian Government funded Threatened Species Protection Initiative project that surveyed threatened birds in the Agricultural Floodplains (\$54,000).
	Improved genetics of seed production areas by working with CSIRO. This will increase adaptability to climate change.
	Implemented and promoted Regional Catchment Strategy 2013-2019.
	Completed NRM Planning for Climate Change project, including the Spatial Assessment Tool used to assess climate change vulnerability and inform priorities for adaptation and mitigation and the Climate Change Adaption Plan. This was funded by the Australian Government.
	Worked with community groups for projects directly funded to groups to remain strategic in project delivery.
	Contributed to reference group that developed the Shepparton Irrigation Region Land and Water Management Plan.
	Contributed to the State Biodiversity Strategy Stakeholder Reference Group.

Long-term strategy implementation progress	2015-16 performance
Biodiversity strategic direction 2: Nurturing partnerships	
<p>The Biodiversity team continues to have a focus on building on and nurturing partnerships, with agencies, community networks and groups, indigenous groups and individuals. Partnerships are growing, which is reflected in the development and delivery of partnership projects.</p>	Facilitated four Land and Biodiversity Implementation Forums, now in its sixth year, to ensure catchment-wide networking and planning to implement strategies.
	Delivered two projects with NSW Murray Local Land Services and Yorta Yorta Nation funded by Australian Government's Biodiversity Fund.
	Continued to deliver one project with North East CMA and North Central CMA (Victorian Government funded VEPP project Northern EcoConnections).
	Participated in community reference groups: Sustainable Irrigation, Fire forums and Community Network Committees (Landcare, Conservation Management and Network Chairs' Forum).
	Worked with Regional DELWP and community groups to develop projects for the Victorian Government funded Threatened Species Protection Initiative and other programs, leveraging a total of \$349,193 to deliver 17 projects.
	Two research reports produced through working with Melbourne University and CSIRO.
	Five training sessions for community groups: First Aid, Driver Safety, Social Media, website management and wetland identification and management.
	Four meetings held of the Goulburn Broken Local Government Biodiversity Reference Group, convened by Moira Shire Council and funded by the Australian Government's National Landcare Programme. This initiative builds capacity of local government to play an active role in natural resource management by developing skills, knowledge and most importantly, strong and collaborative partnerships.
	Developed one scoping study of native vegetation offset management has progressed to feasibility with options for a volunteer scheme being explored.
	Indigenous partnerships continued to grow through engagement, training and employment opportunities.
	Tallis Winery, Yorta Yorta Nations, Trust for Nature and Goulburn Broken CMA partner in 'Rock Correa Walk', funded by the Australian Government's National Landcare Programme. Interpretive signage of both local and indigenous heritage was positioned along the 1.2 kilometre trail.
	Delivered the Alpine Perched-bogs (a Nationally Significant Ecosystem) project, funded by the Australian Government's National Landcare Programme, with Taungurung Clans Aboriginal Corporation as delivery agency. This project focused on enhancing the ecological character of these unique wetland systems and partnering with Parks Victoria to identify and manage pest plants, in particular blackberry.
	Participation in the Goulburn Broken Indigenous Consultation Group and responding to Taungurung Clans Aboriginal Corporation Whole of Country Plan, funded by the Australian Government's National Landcare Programme. Yorta Yorta Nations completed their plan in 2015.
Five Conservation Management Networks (CMN) supported in increasing and community engagement in biodiversity conservation and increasing breadth of partnerships, including: Heathcote Community House, Heathcote Farmers Market Committee, Friends of Winton Wetlands, Glenrowan-Warby Lions Club, Yarrawonga and Shepparton Men's Sheds, Heathcote Golf Club; Birdlife Australia; Mandalay Resources; schools and universities such as Heathcote and Currawa Primary Schools, Benalla P12 College and Shepparton U3A.	
Conservation Management Networks held several field days and workshops of between 50 and 100 people, often with up to 30 who have not previously attended a field day.	
Since 2009, nearly 1400 nest boxes have been built and installed across the Broken Boosey and Whroo Goldfields CMNs for a variety of native fauna that depend on nesting hollows to survive.	

Long-term strategy implementation progress	2015-16 performance
Biodiversity strategic direction 2: Nurturing partnerships (Cont'd)	
	Supporting individual landholders: Numerous property visits were made under the range of biodiversity programs, offering landholder extension and incentives. Limited resources are a barrier to undertaking routine revisits to ensure compliance and discuss how a site is improving.
	12 community networks engaged as delivery partners: building capacity and delivering incentives and community engagement projects: Longwood Plains Conservation Management Network (CMN), Strathbogie Ranges CMN, Up2Us Landcare Network (LN), Euroa Arboretum, South West Goulburn LN, Upper Goulburn LN, Goulburn Murray LN, Lower Goulburn CMN, Gecko Clan LN, Granite Creeks Project and Warrenbayne Boho Landcare Group.
Biodiversity strategic direction 3: Investing more wisely	
<p>Investment in biodiversity conservation in the Catchment is increasingly delivered within a resilience framework, which considers a range of factors and drivers of landscape change that we can respond to. Identifying priority landscapes for onground works and promotion of biodiversity conservation will be a focus of local plan development and implementation. This will result in more targeted funding and increased certainty that works are achieving desired outcomes.</p> <p>Continuous improvement and adaptive management underpin the implementation of the Biodiversity Strategy. Synergies are identified between the Biodiversity Strategy, government funding priorities and the formal 'Expressions of Interest' process, which identifies project priorities of community and other partners.</p>	<p>Governance processes have been updated to ensure best practice is carried out by all delivery partners.</p> <p>Research, such as that into the outcomes from direct seeding, are changing the way in which works are carried out to increase efficiency and effectiveness (eg. reducing seed wastage and increasing success of revegetation).</p> <p>The Biodiversity Monitoring Action Plan continued to guide research priorities and help us understand progress towards catchment targets. Annual review of this plan is informing new directions for the next Biodiversity Strategy.</p> <p>Priority Landscapes identified in the Agricultural Floodplains SES, with assistance of community members to prioritise works to achieve a collective vision for each priority landscape. Priority landscapes and sites across the six SESs will be considered in the development of local plans.</p> <p>One proposal developed for long-term monitoring to measure biodiversity outcomes from investment.</p> <p>Five key research reports produced:</p> <ol style="list-style-type: none"> 1: 'Long-term monitoring of fauna responses to management actions, including birds and reptiles' (Australian National University). 2: 'How much revegetation is enough' (Deakin University), benchmark surveys of bird distribution in landscapes in the Productive Plains, finding 167 species, but many of those were only detected once, suggesting some species are just holding on in the region. 3: 'Efficacy of direct seeding' (University of Melbourne) which will increase efficiencies and effectiveness of direct seeding. 4: 'Key habitat variables that affect bird species distribution at the landscape scale' (LaTrobe University). Significant variables included: diversity of plant communities, distance to large patches and understorey, with noisy miner presence the greatest influence. 5: Seed viability/provenance: CSIRO genetic studies of native seed stock for improved genetic diversity for revegetation projects.

Long-term strategy implementation progress	2015-16 performance
Biodiversity strategic direction 4: Building on our ecological infrastructure	
<p>Identifying priority landscapes ensures that areas that have a good ecological infrastructure to build on are targeted for incentives to increase landscape connectivity and function and climate change adaptation opportunities for wildlife.</p> <p>Continued support of seed production areas and the Dookie Seedbank ensure seed supply for future landscape-scale revegetation projects.</p> <p>Projects consider protecting our natural and cultural heritage.</p> <p>The importance of wetlands and riparian zones for biodiversity, resilience and adaptability to climate change keeps a focus on investment in these ecosystems.</p>	<p>Received \$3,081,044 from the Australian Government's National Landcare Programme for seven projects. The status of six projects is listed below, the remaining project 'Building the resilience of the Barmah Forest Ramsar Site to protect its ecological character' is covered in the River Health section (page 43).</p> <p>1. Building Traditional Owner Capacity and Participation: Goulburn Broken Indigenous Participation Group formed and active; Taungurung Whole of Country NRM plan (draft completed) and 21 indigenous people attended training.</p> <p>2: Building NRM Community, Skills, Knowledge and Engagement project received funding of \$140,024. Box-Ironbark course held with 27 attendees including four indigenous people. Floodplain Ecology Course held with 29 attendees including six indigenous people.</p> <p>3: Improving the resilience of woodland and wetland ecosystems in the Goulburn Broken project received funding of \$942,652 with 137 hectares of wetlands and woodlands secured under 10-year management agreements and 54 landholders engaged.</p> <p>4: Building the resilience of EPBC threatened species in the Goulburn Broken Catchment project received funding of \$373,333. Total outputs achieved: 68.25 hectares of remnant woodlands protected, 27 hectares of weeds and pest animals controlled, 25 community groups supported and 61.5 hectares revegetated. The Superb Parrot Project achieved 15 hectares of revegetation. The Regent Honeyeater Project achieved 63.25 hectares of protection and 43.5 hectares of revegetation across 35 sites.</p> <p>5: Directed Action Learning to Enhance Soil Ecosystem Services project funding received \$762,244. Outputs achieved: 44 SoilCare workshops/field days; 671 participants, 12 farm tours attended by 70 participants, one traditional owner workshop attended by 207 participants and 20 SoilCare discussion group meetings (four groups) attended by 187 people.</p> <p>6: Regional Landcare Facilitator Goulburn Broken project funding received \$150,000. Outputs achieved: 107 participants at field days, 21 at training events and 239 participants at workshop events.</p> <hr/> <p>Received \$1,078,000 from the Australian Government's Biodiversity Fund for three projects:</p> <p>1: Biodiverse Carbon Landscapes outputs achieved: 43 landholders and 567 hectares with 10 year management agreements.</p> <p>2: Sand Ridge Woodlands (including 20 Million trees funding from the Australian Government's National Landcare Programme). Achievements: 250 hectares of revegetation with 71 kilograms of native seed sown and 3,892 plants planted (including 187 hectares in NSW); 5 hectares remnant protection; 67 hectares of pest plant and animal control (including 17 hectares in NSW). Note: as a multiregional, cross-border project outputs include those achieved through NSW National Parks and Wildlife Service and Murray Local Land Services in NSW.</p> <p>3: Providing indigenous seed for revegetation in the Goulburn Broken Catchment: 12.6 hectares revegetation, 9,023 plants planted.</p> <hr/> <p>Victorian Government's Landcare Grants funding received \$245,000: 20 community lead projects: pest plant and animal control, land manager and community education, vegetation protection and enhancement, sustainable farming practices and waterway protection.</p> <hr/> <p>Threatened Species Incentive, funded by the Victorian Government, funded 11 projects to the value of \$157,557 delivering community led projects to protect threatened species that exist in our region such as the Squirrel Glider and Striped Legless Lizard.</p> <hr/> <p>The Victorian Government funded Rabbit Action Network: (\$16,636) funded three projects to share knowledge, record works and promote state scale works.</p>

Long-term strategy implementation progress	2015-16 performance
Biodiversity strategic direction 4: Building on our ecological infrastructure (Cont'd)	
	Communities for Nature, funded by the Victorian Government, funded \$223,000: Broken Boosey CMN - Practical Parrot Action \$73,000; and 'Blueprint for Woodland Birds' \$75,000. Whroo Goldfields CMN: Yellow Gums and Goldfields \$75,000.
Biodiversity strategic direction 5: Legitimising biodiversity conservation	
<p>Significant effort continues to build biodiversity understanding and awareness across the Catchment. While more landholders may be viewing biodiversity conservation as a legitimate land use and integral part of land management, financial, technical and other support, for them to actively manage biodiversity needs to be available with support from both investors and the broader community. The importance of the links between biodiversity conservation and agricultural production has been promoted through providing opportunities for landholders to act as stewards of the land.</p> <p>Ongoing efforts are required to promote synergies between biodiversity conservation and land management at the farm and landscapes scales.</p> <p>Conservation Management Networks continue to play a valuable role in promoting the importance of biodiversity conservation across land tenures.</p> <p>Mixed and unclear messages from a range of sources, such as ongoing changes to native vegetation clearing regulations, pose challenges in strengthening community support for biodiversity conservation.</p>	<p>Delivery of workshops and presentations on biodiversity.</p> <p>Development of one booklet: Seasonal Herbaceous Wetlands, identification and Management.</p> <p>63 media releases.</p> <p>30 facebook posts.</p> <p>Regular 'Show and tell' of animals at Wilmot Primary School after school program.</p> <p>Produced two 'Summary for the Community' flyers to convey results from research projects in a way that the community can understand and contribute.</p> <p>Continued support to the Local Government Biodiversity Reference Group has provided opportunities to collaborate and improve the development and application of appropriate planning tools for native vegetation protection.</p>

What's next?

- The Biodiversity Strategy for the Goulburn Broken Catchment 2016 to be released, recognising recommendations from the review of the Biodiversity Strategy 2010-15 and the Protecting Victoria's Environment - Biodiversity 2036 strategy.
- Ensuring key principles and actions for biodiversity planning, monitoring, evaluation, reporting and implementation are incorporated in SES local plans.
- Increased explicit application of resilience-thinking, including testing the alignment of existing objectives/targets and considering the application of thresholds at the SES-scale.
- Making use of new planning tools such as the Spatial Assessment Tool developed under the Goulburn Broken CMA's NRM Planning for Climate Change project.
- Reinvigorate the use of (and update) 'Biodiversity Action Planning' to inform local planning and implementation.
- Seeking funding for incentives to landholders to increase resilience of landscapes.
- Legitimising biodiversity conservation through community engagement and support to landholders.
- Specific, targeted, education campaigns about biodiversity conservation delivered through community groups.
- Strengthening of Conservation Management Networks, Landcare networks and other groups to play a major role in delivering effective partnerships and onground works across private and public land.
- Review of the Biodiversity Monitoring Action Plan.
- Improved monitoring and measuring biodiversity outcomes.
- Investigate methods to determine gains and losses in native vegetation such as via Landsat Imagery.
- Continue to promote systems-based approaches to land management to achieve whole-of-farm and catchment outcomes for both biodiversity and agricultural productivity.
- Continue to build indigenous skills, knowledge and capacity to deliver works, contribute to natural resource management planning, traditional ecological knowledge and undertake indigenous projects on country.
- Continue involvement in facilitating improved native vegetation retention outcomes in the Catchment, such as through the reinstatement of regional guidelines and trialling a regional offsets scheme.



3b Land Health (including dryland salinity)

Compiled by Karen Brisbane, with the assistance of Brad Costin (DEDJTR) and Greg Bekker (DEDJTR).

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Catchment condition ^{iv}	Watertable salinity and depths Salt disposed to Murray River Salinity of environmental features Management systems	Poor	Very low	Satisfactory	Low	●
Long-term strategy implementation progress	Outputs (scheduled between 1990 and 2016)	n.a.		Below target	Medium	↓ ⁱⁱⁱ
2015-16 performance	Outputs (against targets set as a result of funds received)	n.a.		On-target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. The rating of Catchment condition in 1990 was determined using our understanding in 2016 of the situation in 1990.

iii. Assumed to parallel government funding trend, which includes funding from investment areas 2a and 2b.

iv. The reference point is taken to be the time just prior to European settlement, when the Catchment is considered to have been in excellent condition.

Catchment condition

The main emphasis on improving soil health is the protection or enhancement of the soil capital for the restoration or preservation of services from soil, such as carbon storage, soil biodiversity and water-holding capacity of soils. These services underpin sustainable land use, fundamental ecological processes and the productive capacity of soils. The protection of other terrestrial and aquatic assets by reducing the impact of soil acidity, water erosion and soil salinity is also a priority. Remedying soil erosion and soil acidity is important because they undermine the resilience of our soil systems.

Whilst unquantified catchment wide, soil structural decline, lack of perennial ground cover and incompatible farming and civil infrastructure create and/or exacerbate soil erosion on farms, affecting productivity and leading to offsite impacts. Saline discharge is also contributing to soil erosion. Improvement in catchment condition through changed farming practices (soil condition and vegetation cover) will help prevent new instances of soil erosion. Despite this, existing erosion issues continue to proceed until processes at the site reach equilibrium or are intercepted and remediated. Rate of soil erosion in the catchment is largely influenced by seasonal conditions. With average to low rainfall for 2015-16, incidents of erosion have generally remained steady, except where heavy downfalls have occurred.

Decreasing public investment in on-ground soil conservation works has focused activity on developing and testing new techniques to arrest and repair erosion activity. Engagement with farmers has been good and whilst arresting erosion is a priority for most landholders, it needs to be prioritised against more immediate farm running costs; hence erosion remains a problem in the Catchment.

Gully, tunnel and sheet erosion are still a feature throughout the Productive Plains, Upland Slopes, Commuting Hills and perhaps to lesser extent the Southern Forests. Biodiversity plantings have had multiple benefits where landholders have fenced off and revegetated erosion gullies or steep slopes for soil protection and vegetation connectivity across their farms. Whilst the local benefits of these works are clear, for the most part landholders can only undertake works with grant support.

Challenges for the Catchment include facilitating and encouraging landholders to adopt practice change that remediates soil erosion processes and ensuring new farming practices and public and private infrastructure consider impacts on soil erosion in the early stages.

Saline discharge sites remain present and active, with the majority of sites able to be managed to confine impact to the local site or farm. Current bore data is yet to be collated and analysed in the Goulburn Broken dryland region. It remains an expectation that saline discharge will emerge as a more obvious problem in wet years.

The Beyond SoilCare project, funded by the Australian Government's National Landcare Programme, set targets for soil health on agricultural land within the Catchment. Data on soil condition, including soil acidity and soil organic carbon together with landholder measures of ground cover have been used to determine a benchmark for agricultural soils around the Catchment.

An independent survey was conducted for 2015-16 to help ascertain change on-farm through the Beyond SoilCare project. The evaluators interviewed 87 farmers from across the Catchment and compared results to a survey conducted in 2012. Soil issues such as acidity, fertility and structure were higher than the 2012 ratings. Acidity, biology and erosion were all rated as major issues much less often in 2016 compared to 2012. In the irrigated region of the catchment, salinity is the major issue and in the dryland the major issues are considered to be acidity, fertility and erosion.

Long-term strategy implementation

The Goulburn Broken CMA continues to work closely with the Department of Economic Development, Jobs, Transport and Resources for strategic implementation of land health outcomes.

The Land Health Statement (LHS) prepared in 2013-14 outlines the direction for the Land Health Program and its activities in the Goulburn Broken Catchment as described in the Regional Catchment Strategy. The Goulburn Broken CMA is in the process of creating a Land Health Strategy 2016-2018, this document is in draft form.

In 2015-16, the main outcome sought by investors in the Land Health Program was changing farming practices to help preserve farm productivity and improve financial viability in this changing climate.

Landholders have directed their learning through activities varying from small discussion groups, field days, forums, workshops, farm tours, farmers teaching farmers, demonstration sites and devolved grants to Landcare and producer groups. Through these activities the program aligns the interests of farmers with investor priorities and strategic outcomes required through the Regional Catchment Strategy.

Soil Health Action Plan 2006

A partnership with the Department of Economic Development, Jobs, Transport and Resources, supported by the Victorian Government-funded Land Health Program and funding from the Australian Government's National Landcare Programme, Sustainable Farming Practices and Beyond SoilCare project, continues to see actions of the Soil Health Action Plan delivered.

Progress against the seven Soil Health Action Plan programs includes:

Program 1 – Coordination

Development of project agreements with community groups, community input into activity development, participation in the Soils Community of Practice group, re-establishment of the Goulburn Broken Land Health Forum. (LHS Action 2 & 3).

Program 2 - Community Engagement

In 2015-16 eleven community projects were funded through two Beyond SoilCare Project grant rounds to the value of \$161,500, funded by the Australian Government's National Landcare Programme. Regular meetings with the Landcare Facilitator and Coordinators group and the Regional Landcare Facilitator Steering Committee were held. Over 1230 people attended more than 86 Beyond SoilCare events. A new SoilCare group was established in Seymour specifically for women called the Seymour Farming Ladies group. A demonstration site was established at one farmer-led demonstration site. (LHS Action 1 & 3).

Program 3 - Improved Management Practice

Promotion of land management involved a series of workshops held with the four SoilCare groups and open workshops to the broader community ranging from lime calculations, effective use of composting, soil erosion, P Tool, water budgeting on farm, planned grazing including cell and rotational grazing, soil testing and analysis of tests have proved to be a high priority and farmers teaching farmers bus tours have emphasised the need for these activities. (LHS Action 1, 2, 3, 4 & 5).

Program 4 - Whole Farm Planning for Soil Health

Remains a priority for Department of Economic Development, Jobs, Transport and Resources and has expanded to become more issues-focused to more closely meet the needs of participants. (LHS Action 1 & 3).

Program 5: Working with local government

Currently unfunded.

Program 6 - Monitoring and Evaluation

In 2015-16 the Australian Government's National Landcare Programme funded Beyond SoilCare project interviewed 87 participants from across the Catchment to determine management and soil health issue information against which the project will evaluate practice change over time. Soil acidity, soil organic carbon and ground cover data has been used to determine a baseline benchmark condition for agricultural soils in the Catchment. These will be reviewed as thresholds are developed through the Regional Catchment Strategy and indicators and measures of Land Catchment Condition are developed by Department of Environment, Land, Water and Planning in response to the VAGO report on the effectiveness of CMAs. (LHS Action 3 & 4).

Program 7 - Research and Development

Projects included participation in the Soils Community of Practice Forum, the Dryland Managers Forum and the National NRM Conference and support to 32 on-farm demonstration trials. (LHS Action 2, 3 & 4).

Goulburn Broken Dryland Salinity Management Plan

The adjusted target, developed in 2000 and 2002, is to maintain increases to salinity levels of the River Murray at Morgan (in South Australia) from the Goulburn Broken Dryland at or below 1.3 electrical conductivity (equates to 67,000 tonnes per year from the Dryland by 2050).

Land Health Statement 2014-18

Action 1 Promote resilient farming systems and encourage sustainable land use change

Due to dry conditions over the past two years change on-farm has been limited by farmers as they concentrate on water availability and feeding stock. In the pastoral areas of the catchment the main area of farmer interest remains in adapting grazing management strategies to increase ground cover, perennial grasses and species diversity to promote resilience of pastures to variable seasonal conditions whilst producing quality livestock. This includes a strong focus on soil health through improved soil structure for water infiltration and water holding capacity, carbon sequestration for improved nutrient cycling and reducing the risk of soil erosion. Activities have focused on small discussion groups, grazing management training, farm tours, soil test interpretation and trials of alternative fertilisers and acid-tolerant pasture species. Small and cottage industry farmers are focusing their attention on sustainable farming practices and networking, including trialling small farm crops and visiting successful farm businesses. Dairy and cropping farmers are focused on improving soil structure and managing soil fertility for optimum return, including reducing wastage. Activities include soil test interpretation, soil assessment, composting, stubble management, subsoil manuring and cover cropping trials.

Action 2 Develop partnerships with industry

The main industries have been the beef, wool, horticulture and dairy industries through the delivery of projects, workshops and on-farm discussions. Activities include a farm tour of NSW in partnership with Bestwool Bestlamb; grazing, nutrient management and beef nutrition workshops with the Department of Economic Development Jobs, Transport and Resources Meat and Wool and Land Health teams; 'Inspiring small farms to grow big ideas', an Up2Us Landcare Network project working with cottage farmers to develop successful local businesses; and, 'Water security for grazing enterprise' a significant project coordinated by the Gecko CLaN responding to the issue of water management under changed grazing regimes and seasonal rainfall and runoff variability.

Action 3 Promote community initiated project development and delivery

The main activities, supported by the Goulburn Broken CMA from the Australian Government's National Landcare Programme and Victorian State Government funding, have been the support of 32 on-farm demonstration trials and 11 devolved grants to Landcare, producer and community groups. The Goulburn Broken Land Health Forum, Regional Landcare Facilitator Steering Committee and Landcare Facilitators and Coordinators group have provided significant avenues for planning and supporting community-initiated and led projects.

Action 4 Promote adaptive management

Part of the premise of this action is to recognise the primacy of self-interest married to a natural proclivity for land managers to look after their land. To this end, we have focused on activities that meet landholder needs, within the scope of the investment profile and as outlined above in Action 1. Participant surveys continue to identify farmer needs and interests and provide evidence that landholders do make changes as a result of participating in program activities.

Action 5 Support climate change adaptation and mitigation

The Climate Change Adaption Plan provides a climate change vulnerability assessment across the Goulburn Broken Catchment including assessments of land based assets, it also identifies priority areas for climate change adaptation and management actions to be considered in the Local Plans, Sub-strategies and the Land Health program. Graziers continue to respond to variable seasonal conditions through the development of grazing plans and feed budgets that allow them to plan ahead to maintain ground cover. This is a dynamic and adaptive process that requires many options for success, including potential changes to the enterprise. This requires careful planning and time to ensure financial sustainability of the business.

2015-16 performance

Community engagement

In 2015-16, the Land Health Program worked with community and partners to deliver workshops, farm tours and field days that met community needs through the Beyond SoilCare project, which continues to focus on building improved ecosystem services from soil. The project is funded by the Australian Government's National

Landcare Programme and supported by the Victorian Government through the Department of Economic Development, Jobs, Transport and Resources. The project works with community groups to address the issues of soil acidification, soil organic carbon, soil structural decline and ground cover management. Working with 45 Landcare and producer groups and two schools, it delivered education around soil sampling and soil test interpretation, fertiliser and lime management and sustainable farm practices. The main topics were in the areas of visual soil assessment, soil capability, fertiliser management and budgeting, ground cover and grazing management, alternative fertilisers and soil amendments, stubble management and financial planning. The project also worked with the Yorta Yorta, Taungurung and Dja Dja Warrung Traditional Owner groups to develop and run two workshops around soils, geology and links with Dreamtime Stories.

In 2015-16 the Australian Government's National Landcare Programme funded Beyond SoilCare project delivered:

- 20 SoilCare discussion group meetings (4 groups) 187 people attending events in total
- 44 workshops/field days run by the SoilCare program, 671 participants
- 12 farm tours, 207 participants
- one Traditional Owner workshop at Barmah, 22 participants with students from one Shepparton High School.

The high level of participation reflects ongoing community interest in improved management of soils and opportunities to improve Catchment condition and farm profitability by improving the health and stability of soils.

Planning and responding

Activities and achievements included:

- Develop a Land Health Strategy 2016-2018 – currently in draft form.
- Provided a representative for the Statewide Dryland Managers Forum.
- Reestablishment of the Goulburn Broken Land Health Forum, a forum attended by Goulburn Broken CMA, Department of Economic Development, Jobs, Transport and Resources, Landcare and producer group representatives.
- Preparation of the Beyond SoilCare Qualitative Evaluation Report 2016.
- Preparation of four demonstration site community summaries.
- Promote best practice behaviours that demonstrate robust, adaptable and productive farming systems for managing the impacts of climate change and the program. Whilst the lack of rain has been an issue for farmers throughout the year the recent large downpours have mobilised tunnel, gully and sheet erosion creating further issues for farmers trying to protect soils and pastures.



Works and operations

A dry year focused farmers on issues of water, pasture and stock management. Grazing management strategies, soil amendments, animal husbandry and planning business options continued to be topics of most interest. We still have work to do in this area to assist farmers to plan management options for different scenarios to manage for production and at the same time, land and soil health. Maintaining ground cover is a priority for the majority of farmers in the Catchment with recognition that soil loss reduces the long-term capacity and productivity of their farms and represents erosion of past investment.

The farmers that have increased ground cover have seen a decrease in water runoff into dam catchments creating issues with water availability with stock. This has led to the installation of water troughs and tanks adding a cost some farmers would not have budgeted for.

Due to the dry conditions soil erosion has increased. The rain that has occurred, in some cases, has been in downpours creating sheet and tunnel erosion on certain soils. Some landholders are actively trying to reduce erosion through management of water run-off. Education is required for landholders to effectively manage erosion with this changing environment.

The Beyond SoilCare project continues its key partnerships with delivery partners working with highly skilled staff, allowing extension, engagement and practice change adoption targets to be exceeded in 2015-16. Landcare Networks have continued to formalise their working partnership through Beyond SoilCare project funding to support agency agreements to deliver erosion demonstration works and extension.

Challenges for the program are to run events that suit a majority of people and there has been a larger call to run events on weekends to accommodate absentee landholders and those that work off farm during the week.

