



Document details

Mid-life review: Wimmera Regional Catchment Strategy 2013-19

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Acknowledgements

A number of organisations have assisted in the preparation of this report. Their input is recorded in Appendix 2. However, it is acknowledged that the contents and views expressed within this report are those of Wimmera CMA and do not necessarily reflect the views of the parties acknowledged in Appendix 2.

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Executive summary

The Wimmera Regional Catchment Strategy 2013-19 (RCS) is the region's overarching strategic framework for natural resource management (NRM). It sets a vision, twenty-year objectives and six-year management measures for the region's natural assets, classed as native vegetation, rivers and streams, threatened plants and animals, soils and wetlands. These outcomes are dependent on the collaborative effort of the regional community and all of the region's NRM practitioners, including groups, individuals, government and non-government organisations.

This report outlines the key findings of a review of the strategy mid-way or three years into its nominal life. The review is forward-looking and aims to identify considerations for when the strategy is renewed, nominally in 2019. Overall, the RCS is effectively supporting delivery of its priority strategic actions by providing a user-friendly document with clearly stated long and medium-term outcomes that remain largely contemporary.

RCS performance

How is the RCS performing?

Climate continues to strongly influence the health of natural assets, agricultural productivity and practices, regional economic conditions and community well-being. Over the life of the RCS, the Wimmera has experienced very dry conditions with low rainfall, low soil moisture and well below average inflows into waterways from 2013 until rainfall increased in mid-2016.

Despite this, overall the RCS is performing well. Implementation of the strategy's objectives and management measures for the region's natural assets are generally progressing well. Most of these are focussed around achieving management activities rather than condition-focussed outcomes. Hence, they can generally be delivered irrespective of climate conditions. This could be viewed as a strength of the RCS.

RCS implementation

How is implementation going?

The RCS commits to developing action plans for all natural assets that outline how each objective and management measure will be met and by whom. Wimmera CMA has worked with stakeholders and the regional community to develop:

- The Wimmera Waterway Strategy which provides a detailed action plan for the region's river, stream and wetland assets. This is a sub-strategy to the RCS, however it is complex to relate and align the two documents.
- The Carbon Ready Plan which provides a strategic planning document for adapting to and mitigating climate change by managing the Wimmera's soils and native vegetation. This plan provides priority actions for soils regarding climate change adaptation and mitigation that complement the RCS' management measures. However, the plan does not identify priority actions for native vegetation, rather it prioritises suitable locations for management and revegetation of native plants and provides conditions to follow when implementing these activities. Threatened plant and animal management is also a gap.

It would be beneficial if the RCS renewal process provided an opportunity to further align these plans with the RCS, address gaps and clearly link detailed actions in the plans with the RCS' management measures.

Actions have been completed that contribute to implementing all twenty of the strategy's twenty-year objectives. The RCS contains fifty-nine management measures intended to be implemented over six years from 2013 to 2019. Of these:



Four are completed



42 are partially achieved and on track to be achieved by 2019

_

12 are partially achieved and require increased work to be achieved by 2019



Zero are not started

One is no longer relevant

New information and emerging issues

Is the RCS still saying the things we think it should?

Issues and challenges potentially affecting natural assets were identified during the review. These include climate change and variability as a key driver of catchment condition, agricultural productivity, the regional economy and community well-being. The impacts and opportunities arising from land use development, including the potential expansion of wind farms, mineral sands mining, changing land use and incremental loss of native vegetation was also raised as a key consideration for RCS renewal. These issues are already addressed within the current RCS and this is generally pitched at a high enough level to accommodate the changed circumstances and information that has arisen since 2013. However, it will be important to monitor these issues over the next three years and consider strengthening how they are addressed within the RCS.

In addition to these issues, Wimmera CMA is working with relevant parties to pursue the potential for the carp herpes virus to be released in the Wimmera River system, with potential benefits for river health, native fish, water quality and other aquatic species. Some management measures may need to be reconsidered should this progress.

The Victorian Government has developed a number of new policies and strategies that will inform the renewed RCS, including Water for Victoria: Water Plan, Regional Riparian Action Plan, Our Catchments Our Communities, Safer Together, Protecting Victoria's Environment – Biodiversity 2036, and the review of the Native Vegetation Clearing Regulations.

The review suggests minor improvements and adjustments to some management measures and objectives for consideration when the RCS is renewed.

Stakeholder feedback

What do our key stakeholders think?

Wimmera CMA met with regional organisations and groups involved in natural resource management. Feedback was very positive and most organisations praised the RCS for being a readable and accessible document. While many stakeholders did not need to refer regularly to the RCS to deliver their roles, they found that the relevant strategies, programs and directions of their organisations generally aligned or were consistent. Other stakeholders found the RCS useful for guiding the directions of their work programs and some found it an overall beneficial document for supporting and justifying applications seeking investment in their projects. Feedback was that, overall, the RCS remains current as it is pitched high level enough in most areas to retain its relevance when circumstances change.

A small number of stakeholders felt that the delivery of RCS outcomes would be more coordinated and delivered more efficiently if forums existed for the main organisations and groups involved to regularly meet to share information about their activities and discuss opportunities to add value.

A number of issues, challenges and opportunities affecting natural assets were identified for monitoring and consideration when the RCS is renewed, including:

- The potential expansion of mineral sand mining,
- Agricultural practice change, especially via land use change from grazing to cropping as cropping moves south with potential impacts on native vegetation, paddock trees and wetlands,
- · Climate change and variability and changes in the frequency and impact of extreme events like fires and floods,
- The expansion of wind farms and monitoring for impacts on native vegetation and threatened birds,
- · Ensuring that water is put to best use, for economic and social benefits as well as environmental,
- Sallow wattle invasion in burnt areas of the northern Grampians region, outcompeting native vegetation,
- Ongoing and constant pressure on native vegetation to be removed for developments, and
- Progressing further with implementing managed burns on private land and the desire by Barengi Gadjin Land Council to
 participate in burning native vegetation for cultural outcomes.

Preparing for RCS renewal

What do we need to do to prepare for renewal in 2019?

The review identifies a number of issues, challenges and opportunities to be monitored over the next three years and considered further when the RCS is renewed in 2019. These are identified in the sections describing "New information and emerging issues" and "Stakeholder feedback."

Regional stakeholders and the community should continue to participate in the development and implementation of state strategies and policy directions where opportunities are available. This will help inform policy makers regarding regional circumstances and the intent of the RCS. Equally, the renewal of the RCS will need to consider government directions taken in new strategies and policies like the Victorian Government's Biodiversity Plan, Water Plan and Our Catchments Our Communities.

Prior to the formal review of the RCS in 2019, Wimmera CMA will need to work with regional stakeholders to improve the way that information is collected to enable reporting on the actions that have been achieved to implement the RCS' objectives and management measures. The aim is to provide a comprehensive report on actions achieved by the range of organisations, groups and individuals that implement RCS outcomes across the region. Wimmera CMA has received excellent information from some stakeholders to support annual reporting and this three-year review of the RCS. However, there are a number of organisations that were unable to provide information. To address this, Wimmera CMA is commencing a project in 2016-17 under the Victorian Government's Our Catchments, Our Communities initiative to establish a user-friendly process and tools for collecting, storing and reporting on achievements, including spatially. This will help us to collectively monitor the extent of progress in implementing the RCS and report on achievements.

Introduction

The Wimmera Regional Catchment Strategy 2013-19 (RCS) is the overarching strategic framework for natural resource management in the Wimmera. The RCS sets out the region's vision for 'a healthy Wimmera catchment where a resilient landscape supports a sustainable and profitable community.' It establishes twenty-year objectives and six-year management measures for the region's natural asset, including native vegetation, rivers and streams, soils, threatened plants and animals and wetlands. It defines actions applicable to everyone that manages the region's natural assets, including government and non-government organisations, community groups and individuals.

The Catchment and Land Protection Act 1994 states that a RCS must "...provide for the review of the strategy" (s. 24 (2) (g)). The Wimmera RCS specifies that Wimmera CMA will undertake a mid-term review after three years as well as a formal review at the end of six years. This report provides an overview of the findings of the mid-term review conducted by Wimmera CMA between June and December 2016.

All Victorian CMAs are reviewing their RCS' in 2016. The reviews will inform the RCS renewal process which will be a collaborative process involving the Victorian Catchment Management Council (VCMC), CMAs and the Department of Environment, Land, Water and Planning (DELWP). The renewal process is expected to start in 2017-18.

