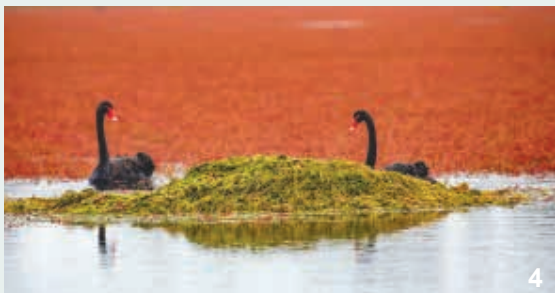




Annual Report / 2020–21



Acknowledgements



Cover Images

- 1 Using technology to improve dryland farming.
- 2 Wildlife Detective Activity Books nurture a love of nature in primary school aged children.
- 3 Local Scouts helping to revegetate Blackbox at Hattah.
- 4 Swans nesting on Lake Kramen.

The Mallee Catchment Management Authority (CMA) acknowledges and respects Traditional Owners, Aboriginal communities and organisations. We recognise the diversity of their cultures and the deep connections they have with Victoria's land and waters.

We value partnerships with them for the health of people and country. The Mallee CMA Board, management and staff pay their respects to Elders past and present, and recognise the primacy of Traditional Owners' obligations, rights and responsibilities to use and care for their traditional lands and waters.

Image Credits

All images supplied by Mallee CMA unless credited otherwise.

Copyright

© The State of Victoria, Mallee Catchment Management Authority 2021. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968*.

Mallee Catchment Management Authority
Annual Report 2020–21
ISSN: 1833-0924

Contact Us

Mallee Catchment Management Authority

The Mallee Catchment Management Authority's (CMA's) main office is located in Irymple, on the outskirts of Mildura. For more information on the Mallee CMA, please contact the authority:

In person	Agriculture Victoria Complex Corner of Eleventh Street & Koorlong Avenue Irymple Victoria 3498
Post	PO Box 5017 Mildura Victoria 3502
Telephone	03 5051 4377
Email	reception@malleecma.com.au
Website	www.malleecma.com.au

Disclaimer

This document can be accessed at the Mallee CMA website: www.malleecma.com.au/resources/corporate-documents

Publications produced by the Mallee Catchment Management Authority may be of assistance to you but the Mallee Catchment Management Authority and its employees do not guarantee that the publication is without flaw or any kind or is wholly appropriate for your particular purpose and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in any Mallee Catchment Management Authority publication.

Contents

Declaration in Report of Operations	2
--	----------

Part 1

Year in Review	3
- Chair's Report	3
- Vision, Mission, Values	5
- Manner of establishment and responsible Ministers	6
- Nature and range of services provided	6
- Objectives, functions, powers and duties	7
Performance Reporting - Non-financial	8
- Achievements, Operational Performance and Key Initiatives	8
- Reporting progress towards Mallee CMA performance objectives, indicators and/or outputs (non-financial)	10
- Business Objective 1: Ensure that community is central to the planning, implementation and evaluation of natural resource management (NRM)	10
- Business Objective 2: Protect and enhance the region's natural, cultural and productive values	19
- Business Objective 3: Strengthen our capacity to operate as a corporately and socially responsible organisation	35
Performance Reporting – Financial	44
- Five year financial summary	44
- Current year financial review	44
- Significant changes in financial position	44
- Significant changes or factors affecting performance	44
- Disclosure of grants and transfer payments	45
- Subsequent events	45

Part 2

Governance and Organisational Structure	46
- Organisational structure and corporate governance	46
- Audit and Risk Committee membership	51

Part 3

Workforce Data	55
- Public Sector Values and Employment Principles	55
- Occupational Health, Safety and Wellbeing	55
- Workforce Data	58
- Workforce Inclusion Policy	59
- Executive Officer Data	59

Part 4

Other Disclosures	60
- Expenditure of funds within the Mallee Salinity Investment Plan 2020–21	60
- Local Jobs First - Victorian Industry Participation Policy	61
- Government advertising expenditure	61
- Consultancy expenditure	61
- Information and Communication Technology (ICT) expenditure	62
- Major contracts	62
- Freedom of information	62
- <i>Building Act 1993</i>	63
- Competitive Neutrality Policy	63
- <i>Public Interest Disclosures Act 2012</i>	63
- <i>Catchment and Land Protection Act 1994</i>	63
- Office-based environmental impacts	64
- Additional information available on request	66
- Asset Management Accountability Framework (AMAF) maturity assessment	66
- Social Procurement Framework	66
- Attestation for financial management compliance	69

Part 5

Financial Statements	70
- Declaration in Financial Statements	70
- Auditor-General's report	71
- Comprehensive operating statement	73
- Balance Sheet	74
- Cash Flow Statement	75
- Statement of changes in equity	76
- Notes to the financial statements	77

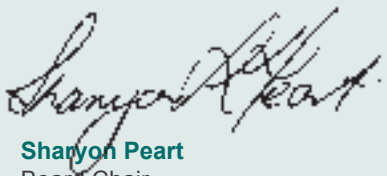
Appendices	113
1 Disclosure Index	113
2 Condition and Management Report	115
Attachment A: Outputs delivered in 2020–21 under each of the Mallee RCS sub-strategies	151



Declaration in Report of Operations

Responsible Body's declaration

In accordance with the *Financial Management Act 1994* (Vic), I am pleased to present the Mallee Catchment Management Authority's Annual Report for the year ending 30 June 2021.

A handwritten signature in black ink, which appears to read 'Sharon Peart'.

Sharon Peart
Board Chair
Mallee Catchment Management Authority

29 September 2021

Part 1

Year in Review



Chair's Report

The work delivered by the Mallee Catchment Management Authority (CMA) during 2020–21 demonstrates the organisation's enduring commitment to protecting and enhancing our region's natural, cultural and productive landscapes by working in close partnership with our communities and key regional stakeholders.

The Mallee CMA's Annual Report 2020–21 documents our progress toward delivering Victorian Government objectives and priorities, within the context of the *Catchment and Land Protection Act 1994* (CaLP Act), the *Water Act 1989*, Ministerial expectations, and policy directions set out in *Water for Victoria*.

I am pleased to report that in delivering our work, we have continued to ensure our community has remained central to the planning, delivery and evaluation of natural resource management (NRM) outcomes in the Victorian Mallee. We have worked in partnership with Traditional Owners, community members, partner agencies and key stakeholders such as Landcare and Friends of groups, with a focus on protecting and enhancing the region's land, water and biodiversity.

Highlights of our work are noted below and categorised according to the 2020–21 Ministerial Expectations for the organisation.

Improved performance and demonstrating outcomes

Our commitment to a high level of corporate governance continues to be demonstrated by the ongoing effort invested in retaining ISO 9001:2015 certification for our Quality Management System. Since achieving accreditation in 2016, annual surveillance audits have not identified any major non-conformities, and the 3 yearly accreditation audit conducted in 2019–20 identified nil major or minor non-conformities. Recertification for the 2019–2022 period was achieved in October 2019.

Climate Change

The Mallee CMA has continued to plan for and respond to a changing climate by ensuring the ongoing delivery of regional programs incorporates priority landscapes and associated interventions established by the Mallee Natural Resource Management Plan for Climate Change (2016). In 2020–21 this included supporting initiatives such as the 'State-wide Carbon Sequestration Analysis Project' being undertaken in partnership with Victorian CMA's and Water Corporations to establish regional

carbon yields and implementation costs associated with environmental planting offsets.

Waterway and Catchment Health

Delivery of over 30,000 hectares of environmental works by Mallee CMA in 2020–21 represents significant progress against targets set by the *Mallee Waterway Strategy* for the region's priority waterways. Of particular note are the 48 watering regimes undertaken to deliver against associated Seasonal Watering Proposals and Environmental Watering Management Plans. In total 39,776 ML of environmental water was delivered, inundating 9,915 hectares of priority floodplain habitat. Progressing the large-scale waterway restoration projects identified by *Water for Victoria* as a priority for the region has also built on this strategic framework by further targeting investment to accelerate progress against environmental, economic, social and cultural outcomes identified for each of the four associated sites; Merbein Common wetlands, Lindsay-Wallpolla Islands, Kings Billabong and Woorlong complex, and Belsar-Yungera Floodplain complex.

Water for Agriculture

The Mallee CMA has continued to support a productive and profitable irrigation sector by delivering irrigation and salinity management actions identified as a priority for the Mallee under *Water for Victoria*. The regional framework informing delivery of these actions was advanced with the release of the *Victorian Mallee Irrigation Region Land and Water Management Plan* in December 2020. Implementation of this 2020–2029 Plan in partnership with regional stakeholders is building on previous achievements and supporting continuous improvement in irrigation and salinity management.

Community engagement and partnerships

Adaptive management approaches were employed by the Mallee CMA throughout 2020–21 to ensure that our stakeholders continued to be effectively engaged under COVID-19 restrictions (i.e. planning for an in-person or virtual delivery scenario). Delivery included targeted events to build stakeholder capacity and enhance the region's cooperative delivery approaches; with activities such as field days, workshops, and training events collectively engaging 6,275 participants over the year. Communication materials produced in 2020–21 also provided effective engagement mechanisms by promoting our region, the NRM programs being delivered, and involvement opportunities to a large and diverse audience. Key examples of the approaches employed to disseminate information included a regular segment on the local ABC radio station, media articles in each of the region's six local newspapers, regular social media (i.e. Facebook, Instagram, Twitter, YouTube) content, and regionally specific educational resources (e.g. Wildlife Detective Activity Books).

Recognise and support Aboriginal cultural values and economic inclusion in the water sector

In recognition of the important role Aboriginal people play in caring for Country, we directly engaged Traditional Owners to deliver Cultural Heritage assessments, on-ground environmental works, and associated monitoring activities. These activities have provided formal ways of recognising Aboriginal cultural values and helped deliver economic inclusion in the water sector, work which has also been crucial in continuing to develop strong relationships with the region's First People and opportunities for meaningful involvement in NRM. Review and renewal of the Mallee CMA Indigenous Participation Plan was also undertaken in 2020–21 to ensure alignment with the needs and aspirations of the Aboriginal community regarding land and water management.

Recognising recreational values

The Mallee CMA recognises that enhancing the recreational values of priority waterways is integral

to our waterway management role, and that effective stakeholder engagement is essential in ensuring alignment with local objectives and facilitating collaborative outcomes. Fifteen community consultation events and three surveys were undertaken throughout 2020–21 to determine recreational values and priorities for local waterways. This has directly informed the development of five community driven projects that are being delivered in partnership with local stakeholders.

Supporting resilient and liveable cities and towns

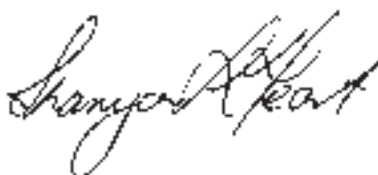
Initiatives that enhance public spaces and urban waterway values through integrated waterway management (IWM) collaborations have also continued to be supported. Key measures progressed in partnership with regional stakeholders over the 2020–21 reporting period included application of the Lake Ranfurly and Lake Hawthorn Integrated Management Plan; implementation of the Wetland Management Strategy for Kings Billabong, Psyche Bend Lagoon and Woorlong Wetland; and engagement with First People of the Millewa Mallee to ensure that Aboriginal values are recognised and supported by associated waterway management activities.

Leadership, diversity and culture

Through implementation of the Mallee CMA's Diversity and Inclusion Plan, our organisation has continued to demonstrate a commitment to building a diverse workforce, while encouraging leadership and culture. Key actions undertaken have included providing staff with cultural awareness training opportunities, ensuring appropriate gender equality on recruitment panels, encouraging staff participation in events that promote LGBTIQ awareness and inclusion, and making organisational health and wellbeing initiatives available to all staff. Implementation of the Mallee CMA Social Procurement Strategy (2019–2021) is also ensuring compliance with Victoria's Social Procurement Framework, and supporting progress against our objectives for achieving broader social benefit through the delivery of NRM focused programs.

Conclusion

It is with pleasure, I present to you the Mallee CMA's Annual Report 2020–21.



Sharyon Peart

Board Chair
Mallee Catchment Management Authority

29 September 2021

Vision, Mission, Values

Our Vision

Informed and active communities balancing the use of resources to generate wealth, with the protection and enhancement of our natural and cultural landscapes.

(Mallee Regional Catchment Strategy 2013–2019)

Our Mission

To ensure natural resources in the region are managed in an integrated and ecologically sustainable way and in accordance with our community's expectations.

Our Values

In delivering against these priorities the Mallee Catchment Management Authority Board, management and staff will demonstrate the following values and behaviours in all aspects of their work:



Figure 1 | Mallee CMA Values and Behaviours

Manner of establishment and responsible Ministers

The Mallee Catchment Management Authority (CMA) was established under the *Catchment and Land Protection Act 1994* (Vic) (CaLP Act). The responsible Ministers for the period from 1 July 2020 to 30 June 2021 were the Hon. Lisa Neville MP, Minister for Water, the Hon. Richard Wynne MO, Minister for Planning and the Hon. Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change.

Nature and range of services provided

The Mallee CMA region covers 39,939 km², around one-fifth of Victoria. The largest catchment management area in the state, it runs along the Murray River from Nyah to the South Australian border and south through vast dryland cropping areas and public reserves.

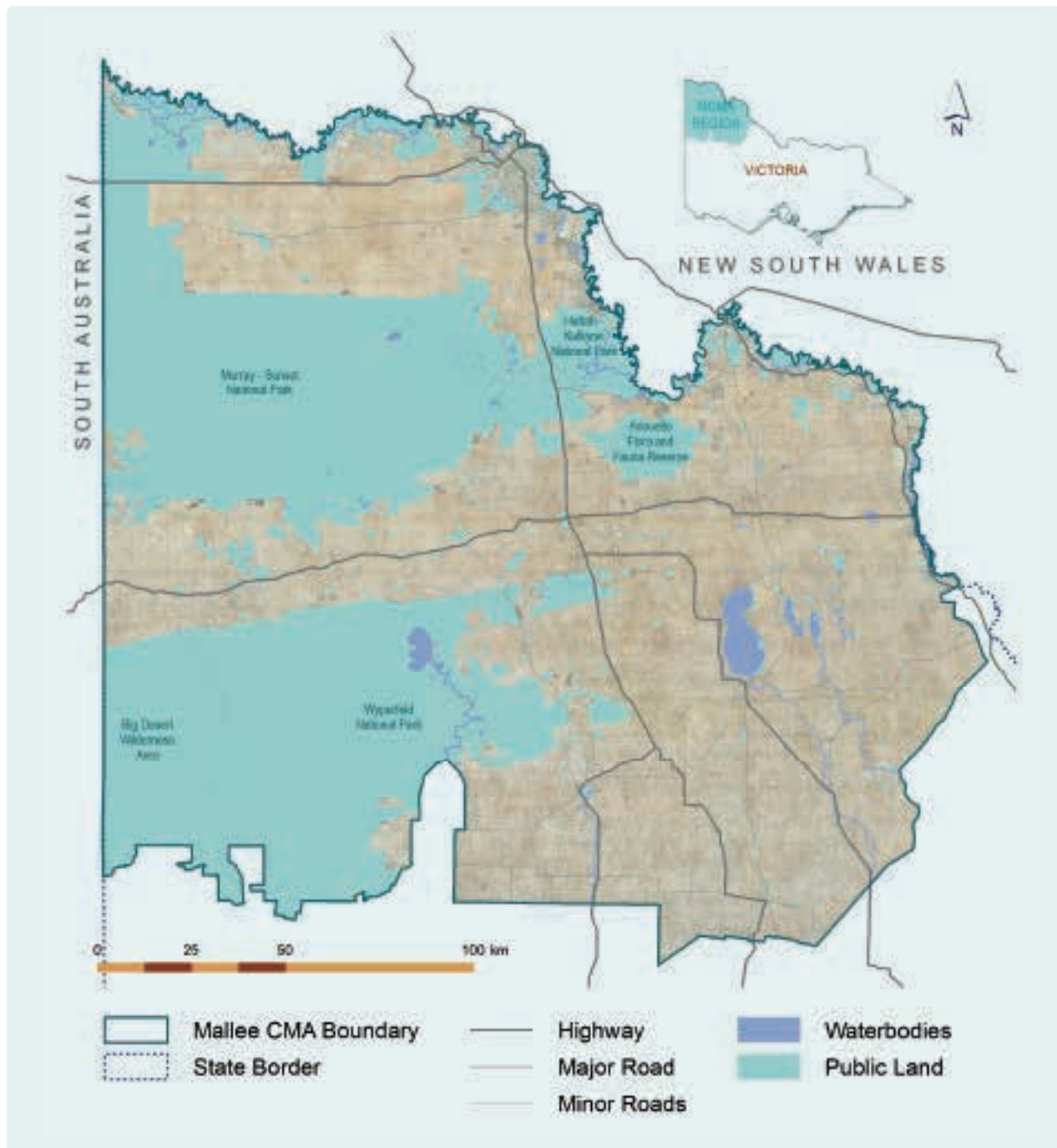


Figure 2 | Map of Mallee CMA region

The primary role of the Mallee CMA is to facilitate integrated and ecologically sustainable management of natural, cultural and productive landscapes occurring within the region. Programs and projects are developed to deliver against the region's priorities for these landscapes, as detailed in the Mallee Regional Catchment Strategy 2013–2019 (RCS) and its associated sub-strategies and plans. The Mallee RCS is prepared under the provisions of the CaLP Act, in partnership with regional stakeholders, as a framework for strategic action to support and focus the ongoing coordinated efforts of the region's land managers, government agencies and community groups.

Within this context, Mallee CMA investment planning and delivery are informed by the long-term (20 year) objectives and strategic (6 year) actions set by the RCS for each of the following regional asset types:

- Rivers;
- Wetlands;
- Threatened species and communities;
- Terrestrial habitat;
- Groundwater;
- Soils;
- Agricultural land;
- Culture and heritage; and
- Community capacity for Natural Resource Management (NRM).

A suite of RCS sub-strategies and plans (e.g. Mallee Waterway Strategy, Mallee Indigenous Participation Plan, Mallee Landcare Support Strategy, Mallee Irrigation Region Land and Water Management Plan, Mallee Floodplain Management Strategy) provides additional detail on the activities required to protect and enhance regional assets, and the roles and responsibilities of regional stakeholders in the delivery of these activities.

These are further complemented by site-based plans (e.g. Environmental Watering Management Plans) which establish priorities and delivery mechanisms.

The RCS monitoring, evaluation, reporting and improvement (MERI) framework is applied to all Mallee CMA activities to support continuous improvement and adaptive management processes.

Key regional stakeholders engaged in the development, delivery and review of the Mallee RCS and its associated sub-strategies include government agencies; local government; water corporations; community and industry-based groups; private land managers; and Traditional Owners. Participation by the broader Mallee community in natural resource management (NRM) activities is also supported to facilitate awareness and skills-based outcomes.

Objectives, functions, powers and duties

As a statutory authority, the Mallee CMA has clear duties and accountabilities set out in legislation. The Statement of Obligations for the CaLP Act and the *Water Act 1989* (Vic) set out the key business undertakings of the Mallee CMA as being to:

- Facilitate and coordinate the management of catchments in an integrated and sustainable manner as it relates to land, biodiversity and water resources;
- Plan and make decisions within an integrated catchment management context that balance social, economic and environmental outcomes;
- Target investment to address priorities and maximise improvement in resource condition of catchments, land, biodiversity and water resources;
- Provide opportunities for community engagement in the integrated management of catchments and natural assets including land, biodiversity and water resources;
- Develop strategic partnerships with relevant stakeholders including public authorities and government agencies;
- Promote and apply a risk management approach which seeks to protect, enhance and restore natural assets and reduce the impact of climate change;
- Promote and adopt an adaptive approach to integrated catchment management, including continuous review, innovation and improvement;
- Manage business operations in a prudent, efficient and responsible manner;
- Act as the caretaker of river health and provide regional leadership on issues relating to river health;
- Undertake the operational management of the Environmental Water Reserve as a key component of an integrated program of river, wetland, floodplain, and aquifer restoration.

The *Public Administration Act 2004* (Vic) and the *Financial Management Act 1994* (Vic) together with the Mallee CMA's Board Charter of Corporate Governance, also provide guidance for the Mallee CMA in relation to its governance requirements.

Part 1

Performance Reporting - Non-financial

Achievements, Operational Performance and Key Initiatives

The Mallee CMA Corporate Plan 2020–2025 establishes three objectives to inform organisational priorities in delivering our vision over the next five years.

Thematic areas and strategic outcomes the Mallee CMA seek to achieve under each objective have been developed to reflect existing delivery and reporting frameworks (both regional and state), and the Mallee CMA's legislative obligations (see Table 1).