Actions 2013-14, 2014-15 and 2015-16

Action		From funds received				
		Achieved ⁱ		Target	% achieved	
		2013-14	2014-15	2015-16		
Fence remnant vegetation	ha	1,115	524	468	508	92
Irrigation drainage environment plans	no.	0	0	0	0	
New irrigation referrals dryland zone	no. ^{iv}	7	0	2	-	
Improved irrigation dryland zone ⁱⁱ	no. ^{iv}	16	17	18	15	120
Sub-surface water action						
Revegetation – plant natives	ha	1,158	508	683	585	117
Pasture – plant	ha	0	0	0	0	
New groundwater pumps – public installed	no.	0	0	0	0	
Planning for works action						
Whole farm plans - Level 1 ⁱⁱⁱ	no.	0	0	0	0	
Whole farm plans prepared - Level 2 ⁱⁱⁱ	no.	2	0	1	-	

ⁱ Achievements include those by complementary investment areas such as Biodiversity. For a full list of footnotes please see Appendix 3 on page 130.

ⁱⁱ An aggregate of properties and irrigated areas receiving intensive extension support for irrigation whole farm planning, system checks, soil moisture monitoring equipment, scheduling and major system changes.

ⁱⁱⁱ Level 2 is comprehensive and is equivalent to SIR's whole farm plan. Level 1 is a short-course that is a precursor to Level 2.

^{iv} Unit of measure published previously should have been 'number' and not 'hectare'.

What's next?

- Implement findings of the Beyond SoilCare Qualitative Evaluation Report 2016.
- Continue to support community-initiated projects through the Goulburn Broken Land Health Forum, Regional Landcare Facilitator Steering Committee and Landcare Facilitators and Coordinators group.
- Continue to coordinate community education opportunities across agencies and build the 'soil health' community network.
- Maintain investment in Landcare and community groups to deliver soil health and sustainable farming projects.
- Link training packages to promotion of improved management practices and soil test interpretation.
- Work on the identification of improved management practices through Beyond SoilCare.
- Assist Department of Environment, Land, Water and Planning in the development of indicators for an improved and consistent approach to monitoring and reporting of catchment condition under the 'Land' theme.
- Report on progress towards soil health targets (pH, organic carbon, ground cover) across Goulburn Broken Social-ecological Systems.
- Coordinate peer supported learning opportunities, focused on management solutions and building the soil health community network.
- Showcase and connect farmers implementing improved management practices.
- Continue to build the capacity of community groups and individuals to carry out their own assessments of soil health and management practices in a rigorous and logical way through support of demonstration trials.
- Completion of the Land Health Strategy review.



3c Invasive Plants & Animals

Compiled by Greg Wood (DEDJTR)

Decision focus ⁱ	Examples of evidence used to inform decisions	Pest Plants				Pest Animals				Trend
		1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	
Catchment Condition ^{iv}	Impact of pest plants and animals on assets. (Not available at Catchment scale) Management systems	Poor	High	Poor	High	Poor	Medium	Poor	Medium	●
Long-term strategy implementation progress	Outputs (scheduled to be completed between 2010 and 2016)	n.a.	n.a.	Below target	Very low	n.a.	n.a.	Below target	Low	● ⁱⁱⁱ
2015-16 performance	Outputs (against targets set as a result of funds received)	n.a.	n.a.	On target	High	n.a.	n.a.	On target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of the situation in 1990.

iii. Extremely hard to rate, especially given that the Department of Economic Development, Jobs, Transport and Resources pest plant and animal activities have been removed from the Goulburn Broken CMA's investment processes.

iv. The reference point is taken to be the time just prior to European settlement, when the Catchment is considered to have been in excellent condition.

Catchment condition

Invasive plants and animals continue to negatively affect catchment condition. Many species have become naturalised and invade all areas of the Catchment. Foxes, wild dogs and feral cats kill millions of native animals each year, while rabbits cause erosion, compete for resources and prevent natural regeneration of native flora. Pest plants out compete native species, reducing diversity and provide harbour for pest animals.

Terrestrial and aquatic environments remain vulnerable to new and emerging weeds and land managers must remain vigilant to ensure early identification of new infestations.

In the Goulburn Broken, consideration of invasive plants and animals is built in to projects and programs where possible.

Long-term strategy implementation

The Goulburn Broken Invasive Plants and Animals Strategy (2010) sets the high-level direction for invasive plants and animals investment in the Catchment and supports the State Invasive Plants and Animals Policy Framework. For the past five years, this document, along with community support, has been used to identify priorities for pest management activities in the Catchment.

A key element of the strategy is the 'biosecurity approach', which emphasises the need to manage new or emerging weed species to prevent establishment of new species, as this is considered to be the most cost-effective use of limited resources. All new invasive plants and animals projects have been clearly aligned to program goals identified in the strategy. Prevention and eradication of new incursions remain the highest priorities.

2015-16 performance

Community engagement

Effective engagement and peer support is the key to program success. During 2015-16, community groups again used local connections and communication to encourage high levels of landholder participation in targeted pest control programs.

The Department of Economic Development, Jobs, Transport and Resources (DEDJTR) invasive pests program continued to support coordinated community action during 2015-16. In consultation with community groups, targeted compliance activities were delivered to support large scale rabbit and weed control programs, ensuring the participation of all land managers in project areas.

Department of Economic Development, Jobs, Transport and Resources Priority for compliance activities was given to areas where incentive funding for pest management works was available through local community groups and where groups could demonstrate sustained coordinated effort over a number of years to control priority pests.

To support pest management works undertaken by private landholders, the Department of Environment, Land, Water and Planning (DELWP) Good Neighbour Program again provided funding in 2015-16 to ensure complementary treatment works occurred on public land in targeted compliance areas. Good communication between DEDJR, DELWP and Goulburn Broken CMA ensured Good Neighbour Program works complemented all pest plants and animal projects, both in and out of targeted compliance areas.

The Victorian Landcare Grants continued to invest in the pest plants and animals space. Projects were funded to control rabbits and foxes in collaboration with the community and DEDJTR, with many groups gearing up ready to make the most of the expected release of RHDV-K5 (Calicivirus). Continued investment in community driven blackberry control works has been delivered in parallel with DEDJTR and existing Blackberry Action Groups.

Planning and responding

In 2015, a further two years of funding for priority pest management works on municipal roadsides was made available to rural municipalities across Victoria. During 2015, all municipalities in the Goulburn Broken Catchment developed revised roadside pest management plans, detailing priority roadside pest management works for the next two years. These plans aligned with the Goulburn



Broken Invasive Plants and Animals Strategy (2010) and were approved by Department of Economic Development, Jobs, Transport and Resources to ensure statewide and catchment issues are adequately and consistently addressed. Delivery of these works has varied across the different local government areas. Some have fully engaged their community groups such as Landcare, whereas others have adopted a hands-off approach by engaging contractors to undertake the works.

Works and operations

The private land public agency partnership for pest plants continued in 2015-16, with community groups accessing \$245,000 from the Victorian Landcare Grants to work in consultation with Department of Economic Development, Jobs, Transport and Resources compliance programs. A coordinated community effort together with agency compliance action ensured a high level of landholder participation in the control of priority pests such as Gorse, Blackberry and rabbits.

With roadside pest management funding, local government actively participated in all Department of Economic Development, Jobs, Transport and Resources compliance

programs during 2015-16, treating roadside pests to complement the excellent results achieved on private land.

The management of all known sites of both State Prohibited Weed and Regionally Prohibited Weed species remained a high priority. During 2015-16 a total of 135 infestations were treated, including all known infestations of the State Prohibited Weeds: Camel Thorn, Horsetail, Knotweed, Mexican Feather Grass and Water Hyacinth and the Regionally Prohibited Weeds: Artichoke Thistle, Serrated Tussock, Cape Tulip and Ragwort. Infestation levels at most sites have steadily reduced and assessment of sites for 'eradication' status continued.

Five established weed compliance projects and two established pest animal compliance projects were delivered by the Department of Economic Development, Jobs, Transport and Resources during 2015-16. These projects involved a total of 257 properties, targeting Serrated Tussock, Gorse, Blackberry and rabbits.

As in previous years, high levels of voluntary compliance were achieved in all projects and despite the large number of landholders involved, only one landholder was prosecuted for failing to comply with a Land Management notice to control rabbits.

Actions 2013-14, 2014-15 and 2015-16

Action		From funds received				% achieved
		Achieved ⁱ			Target	
		2013-14	2014-15	2015-16		
Weed invasion						
Weeds – aquatic weeds controlled/eradicated	km	3	97	14	-	
Targeted infestations of weeds in high priority areas covered by control programs ⁱⁱ	ha	3,853	3,359	2,894	1,270	228
DEDJTR Biosecurity Victoria works - Targeted infestations of weeds in high priority areas covered by control programs ⁱⁱⁱ	ha	12,880	10,060	11,820	12,848	92
Pest animals						
Area of high priority rabbit infested land that are covered by control programs ⁱⁱ	ha	4,699	1,496	722	871	83
DEDJTR Biosecurity Victoria works - Area of high priority rabbit infested land that are covered by control programs ⁱⁱⁱ	ha	6,175	6,850	7,480	7,480	100
Area of high priority fox infested land covered by control programs	ha	26,502	21,384	6,599	6,150	107

ⁱ Achievements include those by complementary investment areas such as Biodiversity. For a full list of footnotes see Appendix 3 on page 130.

ⁱⁱ This includes 'Weeds - woody weed management' (Appendix 3).

ⁱⁱⁱ Works completed by DEDJTR Biosecurity Victoria (outside of the Corporate Plan).

What's next?

All State and Regionally Prohibited weed sites will continue to be surveyed and treated where necessary. Department of Economic Development, Jobs, Transport and Resources will continue to work with community based natural resource management groups and the Goulburn Broken CMA to identify priority areas for management of established weeds and rabbits.

Where groups can demonstrate sustained coordinated effort over a number of years to control priority pests, Department of Economic Development, Jobs, Transport and Resources will provide support through the delivery of targeted compliance programs.



Human resources (including occupational health and safety)

Compiled by: Kate Pendergast, Richard Warburton and Shannon Crawford.

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Organisational condition	Workforce data Management systems	Satisfactory	Medium	Good	High	↑
Long-term strategy implementation progress	Outputs	n.a.		On target	Medium	● ⁱⁱⁱ
2015-16 performance	Outputs (against targets set as a result of funds received)	n.a.		On target	Medium	n.a.

- i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.
 ii. Ratings for 1990 have been determined using our understanding in 2016 of what the situation was like in 1990.
 iii. Assumed to parallel government funding trend.

Government investmentⁱ, \$000

2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
5,645	5,466	5,840	6,015	↑

- i. Excludes board and support committees.
 ii. Forecast based on estimated increases of 3.0 per cent cost (wage and super increase) on 2015-16 figures.

Major strategic references

- Goulburn Broken Workforce Strategy 2013-18
- Goulburn Broken CMA Capability Framework 2013
- Goulburn Broken Corporate Plan 2012-13 to 2016-17
- *Occupational Health and Safety Act 2004*
- *Public Administration Act 2004* (employment and conduct principles)
- *Equal Opportunity Act 1995*

Background

The Goulburn Broken CMA fosters a workplace culture where professionalism and expertise is valued and supported by communication and continuous improvement.

The Goulburn Broken CMA's flexible workplace arrangements address the contemporary needs of a broad staff demographic, aiming to create a sustainable, diverse, progressive and professional staff body.

Efficiencies are captured through carefully balancing internal and partner service delivery.

The Goulburn Broken CMA's workforce capability, culture and business acumen positions it well to achieve the Regional Catchment Strategy's vision and implement government policy.

A healthy and safe organisation

The Goulburn Broken CMA emphasises Occupational Health and Safety including wellbeing across all aspects of the workplace, integrated into all operations and requiring all staff to participate in Occupational Health and Safety management and operations.

Organisation condition

The Organisation Performance Excellence Review (October 2015) combined with continuing low indicators for bullying, absenteeism and voluntary turnover reflects the strong sense of community, high levels of job satisfaction and support for organisational values and strategic objectives in Goulburn Broken CMA staff. Key measures obtained from the Organisation Performance Excellence Review and the People Matter Survey indicated 88 per cent staff satisfaction rate and best practice in Leadership and People Focus respectively.

Workforce data for the current and previous financial years is contained in the table on page 71.

Goulburn Broken CMA 2013-14, 2014-15 and 2015-16 workforce data

	2013-14		2014-15		2015-16		Comments
	no.	%	no.	%	no.	%	
Gender and employment type ⁱ							
Male	28	46	26	43	26	43	Part time flexibility options are perceived to be managed well as reported in the Organisational Performance Excellence report which is often not seen in other NRM bodies.
Female	33	54	34	57	35	57	
Part time	19	32	21	35	22	36	
Full time	42	68	39	65	39	64	
Part time male	4	7	5	8	4	7	
Part time female	15	25	16	27	18	30	
Full time male	24	38	21	35	22	36	
Full time female	18	30	18	30	17	28	
Total employees	61	100	60	100	61	100	
Total full time equivalents ⁱ	54.5		53.1		54.6		Funding obtained allowed consistency of staffing levels.
Employment status ⁱ							
Fixed term	25	41	19	32	20	33	Fixed term versus ongoing proportion enables workforce agility whilst maintaining attractive tenure ration to support employment stability.
Ongoing	36	59	41	68	41	67	
Employment category ^{i & iii}							
Executive Officers	2	3	1	2	1	2	No material change.
Senior Managers	6	10	7	12	7	11	
Admin Officers	44	72	44	73	45	74	
Field staff	9	15	8	13	8	13	
Age profile (years, by tally) ⁱ							
20-24	1	2	1	2	1	2	No material change.
25-29	3	5	2	3	1	2	
30-44	27	44	25	42	25	41	
45-54	21	35	24	40	22	36	
55-59	7	12	6	10	7	11	
60-64	2	3	2	3	5	8	
65+	0	0	0	0	0	0	
Average age, years	44		44		44		
Years of service ⁱⁱ							
12 months or less	3	5	4	7	3	5	Staffing stability continues to be a strength, however turnover for 2015-16 was lower at 3.3 per cent. Five to 10 percent ensures a managed injection of new staff in to the Authority.
1-3 years	6	10	4	7	7	11	
3-5 years	16	27	13	22	5	8	
5+ years	36	58	39	65	46	75	
Average length of service, years	8.1		7.7		8		
Salary distribution ^{iii & iv}							
<\$40,000	0	0	0	0	0	0	Increase in average salary can be attributed to an overlap in departure of a senior manager and appointment of replacement as per succession planning.
\$40,000 – 59,999	6	10	4	7	4	7	
\$60,000-79,999	32	52	30	50	30	49	
\$80,000+	23	38	26	43	27	44	
Average Salary ^v	\$75,801		\$75,428		\$80,269		
Qualifications ⁱⁱⁱ							
Year 12 or less	7	11	6	10	6	10	No material change.
Certificate	2	3	2	3	2	3	
Advanced Diploma/Diploma	10	16	10	17	11	18	
Degree	36	59	36	60	35	57	
Postgraduate Degree/Graduate Diploma	6	10	6	10	7	11	
Turnover (total)	5	8	5	8	2	3	Turnover was lower than target due to funding certainty and opportunities to retain existing staff made available by parental leave and other extended leave opportunities.
Turnover (ongoing staff only, % of total turnover)	3	60	2	40	1	50	
Exit interviews completed	2	40	4	80	1	50	Low turnover resulted in no Exit Interview report being generated.
Absenteeism		1.0		2.3		2.1	No material change.
Training expenditure (% of employee related expenditure)	\$121,404	2.2	\$120,645	2.2	\$114,745	2.0	82% agree that training needs are being encouraged and that opportunities are provided and 90% have identified and agreed their development needs.

i. Active employees: any Goulburn Broken CMA employee included in payroll system whose status is not terminated

ii. All employees including terminations (excludes board and committee members)

iii. Includes all employees for 2014-15

iv. Based on 1.0 FTE full year salary

v. Actual average salary paid including terminations

Long-term strategy implementation progress

Human Resources

The Goulburn Broken CMA Workforce Strategy 2013-18 directs strategic priority projects and opportunities for enhancing the Goulburn Broken CMA employment value proposition.

Occupational Health and Safety

A comprehensive annual review of the Goulburn Broken CMA Occupational Health and Safety Management System was undertaken in 2015-16. This included all Occupational Health and Safety Management System procedures and associated guidelines, forms and checklists. The review resulted in the development of a risk framework and register approach being adopted. .

The Goulburn Broken CMA's Occupational Health and Safety procedures and practices are based on the model of continuous improvement in relation to best practice as defined by AS/NZS 4801, although not certified.

2015-16 Human Resources performance

The 2015-16 year due to funding and staffing stability continued the focus on delivery and improvement to existing processes and operations. A HR Audit was completed in October 2015 with very pleasing results. The audit findings summary reported that 'HR practices at the Goulburn Broken CMA are sound and managed appropriately relevant to the size and type of organisation. In a number of instances, practices exceed those seen within other similar organisations'.

Other key activities undertaken to deliver against the core strategic Workforce Strategy objectives are described below.

Governance

The 2015 HR Audit confirmed appropriate policies, procedures and processes are in place. The audit findings reported strong and transparent recruitment processes with low priority improvements for formalising practices currently in place for managing conflict of interest for recruitment panel members and a framework around the certifications and reference documents require appropriate to position type and level. The renewal of the Goulburn Broken CMA Enterprise Bargaining Agreement commenced in November 2015 and is progressing.

Attraction and recruitment and labour supply and agility

Three new staff were recruited to the Goulburn Broken CMA during 2015-16. The field of applicants for all positions were strong reinforcing the reputation of the Goulburn Broken CMA as an attractive employer and career proposition. All recruitment was in the program areas consistent with confidence in delivery budgets. In 2015-16 resource sharing with neighbouring CMA's continued in the GIS support provided by North Central CMA and the provision of OHS expertise to North East CMA on a 0.4 FTE basis.

Capability building

Learning and development coordination was identified as an opportunity in the 2014 Corporate Review with significant gains achieved in both the promotion, coordination and range of training on offer both internally and externally in 2015-16. Improvements included a continuously updated Training Calendar site with training programs catalogued consistent with the Capability Framework. The use of evaluations for each program and improvements to the online training resources has contributed to improved satisfaction in training coordination.

An initiative of utilising internal staff to deliver skills training was successfully introduced, combined with externally run training. Topics included:

- Occupational Health and Safety
- communication
- systems and Microsoft applications
- financial information.

The response rate to these sessions was positive with 88 per cent of Goulburn Broken CMA staff taking up at least one of these opportunities.

Learning and Development was an area for enquiry in the People Matter Survey, reporting that 82 per cent of staff undertook skills development in the past 12 months with 93 per cent responding that the training undertaken improved job skills and 76 per cent of staff were positive about the learning and development opportunities and delivery by the Goulburn Broken CMA.

Participation and Motivation

Access to workplace flexibility continued to be a cornerstone of the Enterprise Agreement renewal and workforce decisions include flexibility access and equity as key principles. 27 per cent of staff accessed long service, unpaid leave and parental leave over the period and purchased leave was taken up for the first time by two staff members.

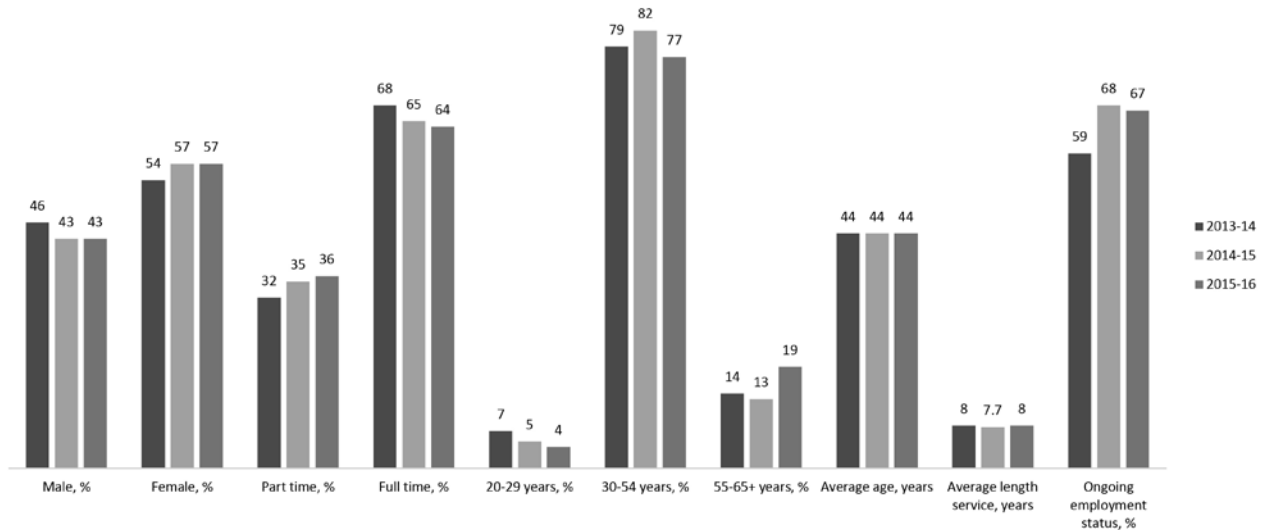
Supporting our community

Following the Goulburn Broken CMA participation in the 1000 Conversations initiative of the Greater Shepparton Lighthouse Project, a cooperative project utilising a Goulburn Broken CMA staff member to work with Shepparton High School to better integrate natural resource management awareness within the Goulburn Broken catchment was piloted. Staff continue to support Learning Club at a local primary school and the organisation raises and donates funds through social club and various fundraising events for a variety of local and national causes.

Our staff

A list of all Goulburn Broken CMA staff employed for all or part of 2015-16 is on page 148.

Goulburn Broken CMA people profile



2015-16 Occupational Health and Safety performance

A key Occupational Health and Safety focus in 2015-16 has been a trial of a new technology called iAuditor, a cloud based management system, enabling inspection and risk assessment templates to be developed and shared with groups and individuals within the Goulburn Broken CMA. The system provides real-time risk assessment, inspection requirements in the field as well as a private and secure desktop environment. Templates were progressively developed utilising the Goulburn Broken CMA's current standard Occupational Health and Safety templates and field trialling was undertaken.

The Goulburn Broken CMA Occupational Health and Safety Policy statement and Occupational Health and Safety procedures continued to be reviewed in consultation with the workforce, ensuring that Occupational Health

and Safety operations reflect best practice and changes to workplace consultation requirements as part of the *Occupational Health and Safety Act 2004* and Occupational Health and Safety Regulations 2007.

The offer of free flu immunisations was taken up by 50 per cent of staff. In addition to the annual flu vaccination the Whooping Cough (dTpa-containing diphtheria-tetanus-acellular pertussis) booster was made available to staff, supporting broader public health initiatives.

The offer of free biannual Health and Wellbeing screening, including skin checks, was taken up by 15 per cent of staff.

Refer also to the 2015-16 Occupational Health and Safety performance table on page 74.

Occupational health and safety statistics summary

		2013-14	2014-15	2015-16
Hazards	Hazards reported, no.	1	0	0
	Rate per 100 FTE	1.8	0	0
Incidents	Total incidents, no.	8	14	11
	Rate per 100 FTE	14.7	26.4	20.1
	Lost time injury days (minor claims)	0	0	0
	Rate per 100 FTE	0	0	0
	No. of staff with days lost (minor claims)	0	0	0
Claims ⁱ	Rate per 100 FTE	0	0	0
	No. of Standard claims	0	0	0
	Rate per 100 FTE	0	0	0
	No. of lost time Standard claims	0	0	0
	Rate per 100 FTE	0	0	0
Fatalities	No. claims exceeding 13 weeks	0	0	0
	Rate per 100 FTE	0	0	0
Claim costs ¹	Fatality claims	0	0	0
	Average cost per Standard claim	0	0	0

i. Data sourced from WorkCover insurer, CGU.

2015-16 Occupational Health and Safety (OHS) performance

Outcome	No.	Indicator	Target 2015-16	Progress 2015-16
Ensuring a working OHS Management System	1	Current and relevant OHS Policy and Procedures	Goulburn Broken CMA OHS Policy Statement. Annual Review of Goulburn Broken CMA OHS Procedures.	Achieved. Endorsed and distributed. 100% completed and published August 2016.
	2	Standard Safe Work Procedure Development	100 per cent of new Safe Work Procedures developed within one month for new mechanically operated equipment or work processes and communicated to staff once the procedure has been ratified by the OHS Committee.	Achieved. No new Standard Safe Work Procedures have been developed. Existing documents reviewed.
		Development and implementation of Safe Work Method Statement Documents	Develop a library of standard Safe Work Method Statement documents for staff to utilise for site specific works and tailor to suit local conditions and tasks. Central recording of actual Safe Work Method Statement and Safe Work Procedure documents when managing worksite and staff safety. Documents submitted for recording within one week of field projects commencing.	Achieved. No new Standard Safe Work Method Statement Procedures developed. Existing documents reviewed. Achieved. A total of 98 Risk Assessment documents have been recorded with 100% within one week of works commencement.
	3	Workplace inspections conducted	100 per cent of workplace inspections conducted as per inspection schedule.	Achieved. Quarterly office inspections across the two offices; bi-annual depot inspections completed at the three depots; twelve external worksite inspections completed.
	4	Workplace inspections actions completed	100 per cent of actions arising from workplace inspections completed.	Achieved.
	5	Evacuation and emergency procedures	100 per cent of emergency drills conducted as per annual schedule.	Achieved June 2016.
Proactive OHS reporting	6	Incident reporting	100 per cent of Incident Reports received are acted on by OHS Manager.	Achieved. Completed and actioned.
	7	Hazard reporting	100 per cent of Hazard Reports received are acted on by Workgroup Supervisor.	No workplace hazards have been reported during 2015-16.
	8	Lost time injuries	Report monthly to the Goulburn Broken CMA Board.	Achieved.
Fostering a safe work culture	9	Mandatory OHS Training	100 per cent of Mandatory OHS Training Delivered.	Progressed. New OHS Training Framework developed and to be implemented in 2016-17
	10	Display of Safety Information	100 per cent OHS Safety Information displayed on Noticeboards and Goulburn Broken CMA Portal.	Achieved. Part of Annual OHS Procedure review.
OHS Consultation & Management	11	OHS Representatives (HRS)	Election of Health and Safety Representatives as per OHS Consultative Procedure No. 3.	Achieved. Tenure of all three Designated Workgroups HSRs completed and HSRs in place during 2015-16.
	12	OHS Committee Meetings	Target of 5 OHS Meetings per financial year conducted with a quorum.	Achieved. 5 meetings conducted for 2015-16. Tenure of OHS Committee completed in 2015-16.

What's next?

Human Resources

- A restructure of the current human resource and occupational health and safety functions will be a key focus for 2016-17. The appointment of a People, Safety and Wellbeing Manager will offer a leadership platform to further the focus on health and wellbeing and continue to promote the role flexibility and workplace culture plays in supporting a proactive approach to this growing understanding of OHS.
- The roll out of the Vic Health, Workplace Achievement Health and Wellbeing Program will be a priority initiative.
- Offering a training and development approach that enhances staff capability and is achievable within resources and budget continues to be a challenge and as such is an ongoing priority.

Occupational Health and Safety

- Goulburn Broken CMA will continue to achieve its occupational health and safety objectives by developing and implementing appropriate policies and procedures that reflect the changing needs of the organisation's operations, documenting standards and guiding managers, supervisors and employees in carrying out their responsibilities.
- The continuing use and implementation of field based technology such as iAuditor to support OHS information accessibility and documentation requirements will continue to be rolled out in 2016-17.
- Consolidation of a risk based approach providing a user friendly framework to be used by managers and staff to understand and implement how risks are managed in the Goulburn Broken CMA.



Environmental footprint

Compiled by: Annie Squires

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Organisational condition	Energy consumption Vehicle use Management systems	Very poor	Very low	Poor	Low	●
Long-term strategy implementation progress	Outputs (scheduled to be progressed between 2012 and 2016)	n.a.		Below target	High	●
2015-16 performance	Outputs (against targets set as a result of funds received)	n.a.		On target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127), including an explanation of the decision focus and ratings.

ii. Ratings for 1990 have been determined using our understanding in 2016 of what the situation was like in 1990. Ratings are about the condition of the natural resource management organisations (with respect to environmental footprint) rather than the condition of the Catchment.

Government investment, \$000

2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
24	10	0	0	↓

i. Forecast is based on Corporate Plan 2016-17.

Major strategic references

- Goulburn Broken CMA Organisational Environmental Footprint Policy 2011
- Goulburn Broken CMA Organisational Environmental Footprint Strategy and Action Plan 2012-2014
- Goulburn Broken CMA Climate Change Integration Strategy
- National Greenhouse Accounts Factors – Department of the Environment
- Greenhouse Gas Protocol (www.ghgprotocol.org)

Background

With support from management and staff, the Goulburn Broken CMA promotes environmentally responsible and sustainable practices.