Wimmera CMA carried out its review in accordance with:

- Guidelines issued by the VCMC (Appendix 1); and
- A Monitoring, Evaluation and Reporting Plan for the RCS which provides for the mid-term review as well as annual reports and a formal review at the end of six years.

The mid-term review process aimed to be forward-looking, assessing the RCS in terms of its performance and learnings to date, new approaches, information and technologies, and any aspects or issues which are no longer relevant.

The review involved:

- Extensive stakeholder consultation, involving face-to-face discussions with government and non-government organisations and groups that play a role in managing the region's natural assets. Appendix 2 lists the stakeholders that Wimmera CMA consulted with and their main feedback,
- Collation and assessment of actions delivered by Wimmera CMA and other organisations (where available) over the past three years. Information explaining the method is available from Wimmera CMA on request,
- · Analysis of actions against the RCS' 20 year objectives and six year management measures, and
- Assessment of the RCS against the VCMC's guidelines.

This report provides an overview of the region's progress implementing the RCS and summarises the review's main findings.

RCS performance

How is the RCS performing?

Climate continues to strongly influence the health of natural assets, agricultural productivity and practices, regional economic conditions and community well-being. Over the life of the current RCS, the Wimmera region has experienced very dry conditions with low rainfall, low soil moisture and well below average inflows into Wimmera waterways from 2013 until mid-2016.

Despite this, overall the RCS is performing well. Implementation of the strategy's objectives and management measures for the region's natural assets are generally progressing well. Most of these goals are focussed around achieving particular management activities rather than a condition-focussed outcome. Hence, they can generally be delivered irrespective of climate conditions. This could be viewed as a strength of the RCS as most of its key goals are able to be achieved. Exceptions include management measures related to environmental flows and water quality where water availability does impact on their ability to be achieved.

The RCS has guided and informed the development of action plans for most of the region's natural assets. The Wimmera Waterway Strategy provides detailed actions and priorities for the region's rivers, streams and wetlands. The Carbon Ready Plan identifies priority actions for regional soils in the context of mitigating and adapting to climate change. The Carbon Ready Plan identifies the highest priority locations and establishes conditions for activities like management and revegetation of native plants. Hence, it does not provide detailed actions for native vegetation and threatened plants and animals and only goes part of the way towards achieving the RCS' goal of providing detailed action plans for the region's natural assets. It would be beneficial if the RCS renewal process provided an opportunity to clearly link and align the RCS' with the waterway strategy.

Stakeholder feedback on the RCS has also been largely positive, highlighting that the RCS is a very accessible and user-friendly document for stakeholder organisations. While many stakeholders did not need to refer regularly to the RCS to deliver their roles, they found that the relevant strategies, programs and directions of their organisations generally aligned or were consistent. Other stakeholders found the RCS useful for guiding the directions of their work programs and some found it an overall useful document for supporting and justifying applications seeking investment in their projects. Feedback was that, overall, the RCS remains current as it is pitched high level enough in most areas to retain its relevance when circumstances change.

RCS implementation

The RCS commits to developing action plans for all natural assets that outline how each objective and management measure will be met and by whom. Wimmera CMA has worked with stakeholders and the regional community to develop new action plans:

- 1. The Wimmera Waterway Strategy (2014-22) provides an action plan for the region's river, stream and wetland assets. The waterway strategy sets long-term goals that are consistent with, but differ to, the twenty-year objectives established in the RCS. The waterway strategy also sets detailed actions for waterways in each local government area. Again, these actions are consistent with the RCS' management measures and directions, but it is complex to relate and align them. It would streamline delivery and reporting for the two strategies if the RCS renewal process sought to clearly align the two strategies.
- 2. The Carbon Ready Plan compliments the RCS by identifying priority actions for regional soils in the context of mitigating and adapting to climate change. The plan provides priority actions for soils regarding climate change adaptation and mitigation that complement the RCS' management measures. With regard to native vegetation and habitat for wildlife, including threatened plants and animals, the plan maps the highest priority locations for management and revegetation of native plants and establishes conditions for organisations and groups to follow when implementing these activities. However, it does not identify priority actions that link to RCS management measures. Hence, the Carbon Ready Plan only goes part of the way towards achieving the RCS' goal of providing a detailed action plan. The RCS renewal process could provide an opportunity to add to the Carbon Ready Plan to further detail actions for achieving the RCS' objectives and management measures, particularly for native vegetation and threatened plants and animals.

How is RCS implementation going?

Implementation of the RCS occurs when organisations, groups and individuals take action that achieves the strategy's twenty-year objectives and six-year management measures.

The strategy's objectives set the directions necessary for achieving the region's aspirations for its natural assets and related themes. Actions have been completed that contribute to implementing all twenty of the strategy's objectives.

The RCS contains 59 management measures that are intended to be the actions necessary for achieving progress towards the objectives over the life of the strategy (nominally 2013 to 2019). Of these:



Four are completed (7%)



42 are partially achieved and on track to be achieved by 2019 (71%)



12 are partially achieved and require increased work to be achieved by 2019 (20%)



Zero are not started



One is no longer relevant (2%)

The following section summarises the progress of Wimmera organisations, groups and individuals in implementing the RCS. A report is provided for each of the region's natural assets, providing an overview of progress using the symbols above and the main achievements for each objective and management measure. Maps highlight the location of activity within the region. Stakeholder feedback is summarised where relevant. Potential improvements and items to consider when the RCS is renewed are included.

Implementation partners

The RCS' objectives and management measures have been implemented by a variety of stakeholders including (but not limited to):

- Wimmera CMA,
- Government agencies like agriculture, environment and Parks Victoria,
- Organisations like Trust for Nature, Greening Australia and Conservation Volunteers Australia,
- Farming extension or research groups like Perennial Pasture Systems and Victorian No-Till Farmers Association (Vic No-Till),
- Community groups like Landcare and "Friends Of..." groups,
- Indigenous groups like Barengi Gadjin Land Council, and
- Private land owners.

Pages 18 and 19 of the RCS describe key implementation partners and articulate their core functions. Wimmera CMA has invited most of these partners to contribute their actions to inform this review and past annual reporting. This information is reported in this review where available. Some organisations and groups were unable to provide information within the required timeframes. Wimmera CMA will continue to work with these groups to capture their contributions to RCS implementation for future monitoring and reporting both annually and at the end of the RCS' life.

Actions to manage the region's natural resources are funded by a variety of sources, including state and federal governments, philanthropic bodies, corporate organisations and voluntary contributions, particularly by private landholders that manage natural assets on their properties.

Numbers provided in the RCS implementation summary tables have been rounded to the nearest ten.

Native vegetation

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

Ol	ojective	Achievements June 2013-16	Status
1.	Improve the management of existing native vegetation classes	240 10-year management agreements were established on 9,750 hectares of private land, involving controlling weeds and rabbits, modifying stock grazing regimes and maintaining native vegetation.	1
		25 permanent conservation covenants were established on 1,700 hectares of private land.	
2.	Strategically revegetate with indigenous	2,100 hectares were revegetated with indigenous species.	
	species	The Wimmera Carbon Ready Plan was developed, establishing priority areas and protocols for revegetation.	•
3.	Bring 30,000 ha (45 percent) of endangered vegetation on private land under ongoing and recognised best practice management standards	190 management agreements were established on 5,300 hectares. Eight conservation covenants were established on 580 hectares of private land.	*

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure (MM)