Table 1 | Mallee CMA 2020–2025 business objectives strategic outcomes

Business Objectives	Theme	Strategic Outcomes
Ensure that community is central to the planning, implementation, and evaluation of natural resource management (NRM).	Community Capacity for NRM	NRM stakeholders and the broader community are aware of and participating in efforts to protect the Mallee's natural, cultural and productive values.
		NRM stakeholders are being supported to identify, and where appropriate respond to emerging threats and opportunities.
Protect and enhance the region's natural, cultural and productive values.	Waterways	Priority waterways and associated riparian habitat are providing enhanced social, economic and environmental services to the community.
	Biodiversity	The ecosystem services provided by targeted terrestrial habitat are being protected and enhanced.
		The viability of targeted threatened species and communities is being protected and enhanced.
	Land	Management practices are being implemented to optimise the productive capacity of agricultural land, while protecting associated natural values.
Strengthen our capacity to operate as a corporately and socially responsible organisation.	Culture & Heritage	Cultural heritage sites are being recognised and protected as an integral component of all land, water and biodiversity management processes.
	Governance & Compliance	Internal governance processes are ensuring compliance with all legislative requirements and statutory functions.
	Integrated Catchment Management	Regional planning, delivery and evaluation processes are supporting integrated and targeted NRM outcomes.

Delivery against these strategic outcomes is guided by priority initiatives and activities identified within the Mallee CMA Corporate Plan 2020–2025. These priorities are reviewed annually to ensure alignment with the organisation’s core responsibilities (e.g. CaLP Act Statement of Obligations and in the *Water Act 1989* Statement of Obligations) and strategic framework (e.g. RCS). Identified activities also reflect Ministerial expectations and performance priorities for nine government policy areas; specifically:

- 1. Improved performance and demonstrating outcomes
- 2. Climate Change
- 3. Waterway and Catchment Health
- 4. Water for Agriculture
- 5. Community Engagement and Partnerships
- 6. Recognise and support Aboriginal cultural values and economic inclusion in the water sector
- 7. Recognise recreational values
- 8. Resilient and liveable cities and towns
- 9. Leadership, diversity and culture

Organisational performance against outcome indicators and activity measures established for each business objective and associated themes (i.e. as detailed by the 2020–2025 Corporate Plan) is provided in the following sections.

Figure 3 illustrates the ‘Key to Results’ system applied within the report to indicate the extent of underachievement or overachievement of activity indicator targets when reporting on their performance

✓	Performance target achieved or exceeded or expected to be achieved.
■	Performance target not achieved - exceeds 5% variance.
○	Performance target not achieved - within 5% variance.

Figure 3 | Activity performance key to results



Mallee CMA Corporate Plan 2020–2025.

Reporting progress towards Mallee CMA performance objectives, indicators and/or outputs (non-financial)

Business Objective

1

Ensure the community is central to the planning, delivery and evaluation of natural resource management (NRM)

Theme: Community capacity for NRM

Communities of the Mallee are at the centre of the current and future management of our natural, cultural, and productive landscapes. NRM is a co-operative endeavour between the community, industry, and government, with effective action requiring effective partnerships founded on a well-informed community with the skills and confidence to identify, direct, and implement change. By working with our community and delivery partners, the Mallee CMA is seeking to deliver against the following capacity related outcomes:

- *NRM stakeholders and the broader community are aware of and participating in efforts to protect the Mallee's natural, cultural and productive values;*
- *NRM stakeholders are being supported to identify, and where appropriate, respond to emerging threats and opportunities.*

Implementation will also directly align to and deliver against priorities established by:

- Community Engagement and Partnerships Framework for Victoria's Catchment Management Authorities (2017)
- Mallee CMA Annual Stakeholder Engagement and Communication Plan (2020)
- DELWP Aboriginal Inclusion Plan: Munganin – Gadhaba (2016–2020)
- Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016)
- Mallee CMA Indigenous Participation Plan (2020)
- Mallee CMA Reconciliation Action Plan (2018)
- Pupungarli Marnmarnepu 'Owning Our Future' Aboriginal Self-Determination Reform Strategy 2020–2025.

Outcome Indicators and Performance Measures

Progress against these strategic outcomes is measured through organisational performance against six key indicators. These indicators are presented according to the Ministerial 'Priority Area' with which they align (see Table 2).

Over the five-year reporting period, Mallee CMA programs have continued to apply a strong community focus as the cornerstone of NRM delivery. This approach is informed by, and aligns with the principles and best practice standards established by the Community Engagement and Partnerships Framework for Victoria's Catchment Management Authorities (2017). Delivery against this framework has included targeted events

to build stakeholder capacity and enhance the region's cooperative delivery approaches; with activities such as field days, workshops, and training events collectively engaging 38,014 participants over the 2016–2021 period. These activities are well received, with more than 95 per cent of participants consistently providing positive feedback on the overall delivery. Since the introduction of participant evaluations in 2014–15, 66 per cent of respondents have provided an 'excellent' rating and 30 per cent 'good'; with only 3 per cent rating them as 'poor' and 1 per cent 'very poor'.

The effectiveness of the engagement approaches being employed to build capacity is also demonstrated by ongoing evaluations; with an average 36 per cent increase in 'awareness of NRM issues' being reported by participants, and an average 19 per cent increase in skills to 'address threat processes.'

While COVID-19 restrictions impacted the number and type of activities undertaken throughout this 2020–21 reporting period, employing adaptive management approaches (i.e. planning for an in-person or virtual delivery scenario) ensured that our stakeholders continued to be effectively engaged. This is supported by evaluations of the field trips, Citizen Science programs, and forums delivered by Mallee CMA in 2020–21; with 66 per cent of participants rating their overall delivery as 'excellent' and a further 32 per cent as 'good'.

Aligning with State Government media guidelines to ensure a focus on COVID-19 settings during extended lockdown periods also reduced the number of communication activities undertaken by the Mallee CMA throughout 2020–21. It is evident however that the information and materials that were produced continued to build on previous achievements by promoting our region, the NRM programs being delivered, and involvement opportunities to a large and diverse audience. Key examples of the mechanisms employed to disseminate information included a regular (fortnightly) segment on the local ABC radio station, media articles in each of the region's six local newspapers, regular social media (i.e. Facebook, Instagram, Twitter, YouTube) content, the biannual 'Mallee Farmer' magazine, and regionally specific educational resources (e.g. Wildlife Detective Activity Books).

Aboriginal cultural values and economic inclusion in the development and delivery of Mallee CMA programs continue to be supported through the implementation of activities which align with the Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016) and directly progress objectives and priority actions identified within the Mallee CMA Indigenous Participation Plan (IPP).

Review and renewal of the 2016–2020 IPP was undertaken during this reporting period to ensure alignment with the needs and aspirations of the Aboriginal Community regarding land and water management. Consultation and engagement undertaken to inform these processes involved discussions with Traditional Owners, Aboriginal organisations and the wider Aboriginal Community through a combination of small group meetings and On-Country visits. The resulting 2020–2023 IPP framework provides realistic and achievable actions and activities to ensure strengthened and collaborative engagement between Traditional Owners and the Mallee CMA. The Plan also forms an important part of Mallee CMA's cultural competency and skill development for staff to further enhance relationships and make better informed decisions about NRM within the Mallee region.

Direct engagement with our region's two Registered Aboriginal Parties also continued to facilitate Traditional Owner participation in the delivery of NRM focused activities. Over the reporting period this has included engaging the First People of the Millewa-Mallee Aboriginal Corporation to deliver cultural assessment and monitoring activities for the Victorian Murray Floodplain Restoration Project (VMFRP); and the Barengi Gadjin Land Council Aboriginal Corporation to undertake Buloke Woodland revegetation programs in the southern Mallee. On-Country field trips were also supported to facilitate the emersion of cultural knowledge and values into NRM delivery across the region.

Further detail on community capacity for NRM condition benchmarks, medium-term trends, and the expected contribution of activities delivered in 2020–21 is provided in the Community section of the Condition and Management Report (see Appendix 2).

Activity Indicators and Performance Measures

Performance against the organisations 2020–21 priority activities for progressing community capacity outcomes, including actual delivery against budgeted targets is provided in Table 3. Overall, 89 per cent of performance targets were achieved or exceeded over the reporting period; with two measures unable to be progressed as originally scheduled.

While already established community and regional delivery partner forums were able to be maintained under the COVID-19 restrictions experienced throughout 2020–21 (i.e. virtually), the establishment of two new

committees (i.e. the Land and Water Management Plan Implementation Committee and the Mallee Drainage Bore Decommissioning Accountable Action Review Steering Committee) was deferred to 2021–22 to enable effective engagement of key stakeholders.

All 2020–21 incentive funding allocated to private land managers under the Regional Land Partnerships (RLP) and Biodiversity Response Planning (BRP) programs was fully expended over the reporting period, with the 33 per cent under achievement variance relating to the Mallee Irrigation Incentive Program (MIIP). Commencement of this project was rescheduled following the announcement of a state-wide review of irrigation incentive programs, enabling associated recommendations to be incorporated into regional delivery processes. The MIIP was subsequently launched on 30 April 2021 and it is anticipated that 2020–21 allocated funding will be fully expended within the next (2021–22) reporting period.

Key initiatives and projects

Initiatives that supported our delivery against the priority activities and associated performance targets in 2020–21 included both State and Commonwealth funded programs. An overview of their contributions in relation to building Community Capacity for NRM is provided in Table 4.

Table 2 | Progress against performance measures for 'Community Capacity for NRM' strategic outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Community engagement & partnerships							
Ministerial Expectation: A strong community engagement focus that is a cornerstone of all MCMA functions.	Community Engagement and Partnering Framework for Victorian CMAs (2017) delivered against (i.e. meeting best practice standards)	per cent	n/a	92	100	100	100
	Community/stakeholder participation in engagement events/activities	number of participants	9,135	8,905	7,695	6,004	6,275
		number of events	681	660	670	588	501
	Participants rating engagement activities as 'good' or 'excellent'	per cent of respondents	92	93	97	99	98
Mallee RCS: Increased awareness of the region's natural, cultural and productive values	Awareness of NRM issues reported by capacity building activity participants	per cent increase (average)	58	66	71	61	36
Mallee RCS: Increased skills in identifying and delivering priority NRM activities	Skills to address threat processes reported by capacity building focused activity participants	per cent increase (average)	16	12	15	8	19
Ministerial Expectation & Mallee RCS: Increased information sharing in promoting NRM and associated evidence base	Communication materials produced to promote programs, activities, etc.	number of publications	330	509	568	439	327
	Social media (Facebook) to promote activities, values, threats etc.	number of posts	n/a	330	554	408	348
		number of views	n/a	32,394	495,546	487,415	307,091
Recognise and support Aboriginal cultural values and economic inclusion in the water sector							
Ministerial Expectation & Mallee RCS: Effective engagement of Traditional Owners and the broader Aboriginal community	Aboriginal Participation Guidelines for Victorian CMAs: Implementation Plan – Pathways to Participation' key outcomes delivered against	per cent	n/a	91	100	100	100
	TO groups participating in forums (formal & informal) to inform project planning and delivery processes	per cent of Registered Aboriginal Parties	100	100	100	100	100
	TO groups participating in the delivery of NRM focused activities	per cent of Registered Aboriginal Parties	0	100	100	100	100
	Participants at engagement activities identifying as Aboriginal or Torres Strait Islander people	per cent of respondents	6	12	17	28	18
Recognise recreational values							
Ministerial Expectation: Increased consideration of social and recreational values in waterway health and environmental water planning and management.	Waterway projects supporting recreational outcomes identified and progressed through collaboration with local stakeholders (number)	number	-	-	3	3	5

Table 3 | Performance against 2020–21 'Community Capacity for NRM' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Community engagement & partnerships						
Ministerial Expectation & Mallee RCS: Build extensive, effective and consistent approaches to community engagement and partnerships in regional planning and implementation	Communication and Engagement Plans developed, implemented and reported to meet internal and/or government requirements	number	9	9	0	✓
	Formal community and regional delivery partner forums facilitated/ coordinated to meet government and/or internal requirements	number	21	23	- 9	■
Ministerial Expectation & Mallee RCS: Work collaboratively with organisations and communities to strengthen engagement approaches and capacity	Formal partnerships established/ maintained	number	99	94	4	✓
	Management agreements established/ maintained with land managers (public and private) to deliver targeted NRM activities	number	47	47	0	✓
	Funding allocated to Community Grants expended (i.e. provided to community groups)	per cent	100	100	0	✓
Mallee RCS: Develop and implement education programs which increase awareness of the Mallee's natural, cultural and productive values; and encourage actions which contribute to their protection	Participants attending engagement events	number	6,275	3,971	58	✓
	Participants rating engagement activities as 'good' or 'excellent'	per cent of respondents	98	>90	0	✓
	Communication materials produced and disseminated	number	327	288	14	✓
Mallee RCS: Support land managers act as responsive and effective stewards of our natural, cultural and productive landscapes	Funding allocated to land manager incentives/grants expended (i.e. provided to private land managers)	per cent	77	100	- 23	■
Mallee RCS: Strengthen and communicate the region's NRM evidence base to support continuous improvement in planning, delivery, and reporting processes	Assessments undertaken to inform regional evidence base	number	534	485	10	✓
Recognise and support Aboriginal cultural values and economic inclusion in the water sector						
Ministerial Expectation: Engage with Traditional Owners in water planning and management and report on outcomes	Engagements with Traditional Owner groups in water planning and management	number	29	26	12	✓
	Reports detailing outcomes of Traditional Owner engagements	number	6	4	50	✓
Mallee RCS: Support Indigenous communities to participate in the development, delivery, and evaluation of NRM programs and activities	Engagement event participants identifying as Aboriginal or Torres Strait Islander people	per cent of respondents	18	>15	0	✓
	Aboriginal people represented on CMA committees/reference groups	per cent of representation	31	>25	0	✓
	Plans/reports provided to government detailing plans for Aboriginal inclusion, participation, engagement and employment	number	7	7	0	✓

Continued...

Table 3 | Performance against 2020–21 'Community Capacity for NRM' activity measures *Continued...*

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Recognise recreational values						
Ministerial Expectation: Engage with the community to identify and prioritise opportunities to deliver recreational objectives relating to the management of water and waterways	Community consultation events and/or surveys undertaken to identify recreational values/priorities for local waterways	number	18	10	80	✓
Ministerial Expectation: Collaboration with other organisations and government agencies to explore and progress opportunities to support recreational values	Activities supporting recreational outcomes identified/progressed through collaboration with local stakeholders	number	5	5	0	✓
Ministerial Expectation: Provide accessible and user-friendly information for recreational users about waterway conditions to assist community members plan recreational activities	Online information systems (i.e. Website, Facebook) promoting recreational opportunities provided by Mallee waterways	number	2	2	0	✓





Wildlife Detective Activity Books.

Table 4 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Community Capacity for NRM' activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Waterway Health Program	<p>Projects including the On-Ground Works & Community Engagement (Flagship Waterways), Water Statutory Functions, and Ramsar Management are supported by the Mallee CMA, through funding from the Victorian Government's Waterway Health Program.</p> <ul style="list-style-type: none"> • 19 targeted events (165 participants) to engage stakeholders in the identification and planning of priority management actions. This included working with Traditional Owners, land managers and community members to plan track restoration and crossing installation works at Merbein Common and Kings Billabong, the region's 2020–24 Flagship Waterway sites. • 6 formal partnerships established/maintained to facilitate coordinated approaches to the development, implementation, and review of regional waterway health-related activities. This included the ongoing coordination/facilitation of the Hattah Ramsar Coordinating Committee, which was established to manage the implementation of the Ramsar site management plan. 11 committee meetings were conducted throughout 2020–21; with Mallee CMA, Parks Victoria and DELWP representatives supporting coordinated approaches to project development, implementation, and co-investment/leveraging opportunities. • 1 monitoring, evaluation and reporting (MER) plan established for the Merbein Common 2020–24 delivery sites to support ongoing assessments of delivery and associated impacts (i.e. condition change). Monitoring of key indicators (e.g. rabbit abundance and impact) was also undertaken to implement the MER plan and inform the delivery of future works programs.
Environmental Water Program	<p>Projects including Environmental Watering Reserve Officers and Community Engagement (Connecting Communities to Waterways) are supported by the Mallee CMA, through funding from the Victorian Government's Environmental Water Program.</p> <ul style="list-style-type: none"> • 28 publications disseminated to promote the region's waterway values and the shared benefits of environmental watering. These included targeted materials (e.g. flyers, media releases, videos, social media posts) to promote seasonal watering proposals, opportunities for the community to be involved, and delivery outcomes. 'Wildlife Detective' Activity Books were also produced for Merbein Common and Lindsay Island, building on the priority waterways encompassed by this popular educational resource. • 52 engagement activities delivered (300 participants) with a focus on developing water literacy for key stakeholders (including Talk Water On-Country events) and connecting the community to local waterways through participation in Citizen Science based programs (e.g. bird and frog monitoring). • 10 agreements established with landholders/managers to enable delivery of water to privately owned wetlands and to undertake works at public wetland sites. • 213 assessments (e.g. cultural, fauna, flora, surface water) to monitor inundation extent and ecological responses to watering. <div> </div> <p>Merbein Common Wildlife Detective Activity Book.</p>
Aboriginal Water Officer	<p>The Aboriginal Water Officer project is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • 5 publications (e.g. media article, video, social media post) promoting inclusion of Aboriginal values and uses in water planning and management. • Participating in 2 key partnership forums, the state-wide Aboriginal Water Officer Network, and the Mallee Aboriginal Reference Group. • Supporting development of key planning documentation (e.g. Seasonal Watering Proposals, Environmental Water Management Plan (EWMP) updates), incorporating and promoting Aboriginal values and interests. • 4 Talk Water events (130 participants) supported/hosted On-Country with Traditional Owners and Aboriginal communities to promote Aboriginal water values and aspirations. <div> </div> <p>Talk Water event at Catfish Billabong.</p>


Continued...

Table 4 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Community Capacity for NRM' activities and associated performance targets *Continued...*

Program/Initiative	Key 2020–21 outputs and achievements
Waterway Environmental Works	<p>The Catfish Environmental Regulator project is supported by the Mallee CMA, through funding from the Victorian Government's Building Works stimulus package – Waterway Environmental Works component.</p> <ul style="list-style-type: none"> • 1 stakeholder engagement plan developed and implemented, with 10 associated events delivered (52 participants). This included consultation with Traditional Owners and commencing implementation of a community engagement campaign (e.g. attendance at local community group meetings, social media posts) to communicate the importance of the project, the benefits it will provide, and the significance of the site (Merbein Common). • 1 formal partnership through the establishment and coordination of stakeholder working group.
Sustainable Irrigation Program	<p>Implementation of the Victorian Mallee Irrigation Region Land and Water Management Plan project is supported by the Mallee CMA, through funding from the Victorian Government's Sustainable Irrigation Program.</p> <ul style="list-style-type: none"> • 11 publications disseminated to promote and/or report key 2020–21 activities including materials (media articles, brochure, guidelines) promoting the 2021 Mallee Irrigation Incentive Program (MIIP). • Participation in key policy and partnership forums, including: the Victorian Salt Disposal Working Group, statewide Sustainable Irrigation Program forum, Seasonal Annual Use Limit (AUL) Adjustment Review Panel, and Regional Watering Monitoring Partnership. • Release of the 2020-2029 Victorian Mallee Irrigation Region Land and Water Management Plan (LWMP) following DELWP endorsement in December 2020. • 2 on-farm (119 ha) Irrigation and Drainage Management Plans (IDMP) to support improved on-farm water use efficiency, and subsequent reductions in groundwater accessions.  <p>Victorian Mallee Irrigation Region Land and Water Management Plan.</p>
Floodplain Management	<p>Implementation of the Flood and Emergency Resilience project is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • 1 formal partnership with the Mallee Floodplain Management Strategy Implementation Committee, responsible for overseeing the delivery, evaluation and reporting of priority floodplain management activities established by the Mallee Floodplain Management Strategy (MFMS). • Completion of Tyrrell and Lalbert Creek Flow Investigation (assessments) and progressing the Murray River Flood Study to provide regional stakeholders with more accurate data and mapping for improved management of future flood events.
Victorian Landcare Program	<p>The Victorian Landcare Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • Partnerships maintained with 23 regional Landcare groups to provide ongoing coordination and support. • 18 engagement activities delivered (e.g. field days, training workshops, meetings) with 448 participants. This included delivery against the Mallee Landcare Aboriginal Inclusion and Traditional Owner Engagement Plan with an On-Country field trip conducted for Landcare Facilitators, Landcare members and Traditional Owner representatives to promote the cultural values of Lake Tyrrell and associated legislative obligations/ approval processes required for their ongoing protection. Other key events included online grant writing, project management and governance training for Landcare Facilitators. • 32 publications promoting/detailing (media articles, video, reports) annual achievements. • 2019-20 grants provided to Landcare and community groups in the current reporting period also delivered community capacity focused outputs, encompassing: 1 assessment of native fish habitat to determine future management actions that support recreational fishing objectives; 2 ecological assessments of local wetlands; and the distribution of 'bee' education packs to 4 local schools/kindergartens.  <p>Assessing woody habitat.</p>

Continued...