Data collection for greenhouse gas emissions calculations commenced in 2006-07, our base year for reporting and comparisons.

All Goulburn Broken CMA environmental footprint initiatives and activities are guided by the Organisational Environmental Footprint Policy 2011 and Organisational Environmental Footprint Strategy and Action Plan 2012-14, which were both revised in 2011. Reporting is guided by the Victorian Government's Financial Reporting Directions 24C and in line with current carbon accounting practices.

Implementation of the action plan was guided by a working group that was supported by the sustainability coordinator.

This position is currently vacant and the action plan has not yet been reviewed.

Internally, the program is promoted as 'Reducing our Footprint'.

Organisation condition

The table on page 76 summarises our greenhouse gas inventory, including direct emission sources such as vehicle fleet fuel and indirect sources such as purchased electricity, business travel and waste.

Long-term strategy implementation progress

Since the initial data collection in 2006-07, the Authority's overall emissions report shows a downwards trend with continued improvements in vehicle emissions (our biggest greenhouse gas emissions source), waste management and paper use.

Some actions to achieve reductions in energy use have been implemented in 2015-16 and are expected to have a more significant impact on emissions from this source in 2016-17.

2015-16 performance

Total emissions were reduced again during 2015-16, primarily due to reductions in electricity use. Total greenhouse gas emissions have reduced to 12 per cent below 2006-07 levels. Emissions per FTE have dropped further to 9.7 t CO₂e, a 24 per cent reduction on 2006-07 levels.

Electricity emissions are now almost 18 per cent below 2006-07 levels. New low energy LED lights were installed in the Shepparton office in April 2016, replacing the fluorescent tubes. This combined with improvements in the heating/cooling control system has resulted in significant savings in electricity use in the last few months of 2015-16.

Vehicle fleet emissions continued the downward trend despite another increase of eight per cent in total kilometres travelled for the year. This continues to highlight the ongoing improvements in the vehicle fleet with fuel efficient, lower emission vehicles. Total emissions from vehicles are now 13 per cent below 2006-07 levels.

Paper use remained steady at 11.7 A4 equivalent reams per FTE which remains significantly below the target 2006-07 level of 14.2 reams per FTE.

Flight emissions rose due to increased air travel by staff.

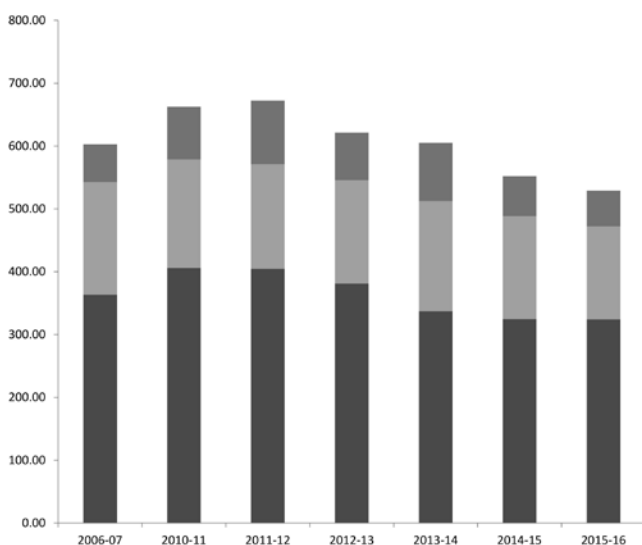
Waste emissions are not a significant component of our total emissions. Waste to landfill fell more than 50 per cent from 9.1 to 4.1 kg per FTE, less than half the target of less than 10 kg per FTE. Recycling rates remained steady at 79 per cent of total waste, falling short of the 90 per cent target.

Office-based environmental impacts reporting

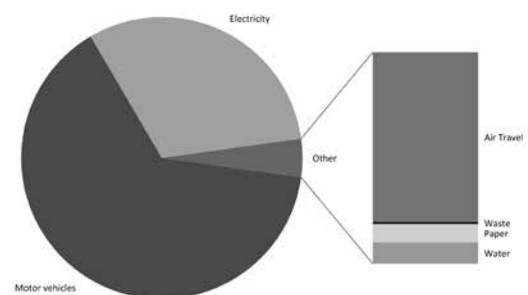
Sustainability report	2006-07 (base year)		2014-15		2015-16	
	Consumption	GHG emissions (t CO ₂ -e)	Consumption	GHG emissions (t CO ₂ -e)	Consumption	GHG emissions (t CO ₂ -e)
Direct emissions (Scope 1)						
Petrol for vehicles (L)	74,711	171	12,909	30	16,552	38
Diesel for vehicles (L)	66,127	178	108,965	294	104,935	286
LPG for vehicles (L)	8,936	14	873	1	-	-
Distance travelled by fleet vehicles (km)	Not avail.		1,553,608		1,685,741	
Total Scope 1		363		325		324
Indirect emissions (Scope 2)						
Electricity (kilowatt hour)	147,930	179	138,587	163	131,270	148
Total Scope 2		179		163		148
Optional emissions (Scope 3) ⁱ						
Electricity (transmission & distribution losses) (kWh)	147,930	22	138,587	21	131,270	17
Flights (km)	Not avail.		50,639	14	68,585	19
Waste - landfill (kg)	8,680	9	418	1	200	0
Water consumption (kL)	Not avail.		1,019	2	997	2
Paper consumption (reams)	514	2	534	2	534	2
Petrol (extraction, production, etc.) (L)	74,711	14	12,909	2	16,552	2
Diesel (extraction, production, etc.) (L)	66,127	13	108,965	22	104,935	15
LPG (extraction, production, etc.) (L)	8,936	1	873	0	-	0
Total Scope 3		61		64		57
Total Scope 1 + 2		542		488		472
Total Scope 1 + 2 + 3		603		552		529
Offsets purchased (% air travel)	-		23		5	

i. Scope 3 emissions are indirect emissions, such as extraction and production of fuels, transport related activities in vehicles not owned or controlled by the Goulburn Broken CMA, waste disposal and electricity-related activities (eg. transmission and distribution losses) not covered in Scope 2. Reporting of Scope 3 emissions is optional under the international Greenhouse Gas Protocol.

Goulburn Broken CMA emissions - t CO₂-e



2015-16 Emissions by source activity





Governance

Compiled by Eileen Curtis, Shannon Crawford and Katie Warner

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

Decision focus ⁱ	Examples of evidence used to inform decisions	1990 ⁱⁱ	Certainty of rating	2016	Certainty of rating	Trend
Organisational condition	Efficiency ratios Management systems: - legislative and funding backing - policies and procedures - communities' capacity ⁱⁱⁱ	n.a.		Good	Medium	↑
Long-term strategy implementation progress	Corporate Plan key performance indicators ^{iv} Compliance ^v	n.a.		On-target	Medium	● ^{vi}
2015-16 performance	Corporate Plan key performance indicators ^{vii} Compliance ^v	n.a.		On-target	High	n.a.

i. See Appendix 1 for notes on the analytical framework (page 127 including an explanation of the decision focus and ratings).

ii. Ratings for 1990 have been determined using our understanding in 2016 of the situation in 1990.

iii. Evidence listed in 'Community engagement' section page 18.

iv. Aggregated performance over the years Goulburn Broken CMA has been in existence (since 1997).

v. See performance of statutory responsibilities as a Victorian State Authority and Employer page 83.

vi. Assumed to parallel government funding trend.

vii. See Corporate Plan performance areas, indicators, targets and progress table page 88.

Government investment, \$000

2013-14	2014-15	2015-16	2016-17 ⁱ	Trend
1,407	1,758	1,694	1,756	●

i. Forecast is based on Corporate Plan 2016-17.

Major strategic references

- Goulburn Broken Corporate Plan 2015-16 to 2019-20 and subsequent deviations
- DELWP Guide to Good Governance – board members
- *Public Administration Act 2004*

Background

This section includes:

- a description of 'Governance'
- the legislative and funding context of the Goulburn Broken CMA to establish its Corporate Governance practices
- a scorecard (above) as a summary of annual and long-term performance (including compliance) and the capacity of the Catchment's people to undertake sound and ethical natural resource management
- an overview of the Goulburn Broken CMA's Governance practices
- Risk Management Attestation
- Goulburn Broken CMA's performance of statutory responsibilities as an employer and a Victorian State Government Authority
- performance against key performance indicators listed in the Goulburn Broken CMA's Corporate Plan
- What's next? (strategic priorities over the next 12 months).

Description of Governance investment area

This 'enabling' program exists to ensure that the Goulburn Broken CMA continues to fulfil its statutory and corporate functions; maintains a high level of governance, transparency and accountability in delivering program commitments agreed with investors and ensures that:

- areas of finance and reporting, business development, communications and marketing, human resources and information and communication technology requirements are clearly aligned with our business objectives
- a safe workplace is provided for all employees, contractors and visitors
- an effective risk management framework is in place which forms an integral part of the strategic planning processes, where risks are identified, assessed and monitored under risk treatment plans to mitigate the risk to an agreed level
- comprehensive monitoring and evaluation process are in place ensuring project reporting on expenditure and outputs is of a high level and in line with requirements of the board and investors
- optimum information management systems are in place to allow Goulburn Broken CMA to undertake, record, communicate and report on its business activities undertaken throughout the Catchment
- the environmental footprint is minimised
- it works in partnership and openly shares knowledge and information, with a range of agencies and other Victorian CMAs to improve the delivery of integrated natural resource management
- it has an optimum corporate structure commensurate to its program funding acceptable to all stakeholders and the community at large
- governance standards are communicated to the community to ensure that the Goulburn Broken CMA maintains its social licence to operate.

2015-16 performance

The performance of the Governance investment area is described comprehensively through the Business and Financial Report sections.

What's next?

The Goulburn Broken CMA is a mature organisation with an optimum corporate structure managing a revenue base of \$26.5 million in 2015-16.

The key challenges in the short term continue to be:

- maintaining a high level of corporate services and skills whilst minimising the cost of the corporate function
- ensuring the return on systems development is a benefit to the business and stakeholders
- keeping abreast of constantly changing governance and investor requirements.

Other general priorities include:

- identifying new and maintaining existing, funding streams to enable investments to be made within the Catchment aligned to what is required to meet the strategic objectives under the Goulburn Broken Regional Catchment Strategy
- having the ability to demonstrate to government and the catchment community the return on taxpayers' investment in natural resource management and sustainable agriculture in a timeframe and language that fits within the political reality
- the ability to retain people with specialist skill sets required to support our Statutory Obligations, in the area of Environmental Water management, Floodplain management and Financial management
- balancing the need to actively support partnerships in service delivery while promoting the Goulburn Broken CMA brand for local and national recognition.

Specific priorities to be addressed include:

Finance and reporting:

- enhancement of financial systems to improve efficiency and financial reporting for end users
- improving project reporting systems to enable timely reporting and greater transparency of investment dollars
- establishing a knowledge management framework to govern capture of the increasing volume information for both internal and external purposes.

Business development:

- mid-term review of the implementation of the Goulburn Broken Regional Catchment Strategy 2013-2019
- seek new investors willing to make major investments in natural resource management priorities of the Catchment's six Social-Ecological Systems, aligned to the strategic objectives of the Goulburn Broken Regional Catchment Strategy 2013-2019
- finalise the Goulburn Broken CMA Monitoring, Evaluation and Reporting Strategy aligned to the Goulburn Broken Regional Catchment Strategy 2013-2019.

Human Resources:

- restructure of HR and OHS operations ensuring continuation of service and smooth transition
- finalisation of Enterprise Agreement and achievement of planned savings and productivity gains
- implementation of Workplace Achievement Program to provide a greater focus and targeted actions on workplace health and wellbeing
- development and implementation of a revised OHS Management Framework to better integrate risk reduction and new support technologies for OHS information and protocols.

Information and communication technology:

- continue implementation of the Information and Communication Technology Strategy 2015-2017
- continue implementation of the EnQuire grants, contract and project management system
- complete major upgrade to the Microsoft SharePoint Electronic Document Management System
- complete major upgrade to the internal computing and network infrastructure.

Marketing and communication:

- review Community Engagement and Communications and Marketing Strategies to ensure they align with Goulburn Broken RCS priorities
- upgrade design and content of the Goulburn Broken CMA website
- completion of community awareness and customer satisfaction survey (undertaken every four years)
- ongoing stakeholder analysis and review
- embed community engagement and communications and marketing activities in all programs/projects
- celebrate success via coordinated communication campaigns.

Occupational health and safety:

- monitor compliance activities against agreed key performance indicators
- ensure that the Goulburn Broken CMA meets its obligations under current legislation and monitor requirements of any proposed new legislation.

Goulburn Broken CMA's legislative and funding context

Refer to 'Power and duties' on page 7 for the legislative context.

The Victorian Government funds the Goulburn Broken CMA to fulfil its statutory obligations as detailed in the two relevant Statements of Obligations.

Costs that enable the Goulburn Broken CMA to fulfil its core corporate obligations are funded from a direct corporate allocation and interest earned. Other corporate costs are charged to projects up to a board-approved percentage which recognise the degree of support provided to those projects. Corporate costs are not charged on project funding to community groups or other partners.

Goulburn Broken CMA's funding of \$25.5 million was sourced from Regional, State and Commonwealth Government sources in 2015-16. It is estimated that the regional community contributes (in-kind and via products and services) about the same that governments contribute.

An increasing amount of government funding received is from initiative funding sources.

All works undertaken are in line with State, Murray-Darling Basin and National strategies.

Objectives, functions, powers and duties of the Goulburn Broken CMA

The Goulburn Broken CMA has responsibilities under two Statements of Obligations, one under the *CaLP Act* (for obligations under that Act) and another under the *Water Act* (for obligations under that Act).

Catchment and Land Protection (CaLP) Act 1994

The responsibilities of the Goulburn Broken CMA as they relate to the *CaLP Act 1994* are as follows:

- prepare, coordinate, monitor and review the Regional Catchment Strategy
- prepare and submit an annual report on the condition and management of land and water resources in the region
- prepare and submit a corporate plan to the Minister by 30 April each year
- comply with the Statement of Obligations.

In performing its functions and providing its services an authority shall, in a manner consistent with relevant government policies, frameworks, strategies, plans and guidelines:

- a. facilitate and coordinate the management of catchments in an integrated and sustainable manner, including as it relates to land, biodiversity and water resources.
- b. take a sustainable approach by balancing social, economic and environmental outcomes.
- c. plan and make decisions within an integrated catchment management context:
 - recognising the integral relationship between rivers, their catchments, coastal systems and estuary and marine environments

- recognising the integral relationship between the land – its soil, water, vegetation and fauna – and associated natural ecosystems
 - recognising the need to foster the resilience of natural assets, including land, biodiversity and water resources, to climate change
 - using the best available scientific information
 - targeting investment to address priorities and deliver maximum improvement in resource condition of catchments, land, biodiversity and water resources.
- d. provide opportunities for community engagement in the integrated management of catchments and natural assets, including land, biodiversity and water resources.
 - e. develop strategic partnerships with relevant stakeholders including public authorities and government agencies.
 - f. promote and apply a risk management approach that seeks to protect, enhance and restore natural assets and reduce the impact of climate change.
 - g. promote and adopt an adaptive approach to integrated catchment management, including continuous review, innovation and improvement.
 - h. manage business operations in a prudent, efficient and responsible manner.

Water Act 1989

Under the *Water Act 1989*, the Goulburn Broken CMA aims to reduce the impact of flood damage to new buildings, help conserve and preserve flora, fauna and habitat in designated waterways and to reduce water quality decline.

This is done by providing:

- permits to construct and operate works on a waterway, compliance and community education
- resources to planning permit referrals for developments within a flood prone area
- responses to applications for flood levels, flood risk reports and flood information before development
- flood planning information and advice to councils, state emergency services, developers and others
- flood response action plans, including collection of flood information during and after a flood and assistance with emergency planning and flood warning
- flood data management
- comply with the Statement of Obligations.

Goulburn Broken CMA Board

Members of the Goulburn Broken CMA Board of Directors are drawn from within the region and together have extensive experience and knowledge of land management, water resources management and the water industry, waterway management, environment or natural resources management, primary industry, strategic or business planning, financial management.

Under the direction of the board, the Goulburn Broken CMA develops detailed environmental management strategies under the umbrella of the overarching Regional Catchment Strategy.

Goulburn Broken CMA's corporate governance practices

Sound and ethical corporate governance practices underpin the Goulburn Broken CMA's overall performance including compliance with what is required and expected of it. This is codified in the Goulburn Broken CMA's Financial Code of Practice which all employees are obligated to comply with.

Board Committees

The Goulburn Broken CMA has established an Audit Risk and Compliance Committee, a Remuneration Committee and a Finance Committee. All committees operate under the terms of their respective Charter. The Finance Committee was placed into recess on 26 May 2016.

Audit, Risk and Compliance Committee

(Directors Weston, Craven and Stothers met the criteria of 'independent' member)

1 July 2015 – 30 September 2015

- Adrian Weston (Chair)
- John Craven
- Ailsa Fox
- Ross Runnalls
- Murray Chapman as Ex Officio

27 October 2015 – 30 June 2016

- Adrian Weston (Chair)
- John Craven
- Kate Stothers
- Murray Chapman as Ex Officio
- Ross Runnalls (external member)

Remuneration Committee

1 July 2015 – 30 September 2015

- Michael (Mike) Dalmau (Chair)
- Alexander (Sandy) MacKenzie
- Ross Runnalls
- Murray Chapman as Ex Officio

27 October 2015 – 30 June 2016

- Rowena Ellis (Chair from 28 April 2016)
- Alexander (Sandy) MacKenzie
- Adrian Appo
- Murray Chapman as Ex Officio (Acting Chair until 28 April 2016)

Finance Committee

1 July 2015 – 30 September 2015

- Ross Runnalls (Chair)
- John Craven
- Alexander (Sandy) MacKenzie
- Michael (Mike) Dalmau
- Murray Chapman as Ex Officio

27 October 2015 – 26 May 2016

- John Craven (Chair)
- Adrian Appo
- Rowena Ellis
- Adrian Weston
- Murray Chapman as Ex Officio

Planning Framework

The Goulburn Broken CMA's planning framework is described within the 'Planning and Responding' section on page 21.

Risk Management

The Goulburn Broken CMA reviewed its risk profile during the year and it was considered by the Audit, Risk and Compliance Committee.

Risk Management Attestation

I, Murray Chapman, certify that the Goulburn Broken CMA has complied with the Ministerial Standing Direction 4.5.5 Risk Management Framework and Processes. The Goulburn Broken CMA's Audit, Risk and Compliance Committee has verified this.



Murray Chapman

Chair

28 July 2016

Board directors and officers

For the financial year ended 30 June 2016.



Board directors (LR): Alexander (Sandy) MacKenzie, Murray Chapman, John Craven, Rowena Ellis, Adrian Weston, Kate Stothers, Chris Norman (CEO).
Absent: Adrian Appo.

Murray Chapman - Chair (Goomalibee)

Murray is the owner of a farm at Goomalibee and a current member of several local community organisations including CFA, the VFF and Landcare and a past member of the board of the Benalla and District Memorial Hospital. He is a member of The Earth Resources Ministerial Advisory Council and is a Director of a tourism business on the mid-north NSW coast which incorporates the harmonisation of natural features. Murray has specialised in providing technical support and facilitation services to the NRM industry, particularly in water and on-farm efficiency. Murray is a past director of a natural resource management company specialising in advisory services as well as land and water project management both in Australia and China. He has many years' experience in assisting governments and industry to achieve change-based programs.

Dr John Craven (Middle Park)

John is a registered veterinary surgeon with a PhD in microbiology and is currently employed as a Director of Terip Solutions Pty Ltd. He has considerable experience in research and research methods and was formerly a research manager in the Department of Primary Industries and the Dairy Research and Development Corporation. Until recently John owned a beef cattle property in Terip Terip which was originally settled by his family in the 1880s. He has had considerable experience in on-farm conservation activities and sees the need for communities to value the environment sufficiently to contribute time, energy and money to improve conservation outcomes.

Alexander 'Sandy' MacKenzie (Avenel)

Sandy has a Masters in Rural Science (UNE) and is currently the Landcare coordinator for the Burnt Creek Landcare Group. He holds executive positions with the Victorian Landcare Council and Australian Landcare International. Sandy is also a Community Assessor for the Federal Government NRM programs Caring for our Country and Carbon Farming Initiative. Sandy has experience in Governance, Natural Resource Management and Community Education/Engagement and was the Founding Principal of Orange Agricultural College (Charles Sturt University).

Adrian Weston (Rushworth)

Adrian, who previously ran a dairy farm, owns and operates an irrigated prime lamb and cropping farm enterprise at Rushworth. He is also a Campaspe Shire Councillor, representing the Waranga Ward. Adrian has a long-standing interest in natural resource management and believes the greatest challenge facing the Catchment community is balancing the demand for increased productive use of land (soil) and water resources with protecting and improving the condition of the region's unique natural environment. He says the key to building the Catchment's environmental and social resilience relies on the willingness of business, industry and communities to embrace and adapt to change.

Adrian Appo – OAM (Merrigum)

Adrian has extensive experience in strategy development and governance, particularly in the fields of attracting funding and indigenous affairs. He is the principal consultant at Litehouse Business Solutions, treasurer of the Indigenous Leadership Network Victoria and is a director on the Social Venture Australia and Children's Ground boards. Adrian is also on advisory committees for Impact Investing Australia, University of Melbourne's Business School and Melbourne Grammar School. Adrian believes the greatest challenge facing the Catchment is the increasing competition for water from various interest groups while its biggest opportunity is to lead the way in demonstrating best environmental practice to improve and protect the health of our waterways. He lives with his family in Merrigum.

Rowena Ellis (Mansfield)

Rowena is a partner in Highview Partners, a management consulting firm that specialises in helping small organisations with corporate governance. Highview Partners also operates/owns a farm near Mansfield producing beef and capers. She has been a Winton Wetlands Committee of Management member since 2012; is a member of the Upper Broken Landcare group and founding member of the Mansfield Producer Alliance; and was previously deputy chair of the Mansfield and District Community Bank. Rowena is interested in promoting profitable productive farming practices and good natural resource management and believes one of the Catchment's greatest opportunities – and challenges – is people's capacity to adapt, innovate and thrive in response to climate change.

Kate Stothers (Upotipotpon)

Kate lives in Upotipotpon and has many years' experience in sustainable land management, private land conservation and community development. She also has a strong interest in community-based democracies and advocating for climate change action. Kate's farming background, extensive contacts and networks, environmental restoration skills and professional experience provide Kate with a good understanding of the Catchment community's natural resource management priorities. Kate believes that using the natural ecological processes of our land and water scapes as the basis to determine community-driven local pathways towards sustainable land management practices is the key to addressing challenges such as climate change.

Board members attendance record at meetings

July 2015 – September 2015				
Board member	Board meetings (3 held)	Audit, Risk and Compliance Committee (3 held)	Remuneration Committee (1 held)	Finance Committee (0 Held)
Murray Chapman (Chair)	3	1	1	
John Craven	3	3	1	
Michael (Mike) Dalmau	2	-	-	
Ailsa Fox (Deputy Chair)	2	2	-	
Alexander (Sandy) MacKenzie	3	-	1	
Ross Runnalls	3	2	1	
Adrian Weston	3	3	1	

October 2015 – June 2016				
Board member	Board meetings (8 held)	Audit, Risk and Compliance Committee (2 held)	Remuneration Committee (2 held)	Finance Committee (2 Held)
Murray Chapman (Chair)	8	-	2	2
John Craven	6	1	-	1
Alexander (Sandy) MacKenzie	7	-	2	-
Adrian Weston (Deputy Chair)	8	2	-	1
Adrian Appo	6	-	2	2
Rowena Ellis	6	-	2	2
Kate Stothers	6	2	-	-

John Craven retired as Board Director, effective from 30 June 2016.

Compliance

The following table includes several summaries of Goulburn Broken CMA's compliance that are discussed in more detail elsewhere in this Annual Report.

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

Act or policy	Board's major tasks	2015-16 issues and status
<i>Catchment and Land Protection Act 1994</i>	Prepare, coordinate, monitor and review of Regional Catchment Strategy.	Regional Catchment Strategy for 2013-2019 was approved on 16 May 2013.
	Submit to Minister and Council by the prescribed date: 'A report on the condition and management of land and water resources in the region and carrying out of its functions.'	2014-15 Annual Report submitted on time and 2015-16 on schedule.
	Corporate Plan to be submitted to the Minister under the <i>Catchment and Land Protection Act 1994</i> by 30 April annually.	Submitted to Minister by 30 April 2015.
	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 relevant directors and officers of the Goulburn Broken CMA and are available for inspection.
<i>Water Act 1989</i>	Corporate Plan available for inspection.	Copy is available for inspection during business hours at 168 Welsford Street, Shepparton.
	Review funds at each (monthly) board meeting. Policy for investment as per the <i>Trustee Act 1958</i> .	Goulburn Broken CMA continued to invest funds with TCV at call and on term deposits in excess of working capital requirements in line with DTF's policy on Centralisation of Borrowing and Investment Activities. DTF's policy only permits GB CMA to invest a maximum of \$2 million with Authorised Deposit-Taking Institutions.
	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. Finance Leases are classified as borrowings due to the accounting treatment. Board reviews monthly.
	Meeting Procedures of Authorities.	Minutes are available through application under Freedom of Information. Goulburn Broken CMA has adopted Governance Guidelines for Statutory Authority Board Members, DELWP. Code of conduct for public sector employees adopted.
	Waterway management responsibilities.	Goulburn Broken CMA was established as a body corporate under the <i>Catchment and Land Protection Act 1994</i> and then established as an Authority under the <i>Water Act</i> with delegated waterway management, floodplain management and drainage functions under Part 10 of the <i>Water Act 1989</i> .
<i>Environmental Protection and Biodiversity Conservation Act 1999</i>	Provide for the protection of the environment and promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources and promote the conservation of biodiversity.	All works have a process which assesses the works against this Act. The Goulburn Broken CMA and its partners have complied with all requirements.

Act or policy	Board's major tasks	2015-16 issues and status
<i>Public Administration Act 2004</i>	Ensure operations of board comply with Part 5.	<p>Policy and Procedures ensure that obligations and best practice approaches are built into current operations and practices.</p> <p>The Goulburn Broken CMA is committed to applying merit and equity principles when appointing staff. The selection processes ensure that applicants are assessed and evaluated fairly and equitably on the basis of the key selection criteria and other accountabilities without discrimination.</p>
<i>Freedom of Information Act 1982</i>	<p>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 Freedom of Information Officer is authorised to make decisions about access to documents under the <i>Freedom of Information Act</i>. 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 a Freedom of Information request being an application fee of \$27.90 (from 1 July 2016) which is non-refundable and an access cost which covers the cost to Authority for providing the information.</p>	<p>The <i>Freedom of Information Act 1982</i> allows members of the public a right of access to documents held by the Goulburn Broken CMA subject to certain exemptions under the Act.</p> <p>Freedom of Information requests are made in writing describing the documents requested and including payment of the \$27.90 application fee. Further charges may be payable.</p> <p>Freedom of Information fees and charges are not subject to GST. Requests to the Goulburn Broken CMA should be sent to Freedom of Information Officer, PO Box 1752, Shepparton, Vic 3632. The telephone contact number is (03) 5822 7700; enquiries can be emailed to reception@gbcma.vic.gov.au.</p> <p>There were no Freedom of Information Requests received in the year. There were no applications for review of fee decisions to the FOI Commissioner or VCAT.</p>
<i>Protected Disclosure Act 2012</i>	Report actions in Annual Report. Report actions at each (monthly) board meeting.	<p>No issues reported.</p> <p>Disclosures of improper conduct by the Goulburn Broken CMA or its employees may be made to Mark Turner (Protected Disclosure Coordinator) or alternatively to the Ombudsman. (See page 138 for policy).</p>
<i>Environmental Protection Act 1970</i>	<p>Protection agencies need to report in their annual reporting processes, actions taken to implement the Policy (as per their responsibilities in State Environment Protection Policy (Waters of Victoria) and Schedules), so that Environment Protection Authority can then report to the community.</p> <p>Outlines CMAs roles with respect to set goals, priorities and targets.</p> <p>Refers to water allocations and environmental flows.</p> <p>Relates to responsibilities of various agencies for ensuring sustainable agricultural activities with the catchment.</p> <p>Relates to the management of irrigation channels and drains.</p> <p>Refers to vegetation protection and rehabilitation.</p>	<p>The Goulburn Broken CMA continued to support the implementation of the Partnership Agreement for the Preparedness and Response to Waterway Incidents in the Goulburn Broken Catchment (2007).</p>
<i>Financial Management Act 1994</i>	Undertake review of its annual operations and advise the Minister regarding compliance with Financial Management Compliance Framework.	Information listed under FRD 22G is available under the <i>Freedom of Information Act 1982</i> .