Achievements June 2013-16

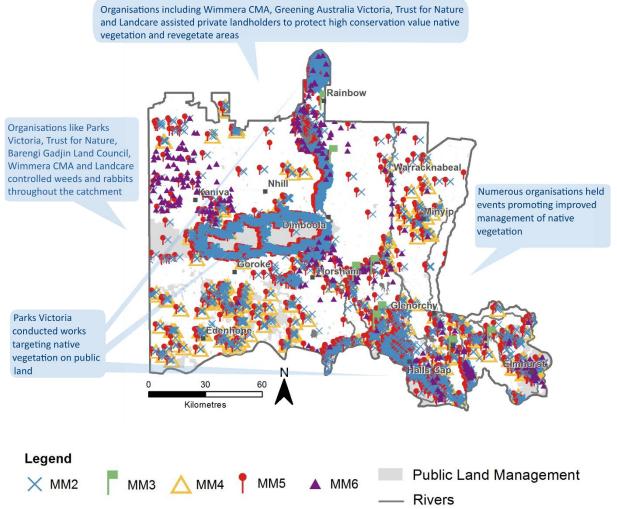
1. Update and review the Wimmera Native

The Wimmera Carbon Ready Plan was completed. A new native

1. Update and review the Wimmera Native Vegetation Plan, with an aim to provide greater flexibility and strategic thinking in offset requirements under planning schemes, particularly for single paddock trees, connectivity and biolinks	The Wimmera Carbon Ready Plan was completed. A new native vegetation plan was not created due to changes to the permitted clearing processes in Victoria. However, the Carbon Ready Plan addresses the intent of this measure.	*
Actively protect high conservation value native vegetation from threatening processes	More than 9,850 hectares were protected via management agreements with landholders and conservation covenants.	1
and sustain its conservation values	Over 34,600 hectares of weed control and 285,800 hectares of pest animal control was implemented.	
3. Ensure current biosecurity approaches	There have been no notable outbreaks of disease since 2013.	
adequately address disease threats	Organisations like DELWP implemented protocols to prevent disease spread when conducting environmental work in the field.	
4. Improve coordination with government agencies, local governments, industry groups, landholders and others for landscape—scale planning and planting of	Numerous events aimed to improve coordination of landscape-scale planning and revegetation and were attended by a range of organisations, groups and landholders - including consultations, conferences, field days and tree planting events.	1
native vegetation, including revegetation activities	Approximately 240 landholders engaged with regional organisations and groups to plan native vegetation projects on their properties.	
	Community members and stakeholders participated in the development of the Wimmera Carbon Ready Plan and the native vegetation Fire Risk Referral Layer, helping to plan and set priorities and protocols for native vegetation management.	
5. Continue to implement the Wimmera Invasive Plant and Animal Strategy, and	36,000 hectares of weed control and 287,200 hectares of pest animal control was conducted.	1
communicate information on activities and success to the broader community	15 events promoted pest animal and weed management.	
success to the broader community	The websites and social media platforms of relevant organisations communicated information about invasive species management.	
6. Implement recommendations of the report by the independent working group on roadside management	Landcare and all local governments controlled rabbits and weeds on roadsides. Details and mapping were provided by Hindmarsh Shire Council and Horsham Rural City Council: more than 1,100 hectares of weed control and 260 hectares of pest animal control along roadsides was completed.	1
7. Develop an action plan that will address potential increase in carbon sequestration activities through native vegetation actions	Wimmera CMA completed the Wimmera Carbon Ready Plan which examines the potential carbon sequestration opportunities available through native vegetation.	*

Status

The location of activities implementing native vegetation management measures



Management measures 1 and 7 are not shown on the map as they relate to the Wimmera Carbon Ready Plan and apply to the whole region.

Suggested Improvements

- The implications of the Victorian Government's Biodiversity Plan for Wimmera native vegetation. The plan is being developed in 2016-17.
- Further aligning the RCS with the Wimmera Carbon Ready Plan completed in 2016. The Carbon Ready Plan uses Natureprint to set priority locations and also establishes conditions for revegetation and native vegetation management.
- Revising objective 3 to remove the reference to "best practice" management and also removing the reference to 45% of endangered vegetation.
- Defining what is meant by "high conservation value" native vegetation for management measure 2. Figures reported in this review were compiled based on the assumption that all remnant native vegetation is high conservation value.
- Revising management measure 6 to tighten up the specific actions arising from the report by the independent working group for roadside management that are relevant for the Wimmera and the RCS.
- Expanding management measure 7 to include implementing and periodically reviewing the plan developed in relation to carbon sequestration.

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

Rivers and streams

3. Rivers and streams classified as

having high social or economic values

Implementation of 20-year objectives

Objective Achievements June 2013-16 30 10-year management agreements were established on 110 hectares of 1. No decline in rivers and streams classified as good or excellent in the riparian zone, involving controlling weeds and pest animals, modifying stock 2004 Index of Stream Condition grazing regimes, maintaining or planting native vegetation. Environmental flows were delivered. 2. Improvements in the condition of 120 10-year riparian management agreements established on 830 hectares. rivers and streams classified as poor to 40 Works on Waterways permits were issued. moderate in the 2004 Index of Environmental flows were delivered. Stream Condition

40 Works on Waterways permits were issued.

120 10-year riparian management agreements established on 830 hectares.

in the Wimmera Waterway Health Environmental flows were delivered. Strategy 2006-2011 will be maintained in value 4. Eighty percent of riverine floodplain Most of the riverine floodplain has accurate modelled flood mapping. Some areas have accurate modelled flood modelling is currently in progress, including for Burnt Creek, MacKenzie River mapping incorporated into council and Bungalally Creek. Data from these investigations is used in emergency planning schemes. Such information is response plans.

included in council and community There are no plans to complete modelling for Norton Creek and Mosquito Creek supported emergency response plans as there is no development pressure in these areas. 120 10-year riparian management agreements established on 830 hectares, 5. Net gain in extent and quality of floodplain Ecological Vegetation Class which included 730 hectares of floodplain revegetation.

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures. Management Measure (MM) Achievements June 2013-16 1.1 Review, update and implement Wimmera Waterway Strategy (WWS) was developed and implemented. Its waterway strategies monitoring plan was also developed. Development of a regional floodplain strategy commenced in 2016. Annual Environmental Water Management Plans were developed. For riparian land: 2.1 Establish a network of managed 120 10-year riparian management agreements was established on 830 hectares.

and maintained riparian zones with high Where relevant, Works on Waterways permits had conditions to maintain riparian environmental value zones. 2.2 Apply best practice management in riparian zones to improve flora and

fauna habitat For instream habitat and channel form: 3.1 Undertake on–ground management 70 groynes, 15 rock chutes and eight outlets were installed or maintained, actions targeting bed and bank erosion, stabilising erosion.

sedimentation, gully erosion and Where relevant, Works on Waterways permits had conditions to prevent erosion. potential landslips

See MM 3.1. 3.2 Restore diversity, habitats, connectivity and movement of instream 120 10-year riparian management agreements were established on 840 hectares. material, through stabilisation and restoration of channels, banks, substrate and riparian vegetation

3.3 Apply best practice management Almost 43,000 megalitres of regulated environmental water releases were for instream habitat, including adequate delivered to nine environmental water reaches, improving stream habitat. structural woody habitat to help native Where relevant, Works on Waterways permits had conditions for instream habitat. aquatic species such as native fish 10 flood investigations educated the community.

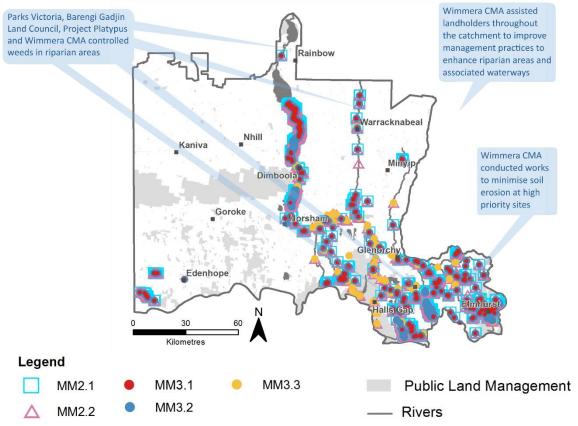
For water quality: Almost 43,000 megalitres of regulated environmental water releases were 4.1 Reduce the impact of salinity on river and stream health delivered to nine environmental water reaches, reducing salinity impacts.

An investigation into saline pools was completed. 4.2 Limit nutrients, sediments and other Where relevant, planning referrals and Works on Waterways permits had pollutants entering and being conditions preventing pollutants entering rivers and streams. remobilised 120 10-year riparian management agreements were established on 840 hectares, leading to improved management.