Table 4 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Community Capacity for NRM' activities and associated performance targets *Continued...*

Program/Initiative	Key 2020–21 outputs and achievements
Threatened Species Initiative	<p>The Threatened Species Protection Initiative is supported by the Mallee CMA, through funding from the Victorian Government to progress implementation of the Victorian Biodiversity Strategy.</p> <ul style="list-style-type: none"> • 25 formal partnerships established and/or maintained to facilitate collaborative approach to planning and delivery. • 93 engagement events delivered (672 participants) to facilitate stakeholder/community input into the development and delivery of project activities. This included training activities that provided Traditional Owners with skills and formal accreditation (e.g. Agricultural Chemical User Permit (ACUP)) in delivering on-ground NRM programs. • 35 publications disseminated and promote annual achievements. • 23 management agreements established and/or maintained with private land managers to facilitate the delivery of priority works programs. • 88 assessments (cultural, and invasive species) undertaken to evaluate the effectiveness of on-ground works and help inform future delivery priorities.
Environmental Water Program	<p>The 'Working for Victoria' Agriculture and Environment Employment Programs are supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • The Working for Victoria initiative employed 37 participants to undertake a range of environmental and agricultural focused works across the region. Training in areas such as ACUP, remote first aid, construction induction (white card), traffic management, Cultural Heritage, and Mallee threatened species identification was also provided.
Mallee Salinity Investment Plan	<p>Salinity Offsetting Charges are collected specifically to offset salinity impact of irrigation development from Nyah to the South Australian border.</p> <ul style="list-style-type: none"> • 23 publications developed/disseminated to promote and/or report key activities, including materials (media articles, brochure, guidelines) promoting the 2021 Mallee Irrigation Incentive Program. • 40 engagement events delivered/supported (349 participants), including utilising the upgraded Salinity Trailer at the Mildura Irrigation Field Days to provide interactive salinity activities/presentations.  <p>Salinity Trailer at the Mildura Irrigation Field Days.</p> <ul style="list-style-type: none"> • 3 formal partnerships established/maintained to facilitate stakeholder input into the development, delivery, and evaluation of program activities. This includes the ongoing operation of the Salinity Accountability Advisory Committee (SAAC). • Ongoing monitoring of 28 surface water sites (flow and salinity) and 436 groundwater bores (depth and salinity) to inform associated modelling and reporting requirements. This included the construction of 4 new bores in 2020-21. • Progressing satellite-based estimations of crop water use and root zone drainage (RZD), enhancing stakeholder understanding of the interactions between RZD and irrigation inputs, crop type, climate etc. • Investigating the processes influencing groundwater recharge under irrigated horticulture. • Preparation of detailed designs for a regional Airborne Electromagnetic (AEM) survey of the Mallee irrigation region from Nyah to South Australian border. • Capturing geospatial imaging (aerial photography) of irrigation areas to inform production of the 2021 Mallee Irrigation Region Crop Report.
Murray-Darling Basin Plan	<p>The Living Murray (TLM) is a joint initiative funded by the New South Wales, Victorian, South Australian, Australian Capital Territory, and Commonwealth governments, coordinated by the Murray Darling Basin Authority.</p> <ul style="list-style-type: none"> • 30 assessments undertaken to support ongoing monitoring of the impacts of TLM investment over time on both threat mitigation (short-term) and resource condition (long-term). Key activities included ongoing monitoring of surface water, fish movement, woodland, and water bird species, and vegetation health within the two Icon Sites (Hattah and Lindsay, Mulcra, Wallpolla). Findings from these assessments were reported through 16 written publications. • 34 events engaged 292 participants in activities such as field days and workshops. Target audiences included Aboriginal stakeholders, private and public landholders, Commonwealth and Victorian Environmental Water Holders, and the Operational Advisory Group (OAG).

Continued...

Table 4 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Community Capacity for NRM' activities and associated performance targets *Continued...*

Program/Initiative	Key 2020–21 outputs and achievements
National Landcare Program	<p>Regional Land Partnership (RLP) Projects including: Core Services, Threatened Species Services, Threatened Ecological Community Services, Soil Services and Ramsar Services are supported by the Mallee CMA through funding provided by the Australian Government's National Landcare Program.</p> <ul style="list-style-type: none"> • 43 engagement events delivered (784 participants) to build stakeholder awareness of and capacity for regional delivery against program priorities including nationally significant threatened species (Malleefowl and Plains-wanderer) and communities (Buloke Woodlands); sustainable agriculture management practices; and Ramsar management activities. Activities included field days, workshops, and training events. Citizen Science approaches were also employed to engage the local community in monitoring priority species/communities and the impact/incidence of associated threat processes. • 7 stewardship management agreements maintained with private landowners covering 84 ha of priority Buloke Woodlands. • 13 community groups (Landcare, NRM community-based groups & farmer groups) to undertake the delivery of targeted on-ground works and/or community engagement events that support progress against RLP outcomes. • Continued, effective function of the Mallee CMA Aboriginal Reference Group in fostering communications with Aboriginal stakeholders and providing input into regional initiatives and plans. • 104 assessments undertaken to support ongoing monitoring of the impacts of investment over time on both threat mitigation (short-term) and resource condition (long-term). Key activities included an annual survey being undertaken by the Birchip Landcare Group to verify the persistence of Plains-wanderer in the southern Mallee; and delivery of the Adaptive Management Predator Experiment (AMPE) in partnership with the National Malleefowl Recovery Team to determine the efficacy and impact of fox baiting programs. • 32 publications disseminated to engage stakeholders and promote delivery against National Landcare priorities. These included 8 social media posts; 13 written publications (factsheets, media releases, poster displays); 6 virtual tours of local research trials; 1 ABC radio interview and 1 podcast; 1 YouTube clip; and 2 editions of the 'Mallee Farmer Newsletter'. Collectively these products are estimated to have had an audience of over 20,000 people.



Scouts, Blackbox revegetation at Hattah.



Land and Water Advisory Committee at the TAFE Smart Farm.

Theme: Waterways

Mallee CMA is the regional caretaker for waterway health and relies on the development and implementation of robust and effective management plans at a national, state, regional, and local level to address key threatening processes in an integrated and targeted way. By continuing to work with regional partners and local stakeholders to deliver against priorities identified under this framework, the Mallee CMA is seeking to deliver against the following Waterway-related outcome:

- *Priority waterways and associated riparian habitat are providing enhanced social, economic and environmental services to the community.*

Delivery against this outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Water for Victoria (2016)
- Mallee Waterway Strategy (2014–2022)
- Hattah-Kulkyne Lakes Ramsar Site Ecological Character Description (2011) and Annual Work Plan (2020–21)
- Ministerial Expectations for 'waterway and catchment health' and 'recognise recreational values' (2020–21)
- Mallee Floodplain Management Strategy (2018).

Outcome Indicators and Performance Measures

Progress against these strategic outcomes is measured through organisational performance against four key indicators. These indicators are presented according to the Ministerial 'Priority Area' with which they align (see Table 5).

Delivery of over 120,000 hectares of environmental works over the 2016–2021 reporting period represents significant progress against both the short-term (activity/output) and medium-term (outcome) targets set by the Mallee Waterway Strategy 2014–2022 (MWS) for priority waterways within each of the region's 23 Waterway Management Units.

Management of the four sites identified by Water for Victoria (2016) as a priority for the Mallee (i.e. Merbein Common wetlands, Lindsay-Wallpolla Islands, Belsar-Yungera Floodplain complex, Kings Billabong and Woollong complex) has continued to be a priority under state funded Waterway Health programs; supporting the delivery of environmental, economic, social and cultural outcomes at each site. Of particular note is the suite of works implemented at the Merbein Common wetlands site, Mallee CMA's 2016–2024 Flagship Waterway project titled 'There's nothing common about Merbein Common'.

This initiative delivered significant improvements in habitat condition by rationalising non-arterial user made tracks and repairing key access roads, controlling priority pest plants, and establishing native vegetation. Application of this approach is also being built on through commencement of a new flagship site at Kings Billabong.

Delivering 39,776 ML of environmental water to 40 regional waterways (inundating 9,915 hectares of priority floodplain habitat) in the 2020–21 reporting period represented a significant increase from the 2018–20 seasons, when dry conditions were experienced across the region. Eleven of the 18 lakes within Hattah-Kulkyne National Park were watered as part of this year's program; promoting further improvements in the ecological character of this internationally recognised site, and providing critical water refuges that are supporting a high abundance and diversity of waterbirds.

Delivery of targeted works programs through the Regional Land Partnership Ramsar Services project has also facilitated an increase in the area of pest animal control undertaken in the current (2020–21) reporting period. The four-year (2019–2023) Commonwealth-funded project aims to maintain key invasive species (e.g. foxes, rabbits, goats, pigs) below critical thresholds within the Hattah Ramsar site, and ensure that the benefits of these environmental watering events can be fully realised.

The Mallee CMA places high importance on enhancing the recreational values of our priority waterways to support the well-being of rural and regional communities; with 60 individual visitor facilities installed over the past three years. This included picnic and camping facilities, fishing platforms, canoe launches, walking tracks, and interpretation/appreciation signage.

Further detail on Waterway condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2020–21 is provided in the Waterway section of the Condition and Management Report (see Appendix 2).

Activity Indicators and Performance Measures

Performance against our organisations 2020–21 priority activities for progressing Waterway outcomes, including actual delivery against budgeted targets are provided in Table 6. Overall, 100 per cent of performance targets were achieved or exceeded over the reporting period.

The significant over-achievement against 2020–21 targets for weed control, exclusion fencing, and native vegetation and visitor facilities was a result of additional works being undertaken the Working for Victoria Employment Program participants. This initiative did not have associated performance measures specified and all works are complementary to those delivered under annual/ongoing funding agreements.

Key initiatives and projects

Initiatives that supported our delivery against the priority activities and associated performance targets in 2020–21 included both state and Commonwealth funded programs. An overview of their contribution in relation to waterway management is provided in Table 7.

Table 5 | Progress against performance measures for 'Waterway' strategic outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Waterway and Catchment Health							
Ministerial Expectation: Increased delivery of watering regimes which meet environmental objectives	Watering regimes delivered to meet environmental objectives (i.e. as per Environmental Watering Management Plan)	number	54	48	48	34	48
		hectares	8,633	6,696	559	2,557	9,915
Mallee RCS: Improved health of priority waterways & their catchments	Waterways treated for priority pest animal species	hectares	8,716	34,748	8,624	5,714	16,986
	Waterways treated for priority weed species	hectares	1,783	8,149	3,310	2,178	3,139
	Native vegetation established	hectares	6	32	100	6	11
	Road rationalisation and repair works	kilometres	2	4	37	18	0
	Exclusion fencing installed	kilometres	80	25	39	27	49
Mallee RCS: Increased understanding, communication and management of Mallee flood risks	Mallee Floodplain Management Strategy priority management actions progressed	per cent	-	-	-	69	69
Recognise recreational values							
Ministerial Expectation: Increased amenity and recreational values provided by regional waterways	Watering regimes delivering against recreational objectives	per cent	100	100	100	100	100
	Visitor facilities installed	number	0	7	25	25	3




Catfish Billabong.

Table 6 | Performance against 2020–21 'Waterway' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Waterway and Catchment Health						
Mallee RCS: Implement priority management activities established by the Mallee Waterway Strategy (2014–2022) and related actions in Water for Victoria (2016); with a priority focus on the region's large-scale waterway projects outlined in Water for Victoria	Waterways treated for priority pest animal species	hectare	16,986	16,786	1	✓
	Waterways treated for priority weed species	hectare	3,139	1,820	72	✓
	Native vegetation established	hectare	11	0	100	✓
	Exclusion fencing installed/maintained	kilometre	49	0	100	✓
	Water for Victoria identified priority sites managed to support delivery against identified environmental, economic, social and cultural outcomes	number	4	4	0	✓
Water Act SoO: Implement the Murray-Darling Basin Authority's The Living Murray Program (TLM) at Lindsay, Mulcra and Wallpolla Islands; and Hattah Lakes	TLM sites managed, monitored and reported as per contractual/government requirements	number	2	2	0	✓
Water Act SoO: Develop and implement Seasonal Watering Proposals to align with and deliver against site based Environmental Watering Management Plans (EWMPs)	Seasonal Watering Proposals submitted annually in line with stated requirements and accepted by associated partners/stakeholders	number	4	4	0	✓
	EWMPs reviewed annually	per cent	100	100	0	✓
	Watering regimes delivered annually	number	48	46	4	✓
Mallee RCS: Implement priority actions established by the Mallee Floodplain Management Strategy (MFMS) (2018)	MFMS priority management actions progressed by annual works programs	per cent	69	69	0	✓
	Annual outputs delivering against MFMS priority management actions	number	10	10	0	✓
Recognise recreational values						
Ministerial Expectation: Plan for and provide water services that explicitly consider recreational values as part of existing frameworks	Environmental water delivery events providing recreational benefits annually	per cent	100	100	0	✓
	Visitor facilities established	number	3	0	100	✓

Table 7 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority ‘Waterway’ activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Environmental Water Program	<p>Projects including Environmental Watering Reserve Officers are supported by the Mallee CMA, through funding from the Victorian Government’s Environmental Water Program. Works are focused on the delivery of appropriate water regimes to enhance the environmental and social values of priority waterways.</p> <ul style="list-style-type: none"> • 4 Seasonal Watering Proposals developed in consultation with key project stakeholders (i.e. the Victorian Environmental Water Holder, Parks Victoria, and the Department of Environment, Land, Water, and Planning). These proposals encompassed priority waterways within the Hattah Lakes, Lower Murray Wetlands, Wimmera Mallee Pipeline Wetlands, and Lindsay, Wallpolla, and Mulcra areas. • 30 Environmental Watering Delivery/Management Plans developed for individual sites in consultation with land managers, community groups and other stakeholders. 48 watering regimes to deliver against associated Seasonal Watering Proposal and Environmental Water Management Plan, encompassing: • 46 wetland and 2 river reach environmental water deliveries (39,776 ML) inundating 9,915 ha of priority floodplain habitat, including 23 Wimmera Mallee Pipeline wetland sites and 13 of the 18 Lakes within Hattah-Kulkyne National Park (below).  <p>Environmental water delivery to Hattah.</p>
Basin Plan	<p>The Basin Plan Implementation project is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • Review and refinement of environmental objectives completed for all (30) of the region’s Environmental Water Management Plans. This involved mapping the existing 156 objectives against high level guidance documents (e.g. Basin Plan Environmental Water Plan and Victorian Long-Term Water Plans) to identify/document key drivers and establishing SMART targets against which to measure change. • Providing regional input to reviews of key state level and multi-regional documentation including the Victorian Environmental Water Management Plan Guidelines, Wimmera-Mallee Long-Term Water Plan, and Victorian Murray Long-Term Water Plan.
Floodplain Management	<p>Implementation of the Flood and Emergency Resilience project is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • Progressing delivery against priority actions established by the MFMS Regional Works Plan, including the identification and assessment of flood mitigation infrastructure; and development of the Tyrrell, Lalbert, Culgoa, Mid-Murray flood studies.
Working for Victoria	<p>The Working for Victoria Employment Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • 1,319 ha of weed control undertaken; 3 visitor (e.g. campground) facilities installed; 14 km of exclusion fencing maintained; and 11 ha of riparian revegetation works.
National Landcare Program	<p>Regional Land Partnership Mallee Ramsar Services are supported by the Mallee CMA through funding provided by the Australian Government’s National Landcare Program to support the ecological character of the Hattah-Kulkyne lakes Ramsar site (i.e. 12 listed lakes and associated floodplain habitat).</p> <ul style="list-style-type: none"> • 1,800 ha managed for Weeds of National Significance (e.g. Boxthorn, Bridal Creeper, Prickly pear) to reduce competition within priority black box floodplain habitat and fringing woody vegetation. • 20 ha of Lake Bed Herbland managed for encroaching river red gums through delivery of a targeted ecological thinning program. • Rabbit and feral goat control to reduce grazing impacts within priority river red gum (4,367 ha) and black box (800 ha) floodplain habitat. • Targeted fox control to reduce predation within 319 ha of waterbird breeding habitat. • Targeted feral pig control to reduce soil disruption and weed incursion impacts within 319 ha of Lake Bed Herbland.

Theme: Biodiversity

The Mallee supports a diverse and unique range of flora and fauna. Several species occur here which are found nowhere else in Victoria, and many others are genetically distinct from their northern or southern relatives. This includes 27 species and four communities listed as threatened nationally (i.e. *Environment Protection and Biodiversity Conservation Act*); and 133 species and six communities listed in Victoria (i.e. *Flora Fauna Guarantee Act*).

Native vegetation across the Mallee once covered some 3,919,887 hectares, of which 52 per cent is estimated to have been cleared. Much of the region's remaining vegetation has been reserved in large parks such as Murray-Sunset, Big Desert, Wyperfeld and Hattah-Kulkyne National Parks, extensive tracts of riverine and dryland state forests, and over 500 small reserves scattered throughout the agricultural area. These areas of public land are particularly significant given the largely cleared and fragmented agricultural landscape in which they occur. Remnants on private land, and the roadsides and rail reserves dissecting this land, also represent significant areas of our native vegetation. These are of particular importance for the threatened flora they contain and for the connectivity opportunities they provide to our region's fauna.

Historic native vegetation removal and associated habitat loss and fragmentation makes much of the region's biodiversity vulnerable to a range of threatening processes. This can include invasive plants and animals, inappropriate fire regimes, constrained regenerative capacity, recreational pressures and land-use change. By working with our community and delivery partners to address these key threats, the Mallee CMA is seeking to deliver against the following Biodiversity-related outcomes:

- *The viability of targeted threatened species and communities is being protected and enhanced;*
- *The ecosystem services provided by targeted terrestrial habitat are being protected and enhanced.*

Delivery against these outcomes will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Protecting Victoria's Environment – Biodiversity 2037 (2017)
- Australian Government's Threatened Species Strategy (2015–2020)
- Commonwealth and Victorian Recovery Plans/ Action Statements for target threatened species and communities
- Mallee Biolinks Plan (2016–2019).

Outcome Indicators and Performance Measures

Progress against these strategic outcomes is measured through organisational performance against two key indicators (see Table 8).

Delivery of over 1.7 million hectares and 235 kilometres of environmental works over the 2016–2021 reporting period represents significant progress against federal, state and regional targets for Mallee biodiversity. This includes the re-establishment or enhancement of priority habitat through tubestock planting and direct seeding; targeted pest plant and animal control to reduce competition, grazing and predation impacts; and exclusion fencing to protect priority remnants from overgrazing.

The area of priority pest plant and animal control increased significantly in 2017–18 with the commencement of the State Government's Threatened Species Initiative. The program is delivering against actions identified by the Victorian Biodiversity Strategy (Protecting Victoria's Environment – Biodiversity 2037) as being a priority for the Mallee to support the recovery of 18 threatened species (e.g. Mallee Emu-wren, Regent Parrot, Malleefowl, Carpet Python, Mallee Worm Lizard, Yellow Swainson-pea) and four threatened ecological communities (e.g. Buloke Woodlands, Mallee Bird Community) across eight priority landscapes.



Tubestock planting near Birchip.

Ongoing implementation of the National Landcare Program (NLP) is delivering against national priorities for threatened species and threatened ecological communities. Targeting delivery to improve the connectivity of critical Malleefowl habitat and to support the recovery of Buloke Woodlands in the southern Mallee is building on the outcomes achieved under previous (2013–2018) NLP funding. An additional focus on Plains-wanderer is also delivering actions to validate the persistence of this priority species across the southern Mallee and support improvements in suitable habitat.

Broader terrestrial habitat improvement outcomes are also being progressed through the delivery of both targeted works and landscape-scale programs (e.g. works delivered under Victorian Landcare Grants).

Further detail on Biodiversity condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2020–21 is provided in the Biodiversity section of the Condition and Management Report (see Appendix 2).

Activity Indicators and Performance Measures

Performance against the organisations 2020–21 priority activities for progressing Biodiversity outcomes, including actual delivery against budgeted targets are provided in Table 9. Overall, 91 per cent of performance targets were achieved or exceeded over the reporting period, with one measure within 5 per cent variance. This variance relates to Regional Land Partnership (Commonwealth) Buloke revegetation project, with 28 ha of tubestock planting delayed by a combination of dry conditions and extended COVID-19 lockdown settings within the southern Mallee target area. Extending delivery timeframes from May to June in response to these delays did however provide for the remaining 92 ha to be completed in 2020–21.

Key initiatives and projects

Initiatives that supported our delivery against the priority activities and associated performance targets in 2020–21 included both state and Commonwealth-funded programs. An overview of their contribution in relation to Biodiversity is provided in Table 10.