Act or policy	Board's major tasks	2015-16 issues and status
<i>Flora and Fauna Guarantee Act 1988</i>	Conserve the Catchment's communities of flora and fauna and manage potentially threatening processes and educate the community in the conservation of flora and fauna.	The Goulburn Broken CMA continues to support the implementation of action statements and recovery plans for threatened flora and fauna by DELWP.
<i>Statutory Referral and Advice (Planning and Environment) Act 1987, Subdivision Act 1988, Building Regulations 2004, Water Act 1989, Mineral Resources (Sustainable Development) Act 1990</i>	<p>Goulburn Broken CMA has delegated floodplain management functions and is the floodplain management authority under the <i>Planning and Environment Act 1987, Subdivision Act 1988</i> and Building Regulations where various types of application for development are referred. Furthermore, functions require direct advice to be provided to anybody or person under the <i>Water Act 1989</i>.</p> <p>Goulburn Broken CMA is a referral authority for applications from Department of Economic Development, Jobs, Transport and Resources (<i>Mineral Resource Act, 1990</i>) for work plans on floodplain areas.</p> <p>Goulburn Broken CMA is referral authority from regional water authorities under section 67 licences for dams on waterways and for permits/licences to landowners to carry out works or activities on waterways.</p>	<p>The Goulburn Broken CMA processed 882 referral and advice applications relating to floodplain management and 68 applications for works on waterways for 2015-16.</p>
	Board is advised of application refusals at each (monthly) meeting.	Decisions are made in accordance with the Victorian Floodplain Management Strategy, the Goulburn Broken 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 has been provided where appropriate.
<i>Privacy and Data Protection Act 2014</i>	Ensure details of individuals are protected.	Goulburn Broken CMA has reviewed the Privacy Procedure (in accordance with the Act) on how personal information is stored and under what circumstances it can be accessed or released to third parties.
<i>Forest Act 1958</i>	Liaise with the Department of Environment, Land, Water and Planning as required.	For waterways in areas managed by DELWP under the Act, the Goulburn Broken CMA complied with elements of the code which deals with access to waterways and crossings.
<i>Aboriginal Heritage Act 2006</i>	Ensure the use of cultural heritage management plans for certain development plans or activities and interact with registered Aboriginal parties to evaluate management plans, advise on permit applications and enter into cultural heritage agreements.	<p>The Goulburn Broken CMA applies diligence with regard to the requirements of the Act and encourages best practice in partner organisations through its cultural heritage support program.</p> <p>The Goulburn Broken CMA 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 provide input into Goulburn Broken CMA deliberations.</p>

Act or policy	Board's major tasks	2015-16 issues and status
<i>Building Act 1993</i>	Comply with standards for the construction and maintenance of buildings.	Goulburn Broken CMA does not own or control any government buildings and consequently is exempt from notifying its compliance with the building and maintenance provisions of the <i>Building Act 1993</i> .
National Competition Policy	Ensure fair competition	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 Goulburn Broken CMA continues to apply this principle in its business undertakings.
<i>Country Fire Authority Act 1958</i>	Work with other related organisations to assist in the control, prevention and suppression of fires within the Catchment.	Goulburn Broken CMA has policies relating to waterway operations that comply with the Act and reduce fire risk.
<i>Victorian Industry Participation Policy Act 2003</i>	The Victorian Industry Participation Policy is a Victorian Government initiative designed to promote greater access for small to medium enterprises to work with major projects.	No issues to report.
<i>Equal Opportunity Act 1995</i>	Annual data return reporting gender, diversity and complaints lodged and investigated.	<p>The Goulburn Broken CMA is an equal opportunity employer.</p> <p>Kate Pendergast is the sexual harassment contact officer. No complaints were received in the reporting period.</p> <p>Of the Goulburn Broken CMA staff, 54 per cent are female and 46 per cent male (see page 71).</p> <p>Of the Goulburn Broken CMA Board members, as at 30 June 2016, 29 per cent are female and 71 per cent male (see page 81).</p>
<i>Occupational Health and Safety Act 2004</i>	<p>Report Occupational Health and Safety (OHS) issues at each (monthly) board meeting and in Annual Report.</p> <p>Quarterly Report of measurable OHS targets to the Audit Risk and Compliance Committee.</p>	<p>Goulburn Broken CMA continues to review and update its OHS Policy Statement and supporting OHS procedures. All staff and contractors are inducted in the procedures that reflect their work function.</p> <p>OHS Procedures are in place and made available for contractors when applicable.</p> <p>Employee Health and Safety Representatives and Designated Work Groups are part of the consultative processes under sections 35 and 36 of the <i>OHS Act 2004</i>.</p> <p>Policies and procedures are available to staff on the portal (intranet). An OHS Report against agreed KPIs is provided to Audit, Risk and Compliance Committee quarterly.</p>
<i>Fair Work (Registered Organisations) Act 2009</i>	Comply with the Award system which provides a minimum set of terms and conditions for Goulburn Broken CMA employees.	<p>Goulburn Broken CMA's policies have been evaluated for alignment against the Act and are available to staff on its portal (intranet).</p> <p>The renewal of the enterprise agreement is in progress.</p>
Government Advertising Expenditure	Relates to the disclosure of government advertising expenditure under FRD 22G.	Nil issues to report.

Act or policy	Board's major tasks	2015-16 issues and status
<i>Victorian Government Risk Management Framework</i>	The Victorian Government Risk Management Framework provides for a minimum risk management standard across Public Sector entities.	The attestation that the Goulburn Broken CMA has complied with Ministerial Standing Direction 4.5.5 Risk Management Framework and Processes.
<i>Victorian Managed Insurance Authority Act 1996</i>	Attestation by accountable officer in annual report which ensures that requirement is built into corporate planning and reporting processes.	
Data Vic Access Policy (2012)	The DataVic Access Policy provides direction on the release, licensing and management of Victorian Government data so that it can be used and reused by the community and businesses.	Goulburn Broken CMA has not supplied any data sets to DataVic during 2015-16.
Gifts, benefits and hospitality policy framework	The Victorian Government Framework requiring employees to record gifts, benefits and hospitalities offered to them in their capacity with Goulburn Broken CMA.	The Goulburn Broken CMA has a comprehensive policy in relation to this issue and all staff are required to comply and record any benefits on the Register.

Additional information available on request

In compliance with the requirements of Financial Reporting Direction 22G, details in respect of the items listed below have been retained by the Authority and are available on request, subject to the provisions of the *Freedom of Information Act 1982*.

- a statement that declarations of pecuniary interests have been duly completed by all relevant officers
- details of shares held by a senior officer as nominee or held beneficially in a statutory authority or subsidiary
- details of publications produced by the entity about itself and how these can be obtained
- details of changes in prices, fees, charges, rates and levies charged by the entity
- details of any major external reviews carried out on the entity
- details of major research and development activities undertaken by the entity
- details of overseas visits undertaken including a summary of the objectives and outcomes of each visit
- details of major promotional, public relations and marketing activities undertaken by the entity to develop community awareness of the entity and its services
- details of assessments and measures undertaken to improve the occupational health and safety of employees
- a general statement on industrial relations within the entity and details of time lost through industrial accidents and disputes
- a list of major committees sponsored by the entity, the purposes of each committee and the extent to which the purposes have been achieved
- details of all consultancies and contractors including:
 - consultants/contractors engaged
 - services provided
 - expenditure committed to for each engagement.

The information is available on request from:

Goulburn Broken CMA
PO Box 1752
Shepparton VIC 3630

Details of compliance with *Protected Disclosure Act 2012*

Refer to Appendix 7, page 138, for disclosure against and compliance with the *Protected Disclosure Act 2012*.

Corporate Plan key performance indicators*

* KPIs derived from current Corporate Plan as per the 2015 Ministerial Form guidelines.

Performance area	Performance target	Progress 2015-16
Business management and governance	Submit annually, a board performance assessment report according to any guidelines issued.	Report submitted and complied with guidelines issued.
	A risk management strategy / plan approved by the board and being implemented	Strategy is approved by the board and being implemented.
	One hundred per cent of the CMA's policies and procedures reviewed every three financial years.	A total of 62 policies and procedures reviewed in 2015-16, this includes 41 Occupational Health and Safety policies and procedures.
	Full compliance with all applicable Standing Directions under the Financial Management Compliance Framework checklist.	Full compliance was achieved
Regional planning and coordination	A regional catchment strategy (RCS) approved by the Minister.	Goulburn Broken Regional Catchment Strategy was approved by the Minister in 2013 and is now being implemented.
	A stakeholder and community engagement framework / plan approved by the board.	Goulburn Broken Community Engagement and Action Plan 2015-16 was approved by the board and is being implemented.
	A regional Landcare support plan approved by the board.	Goulburn Broken Community NRM Action Plan 2013-2018 approved by the board and is being implemented.
	A regional waterways strategy approved by the minister.	Goulburn Broken Regional River Health Strategy 2014-2022 was completed and endorsed by the Minister in November 2014 and is being implemented.
	A regional floodplain strategy approved by the board.	Goulburn Broken Floodplain Management Strategy (interim) 2014-2016 approved by the board and is being implemented. Strategy is under review following release of the Victorian Floodplain Management Strategy.
	Land and water management plans (LWMP) in designated irrigation areas (or equivalent) approved by the board.	The SIR LWMP 2016 Review has been completed and is awaiting board approval.
	The regional contribution to the annual report on salinity management activities and the allocation and update of salt disposal entitlements is submitted to the department by 31 July or as otherwise directed by the department.	The annual contribution to the State report to meet the requirements of the Murray-Darling Basin Salinity Management Strategy was submitted in November 2015 as requested and subsequently presented to the Independent Audit Group of the MDBA.

Performance area	Performance target	Progress 2015-16
Regional delivery	Progress with implementation of the RCS (and its major sub-strategies) is reviewed by the board annually.	Progress with the Goulburn Broken Regional Catchment Strategy was reviewed by the board in February 2016.
	Projects / activities to implement the RCS are delivered and reported according to associated funding agreements.	Planned projects for 2015-16 were delivered and reported according to associated funding agreements.
	Projects / activities to implement the regional waterways strategy and the regional floodplain management strategy delivered and reported according to associated funding agreements.	Planned projects for 2015-16 were delivered and reported according to associated funding agreements.
	Projects / activities to implement the LWMP are delivered and reported according to associated funding agreements.	Planned projects for 2015-16 were delivered and reported according to associated funding agreements.
Statutory functions under Part 10 of the Water Act	Ninety per cent of statutory requirements (permits, referrals, advice and licences) associated with waterway and floodplain management are responded to within the prescribed period.	99 per cent of responses were within the prescribed period
Statutory functions under Part 11 of the Water Act	Ninety per cent of statutory requirements (permits, referrals, advice and licences) associated with irrigation management are responded to within the prescribed period.	100 per cent of responses were within the prescribed period

Strategic organisational measures

Performance area	Performance indicators	Targets	Progress 2015-16
NRM Results	Catchment objectives are achieved or evidence demonstrates movement towards meeting the objectives.	20-30 year objectives for Catchment condition.	On target. See pages 6 and 13 for further detail.
Client Focused	Clients and stakeholders value the services received from the GB CMA and see the services making a positive contribution to catchment condition.	Satisfaction rating as rated by people having contact with the CMA.	6.1/10 from Wallis Survey 2012.
		Awareness of the GB CMA as a land, water and biodiversity management body.	

Performance area	Performance indicators	Targets	Progress 2015-16
Operational Effectiveness	Projects delivered as planned, aligned to GB CMA strategy, on time, on budget, and to an agreed quality.	Progress against agreed RCS Implementation Plan.	On track.
		Performance against Annual Internal Audit Plan.	On track.
		% projects finished on time and on budget (trend over time, and by service provider).	<p>Standard output targets for program areas have been met for 84% of funding lines during the financial year (47 from 56 funding lines).</p> <p>Nine projects delivered less than budgeted: six projects delivered between 60% and 79% of projected targets and three projects delivered below 60% of projected targets.</p> <p>Two projects have now been completed, with initial targets set for outputs turning out to be optimistic or not being required.</p> <p>Five projects are run over multiple years and the life to date output delivery is expected to be met during the life of the project or has already been exceed in previous years.</p> <p>One project (Floodplain Management Strategy) was delayed, on DELWP advice this project has been extended until December 2017.</p> <p>The remaining project (Farm & Environment) has been delayed due to whole farm plan finalisation delays due to connection issues related to the Goulburn-Murray Water Connections Program, dairy decline and dry seasonal conditions, causing problems for landholders.</p>
Financial	The GB CMA optimises investment to on-ground works by minimising (as much as possible) the costs incurred by the CMA in facilitating the delivery of NRM activities within the Catchment.	<p>Ratio of CMA staff : \$ works on the ground (as a measure of leverage).</p> <p>Growth in income (incl. proportion of Govt. to Non-Govt.).</p>	<p>Ratio of 2 FTE staff for every \$1 million of on-ground works.</p> <p>The total government funded revenue remained unchanged from prior year at \$25.5 million and accounts for 96% of total revenue</p>
People	The GB CMA has capable and motivated people to enable it to deliver on the RCS and who are able to support the achievement of the Authority's vision and purpose.	Organisational Leadership (in the Organisational Performance Excellence Review).	7.5/10 recognised at best practice level from Organisational Performance Excellence Review 2015.
		Overall job satisfaction (% of staff).	<p>As at 2016, 88% of staff were satisfied with their job.</p> <p>An increase of 7% on the 2014 survey results</p>
Governance and Social Responsibility	Governance structures and processes enable the board to professionally and competently discharge their responsibilities to the Catchment community.	Strategy and purpose (Aggregated results from Board Assessment).	On track.
		Compliance and Reporting (Aggregated results from Board Performance Assessment).	

Financial Report

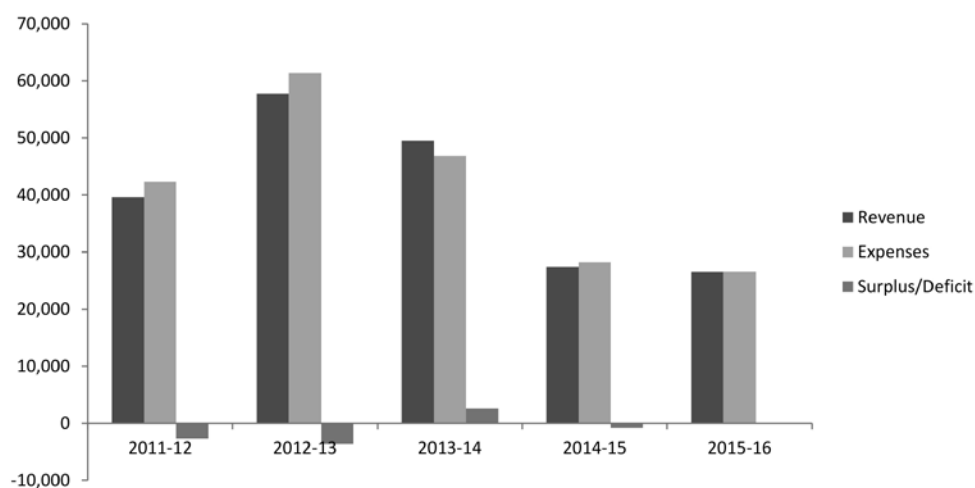
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Financial results summary: current plus past four years

	2011-12 \$000	2012-13 \$000	2013-14 \$000	2014-15 \$000	2015-16 \$000
Income and expenditure					
State Government	17,035	34,764	34,753	9,921	10,573
Australian Government	14,602	19,765	12,430	14,371	14,197
Government contributions	31,637	54,529	47,183	24,292	24,770
Revenue from government entities	6,201	1,682	260	1,213	728
Other revenues	1,780	1,524	2,081	1,911	1,041
Total income	39,618	57,735	49,524	27,416	26,539
Expense					
Interest	15	6	10	54	5
Total expenses	42,328	61,383	46,898	28,226	26,561
NET RESULT	(2,710)	(3,648)	2,626	(810)	(22)
Balance sheet items					
Current assets					
Cash	34,936	23,146	13,266	12,489	13,708
Receivables	1,177	1,471	3,142	1,100	673
Inventories	234	-	-	-	-
Prepayments	35	27	173	70	209
Total current assets	36,382	24,644	16,581	13,659	14,590
Fixed assets	1,449	1,330	1,492	1,257	1,247
Total assets	37,831	25,974	18,073	14,916	15,837
Current liabilities					
Trade creditors	3,518	2,010	1,956	849	804
Unearned revenue	17,474	14,220	3,682	3,003	3,771
Borrowings	32	31	39	35	26
Accruals	4,179	760	770	304	450
Provisions	1,747	1,739	1,742	1,582	1,735
Total current liabilities	26,950	18,760	8,189	5,773	6,786
Non-current liabilities					
Borrowings	36	20	32	43	15
Other	67	64	96	154	112
Total non-current liabilities	103	84	128	197	127
NET ASSETS	10,778	7,130	9,756	8,946	8,924
Equity items					
Contributed capital	4,209	4,209	4,209	4,209	4,209
Reserves	6,569	2,921	5,547	4,737	4,715
TOTAL EQUITY	10,778	7,130	9,756	8,946	8,924
Cash flow items					
Net operating activities	13,576	(11,448)	(9,253)	(608)	1,635
Net investing activities	(288)	(297)	(579)	(132)	(380)
Net financing activities	(35)	(45)	(48)	(37)	(36)
Net cash movement	13,253	(11,790)	(9,880)	(777)	1,219

Financial results summary: current plus past four years (Cont'd)

Financial summary 2011-12 to 2015-16, \$'000



Significant changes in financial results for 2015-16

	Original Corporate Plan April 2015	Corporate Plan ⁱ August 2015 \$'000	Corporate Plan ⁱⁱ March 2016 \$'000	Actual \$'000
Comprehensive Operating Statement				
Total revenue	44,681	33,175	26,871	26,539
Total expenditure	47,132	36,091	30,258	26,561
Net result	(2,451)	(2,916)	(3,387)	(22)
Statement of financial position				
Cash and receivables	14,573	9,878	9,406	14,381
Other	55	55	55	209
Non-current assets	1,271	1,471	1,471	1,247
Total assets	15,899	11,404	10,932	15,837
Liabilities				
Current	10,154	5,164	5,163	6,786
Non-current	130	210	210	127
Total liabilities	10,284	5,374	5,373	6,913
Net assets	5,615	6,030	5,559	8,924

- In August 2015 the Goulburn Broken CMA submitted to the Minister a major deviation to its Corporate Plan based on funding changes since the initial plan was prepared.
- In March 2016 the Goulburn Broken CMA submitted to the Minister a major deviation to its Corporate Plan based on funding changes since the revised plan was prepared.

The variance in the actual result to end June 2016 of \$22 thousand deficit compared to the Corporate Plan (second deviation) of \$3.3 million related to additional unbudgeted funds of approximately \$1 million combined with decreased revenue and expenditure in the Farm Water Program.

The additional funding in June, combined with delays in finalisation of Service Level Agreements, resulted in extra carry forward funds and higher than planned cash and receivables position at June 2016.

Significant changes or factors affecting performance

Other than as detailed above, there were no significant changes or factors which affected our performance.

Consultancy expenditure

The definition of consultancy was updated effective from 1 July 2013. Consequently, disclosures on consultancy expenditure prior to that date cannot be compared with current year disclosures.

	2013-14		2014-15		2015-16	
	No.	\$ (excl. GST)	No.	\$ (excl. GST)	No.	\$ (excl. GST)
Consultancies valued at \$10,000 or greater	58	1,908,607	42	1,034,105	44	1,045,043
Consultancies valued at less than \$10,000	96	268,240	32	101,822	51	131,139

Details of individual consultancies valued at \$10,000 or greater are outlined on the Goulburn Broken Catchment Management Authority website, at www.gbcma.vic.gov.au.

Information and Communication Technology expenditure

For the 2015-16 reporting period, Goulburn Broken CMA had a total ICT expenditure of \$601,444 with the details shown below.

Business as usual ICT expenditure	Non-Business as usual ICT expenditure		
	Total \$	Operational \$	Capital \$
515,207	86,237	86,237	-

ICT expenditure to the Goulburn Broken CMA's costs in providing business enabling ICT services. It comprises Business as usual ICT expenditure and Non-business as usual ICT expenditure. Non-business as usual expenditure relates to extending or enhancing the Goulburn Broken CMA's current ICT capabilities. Business as usual ICT expenditure is all remaining ICT expenditure which primarily relates to ongoing activities to operate and maintain the current ICT capability.

Other financial disclosures

Victorian Industry Participation Policy

Nil procurement and/or project contracts in excess of \$1 million were entered into during the year.

Government advertising expenditure

Nil advertising campaigns with a media spend of \$100,000 or greater were entered into during the year.

Disclosure of major contracts

Goulburn Broken CMA did not award any major contracts (valued at \$10 million or more) during 2015-16.

Capital projects

Goulburn Broken CMA did not manage any capital projects.

Subsequent events

There were no events occurring after balance date which may significantly affect the Goulburn Broken CMA's operations in subsequent reporting periods.

Financial Statements

Goulburn Broken Catchment Management Authority

Australian Business Number (ABN): 89 184 039 725

Accountable Officers' and Chief Finance and Accounting Officer's declaration

The attached financial report for the Goulburn Broken Catchment Management Authority (Goulburn Broken CMA) has been prepared in accordance with Standing Directions 4.2 of the *Financial Management Act 1994*, applicable Financial Reporting Directions, Australian Accounting Standards including Interpretations and other mandatory professional reporting requirements.

We further state that, in our opinion, the information set out in the comprehensive operating statement, balance sheet, statement of changes in equity, cash flow statement and accompanying notes, presents fairly the financial transactions during the year ended 30 June 2016 and financial position of the Goulburn Broken CMA at 30 June 2016.

At the time of signing, we are not aware of any circumstance which would render any particulars included in the financial statements to be misleading or inaccurate.

We authorise the attached financial statements for issue on 25 August 2016.



A Weston

Acting Chairperson



C P Norman

Chief Executive Officer



E Curtis

Chief Finance and Accounting Officer

25 August 2016

INDEPENDENT AUDITOR'S REPORT

To the Board Members, Goulburn Broken Catchment Management Authority

The Financial Report

I have audited the accompanying financial report for the year ended 30 June 2016 of the Goulburn Broken Catchment Management Authority which comprises the comprehensive operating statement, balance sheet, statement of changes in equity, cash flow statement, notes comprising a summary of significant accounting policies and other explanatory information, and the accountable officer's and chief finance and accounting officer's declaration.

The Board Members' Responsibility for the Financial Report

The board members of the Goulburn Broken Catchment Management Authority are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards, and the financial reporting requirements of the *Financial Management Act 1994*, and for such internal control as the board members determine is necessary to enable the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error.

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. Those standards require compliance with relevant ethical requirements relating to audit engagements and that the audit be planned and performed to obtain reasonable assurance about 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 the 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 I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

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, I and my staff and delegates have complied with all applicable independence requirements of the Australian accounting profession.

Opinion

In my opinion, the financial report presents fairly, in all material respects, the financial position of the Goulburn Broken Catchment Management Authority as at 30 June 2016 and of its financial performance and its cash flows for the year then ended in accordance with applicable Australian Accounting Standards, and the financial reporting requirements of the *Financial Management Act 1994*.

MELBOURNE
30 August 2016


for Dr Peter Frost
Acting Auditor-General

Comprehensive Operating Statement for the financial year ended 30 June 2016

	Note	2016 \$000	2015 \$000
Revenue from operating activities			
Government contributions	3	24,770	24,292
Revenue from government entities	3	728	1,213
Other revenues from ordinary activities	3	666	1,333
		26,164	26,838
Revenue from non-operating activities	3	375	578
TOTAL REVENUE		26,539	27,416
Expenses from operating activities			
Operating costs to Programs	4a	(25,790)	(27,345)
Depreciation & Amortisation	4b	(432)	(499)
Interest		(5)	(54)
Provision for Bad Debt		(1)	-
Occupancy expenses		(333)	(328)
TOTAL EXPENSES		(26,561)	(28,226)
NET RESULT FOR THE PERIOD	15	(22)	(810)
Comprehensive result	15	(22)	(810)

The above Comprehensive Operating Statement should be read in conjunction with the accompanying notes.

Balance Sheet as at 30 June 2016

	Note	2016 \$000	2015 \$000
Assets			
Current assets			
Cash and cash equivalents	5	13,708	12,489
Receivables	6	673	1,100
Prepayments		209	70
Total current assets		14,590	13,659
Non-current assets			
Property, plant and equipment	7	1,229	1,231
Intangible Assets	8	18	26
Total non-current assets		1,247	1,257
Total assets		15,837	14,916
Liabilities			
Current liabilities			
Payables	9	1,254	1,153
Unearned revenue	10	3,771	3,003
Interest bearing liabilities	11	26	35
Employee benefits	12	1,735	1,582
Total current liabilities		6,786	5,773
Non-current liabilities			
Interest bearing liabilities	11	15	43
Employee benefits	12	112	154
Total non-current liabilities		127	197
Total liabilities		6,913	5,970
Net assets		8,924	8,946
Equity			
Contributed equity	14	4,209	4,209
Accumulated funds	15	-	-
Committed Funds Reserve	16	4,715	4,737
Total equity		8,924	8,946

The above Balance Sheet should be read in conjunction with the accompanying notes.

Statement of Changes in Equity for the financial year ended 30 June 2016

	Note	Contribution by owners \$000	Reserves \$000	Accumulated funds \$000	Total \$000
Balance at 1 July 2014		4,209	5,547	-	9,756
Net result for the period		-	-	(810)	(810)
Transfer to / (from) Reserve	16	-	(810)	810	-
Balance at 30 June 2015		4,209	4,737	-	8,946
Total Comprehensive Income / (Deficit) for the year		-	-	(22)	(22)
Transfer to / (from) Reserves	16	-	(22)	22	-
Balance at 30 June 2016		4,209	4,715	-	8,924

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Cash Flow Statement for the financial year ended 30 June 2016

	Note	2016 \$000	2015 \$000
Cash flow from operating activities			
Government contributions		25,204	27,375
Revenue from other Government Entities		1,002	1,368
Payments to suppliers and employees		(27,427)	(31,818)
GST (remitted to) received from Australian Tax Office		1,871	561
Interest received		326	498
Interest paid		(5)	(54)
Other revenue		664	1,462
Net cash provided by (used in) operating activities	23b	1,635	(608)
Cash flow from financing activities			
Repayment of finance lease liabilities		(36)	(37)
Net cash provided by (used in) finance activities		(36)	(37)
Cash flow from investing activities			
Proceeds from sale of property, plant and equipment		381	209
Payment for property, plant and equipment		(761)	(341)
Net cash provided by (used in) investing activities		(380)	(132)
Net (decrease) / increase in cash held		1,219	(777)
Cash and cash equivalents at beginning of year		12,489	13,266
Cash and cash equivalents at end of year	23a	13,708	12,489

The above Cash Flow Statement should be read in conjunction with the accompanying notes.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies

a Basis of accounting

General

The financial report includes separate financial statements for Goulburn Broken CMA as an individual reporting entity. This financial report is a general purpose financial report, that consists of a Comprehensive Operating Statement, Balance Sheet, Statement of Changes in Equity, Cash Flow Statement and notes accompanying these statements for the year ended 30 June 2016. The general purpose financial report has been prepared in accordance with Australian Accounting Standards (AAS), Interpretations and other authoritative pronouncements of the Australian Accounting Standards Board, and the requirements of the *Financial Management Act 1994* and applicable Ministerial Directions. The Goulburn Broken CMA is a not for-profit entity for the purpose of preparing the financial statements.

This financial report has been prepared on a going concern basis.

Where appropriate, those AAS paragraphs applicable to not-for-profit entities have been applied.

The accrual basis of accounting has been applied in the preparation of these financial statements whereby assets, liabilities, equity, income and expenses are recognised in the reporting period to which they relate, regardless of when cash is received or paid.

The annual financial statements were authorised for issue by the Board on 25 August 2016.

The principal address is:

Goulburn Broken Catchment Management Authority
168 Welsford St
Shepparton VIC 3632

Accounting policies

Accounting policies are selected and applied in a manner which ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

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.

Functional and Presentation Currency

Items included in this financial report are measured using the currency of the primary economic environment in which Goulburn Broken CMA operates ('the functional currency'). The financial statements are presented in Australian dollars, which is Goulburn Broken CMA's functional and presentation currency.

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 Goulburn Broken CMA's operational cycle - see note 1(f) for a variation in relation to employee benefits.