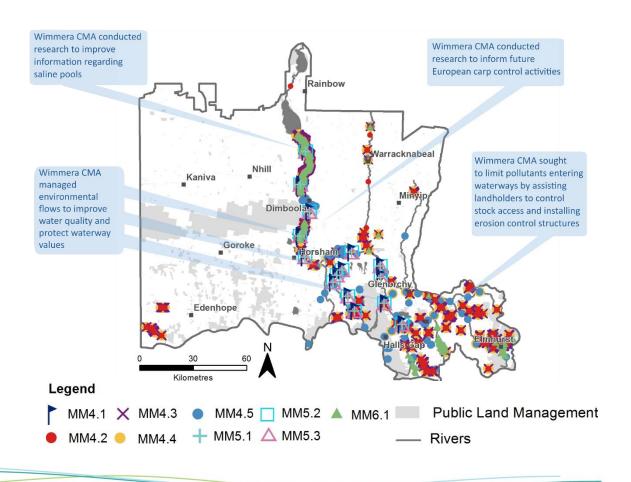
Status

Management Measure (MM)	Achievements June 2013-16	Status
4.3 Work towards meeting State Environment Protection Policy (Waters of Victoria) 2003 criteria for water quality	Actions taken are described in MM 4.1 and 4.2.	1
4.4 Coordinate water quality management projects to improve the quality of water in rivers and streams	See MM 4.1, 4.2 and 4.3.	1
4.5 Provide information on the trends in river and stream health in relation to water quality	Regular information about rivers and stream health and environmental water releases were provided on social media and via text messages to subscribers. Quarterly updates about environmental water releases and annual catchment	1
	condition reports provided information on river and stream health.	
For adequate flows: 5.1 Deal adaptively to climatic impacts on streamflows	Environmental flows were delivered in line with the "FLOWS" study into environmental flow recommendations completed in 2013 which takes into consideration prevailing climate conditions.	1
	During the extremely dry period in 2015 and 2016, environmental flows were managed to protect drought refuge pools, improve water quality and prevent losses of important species.	
5.2 Achieve minimum environmental water needs of priority rivers and streams under historic climatic conditions	There has been insufficient environmental water available to achieve this measure due to dry conditions since 2013. This measure has been achieved with wetter conditions and improved water availability since mid-2016.	_
5.3 Provide environmental water releases to improve water quality and enable diversity of aquatic and water dependent flora and fauna ecosystems and maintain channel form	Almost 43,000 megalitres of regulated environmental water releases were delivered to nine environmental water reaches.	1
5.4 Seek additional environmental water where available such as through improving efficiency of water delivery or	An investigation was completed to identify potential improvements to waterway structures to achieve environmental water outcomes. Wimmera CMA plans to improve two structures in 2016-17.	1
other water recovery activities	Grampians Wimmera Mallee Water is investigating infrastructure enhancements.	
5.5 Prevent additional flow–stress impacts, such as intense water	There is reduced pressure from forestry development and large-scale revegetation due to changes to the commercial industry and funding priorities.	_
extraction or land–use change activities (e.g. concentrated areas of new farm	Farm dam proliferation in the upper catchment remains an issue, however there are limited opportunities to address this under current policy settings.	
dams or forestry development) by acknowledging the recommendations of the Western Region Sustainable Water Strategy 2011	Wimmera CMA plans to investigate changes to catchment runoff arising from current cropping and grazing practices. An example is the impact of cropping on water yield in Natimuk Lake's catchment.	
For aquatic ecosystems:	Invasive species assessments were conducted over 3,000 hectares.	4
6.1 Reduce impacts of exotic species on aquatic ecosystems	European carp were removed at various locations. Removal of carp also occurred	1
	during 10 fishing competitions. 3,100 hectares of weed control was conducted in riparian zones.	
For the floodplain:		
7.1 Improve knowledge of floodplains and their flood characteristics, including	10 flood investigations were conducted, covering 560,300 hectares and including 14 community meetings. Online community maps were developed for two studies.	1
the improvement of flood overlays	More than 10 organisations' websites and social media platforms were used to communicate and collect information about floods.	
	Wimmera CMA is working with local councils to improve flood overlays.	
7.2 Manage floodplains to minimise flood risk and damage to people and	10 flood investigations provided information to minimise flood risk and damage.	1
property	480 floodplain advice enquiries and 350 floodplain planning referral responses minimised flood risk and damage arising from new developments.	
7.2 Enhance accleminal values of	Flood advice was provided for at least four major development proposals.	4
7.3 Enhance ecological values of floodplains	120 10-year riparian management agreements were established on 830 hectares. Weeds were controlled over 3,900 hectares beside rivers and streams.	*
7.4 Achieve a balance between social, economic and environmental values on	Flood investigations and their community meetings sought to collect community feedback, balance values and provide flood mitigation options.	1
floodplains	Wimmera CMA's incentive programs aimed to support landholders to protect natural assets while managing their farm business.	
	Responses to planning referrals and Works on Waterways permits sought to balance values.	

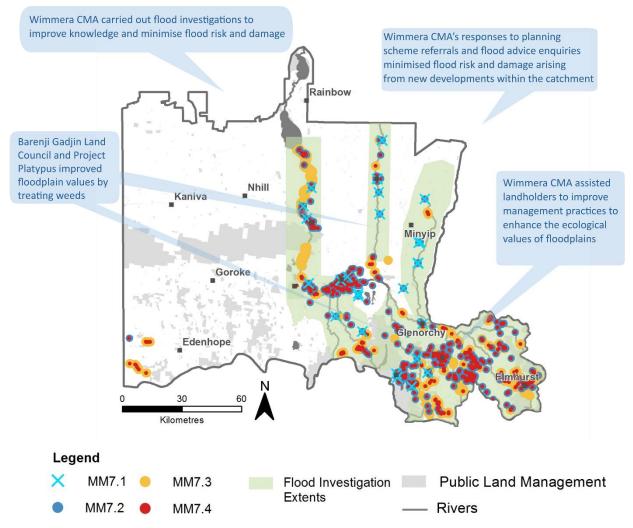
The location of activities for riparian land and instream habitat and channel form



The location of activities for water quality, adequate flows and aquatic ecosystems



The location of activities for the floodplain



Management measure 1 is not shown on the map as it relates to the Wimmera Waterway Strategy and applies to the whole region. Management measure 5.5 is not shown on the map because no on-ground actions were delivered. Explanation is provided in the table on page 11.

Stakeholder Views

Consider updating the rivers and streams section to reflect:

Suggested Improvements

- The role of the Wimmera Waterway Strategy as providing the means for achieving the objectives of the RCS rather than having specific management measures. The renewal process provides an opportunity to further align the two documents.
- Updating Objectives 1 and 2 to refer to the 2010 Index of Stream Condition (ISC) so that the RCS reflects the most relevant information. The report on the findings of the 2010 ISC was completed shortly after the RCS was finalised.
- Updating Objective 3 to refer to the Wimmera Waterway Strategy 2014-22 so that the RCS reflects the most current information.
- Tightening the wording of management measure 1 (riparian land) to make it clear that "network" refers to improving the connectedness of native vegetation along rivers and streams. Consider combining management measure 1 and 2.
- Removing the reference to "best practice" for management measure 3 (instream habitat and channel form).
- Monitoring the Victorian Government's review of the State Environment Protection Policy (Waters of Victoria) for any implications for management measure 3 (water quality) with regard to criteria for water quality.
- Removing management measure 4 (water quality) as it duplicates management measures 1, 2 and 3 (water quality).
- Monitoring management measure 2 (adequate flows) to determine whether it is achievable as it is dependent on the availability
 of adequate amounts of environmental water and hence reliant on rainfall. If it proves unachievable, consider refocusing this
 measure to centre on gaining additional water and maximising outcomes from existing water.

Soils

Implementation of 20-year objectives

he table summarises	the main actions comr	lleted since 2013 that hav	e contributed to achieving the	RCS's 20-vear objectives
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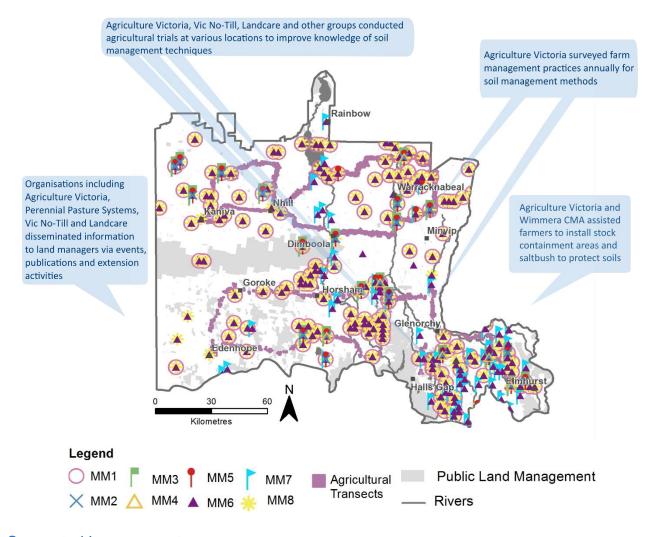
Objective	Achievements June 2013-16	Status
The overall outcome for soils will be to ensure that land managers have the	More than 100 events that discussed soil health properties were held, including conferences, workshops, site tours and field days.	1
capacity, skills and knowledge to improve soil productivity and resilience to	Numerous agency websites and social media platforms promoted soil health and management.	
environmental change. Resilient soils support a productive farming system, and a healthy environment and community	The Wimmera Carbon Ready Plan was developed which examines future risks to soil health and methods of increasing resilience.	
that is prosperous in the face of climatic and economic challenges.	15 agricultural trials were completed or commenced, researching methods for potentially improving soil health, productivity and resilience.	
This outcome will be achieved by increasing the number of landholders (80%) adopting best management practices that improve soil: 1. Productive capacity. 2. Resilience against extreme weather events and economic perturbations. 3. Rainfall use efficiency and water holding capacity. 4. Environmental amenity (e.g. reduced greenhouse gas emissions). 5. Organic matter and biological activity. 6. Resilience against degradation on other natural assets.	140 management agreements with landholders were established for Saltbush, Stock Containment, Greening the Desert and Perennial Pasture Systems trial agreements, which included increasing or protecting groundcover.	