Table 8 | Progress against performance measures for 'Biodiversity' outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Mallee RCS: Improved ecosystem services provided by targeted terrestrial habitat	Habitat treated for priority pest animal species	hectares	93,008	457,370	327,306	280,967	269,772
	Habitat treated for priority weed species	hectares	48,251	158,882	123,756	108,297	120,199
	Native vegetation established	hectares	609	269	463	434	523
	Exclusion fencing installed	kilometres	95	31	25	5	71
Mallee RCS: Improved viability of targeted threatened species and communities	Threatened flora species targeted by works programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	3	3	3	3
	Threatened fauna species targeted by work programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	18	18	16	16
	Threatened ecological communities targeted by works programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	4	4	4	4


Table 9 | Performance against 2020–21 'Biodiversity' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Mallee RCS: Support implementation of Victoria's strategic plan for valuing and managing biodiversity into the future, Protecting Victoria's Environment – Biodiversity 2037 (2017); by delivering against actions identified as a priority for the Mallee	Habitat treated for priority pest animal species	hectare	269,772	264,603	2	✓
	Habitat treated for priority weed species	hectare	120,199	107,674	17	✓
	Native vegetation established/maintained	hectare	523	545	- 4	○
	Exclusion fencing installed/maintained	kilometre	71	0	100	✓
Mallee RCS: Support implementation of Australian Government's Threatened Species Strategy (2015–20); by delivering against species and actions identified as a priority for the Mallee	Australian Government identified priority threatened species which occur in the Mallee targeted by works programs	per cent	80	80	0	✓
	Priority habitat managed to support recovery of threatened species identified by the Australian Government as a priority for the Victorian Mallee	hectare	148,451	135,000	10	✓
Mallee RCS: Align the delivery of threatened species and communities programs with associated Action Statements and Recovery Plans	Threatened flora species targeted by works programs to deliver against associated Action Statement/Recovery Plan	number	3	3	0	✓
	Threatened fauna species targeted by works programs to deliver against associated Action Statement/Recovery Plan	number	16	16	0	✓
	Threatened ecological communities targeted by works programs to deliver against associated Action Statement/Recovery Plan	number	4	4	0	✓
Mallee RCS: Implement priority actions established by the Mallee Biolinks Plan (2016–19)	Mallee Biolinks Plan priority landscapes and corridors included in works programs	per cent	77	>75%	0	✓
	Mallee Biolinks Plan priority management actions delivered against	per cent	93	>75%	0	✓



Malleefowl. Image credit: DELWP.

Table 10 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority Biodiversity activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Threatened Species Initiative	<p>Biodiversity Response Planning projects are delivered by the Mallee CMA, through funding from the Victorian Government to progress implementation of the Victorian Biodiversity Strategy.</p> <p>Delivery against actions identified by Victoria's Biodiversity Strategy (Protecting Victoria's Environment – Biodiversity 2037) as being a priority for the Mallee. Targeted works implemented to support the recovery of:</p> <ul style="list-style-type: none"> • 16 threatened species (e.g. Mallee Emu-wren, Regent Parrot, Malleefowl, Carpet Python, Mallee Worm Lizard, Yellow Swainson-pea). • 4 threatened ecological communities (e.g. Buloke Woodlands, Mallee Bird Community); across 11 priority landscapes (Annuello, Wandown, Cardross Lakes, Hattah-Kulkyne Lakes System & National Park, Wyperfeld Dunefields, Wathe Dunefields, North Wimmera Creeklines, Pink Lakes, Murray River Floodplain: Nyah to Robinvale, Avoca Basin Terminal Lakes System and Creeklines, North West Woodlands). <p>Key 2020-21 activities delivered in partnership with land managers and community groups included:</p> <ul style="list-style-type: none"> • 196 ha of native vegetation planted to re-establish critical habitat. • 93,190 ha of habitat managed for priority weeds (e.g. boxthorn, cactus, bridal creeper, buffel grass). • 242,187 ha of habitat managed for priority pest animals to support reduced grazing, disturbance and predation outcomes (i.e. rabbits, feral goats, feral pigs, foxes, and feral cats).
National Landcare Program	<p>Regional Land Partnership Threatened Species Services and Threatened Ecological Community Services are supported by the Mallee CMA through funding provided by the Australian Government's National Landcare Program to progress delivery of the national Threatened Species Strategy (2015–20) and National Recovery Plans.</p> <p>Funding secured under the Federal Government's Regional Land Partnerships Program 'Threatened Species' and 'Threatened Communities' Services delivers against priority actions for the Mallee identified by the Australian Government's Threatened Species Strategy (2015-20). Targeted works implemented in partnership with land managers and community groups to support the recovery of two threatened species (Malleefowl, Plains-wanderer) included:</p> <ul style="list-style-type: none"> • 86 ha of vegetation corridors established/enhanced (tubestock and direct seeding) to reconnect isolated Malleefowl populations with core habitat; and 300 ha of 2018–20 plantings maintained through supplementary planting and following watering/invasive species management. • 24,000 ha of critical Malleefowl and Plains-wanderer habitat managed for rabbits and feral goats to reduce grazing impacts and support regeneration outcomes. • 14,344 ha of critical Malleefowl and Plains-wanderer habitat managed for Weeds of National Significance (e.g. Boneseed, Boxthorn, Bridal Creeper). • 14,597 ha of targeted fox control delivered in partnership with Malleefowl Recovery Group as part of the national Adaptive Management Predator Experiment. <p>Delivery against priority actions identified by the National Recovery Plan for Buloke Woodlands progressed through the implementation of works programs within the Avoca Basin and Yarriambiack target areas:</p> <ul style="list-style-type: none"> • 92 ha of key canopy and understory species re-established (tubestock and direct seeding within degraded remnants). • 2,068 ha managed for Weeds of National Significance (e.g. Boxthorn, Bridal Creeper, Hudsons Pear) to reduce competition. • 15,121 ha managed for rabbits to reduce grazing impacts and promote regeneration.  <p>Tubestock planting in vegetation corridors.</p>
	<p>The Victorian Landcare Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <p>2019-20 grants provided to Landcare and community groups were completed in the reporting period, delivering the following biodiversity outputs:</p> <ul style="list-style-type: none"> • 18,000 ha of rabbit control and 51 ha of weed control within priority roadside vegetation • 19 ha of revegetation to re-establish indigenous species within degraded landscapes
Working for Victoria	<p>The Working for Victoria Employment Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • 1,710 ha of rabbit control, 11,473 ha of weed control undertaken; and 50 km of exclusion fencing maintained.

Theme: Land

Despite the semi-arid nature of the region, the predominance of winter rainfall and access to reliable water from the Murray River has allowed the Mallee to develop into an agriculturally diverse region, with important irrigation areas in the north along the Murray, and extensive dryland cropping and grazing areas in the south, east and west. In total, some 62 per cent of the region's area is utilised for agricultural production.

The productive capacity of our agricultural lands rose steadily over the last half of the twentieth century in response to increased mechanisation, improved management techniques, and genetic improvement of crops. Today, agriculture remains our major land use and most economically-important industry. Dryland farming in the region covers some 2.4 million hectares and includes the cropping of a wide variety of cereals, pulse and oilseed crops such as wheat, barley, vetch, lupins, and canola.

The productivity of our agricultural lands is, however, vulnerable to a number of processes and management practices (both historical and current), which play a major role in determining the impact of threats such as salinity, erosion, and invasive plants and animals. If not managed appropriately, these processes have the potential to degrade our agricultural land and potentially reduce the area available for production into the future.

By continuing to work with regional delivery partners, the Mallee CMA is seeking to support irrigators and dryland farmers to deliver against the following Land-related outcome:

- *Management practices are being implemented to optimise the productive capacity of agricultural land while protecting associated natural values.*

Delivery against this outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Mallee Dryland Sustainable Agriculture Strategy (2017–2023)
- Victorian Mallee Irrigation Region Land and Water Management Plan (2011)
- Water for Victoria (2016)
- Basin Salinity Management 2030 Strategy
- Ministerial Expectations for Water for Agriculture (2020–21)

Outcome Indicators and Performance Measures

Progress against strategic outcomes is measured through organisational performance against two key indicators (see Table 11); one in relation to irrigated land, and one for dryland agriculture.

Irrigated land

Between 2015 and 2020 the irrigable area has increased by 5,000 hectares, with the rate of this expansion demonstrated by the 2,470 hectares (3 per cent) increase from mid-2018 to mid-2019 which is on par with the average expansion recorded from 2003 to 2006, the second highest growth rate since 1997.

Annual calculations of salinity credit consumption through irrigation development is a key regional reporting requirement under both Basin Salinity Management (BSM) 2030 and the *Catchment and Land Protection Act 1994*. During this reporting period significant changes were



Dryland crop near Birchip.

made to the Nyah to SA Border Salinity Management Plan Accountable Action with its Register A entry revised down from 17.6 EC to 13.4 EC, and a shift from medium to high confidence. These changes represent a major achievement that concludes four years of investment in model development and salinity impact investigations.

The progressive total of salinity debits is now estimated at 15.25 EC, with the 4.2 EC reduction for the Nyah to SA border irrigation and no change to the impact from Nyah to Colignan. With a total salinity credit allocation of 23.22 EC the region is currently 7.97 EC in credit overall, and remains compliant at a regional scale.

Delivery of the Mallee Irrigation Incentive Program (MIIP) in partnership with Agriculture Victoria (Department of Jobs, Precincts and Regions) over the 2016–2021 reporting period provided an effective mechanism to promote sustainable irrigation management practices and support the growth and viability of regional communities. The MIIP represents an integrated package of measures to encourage improved planning and management of irrigation and drainage systems. It provides financial assistance for improved irrigation management, for system upgrades, for skills development and planning at the farm level. All financial incentives are based on cost-sharing arrangements between the MIIP and irrigators and are supported by two separate initiatives.

Incentives funded under the Victorian Sustainable Irrigation Program focus on supporting on-farm works and measures to improve irrigation management and water efficiency. Salinity impact offset charges collected by water authorities are managed under the Mallee Salinity Investment Plan and support the implementation of works which will secure future salinity benefits by reducing salt loads to the Murray River. Over the 2016–2021 reporting period, these two programs collectively improved 2,237 hectares of irrigation infrastructure, encompassing 1,456 hectares of irrigation upgrades/conversions and the installation of 781 hectares of scheduling equipment. The water use efficiency gains achieved by these works is estimated to be a reduction of 4,730 ML, with salinity benefits estimated to be 13,848 tonnes/year in salt to the Murray River.

Delaying delivery of the 2020–21 MIIP to align with completion of a state-wide review of irrigation incentive programs (and enable associated recommendations to be incorporated into regional delivery processes) reduced the contribution of these works in the current reporting period. With a high level of irrigator interest recorded following the program's launch on 30 April 2021, it is anticipated that associated gains will be achieved through 2021–22 delivery.

Dryland agriculture

The Mallee CMA's delivery against dryland agriculture outcomes is primarily funded under the Commonwealth's National Landcare Program (NLP). The completion

of Phase 1 (2013–2018) of this initiative and the commencement of Phase 2 in 2018–19 has seen a key change in the delivery mechanisms being applied to achieve both investor and regional priorities. The NLP Regional Land Partnerships funding stream identified activities supporting increased groundcover (and reducing wind erosion) and soil organic carbon as investment priorities for the Victorian Mallee. The provision of incentives to private land managers to undertake associated threat mitigation works was not however eligible under the program, meaning support for actions such as dune reclamation, stock containment, and discharge management was not provided over the 2019–2021 period (other than as part of external initiatives such as dry seasonal conditions support packages).

In response to these changes, the Mallee CMA's NLP Phase 2 funded Soils program is focusing on building the awareness, knowledge, and skills of land managers in relation to implementing improved management practices (as reported under Objective 1 - Community capacity for NRM of this performance report). The delivery of on-ground research and development sites to identify, validate and promote improved management practices also re-commenced in 2019–20 to further support these outcomes.

The Mallee Dryland Sustainable Agriculture Strategy (2017–2023) establishes a groundcover target of >50 per cent to minimise the risk of wind erosion across the region's cropping areas. Performance against this target is reported annually in March, which represents a period of high erosion risk. Between 70 per cent and 95 per cent of the region achieved this target over the 2016–2021 reporting period. The low (70 per cent) figure reported for 2019–20 is largely a response to the well below average rainfall levels experienced across the region over an extended period, rather than any indication of widespread returns to inappropriate land management practices.

Further detail on Land condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2020–21 is provided in the Land section of the Condition and Management Report (see Appendix 2).

Activity Indicators and Performance Measures

Performance against the organisations 2020–21 priority activities for progressing Land outcomes, including actual delivery against budgeted targets are provided in Table 12. Overall, 100 per cent of performance targets were achieved or exceeded over the reporting period.

Key initiatives and projects

Initiatives which supported our delivery against the priority activities and associated performance targets in 2020–21 included state, Commonwealth and regionally funded programs. An overview of their contribution in relation to Land management is provided in Table 13.

Table 11 | Progress against performance measures for 'Land' strategic outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Irrigated Land							
Ministerial Expectation & Mallee RCS: Improved productivity & resilience of the Victorian Mallee irrigation sector	Irrigable area	hectares	n/a	78,775	81,150	81,245	81,245
	Irrigation infrastructure upgrades/ conversions	hectares	193	276	582	379	26
	Irrigation scheduling equipment installed	hectares	161	196	182	220	22
	Estimated water use efficiency (WUE) gains achieved by works	ML	1,292	1,199	1,036	1,066	137
	Estimated salinity benefits (i.e. reduced irrigation recharge) achieved by works	tonnes/year reduction in salt to Murray River	3,112	2,770	3,312	4,171	483
	Salinity credit uptake	EC at Morgan	17.30	17.86	18	18.46	15.25
Dryland Agriculture							
Mallee RCS: Improved productive capacity & resilience of dryland agricultural soils within the Victorian Mallee	On-ground research and demonstration (R&D) sites managed to identify, validate and promote improved management practices	number	10	10	0	1	1
	Stock containment areas established	number	53	26	0	0	0
	Sand dunes reclaimed	number	11	26	0	0	0
	Vegetation (non-indigenous) established for salinity management	hectares	39	95	0	0	18
	Proportion of the Mallee with more than 50% groundcover in March	per cent	95	95	71	70	82



Irrigated Rockmelon farm.



Table 12 | Performance against 2020–21 'Land' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Irrigated Land						
Mallee RCS: Implement priority actions established by the Victorian Mallee Irrigation Region Land and Water Management Plan	LWMP priority management actions progressed as per Ministerial determinations	per cent	100	100	0	✓
Ministerial Expectation: Promote sustainable irrigation management practices to support the growth and viability of regional communities	Irrigation infrastructure upgrades/conversions for improved WUE	hectares	9	9	0	✓
	Irrigation scheduling equipment installed for improved WUE	hectares	0			
Ministerial Expectation: Support implementation and reporting of Victoria's salinity impact obligations under the Basin Salinity Management 2030 Strategy (BSM2030)	Compliance with DELWP guidelines for Annual BSM2030 Implementation Report	per cent	100	100	0	✓
	Accountable action reviews progressed as per BSM2030 Register	per cent	100	100	0	✓
Ministerial Expectation: Implement priorities established by the Mallee's Salinity Investment Plan to offset the salinity impact of new irrigation development between Nyah and the South Australian border	Irrigation infrastructure upgrades/conversions for salinity benefits	hectares	17	35	11	✓
	Irrigation scheduling equipment installed for salinity benefits	hectares	22			
	Annual Mallee Salinity Investment Plan priority activities progressed	per cent	100	100	0	✓
Dryland Agriculture						
Mallee RCS: Implement priority actions established by the Mallee Dryland Sustainable Agriculture Strategy (2017-23)	On-ground R&D sites managed to identify, validate and promote improved management practices	number	1	1	0	✓
	Targeted extension programs delivered to promote sustainable agricultural production systems and improved management practices	number	2	2	0	✓
	Monitoring programs delivered for improved understanding of spatial/temporal variability in land management practices and associated soil health impacts	number	3	3	0	✓



Improved pivot spray management.

Table 13 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Land' activities and associated performance targets *Continued...*

Program/Initiative	Key 2020–21 outputs and achievements
Sustainable Irrigation Program	<p>Implementation of the Victorian Mallee Irrigation Region Land and Water Management Plan project is supported by the Mallee CMA, through funding from the Victorian Government's Sustainable Irrigation Program.</p> <ul style="list-style-type: none"> • 1 deferred 2019–20 Irrigation Incentive works project completed by irrigator to upgrade irrigation infrastructure (9 ha) for improved on-farm water use efficiency and subsequent reductions in groundwater accessions (no incentive works projects completed in 2020–21). • Completion of 3 BSM2030 accountable actions reviews as scheduled; Legacy of History (Dryland Clearance and Irrigation Development), and Nyah to SA Border Salinity Management Plan. • 1 recommendation relating to the Drying of the Drains Accountable Action Review; establishment of additional drainage monitoring sites completed and operational. • Ongoing coordination and communication of the Seasonal Annual Use Limit (SAUL) adjustment process. • Preparation and submission of the 2019–20 BSM2030 Implementation Report as per government requirements; with the salinity impact of irrigation development for Nyah to SA Border SMP revised down from 17.6 EC to 13.4 EC to reflect improvements in associated modelling development and impact investigations. No change was determined for the Nangiloc-Colignan SMP, bringing the total Mallee salinity credit uptake to 15.25 EC as of June 2021; within the 20.62 EC salinity credit allocations for these areas.
Mallee Salinity Investment Plan	<p>Activities delivered by projects funded from Salinity Offsetting Charges (collected specifically to offset salinity impact of irrigation development from Nyah to the South Australian border).</p> <ul style="list-style-type: none"> • 6 deferred 2019–20 Irrigation Incentive works projects completed by irrigators to upgrade irrigation infrastructure (17 ha) and install scheduling equipment (22 ha) for salinity benefit (no incentive works projects completed in 2020–21). • Each of the 10 priority activities established by the Mallee Salinity Investment Plan progressed, encompassing: works and measures to gain salinity credits for Victoria; irrigation incentives for salinity benefit; major projects planning & development; drainage monitoring & maintenance; groundwater monitoring and maintenance; geospatial mapping of irrigation footprint; refining salinity management policy; field validation of district scale root zone drainage estimation; regional capacity development, and irrigation impacts on landscape groundwater systems.  <p>Scheduling equipment.</p>
National Landcare Program	<p>Regional Land Partnership Soils Services are supported by the Mallee CMA through funding provided by the Australian Government's National Landcare Program.</p> <ul style="list-style-type: none"> • Delivery against Regional Land Program priorities for wind erosion and soil organic carbon in partnership with Agriculture Victoria, Birchip Cropping Group, and Mallee Sustainable Farming included: <ul style="list-style-type: none"> • Targeted communication/engagement activities to improve awareness (and ultimately adoption) of alternative farming systems which have the potential to significantly enhance groundcover levels in the northern Mallee. Utilising existing research trial sites, delivery-focused sharing results/interpretations; identifying new/emerging risks and appropriate responses, and validation of key barriers/drivers of change. • Ongoing implementation of the revised Mallee Soil Erosion and Land Use Monitoring Framework to deliver against federal/state/regional MER requirements. • Supporting the maintenance and data collection/collation requirements of two DustWatch nodes located within the region (Walpeup and Werrimull). The data generated is utilised by the national monitoring framework which produces monthly reports on wind erosion indicators such as dust activity/ground cover at a range of scales. • Increasing awareness of farm practices influencing soil carbon by identifying specific issues around awareness/adoption of relevant management practices and applying new decision support tools (e.g. Yield Prophet) to effectively communicate associated impacts on production/profitability.  <p>Mallee Farmer, edition 19.</p>

Theme: Culture and Heritage

The Mallee has been occupied for thousands of generations by Aboriginal people with human activity dated as far back as 33,500 years ago. The region's rich and diverse Aboriginal heritage has been formed through the historical and spiritual significance of sites associated with this habitation, together with the strong connection Traditional Owners continue to have with the Mallee's natural landscapes.

Aboriginal cultural heritage is inextricably connected to our natural landscapes and as such is vulnerable to the same suite of threatening processes (e.g. altered hydrological regimes, soil erosion). Efforts to protect our natural values from these threats can also pose significant risks to cultural sites, particularly where soil disturbance is required (e.g. built infrastructure, invasive species management, and revegetation).

The *Aboriginal Heritage Amendment Act 2016* established new provisions and changes to the *Aboriginal Heritage Act 2006*. The Act provides for the protection of (or minimisation of harm to) Aboriginal Cultural Heritage in Victoria. Aboriginal Cultural Heritage is protected by law, regardless of the land tenure of the sites where the Cultural Heritage is located.

In delivering against our cultural heritage management responsibilities, the Mallee CMA continues to work with regional partners and local stakeholders to deliver the following outcome:

- *Cultural heritage sites are being recognised and protected as an integral component of all land, water, and biodiversity management processes.*

Delivery against this outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- *Aboriginal Heritage Amendment Act 2016*
- Mallee CMA Cultural Heritage Assessment Policy and Procedure (2020)
- Mallee Indigenous Ecological Knowledge Guidelines (2016)
- DELWP Aboriginal Inclusion Plan: Munganin – Gadhaba (2016–2020)
- Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016)
- Mallee CMA Indigenous Participation Plan (2016)
- Pupangarli Marnmarnepu 'Owning Our Future' Aboriginal Self-Determination Reform Strategy 2020–2025.