Rounding

Unless otherwise stated, amounts in the report have been rounded to the nearest thousand dollars. Figures in the financial statements may not equate due to rounding.

Historical cost convention

These financial statements have been prepared under the historical cost convention, except for the revaluation of financial assets and all classes of property, plant and equipment.

Accounting estimates

The preparation of financial statements in conformity with AAS requires the use of certain critical accounting estimates that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. It also requires management to exercise its judgement in the process of applying the Goulburn Broken CMA's accounting policies.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

b Changes in accounting policy

The accounting policies are consistent with those of the previous year, unless stated otherwise.

c Revenue

Government grants and contributions

Under AASB 1004-Contributions, Government grants of a recurrent nature are brought to account on the earlier of receipt or the right to receive the contributions. The full grant receivable is reflected in the comprehensive operating statement as government contributions. Instalment receipts on the grant are credited to the receivable account as received. 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 or for nominal consideration are recognised at their fair value when the Goulburn Broken CMA gains control of them.

Grants and contributions for capital works from all sources are disclosed in the operating statement as operating revenue. Any grants and contributions received from the Victorian Government which the relevant Ministers have indicated are in the nature of owners' contributions, are accounted for as Equity – Contributed Capital.

Farm Water Program

During the financial year Goulburn Broken CMA continued as the 'delivery partner' for both the Australian Government and the Victorian Farm Modernisation Program – Tranche 1 and the Victorian Farm Modernisation Program – Tranche 2.

In its role as the 'delivery partner', Goulburn Broken CMA receives funding to make payments to approved irrigators under an Infrastructure Works Deed whereby irrigators undertake works on their land to generate permanent water savings half of which are transferred to the Australian Government.

Goulburn Broken CMA reflects as Revenue, funding it has received to match the liability it must pay under the Infrastructure Works Deed.

Revenue received by Goulburn Broken CMA in advance of paying liabilities under the relevant Program's Infrastructure Works Deed is taken to unearned revenue.

Other

Gains or losses on disposal of non-current assets are calculated as the difference between the proceeds on sale and their written down value.

Interest

Interest income is recognised using the effective interest rate method, in the period in which it is earned.

Interest earned in relation to the Farm Water Program is retained by that program and is not the revenue of the Goulburn Broken CMA. Interest earned on this program is held in unearned revenue as at 30 June 2016 as disclosed in Note 10.

d Expenses

Borrowing costs

Borrowing costs are recognised as expenses in the period in which they are incurred. Borrowing costs include interest on finance lease charges.

Grants and other transfers

Grants and other transfers to third parties (other than contribution to owners) are recognised as an expense in the reporting period in which they are paid or payable. They include transactions such as: grants, incentives, subsidies and other transfer payments made to State-owned agencies, local government, land owners and community groups.

Depreciation and amortisation of non-current assets

All non-current physical assets that have a limited useful life are depreciated. 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 cost or revalued amounts, 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.

Intangible assets with finite useful lives are amortised as an expense on a systematic basis (typically straight-line), commencing from the time the asset is available for use. The amortisation periods are reviewed and adjusted if appropriate at each balance date. Intangible assets with indefinite useful lives are not amortised. However, all intangible assets are assessed for impairment annually as outlined in Note 1(e).

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Depreciation rates within each asset class are consistent with the previous year and fall within the following ranges:

Asset Class	Depreciation rate, %
Buildings	2.5
Plant and equipment	10 to 40
Motor vehicles	20
Website upgrade	20

Employee Benefits

These expenses include all costs related to employment (other than superannuation which is accounted for separately) including wages and salaries, fringe benefits tax, leave entitlements, redundancy payments and WorkCover premiums.

Superannuation

The amount charged to the Comprehensive Operating Statement in respect of superannuation represents contributions made or due by Goulburn Broken CMA to the relevant superannuation plans in respect to the services of Goulburn Broken CMA's staff (both past and present). Superannuation contributions are made to the plans based on the relevant rules of each plan and any relevant compulsory superannuation requirements that Goulburn Broken CMA is required to comply with.

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.

Other expenses

Supplies and services costs are recognised as an expense in the reporting period in which they are incurred.

e Assets

Cash and deposits

Cash and deposits recognised on the Balance Sheet comprise cash on hand and cash at bank, deposits at call and those highly liquid investments (with an original maturity of three months or less), which are held for the purpose of meeting short term cash commitments rather than for investment purposes, and readily convertible to known amounts of cash with an insignificant risk of changes in value.

For Cash Flow Statement presentation purposes, cash and cash equivalents include bank overdrafts, which are included as interest bearing liabilities on the Balance Sheet.

Receivables

Receivables consist of:

- contractual receivables, such as debtors in relation to goods and services, loans to third parties, and accrued investment income; and
- statutory receivables, such as amounts owing from the Victorian Government and Goods and Services Tax (GST) input tax credits recoverable.

Contractual receivables are classified as financial instruments and categorised as loans and receivables.

Statutory receivables, are recognised and measured similarly to contractual receivables (except for impairment), but are not classified as financial instruments because they do not arise from a contract.

Contractual receivables are recognised initially at fair value and subsequently measured at amortised cost, less an allowance for impaired receivables. Trade receivables are due for settlement no more than 14 days from Government, and no more than 30 days for other debtors.

Collectability of contractual receivables is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off. A provision for doubtful debts is established when there is objective evidence that Goulburn Broken CMA will not be able to collect all amounts due according to the original terms of receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The amounts credited to the provision are recognised as an expense in the comprehensive operating statement.

Prepayments

Prepayments represent payments in advance of receipt of goods or services or that part of expenditure made in one accounting period covering a term extending beyond that period.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Infrastructure, property, plant and equipment

Recognition of non-current physical assets

Property, plant and equipment represent non-current physical assets comprising buildings, plant, equipment and motor vehicles, used by the Goulburn Broken CMA 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.

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

Measurement of non-current physical assets

All non-current physical assets are recognised initially at cost and subsequently revalued at fair value less accumulated depreciation and impairment in accordance with the requirements of Financial Reporting Direction (FRD) 103F. Revaluations are conducted in accordance with FRD 103F Non-Financial Physical Assets.

Plant equipment and motor vehicles are measured at fair value.

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 are 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.

A reversal of an impairment loss

A reversal of an impairment loss on a revalued asset is credited directly to equity under the heading revaluation reserve. However, to the extent that an impairment loss on the same class of asset was previously recognised in the operating statement, a reversal of that impairment loss is also recognised in the operating statement.

Intangibles

Intangible assets represent identifiable non-monetary assets without physical substance. Intangible assets are initially recognised at cost. Subsequently, intangible assets with finite useful lives are carried at cost less accumulated amortisation and accumulated impairment losses. Costs incurred subsequent to initial acquisition are capitalised when it is expected that additional future economic benefits will flow to Goulburn Broken CMA. The amortisation method is reviewed at each financial year-end and assets are reviewed annually for indicators of impairment.

Intangible assets consist of software, web site development and licences. These assets are amortised over 5 years.

Costs in relation to web sites controlled by the Goulburn Broken CMA are charged as expenses in the period in which they are incurred unless they relate to the acquisition of an asset, in which case they are capitalised and amortised over their period of expected benefits. Generally, costs in relation to feasibility studies during the planning phase of a web site, and ongoing costs of maintenance during the operating phase are considered to be expenses. Costs incurred in building or enhancing a web site, to the extent that they represent probable future economic benefits controlled by the entity that can be reliably measured, are capitalised as an asset and amortised over the period of the expected benefits.

Leased assets

Leases of property, plant and equipment where the terms of the lease transfer to the Goulburn Broken CMA substantially all the risks and benefits incidental to the ownership of the asset, are classified as finance leases. Finance leases are capitalised at the lease's inception at the lower of the fair value of the leased property and the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, are included in interest bearing liabilities. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The interest element of the finance cost is charged to the Comprehensive Operating Statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under a finance lease is depreciated over the shorter of the asset's useful life and the lease term.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Financial assets

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:

Receivables

Receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for those with maturities greater than 12 months after the reporting date which are classified as non-current assets. Receivables are included in the balance sheet. Receivables are recorded at amortised cost less impairment.

Impairment of financial assets

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

Fair value

Consistent with AASB 13 Fair Value Measurement, Goulburn Broken CMA determines the policies and procedures for both recurring fair value measurements such as property, plant and equipment, and financial instruments and for non recurring fair value measurements such as assets held for sale, in accordance with the requirements of AASB 13 and the relevant Financial Reporting Directions.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For the purpose of fair value disclosures, Goulburn Broken CMA has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

In addition, Goulburn Broken CMA determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The Valuer General Victoria (VGV) is Goulburn Broken CMA's independent valuation agency.

Goulburn Broken CMA, in conjunction with VGV, monitors changes in the fair value of each asset and liability through relevant data sources to determine whether revaluation is required.

f Liabilities

Payables

Payables consist of:

- contractual payables, such as accounts payable, and unearned income. Accounts payable represent liabilities for goods and services provided to the Goulburn Broken CMA prior to the end of the financial year that are unpaid, and arise when the Goulburn Broken CMA becomes obliged to make future payments in respect of the purchase of those goods and services; and
- statutory payables, such as goods and services tax, payroll tax and fringe benefits tax payables.

Contractual payables are classified as financial instruments and categorised as financial liabilities at amortised cost. Statutory payables are recognised and measured similarly to contractual payables, but are not classified as financial instruments and not included in the category of financial liabilities at amortised cost, because they do not arise from a contract.

The contractual payables are unsecured and are usually paid within 30 days of recognition.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Interest bearing liabilities

Interest bearing liabilities are initially recognised at fair value, net of transaction costs incurred. Interest bearing liabilities are subsequently measured at amortised cost. Any difference between the initial amount recognised (net of transaction costs) and the redemption amount is recognised in the Comprehensive Operating Statement over the period of the interest bearing liabilities, using the effective interest method.

Interest bearing liabilities are classified as current liabilities unless the Goulburn Broken CMA has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Provisions

Provisions are recognised when the Goulburn Broken CMA has a present obligation, the future sacrifice of economic benefits is probable, and the amount of the provision can be measured reliably.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows, using discount rate that reflects the time value of money and risks specific to the provision.

When some or all of the economic benefits required to settle a provision are expected to be received from a third party, the receivable is recognised as an asset if it is virtually certain that recovery will be received and the amount of the receivable can be measured reliably.

Employee benefits

Provision is made for benefits accruing to employees in respect of wages and salaries, annual leave and long service leave (LSL) for services rendered to the reporting date.

Wages and salaries and annual leave

Liabilities for wages and salaries, including non monetary benefits annual leave and accumulating sick leave, are all recognised in the provision for employee benefits as 'current liabilities', because the Goulburn Broken CMA does not have an unconditional right to defer settlements of these liabilities.

Depending on the expectation of the timing of settlement, liabilities for wages and salaries, annual leave and sick leave are measured at:

- undiscounted value if the Goulburn Broken CMA expects to wholly settle within 12 months; or
- present value if the Goulburn Broken CMA does not expect to wholly settle within 12 months.

Long service leave

Liability for long service leave is recognised in the provision for employee benefits.

Unconditional LSL is disclosed in the notes to the financial statements as a current liability, even where the Goulburn Broken CMA does not expect to settle the liability within 12 months because it will not have the unconditional right to defer the settlement of the entitlement should an employee take leave within 12 months.

The components of this current long service leave liability are measured at:

- nominal value – component that the Goulburn Broken CMA expects to settle within 12 months; and
- present value – component that the Goulburn Broken CMA does not expect to settle within 12 months.

Conditional long service leave (representing less than seven years of continuous service) is disclosed as a non-current liability. There is an unconditional right to defer the settlement of the entitlement until the employee has completed the requisite years of service. Conditional long service leave is measured at present value.

Any gain or loss following revaluation of the present value of non-current LSL liability is recognised in the 'net result from transactions', except to the extent that a gain or loss arises due to changes in bond interest rates for which it is then recognised in the net result as an other economic flow.

Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or when an employee decides to accept an offer of benefits in exchange for the termination of employment. The Goulburn Broken CMA recognises termination benefits when it is demonstrably committed to terminating the employment of a current employee according to a detailed formal plan without possibility of withdrawal.

Superannuation

The Goulburn Broken CMA does not recognise any defined benefit liability in respect of the superannuation plan because the Goulburn Broken CMA 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. See Note 13 for more details on superannuation.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Employee benefit on-costs

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

Performance payments

Performance payments for the Goulburn Broken CMA'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.

g Equity

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 or the Minister for Water and the Minister for Energy, Environment and Climate Change have indicated are in the nature of owners' contributions, are accounted for as Equity – Contributed Capital.

h Commitments

Commitments for future expenditure include operating and capital commitments arising from contracts. These commitments are disclosed by way of a note (refer to Note 17) at their nominal value and inclusive of the goods and services tax (GST) payable. In addition, where it is considered appropriate and provides additional relevant information to users, the net present values of significant individual projects are stated. These future expenditures cease to be disclosed as commitments once the related liabilities are recognised in the balance sheet.

i Contingent assets and contingent liabilities

Contingent assets and contingent liabilities are not recognised in the balance sheet, but are disclosed by way of a note (refer to Note 19) and, if quantifiable, are measured at nominal value. Contingent assets and liabilities are presented exclusive of GST receivable or payable respectively.

j Events after the reporting period

Assets, liabilities, income or expenses arise from past transactions or other past events. Where the transactions result from an agreement between the Goulburn Broken CMA and other parties, the transactions are only recognised when the agreement is irrevocable at or before the end of the reporting period.

Adjustments are made to amounts recognised in the financial statements for events which occur between the end of the reporting period and the date when the financial statements are authorised for issue, where those events provide information about conditions which existed at the reporting date.

Note disclosure is made about events between the end of the reporting period and the date the financial statements are authorised for issue where the events relate to conditions which arose after the end of the reporting period that are considered to be of material interest.

k 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 ie. 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

The Department of Environment, Land, Water and Planning treat grant contributions to the Goulburn Broken CMA for the agreed works program to be State government appropriations. Consequently as this does not constitute a taxable supply, the Goulburn Broken CMA receives no GST on amounts paid by the Department.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

I New accounting standards and interpretations

New Accounting Standards and Interpretations issued that are not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for the 30 June 2016 reporting period. As at 30 June 2016, Goulburn Broken CMA has not and does not intend to adopt these standards early. Department of Treasury and Finance (DTF) assesses the impact of new standards and advises Goulburn Broken CMA of their applicability and early adoption where applicable.

The following AASs issued may have some impact on Goulburn Broken CMA financial statements but are not yet effective for the 2015-16 reporting period.

Topic	Key requirements	Applicable for annual reporting periods beginning on	Estimated impact on Financial Statements
AASB 15 Revenue from Contracts with Customers	The core principle of AASB 15 requires an entity to recognise revenue when the entity satisfies a performance obligation by transferring a promised good or service to a customer. Note that amending standard AASB 2015 8 Amendments to Australian Accounting Standards – Effective Date of AASB 15 has deferred the effective date of AASB 15 to annual reporting periods beginning on or after 1 January 2018, instead of 1 January 2017.	1 July 2018	Application of the new standard is expected to impact the timing of the recognition of revenue. The standard will be applied in the annual reporting period ending 30 June 2019.
AASB 16 Leases	The key changes introduced by AASB 16 include the recognition of most operating leases (which are currently not recognised) on balance sheet.	1 July 2019	Goulburn Broken CMA is yet to assess its full impact. This amendment is expected to have no or minimal impact.
AASB 2010 7 Amendments to Australian Accounting Standards arising from AASB 9 (December 2010) [AASB 1, 3, 4, 5, 7, 101, 102, 108, 112, 118, 120, 121, 127, 128, 131, 132, 136, 137, 139, 1023 & 1038 and Interpretations 2, 5, 10, 12, 19 & 127]	The requirements for classifying and measuring financial liabilities were added to AASB 9. The existing requirements for the classification of financial liabilities and the ability to use the fair value option have been retained. However, where the fair value option is used for financial liabilities the change in fair value is accounted for as follows: <ul style="list-style-type: none"> the change in fair value attributable to changes in credit risk is presented in other comprehensive income (OCI); and other fair value changes are presented in profit or loss. If this approach creates or enlarges an accounting mismatch in the profit or loss, the effect of the changes in credit risk are also presented in profit or loss. 	1 July 2018	This amendment is expected to have no or minimal impact.
AASB 2014 4 Amendments to Australian Accounting Standards – Clarification of Acceptable Methods of Depreciation and Amortisation [AASB 116 & AASB 138]	AASB 2014 4 amends AASB 116 and AASB 138 to: <ul style="list-style-type: none"> establish the principle for the basis of depreciation and amortisation as being the expected pattern of consumption of the future economic benefits of an asset. 	1 July 2016	This amendment is expected to have no or minimal impact.

Notes to the financial statements for the year ended 30 June 2016

Note 1: Significant accounting policies (Cont'd)

Topic	Key requirements	Applicable for annual reporting periods beginning on	Estimated impact on Financial Statements
AASB 2014 5 Amendments to Australian Accounting Standards arising from AASB 15	Amends the measurement of trade receivables and the recognition of dividends.	1 July 2017, except amendments to AASB 9 (Dec 2009) and AASB 9 (Dec 2010) apply from 1 Jan 2018	This amendment is expected to have no or minimal impact.
AASB 2015 1 Amendments to Australian Accounting Standards – Annual Improvements to Australian Accounting Standards 2012–2014 Cycle AASB 5	Amends the methods of disposal in AASB 5 Non current assets held for sale and discontinued operations.	1 July 2016	This amendment is expected to have no or minimal impact.
AASB 2015 6 Amendments to Australian Accounting Standards – Extending Related Party Disclosures to Not for Profit Public Sector Entities [AASB 10, AASB 124 & AASB 1049]	This Standard defers the mandatory effective date of AASB 15 from 1 January 2017 to 1 January 2018.	1 Jan 2018	This amending standard will defer the application period of AASB 15 to the 2018-19 reporting period in accordance with the transition requirements.
AASB 2016-4 Amendments to Australian Accounting Standards – Recoverable Amount of Non-Cash-Generating Specialised Assets of Not-for-Profit Entities	The standard amends AASB 136 Impairment of Assets to remove references to using depreciated replacement cost (DRC) as a measure of value in use for not-for-profit entities.	1 Jan 2017	The assessment has indicated that there is minimal impact. Given the specialised nature and restrictions of public sector assets, the existing use is presumed to be the highest and best use (HBU), hence current replacement cost under AASB 13 Fair Value Measurement is the same as the depreciated replacement cost concept under AASB 136.

Notes to the financial statements for the year ended 30 June 2016

Note 2: Financial risk management objectives and policies

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

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

Risk Management is carried out by the Audit Risk & Compliance Committee under policies approved by the Board of Directors. The corporate division identifies, evaluates and hedges financial risks in close cooperation with the Goulburn Broken CMA's operating units. The Board complies with Department of Treasury and Finance policy covering specific areas, such as interest rate risk, credit risk and investment of excess liquidity.

2.1 Risk exposures

The main risks the Goulburn Broken CMA 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 Goulburn Broken CMA's financial instruments. Market risk comprises of interest rate risk and other price risk. The Goulburn Broken CMA's exposure to market risk is primarily through interest rates, as there is no exposure to foreign exchange risk and no significant exposure to other price risks.

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

Interest rate risk

The Goulburn Broken CMA has minimal exposure to interest rate risk through its holding of cash assets and other financial assets. The Goulburn Broken CMA complies with Department of Treasury and Finance policies in this regard.

Other price risk

The Goulburn Broken CMA has no significant exposure to other price risk.

Market risk sensitivity analysis

The following table summarises the sensitivity of the Goulburn Broken CMA's financial assets and financial liabilities to interest rate risk.

30 June 2016	Carrying amount \$000	Interest rate risk			
		-1 per cent		+1 per cent	
		Result \$000	Equity \$000	Result \$000	Equity \$000
Financial assets					
Cash at bank	13,708	(137)	(137)	137	137
Receivables	545	-	-	-	-
Financial liabilities					
Payables	(1,172)	-	-	-	-
Interest bearing liabilities	(41)	-	-	-	-
Total increase/(decrease)		(137)	(137)	137	137

Notes to the financial statements for the year ended 30 June 2016

Note 2: Financial risk management objectives and policies (Cont'd)

30 June 2015	Carrying amount \$000	Interest rate risk			
		-1 per cent		+1 per cent	
		Result \$000	Equity \$000	Result \$000	Equity \$000
Financial assets					
Cash at bank	12,489	(125)	(125)	125	125
Receivables	758	-	-	-	-
Financial liabilities					
Payables	(1,079)	-	-	-	-
Interest bearing liabilities	(78)	-	-	-	-
Total increase/(decrease)		(125)	(125)	125	125

b Credit risk

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

The Goulburn Broken CMA'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 Goulburn Broken CMA has in place a policy and procedure for the collection of overdue receivables. In relation to cash at bank, cash is invested with Treasury Corporation Victoria and Authorised Deposit Taking Institutions.

Credit quality of contractual financial assets that are neither past due nor impaired.

30 June 2016	Government agencies \$000	Other \$000	Total \$000
Financial assets			
Cash and deposits	6,500	7,208	13,708
Receivables	353	192	545
Investments and other financial assets	-	-	-

30 June 2015	Government agencies \$000	Other \$000	Total \$000
Financial assets			
Cash and deposits	7,000	5,489	12,489
Receivables	491	267	758
Investments and other financial assets	-	-	-

c Liquidity risk

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

The Goulburn Broken CMA 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 Goulburn Broken CMA's financial liability maturities have been disclosed in Note 24.

Notes to the financial statements for the year ended 30 June 2016

Note 2: Financial risk management objectives and policies (Cont'd)

2.2 Fair valuation estimation

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 Goulburn Broken CMA 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 24.

Note 3: Revenues

	Note	2016 \$000	2015 \$000
Government Contributions			
State		13,889	9,065
Commonwealth		1,149	3,343
Farm Water Program ⁱ		9,732	11,884
Total Government Contributions		24,770	24,292
Revenue From Government Entities			
Goulburn-Murray Water		76	154
Catchment Management Authorities		127	950
Other Government Entities		525	109
Total Revenue From Government Entities		728	1,213
Other Revenues			
Recoverable Costs		111	86
Other		555	1,247
Total Other Revenues		666	1,333
Non Operating Revenue			
(Loss)/Gain on Disposal of Property, Plant & Equipment		43	88
Interest		332	490
Total Non Operating Revenue		375	578
Total Revenue		26,539	27,416

ⁱ The Farm Water Program includes both State and Commonwealth Contributions from the following Investment Programs: 2015-16: Victorian Farm Modernisation Project (VFMP) [2014-15: Victorian Farm Modernisation Project (VFMP) and Victorian On-farm State Priority Project (VOSPP)]

Notes to the financial statements for the year ended 30 June 2016

Note 4: Expenses

Net result for the period has been determined after:

	Note	2016 \$000	2015 \$000
a Operating costs to Programs			
<i>Land and Biodiversity</i>		5,230	5,226
<i>Sustainable Irrigation</i>		12,689	15,443
<i>River Health & Floodplain</i>		6,609	5,344
Corporate			
• Audit Fees - External		12	21
- Internal		27	29
• Other		826	931
<i>Corporate Administration</i>		865	981
<i>Business Development</i>		397	351
Total Corporate		1,262	1,332
Total operating costs to Program		25,790	27,345
b Depreciation of non-current assets			
Buildings		-	-
Plant and equipment and other		98	139
Motor vehicles		285	310
Total depreciation		383	449
Amortisation of leased assets		41	43
Amortisation Intangible assets		8	7
Total Amortisation		49	50
Total Depreciation and Amortisation		432	499
c Employee related expenses			
Included in the Program Expenditure totals are the following employee related expenses:			
Salary & Wages		4,428	4,160
Annual Leave		387	334
Long Service Leave		164	121
Employer Superannuation contributions		606	575
Other		255	243
Total employee related expenses		5,840	5,433

Notes to the financial statements for the year ended 30 June 2016

Note 5: Cash and cash equivalents

	Note	2016 \$000	2015 \$000
Cash on hand		2	2
Cash at Bank		5,206	3,487
Term Deposit at Bank		2,000	2,000
Deposits at Call with Treasury Corp Victoria		6,500	7,000
Total cash and cash equivalents		13,708	12,489

All of these funds are restricted in that they are held to be spent on a range of programs which the Goulburn Broken CMA currently has contracted.

a Reconciliation to cash at the end of the year

The above figures are agreed to cash at the end of the financial year as shown in the Cash Flow Statement.

b Cash at Bank

Amounts at bank bear floating interest rates currently 1.50 per cent (2015: 1.75 per cent)

c Term deposit at Bank

Term Deposit bears interest at 2.9 per cent and matures on 18 July 2016 (2015: 2.43 per cent)

d Deposits at call

The Deposits at call with Treasury Corporation Victoria bear interest at 1.91 per cent (2015: 1.95 per cent)

Note 6: Receivables

	Note	2016 \$000	2015 \$000
Contractual			
Government grants receivable		353	491
Trade debtors		165	245
Less provision for bad debt		(1)	-
Accrued interest		28	22
Total contractual		545	758
Statutory			
Net GST amount due from Australian Tax Office		128	342
Total statutory		128	342
Total receivables		673	1,100

a Provision for impaired receivables

As at 30 June 2016, current receivables of the Goulburn Broken CMA with a nominal value of \$677 (2015: nil) were impaired.

b Past due but not impaired receivables

As of 30 June 2016, government receivables of \$nil (2015: \$7,094) and other receivables of \$14,599 (2015: \$nil) were past due but not impaired. These relate to entities for which there is no recent history of default. The ageing analysis of these receivables is as follows:

One to three months		1	-
Three to six months		-	7
Over six months		13	-
Total		14	7

Notes to the financial statements for the year ended 30 June 2016

Note 7: Property plant and equipment

	Note	2016 \$000	2015 \$000
Buildings at fair value		38	43
Less accumulated depreciation		(38)	(43)
		-	-
Plant and equipment at fair value		1,093	1,368
Less accumulated depreciation		(921)	(1,157)
		172	211
Motor vehicles at fair value		1,428	1,484
Less accumulated depreciation		(408)	(542)
		1,020	942
Office and computer equipment acquired under finance lease at fair value		206	396
Accumulated amortisation		(169)	(318)
		37	78
Total property, plant and equipment		1,229	1,231

Movements during the reporting period

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

	Buildings \$000	Plant and equipment \$000	Motor Vehicles \$000	Equipment under finance lease \$000	Total \$000
2015-16					
Opening written down value at 1 July 2015	-	211	942	78	1,231
Additions	-	59	702	-	761
Disposals	-	-	(339)	-	(339)
Depreciation expense	-	(98)	(285)	-	(383)
Amortisation	-	-	-	(41)	(41)
Closing written down value at 30 June 2016	-	172	1,020	37	1,229
2014-15					
Opening written down value at 1 July 2014	-	284	1,100	78	1,462
Additions	-	66	272	43	381
Disposals	-	-	(120)	-	(120)
Depreciation expense	-	(139)	(310)	-	(449)
Amortisation	-	-	-	(43)	(43)
Closing written down value at 30 June 2015	-	211	942	78	1,231

Notes to the financial statements for the year ended 30 June 2016

Note 7: Property plant and equipment (Cont'd)

Fair Value Hierarchy

Fair Value measurement recognised in the balance sheet are categorised into the following levels at 30 June 2016 and 2015.

	2016	Fair Value measurement at end of reporting period using:		
	Carrying amount \$000	Level 1 \$000	Level 2 \$000	Level 3 \$000
Building at fair value				
Non- Specialised Buildings	-	-	-	-
Total Building at fair value	-	-	-	-
Plant, Equipment and Vehicles at fair value ⁱ				
Plant and Equipment	172	-	-	172
Vehicles	1,020	-	1,020	-
Total Plant, Equipment and Vehicles at fair value	1,192	-	1,020	172
Office & Computer Equipment at fair value ⁱ				
Office & Computer Equipment	37	-	-	37
Total Office & Computer Equipment at fair value	37	-	-	37

ⁱ The Classes of Plant and Equipment and Office & Computer Equipment were transferred from Level 2 to Level 3 during the period ended 30 June 2016 as management has formed the view that an observable market does not currently exist for these asset classes.