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure (MM)	Achievements June 2013-16	Status
Maintaining or improving ground cover	140 management agreements were established with landholders which included increasing or protecting groundcover.	_
	15 agricultural trials were completed or commenced. Topics include cover cropping, variable lime trials and pasture variety trials.	
	At least 10 events were held and publications produced.	
	Saltbush and stock containment areas were established over 300 hectares.	
	Two farm management transects surveyed 181,100 hectares of farmland.	
Increasing soil organic matter (including soil carbon)	Seven agricultural trials were completed or commenced. Topics included cover cropping and soil carbon sequestration.	
Improving beneficial soil biological activity	More than 60 events were held and publications produced.	_
activity	The Wimmera Carbon Ready Plan was developed, summarising current knowledge and identifying priority actions.	
4. Recovering areas of dryland salinity	Perennial Pasture Systems conducted or commenced nine farm trials and distributed information promoting the use of deep-rooted perennial pastures.	
5. Improving nutrient efficiencies	15 agricultural trials were completed. Topics included decreasing nitrous oxide emissions, soil carbon sequestration and fertiliser demonstrations.	1
	The Wimmera Carbon Ready Plan was developed.	
Enhancing landholder knowledge of soil health	At least 100 events were held including conferences, workshops, site tours and field days.	1
	More than 30 publications were produced, including newsletters, media articles, reports and films.	
	Numerous agency websites and social media platforms promoted soil health and management.	
7. Supporting research and development	20 assessments and agricultural trials were completed or commenced.	1
	Numerous organisations and groups conducted or participated in research and development projects.	Ţ
Improving partnerships between landholders and soil health agencies	Soil health agencies engaged with landholders at engagement events and via websites and social media.	1
	77 community-based groups were established or maintained.	

The location of activities implementing soil management measures



Suggested Improvements

- Revising the objectives so that they are written as three objectives (as written in the table on page 14).
- Removing references to "best practice" to focus objectives on the desired outcomes instead. Soil management methods that
 are considered best practice change over time as information improves and they can be defined in different ways, for example
 based on economic or environmental or social outcomes, cropping or grazing benefits and local specificity.
- Revising the objectives to focus on the number of hectares rather than the percentage of landholders adopting desirable soil
 management practices. Farm size is changing in the Wimmera, hence the number of landholders may be less important than
 the amount of land managed for healthy soils.
- Combining management measure 2 and 3 into a single measure as they are inter-related and management actions taken to achieve them are the same.
- Revising management measure 4 to suggest monitoring the impacts of dryland salinity on soil health and taking action to recover areas of dryland salinity where necessary.
- Removing management measure 5. Recent research found that soils in the Wimmera have relatively good nitrogen efficiency.

Threatened plants and animals

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

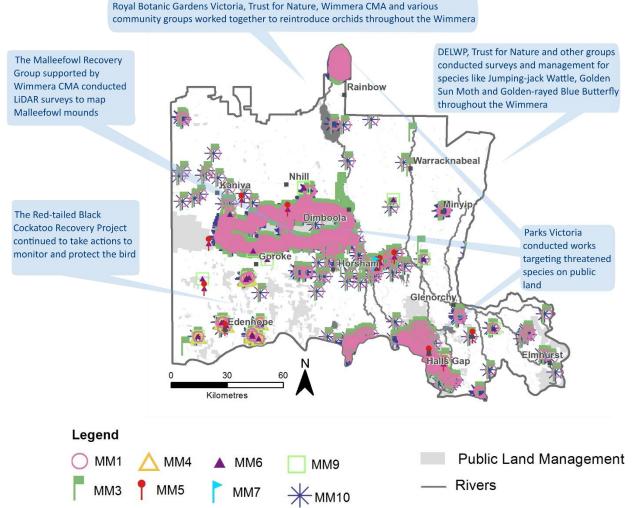
Objective	Achievements June 2013-16	Status
Demonstrate actions leading to improving the status of 20 percent of listed species occurring in the region	270 hectares of native vegetation was protected or maintained, providing increased habitat for threatened fauna.	1
2. Improve community awareness of local threatened species	More than 10 engagement events discussed threatened species. Organisation websites and social media platforms were used to communicate information about threatened species and their threatening processes.	1
3. Improve coordination of communication and availability of information between agencies and the community to maximise benefits for threatened species	At least 20 publications provided information about threatened species. Organisation websites and social media platforms were used to make threatened species information available and communicate it to the community.	*

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure (MM)	Achievements June 2013-16	Status
Continue to support on–ground actions to reduce threats at specific sites	Environmental water regimes delivered 42,700 megalitres to rivers and streams, increasing habitat and refuge pools for aquatic species.	1
	15 threatened species response actions were conducted across 65 sites, including surveys, orchid reintroductions, caging and weed control.	
Participate in the development of a statewide framework to improve the prioritisation of threatened species work	Regional organisations contributed to the government's draft biodiversity strategy. Individuals and organisations also contributed during community information sessions and via online submissions on a draft plan in 2016.	
and the communication of successes	Organisations contributed to Managing Victoria's Biodiversity under Climate Change symposium, discussing mitigating climate change impacts.	
	Organisation websites and social media platforms were used to engage the community and communicate information.	
Continue to implement WIPAMs to manage pest plant and animals and disease	Invasive species assessments were conducted over 212,000 hectares, which included environmental DNA studies of European carp populations at 40 sites. Carp eradication was conducted on four sites.	1
	Weed control and fencing was conducted on orchid reintroduction sites.	
4. Ensure current biosecurity approaches	There have been no notable outbreaks of disease since 2013.	_
adequately address disease threats	Organisations like DELWP implement protocols to prevent disease spread when conducting environmental work in the field.	
5. Undertake educational programs to	More than 10 engagement events were held.	1
improve community involvement and awareness of threatened plants and animals and the relevant threatening processes	Organisation websites, apps and social media platforms were used to engage the community and communicate information about threatened species and their threatening processes.	·
6. Identify flagship species and ecological communities to promote landscape–scale	220 hectares of high conservation value native vegetation was protected or revegetated.	1
habitat protection and improvement work	More than 10 threatened flora and fauna surveys were completed, including fish, platypus, Malleefowl and Red-tailed Black Cockatoo.	
7. Support and participate in existing networks to maximise information flow between agencies (e.g. recovery teams).	At least five groups were supported to survey threatened species and partnerships between organisations were formed for threatened species response and habitat augmentation projects.	1
8. Establish and maintain a regional threatened species advisory committee that reports to the Wimmera CMA board and includes representatives from key agencies	When the RCS was developed, a threatened species advisory committee was active. Since then, Wimmera CMA's Board has adopted the Enhanced Engagement Framework, which targets community and stakeholder consultation as required. There have not been any meetings or reports to Wimmera CMA's Board specifically on threatened plants and animals.	_
9. Ensure that spatial information on threatened species is accessible and used by local governments and fire managers, so that these species are routinely accounted for in planning and operations.	The Victorian Biodiversity Atlas is managed and updated by DELWP.	_
10. Implement actions that directly lead to improving the status of listed threatened species, with a focus on propagating and reintroducing listed flora species	15 threatened species response actions were implemented across 65 sites, including surveys, orchid reintroductions, caging and weed control.	

The location of activities implementing threatened plant and animal management measures



Management measure 2 is not shown on the map because it refers to development of a state-wide framework rather than on-ground activity. Management measure 8 is not shown on the map because no activity has occurred.