Outcome Indicators and Performance Measures

Progress against these strategic outcomes is measured through organisational performance against one key indicator (see Table 14).

Since records commenced in 2016, the Mallee CMA has undertaken over 500 Cultural Heritage assessments at proposed works sites. These assessments have been delivered across all areas of our organisation's on-ground works programs (i.e. land, water, and biodiversity) as required by the Mallee CMA Aboriginal Cultural Heritage Compliance Policy (2016); ensuring that all obligations set out by the Aboriginal Heritage Amendment Act 2016 are met. While only limited records exist in regards to the number of formal Cultural Heritage Management Plans (CHMPs) that have been developed, approved, and lodged by Mallee CMA with First Peoples – State Relations; it is evident that these can vary in both number and area in any given year depending on the scale and type of works being implemented.

It is assumed that a site listed on a relevant heritage register is afforded some level of protection, and similarly, sites captured within a CHMP are protected through associated threat/risk mitigation activities. This assumption is applied in determining progress against the organisations stated outcome for Culture and Heritage. Mallee CMA Cultural Heritage Assessment and CHMP processes require that the location of any new (i.e. unregistered) sites identified as part of on-site inspections are provided to First Peoples – State Relations for inclusion on the Aboriginal Cultural Heritage Register and Information System (ACHRIS) database. While records are not kept in regards to the number of sites specifically provided by the Mallee CMA, performance at a regional scale is demonstrated by the total number of additional Aboriginal places and individual components registered in ACHRIS; which since 2016 has been 189 and 535 respectively.

Further detail on Culture and Heritage condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2020–21 is provided in the Culture and Heritage section of the Condition and Management Report (see Appendix 2).

Activity Indicators and Performance Measures

Performance against our organisation's 2020–21 priority activities for progressing Culture and Heritage outcomes, including actual delivery against budgeted targets are provided in Table 15. Overall, all four performance targets were achieved over the reporting period.

Key initiatives and projects

Initiatives that supported our delivery against the priority activities and associated performance targets in 2020–21 included both state and Commonwealth funded programs. An overview of their contribution in relation to Culture and Heritage management is provided in Table 16.


Table 14 | Progress against performance measures for 'Culture and Heritage' strategic outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Mallee RCS: Increased recognition and protection of the region's cultural values	Cultural heritage assessments undertaken by MCMA programs at proposed works sites	number	51	113	144	98	117
	CHMP's approved and lodged by MCMA with First Peoples – State Relations	number	-	5	7	2	1
		area	-	17,916	300	812	2
	Registered Aboriginal Places (ACHRIS)	number	4,274	4,334	4,345	4,405	4,463
	Components Recorded (ACHRIS)	number	5,679	5,832	6,031	6,128	6,214

Table 15 | Performance against 2020–21 'Culture and Heritage' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Mallee RCS: Implement all activities that may affect Indigenous sites, places, values or communities in line with the Mallee CMA Cultural Heritage Assessment Policy and Procedure (2020) to ensure that all obligations set out by the Aboriginal Heritage Amendment Act 2016 are met	Non-compliance reports registered	number	0	0	0	✓
Mallee RCS: Provide opportunities for Aboriginal people to be involved in Cultural Heritage assessments to build practical archaeological skills, facilitate connections with Country, and promote Indigenous ecological knowledge	MCMA Cultural Heritage field assessments engaging and/or employing Aboriginal people	per cent	100	100	0	✓
Mallee RCS: Provide the location of any new (i.e. unregistered) sites identified as part of on-site inspections to AV for inclusion on the Aboriginal Cultural Heritage Register and Information System (ACHRIS) database	MCMA proposed works sites with completed Cultural Heritage assessments/approvals (%)	per cent	100	100	0	✓
	Cultural Heritage Management Plans approved and lodged by MCMA with First Peoples – State Relations	number	1	1	0	✓

Table 16 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Culture and Heritage' activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Waterway Environmental Works	<p>The Catfish Environmental Regulator Project is supported by the Mallee CMA, through funding from the Victorian Government's Building Works stimulus package – Waterway Environmental Works component.</p> <p>1 Cultural Heritage Management Plan lodged: Construction and operation of environmental regulator at Catfish Billabong (2 ha).</p>
Across all Programs	<ul style="list-style-type: none"> All 2020–21 funding initiatives delivering on-ground works programs have contributed to the delivery of 117 Cultural Heritage assessments undertaken at proposed works sites, encompassing >300,000 ha. Through these programs, Mallee CMA demonstrated 100% compliance with obligations as set out by the <i>Aboriginal Heritage Amendment Act 2016</i>.  <p>Canoe Tree.</p>



Promoting Indigenous ecological knowledge.

Theme: Governance and Compliance

As a statutory authority, the Mallee CMA has clear duties and accountabilities set out in legislation. The Statement of Obligations for the *Catchment and Land Protection Act 1994* (CaLP) and the *Water Act 1989*, the *Public Administration Act 2004*, the *Financial Management Act 1994*, and the Mallee CMA's Board Charter of Corporate Governance all provide guidance for the Authority in relation to its governance requirements.

In delivering against these requirements, the Mallee CMA is committed to a high level of corporate governance and to fostering a culture that values ethical behaviour, integrity, and respect. The Mallee CMA Board believes adopting and operating in accordance with high standards of corporate governance is essential for sustainable long-term performance and achievement of priority NRM outcomes.

The Mallee CMA is also committed to building a diverse workforce and a culture of inclusion in all areas of our business by giving our staff a real voice and a sense of being valued for their difference of opinion, style and approach in order to achieve improvements in the way we do business. We do this through leveraging strengths from difference in gender, culture, generational groups, ethnicity, personal preferences, physical and mental abilities, and by respecting people as individuals.

By continuing to focus on strong governance and sustainable business practices for improved transparency, accountability, and inclusiveness; the Mallee CMA is seeking to deliver against the following Governance and Compliance related outcome:

- *Internal governance processes are ensuring compliance with all legislative requirements and statutory functions.*

Delivery against this outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Mallee CMA Risk Management Policy (2021)
- Mallee CMA Cultural Competency Framework (2018)
- Mallee CMA Diversity and Inclusion Plan (2017–2022)
- Mallee CMA HR and Integrity 2020 Strategy
- Mallee CMA Internal Control, Compliance & Integrity Framework (2020)
- Mallee CMA Quality Objectives (2020)
- Mallee CMA Strategic Internal Audit Plan (2020–21)
- Mallee CMA Asset Management Strategy (2019–2021)
- Mallee CMA Fraud and Corruption Prevention Plan (2020–2023)
- Mallee CMA Social Procurement Strategy (2020–21)
- Mallee CMA Workforce Strategy (2019–2022)

- Ministerial Expectations for 'leadership, diversity and culture', and 'improved performance and demonstrating outcomes' (2020–21).

Outcome Indicators and Performance Measures

Progress against this strategic outcome is measured through organisational performance against two key indicators. These indicators are presented according to the Ministerial 'Priority Area' with which they align (see Table 17).

Mallee CMA's commitment to a high level of corporate governance continues to be demonstrated by the ongoing effort invested in retaining ISO 9001:2015 certification for our Quality Management System (QMS). Since achieving accreditation in 2016, annual surveillance audits have not identified any major non-conformities, and the three yearly Accreditation Audit conducted in 2019–20 identified nil major or minor non-conformities. Recertification for the 2019–2022 period was achieved in October 2019. Furthermore, 100 per cent of areas identified for improvement by these audits and annual management reviews continue to be addressed on an ongoing basis.

Our organisation also continues to demonstrate compliance with legislative requirements and statutory functions as set out by the CaLP and Water Acts. This has included incorporation of the 'outcome' based framework, introduced as a whole of government requirement in 2018–19, into annual planning and reporting processes (i.e. Corporate Plan and Annual Report).

Several regional strategies and plans have also been progressed in line with legislated requirements and government guidelines over the 2016–2021 reporting period. This has included completion of the Mallee Floodplain Management Strategy (2018), the Victorian Mallee Irrigation Region Land and Water Management Plan (2020), the Mallee CMA Social Procurement Strategy (2020), the Mallee CMA Indigenous Participation Plan (2021), Seasonal Watering Proposals; and progressing renewal of the 2013–2019 Mallee Regional Catchment Strategy (2021–2027 Mallee RCS scheduled for completion in December 2021).

Delivery against the Mallee CMA Diversity and Inclusion Plan commenced in 2018–19, demonstrating the organisation's commitment to actively building a diverse workforce while encouraging leadership and culture. Key actions undertaken to date include delivering

engagement activities in partnership with diverse community groups (e.g. Sunraysia Multicultural Ethnic Communities), providing staff with cultural awareness training, ensuring appropriate gender balance on recruitment panels, encouraging staff participation in events that promote LGBTIQ awareness and inclusion, and making organisational health and wellbeing initiatives available to all staff.

- Review and renewal of the Mallee CMA Reconciliation Action Plan and Cultural Competency Framework has been deferred to 2021–22 to ensure that key stakeholders (e.g. Traditional Owners and Aboriginal Reference Group) are effectively engaged.
- One of the 13 priority actions established by the Mallee CMA Diversity & Inclusion Plan's 2020–21 'Action Plan' (i.e. promotion of and participation in anti-family violence activities) was not able to be progressed due to the cancellation of planned activities.

Activity Indicators and Performance Measures

Performance against the organisations 2020–21 priority activities for progressing Governance and Compliance outcomes, including actual delivery against budgeted targets is provided in Table 18. Overall, 86 per cent of performance targets were achieved within the reporting period; with both measures that were unable to be progressed as originally scheduled directly impacted by COVID-19 social distancing restrictions, specifically:

Key initiatives and projects

An overview of key initiatives that supported delivery against the Governance and Compliance priority activities and associated performance targets in 2020–21 is provided in Table 19.

Table 17 | Progress against performance measures for 'Governance and Compliance' strategic outcome indicators


Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Improved performance and demonstrating outcomes							
Ministerial Expectation & MCMA QMS: Improved performance & demonstrated results against outcomes	Ongoing maintenance of ISO 9001:2015 Certification achieved in 2016 (<i>major non-conformities findings by annual surveillance audits and three yearly accreditation audits</i>)	number	n/a	0	0	0	0
	Quality Management System (QMS) initiatives implemented to support ongoing improvements/efficiencies	number	n/a	5	4	6	3
	Government approval/acceptance of MCMA Annual Reports, Corporate Plans, Board/Audit and Risk Committee performance assessment reports, and legislated regional strategies/action plans	per cent	100	100	100	100	100
Ministerial Expectation & MCMA QMS: Increased diversity and inclusion in the workplace.	Statutory requirements (permits, referrals, advice, and licenses) responded to within the prescribed period (<20 working days)	per cent	98	100	100	100	100
	Registered stakeholder feedback which is 'positive'	per cent	97	98	89	100	89
	Participants rating the delivery of information at engagement activities as good/excellent	per cent	89	92	97	98	98
Leadership, diversity and culture							
	MCMA Diversity and Inclusion Plan workforce initiatives implemented	per cent	n/a	n/a	97	100	100

Table 18 | Performance against 2020–21 'Governance and Compliance' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Improved performance and demonstrating outcomes						
Ministerial Expectation and MCMA QMS: Collaborate with DELWP and other funding bodies to improve reporting systems and processes	Reporting-focused forums coordinated and/or supported to meet government and internal requirements	number	5	5	0	✓
	Strategic planning, evaluation and reporting frameworks developed/ reviewed in line with government/ internal requirements	number	8	10	- 20	■
Ministerial Expectation and MCMA QMS: Demonstrate outcomes of government investment into waterways & catchment health	Compliance with DELWP 2019-20 Annual Report guidelines	per cent	100	100	0	✓
	Compliance with DELWP 2021-26 Corporate Plan guidelines	per cent	100	100	0	✓
	Compliance with DELWP Guidelines for Board and Audit Committee performance assessment report	per cent	100	100	0	✓
	Participants rating the delivery of information at MCMA events/activities as good/excellent (not fair/poor)	per cent	98	>90	0	✓
	Works on Waterway statutory referrals responded to within required timeframes (< 20 days)	per cent	100	100	0	✓
	MCMA staff, Board, and committee members completing Fraud & Corruption prevention awareness training	per cent	100	100	0	✓
	Compliance with Integrity Tender & HR panel member evaluation and selection processes (Nil non-compliance reports)	per cent	100	100	0	✓
Ministerial Expectation and MCMA QMS: Deliver efficiency through shared services, smarter procurement and lower-cost technology	VMIA Risk Maturity Self-assessment submitted by due date	per cent	100	100	0	✓
	Corrective actions identified by Management Review Action Plan progressed as per scheduled timeframes	per cent	100	100	0	✓
Leadership, diversity and culture						
Ministerial Expectation and MCMA QMS: Implement strategies that will increase cultural diversity in the workforce and gender equality in executive leadership	MCMA Diversity and Inclusion Plan key activities/initiatives progressed	per cent	100	100	0	✓
	Priorities established by the MCMA Diversity and Inclusion Plan annual 'Action Plan' implemented	per cent	92	100	8	■
Ministerial Expectation: Encourage staff participation in the Victorian Public Sector Commission 'People Matter' Survey	Staff participating in 'People Matter' survey	per cent	60	60	0	✓

Part 1 Performance Reporting - Non-financial

Table 19 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Governance and Compliance' activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Catchment Governance Program	<p>The Mallee CMA delivers against corporate and statutory functions set out under <i>Catchment and Land Protection Act 1994</i> through funding support provided by the Victorian Government.</p> <ul style="list-style-type: none"> • 10 Ordinary Board Meetings conducted and ongoing operation of associated sub-committees; including the Audit and Risk Committee (10 meetings) and Remuneration Committee (1 meeting). • Ongoing operation of the Land and Water Advisory Committee, maintaining a two-way communication channel between Board and members of the Victorian Mallee community (3 meetings). • Development, implementation and reporting of business plans to support compliance with legislative obligations; including the 2019–20 Annual Report, 2021–26 Corporate Plan, Diversity and Inclusion Plan 2017–2022, Learning and Development Framework 2019–2022, and Social Procurement Strategy 2019–2021. • 16 information management systems maintained, including: social media platforms and MCMA website; Technology One, financial and document management systems; and Rabid Global Staff and Contractor Induction and Incident Reporting system. Delivery against the organisation's overarching Mallee CMA Information, Communication and Technology (ICT) strategy is ensuring that these individual components are part a coordinated framework which continues to identify efficiency opportunities.  <p>Land and Water Advisory Committee.</p>
Waterway Health Program	<p>Water Statutory Functions as required under Part 10 and 11 of the <i>Water Act 1989</i> are delivered by the Mallee CMA, through funding from the Victorian Government's Waterway Health Program.</p> <ul style="list-style-type: none"> • Delivery against the Mallee CMA statutory responsibilities with regard to floodplain management and works on waterways included: 50 referrals, 24 approvals/advice, and 4 permits. Average response time in 2020–21 was 11 days. • Ongoing application of Floodzoom program, including Planning System module for processing and responding to integration floodplain referrals, advice and works on waterways permits. • Participation in 6 forums, encompassing the state-wide Floodplain Management Forum, Buloke Flood Planning Committee, Mildura Rural City Council Municipal Emergency Management Planning Committee, Mildura Flood Working Group, Swan Hill Rural City Council Residential Land Strategy, and Floodzoom Planning and Spatial Group.



Mallee CMA Diversity and Inclusion Plan.

Theme: Integrated Catchment Management

Mallee CMA programs and projects are developed to deliver against regional priorities detailed in the Mallee Regional Catchment Strategy (RCS) and its associated sub-strategies and plans. The Mallee RCS is prepared under the provisions of the CaLP Act to establish a framework for the integrated and coordinated management of the region's natural, productive and cultural landscapes. Developed in partnership with regional stakeholders, it provides a six-year framework for strategic action to support and focus the ongoing coordinated effort of the region's land managers, government agencies and community groups.

Application of the RCS's integrated and targeted delivery framework to project planning further ensures that available resources are applied effectively and efficiently. Under this framework key threatening processes are addressed across priority landscapes to deliver environmental, social and economic outcomes for multiple asset types (e.g. waterways, biodiversity and community capacity) and their associated natural, cultural and/or productive values.

The RCS monitoring, evaluation, reporting and improvement (MERI) framework is applied to all Mallee CMA programs, projects and associated activities to support continuous improvement and adaptive management processes.

By continuing to apply this approach to the identification and implementation of regional NRM priorities, the Mallee CMA is seeking to deliver against the following Integrated Catchment Management-related outcome:

- *Regional planning, delivery and evaluation processes are supporting integrated and targeted NRM outcomes.*

Delivery against this stated outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Water for Victoria (2016)
- Mallee Natural Resource Management for Climate Change Plan (2017)
- Ministerial Expectations for 'climate change', 'waterway and catchment health' 'improved performance and demonstrating outcomes', and 'resilient and liveable cities and towns' (2020–21).

Outcome Indicators and Performance Measures

Progress against the strategic outcomes is measured through organisational performance against four key indicators. These indicators are presented according to the Ministerial 'Priority Area' with which they align (see Table 20).

Mallee CMA programs and projects are collectively achieving Integrated Catchment Management (ICM) outcomes across the region through their alignment

with regional priorities detailed within the Mallee RCS. Developed in partnership with regional stakeholders, review and renewal of this primary strategic planning document commenced in 2020–21 to establish the next six-year (2021–2027) framework for strategic action that supports and focuses the ongoing coordinated effort of the region's land managers, government agencies, community groups, and Traditional Owners. With the revised RCS scheduled to be completed in December 2021, the previous (2016–2019) framework has been applied in assessing performance against 2020–21 outcome indicators.

The 2013–2019 RCS prioritises key threatening processes and associated interventions within 17 high value landscapes (Catchment Assets) to deliver environmental, social and economic outcomes for multiple asset types (e.g. waterways, biodiversity and community capacity) and their associated natural, cultural and/or productive values. Alignment with these priorities over the 2016–2021 period is demonstrated by the extent to which Mallee CMA NRM activities are delivering against the strategic actions (94 per cent average), and the high proportion of associated works that are being delivered within priority landscapes (93 per cent average).

Completion of the 2016–2020-funded 'Tyrrell Project – Ancient Landscapes, New Connections' represented significant progress in applying the RCS ICM framework; delivering landscape-scale stewardship outcomes for multiple assets occurring within the Avoca Basin Terminal Lakes System and Creeklines target area. Application of this approach is being built on through commencement of a new ICM-focused initiative. This 2021–2024 'Islands in the Sand' project is delivering against community and Traditional Owner priorities for two Mallee RCS priority landscapes: the 'Murray River and Floodplain – Merbein to SA Border' and 'North West Savannah Woodlands'.

Opportunities for integrated outcomes across the broader region are identified and progressed through stakeholder participation in the Mallee's two Catchment Partnership Committees (CPCs). These Sustainable Agriculture and Biodiversity/Water focused forums are delivering against the objectives of the Mallee Catchment Partnership Agreement by enhancing knowledge sharing between members and further strengthening collaborative approaches to NRM.

As an addendum to the Mallee RCS, the Mallee NRM for Climate Change Plan identifies 17 priority management actions (interventions) to support regional adaptation and resilience outcomes. The Mallee CMA has continued to plan for and respond to a changing climate by continuing to incorporate priority landscapes and associated interventions established by this Plan into the ongoing delivery of regional programs. This has included supporting carbon sequestration/offset initiatives such as the 'State-wide Carbon Sequestration Analysis Project'

being undertaken in partnership with Victorian CMAs and Water Corporations to establish regional carbon yields/ implementation costs associated with environmental planting offsets. Mallee CMA is also working with Birchip Cropping Group to deliver soil carbon-focused activities which facilitate the identification, validation and communication of practices for improved sequestration outcomes in the southern Mallee.

Initiatives that enhance public spaces and urban waterway values through Integrated Waterway Management (IWM) collaborations also continued to be supported. Key measures progressed in partnership with regional stakeholders over the 2020–21 reporting period included: application of the Lake Ranfurly and Lake Hawthorn Integrated Management Plan; implementation of the Wetland Management Strategy for Kings Billabong, Psyche Bend Lagoon and Woorlong Wetland; and engagement with First People of the Millewa Mallee to ensure Aboriginal values are recognised and supported by associated waterway management activities.

Activity Indicators and Performance Measures

Performance against our organisation's 2020–21 priority activities for progressing Integrated Catchment Management outcomes, including actual delivery against budgeted targets is provided in Table 21. Overall, 100 per cent of performance targets were achieved or exceeded over the reporting period.

Key initiatives and projects

An overview of key initiatives that supported our delivery against the Integrated Catchment Management priority activities and associated performance targets in 2020–21 is provided in Table 22.