	2015	Fair Value measurement at end of reporting period using:		
	Carrying amount \$000	Level 1 \$000	Level 2 \$000	Level 3 \$000
Building at fair value				
Non- Specialised Buildings	-	-	-	-
Total Building at fair value	-	-	-	-
Plant, Equipment and Vehicles at fair value				
Plant and Equipment	211	-	211	-
Vehicles	942	-	942	-
Total Plant, Equipment and Vehicles at fair value	1,153	-	1,153	-
Office & Computer Equipment at fair value				
Office & Computer Equipment	78	-	78	-
Total Office & Computer Equipment at fair value	78	-	78	-

Notes to the financial statements for the year ended 30 June 2016

Note 7: Property plant and equipment (Cont'd)

Class of Building

Non-Specialised buildings

Buildings relate to non-specialised portable structures and are valued based on depreciated replacement cost. To the extent that non specialised buildings do not contain significant, unobservable adjustments, these assets are classified as Level 2 under the market approach.

Class of Plant, Equipment and Vehicles

Vehicles

Vehicles are valued using the depreciated replacement cost method. Goulburn Broken CMA acquires new vehicles and at times disposes of them before the end of their economic life. The process of acquisition, use and disposal in the market is managed by experienced external fleet managers who set relevant depreciation rates during use to reflect the utilisation of the vehicles. Vehicles have been classified as Level 2 because they are non specialised in nature, an indirect observable market is available for the vehicles and the impact of unobservable inputs such as condition are not considered significant.

Plant and equipment

Plant and equipment is held at fair value. When plant and equipment is specialised in use, such that it is rarely sold other than as part of a going concern, fair value is determined using the depreciated replacement cost method. For non specialised assets with short useful lives, depreciated historical cost has been used as an acceptable surrogate for fair value as differences are not considered material.

Class of Office and Computer Equipment

Office and computer equipment

Office and computer equipment is held at fair value and are non specialised assets with short useful lives. Depreciated historical cost has been used as an acceptable surrogate for fair value as differences are not considered material.

There were no changes in valuation techniques throughout the period to 30 June 2016.

For all assets measured at fair value, the current use is considered the highest and best use.

Reconciliation of Level 3 fair value

	Plant and equipment \$000	Office and Computer Equipment \$000	Total \$000
2015-16			
Opening Balance	-	-	-
Purchases	-	-	-
Transfers in (out) of Level 3	172	37	209
<i>Gains or losses recognised in net result</i>			
Depreciation expense	-	-	-
Impairment loss	-	-	-
Closing balance	172	37	209

Description of significant unobservable inputs to Level 3 valuations

	Valuation technique	Significant unobservable inputs
Plant and Equipment – Specialised	Depreciated replacement cost	Cost per unit
Plant and Equipment – Non-Specialised	Depreciated historical cost	Useful life of plant and equipment
Office and Computer Equipment	Depreciated historical cost	Cost per unit Useful life of plant and equipment

Notes to the financial statements for the year ended 30 June 2016

Note 8: Intangible Assets

	2016 \$000	2015 \$000
Website Development At Cost	36	36
Accumulated amortisation	(18)	(10)
Total Intangible Assets	18	26

	Website \$000	Total \$000
2015-16		
Opening written down value at 1 July 2015	26	26
Additions	-	-
Disposals	-	-
Amortisation	(8)	(8)
Closing written down value at 30 June 2016	18	18
2014-15		
Opening written down value at 1 July 2014	30	30
Additions	3	3
Disposals	-	-
Amortisation	(7)	(7)
Closing written down value at 30 June 2015	26	26

Note 9: Payables

	Note	2016 \$000	2015 \$000
Contractual			
Trade creditors		722	795
Accruals		450	284
Total contractual		1,172	1,079
Statutory			
FBT payable		62	54
Payroll tax		20	20
Total Statutory		82	74
Total payables		1,254	1,153

Note 10: Unearned Revenue

	Note	2016 \$000	2015 \$000
Victorian On-Farm State Project		178	178
Victorian On-Farm State Project - Interest		41	41
Victorian Farm Modernisation Project		2,619	2,032
Victorian Farm Modernisation Project Interest		93	111
Other		840	641
Total		3,771	3,003

Funding in advance to Goulburn Broken CMA to pay Farm Water Program proponents is taken to unearned revenue and released to the income and expenditure account to match Goulburn Broken CMA expenditure liabilities under the Program.

Notes to the financial statements for the year ended 30 June 2016

Note 11: Interest bearing liabilities

	Note	2016 \$000	2015 \$000
Current			
Secured		-	-
Finance lease liability	17b	26	35
Non-current			
Secured		-	-
Finance lease liability	17b	15	43
Total interest bearing liabilities		41	78

Note 12: Employee benefits

Employee benefits and on-costs	Note	2016 \$000	2015 \$000
Current			
Other employee benefits		34	31
Annual leave			
Unconditional and expected to settle within 12 months		296	320
Unconditional and expected to settle after 12 months		27	-
Long service leave			
Unconditional and expected to settle within 12 months		69	-
Unconditional and expected to settle after 12 months		1,084	1,020
On-costsⁱ			
Unconditional and expected to settle within 12 months		55	56
Unconditional and expected to settle after 12 months		170	155
Total current employee benefits and on-costs		1,735	1,582
Non-current			
Long service leave		97	133
On-costs ⁱ		15	21
Total non-current employee benefits and on-costs		112	154
Total employee benefits		1,847	1,736

i. On-costs include payroll tax, superannuation and worker's compensation insurance.

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 seven years continuous service is treated as a non-current liability.

Movement in provisions of on-costs	2016 \$000	2015 \$000
Opening balance	232	243
Additional provisions recognised	78	7
Reductions arising from payments/other sacrifices of future economic benefits	(70)	(18)
Closing balance	240	232
Current	225	211
Non-current	15	21
Total employee benefits	240	232

Notes to the financial statements for the year ended 30 June 2016

Note 13: Superannuation

The Goulburn Broken CMA makes employer superannuation contributions in respect of its employees to the Local Authorities Superannuation Fund (the Fund). This Fund has two categories of membership, accumulation and defined benefit, each of which is funded differently. The Defined Benefit category provides lump sum benefits based on years of service and final average salary. The accumulation category receives fixed contributions from Goulburn Broken CMA and Goulburn Broken CMA's legal or constructive obligation is limited to these contributions.

Obligations for contributions to the Fund are recognised as an expense in Comprehensive Operating Statement when they are made or due.

All payments to other funds are to accumulation funds.

Accumulation

The Fund's accumulation category and other accumulation funds, receive both employer and employee contributions on a progressive basis. Employer contributions are normally based on a fixed percentage of employee earnings for the year ended 30 June 2016, this was 9.5% required under Superannuation Guarantee legislation (for 2014-15, this was 9.5%). Our commitment to accumulation plans is limited to making contributions in accordance with our minimum statutory requirements. 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.

The Superannuation Guarantee rate will remain at 9.5% for the next 5 years, increasing to 10% from 1 July 2021, and eventually to 12% from 1 July 2025.

Defined Benefit

Goulburn Broken CMA does not use defined benefit accounting for its defined benefit obligations under the Fund's Defined Benefit category. This is because the Fund's Defined Benefit category is a multi-employer sponsored plan.

There is no proportional split of the defined benefit liabilities, assets or costs between the participating employers as the defined benefit obligation is a floating obligation between the participating employers and the only time that the aggregate obligation is allocated to specific employers is when a call is made. As a result, the level of participation of Goulburn Broken CMA in the Fund cannot be measured as a percentage compared with other participating employers. Therefore, the Actuary is unable to allocate benefit liabilities, assets and costs between employers for the purposes of AASB 119.

Funding Arrangements

Goulburn Broken 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.

As at 30 June 2015, an interim actuarial investigation was held as the Fund provides lifetime pensions in the Defined Benefit category. It was determined that the Vested Benefit Indexed (VBI) of the Defined Benefit category of which Goulburn Broken CMA is a contributing employer was 105.8% (103.4% at 30 June 2015).

To determine the VBI, the fund Actuary used the following long-term assumptions:

	30 June 2015	30 June 2014
Net investment returns	7.0% pa	7.50% pa
Salary information	4.25% pa	4.25% pa
Price inflation (CPI)	2.5 % pa	2.75% pa

The next interim actuarial investigation will be held as at 30 June 2016 and the next full actuarial investigation will be as at 30 June 2017.

Vision Super has advised that the estimated VBI at March 2016 was 102.4%.

The VBI is to be used as the primary funding indicator. Because the VBI was above 100%, the actuarial investigation determined the defined benefit category was in a satisfactory financial position and that no change was necessary to the defined benefit category's funding arrangements from prior years.

Employer Contributions

Regular Contributions

On the basis of the results of the 2015 interim actuarial investigation conducted by the Fund's Actuary the Goulburn Broken CMA makes employer contributions to the Fund's Defined Benefit category at rates determined by the Fund's Trustee. For the year ended 30 June 2016, this rate was 9.5% of members' salaries (2015: 9.5%). This rate will increase in line with the required Superannuation Guarantee contribution rate.

In addition, Goulburn Broken CMA reimburses the Fund to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit.

Notes to the financial statements for the year ended 30 June 2016

Note 13: Superannuation (Cont'd)

Funding Calls

If the defined benefit category is in an unsatisfactory financial position at actuarial investigation or the defined benefit category's VBI is below its shortfall limit at any time other than the date of the actuarial investigation, the defined benefit category has a shortfall for the purposes of SPS 160 and the Fund is required to put a plan in place so that the shortfall is fully funded within three years of the shortfall occurring. The Fund monitors its VBI on a quarterly basis and the Fund has set its shortfall limit at 97%.

In the event that the Fund Actuary determines that there is a shortfall based on the above requirement, the Fund's participating employers (including Goulburn Broken CMA) are required to make an employer contribution to cover the shortfall.

Using the agreed methodology, the shortfall amount is apportioned between the participating employers based on the pre-1 July 1993 and post-30 June 1993 service liabilities of the Fund's defined benefit category, together with the employer's payroll at 30 June 1993 and at the date the shortfall has been calculated.

Due to the nature of the contractual obligations between the participating employers and the Fund, and that the Fund includes lifetime pensioners and their reversionary beneficiaries, it is unlikely that the Fund will be wound up.

If there is a surplus in the Fund, the surplus cannot be returned to the participating employers.

In the event that a participating employer is wound-up, the defined benefit obligations of that employer will be transferred to that employer's successor.

Latest actuarial investigation surplus amounts

The 2015 interim actuarial investigation identified the following in the Defined Benefit category of which Goulburn Broken CMA is a contributing employer:

- A VBI surplus of \$130.8 million; and
- A total service liability surplus of \$239 million.

The VBI surplus means that the market value of the funds' assets supporting the defined benefit obligations exceed the vested benefits that the defined benefit members would have been entitled to if they had all exited on 30 June 2015.

The total service liability surplus means that the current value of the assets in the Defined Benefit category plus expected future contributions exceeds the value of expected future benefits and expenses.

Goulburn Broken CMA was notified of the 30 June 2015 VBI during August 2015.

Superannuation Contributions

Contributions by Goulburn Broken CMA (excluding any unfunded liability payments) to the above superannuation plans for the financial year ended 30 June 2016 are detailed below:

	Type of scheme	2016 Rate %	2016 \$000	2015 \$000
Government Superannuation Office	Accumulation	Various	75	68
Vision Super	Defined Benefits	9.5	9	9
Vision Super	Accumulation	9.5	120	146
Other funds	Accumulation	9.5	402	352
Total contributions to all funds			606	575

There were \$43,769 (2015: \$34,901) in relevant contributions outstanding and no loans issued from or to the above schemes as at 30 June 2016.

The expected contributions to be paid to the defined benefit category of Vision Super for the year ending 30 June 2017 is \$9,217. (2015: \$8,949)

Notes to the financial statements for the year ended 30 June 2016

Note 14: Contributed equity

	Note	2016 \$000	2015 \$000
Balance at the beginning of the reporting period		4,209	4,209
Contributed capital received		-	-
Balance at the end of the reporting period		4,209	4,209

Note 15: Accumulated Funds

	Note	2016 \$000	2015 \$000
Balance at the beginning of the reporting period		-	-
Net result for the year		(22)	(810)
Transfer from / (to) reserves		22	810
Balance at the end of the reporting period		-	-

Note 16: Committed Funds Reserve

	Note	2016 \$000	2015 \$000
Balance at the beginning of the reporting period		4,737	5,547
Net transfers (to) / from accumulated funds		(22)	(810)
Balance at the end of the reporting period		4,715	4,737

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 of a recurrent nature are taken to revenue as soon as the Goulburn Broken CMA 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 17: Commitments

	Note	2016 \$000	2015 \$000
a Operating lease commitments:			
Office accommodation			
Within one year		320	326
One year to five years		758	221
Total		1,078	547
b Finance leases commitments			
At balance date the Goulburn Broken CMA had finance lease commitments payable as follows:			
Within one year		28	35
One year to five years		15	49
Less future finance charges		(2)	(6)
Total		41	78
Represented by:			
Current liability	11	26	35
Non-current liability	11	15	43
Total		41	78
c Capital commitments			
At balance date the Goulburn Broken CMA had commitments for capital expenditure payable as follows:			
Within one year		-	-

Notes to the financial statements for the year ended 30 June 2016

Note 18: Carry forward funding

Catchment Management Authorities are responsible for the facilitation and coordination of catchments in an integrated and sustainable manner. This is achieved by undertaking projects primarily funded by Victorian and Australian Government programs. The Authority receives funding for specific projects which are guided by the Regional Catchment Strategy and delivered in line with the Authority's Corporate Plan approved by the Minister for Water and the Minister for Energy, Environment and Climate Change.

The projects funded by the State and Commonwealth Governments can be undertaken over multiple financial years and funding is received at various stages of the project life based on contractual agreements. At the end of the financial year there are some projects that have not reached completion but will be completed within the contractual terms in future financial periods. At balance date the Authority has cash and cash equivalents that will be utilised to complete these projects in future financial years. Refer Note 5 Cash and Cash Equivalents for balances on hand.

Note 19: Contingent assets and liabilities

There are no contingent assets or contingent liabilities at 30 June 2016 (2015: nil).

Note 20: 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 Goulburn Broken CMA, the results of those operations, or the state of affairs of the Goulburn Broken CMA in future financial years.

Note 21: Responsible persons related disclosures

a Responsible persons

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

Minister for Environment, Climate Change and Water	Lisa Neville MP	1 July 2015 to 22 May 2016
Minister for Water	Lisa Neville MP	23 May 2016 to 30 June 2016
Minister for Energy, Environment and Climate Change	Lily D'Ambrosio MP	23 May 2016 to 30 June 2016

There were numerous transactions between the Goulburn Broken CMA and Department of Environment, Land, Water & Planning during the year under normal commercial terms and conditions.

Position		First appointed	Term expires
Chair	M Chapman	1 July 2009; Deputy Chair 21 Oct 2011, Chair 1 October 2013	30 September 2017
Board Member	A Appo	27 October 2015	30 September 2019
Board Member	R Ellis	27 October 2015	30 September 2019
Board Member	A MacKenzie	1 October 2011	30 September 2017
Board Member	K Stothers	27 October 2015	30 September 2019
Board Member	A Weston	14 October 2013; Deputy Chair 26 Nov 2015	30 September 2017
CEO	C P Norman	15 December 2009	-
Acting CEO	K Warner	11 to 20 January 2016	-
Acting CEO	C Walters	4 to 8 January 2016, 14 to 28 June 2016	-

Position		First appointed	Term expired
Board Member	M Dalmau	1 October 2011	30 September 2015
Board Member	A Fox	1 October 2011, Deputy Chair 24 Oct 2013.	30 September 2015
Board Member	R Runnalls	1 October 2011	30 September 2015
Board Member	J Craven	1 October 2011	30 June 2016 (resigned)

Notes to the financial statements for the year ended 30 June 2016

Note 21: Responsible persons related disclosures (Cont'd)

b Remuneration of responsible persons

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

Income bands	2016 no.	2015 no.
\$1-\$9,999	6	1
\$10,000-\$19,999	3	6
\$20,000-\$29,999	1	1
\$80,000-\$89,999	-	-
\$90,000-\$99,999	-	-
\$210,00-\$219,999	-	1
\$220,000-\$229,999	1	-
Total	11	9

The total remuneration of responsible persons referred to in the above bands was \$318,771 (2015: \$325,529) which includes \$42,842 (2015: \$36,118) paid in superannuation contributions.

The relevant information of the Chief Executive Officer is reported under the Responsible persons.

The relevant Ministers' 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	Total remuneration		Base remuneration	
	2016	2015	2016	2015
\$100,000 - \$109,999	-	-	-	1
\$110,000 - \$119,999	-	1	-	1
\$120,000 - \$129,999	2	-	2	-
\$130,000 - \$139,999	-	-	1	1
\$140,000 - \$149,999	2	1	2	1
\$150,000 - \$159,999	1	1	1	1
\$160,000 - \$169,999	1	1	-	-
\$230,000 - \$239,999	-	1	-	-
Total amount	863,188	802,458	837,889	660,123
Total numbers	6	5	6	5
Total annualised employee equivalentⁱ	5.9	4.8	5.9	4.8

ⁱ Annualised employee equivalent is based on paid working hours of 38 ordinary hours per week over the 52 weeks for a reporting period.

There were no contractors engaged during the year with significant management responsibilities.

d Other related party transactions

Loans

There were no loans in existence by the Goulburn Broken CMA to responsible persons or related parties at the date of this report.

Shares

There were no share transactions in existence between the Goulburn Broken CMA and Responsible Persons and their related parties during the financial year.

Note 22: Economic dependence

To attain its goals as detailed in its Regional Catchment Strategy, the Goulburn Broken CMA 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 2016

Note 23: Cash flow information

	Note	2016 \$000	2015 \$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	5	13,708	12,489
b Reconciliation of cash flow from operations with net result for the year			
Net result for the period		(22)	(810)
Non-cash flows in net result			
Depreciation & Amortisation		432	499
Net loss (gain) on disposal of non-current assets		(43)	(88)
Changes in assets and liabilities			
Decrease / (Increase) in receivables		427	2,042
(Increase) / decrease in prepayments		(139)	103
(Decrease) / Increase in provisions		111	(102)
Increase / (decrease) in unearned revenue		768	(679)
Increase / (decrease) in payables		101	(1,573)
Cash flows from operating activities		1,635	(608)

c Property plant and equipment

During the financial year the Goulburn Broken CMA acquired computer equipment with an aggregate fair value of \$Nil (2015: \$42,232) by means of finance leases. These acquisitions are not reflected in the cash flow statement.

Note 24: Financial instruments

Interest risk rate exposures

The following table sets out the Goulburn Broken CMA'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 Goulburn Broken CMA intends to hold fixed rate liabilities to maturity.

	Weighted average interest rate %	Floating interest rates \$000	Fixed interest rate maturing			Non-interest bearing \$000
			1 year or less \$000	1 to 2 years \$000	2 to 3 years \$000	
2015-16						
Financial assets						
Cash	1.9	11,706	2,000	-	-	2
Receivables		-	-	-	-	545
Total financial assets		11,706	2,000	-	-	547
Financial liabilities						
Lease liabilities	3.6	-	(26)	(15)	-	-
Payables		-	-	-	-	(1,172)
Total financial liabilities		-	(26)	(15)	-	(1,172)
Net financial assets (liabilities)		11,706	1,974	(15)	-	(625)
2014-15						
Financial assets						
Cash	1.97	10,488	2,000	-	-	2
Receivables		-	-	-	-	758
Total financial assets		10,488	2,000	-	-	760
Financial liabilities						
Lease liabilities	3.54	-	(35)	(28)	(15)	-
Payables		-	-	-	-	(1,079)
Total financial liabilities		-	(35)	(28)	(15)	(1,079)
Net financial assets (liabilities)		10,488	1,965	(28)	(15)	(319)

Notes to the financial statements for the year ended 30 June 2016

Note 24: Financial instruments (Cont'd)

Fair value

The fair value of financial instruments must be estimated for recognition and measurement or for disclosure purposes.

Refer to Note 1(e) for accounting policy relating to disclosure of fair value measurement hierarchy.

The following tables present the entity's financial assets and financial liabilities measured and recognised at fair value at 30 June 2016 and 2015. It also shows the comparison between the carrying amount of the asset or liability and its fair value.

	2016 Carrying amount \$000	Fair Value measurement at end of reporting period using:		
		Level 1 \$000	Level 2 \$000	Level 3 \$000
Financial assets				
Cash	13,708	-	13,708	-
Receivables	545	-	545	-
Total financial assets	14,253	-	14,253	-
Financial liabilities				
Lease liabilities	41	-	41	-
Payables	1,172	-	1,172	-
Total financial liabilities	1,213	-	1,213	-

	2015 Carrying amount \$000	Fair Value measurement at end of reporting period using:		
		Level 1 \$000	Level 2 \$000	Level 3 \$000
Financial assets				
Cash	12,489	-	12,489	-
Receivables	758	-	758	-
Total financial assets	13,247	-	13,247	-
Financial liabilities				
Lease liabilities	78	-	78	-
Payables	1,079	-	1,079	-
Total financial liabilities	1,157	-	1,157	-

There have been no transfers between levels during the period.

The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading and available-for-sale securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the group is the current bid price. These instruments are included in level 1.

The carrying amounts of receivables and payables are assumed to approximate their fair values due to their short-term nature. 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 group for similar financial instruments. The fair value of current borrowings approximates the carrying amount, as the impact of discounting is not significant.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

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.

Appendix 1: Understanding progress and ratings

Compiled by Rod McLennan.

Details on each investment area within sections of this annual report justify ratings provided. Further details, including graphs and reports, are on the Goulburn Broken CMA's website, www.gbcma.vic.gov.au and in relevant sub-strategies of the Regional Catchment Strategy.

The ordering of information, which helps develop consistency and understanding across the many aspects of catchment management, is part of implementing the 2004 Goulburn Broken Monitoring, Evaluation and Reporting Strategy.

The Goulburn Broken CMA understands that measuring progress in natural resource management is almost

universally difficult and the quality of data systems used to inform whole-of-Catchment-scale decisions is often poor. Nevertheless, decisions have to be made and the Goulburn Broken CMA is at the forefront of communicating progress.

Evaluation, planning levels and decision-making cycles

Decisions in catchment management have vastly different timeframes, from daily operational decisions by extension officers to once-in-six-year strategic decisions by the Goulburn Broken CMA Board. The Goulburn Broken CMA arranges data to inform three critical and connected levels of evaluation for strategic planning and implementation, as shown in the table below.

Evidence for three levels of decision-making

Evaluation level	Evaluation terminology	Typical key evaluation questions used to focus evaluation	Examples of evidence to inform evaluation
1	Annual performance	How did we go this year against what we said we would do?	Outputs (onground works and capacity building actions or tasks) achieved and funds spent against targets set
2	Long-term strategy implementation progress	How have we gone against what we said we would do when we wrote the (various) strategies? How effective were the implemented measures?	Outputs and assumptions of their impact listed in strategies
3	Catchment condition change	What 'shape' is the issue we are managing in now? 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?	Resource condition; trends; tipping points; indicators of resilience, adaptation and transformation responses

Annual performance

Annual performance is rated by measuring the outputs achieved against targets for the year. Targets are determined by the funds available and usually vary from those identified or implied in the relevant long-term strategy. This is because we mostly 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.

The Goulburn Broken 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.

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

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 certainty of the rating.

Annual targets and achievements data in this report do not include outputs delivered beyond Goulburn Broken CMA's direct control, especially by those landholders who voluntarily pay for and undertake onground works. However, data on these external outputs is also critical to inform long-term decisions and is increasingly captured by other means.

Outputs shown in this report are useful for decision making by government investors, Goulburn Broken CMA senior managers and the Goulburn Broken CMA Board. Monitoring finer-scaled outputs and inputs are more appropriate for individual project and subproject decision making and are not shown in this report.

For detailed outputs in each program area, see the 'Outputs – detailed list of achievements' table on page 130. Detailed outputs relating to each investment area are listed in sections devoted to each investment area throughout this report.

Long-term progress

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 strategic 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. Strategies for different investment areas vary in formality and comprehensiveness, which is appropriate, so our certainty of understanding progress varies considerably.

Where outputs and long-term strategies are well defined and where they are accompanied by solid data management systems, such as for 'Investment– area 1a Shepparton Irrigation Region salinity', then the certainty of long-term progress ratings increases.

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 assumptions related to funding levels, social and political circumstances 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) listed 10 similar types of theme as resource condition 'matters for target'. It also recommended indicator headings and indicators of progress. Resource condition indicator examples are depth to groundwater, soil acidity, total phosphorus levels in water and the extent of native vegetation present by interim biogeographical regionalisation of Australia subregions.

'Resource' can be interpreted from this 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.

More information on the investment areas in an integrated context is needed to make better decisions. This means information on all elements that impact on particular investment areas is needed to rate the condition of the Catchment for that investment area.

The Goulburn Broken CMA 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 socioecological systemⁱ in which humans are a part of nature. Ratings of Catchment condition for an investment area are therefore ratings of the socioecological 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 the Goulburn Broken CMA is in the early stages of 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 socioecological system ratings for Catchment condition rather than ratings based on resource condition indicators alone. Progress within investment areas is 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 investment areas merely have supporting functions.

Investment areas and integration

The Goulburn Broken CMA focuses on 13 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 'Collaborations and communities' section. 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. Planning for large projects is increasingly integrated across the investment areas. Integration can add cost and complexity. The benefits of integration need to outweigh these costs.

Resilience, adaptability and transformability

Resilience thinkingⁱ helps to expand thinking to the whole of system. This approach evolved out of the Goulburn Broken CMA's sustainability and ecosystem services thinking and is a major focus of the Regional Catchment Strategy 2013-2019.

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'.

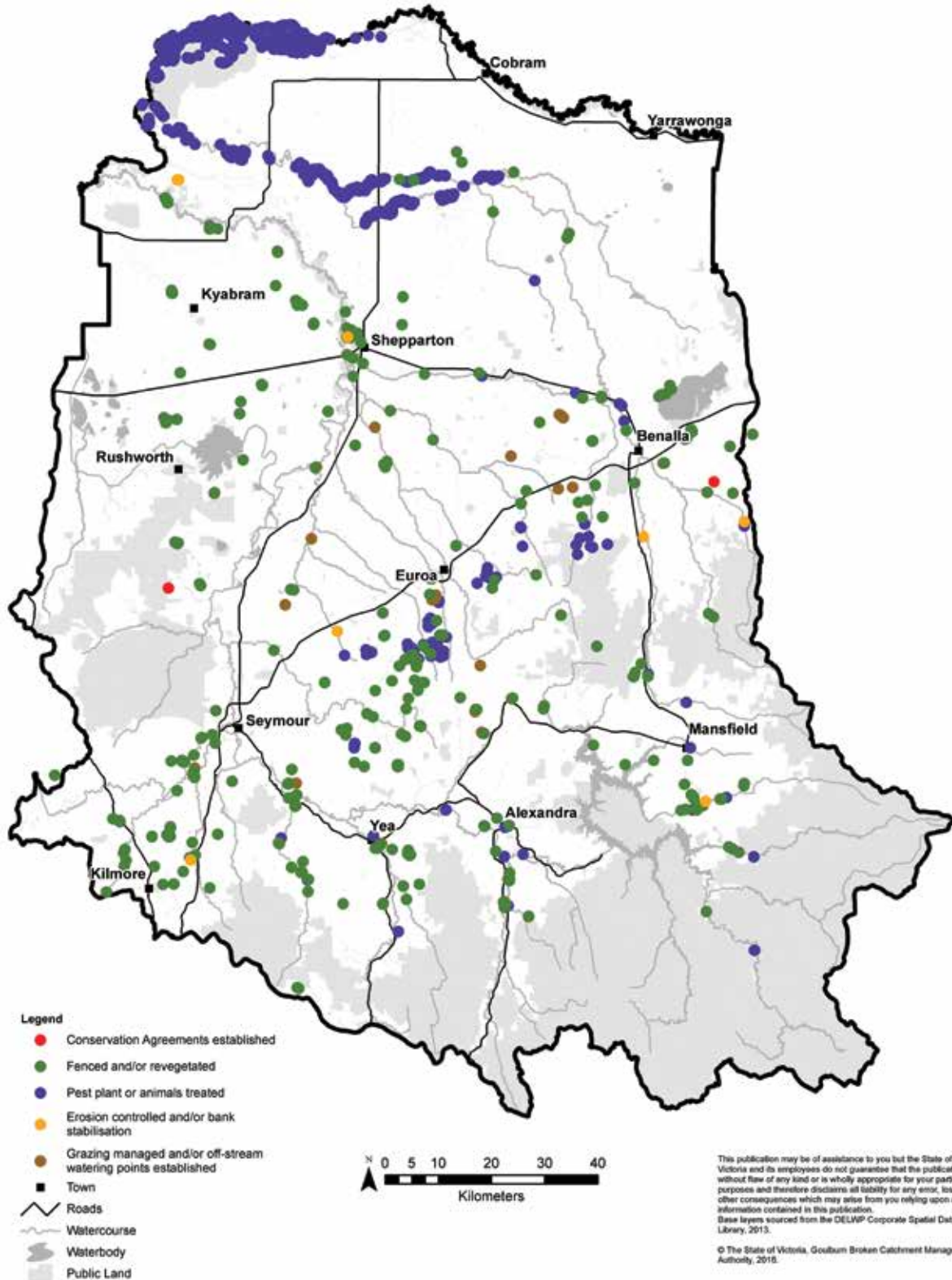
For the first time in this 2015-16 Annual Report, a summary of each 'critical attribute' of a social-ecological system is given. See Sustainable Irrigation section page 33.