Suggested Improvements

- The implications of the Victorian Government's Biodiversity Plan for threatened plant and animal management. The plan is being developed in 2016-17.
- Aligning the RCS with the Wimmera Carbon Ready Plan completed in 2016.
- Revising objective 1 and management measure 10 to replace the notion of improving the "status" of listed species with improving their "conservation outlook." This maintains the intent and outcome for threatened species, but removes the implication of engaging in the process to formally change listings under threatened species legislation.
- Revising objective 3 to improve readability and meaning: "Improve communication and the availability of information between agencies and the community to maximise benefits for threatened species."
- Ensuring that the language used to describe this asset clearly includes threatened plants, animals and ecological communities.
- Revising management measure 3 as the Wimmera Invasive Plant and Animal Management Strategy does not include disease.
- Revising management measure 8. In 2015, Wimmera CMA's Board replaced the advisory committees that existed when the RCS was developed with an "Enhanced Engagement Framework" where relevant representatives and individuals are engaged on specific topics on an as-needs basis.
- Updating the threatened plants and animals section and local government area descriptions to reflect that the specific species
 mentioned in the RCS are not the only threatened plants, animals and communities in the region. This will assist groups to
 demonstrate in applications seeking funding for projects that work on any threatened species or community is supported by the
 RCS.

Wetlands

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

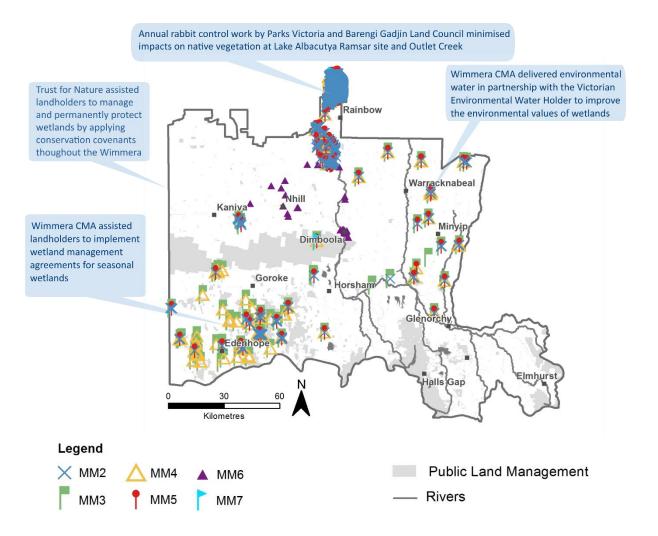
	Ashistory and a long 2013 that have continuated to achieving the RC3's 20-year objecti	
Objective	Achievements June 2013-16	Status
Wetlands with recognised conservation significance are	Annual rabbit control was conducted across more than 5,400 hectares of the Lake Albacutya Ramsar site, enhancing riparian vegetation.	1
protected and sustained	25 significant wetlands were enhanced on private land, covering 1,000 hectares.	
	150 megalitres of environmental water releases were delivered to 10 wetlands.	
The rate of decline in freshwater meadows and shallow freshwater marshes is decreased	Eight 10-year management agreements and four covenants were established on 500 hectares of private land containing wetlands, where landholders received management advice and funding, improving wetland management. Organisations engaged a broad audience using print and online media	1
	campaigns.	
Wetlands continue to provide	This was achieved in a variety of ways. Examples include:	1
social, environmental and economic benefits	Carp control undertaken at Lake Marma to enhance fishing.	, The second second
Solidito	Water transfers and boat ramp enhancement to sustain Lake Toolondo for fishing.	
	The community engaged with stakeholder websites and social media platforms.	

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure (MM)	Achievements June 2013-16	Status
Review, update and implement waterway strategies	Regional waterway strategy was reviewed and updated in 2014. Implementation is underway.	1
2. Actively protect wetlands with recognised conservation significance	Annual rabbit control was conducted across more than 5,400 hectares of the Lake Albacutya Ramsar site, enhancing riparian vegetation.	1
from threatening processes and sustain their conservation values	25 significant wetlands were enhanced on private land, covering 1,000 hectares.	
	150 megalitres of environmental water releases were delivered to 10 wetlands.	
Actively promote wetland	At least five events promoted wetland protection.	1
protection	Organisation websites and social media pages promoted wetland protection and there were a range of media campaigns.	·
4. Assist land managers to permanently protect and manage freshwater meadows and shallow fresh water marshes according to best practice	Eight 10-year management agreements and four covenants were established on 500 hectares of private land containing wetlands.	•
5. Increase the number of land managers implementing best practice	20 10-year management agreements and four covenants were established on 1,000 hectares of private land containing wetlands.	1
wetland management	A broad audience was engaged via print and online media campaigns and four events.	
6. Prevent negative impacts to wetlands from new developments and	Wimmera CMA provided advice regarding 30 planning referrals on the Ecological Significant Overlay.	
land-use change by working with local governments and Department of Transport, Planning and Local Infrastructure to implement wetland specific planning scheme overlays	Ongoing discussions are occurring with local governments to update planning scheme overlays to protect wetlands.	
7. Review, update and implement the	This plan was updated in 2014 and implementation is underway.	1
Lake Albacutya Ramsar Site Strategic Management Plan	Annual rabbit control occurred across more than 5,400 hectares of the Lake Albacutya Ramsar site, enhancing riparian vegetation.	
	The ecological character of Lake Albacutya is being maintained as per the Federal Ecological Character Description report.	

The location of activities implementing wetland management measures



Suggested Improvements

- Revising management measures 4 and 5 to remove the wording "best practice" in relation to wetland management.
- Revising management measure 6 if local governments are not interested in updating or introducing planning scheme overlays to protect wetlands.
- Using aerial mapping and remotely sensed data to monitor the rate of decline in freshwater meadows and shallow freshwater marshes to determine whether objective 2 is being achieved.
- Updating references to "freshwater meadows" and "shallow freshwater marshes" to reflect the Australian National Aquatic Ecosystem Classification Framework introduced in Victoria in 2013.
- The importance of wetlands receiving water from the Wimmera-Mallee Pipeline given drying climate and their relative importance as habitat in the north-east Wimmera.
- The potential role of artificial wetlands in providing environmental benefits.

Fire management

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

The table summanded the main actions completed sin	ice 2013 that have contributed to achieving the RC3's 20-year objecti	v C3.
Objective	Achievements June 2013-16	Status
1. During the development of the RCS, an area identified for improvement was a lack of managed burns on private land. Burning for fuel reduction, at a frequency and intensity that is right for the vegetation type, can be a positive management tool for both fire prevention and the environment. The prevention aspect is particularly relevant where patches of native vegetation on private land exist near residential areas.	The Victorian Government's Safer Together initiative is consistent with this objective. It takes a more integrated risk-based approach to fire prevention and management across public and private land.	*
2. Using fire as a tool in the management of native vegetation is an area that needs further research and development in the Wimmera. Using fire requires ecological knowledge to plan, and there are risks and resource requirements associated with undertaking the burns. Many landholders have patches of native vegetation that have long been unburnt and are likely to remain so in the future. There are potential benefits for both safety and for native fire dependent species if the relevant authorities can work with landholders to provide information and support.	The Victorian Government's Safer Together initiative is consistent with this objective, recognising the need for up-to-date information to effectively manage for healthy environments.	•

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure	Achievements June 2013-16	Status
1. Wimmera CMA, CFA and DEPI will investigate opportunities to take a more integrated approach to managing burns that could concurrently benefit safety and environmental values. These organisations will work together to implement more integrated fire management arrangements, including the involvement in municipal fire management plans.	Opportunities were discussed at the Little Desert fire conference. The Carbon Ready Plan specifies protocols developed by Wimmera CMA in consultation with DELWP, Country Fire Authority (CFA) and Parks Victoria that ensure fire management is factored into revegetation and native vegetation management activities. DELWP's bushfire risk landscapes project provides a strategic bushfire management planning framework that, with the help of communities, identifies values to be protected from bushfire, assesses bushfire risk to those values and sets out strategies to manage this risk. Municipal Fire Management Planning Committees involve stakeholders in planning integrated fire management opportunities and risks.	•

Suggested Improvements

When the RCS is updated in 2019, consider:

- Updating the information included in the RCS to capture new government directions arising from:
 - o The Inspector-General for Emergency Management's Review of Performance Targets for Fuel Management on Public Land, whose recommendations included moving from a hectare-based performance to a risk reduction target,
 - o The Victorian Government's Safer Together initiative which is a new approach to reducing bushfire risk in Victoria,
 - o The newly branded Forest Fire Management Victoria, which represents DELWP's on-ground role in fire management and planned burning, alongside Parks Victoria, VicForests and Melbourne Water.
- Rewording the objectives to make the goal clearer and shorten them by moving some of the explanatory text into the introductory sections for this theme.
- Progressing management measure 1 on from "investigating opportunities" to actions that implement an integrated approach to managing burns to benefit safety and environmental values.
- Adding an additional objective and management measure that takes into consideration BGLC's aspirations to implement managed burns for cultural outcomes.