Table 20 | Progress against performance measures for 'Integrated Catchment Management' strategic outcome indicators

Outcome Indicators	Performance measures	Unit of measure	2016–17	2017–18	2018–19	2019–20	2020–21
Climate Change							
Ministerial Expectation: Active/collaborative investigation into new opportunities to sequester carbon	Carbon sequestration/offset initiatives supported	number	n/a	n/a	2	3	3
Ministerial Expectation: Increased landscape resilience under a changing climate	Mallee NRM Plan for Climate Change adaptation actions (6 year) delivered against	per cent	88	88	94	94	88
Resilient and liveable cities and towns							
Ministerial Expectation: Increased participation in forums/plans which contribute to the health of Mallee communities by supporting resilient environments	Initiatives implemented to enhance public spaces and urban waterway values through integrated waterway management (IWM) collaborations	number	n/a	n/a	4	4	4
Improved performance and demonstrating outcomes / Waterway and catchment health							
Ministerial Expectation: Increased application & promotion of ICM strategies which support enhanced environmental, social, cultural & economic outcomes	Mallee RCS strategic actions (6 year) delivered against	per cent	92	93	95	95	93
	On-ground works delivered within Mallee RCS priority landscapes	per cent	81	92	99	96	96
	Initiatives implemented to demonstrate ICM outcomes	number	1	1	1	1	1

Table 21 | Performance against 2020–21 'Integrated Catchment Management' activity measures

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Climate Change						
<i>Ministerial Expectation and RCS: Explore opportunities to sequester carbon / provide carbon offsets in partnership with land managers and Traditional Owners</i>	Carbon sequestration/offsets opportunities progressed in partnership with land managers and other regional stakeholders	number	3	3	0	✓
<i>Ministerial Expectation and RCS: Progress on climate change adaption initiatives outlined in Mallee climate change and catchment strategies</i>	Priority actions identified by the Mallee NRM Plan for Climate Change delivered against annually	per cent	88	>75	0	✓
Resilient and liveable cities and towns						
<i>Ministerial Expectation and RCS: Collaborate with water corporations and local government, including the participation in Integrated Water Management (IWM) Forums, to enhance public spaces through integrated water management in existing and new urban environments.</i>	IWM forums participated in	number	1	1	0	✓
<i>Ministerial Expectation and RCS: Participate in the development and implementation of integrated water management plans, particularly through prioritising measures to enhance urban waterway values.</i>	IWM priority measures supported	number	4	4	0	✓
Improved performance and demonstrating outcomes / Waterway and catchment health						
<i>Ministerial Expectation and RCS: Work collectively via Vic Catchments membership to strengthen collaboration/ performance in the Catchment management sector in Victoria.</i>	Priority actions/projects identified within Vic Catchments 2018-19 Strategic Framework actively supported	per cent	100	100	0	✓
<i>Ministerial Expectation and RCS: Develop and coordinate the implementation of a new regional catchment strategy according to legislative changes and new guidelines established by the Victorian Catchment Management Council.</i>	Delivery partner acceptance of 2013-19 RCS Final Review	per cent	100	100	0	✓
	Renewal of RCS progressed in line with VCMC guidelines	per cent	50	50	0	✓

Continued...


Table 21 | Performance against 2020–21 'Integrated Catchment Management' activity measures *Continued...*

Activity Indicators	Performance measures	Unit of measure	2020–21 actual	2020–21 target	Performance variation (%)	Result
Improved performance and demonstrating outcomes / Waterway and catchment health						
Ministerial Expectation and RCS: Deliver ICM in line with Water for Victoria and building on the legacy of Our Catchments Our Communities with strengthened performance across environmental, social, and economic outcomes.	ICM focused initiatives/programs delivered	number	1	1	0	✓
	Local delivery/stakeholder partnerships established/maintained to enhance the environmental, social, and economic outcomes delivered by ICM approaches to regional NRM	number	5	5	0	✓
	On-ground works outputs delivered within locations that will deliver the greatest environmental, social and economic return on investment (i.e. in RCS priority landscapes)	per cent	95	>75	0	✓
Ministerial Expectation: Report on Catchment Partnership Agreements for the Mallee region in accordance with the Framework for Catchment Partnership Agreements (CPA)	Compliance with state-wide Framework for CPA requirements	per cent	100	100	0	✓
	Priority actions identified by the CPA Annual Plan progressed	per cent	88	>75	0	✓



Canoe launcher at Kings Billabong.

Table 22 | Key outputs delivered under government programs/initiatives contributing to the achievement of 2020–21 priority 'Integrated Catchment Management' activities and associated performance targets

Program/Initiative	Key 2020–21 outputs and achievements
Catchment Governance Program	<p>The Mallee CMA delivers against corporate and statutory functions set out under <i>Catchment and Land Protection Act 1994</i> through funding support provided by the Victorian Government.</p> <p>Ongoing participation in regional, state-wide and national planning, evaluation and reporting forums, including:</p> <ul style="list-style-type: none"> • Vic Catchments forum, with support provided for delivery against Strategic Framework priority actions/projects (e.g. VCMA's Actions and Achievements Report, VMCA's Community Engagement and Partnering Framework, and VCMA 'Climate Ready Natural Resource Management Planning in Victoria' website) • Tri-State Murray NRM Regional Alliance, which consists of the Victorian North East, Goulburn Broken, North Central and Mallee Catchment Management Authorities; the New South Wales Murray Local Land Services; and the South Australian Murray-Darling Basin Natural Resources Management Board. The Alliance was formalised by the signing of the Tri-State Murray NRM Regional Alliance MOU in 2015. • NRM Regions Australia, which has representation from chairs of each of the 54 regional NRM bodies across Australia. The primary objectives of the group is to build networks, share information and receive briefings on strategic direction for NRM policies and programs. • Coordination of an internal MER working group to support the development and implementation of standardised MER approaches across all areas of MCMA operations. Includes facilitation of overarching MER framework to inform development and review of project/program-based plans. • Application and maintenance of regional evidence base to support the collection, collation and communication of information required by RCS and Corporate Plan reporting frameworks.
Our Catchments Our Communities	<p>The Our Catchments, Our Communities Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> • 38 engagement events delivered (243 participants) to facilitate land manager/stakeholder/community input into development and delivery of project activities; including the identification of integrated management actions within the 'Islands in the Sand' target landscape. • Commencement of the 2021–2024 Mallee ICM project: 'Islands in the Sand – Ancient Connections' project to deliver against community and Traditional Owner priorities that provide multiple (environmental economic and social) outcomes for two Mallee RCS priority landscapes; the 'Murray River and Floodplain – Merbein to SA Border' and 'North West Savannah Woodlands'. • 7 formal partnerships established/maintained to facilitate coordinated approaches to the identification, development, implementation, and review of integrated catchment management. This included establishment of the Mallee RCS Steering Committee, with representation from key stakeholders to inform the review and renewal of this key strategic planning document. • Ongoing coordination of the region's two Catchment Partnership Committees (Sustainable Agriculture and Biodiversity/Water) also delivered against the objectives of the Mallee Catchment Partnership Agreement by enhancing knowledge sharing between members and further strengthening collaborative approaches to NRM in the region. • Progressing the 'Statewide Carbon Sequestration Analysis Project' in partnership with Victorian CMAs and Water Corporations to establish carbon yields and implementation costs associated with environmental plantings.  <p>Traditional Owner engagement.</p>

Part 1

Performance Reporting - Financial

Five year financial summary

The Mallee CMA's financial results for this reporting year and the previous four years are detailed in Table 23 below.

Table 23 | Five year financial summary

Five year financial summary	2020-21 \$'000	2019-20 \$'000	2018-19 \$'000	2017-18 \$'000	2016-17 \$'000
Revenue					
Commonwealth Government contributions	4,881	4,538	4,650	5,646	6,252
State Government contributions	9,946	7,500	7,181	7,293	6,530
Other revenue	7,075	6,275	3,962	4,055	3,142
Total Revenue	21,884	18,313	15,793	17,026	15,924
Expenditure					
Employee benefits expenses	5,778	5,817	4,957	5,000	4,789
Grants and Incentives	257	1,083	1,365	1,518	1,766
Other operating expenses	12,910	9,966	10,470	9,161	7,817
Total Expenditure	18,945	18,866	16,793	15,679	14,372
Assets					
Current assets	46,406	42,768	41,544	41,990	40,933
Non-current assets	460	664	738	953	1,152
Total Assets	46,886	43,432	42,282	42,943	42,085
Liabilities					
Current liabilities	978	1,460	1,565	1,286	1,672
Non-current liabilities	1,139	161	122	80	65
Total Liabilities	2,117	1,621	1,687	1,366	1,737

Current year financial review

The Mallee Catchment Management Authority (CMA) is financially sound, with adequate provisions in place to fulfil its obligations to staff, and replacement of plant and equipment. Sufficient resources are allocated to deliver the Corporate Plan business objectives which form the organisation's strategic direction for 2021-22.

An increase in State Government contributions relates to the Working for Victoria employment program, while the increase in Other revenue relates to the Victorian Murray Floodplain Restoration Program.

The Mallee CMA reported a surplus of \$2,939,83 (2020: surplus \$1,214,514) for the financial year. Assets exceed liabilities by \$44,749,684 (2020: \$41,810,401).

Significant changes in financial position

There were no significant matters which changed our financial position during the reporting period.

Significant changes or factors affecting performance

There were no significant changes or factors which affected our performance during the reporting period.

Disclosure of grants and transfer payments

Mallee CMA has provided financial assistance as part of the grants and incentives programs; which Mallee CMA is responsible for administering. Grants provided in 2020–21 for the purposes of delivering citizen science programs, targeted on ground works (fencing, revegetation, pest plant and animal control, track maintenance), and irrigation incentives (system checks, system upgrades, irrigation scheduling equipment installation and soil surveys) were as follows:

Table 24 | Disclosure of grants and transfer payments

Organisation	Payments \$
Our Catchments Our Communities	
Pest plant and animal control, fencing, revegetation works and track maintenance.	
1 Landholder	21,560
The Cowangie Connection	
Pest plant and animal control.	
6 Landholders	5,000
Annuello & Wandown: Enhancing Mallee - Murray biolinks	
Pest plant and animal control.	
2 Landholders	3,000
Yarrara Ridge: Conserving Victoria's Semi-arid Environments	
Pest plant and animal control.	
7 Landholders	6,000
Improving conservation of the Southern Mallee Dunefields	
Pest plant and animal control.	
2 Landholders	9,909
Tyrrell: Preserving an Ancient Salina Landscape	
Pest plant and animal control.	
2 Landholders	3,500
Robinvale to Nyah: Conserving Robinvale Plains & Murray	
Pest plant and animal control.	
Nyah District Golf Club	10,000
2 Landholders	15,300
RLP Threatened Species Services	
Delivery of citizen science programs and targeted on ground works (revegetation, pest plant and animal control).	
Birchip Landcare Group	30,000
Mallee Landcare Group	5,000
National Malleefowl Recovery Group	16,455
1 Landholder	29,153
RLP Threatened Ecological Communities Services	
Delivery of targeted on ground works (revegetation, pest plant and animal control) and Buloke Stewardship program.	
Hopetoun Landcare Group	16,604
Nullawill Landcare Group	34,716
Nyah West Landcare Group	10,000
Waitchie & District Landcare Group	4,000
3 Landholders	45,314
6 Landholders	23,118
Salinity Offset Fund	
Irrigation Incentives, including system checks, system upgrades, irrigation scheduling equipment installation and soil surveys.	
5 Landholders	43,151
Sustainable Irrigation Program	
Irrigation Incentives, including system checks, irrigation scheduling equipment installation and soil surveys.	
2 Landholders	7,471
TOTAL	1,128,055

Subsequent events

There were no events occurring after the balance date which may significantly affect the Mallee CMA's operations in subsequent reporting periods.

Part 2

Governance and Organisational Structure



Organisational structure and corporate governance

The organisational and governance structure of the Mallee CMA (Figure 4) provides a framework for the integrated and effective management of the region's key assets. This structure allows for efficient program planning across all areas of operation and the sharing of resources, where possible, with partner agencies and the community.

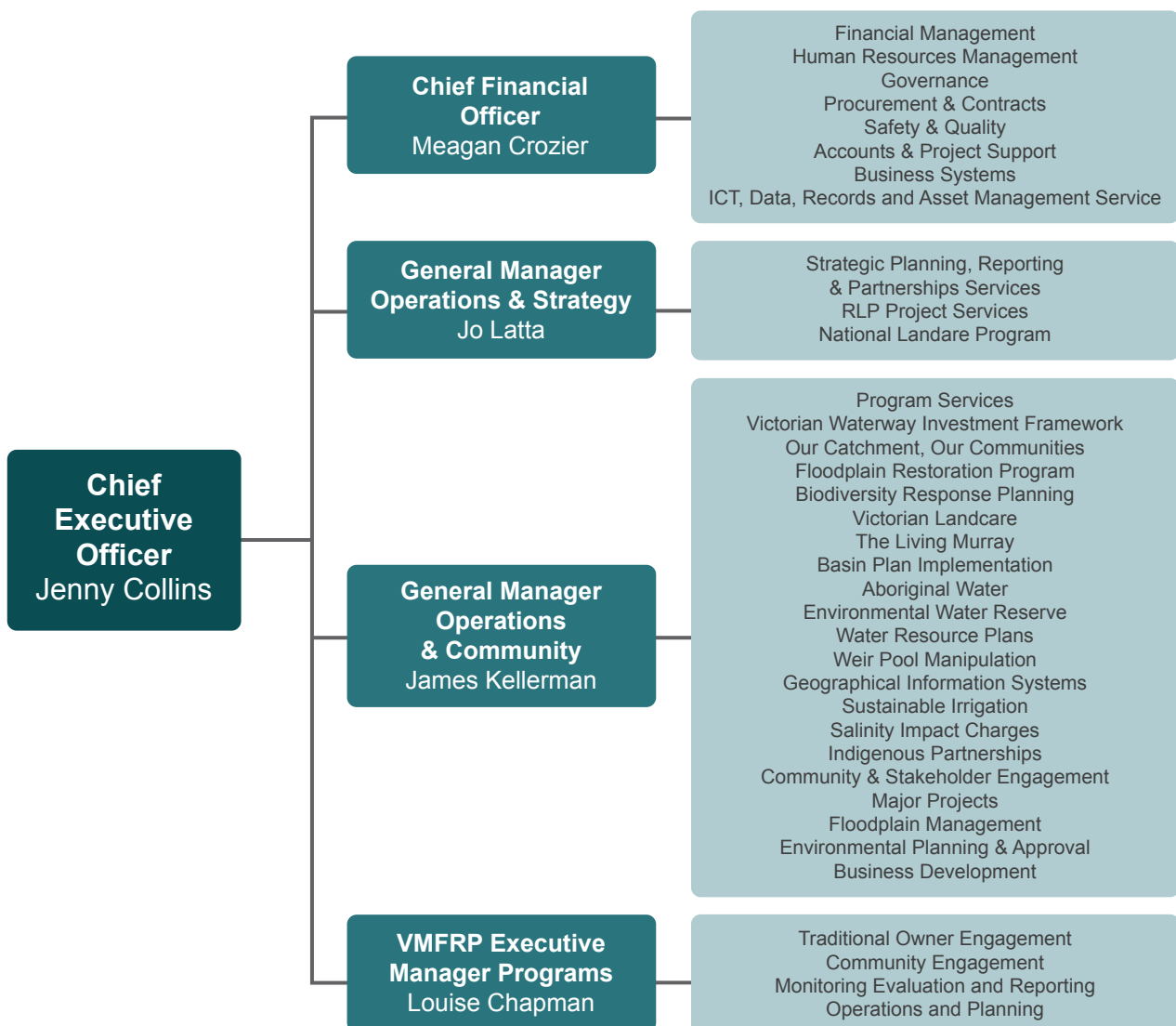


Figure 4 | Mallee CMA organisational structure 2020–21

Opportunities for stakeholder involvement in priority setting and funding allocations for natural resource management in the region is enhanced through various advisory committees, comprising Board, agency and community members (see Figure 5).

The Mallee CMA Board sets governance level policies and establishes the organisation’s vision, strategic directions and business objectives. The Board is ultimately responsible for all functions undertaken by the Authority and consists of up to nine members appointed by the Minister.

A number of sub-committees, including an Audit and Risk Committee, Remuneration Committee, Salinity Accountability Advisory Committee, Salinity Impact Charge Major Projects Project Control Group (PCG), Land and Water Advisory Committee, and Aboriginal Reference Group have been established by the Board to advise on specific areas of responsibility. Additional sub-committees are convened as necessary to ensure continued effective governance and performance.

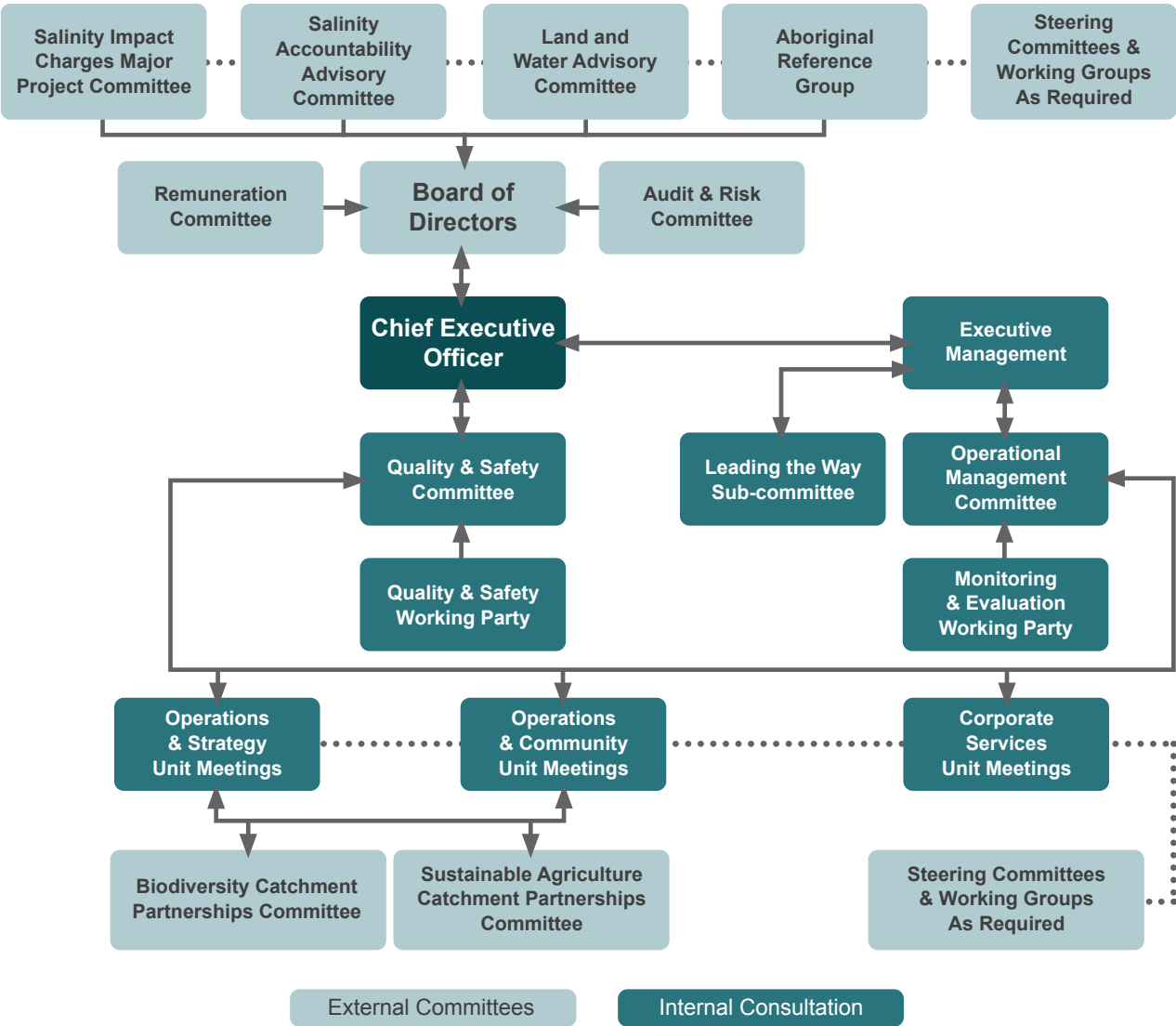


Figure 5 | Mallee CMA organisational and governance structure 2020–21

Governing Board

The current Board represents a wide range of interests across the Mallee region, including: agricultural; economic; horticultural; financial auditing; law; risk management; governance; environmental issues; and human resource management. As part of their responsibilities, each Board member has a specific leadership role reflecting their individual area of expertise. Through these leadership roles, a strong governance culture is realised that enables a measured and strategic approach to all business undertaken by Mallee CMA.

Governing Board Members

Sharyon Peart - Chair

Sharyon moved from Melbourne to the Mallee in 2003, where she lived on a large citrus, dried fruit and wine grape growing property at Nangiloc.

Her background in corporate business, sales, marketing and team management provided inspiration for the small local business Sharyon owns and operates. Sharyon has been the sole director since she created the company in 2005, specialising in retail consultation, and managing women's health and wellbeing.

Sharyon served on the Mildura Rural City Council as a Councillor for nine years and gained much experience as portfolio councillor for art and education, community services and wellbeing, and governance and finance. Sharyon is committed to strengthening partnerships between community and government in the sustainable management of resources across our region.