ⁱ The above discussions on socio-ecological systems and resilience have drawn heavily from 'Resilience, Adaptability and Transformability in the Goulburn- Broken Catchment' (2009) by Walker, Abe I, Anderies and Ryan; the Resilience Alliance website 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.

Appendix 2: Works

1 July 2015 to 30 June 2016

This map shows onground works completed in 2015-16 through Goulburn Broken CMA programs. These works relate to outputs listed in tables throughout this Annual Report. Some major works under River and Wetland Health and Floodplain Management and Sustainable Irrigation Programs are not shown. Ongoing works that landowners fully fund themselves are not shown. The Goulburn Broken CMA is investigating ways to capture such important contributions. The points indicated on this map are an approximate location of where the works occurred only.



Appendix 3: Outputs - detailed list of achievements

Standard GB Threat or Impact Managed	Output	Land & Biodiversity Program		
		Target ⁱ	Achieved	% Achieved
Threat				
Land and water use practices				
Stock grazing (ha = terrestrial; km = riparian)	Fence terrestrial remnant vegetation (ha) ⁱⁱ	508	468	92
	Fence wetland remnant (ha)			
	Fence stream/river remnant (ha)			
	Fence stream/river remnant (km)			
	Off-stream watering (no.)			
	Binding Management Agreement (licence, Section 173, covenant) (ha)	60	70	117
Induced Threat				
Saline water and high watertables				
	Laser levelling (ha) ⁱⁱⁱ			
	Drain – primary built (km) ^v			
	Drain – community built (km)			
	Weir – replace (no.)			
Surface water ^{iv}	Farm reuse systems installed (no.) ^{vi}			
	Drain – additional water diverted from regional drains (ML)			
	Irrigation systems – improved (ha) ^{vii}			
	Pasture – plant (ha)			
	Groundwater pumps - public installed (new; no.)			
	Groundwater pumps - private installed (new; no.)			
Sub-surface water	Volume water pumped - increase (ML)			
	Tile drains – install (ha)			
	Revegetation - plantation/farm forestry (ha)			
Nutrient-rich & turbid water & suspended solids	Waste water treatment plants - install (no.)			
	Stormwater management projects (no.) ^{viii}			
In-stream and near-stream erosion	Bed and bank protection actions (km)			
	In-stream & tributary erosion controlled (km)			
Changed flow pattern	Environmental water use (ML) ^{ix}			
	Weeds – woody weed management (ha)	110	135	123
Weed invasion	Weeds – aquatic weeds controlled/eradicated (km)			
	Targeted infestations of weeds in high priority areas covered by control programs (ha) ^x	966	1,663	172
	Area of high priority rabbit infested land covered by control programs (ha)	871	722	83
Pest animals	Area of high priority fox infested land covered by control programs (ha)	6,000	6,000	100
Impact				
Habitat loss - terrestrial	Revegetation - plant natives within or next to remnants (ha) ^{xi}	585	683	117
	Revegetation - plant natives away from remnants (ha)			
	Fish release (no.)			
	Vertical slot fishway (no.)			
Habitat loss – in-stream	Rock ramp fishway (no.)			
	Fish barrier removal (no.)			
	In-stream woody habitat - snags (no.) ^{xii}			
Habitat loss – wetlands	Reinstate flood regime (ML)			
	Construct new wetland (ha)			
Habitat loss – threatened species	Threatened Species Recovery Plan and Action Statements (no. projects)			
Planning				
	Whole farm plans (no.) ^{xiii}			

ⁱ Targets are determined by considering levels of government funding as at 30 June 2015 and any subsequent adjustments over the financial year.

ⁱⁱ Includes 360 hectares of remnant protection in Bushfire Recovery Program in 2009-10.

ⁱⁱⁱ Assumptions: 2010-11 = area put under Whole Farm Plans, including modernised + Farm Water Program onground achievements (226 hectares); 2011-12 = 90 per cent of area under Whole Farm Plans (25,841) + 70 per cent of Farm Water Program onground achievements (965); 1,783 was used to calculate figures in 2011-12 report; 2012-13 = Farm Water Program onground achievements (2,163) + 60 per cent of area put under Whole Farm Plans [new (8,424) + modernised (9,075)]; 2013-14 = Farm Water Program's SIR onground achievements (3,736) + 60 per cent of area put under Whole Farm Plans [new (4,224) + modernised (4,403) – Farm Water Program's SIR onground achievements (3,736)]; 2014-15 & 2015-16 = Farm Water Program's SIR onground achievements (478 & 1,963) + 60 per cent of area put under Whole Farm Plans [new (4,143 & 2,576) + modernised (2,572 & 2,037) – Farm Water Program's SIR onground achievements (478 & 1,963)]. Target = Farm Water Program's SIR target (1,253 & 1,253) + 60 per cent of [area to be put under Whole Farm Plans (110 & 140) x average area of Whole Farm Plans (91) – Farm Water Program's SIR target (1,253 & 1,253)].

^{iv} Surface water management enables the removal of excess rainfall runoff from irrigated lands, alleviating soil salinity. As part of an overall management plan for nutrients, nutrients loads are managed by collecting and reusing water from drains. Nutrient loads are monitored against the Goulburn Broken Water Quality Strategy nutrient target for drains.

^v Fencing and laneways are relocated along primary drains to control stock. Drains are also hydro-mulched and seeded to provide vegetative cover on bare batters. 6 kilometres were constructed during 2009-10 and 3 kilometres were prepared for handover to Goulburn-Murray Water for it to manage. Handed-over drains not accounted for in 2005-06 and 2006-07 were recorded in 2007-08.

^{vi} Reuse dams allow for the collection of high nutrient runoff and re-irrigation, reducing the water and nutrient loads leaving the farm. Figures include Farm Water Program installations. In 2014-15 the number of new farm reuse systems installed is assumed to be: 67 per cent of projects install a new system and 33 per cent reconnect the project area to an existing system. In 2012-13 and 2013-14 the number of new systems was assumed to be: 100 per cent of projects install a new system ie. new systems and extensions of existing systems were both counted as 'new systems'.

^{vii} Assumptions: From 2014-15, area improved = laser levelling (which itself includes an assumption based on whole farm plan area see footnote iii) + pressurised irrigation systems (micro or drip + irrigation); 2013-14 = Farm Water Program's SIR onground achievements (laser grading + overhead spray + drip; 3,736 + 567 + 0) + 70 per cent of area put under Whole Farm Plans [new (4,224) + modernised (4,403) less Farm Water Program's SIR onground achievements].

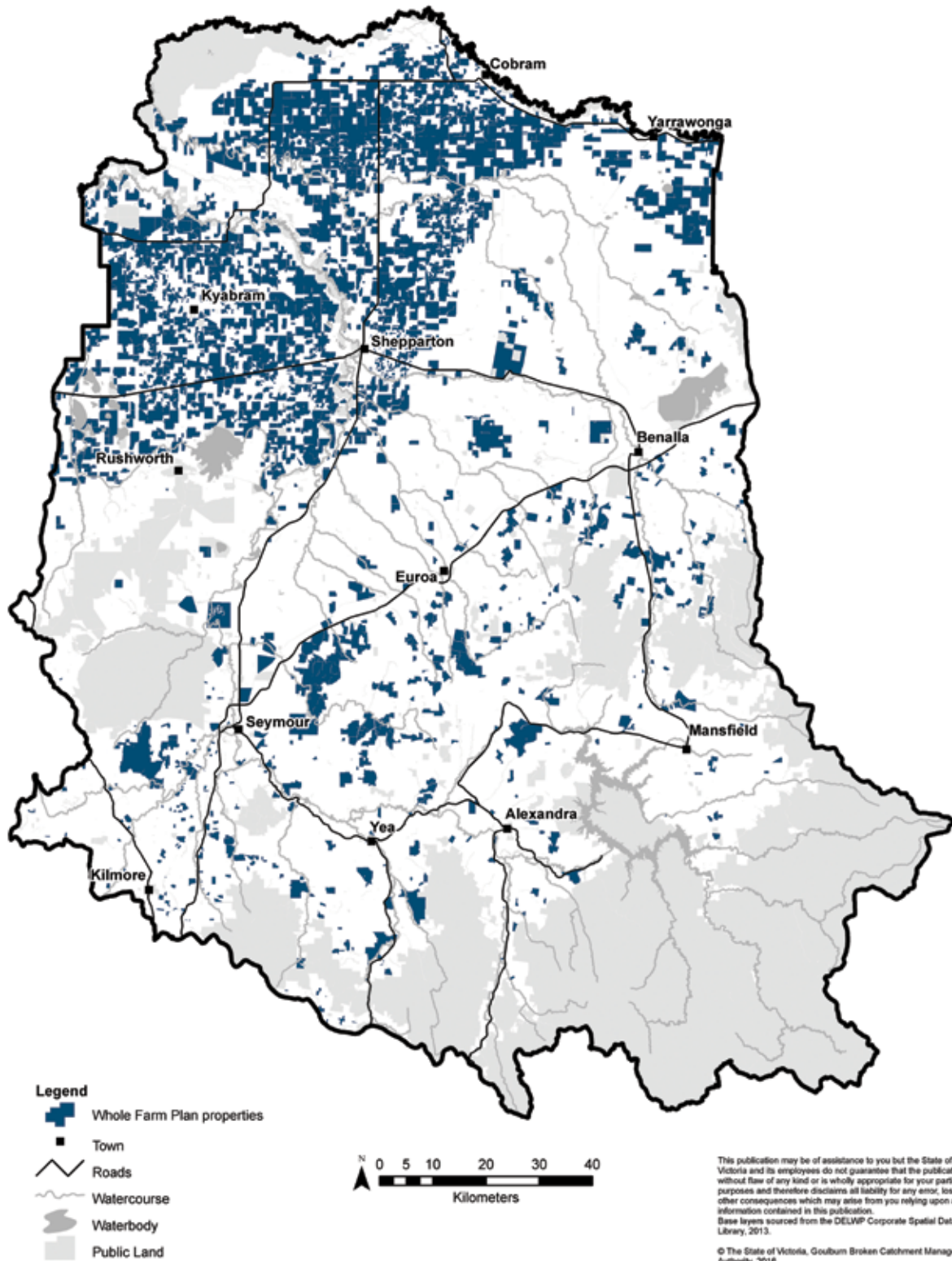
^{viii} Stormwater management projects are undertaken on a one-to-one funding basis with local government.

^{ix} Target cannot be set with any confidence because achievement is prone to extreme variation, being affected by climatic and seasonal conditions. Volumes used since 2000-01 were reconciled in 2014 and some figures were adjusted. The NSW component of water delivered to Barmah Forest is included in these figures.

Appendix 4: Properties covered by a whole farm plan

to 30 June 2016

This map shows the properties covered by a whole farm plan or modernised whole farm plan completed since the start of the Program.



Appendix 5: Roles of Catchment Partners

Agency / Authority / Organisation / Individual	Role relative to the development and implementation of the RCS
Alpine Resorts Coordinating Council and Alpine Resort Management Boards	<p>The Alpine Resorts Coordinating Council is a statutory body established under the Victorian <i>Alpine Resorts Management Act 1997</i>. It reports to the Minister for Environment, Climate Change and Water and addresses issues of broad concern to alpine resort stakeholders and government and is focused on three key areas: Strategic positioning and advocacy, Cooperation and Research.</p> <p>The Alpine Resorts are permanent Crown land reserves, each managed by an Alpine Resort Management Board appointed by and responsible to, the Minister for Environment, Climate Change and Water. The boards are also established under the <i>Alpine Resorts Management Act 1997</i>.</p> <p>The Alpine Resort Management Boards are responsible for the development, promotion, management and use of each Alpine Resort. They also provide or arrange required basic services and utilities including water and energy supply and sewerage and garbage disposal. The boards are required to carry out their functions in an environmentally sound way and in accordance with an approved strategic management plan. Each board is represented on the Alpine Resorts Coordinating Council.</p>
Australian Government - Department of Agriculture and Water Resources	<p>The Australian Government Department of Agriculture and Water Resources develops and implements policies and programmes to ensure Australia's agricultural, fisheries, food and forestry industries remain competitive, profitable and sustainable and supports the sustainable and productive management and use of rivers and water resources. Regionally, the Department plays an important role in the implementation of the RCS funding projects across the Catchment.</p>
Australian Government – Department of the Environment	<p>The Department of the Environment designs and implements the Australian Government's policies and programmes to protect and conserve the environment, water and heritage and promote climate action.</p> <p>The Department administers the <i>Environment Protection and Biodiversity Conservation Act 1999</i>. Regionally, the Department plays an important role in the implementation of the RCS by funding projects across the Catchment.</p>
Community NRM groups (eg. CMNs, Landcare and environmental groups)	<p>The Goulburn Broken Catchment's 96 natural resource management groups, 12 networks and three sustainable farming groups mobilise community involvement, attract corporate, philanthropic and corporate funding and influence and implement significant parts of the Regional Catchment Strategy in local areas, usually with an emphasis on onground works. They are represented on many of the CMA's advisory groups and steering committees.</p>
Department of Economic Development, Jobs, Transport and Resources	<p>The purpose of the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) is to create the conditions to sustainably develop the Victorian economy and grow employment.</p> <p>DEDJTR responsibilities include agriculture and fisheries and associated research, biosecurity, economic growth including regional development and transport including public transport.</p>
Department of Environment, Land, Water & Planning	<p>The Department of Environment, Land, Water & Planning (DELWP) aims to protect and manage Victoria's natural and built environments supporting economic growth and building communities while responding to increased population and climate change.</p> <p>DELWP is responsible for policies, programs, investment and regulation of the natural environment, water resources, planning, heritage protection, land information services, public land management and emergency response to fire and other emergencies.</p> <p>DELWP performs its range of functions in partnership with service delivery partners including catchment management authorities. It is responsible for administering the <i>Catchment and Land Protection Act 1994</i> and other important legislation.</p>
Environment Protection Authority	<p>The Environment Protection Authority's (EPA) sole role is to regulate pollution and has independent authority to make regulatory decisions under the <i>Environment Protection Act 1970</i>. Based on its regulatory risk model EPA prioritises its compliance and enforcement activity by addressing the biggest risk to the environment and health. EPA aspires to create a healthy environment that supports a liveable and prosperous Victoria. By effectively regulating pollution in Victoria, we strive to deliver clean air, healthy waterways, safe land and minimal disturbances from noise and odour for Victorians.</p>
GMW Connections Project	<p>The GMW Connections Project is investing more than \$2 billion to develop a water delivery network to match these changing needs and to support the many, varied and exciting opportunities for irrigated agriculture across Northern Victoria. The Project will also provide important opportunities and benefits for environmental and urban water users and will ensure the ongoing contribution of irrigated agriculture to our regional, state and national economies.</p>

Appendix 5: Roles of Catchment Partners (Cont'd)

Agency / Authority / Organisation / Individual	Role relative to the development and implementation of the RCS
Goulburn Broken Catchment Management Authority	<p>The Goulburn Broken Catchment Management Authority (CMA) is a statutory authority established under the <i>Catchment and Land Protection Act 1994</i>. It plays a pivotal role in NRM in the Catchment.</p> <p>There are many policies that inform this role, listed in Appendix 6. The Goulburn Broken CMA prepares the Goulburn Broken RCS and coordinates and monitors its implementation. It does this by working with all tiers of government, other agencies, community groups, industry, individuals and research and funding organisations.</p>
Goulburn Valley Water	<p>Goulburn Valley Water's (GVW) delivery of water and waste water services to its customers has a considerable impact on non-renewable natural resources. Primary objectives of the organisation include a commitment to improve environmental performance by minimising resource demand and preventing pollution. In order to translate these commitments into practice, the organisation has established an Environment Policy and an Environmental Management System (EMS).</p>
Goulburn-Murray Water	<p>Goulburn-Murray Water (GMW) has substantial interaction with the environment, partnerships with a number of stakeholders and legislative requirements leading to a large and diverse environmental risk profile. GMW aims to maximise water resource availability for customer use, while meeting key environmental goals and contributing to a sustainable and productive natural environment. GMW's environmental objectives are listed in the Environment Policy Statement.</p> <p>In summary GMW is committed to minimising and preventing any adverse impact on the environment caused by our activities.</p> <p>Activities and initiatives include catchment management (including salt interception management), surface and subsurface drainage support, water quality and land management planning.</p>
Individuals / land Managers	<p>Under the <i>Catchment and Land Protection Act 1994</i>, responsibilities of land managers include (but are not limited to) take all reasonable steps to:</p> <ul style="list-style-type: none"> • Prevent the spread of and as far as possible eradicate, established pest animals • Eradicate regionally prohibited weeds • Prevent the growth and spread of regionally controlled weeds • Conserve soil and avoid contributing to land degradation on someone else's land. <p>Land managers must also seek authority to interfere, obstruct or carry out works in relation to a waterway, bore or drainage course, or (in some cases) a private dam.</p> <p>Regionally, landholders across the Catchment invest significant resources (time, money and land) into activities that contribute to meeting the objectives of the Regional Catchment Strategy.</p> <p>This contribution is further outlined in the People section of the Assets of the Goulburn Broken Catchment supplement to the Goulburn Broken Regional Catchment Strategy.</p>
Industry groups	<p>Peak industry groups such as Murray Dairy and the Victorian Farmers Federation can strongly influence catchment management through their networks with regional land managers.</p>
Local government	<p>Services provided by councils are diverse. They include property, economic, human, recreational and cultural services. Councils also enforce State and local laws relating to such matters as land use planning, environment protection, public health, traffic and parking and animal management.</p> <p>They maintain significant infrastructure, provide a range of services and enforce various laws for their communities.</p> <p>Local government plays a significant role in land use planning, which is administered under the <i>Planning and Environment Act 1987</i>, with each municipality having a local planning scheme that describes directions and controls for developments. They also have other important roles including public awareness, engagement and education as well as local partnerships such as Conservation Management Networks.</p> <p>Regionally, the Goulburn Broken CMA actively participates in development of environment strategies for the Benalla Rural City, Campaspe Shire, City of Greater Shepparton, Mansfield Shire, Moira Shire and Strathbogie Shire Councils. The Goulburn Broken CMA is a key member and supporter of the Goulburn Broken Local Government Biodiversity Reference Group led by Moira Shire in partnership with the other local governments represented in the catchment.</p>

Agency / Authority / Organisation / Individual	Role relative to the development and implementation of the RCS
Other groups	The Goulburn Broken CMA and community and advisory groups develop close relationships with many organisations as needs arise during research, planning and implementation, including Victorian Farmers Federation, the Goulburn Broken Greenhouse Alliance, Committees of Management (Crown land reserves) and the various environment and climate action groups across the Catchment.
Parks Victoria	<p>Under the <i>Parks Victoria Act 1998</i>, Parks Victoria's (PV) responsibilities are to provide services to the State and its agencies for the management of parks, reserves and other public land.</p> <p>With the approval of the Minister, it may also provide land management services to the owner of any other land used for public purposes. The Act requires that, in carrying out its functions, Parks Victoria must not act in a way that is not environmentally sound. Parks Victoria's responsibilities encompass the management of: all areas reserved under the <i>National Parks Act 1975</i>, metropolitan waterways and adjacent land under the <i>Water Industry Act 1994</i>, nominated Crown land reserved under the <i>Crown Land (Reserves) Act 1978</i>, conservation reserves reserved under the <i>Crown Land (Reserves) Act 1978</i> and managed in accordance with approved land use recommendations under the <i>Land Conservation Act 1970</i>, areas reserved under the <i>Heritage Rivers Act 1992</i>, planning for all Ramsar sites and management of some sites, piers and jetties in Port Phillip Bay and Western Port and recreational boating on these Bays pursuant to powers conferred by the <i>Marine Act, 1988</i> and the <i>Port of Melbourne Authority Act 1958</i>, other areas as specified under the <i>Parks Victoria Act 1998</i>.</p> <p>Regionally, Parks Victoria and the Goulburn Broken CMA work jointly in the delivery of Commonwealth and State funded projects.</p>
Traditional Owners	The role of Traditional Owners is outlined in the Community Engagement section of this document. In addition, Registered Aboriginal Partners have responsibilities relating to the management of Aboriginal cultural heritage under the <i>Aboriginal Heritage Act 2006</i> . These include evaluating Cultural Heritage Management Plans, providing advice on applications for Cultural Heritage Permits, decisions about Cultural Heritage Agreements and advice or application for interim or ongoing Protection Declarations.
Trust for Nature	<p>Trust for Nature (TfN) is Victoria's specialist private-land conservation statutory entity whose statewide services include covenanting, land purchase, ongoing post-protection landowner support, short-term management agreements and environmental market agreements.</p> <p>Conservation covenants protect the natural features of an area in perpetuity and ensure, through management plans, that any use is compatible with the conservation of the land's natural or cultural values.</p> <p>TfN works in securing the permanent protection and ongoing management of high quality remnants within the Catchment, adding value to the conservation of biodiversity, community engagement and the National Reserve System.</p>
Victorian Catchment Management Council	The Victorian Catchment Management Council (VCMC) is appointed under the <i>Catchment and Land Protection Act 1994</i> . Its statutory roles are to advise the Minister for Environment, Climate Change and Water, and other Ministers as requested, on land and water management issues; to report annually on operation of the <i>Catchment and Land Protection Act 1994</i> ; and report every five years on the environmental condition and management of Victoria's land and water resources, through the VCMC Catchment Condition Report.

Appendix 6: Major Strategic References

Legislation

Federal legislation

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Australian Heritage Commission Act 1975 (Register of the National Estate)

Environment Protection and Biodiversity Conservation Act 1999

Native Title Act 1993

Water Act 2007

State legislation

Aboriginal Heritage Act, 2006

Aboriginal Heritage Regulations 2007

Alpine Resorts (Management) Act 1997

Building Regulations 1996

Catchment and Land Protection Act 1994

Climate Change Act 2010

Conservation, Forests and Lands Act 1987

Crown Land (Reserves) Act 1978

Environment Protection Act 1970

Equal Opportunity Act 2010

Fisheries Act 1995

Flora and Fauna Guarantee Act 1988

Forests Act 1958

Heritage Rivers Act 1992

Land Act 1958

Mineral Resources (Sustainable Development) Act 1990

Murray-Darling Basin Act 1993

National Parks Act 1975

Occupational Health and Safety Act 2004

Parks Victoria Act 1998

Planning and Environment Act 1987

Public Administration Act 2004

Reference Areas Act 1978

State Environment Protection Policy (Groundwaters of Victoria)

State Environment Protection Policy (Waters of Victoria)

Subdivision Act 1988

Sustainable Forests (Timber) Act 2004

Traditional Owner Settlement Act 2010

Victorian Conservation Trust Act 1972

Victorian Environment Assessment Council Act 2001

Water Act 1989

Yorta Yorta Cooperative Management Agreement 2004

Wildlife Act 1975

Relevant Policies, Strategies and Agreements

International

China Australia Migratory Bird Agreement 1986

Convention of Migratory Species (Bomm Convention) 1979

Greenhouse Gas Protocol (www.ghgprotocol.org)

Japan Australia Migratory Bird Agreement 1974

Ramsar Convention on Wetlands

Republic of Korea Australia Migratory Bird Agreement 2009

Federal

A Directory of Important Wetlands in Australia (EA 2001)

A Framework for Determining Commonwealth Environmental Watering Actions 2009

Australia's Biodiversity Conservation Strategy 2010–2030

Australian Pest Animal Strategy 2007

Barmah-Millewa Environmental Management Plan (MDBA) 2005

Basin Salinity Management Strategy 2030 (MDBA 2001-2015)

Living Murray First Step Decision (MDBC 2003)

Murray-Darling Basin Plan 2012

Murray-Darling Native Fish Management Strategy

National Framework for the Management and Monitoring of Australia's Native Vegetation (2001)

National Greenhouse Accounts Factors – Department of Climate Change and Energy Efficiency

National Indigenous Reform Agreement (Closing the Gap)

National Water Quality Management Strategy (ARMCANZ and ANZECC 1992)

Strategy for Australia's National Reserve System 2009–2030

The Australian Weeds Strategy (revised 2007)

The Clean Energy Future Initiative (2012)

Wetlands Policy of the Commonwealth Government of Australia 1997

Relevant Policies, Strategies and Agreements (Cont'd)

State

Aboriginal Participation Guideline for Victorian Catchment Management Authorities 2016
Advisory lists of rare and threatened species in Victoria (DELWP)
Alpine Resorts Strategic Plan 2012
Biosecurity Victoria Strategic Plan for Victoria 2009
Community Engagement and Partnerships Framework for Victoria's Catchment Management Authorities 2013
Food & Fibre Strategy 2016
Indigenous Partnership Framework 2007-10 (reviewed 2010)
Invasive Plants and Animal Policy Framework 2010
Native Vegetation Net gain accounting first approximation report 2008 (DSE)
Our Catchments, Our Communities – Integrated Catchment Management in Victoria 2016-19
Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines 2013
Policy for Sustainable Recreation and Tourism on Victoria's Public Land 2002
Protecting Victoria's Environment – Biodiversity 2036 (Draft, 2016)
Sustainability Charter for Victoria's State Forests 2006
Threatened Species Recovery Plans (DELWP)
Victoria's Nature based Tourism Strategy 2008–2012
Victoria's Salinity Management Framework 2000
Victorian Bushfire Strategy 2008
Victorian Bushfires Royal Commission 2009
Victorian Climate Change Adaptation Strategy 2013
Victorian Floodplain Management Strategy 2016
Victorian Landcare Program Strategic Plan 2012 (DEPI)
Victorian Planning Provisions 1998-1999
Victorian Waterway Management Strategy 2013 (DEPI)
Water for Victoria – discussion paper 2016 (DELWP)

Regional

Climate Change Adaptation Plan for Natural Resource Management in the Goulburn Broken Catchment 2016
Dryland Landscape Strategy 2009-2011
Goulburn Broken Biodiversity Strategy 2010-2015
Goulburn Broken Climate Change Integration Strategy 2012
Goulburn Broken CMA Capability Framework 2013-2018
Goulburn Broken CMA Climate Change position paper 2007
Goulburn Broken CMA Organisational Environmental Footprint Policy 2011
Goulburn Broken CMA Organisational Environmental Footprint Strategy and Action Plan 2012-2014
Goulburn Broken Communications and Marketing Strategy and Action Plan 2015-2017
Goulburn Broken Community Engagement Strategy and Action Plan 2015-2017
Goulburn Broken Corporate Plan 2015-16 to 2019-20
Goulburn Broken Dryland Salinity Management Plan 1990 (and reviews 1995, 2001, 2008)
Goulburn Broken Floodplain Management Strategy 2002-2012 (GB CMA 2002)
Goulburn Broken Invasive Plants and Animals Strategy 2010
Goulburn Broken Land Health Strategy 2016 (Draft)
Goulburn Broken Native Vegetation Plan 2003
Goulburn Broken Regional Catchment Strategy 2013-2019 (GB CMA 2014)
Goulburn Broken Regional Floodplain Management Strategy (Interim) 2014-2016
Goulburn Broken Water Quality Strategy 1996-2016 (GB CMA 1996)
Goulburn Broken Waterway Strategy 2014-2022 (GB CMA 2014)
Goulburn Broken Workforce Strategy 2013-2018
Hume Regional Growth Plan (2014)
Hume Strategy for Sustainable Communities (Hume Strategy 2010-2020)
Monitoring Evaluation and Reporting Strategy for the Goulburn Broken Catchment 2004
Municipal Planning Schemes
Northern Region Sustainable Water Strategy 2009
Shepparton Irrigation Region Catchment Implementation Strategy 1990-2020
Various Memoranda of Understanding
Yorta Yorta Cooperative Management Agreement 2004
Yorta Yorta Nation Whole of Country Plan 2012-2017
Yorta Yorta Traditional Land Management Agreement 2010
Various Memoranda of Understanding

Appendix 7: Compliance with the *Protected Disclosure Act 2012*

The *Protected Disclosure Act 2012* was part of a package of integrity reforms introduced by the Victorian Government, which also established the Independent Broad-based Anti-corruption Commission (IBAC).