Emergency management

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

Objective	Achievements June 2013-16	Status
1. A well-prepared community, with plans in place to respond to and recover from emergencies as efficiently and effectively as possible.	The Victorian Emergency Management Reform: White Paper (2012) has seen the development of the new overarching Emergency Management Victoria body. Regionally, coordination committees are active, receive good participation from relevant stakeholders and plans are in place.	1

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.			
Management Measure	Achievements June 2013-16	Status	
Regional government agencies work more closely to build capacity for incident management.	Wimmera CMA staff have offered a variety of skills to assist with incident management. Levels of participation have not been resolved due to legal barriers.	1	
	Improvements have been made regarding flood incident management. For example, the State Emergency Service (SES) has a presence in the Wimmera and DELWP have developed Floodzoom, a new flood management tool. The role of Wimmera CMA staff in incident control centres remain unclear.		
	Relevant stakeholders including Wimmera CMA participate in Municipal Emergency Management Planning Committee meetings to plan for emergency preparedness, response and recovery.		
 Continually improve emergency management by implementing best practice management techniques. 	Organisations have participated in mock emergency events, including flood incident management and evacuation processes.	1	
	A number of management actions have been completed or are in progress to manage flood emergencies including:		
	 Flood investigations conducted across the catchment to improve information and consider mitigation and warning systems, Some local councils incorporated flood information into planning schemes, Fire risk management protocols in the Carbon Ready Plan, Commencement of a new regional floodplain management strategy, Commencement of work by state CMAs to develop guidelines in flood areas to ensure that consistent advice is provided, SES flood guides to educate people about flood risk, warning systems and management for their properties, Development of Floodzoom, a flood information portal to assist with incident management. 		

Suggested Improvements

• Reword management measure 2 to change "best practice" to words along the lines of "recognised industry standards."

Emerging opportunities and challenges

Implementation of 20-year objectives

The table summarises the main actions completed since 2013 that have contributed to achieving the RCS's 20-year objectives.

Objective	Achievements June 2013-16	Status
Work with the community to proactively manage any emerging opportunities and challenges.	Regional organisations including Wimmera CMA have provided advice regarding large developments including mineral sands mining, Western Highway duplications, Horsham bypass of the Western Highway, windfarms, residential development, intensive agriculture and water delivery improvements.	*
	Wimmera CMA has sought to minimise impacts of development while looking for opportunities to deliver integrated catchment management benefits.	

Implementation of six-year management measures

The table summarises the region's main achievements in implementing the RCS's six-year management measures.

Management Measure	Achievements June 2013-16	Status
1. Develop a regional management plan for sequestration and other carbon market activities, so that negative outcomes are avoided, and multiple benefits for biodiversity, productivity and the community are optimised.	The Wimmera Carbon Ready Plan was completed in 2016.	*
2. Ensure the community is aware of, and has the opportunity to contribute to discussions around the future development of the region.	The Wimmera Southern Mallee Regional Growth Plan was released in mid-2014, providing broad direction for land use and development.	1
	In 2016, the Wimmera Southern Mallee Regional Partnership was established to increase collaboration between communities, industry, businesses and government to address challenges and opportunities in the region.	
	Flood investigations developed by Wimmera CMA gave opportunities for community contributions via meetings and social media.	
3. Continually improve and share knowledge.	More than 380 events were held or attended by various organisations on a range of themes, including conferences, field days, workshops and presentations.	1
	More than 220 publications were produced by organisations, including media articles, newsletters, videos, reports and content on websites and social media.	

New information and emerging issues

Is the RCS still saying the things we think it should?

Regional issues, challenges and opportunities

Climate change and variability strongly influence the health of natural assets as well as the region's agricultural productivity, economic conditions and community well-being. Although the Wimmera region has experienced very dry conditions from 2013 until mid-2016, the RCS has remained largely current and able to be implemented. The effect of climate on natural assets and their management is incorporated into the asset sections of the RCS, with the potential impacts of dry climate included in risk assessments used to establish management measures. On the whole, this remains relatively robust as the RCS is high level enough to accommodate improvements made to climate information. When the RCS is renewed, it should continue to take a strong focus on climate change and variability.

Since 2013, Wimmera CMA has worked with stakeholders and the regional community to develop a new Carbon Ready Plan (2016) for the Wimmera. This provides a strategic planning document for adapting to and mitigating climate change by managing the Wimmera's soils and native vegetation. The Carbon Ready Pan is a sub-strategy to the RCS and renewal of the RCS in 2019 could provide an opportunity to strengthen the RCS' approach to climate and further align the objectives, measures, actions and priorities within the two strategies.

Other issues identified include new land use developments including the potential expansion of mining and wind farms. The RCS' asset sections and "Emerging opportunities and challenges" section discuss these issues. However, they are likely to expand and should be reviewed and considered when the RCS is renewed.

Native vegetation removal by land developers and private landholders was also raised by some stakeholders as an issue impacting on the extent of native vegetation. Removal is occurring via a variety of situations, including under exemptions to the permitted clearing regulations, bushfire management overlay and changing land use from grazing to cropping. The Victorian Government is currently reviewing the native vegetation clearing regulations. The renewal of the RCS should consider the outcomes of this review, the ongoing nature of the issue and consider appropriate management measures going forward. Options could include working with local government planners to zone land appropriately in areas like the fringes of the Grampians National Park to reduce clearing in light of the bushfire management overlay.

Wimmera CMA is working with relevant parties to pursue the potential for the carp herpes virus to be released in the Wimmera River system, with potential benefits for river health, native fish, water quality and other aquatic species. Some management measures may need to be reconsidered should this progress.

Government policies and strategies

It remains important to engage with the Wimmera community and ensure that the RCS meets their needs. The Victorian Government and Wimmera CMA's Board have a strong focus on community. The RCS renewal process should include a strong focus on seeking opportunities to achieve community benefits from the management of natural assets.

Since 2013, a number of new Victorian Government strategies and programs have been released and these should inform the renewal of the RCS:

- The Water Plan seeks to plan for a future with less water as Victoria responds to the impact of climate change and a growing population. The actions set out in the plan support a healthy environment, a prosperous economy with growing agricultural production, and thriving communities.
- The Regional Riparian Action Plan released in 2015 is a five-year plan to accelerate on-ground management works to improve the health of riparian land along Victoria's regional rivers, estuaries and wetlands. The action plan is informed by regional waterway strategies and, hence, aligns with the waterway strategy and RCS. The plan created additional funding to fast track priority riparian management actions and has meant delivery of the RCS and Wimmera Waterway Strategy's management measures and actions for riparian management are ahead of schedule.
- Our Catchments Our Communities, is a state-wide strategy to strengthen integrated catchment management across
 Victoria, ensuring that catchment management partners work effectively together. The RCS highlights the dependence of
 effective RCS implementation on the collaborative effort of all stakeholders. As part of assisting to deliver Our Catchments
 Our Communities, Wimmera CMA is commencing collaborative projects that work with stakeholders to deliver RCS
 priorities and improve the way the region collectively reports on achievements regarding RCS implementation.
- The Safer Together initiative takes an integrated risk-based approach to fire prevention and management across both public and private land. This is discussed in the Fire management section of this report.

Other strategies and reviews are continuing to evolve:

- The Victorian Government is currently developing a new biodiversity plan, called Protecting Victoria's Environment –
 Biodiversity 2036. The completion of this strategy may provide opportunities for the region to develop actions for native
 vegetation and threatened plant and animal assets that align with the RCS and biodiversity plan.
- Review of the Native Vegetation Clearing Regulations to ensure that sensitive vegetation is sensibly protected.

RCS assets and action plans

Since 2013, Wimmera CMA has worked with stakeholders and the regional community to develop new action plans, including the Wimmera Waterway Strategy (2014-22) and Carbon Ready Plan. As discussed in the RCS Implementation section of this report, it would be beneficial if the RCS renewal process provided an opportunity to further align these plans with the RCS, address gaps and clearly link detailed actions in the plans with RCS management measures.