Current positions and memberships include: La Trobe University Mildura Regional Advisory Board, member; Vic Catchments, Chair; Lower Murray Water, Deputy Chair; Commissioner for Sustainability and Environment Reference Group, member; Resilient Cities and Towns Reference Group, Victorian CMA representative.

Sharyon currently represents the Mallee CMA Board as:

- Chair - Remuneration Committee
- Member - Aboriginal Reference Group (ARG).

Sharyon was a Board member during the reporting year with her current term of appointment being from 01 October 2019 to 30 September 2023.

Dr John Cooke DSc (hc), PhD - Deputy Chair

John was born in Ouyen and grew up on a Mallee wheat/sheep farm. Before retiring in 2013, John served as an extension officer, research scientist, manager and internal consultant.

As a research scientist, John led investigations of tillage systems for red/brown and Mallee soils in northern Victoria. He was the lead or sole author of five refereed papers, and numerous conference papers.

As a manager, John was responsible for land protection in the Mallee and other key issues across northern Victoria. John's involvement in waterway management has covered issues relevant to land tenure, reclamation, water quality and salinity, habitat protection and wetland watering programs. John also contributed significantly to land and water management across the southern Murray Darling Basin.

John is Chairperson of the Regional Advisory Board for the Mildura Campus of La Trobe University. He has recently retired from the Board of Mallee Family Care, having served on the Board for over ten years, and was Chair of the Audit and Risk Committee for much of this time.

In recognition of his contribution to natural resource management and community involvement in northern Victoria, John was awarded an honorary Doctorate of Science by La Trobe University in 2015.

John currently represents the Mallee CMA Board as:

- Chair - Salinity Accountability Advisory Committee
- Chair - Salinity Impact Charges Major Projects Project Control Group
- Member - Remuneration Committee.

John was a Board member during the reporting year with his current term of appointment being from 01 October 2017 to 30 September 2021.

Allison McTaggart

Allison is the principal consultant at Allison McTaggart and Associates, a human resources and business consultancy business. Allison's consultancy work includes strategic planning, governance, recruitment, training, corporate communications, and workplace health and safety.

Allison is a Director of Western Murray Irrigation, and her family owned earthmoving business. Allison Chairs the Murray Primary Health Network North West Community Consultative Committee and is Deputy Chair of Mallee District Aboriginal Service Finance Audit and Risk Committee. Allison formerly held roles with the Australian Table Grape Association as the Manager for Communications and Industry Analysis, the Murray Primary Health Network as a Workforce Development Officer and Tandou Limited as Human Resource Manager.

Allison's diverse background includes agribusiness, earthmoving and small mines extraction, public relations, marketing and workforce development.

Current memberships include: Australian Human Resource Institute; Governance Institute of Australia; Institute of Community Directors Australia; Australian Institute of Company Directors fellow.

Allison holds a Bachelor of Arts (Management Communication) and an Associate Diploma (Animal Production).

Allison currently represents the Mallee CMA Board as:

- Chair - Audit and Risk Committee;
- Member - Remuneration Committee.

Allison was a Board member during the reporting year with her current term of appointment being from 01 October 2017 to 30 September 2021.

Kellie Nulty

In addition to being a partner in a dryland farming operation at Carwarp, Kellie has a strong background in accounting and auditing. Kellie has worked as a practising accountant for more than 20 years.

Kellie has extensive internal and external auditing experience across a variety of industries. Her fields of expertise include: management and financial accounting; information technology; risk management; corporate governance; project management; and business consultancy.

Kellie is a Chartered Accountant, Registered Company Auditor, Registered Superannuation Fund Auditor, and holds degrees in both Business and Computer Science.

Kellie currently represents the Mallee CMA Board as:

- Member - Land and Water Advisory Committee;
- Member - Audit and Risk Committee.

Kellie was a Board member during the reporting year with her current term of appointment being from 01 October 2019 to 30 September 2023.

Robert Matthews

Having grown up on the family farm at Meringur, Robert has been involved in dryland wheat and sheep farming his whole life. After 13 years in the Commonwealth public service working in employment counselling, Robert returned to full time farming in 1998.

With a keen focus on all areas of natural resource management, combatting soil erosion, resource efficiency and the further development of biological farming methods are major priorities for Robert.

Robert is currently serving as: Director of the Red Cliffs Association Board; Secretary of the Koorlong Hall Committee; and member of the Mallee Natural Food Group Board. Robert is also the sole director of Kurnwill Quarries.

Robert currently represents the Mallee CMA Board as:

- Member - Land and Water Advisory Committee;
- Member - Salinity Accountability Advisory Committee.

Robert was a Board member during the reporting year with his current term of appointment being from 01 October 2017 to 30 September 2021.

Jacquelyn Turfrey

Jacquelyn is a barrister and an accredited mediator, and has been practising law for almost 20 years. She holds a Graduate Diploma in Equal Opportunity Administration and a Bachelor of Laws LLB (Hons) from the University of Melbourne.

Jacquelyn was an independent non-executive director of Aboriginal Housing from 2006 to 2016 and Worawa Aboriginal College from 2016 to 2017.

Jacquelyn brings extensive experience from the financial services sector where she was in-house counsel; a company secretary; and a director of a number of National Australia Bank subsidiary entities. Jacquelyn was in a leadership role in global banking risk management and governance. Experienced in State and Commonwealth government and private legal practice. Jacquelyn spent three and a half years at senior executive level in the Victorian Public Service.

Jacquelyn brings unique experience and understanding gained from working across government, corporate, private and not for profit sectors. Jacquelyn has worked in Perth in the mining industry and represented the Yawuru Native Title holders in settlement negotiations with the Western Australian Government. Jacquelyn established company structures, frameworks and operations for entities associated with the Yawuru Corporate Group, including acting as Chief Executive Officer for a period of time.

Jacquelyn currently represents the Mallee CMA Board as:

- Member - Audit and Risk Committee.

Jacquelyn was a Board member during the reporting year with her current term of appointment being from 01 October 2017 to 30 September 2021.

Janice Kelly

Janice Kelly has 25 years' experience as a primary producer and 35 years' experience as a Chartered Accountant. She is an experienced Finance and Corporate Services Manager and has completed the Australian Institute of Company Directors Course.

Janice has provided significant input into organisational strategic plans both as a board member and senior manager.

Janice currently represents the Mallee CMA Board as:

- Member - Land and Water Advisory Committee.

Janice was a Board member during the reporting year with her current term of appointment being from 01 October 2019 to 30 September 2023.

Monica Munro

Monica Munro grew up in the Mallee township of Murrayville. With a background in Natural Resource Management, Monica has worked in the water industry (Environmental Services).

Monica was the Environmental Officer for Lower Murray Urban and Rural Water Corporation, with responsibility for compliance with environmental legislative and regulatory requirements across all functionalities of the business.

Utilising her knowledge in compliance and risk management, Monica established a grain marketing company (Horizon Grain Brokers) with her husband in 2013.

Monica is committed to providing a voice for the more remote, regional areas of the Mallee CMA region.

Monica currently represents the Mallee CMA Board as:

- Member - Salinity Accountability Advisory Committee.

Monica was a Board member during the reporting year with her current term of appointment from 01 October 2019 to 30 September 2023.

Board meetings attended

Ten Ordinary Board Meetings (OBMs) were held during the 2020–21 financial year. The Board Chair approved all Board member absences during the reporting period.

Table 25 | Board membership, terms and meeting attendance 2020–21

Board Member	Appointed	Appointment review	Eligible meetings	Attended meetings
Sharyon Peart	01 October 2019	30 September 2023	10	10
John Cooke	01 October 2017	30 September 2021	10	10
Allison McTaggart	01 October 2017	30 September 2021	10	10
Kellie Nulty	01 October 2019	30 September 2023	10	9
Robert Matthews	01 October 2017	30 September 2021	10	10
Jacquelyn Turfey	01 October 2017	30 September 2021	10	6
Janice Kelly	01 October 2019	30 September 2023	10	10
Monica Munro	01 October 2019	30 September 2023	10	10

Audit and Risk Committee membership

The members of the Audit and Risk Committee (ARC) in 2020–21 are detailed in Table 26 below.

The ARC's responsibilities are set out in Standing Direction 3.2.1.1. Key responsibilities are to:

- review and report independently to the board on the annual report and all other financial information published by Mallee CMA
- assist the board in reviewing the effectiveness of Mallee CMA's internal control environment covering: effectiveness and efficiency of operations; reliability of financial reporting; and compliance with applicable laws and regulations
- determine the scope of the internal audit function and ensure its resources are adequate and used effectively, including coordination with the external auditors

- maintain effective communication with external auditors, consider recommendations made by internal and external auditors and review the implementation of actions to resolve issues raised
- oversee the effective operation of the risk management framework.

The Mallee CMA Board appoint members to the ARC annually and endorse external independent members for three-year terms with extension of up to a further three years. ARC members are subject to the committee's terms of reference.

Meetings are scheduled monthly, and at any other time on request of a committee member or the internal or external auditor. In 2020–21, the committee met ten times. Attendance of committee members is detailed in Table 26 below.

Table 26 | Audit and Risk Committee membership, terms and meeting attendance 2020–21

Member	Appointed	Appointment review	Eligible meetings	Attended meetings
Allison McTaggart, (Chair) Board Member	28 October 2020	31 October 2021	10	10
Kellie Nulty, Board Member	28 October 2020	31 October 2021	10	8
Jacquelyn Turfey, Board Member	28 October 2020	31 October 2021	10	10
Grant Martinella, Independent Member	15 April 2020	30 April 2023	10	10
Inga Dalla Santa, Independent Member	15 April 2020	30 April 2022	10	10

Board committees

The committees act on the Board's behalf, as deemed necessary. Appropriate advisory committees ensure projects are properly guided and funds are spent wisely.

Remuneration Committee

The primary purpose of the Remuneration Committee is to assist the Board to discharge its responsibilities by managing the employment cycle of the Chief Executive Officer (CEO), which includes:

- Encompassing the full employment cycle from advertising to contract negotiation, employment performance management and end of tenure
- Succession planning for the role in accordance with the CEO Succession, Recruitment and Appointment Policy
- Induction for the CEO and Board members
- Learning and development for the CEO and Board members
- Endorsing CEO backfill arrangements for periods of leave exceeding two weeks, up to and including six weeks. CEO backfill arrangements for periods of leave exceeding six weeks will require Board approval

- Annually reviewing a report on Office of Public Sector Executive Remuneration (OPSER) contracts.

The Remuneration Committee achieves this by providing the following services on behalf of the Board:

- Ensuring reporting disclosures related to remuneration meet the Board's disclosure objectives and all relevant legal requirements
- Coordinating the Annual Board Assessment in accordance with DELWP Guidelines
- Conducting the Audit and Risk Committee annual self-assessment and three-year formal review, as per Ministerial Standing Directions
- Reviewing its Terms of Reference every two (2) years at the first meeting of the calendar year
- Ensuring all reviews incorporate relevant changes to the internal and external environment
- Ensuring procedures for agendas, minutes and reporting to the Board are adhered to, including providing minutes of committee meetings
- Ensuring records are managed securely and in accordance with Public Record Office Victoria (PROV) Principles.

Table 27 | Remuneration Committee membership and attendance 2020–21

Member	Appointed	Appointment review	Eligible meetings	Attended meetings
Sharyon Peart (Chair), Board Chair	28 October 2020	31 October 2021	1	1
John Cooke, Deputy Board Chair	28 October 2020	31 October 2021	1	1
Allison McTaggart: Board Member, ARC Chair	28 October 2020	31 October 2021	1	1



Board members site visit to Kings Billabong.

Salinity Accountability Advisory Committee

The Salinity Accountability Advisory Committee (SAAC) is pursuant to Mallee CMA's obligations under the *Catchment and Land Protection Act 1994* and delegated responsibilities under the Victorian Water Act 1989.

The prime responsibility of the SAAC is to provide advice to the Mallee CMA Board on:

- Annual reporting associated with Basin Salinity Management 2030 and salinity impact of irrigation
- Outputs, activities and reporting that relate to Mallee Accountable Actions under Schedule B of the Murray-Darling Basin (MDB) Agreement; and Salinity Impact Charges and its uses which are collected to mitigate and offset the salinity impact of irrigation between Nyah and the South Australian Border
- Business as usual projects and low risk or low complexity projects valued under \$800,000.

The SAAC is not a decision-making body. In broad terms, it allows detailed attention to be given to particular matters, and then makes recommendations to the Board for consideration.

Table 28 | Salinity Accountability Advisory Committee membership 2020–21

Member
John Cooke (Chair), Board member
Robert Matthews, Board member
Monica Munro, Board member
Jarred Cook, DELWP
Anthony Couroupis, Lower Murray Water
Simon Cowan, Goulburn-Murray Water
Peter Jones, Community member
Owen Lloyd, Community member
Terri Wilson, Community member
Troy Richman, Community member

The SAAC met 4 times during the 2020–21 reporting period.

Salinity Impact Charge Major Projects Project Control Group

Salinity Impact Charge (SIC) Major Projects are defined as any SIC project with a value exceeding \$800,000.00 or deemed a Major Project due to the project's complexity and or risk level (e.g. complex delivery, high community interest).

The SIC Major Projects Project Control Group (PCG) is a skills-based group responsible for the oversight and delivery of approvals, and the design and delivery of the SIC Major Projects. The SIC Major Projects PCG

achieves this by providing the following services on behalf of the Board:

- Reviewing all SIC projects and confirm proposed project governance structure, either:
 1. Business as usual with Salinity Accountability Advisory Committee oversight for established low risk and low complexity projects less than \$800,000 in value; or
 2. Major Projects with PCG oversight for projects with a value exceeding \$800,000 or that are deemed high risk and or high complexity by the PCG.
- Efficient and effective delivery of the SIC Major Projects in accordance with delegated authority from Mallee CMA Board, Mallee CMA policies and procedures, and in alignment with funding guidelines and governance of SIC prepared by DELWP.
- Closely monitor major project delivery, approving all variations to time, scope and budget as required.
- Quarterly reporting to the Mallee CMA Board on SIC Major Projects' progress.
- Immediately reporting material variations or risks to the Board.
- Ensuring effective relationships between SIC Major Project partners.
- Providing recommendations to the Board on matters relating to the approval of all Major Projects, in accordance with Mallee CMA procurement policy and procedures.

Members of the SIC Major Projects PCG during the 2020–21 reporting period were:

Table 29 | SIC Major Projects PCG membership 2020–21

Member
John Cooke (Chair), Board member
Jenny Collins, Chief Executive Officer
Campbell Fitzpatrick, Independent member
Andrew Fennessy, DELWP, (non-voting member, strategic advice only)

The SIC Major Projects PCG met once during the 2020–21 reporting period.

Land and Water Advisory Committee

The core function of the Land and Water Advisory Committee (LWAC) is to:

- Provide general advice to the Board on the development and delivery of projects and programs from a community perspective
- Advise management and the Board on process and appropriate levels of community ownership, consultation and engagement.

The LWAC may also be requested by the Board to provide feedback on issues identified as necessitating a community perspective.

Table 30 | LWAC membership 2020–21

Member	Appointed	Appointment review
Robert Biggs (Chair)	24 April 2018	30 June 2022
Maria Riedl	23 March 2016	30 June 2021
Andrew Menzies	23 March 2016	30 June 2021
Andrew Hudson	24 April 2018	30 June 2022
Owen Lloyd	24 April 2018	30 June 2022
Graham McKechnie	24 April 2018	30 June 2022
Brian Ebery	24 April 2018	30 June 2022

The LWAC met three times during the 2020–21 reporting period.

The appointed Board representatives on the LWAC for the reporting period were:

- Kellie Nulty
- Robert Matthews
- Janice Kelly.

Aboriginal Reference Group

The core function of the Aboriginal Reference Group (ARG) is to provide advice and guidance to the Board and Mallee CMA on:

- Building links with the broader Aboriginal community
- Ensuring Natural Resource Management outcomes are delivered in a way that benefits the environment and respects Aboriginal culture
- The ARG may also be requested by the Board to provide feedback on issues identified as necessitating a community perspective.

The Committee represents the interests of all Aboriginal community and does not speak on Traditional Owners business.

Table 31 | ARG membership 2020–21

Member	Appointed	Appointment review
Charlene Davis (Chair)	24 April 2018	30 June 2021
Stuart Harradine, Barengi Gadjin Land Council representative	26 April 2017	30 June 2023
Robbie Fry, Barengi Gadjin Land Council representative	24 April 2018	30 June 2023
Veronica Harradine	24 April 2018	30 June 2023
Kathy Potter	24 April 2018	30 June 2021
Rose Kirby	27 June 2018	30 June 2021
Margaret Hannah	26 June 2019	30 June 2023
Leigh Fuller	26 April 2017	30 June 2023
Norman Wilson, First People of the Millewa-Mallee Aboriginal Corporation	26 April 2017	30 June 2023

The ARG met twice times during the 2020–21 reporting period. At least one Board member attends ARG meetings.

The appointed Board representatives on the ARG for the reporting period was:

- Sharyon Peart



Land and Water Advisory Committee SMART Farm tour.

Part 3

Workforce Data

Public Sector Values and Employment Principles

The *Public Administration Act 2004* established the Victorian Public Sector Commission (VPSC). The VPSC's role is to strengthen public sector efficiency, effectiveness and capability, and advocate for public sector professionalism and integrity.

The Mallee 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 core capabilities against the *Mallee CMA Workforce Capability Framework Policy* without discrimination.

To ensure the public sector values (Figure 1) are embedded within the workplace, the Mallee CMA has introduced policies and practices that are consistent with the VPSC's employment standards and provide for fair treatment, career opportunities and the early resolution of workplace issues including recruitment, redeployment, managing under performance and discipline. The Mallee CMA has advised its employees on how to avoid conflicts of interest, how to respond to offers of gifts and how it deals with misconduct.

Occupational Health, Safety and Wellbeing

The Mallee CMA is committed to the effective management of occupational health, safety and wellbeing (OHS&W), which ranks equally with all other operational considerations.

It is the aim of Mallee CMA to minimise the risk of injury and disease to our employees and other persons by adopting a planned and systematic approach to the management of occupational health and safety (OHS) and promote the mental health and wellbeing of all staff

within the organisation, ensuring the resources for its successful implementation and continuous improvement are provided.

During the reporting period Mallee CMA has focused on the following areas.

COVID-19 Pandemic

Mallee CMA continues to implement the Pandemic Influenza Action Plan, in place to manage the operational aspects of preparing for and responding to a pandemic together with guidance from the Department of Health and Human Services (DHHS) on current restrictions and implementation of the Victorian COVID Safe Principles. Transitional arrangements have been developed that can be quickly implemented in the event that DHHS enforce restrictions in the workplace.

Business continuity planning, preparation and communications persist to ensure staff are fully supported and provided with adequate, up to date information about the pandemic. Staff complete a COVID-19 return to workplace induction to ensure they are informed of the safety measures that have been implemented.

Contractors engaged by Mallee CMA are required to provide a COVID Safe Plan prior to the commencement of a contract.

Leading the Way

Leading the Way is a Victorian Government Initiative to improve health and safety in government workplaces. The initiative is a commitment to Leading the Way in standardising workplace occupational health and safety management, including psychological health and safety, and is designed to help Public Sector organisations strengthen senior management commitment, improve safety culture, and OHS performance, and ensure accountability for continuous improvement. The Leading the Way framework and its embedded safety maturity model provides organisations with a vision for the future and guiding actions for change.

Four strategic priorities have been agreed by the Leading the Way governance bodies. The Leading the Way approach has been developed to support delivery of these strategies. The approach includes a governance structure together with accountability process elements and tools based on leading practice.

A Leading the Way sub-committee has been established to assist the Executive Management Team to implement the Leading the Way initiative, and reporting requirements for the mental health minimum data set and DELWP reporting tool.

Through participation in the initiative, Mallee CMA will further improve both existing OHS management foundations and the positive organisational safety culture.

Training

During the 2020–21 financial year there was a significant focus on current staff skills and competency. Mallee CMA conducted an OHS&W training needs analysis to identify any gaps. Training requirements were updated for all staff with training conducted in the following areas:

- First Aid and CPR
- Mental Health First Aid
- Hazard identification and risk control
- Defensive driving
- Warden training
- White card construction induction
- Traffic management
- Snake awareness training
- Trailer towing
- UTV / 4WD

Internal OHS&W training is completed within the Rapid Global system. Reminders for refresher training are automatically generated by the system, ensuring training is kept up to date and is easily monitored.

Incident Management

Safety related occurrences across the Mallee CMA are reported by Hazard and Incident. Incidents of all types are grouped together to give an overall total, while injuries are noted for reporting purpose only.

Reporting hazards provides a way to monitor potential problems and identify root causes as they occur. The documentation of these problems and root causes increases the likelihood that repeating failures will be noticed and corrected before they develop into more serious incidents or injuries.

The Rapid Global system provides for hazard, incident and injury reporting and audit outcomes. Various reports can be exported from Rapid Global and reported to relevant committees of Mallee CMA.