The *Protected Disclosure Act 2012* enables people to make disclosures about improper conduct within the public sector without fear of reprisal. It aims to ensure openness and accountability by encouraging people to make disclosures and protecting them when they do.

What is a 'protected disclosure'?

A protected disclosure is a complaint of corrupt or improper conduct by a public officer or a public body.

The Goulburn Broken Catchment Management Authority is a 'public body' for the purposes of the Act.

What is 'improper or corrupt conduct'?

Improper or corrupt conduct involves substantial:

- mismanagement of public resources; or
- risk to public health or safety or the environment; or
- corruption.

The conduct must be criminal in nature or a matter for which an officer could be dismissed.

How do I make a 'Protected Disclosure'?

You can make a protected disclosure about the Goulburn Broken Catchment Management Authority or its board members, officers or employees by contacting the Independent Broad-Based Anti-Corruption Commission on the contact details provided below.

Please note that the Goulburn Broken Catchment Management Authority is not able to receive protected disclosures.

How can I access the Goulburn Broken Catchment Management Authority's procedures for the protection of persons from detrimental action?

Goulburn Broken Catchment Management Authority has established procedures for the protection of persons from detrimental action in reprisal for making a protected disclosure about Goulburn Broken Catchment Management Authority or its employees. You can access Goulburn Broken Catchment Management Authority's procedures on its website at: www.gbcma.vic.gov.au

Contacts

Independent Broad-Based Anti-Corruption Commission (IBAC) Victoria

Address: Level 1, North Tower, 459 Collins Street, Melbourne Victoria 3000.

Mail: IBAC, GPO Box 24234, Melbourne Victoria 3001.

Internet: www.ibac.vic.gov.au

Phone: 1300 735 135

Email: see the website above for the secure email disclosure process, which also provides for anonymous disclosures.

Appendix 8: Community Grants

Below is a list of grants paid to community groups and organisations for projects during the 2015-16 financial year.

Payments made to indigenous groups are done on a works basis and may be across more than one funding source.

Total Grants paid to community groups and other organisations 2015-16	Amount paid \$ (ex GST)
Australian Government - Biodiversity Fund The overall objectives of the Biodiversity Fund are to help land managers establish, manage and enhance native vegetation on their land, increase our stores of carbon in the landscape and, in so doing, maintain ecosystem function and improve the resilience of our ecosystems to the impacts of climate change.	\$562,206.67
Apolstolic Church Australia / Rad.com	
Indigenous Works Crew - Banksia Project at Moylans Hill	\$3,073.40
Indigenous Works Crew - Banksia Project at Ruffy	\$5,288.00
Indigenous Works Crew - Banksia Project at Tahbilk Winery	\$2,347.40
Indigenous Works Crew Delivering on Ground Biodiversity Programs	\$4,048.00
Planting and watering Seed production - Dookie Tree Planting	\$760.00
Planting and watering Seed production - Moylans Hill	\$880.00
Planting and watering Seed production - Yielima	\$6,197.00
Birds, Bush & Beyond	
Sand Ridge Woodland Bird Survey Project	\$10,835.00
Cerberus Pty Ltd trading as Applied Conservation Science Consulting	
Direct Seeding Monitoring – findings and further recommendations	\$5,000.00
Euroa Arboretum	
Carbon Landscapes (Biodiversity Spring)	\$5,000.00
Carbon Landscapes (Site assessments/ direct seeding sites)	\$7,000.00
Seed for revegetation project	\$23,650.00
Seed production project	\$32,155.20
Woodland booklet field guide	\$10,000.00
GV Community Energy	
Direct seeding Monitoring	\$42,000.00
Murray Local Land Services	
Revegetation of Sand Ridge Woodlands	\$141,999.00
NSW Parks	
Revegetation of Sand Ridge Woodlands	\$141,999.00
Strathbogie Ranges Conservation Management Network	
Remnant Protection & Revegetation	\$25,000.00
Wetlandia' long term monitoring project	\$5,000.00
Upper Goulburn Landcare Network	
Remnant Protection & Revegetation	\$10,000.00
Remnant Protection & Revegetation - Biodiversity Fund	\$10,000.00
Warrenbayne Boho Land Protection Group	
Understanding Farm Wetlands - Boom Bust Biodiversity Hotspots	\$12,000.00
Yorta Yorta Nations Aboriginal Corporation	
Fencing / Revegetation / Weed control / Watering - various sites	\$34,652.34
Revegetation / Pest Plant & Animal control - Sand Ridge Woodlands	\$23,322.32
Australian Government - National Landcare Programme The National Landcare Programme is part of the Australian Government's Plan for a Cleaner Environment. The Programme brings together previous programmes to create a single national programme that will invest to protect and improve our nationally and internationally important natural assets and values through action at the local level.	
Alpine Valleys Community Leadership Program (AVCLP)	
Community Landcare and Agriculture Leadership Program Project	\$15,000.00
Australian Processing Tomato Research Council Inc	
Role of compost on processing tomato production	\$10,170.00
Delatite Landcare Group	
Good farm management starts with understanding your soil	\$3,000.00

Total Grants paid to community groups and other organisations 2015-16	Amount paid \$ (ex GST)
Euroa Arboretum	
8 training days for Woodlands Week for NSE Woodland Service Delivery Facilitators.	\$995.45
Box Ironbark Course	\$10,000.00
Building resilience in the restoration and revegetation industry of the Goulburn Broken Catchment	\$30,000.00
Healthy Hectares - information, training and services for small landholders	\$14,037.50
Landholder service delivery	\$10,000.00
NLP Wetlands/Woodlands – Woodlands Kit	\$5,000.00
Professional development series for extension staff in natural resource management	\$10,000.00
Gecko Clan	
Sustainable Futures in Farming	\$10,000.00
Water Security for grazing enterprise	\$43,700.00
Goulburn Murray Landcare Network	
Annual Farming Forum	\$10,000.00
Bush Business	\$10,340.00
Continuing to improve the uptake of sustainable farming practices in the GMLN	\$78,000.00
Digging up the dirt on Soil Health – a series of practical workshops	\$4,550.00
Floodplain Ecology Course	\$10,000.00
Growing farmer confidence with soil health knowledge	\$7,875.00
Growing positive farming futures	\$38,700.00
Living the good life – tips for small landholders	\$14,580.00
Pilot Project: Focus landscapes in the Agricultural Floodplains	\$15,000.00
Rapid Assessment of Soil Health (RASH) – a Landcare Tool	\$7,600.00
Goulburn Valley Environment Group	
Enhanced Landscape Health and Productivity	\$10,000.00
GV Community Energy	
GV Community Energy Indigenous Seedbank	\$20,000.00
Irrigated Cropping Council Incorporated	
The effect of compaction and amelioration in irrigated soils	\$10,000.00
Longwood Plains Conservation Management Network	
Promotion of Nationally Significant Eco-Systems	\$30,000.00
Moira Shire Council	
Goulburn Broken Local Government Biodiversity Reference Group	\$20,000.00
Regent Honeyeater Project	
Lurg Hills Regent Honeyeater Project - Ecological restoration on a landscape scale	\$50,000.00
Riverine Plains Inc	
Refining deep soil nitrogen testing to reduce environmental losses	\$10,000.00
South West Goulburn Landcare Network	
Healthy Soils, Healthy Foods	\$10,000.00
Strathbogie Ranges Conservation Management Network	
Striped Legless Lizards in the Strathbogie Ranges	\$3,650.00
Superb Parrot Project	
Superb Parrot Project	\$30,000.00
Taungurung Clans Aboriginal Corporation	
Alpine Sphagnun Bogs & Fens project	\$74,418.60
Seymour Indigenous Garden	\$752.05
Taungurung Country Plan development	\$7,610.91
Trust for Nature	
Covenant sites - Wetlands and Woodlands project	\$80,000.00
Up2Us Landcare Alliance	
Remnant Protection & Revegetation	\$15,000.00
Upper Goulburn Landcare Network	
Learning with Landcare - small farm tours and learning for small scale landholders.	\$9,800.00
Warby Range Landcare Group	
Understanding soils: The next step - Biology	\$8,170.00
Yea High School	
Cert II Agriculture - with Environmental awareness	\$5,000.00

Total Grants paid to community groups and other organisations 2015-16	Amount paid \$ (ex GST)
Yea River Catchment Landcare Group	
A farmer's guide to understanding soil tests in lay terms	\$13,400.00
Yorta Yorta Nations Aboriginal Corporation	
20 Million trees revegetation	\$4,005.24
Fencing - Sand Ridge Woodlands	\$6,580.00
Murray Floodplain rehabilitation works	\$679.65
NRM Training - Yorta Yorta staff	\$19,358.51
Olive control works - Mout Major / Dookie	\$14,717.70
Pest Plant control - Barmah	\$116,208.77
Red Gum sapling removal - Barmah Forest wetlands	\$12,004.85
Seed Production and Seed Collection	\$55,904.39
Watering & Maintenance of Sites	\$22,564.43
Woka Walla - Bird Survey	\$3,937.60
Woka Walla - leaf litter assessments in Barmah Forest	\$1,756.05
Victorian Government - other	
The Victorian Government provides opportunities for investment in activities that help protect, enhance and strengthen the resilience of our quality built and natural environments, assets and resources.	
Birds, Bush and Beyond	
Threatened woodland birds of the Goulburn Murray Irrigation District: Are we prioritising works in the right landscapes?	\$21,000.00
Victorian Government - Regional Riparian Action Plan	
The Regional Riparian Action Plan is a five-year plan to accelerate onground riparian management works to improve the health of riparian land along Victoria's regional rivers, estuaries and wetlands. Works include fencing to manage stock, revegetation programs, weed management and construction of off-stream watering systems.	
Hughes Creek Catchment Collaborative	
County Creek Rescue	\$11,500.00
Longwood Plains Conservation Management Network	
Creek Connections across Longwood Plains	\$22,500.00
Up2Us Landcare Alliance	
Shades of Grey for the Delatite River	\$10,500.00
Victorian Government - Victorian Landcare Grants	
The Victorian Government through Victorian Landcare Grants provides funding to the Goulburn Broken CMA to support Landcare and other community-based natural resource management groups to protect and restore the Victorian landscape.	
Balmattum Sheans Creek Landcare Group	
Maintenance grants	\$338.98
Broadford Land Management Group Inc	
Maintenance grants	\$338.98
Broken River Environment Group	
Maintenance grants	\$338.98
Bunbartha Kaarimba Landcare Group	
Maintenance grants	\$338.98
Congupna Tallygaroopna Landcare Group	
Maintenance grants	\$338.98
Dabyminga Catchment Co-operative	
Maintenance grants	\$338.98
Delatite Landcare Group	
Maintenance grants	\$338.98
Euroa Arboretum	
Maintenance grants	\$338.98
School environmental education program	\$15,000.00
Euroa Environment Group	
2015 Watershed Year: Euroa Environmental Seminar Series	\$5,000.00
Maintenance grants	\$338.98
Flowerdale Landcare Inc	
Maintenance grants	\$338.98
Goomalibee Landcare	
Maintenance grants	\$338.98

Total Grants paid to community groups and other organisations 2015-16	Amount paid \$ (ex GST)
Goulburn Murray Landcare Network	
20 year celebration of landcare in the Agricultural Floodplains	\$5,000.00
Biodiversity Environment Aquatic Discovery program. (BEAD)	\$20,000.00
Environmental Education in the Agricultural Floodplains	\$5,000.00
Maintenance grants	\$338.98
Granite Creeks Project	
Maintenance grants	\$338.98
Granite Creeks Project Inc	
Granite Creeks on going integrated pest plant and animal control program	\$30,000.00
Highlands Landcare Group	
Maintenance grants	\$338.98
Home Creek/ Spring Creek Landcare Group	
Maintenance grants	\$338.98
Hughes Creek Catchment Collaborative	
Maintenance grants	\$338.98
Post Fire Pest Animal Control	\$20,000.00
Kialla Lakes Residents Group/Landcare	
Maintenance grants	\$338.98
Kinglake Landcare Group	
Maintenance grants	\$338.98
Kinglake Scouts Junior Landcare	
Maintenance grants	\$338.98
Kyabram Urban Landcare Group	
Maintenance grants	\$338.98
Landcare Victoria	
Sponsorship of the 2016 Victorian Landcare Council Forum	\$3,000.00
Longwood East Landcare Group	
Controlling weeds after the Longwood East Fires	\$1,000.00
Maintenance grants	\$338.98
Lower Goulburn Conservation Management Network	
Outdoor Classrooms	\$7,000.00
Merton Landcare Incorporated	
Maintenance grants	\$338.98
Mitchell and Surrounds Equine Landcare Group	
Maintenance grants	\$338.98
Molesworth Landcare Group	
Maintenance grants	\$338.98
Muckatah Landcare	
Maintenance grants	\$338.98
Naring landcare Group	
Maintenance grants	\$338.98
Nulla Vale Pyalong West Landcare Group Inc	
Maintenance grants	\$338.98
South West Goulburn Landcare Network	
Engaging Children's Learning through Nature	\$5,000.00
FarmBlitz	\$15,000.00
Kurkurac Creek Weed Management and Revegetation Corridor	\$20,000.00
Strath Creek Landcare Group	
Maintenance grants	\$338.98
Strathallan Family Landcare	
Maintenance grants	\$338.98
Strathbogie Ranges Conservation Management Network	
Engaging Absentee and New Landowners	\$13,000.00
Maintenance grants	\$338.98

Total Grants paid to community groups and other organisations 2015-16	Amount paid \$ (ex GST)
Strathbogie Tableland Landcare Group	
Maintenance grants	\$338.98
Sunday Creek Dry Creek Landcare Group	
Maintenance grants	\$338.98
Swanpool Landcare	
Maintenance grants	\$338.98
The Friends of the Marysville Walks Inc	
Maintenance grants	\$338.98
Up2Us Landcare Alliance	
Integrated approach to weed control on private and public land	\$11,000.00
Meet, Talk and Act 3	\$6,000.00
Maintenance grants	\$338.98
Upper Broken River Landcare Group	
Maintenance grants	\$338.98
Upper Goulburn Landcare Network	
Environmental Events and Nature Walks	\$3,000.00
Kids Teaching Kids - Community Education Grant	\$8,000.00
Nature and kids – engaging children in the natural world through their local school	\$15,000.00
Priority weeds rebate, pest animal control and continuation of 3 community blackberry taskforce project officers.	\$15,000.00
Upper Hughes Creek Landcare Group	
Maintenance grants	\$338.98
UT Creek Maintongoon Landcare Group	
Maintenance grants	\$338.98
Warrenbayne Boho Land Protection Group	
Brush em off Blackberries, Wild Tobacco and Rabbits	\$10,000.00
Whiteheads Creek Landcare Group	
Maintenance grants	\$338.98
Yea High School	
Maintenance grants	\$338.98
Yea River Catchment Landcare Inc	
Maintenance grants	\$338.98
Yea Wetlands Committee of Management	
Maintenance grants	\$338.98
Victorian Government - Victorian Water Investment Program	
The VWPIF supports an integrated approach to water investment in Victorian catchment regions through three programs: Catchments Program – to improve the health of Victoria’s catchments and waterways through effective and efficient integrated catchment management.	
Goulburn Valley Water (in association with GB CMA)	
Goulburn Broken Stormwater Project	\$15,000.00
Goulburn Broken Waterwatch	\$65,000.00
Greater Shepparton City Council	
RiverConnect Project	\$100,000.00
South Cathedral Landcare Group	
Andrews Creek Restoration and Revegetation	\$25,588.00
Strath Creek Landcare	
Riparian Management Agreement Works	\$5,502.00
Strath Creek Landcare Group	
Building resilience along the King Parrot Creek	\$10,212.00
Upper Goulburn Landcare Network	
Green Army Sponsorship Project	\$10,000.00
Yea Wetlands Trust	
The Riparian Project - 3D animation	\$3,000.00
The Riparian Project - Monitor, mount and button for animation	\$3,500.00
Total Grants paid	\$2,135,812.54

Appendix 9: Disclosure index

The Annual Report of the Goulburn Broken CMA is prepared in accordance with all relevant Victorian legislations and pronouncements. 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 22G 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*.

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	<i>Financial Management Act 1994</i>	84, 101
	<i>Catchment and Land Protection Act 1994</i>	83
	<i>Water Act 1989</i>	83

Glossary of terms

Biolink: Areas identified for targeted action to increase ecological function and connectivity, improving the potential of plants and animals to disperse, recolonise, evolve and adapt naturally.

Bioregions: Large, geographically distinct areas of land with common biophysical characteristics such as geology, landform patterns, climate and ecological features.

Carryover was introduced in northern Victoria in early 2007 as an emergency drought measure to allow entitlement holders to carry over some unused water allocation to use in the following season.

Ecosystem: A diverse and changing set of living organism within a community, interacting with each other and the physical elements of the environment in which they are found.

End-of-valley targets have been proposed for major rivers contributing salt to the River Murray under the (Murray-Darling) Basin Salinity Management Strategy. The purpose of these targets is to maintain salinity levels at the benchmark site, Morgan in South Australia, at or under 800 EC for 95 per cent of the time. These enable within-valley targets to be set. The proposed end-of-valley targets are being investigated to align them with expectations and obligations of different parties at regional, State and Federal levels.

GMW Connections is a \$2 billion project funded by the Victorian Government, Commonwealth Government and Melbourne Water to develop a water delivery network to match changing needs and support opportunities for irrigated agriculture across Northern Victoria.

Long-term objectives: Long-term (20-30 year) goals for the system components of the Catchment - people, land, water and biodiversity. These objectives are found in the sub-strategies of the Goulburn Broken CMA. Achieving these objectives will contribute to the Vision being realised. In some instances these objectives may be related to known (or assumed) thresholds and tipping points.

Minimum (river) flow: A minimum level of flow that the water authority needs to maintain in the river at a particular location, or a trigger below which water cannot be harvested from the river. Minimum flows are usually specified in water authority bulk entitlements or in environmental entitlements. (See also 'qualification of rights' below.)

Modernised Whole Farm Plan is a plan revised to take account of the changed regional channel delivery infrastructure as a result of modernisation.

Qualification of rights: If on a seasonal basis there is insufficient water in a water supply system to meet critical water needs, a water shortage may be declared by the Minister for Water and rights to water may be qualified temporarily. A qualification of rights changes a legal entitlement. Rights that may be qualified include licenses, water shares, bulk and environmental entitlements. Private rights may be suspended, reduced, increased or otherwise altered after a water shortage has been declared.

Regional Catchment Strategy is a blueprint for integrated natural resource management across a geographic area.

Registered Aboriginal Parties are the voice of Aboriginal people in managing and protecting Aboriginal cultural heritage under the *Victorian Aboriginal Heritage Act 2006*. The Act recognises Aboriginal people as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage.

Resilience: The capacity of a system to absorb disturbance and reorganise while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks.

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.

Salt registers of salt debits and credits are required to be maintained by the State under the *Federal Water Act 2007*. The delayed impacts of dryland salinity are accounted for in the B Registers. The Goulburn Broken CMA has set up the framework for the B Register and is establishing a process with DELWP and the Murray-Darling Basin Authority for entering data to complement data already in the A Register under the salinity and drainage strategy.

Social-ecological systems (SES): Linked and generally similar systems of people and nature, taking into account cultural, political, social, economic, ecological and technological components.

Thresholds: A breakpoint between two states of a system that must be exceeded to begin to produce some sort of effect or response.

Tipping points: A point where a small change can have a large effect on the state of a system.

Abbreviations

AASB	Australian Accounting Standards Board
AQF	Australian Qualifications Framework
ARI	Arthur Rylah Institute
CaLP	Catchment and Land Protection Act 1994
CEO	Chief Executive Officer
CEWH	Commonwealth Environmental Water Holder
CMA	Catchment Management Authority
CMN	Conservation Management Network
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water & Planning
DEP	Drought Employment Program
DTF	Department of Treasury & Finance
EC	Electrical Conductivity unit
EVC	Ecological Vegetation Class
EWAG	Environmental Water Advisory Group
FIEP	Fruit Industry Employment Program
FTE	Fulltime Equivalent
FWP	Farm Water Program
GHG	Greenhouse Gas
GL	Gigalitre
GMW	Goulburn-Murray Water
GST	Goods and Services Tax
ha	hectare
IT / ICT	Information Technology / Information & Communications Technology
km	kilometre
KPI	Key Performance Indicator
L	Litre
LaBIF	Land and Biodiversity Implementation Forum
LWMP	Land and Water Management Plan
MDBA	Murray-Darling Basin Authority
ML	Megalitre
MLA	Member of the Legislative Assembly
MLC	Member of the Legislative Council
MP	Member of Parliament
MoU	Memorandum of Understanding
no.	Number
NRM	Natural Resource Management
NRIP	Natural Resources Investment Program
OCOC	Our Catchment Our Communities Strategy 2016-19
PV	Parks Victoria
RCS	(Goulburn Broken) Regional Catchment Strategy
RSMP	Regional Salinity Management Plan
SES	Social-Ecological System
SIR	Shepparton Irrigation Region
SIRCIS	Shepparton Irrigation Region Catchment Implementation Strategy
SIRPPIC	Shepparton Irrigation Region People and Planning Integration Committee
SoO	Statement of Obligations
tCO ₂ e	Tonnes of carbon dioxide (CO ₂) emitted
TfN	Trust for Nature
TCAC	Taungurung Clans Aboriginal Corporation
VEWH	Victorian Environmental Water Holder
VFMP	Victorian Farm Modernisation Program
YYNAC	Yorta Yorta Nation Aboriginal Corporation

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Staff list 2015-16

Aaron Findlay	Christine Glassford	Gillian Mason	Kate Brunt	Melanie Haddow	Tim Barlow
Annette Neessen	Collin Tate	Guy Tierney	Kate Pendergast	Neville Atkinson	Tom O'Dwyer
Annie Squires	Corey Wilson	Helen Murdoch	Katie Warner	Peter Geddes	Tony Kubeil
Ashley Rogers	Daniel Lovell	Janice Mentiplay-	Keith Ward	Rachael Spokes	Vicki Mackenzie
Belinda Senini	Darelle Siekman	Smith	Kerry McFarlane	Rebecca Caldwell	Wayne Tennant
Bianca Sulejman	David Lawler	Jeff Parry	Kiera Hole *	Rhiannon Apted	Zuzanna Lelito
Brendan Stary	Dean Judd	Jenny Wilson	Kirsten Roszak	Richard Warburton	
Carl Walters	Eileen Curtis	Jim Begley	Lisa Duncan	Samantha Moreno	* YES Trainee
Carla Miles	Fiona Lloyd	Jim Castles	Mark Turner	Shannon Crawford	
Chris Burnett	Gaye Sutherland	Jo Wood	Mary Dimit	Simon Casanelia	
Chris Nicholson	Geoff Brennan	Karen Brisbane-	Meegan Judd	Steve Wilson	
Chris Norman	Geoff Earl	Bullock	Megan McFarlane	Sue Kosch	

RECOGNISING MAJOR NRM CONTRIBUTIONS

CATHY OLIVE



When it comes to her passion for protecting and restoring the landscape through revegetation and land management, bringing others along for the ride underpins much of the work Cathy Olive does in her roles with the Upper Goulburn Landcare Network (UGLN) and the Euroa Arboretum.

From education to working with restoration practitioners, Cathy's ultimate aim is for a better environment for everyone to enjoy.

The key to doing this successfully she says is supporting and empowering people to have input into shaping projects and activities.

The environmental education program run in the Cathedral Cluster of schools around Alexandra, Yea and at Avenal Primary School is just one example of how Cathy has kick-started a project that has now gained its own momentum.

Building on her past experience in outdoor and environmental education Cathy worked closely with schools and Berry Street to get the Kids Teaching Kids program up and running four years ago in her role with the UGLN.

"Early on I was heavily involved in driving the project but now thanks to fantastic support from Landcare facilitators, school principals and teachers, the program is becoming integrated into the school's curriculum," says Cathy. "It's wonderful to now walk through the school grounds and have students talk about all the local native plants and animals."

As the project manager at the Euroa Arboretum, Cathy is the driving force behind a number of initiatives although she is keen to emphasise that these projects "are really just a natural progression of the good work that was already under way".

As well as expanding the arboretum's intensive native seed production areas, Cathy and her team have continued to improve the site's "naturalness", turning a wet, weedy problem spot into a wetland and a weedy patch of earth into a wildflower-filled grassland. Improving paths and bridges has made the arboretum even easier for the public to access and see first-hand the many benefits of landscape restoration.

With an eye to the future, other projects in the pipeline or under way include investigating improved direct seeding methods and expanding the diversity of species used in revegetation programs in the broader landscape by working with the GB CMA to deliver environmental incentives to farmers.

"There are also the challenges of engaging with the increasing number of absentee landholders, and providing them with good land management advice early in their land ownership. This is something many of the Landcare groups are grappling with - how best to serve this demographic with timely advice and practical assistance.

"I am particularly fortunate at the Arboretum that I can experiment with different techniques with weed control and planting. There are activities that we are trialling that I think can work on a broader scale."

Working with landholders to integrate farming and native vegetation protection practices has long motivated Cathy, who spent 10 years working as an extension officer for the (former) DPI.

"I love working with landholders, learning from them and providing them with advice on how to integrate productive farming while protecting the natural landscape," she says.

"Farmers know that a healthy ecosystem has long-term benefits to their farm, so the key to better productivity is looking at ways to improve their land and make it better than what they inherited, to make it a more 'robust system'. Seeing and contributing to that that shift to thinking holistically about the way they manage their land is a real privilege."

RAY THOMAS



Ask anyone involved, and they'll tell you that Ray Thomas is the driving force behind the success of the Regent Honeyeater Project.

Ray, however, sees it quite differently despite being named Australian Geographic Society Conservationist of the Year in 2009 in recognition of his efforts.

"No it's the community – all those volunteers that have helped over the years – they've turned a couple of pairs of hands into 32,000 pairs of hands and that's what makes this project work."

For 22 years, under Ray's guidance, local landholders and thousands of school children, community members and other groups have worked to rehabilitate more than 16,000 ha around the Lurg Hills near Benalla to help the critically endangered Regent Honeyeater.

The main aim of the project is to protect, extend and connect the small, scattered patches of remnant Box-Ironbark vegetation along roadsides and on private land that provide food and shelter for Regent Honeyeaters and many other native species.

Project activities include fencing, seed collection and propagation, nest box building, pest plant and animal control, and a great deal of community education.

Monitoring shows the hard work is paying off: Regent Honeyeaters as well as other rare bird species such as Grey-crowned Babblers, Painted Honeyeaters, Speckled Warblers, Hooded Robins, and several endangered and vulnerable mammals like Squirrel Gliders and Brush-tailed Phascogales are nesting and moving through the sites.

All this activity takes time, effort and commitment, and Ray is very aware of the risk of local community burnout.

"I think people realise that the issues are bigger than Lurg; the people who are farming and living here now didn't necessarily cause the problems, so it's important that we gather support from wider afield to help with the work that needs to be done."

With up to 100 volunteers regularly turning up to the many working bees and activities Ray co-ordinates throughout the year, the project clearly maintains that groundswell of support.

"People say they get involved because they're inspired by me but I'm inspired by them; it's a privilege to rub shoulders with all these people who have big hearts and are achieving big things."

Not surprisingly, success breeds success. As well as Victorian and Australian Government grants, the project has attracted long-term funding from a number of corporate and charitable organisations including Exetel Pty Ltd and the Norman Wettenhall Foundation.

And there's plenty more to achieve, says Ray.

"It's important that this Lurg Hills area isn't just an island in the broader landscape so we're already working to link up with habitat areas in Winton Wetlands, along the Broken River and in the Warby Ranges.

"Whatever we do to improve Ironbark forests is not just good for Regent Honeyeaters, it's good for a whole suite of species."



PARTNERS IN CATCHMENT MANAGEMENT

The health of the Catchment relies on many partner organisations and individuals. In fact, there are so many partner organisations of the Goulburn Broken Catchment Management Authority that we have found it challenging to capture them all. Any partner logo not appearing above does not undervalue their contribution to the Catchment.

CONTACTS AND OFFICE LOCATIONS OF GOULBURN BROKEN CATCHMENT MANAGEMENT AUTHORITY

Shepparton (Main Office)

168 Welsford Street, Shepparton
PO Box 1752, Shepparton Vic 3632
Phone: (03) 5822 7700
Fax: (03) 5831 6254
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Benalla

89 Sydney Road, Benalla
PO Box 124, Benalla Vic 3672
Phone: (03) 5764 7000
Fax: (03) 5761 1547

Yea

Shop 5/10 High Street,
Yea Vic 3717
Phone: (03) 5797 4000
Fax: (03) 5797 3199