Wimmera CMA has also commenced developing a regional floodplain strategy. This is scheduled to be completed in 2017-18. The RCS renewal process should ensure that the RCS' Floodplain management section is updated to align with any changed directions or priorities identified in this new strategy.

Wimmera CMA's analysis and feedback from stakeholders regarding objectives and management measures is that they largely remain relevant and address the range of issues and actions applicable to each natural asset. A few require adjustments to ensure they remain current and achievable where circumstances have changed since 2013. These are identified in the RCS implementation section of this report. For example, objectives 1, 2 and 3 for rivers and streams refer to the Index of Stream Condition 2004 and Wimmera Waterway Health Strategy 2006-2011. Since 2013, both of these have been updated. Management measure 7 for native vegetation refers to updating and reviewing the Wimmera Native Vegetation Plan. This plan will not be updated due to changed circumstances but the management measure requires updating to reference the Carbon Ready Plan which meets the intent of this action.

Sections describing the region, indigenous participation and local government areas were well-received by stakeholders and feedback was that they generally remain current and cover the major issues and assets. Minor improvements were suggested for consideration when the RCS is renewed.

Other information

Charles Sturt University researchers are currently preparing to report on the findings of the fourth Wimmera rural landholder survey examining the social drivers of natural resource management in the Wimmera. The survey's findings will help inform the formal review and renewal of the RCS in 2019 and ensure that the services and programs that deliver RCS outcomes meet the needs of landholders.

Stakeholder feedback

What do our key stakeholders think?

Wimmera CMA met with regional organisations and groups involved in managing the region's natural assets to discuss how they use the RCS, its relevance and new and emerging issues, challenges and opportunities. Feedback was very positive, highlighting that the RCS is a useful document for stakeholders that on the whole remains relevant. Minor improvements to the document and the coordination of its delivery were suggested and are summarised below and in Appendix 2. This Appendix lists the stakeholders that Wimmera CMA met with and their main feedback.

Using the RCS

Stakeholder organisations consistently praised the RCS for being a readable and accessible document. Many people commented that the RCS is a user-friendly length and written in a way that enables the reader to quickly understand the intent of the document and its key information. A few stakeholders thought that the RCS was less accessible for members of the general community, mainly due to its use of industry terminology and concepts. One stakeholder suggested that fact sheets on each natural asset could provide a useful tool for communicating key messages and objectives to community members. In particular, this would be helpful for linking local management actions taken by landholders to bigger picture objectives and outcomes for the region's assets.

The most common ways that organisations used the RCS were to guide their work programs and to support applications seeking government funding to deliver projects. Funding applications required proponents to refer to the RCS to describe how their projects related to regional strategies or to justify how their projects delivered on regional or local priorities. Most organisations felt that the RCS is very useful for these purposes because it states clear and high level objectives, management measures and directions for the region's natural resource assets. A number of organisations indicated that it is important for the document to be high level so that it remains current and can be adaptable and flexible as situations change or new knowledge emerges.

One Landcare facilitator commented that the RCS would provide stronger support for funding applications if it mentioned that there are a broad range of assets present in each local government area. For example, the RCS refers to a selection of the more commonly known threatened plants and animals but does not mention that there are additional threatened species present.

Emerging issues, challenges and opportunities

The general consensus from stakeholders was that the RCS remains relevant and current and only minor updates were suggested to some of the text. These are detailed in Appendix 2. A number of issues and challenges impacting on natural assets were identified for monitoring and consideration when the RCS is renewed, including:

- The potential expansion of mineral sands mining with increased exploration occurring and the potential for impacts on natural assets,
- Agricultural practice change, especially impacts on native vegetation, paddock trees and wetlands via cropping moving south and practices changing from grazing to cropping,
- Climate change and variability and changes in the frequency and impacts of extreme events like fires and floods,
- The expansion of wind farms and monitoring for impacts on native vegetation and threatened birds,
- Ensuring that water is put to best use, for economic and social benefits as well as environmental,
- Sallow wattle invasion in burnt areas of the northern Grampians region, outcompeting native vegetation,
- Progressing further with implementing managed burns on private land and the desire by Barengi Gadjin Land Council to participate in burning native vegetation for cultural outcomes,
- Ongoing and constant pressure to remove native vegetation for development. Offsets are occurring, but are predominately
 enhancing existing vegetation rather than establishing new areas. It is also very difficult to estimate the amount of native
 vegetation being lost from private land as many losses are not recorded, including vegetation removed under exemptions
 from the guidelines, dead vegetation and illegal removal.

A small number of stakeholders felt that the delivery of RCS outcomes would be more coordinated and delivered more efficiently if forums existed for the main organisations and groups involved to regularly meet to share information about their activities and discuss opportunities to add value.

Indigenous participation

Barengi Gadjin Land Council (BGLC) felt that implementation of the RCS' goals for indigenous participation is progressing positively. Positives include BGLC Director attendance at Wimmera CMA Board meetings and BGLC and Wimmera CMA staff have regular meetings and strong relationships. BGLC has received invaluable ongoing support for employment, training and development opportunities regarding its works crew program. Wimmera CMA and Landcare were involved in country planning, supporting traditional owners to set their priorities which will help inform the renewed RCS in 2019. A number of projects have been delivered in partnership with Wimmera CMA as well as other regional NRM organisations.

BGLC suggested changing the goal around "promoting the establishment of Indigenous Landcare groups" to instead promote relationships between traditional owners and Landcare groups. This better reflects current relationships and likely future actions.

Other suggested improvements

Feedback from Landcare facilitators and local government regarding slight updates to some local government area descriptions. BGLC suggested some improvements to the RCS content for the "Indigenous participation" and Hindmarsh Shire sections.

Preparing for RCS renewal

What do we need to do to prepare for renewal in 2019?

Monitor the impacts of issues, challenges and opportunities

Discussions with stakeholders and Wimmera CMA's analysis raised a variety of issues, challenges and opportunities with the potential to impact on the condition of the region's natural assets and affect RCS delivery. These should be monitored to determine the likelihood of impacts occurring, opportunities arising and the need for any active management. In summary, they include:

- Mineral sand mining and expanded exploration for mineral sand resources,
- Changes in agricultural practices particularly movement of cropping into traditionally grazed areas,
- Climate change and variability and associated changes in extreme events,
- · Expansion of wind farms into new areas,
- The potential for the carp herpes virus to be released in the Wimmera River system,
- The potential for managed burns on private land and burning native vegetation for cultural outcomes.

Wimmera CMA, stakeholder organisations and the community should continue to participate in the development of state strategies and policy directions where opportunities are available. This will help inform policy makers regarding regional circumstances and the intent of the RCS. Equally, the renewal of the RCS will need to consider government directions taken in new strategies and policies like the Biodiversity Plan, Water Plan and Our Catchments Our Communities.

Improve reporting of achievements and outcomes

Prior to the formal review of the RCS in 2019, Wimmera CMA will need to work with regional stakeholders to improve the way that information is collected to enable reporting on the actions that have been achieved to implement the RCS' objectives and management measures. The aim is to provide a comprehensive report on actions achieved by the range of organisations, groups and individuals that implement RCS outcomes across the region. Wimmera CMA has received excellent information from some stakeholders to support annual reporting and this three-year review of the RCS. However, there are a number of organisations that were unable to provide information. To address this, Wimmera CMA is commencing a project in 2016-17 under the Victorian Government's Our Catchments, Our Communities initiative to establish a user-friendly process and tools for collecting, storing and reporting on achievements, including spatially. This will help us to collectively monitor the extent of progress in implementing the RCS and report on achievements.

Appendix 1

VCMC Guide for review of Regional Catchment Strategies

- (i) How is the RCS performing?
 Is it effective in supporting delivery of its priority strategic actions?
- (ii) How is implementation going?

 How are we progressing with delivery of the 6 year programs?
 Is any corrective action required? If so, then what?
- (iii) Is the RCS still saying the things we think it should?
 What new information has appeared?
 Is there new or additional information which needs to be considered (for the remaining life of this RCS, and to initiate our thinking for the 2019 RCS?
 Is there anything which we plan to not take any further action on?
- (iv) What do our key stakeholders think? What might any consultation look like?
- (v) What do we need to do to prepare for renewal in 2019? Issues to be monitored? Issues to be investigated?

Wimmera CMA – A healthy Wimmera catchment where a resilient landscape supports a sustainable and profitable community