Mallee CMA remains focused on the importance of incident reporting and supports continuous improvement through our commitment to retaining ISO 9001:2015 certification for our Quality Management System.

There were no notifiable incidents reported by the Mallee CMA to WorkSafe during the reporting period. Notifiable incidents are those which require reporting to WorkSafe in accordance with s37 of the *Occupational Health Safety Act 2004* (OHS Act).

The Mallee CMA had one (FTE 56) WorkCover claim in the reporting period, the result of this claim was lost time.

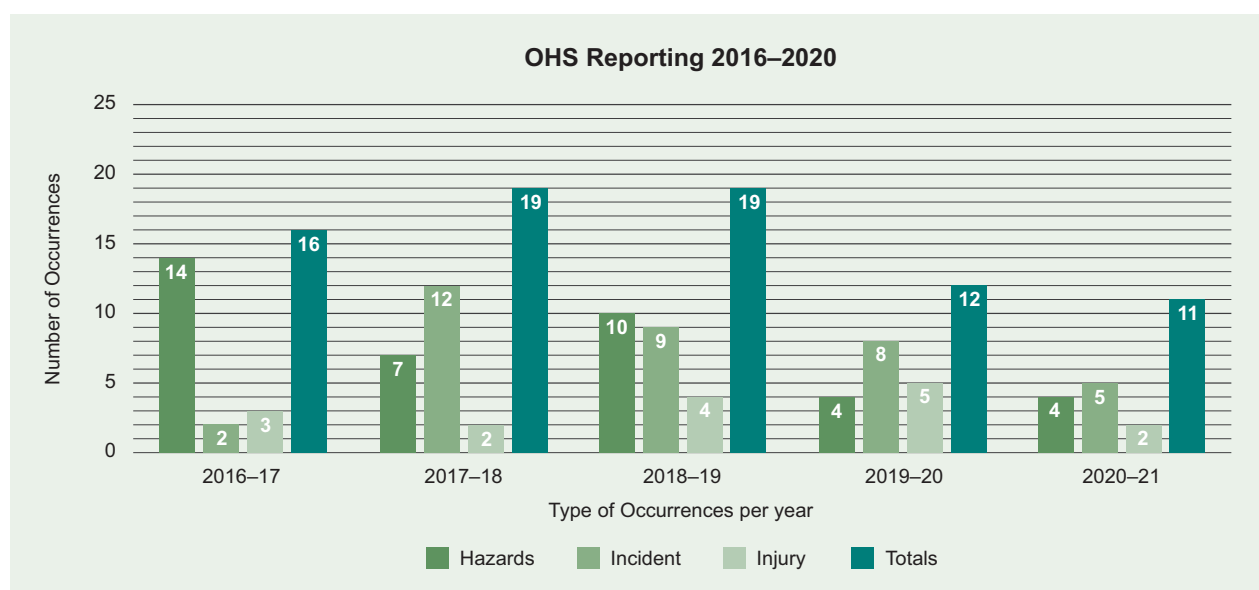


Figure 6 | Mallee CMA OHS reported occurrences 2016 to 2020

Table 32 | Performance against OHS management measures

Measures	Key Performance Indicators	2018–19	2019–20	2020–21
Incidents	Number of incidents (rate per 100 FTE)	41	24	9
Claims	Number of claims (rate per 100 FTE)	0	2	2
	Number of lost time claims (rate per 100 FTE)	0	2	2
	Number of claims exceeding 13 weeks (rate per 100 FTE)	Nil	2	2
Fatalities	Fatality claims	Nil	Nil	Nil
Claim costs	Average cost per standard claim	Nil	\$13,874	\$15,973
Return to work	Percentage of claims with return to work plans <30 days	Nil	Nil	Nil
Management commitment	Evidence of OH&S policy statement, OH&S objectives, regular reporting to senior management of OH&S, and OH&S plans (signed by CEO or equivalent)	Completed	Completed	Completed
	Evidence of OH&S criteria(s) in purchasing guidelines (including goods, services and personnel).	Completed	Completed	Completed
Consultation and participation	Evidence of agreed structure of designated workgroups (DWGs), health and safety representatives (HSRs), and issue resolution procedures (IRPs).	Completed	Completed	Completed
	Compliance with agreed structure on DWGs, HSRs, and IRPs	Completed	Completed	Completed
Risk management	Percentage of internal audits/inspections conducted as planned.	100%	100%	100%
	No. of Improvement Notices issued across the Department by WorkSafe Inspector	Nil	Nil	Nil
	Percentage of issues identified actioned arising from:			
	Internal audits	100%	100%	100%
	HSR provisional improvement notices (PINs)	Nil	Nil	Nil
	Worksafe Notices	Nil	Nil	Nil
	Percentage of managers and staff that have received OH&S training:			
	Induction	100%	100%	100%
	Management training	100%	100%	100%
	Contractors, temps, and visitors	100%	100%	100%
	Percentage of HSRs trained:			
	Acceptance of role	100%	100%	100%
	Re-training or refresher training	100%	100%	100%
	Reporting of incidents and injuries	100%	100%	100%

Workforce Data

Table 33 discloses the headcount and full-time staff equivalent (FTE) of all active public service employees of the Mallee CMA, employed in the last full pay period in June of the current reporting period (2021), and in the last full pay period in June of the previous reporting period (2020).

Employees have been correctly classified in workforce data collections.

Table 33 | Details of employment levels in the last full pay period in June 2021 and 2020 ⁽ⁱ⁾

	June 2021						June 2020					
	All Employees		Ongoing ⁽ⁱⁱ⁾		Fixed term & Casual		All Employees		Ongoing ⁽ⁱⁱ⁾		Fixed term & Casual	
	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE
Gender												
Male	31	29	18	18	13	11	26	22	16	16	10	6.96
Female	29	27.13	15	14.40	14	12.73	29	28	15	14.40	14	13.6
Self-described	n	n	n	n	n	n	n	n	n	n	n	n
Age												
15-24	1	1	0	0	1	1	1	1			1	1
25-34	9	8.34	5	4.60	4	3.74	11	10.6	4	4	7	6.60
35-44	15	14.39	8	7.80	7	6.59	14	13.40	12	11.40	2	2
45-54	15	15	9	9	6	6	14	14	8	8	6	6
55-64	17	15.30	9	9	8	6.30	13	10.75	6	6	7	4.75
65+	3	2.10	2	2	1	0.10	2	0.81	0	0	2	0.81
Classification												
CEO	1	1	0	0	1	1	1	1			1	1
General Managers	4	3.80	4	3.80	0	0	3	3	2	2	1	1
Managers	9	9	8	8	1	1	8	7.4	7	6.4	1	1
Project/Support Staff	46	42.33	21	20.60	25	21.73	43	39.56	22	22	21	17.56
Total	60	56.13	33	32.40	27	23.73	55	50.96	31	30.4	24	20.56

'n' denotes that no data has been collected

⁽ⁱ⁾ Excluded are external contractors/consultants, and temporary staff employed by employment agencies.

⁽ⁱⁱ⁾ Ongoing employees include people (full time and part time) engaged on an open ended contract of employment and executives engaged on a standard executive contract who were active in the last full pay period of June.

Workforce Inclusion Policy

Mallee CMA is working towards improving workplace gender equality consistent with the Gender Equality Act 2020, and aims to promote gender equality throughout the organisation ensuring it is embedded in all workplace behaviour, processes and decision making.

The Authority will conduct a workplace gender audit and based on these results, develop and implement a Gender Equality Action Plan, detailing key strategies for achieving workplace gender equality.

Mallee CMA is also committed to promoting gender equality in policies, programs and services that impact the public by completing gender impact assessments.

Table 34 | Progress against Diversity and Inclusion policy initiative

Diversity and Inclusion policy initiative	Target	Actual progress in 2019–20	Actual progress in 2020–21
1.1 Provide regular training and support to all Board members and staff to promote a strong understanding of, and support for, diversity and inclusion in the workplace	100% completion of diversity e-learning training within 12 months	100%	100%
	100% of Accredited Aboriginal and Torres Strait Islander Cultural Competency enrollees complete training as scheduled	N/A	100%
	1 Board training session on Diversity and Inclusion to be held in 2020-21: Culture Masterclass, Fiona Robertson	N/A	100%

Executive Officer Data

An executive officer (EO) is defined as an executive under Part 3 of the *Public Administration Act 2004* (Vic) or a person to whom the Victorian Government's *Public Entity Executive Remuneration (PEER) Policy* applies.

During the reporting period the Mallee CMA had one employee on a PEER contract who is female.

The Mallee CMA does not have any executive officers that meet the definition of Financial Reporting Directions (FRDs) 15E and 21C disclosures of responsible persons and executive officers, other than ministers and the accountable officer, during the reporting period.

The accountable officer's remuneration has been disclosed in financial statements note 8.5 Related Parties.

Part 4

Other Disclosures

Expenditure of funds within the Mallee Salinity Investment Plan 2020–21

The Ministerial Determination of Salinity Impact Zones and Salinity Impact Charges fixes the salinity impact charges for the purposes of section 232B of the *Water Act 1989*. Salinity Impact Charges are generated when a new water-use licence (WUL) is created or an existing WUL is varied to allow an increase in megalitres of annual use limit (AUL). The purpose of the charge is for the WUL holder to contribute towards the cost of works or measures to mitigate or offset the salinity impact of irrigation.

The charge is collected from WUL holders by the Ministers delegate, Lower Murray Water (LMW). The charge is transferred annually to the Mallee CMA, less the portion required to meet LMW's costs and expenses. The Mallee CMA must hold and apply the funds consistent with the direction, function and powers delegated to it by the Minister. Salinity Levies received by Mallee CMA in 2020–21 totalled \$3,364,473.

Total expenditure in 2020–21 within the Mallee Salinity Investment Plan was \$2,481,840. Projects delivered included:

- Managing statutory responsibility's through implementation of a governance framework to deliver regional monitoring and reporting obligations under the *Water Act 2007* (Cth) and *CaLP Act* as delegated to the Mallee CMA and support the functions of the Salinity Accountability Advisory Committee. Implement the Victorian Mallee Irrigation Region Land and Water Management Plan (\$341,045);
- The Mallee On-farm Irrigation Incentives Program, which focused on assisting irrigators in the upgrade and management of on-farm infrastructure to generate water use efficiency outcomes resulting in salinity benefits. This investment has the potential to provide additional offset salinity credit claims associated with relevant accountable actions (\$102,413);
- Eight (8) major projects listed on the Annual Salinity Major Projects Work Program that are critical to the offsetting and mitigation of salinity impacts from irrigation in waterways and landscapes. A program of works has been delivered to develop and deliver these projects, each project moves through a series of defined gateways, (concept, preliminary investigation, detailed design, delivery and ongoing monitoring). The major projects are overseen by an independent governance panel known as the Salinity Impact Charges Major Projects Project Control Group. A total of six (6) projects progressed through gateways during the financial year (\$237,467);
- Project management to drive the development and implementation of projects, including Airborne Electromagnetic Survey, Irrigation Futures and Restoration Management (iFarm), Irrigation Rootzone Drainage and BSM2030 annual reporting (\$150,378);
- Completion of a detailed design for an Airborne Electromagnetic (AEM) survey to inform salinity management. By providing more detailed data on subsurface geology, AEM provides the Mallee CMA with the capacity to reduce uncertainty and enable delivery of targeted efficient works to managing salinity (\$225,529);
- The operation of the Salinity Accountability Advisory Committee to provide advice to the Mallee CMA Board on salinity and irrigation management matters. This includes advice on Accountable Actions under Schedule B of the Murray Darling Basin Agreement, management and maintenance of the Mallee Regional Salinity Register and administration of the salinity impact charges Annual Program (\$18,135);
- Annual data collection from Mallee groundwater observation bores (\$141,501) and irrigation drainage monitoring stations (\$136,618), helped to support and refine salinity impact assessments that generated salinity credits and debits for the region. This project involved collection and management of groundwater level and salinity data at 406 monitoring bores visited on an annual, quarterly or biannual basis, along with the collection and management of salinity and flow data from 20 irrigation drainage outfall sites and three river sites. The data informs salinity impact models and reviews of specific accountable actions within the region. Additional to monitoring, a four-stage groundwater bore maintenance and reconditioning program was completed, with four new bores being added to the network associated with new irrigation development (\$528,822);

- Geospatial mapping (aerial photography) was captured by plane across the irrigable landscape, the data will be used in the production of the 2021 Mallee Irrigation Crop Report (\$77,981);
- A program of work to progress achievement of Action 4.8 of the Victorian Government's Water for Victoria Water Plan. This action aims to improve salinity management in the Mallee and commits to investing revenue from salinity offset charges to update contemporary knowledge of salinity impacts, review salinity impact charges, and update policies under the Victorian Mallee salinity management framework (\$168,960);
- A program of field investigations to better understand and quantify the physical processes affecting the dynamics of water movement between crop rooting depth and regional groundwater under irrigated tree crops. The project results help to explain why the magnitude of root zone drainage (deep drainage) is quite different from the recharge to groundwater. When extended spatially and temporally it will reduce the uncertainty associated with recharge to groundwater used in modelling and explain discharge to the river and salinity impact estimates (\$100,000). A further detailed study of process influencing groundwater recharge was investigated under irrigated horticulture in the boundary bend area. This work was important to provide evidence recharge rates were consistent with values used in the Nyah to SA border SMP Accountable Action Review (\$102,222); and
- Targeted communication efforts to address policies and frameworks that are current and emerging. This includes communication regarding, major projects, groundwater bore rationalisation, root zone drainage and irrigation impacts of groundwater systems. The activity also addresses the perception within the Victorian Mallee irrigation community that the salinity issue has been addressed and that salinity controls are no longer required (\$150,769).

The balance of funds as at 30 June 2021 is \$33,764,403. These funds are segregated for operational and capital expenditure for the purpose of mitigating or offsetting the salinity impact of irrigation in the Victorian Mallee and to maintain the region's compliance with state and federal requirements.

Local Jobs First - Victorian Industry Participation Policy

During 2020–21, Mallee CMA commenced one Local Jobs First Standard project totalling \$1.35 million. The project was located in regional Victoria, with a commitment of 100 per cent of local content. No projects were commenced that occurred state-wide.

The outcomes expected from the implementation of the Local Jobs First policy to these projects where information was provided are as follows:

- 100 per cent of local content commitment was made;
- A total of 0.08 jobs Annual Employee Equivalent (AEE) were committed, including the creation of 0.04 new jobs and the retention of 0.04 existing jobs (AEE); and
- There were 10 small to medium enterprises that prepared a Victorian Industry Participation Policy (VIPP) Plan or Local Industry Development Plan (LIDP) for contracts. Four small to medium-sized businesses are engaged through the supply chain on this commenced Standard Project.

Government advertising expenditure

Mallee CMA expenditure in the 2020–21 reporting period on government campaign expenditure was nil.

Consultancy expenditure

Details of consultancies (valued at \$10,000 or greater)

In 2020–21, there were 45 consultancies where the total fees payable to the consultants were \$10,000 or greater. The total expenditure incurred during 2020–21 in relation to these consultancies was \$2,785,693.18 (excl. GST).

Details of individual consultancies are outlined on the Mallee CMA's website, at www.malleecma.com.au in the Resources tab.

Details of consultancies (valued at less than \$10,000)

In 2020–21, there were 24 consultancies engaged during the year, where the total fees payable to the consultants were less than \$10,000. The total expenditure incurred during 2020–21 in relation to these consultancies was \$94,056.39 (excl. GST).

The following definitions are applied in calculating the aforementioned amounts:

- Contractor - A contractor is an individual or organisation that is formally engaged to provide works or services for or on behalf of an entity; and
- Consultant - A consultant is a particular type of contractor that is engaged primarily to perform a discrete task for an entity that facilitates decision making through: provision of expert analysis and advice; and/or development of a written report or other intellectual output.

Table 35 | ICT expenditure 2020–21

All operational ICT expenditure	ICT expenditure relating to projects to create or enhance ICT capabilities		
Business As Usual (BAU) ICT expenditure	Non-BAU ICT expenditure (OPEX + CAPEX)	Operational expenditure (OPEX)	Capital expenditure (CAPEX)
Total	Total (A + B)	A	B
\$435,128.94	\$77,802.00	\$44,400.00	\$33,402.00

Information and Communication Technology (ICT) expenditure

For the 2020–21 reporting period Mallee CMA had a total ICT expenditure of \$512,930.94, with the details shown above.

ICT expenditure refers to the Mallee CMA's costs in providing business enabling ICT services within the current reporting period. It comprises Business as Usual (BAU) ICT expenditure and Non-Business as Usual (Non-BAU) ICT expenditure.

Non-BAU ICT expenditure relates to extending or enhancing the Mallee CMA's current ICT capabilities.

BAU ICT expenditure is all remaining ICT expenditure, which primarily relates to ongoing activities to operate and maintain the current ICT capability.

Major contracts

The Mallee CMA did not enter into any major contracts during 2020–21.

A 'major contract' is a contract entered into during the reporting period valued at \$10 million or more.

Freedom of information

The *Freedom of Information Act 1982* (Cth) (FOI Act) allows the public a right of access to documents held by the Mallee CMA. The purpose of the FOI Act is to extend as far as possible the right of the community to access information held by government departments, local councils, Ministers and other bodies subject to the FOI Act.

An applicant has a right to apply for access to documents held by the Mallee CMA. This comprises documents both created by the Mallee CMA or supplied to the Mallee CMA by an external organisation or individual, and may also include maps, films, photographs, computer printouts, computer discs, tape recordings and videotapes. Information about the type of material produced by the Mallee CMA is available on its website at MalleeCMA.com.au/corporate-policies/ under its Part II Information Statement.

The FOI Act allows Mallee CMA to refuse access, either fully or partially, to certain documents or information. Examples of documents that may not be accessed include: cabinet documents; some internal working documents; law enforcement documents; documents covered by legal professional privilege, such as legal advice; personal information about other people; and information provided to the Mallee CMA in confidence.

The FOI Act was amended on 1 September 2017 to reduce the Freedom of Information (FoI) processing time for requests received from 45 to 30 days. However, when external consultation is required under ss29, 29A, 31, 31A, 33, 34 or 35, the processing time automatically reverts to 45 days. Processing time may also be extended by periods of 30 days, in consultation with the applicant. With the applicant's agreement this may occur any number of times. However, obtaining an applicant's agreement for an extension cannot occur after the expiry of the timeframe for deciding a request.

If an applicant is not satisfied by a decision made by the Mallee CMA, under section 49A of the FOI Act, they have the right to seek a review by the Office of the Victorian Information Commissioner (OVIC) within 28 days of receiving a decision letter.

Making a request

FOI requests can be lodged online at www.ovic.vic.gov.au. An application fee of \$30.10 applies. Access charges may also be payable if the document pool is large, and the search for material, time consuming.

Access to documents can also be obtained through a written request to the Mallee CMA's Freedom of Information team, as detailed in s17 of the *Freedom of Information Act 1982*.

When making a FOI request, applicants should ensure requests are in writing, and clearly identify what types of material/documents are being sought.

Requests for documents in the possession of the Mallee CMA should be addressed to:

Freedom of Information Team
Mallee Catchment Management Authority
Mail: PO Box 5017, Mildura, Victoria 3502
Email: foi@malleecma.com.au

Fol statistics

During 2020–21, Mallee EMC received **No** Freedom of Information applications.

Further information

Further information regarding the operation and scope of FOI can be obtained from the FOI Act; regulations made under the FOI Act; and www.ovic.vic.gov.au.

Building Act 1993

The Mallee 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 *Building Act 1993*.

Competitive Neutrality Policy

Competitive neutrality requires government businesses to ensure where services compete, or potentially compete with the private sector, any advantage arising solely from their government ownership be removed if it is not in the public interest. Government businesses are required to cost and price these services as if they were privately owned. Competitive neutrality policy supports fair competition between public and private businesses and provides government businesses with a tool to enhance decisions on resource allocation. This policy does not override other policy objectives of government and focuses on efficiency in the provision of service.

Mallee CMA continues to comply with the requirements of the Competitive Neutrality Policy.

Public Interest Disclosure Act 2012

The *Public Interest Disclosure Act 2012* (PID Act) enables people to make a disclosure about corrupt or improper conduct by a public officer or a public body.

Mallee CMA is a public body for the purposes of the PID Act.

What is a public interest disclosure?

A public interest disclosure is a complaint of corrupt or improper conduct or detrimental action by a public officer or a public body.

'Improper or corrupt conduct' involves substantial mismanagement of public resources, risk to public health or safety or the environment, or corruption.

'Detrimental action' is action taken against a person in reprisal for making a public interest disclosure.

How do I make a public interest disclosure?

You can make a public interest disclosure about Mallee CMA or its board members, officers or employees by contacting Independent Broad-Based Anti-Corruption Commission (IBAC) (details below).

Mallee CMA is not able to receive public interest disclosures.

Mallee CMA has established procedures for the protection of persons from detrimental action in reprisal for making a public interest disclosure about Mallee CMA, its board members, officers or employees. You can access Mallee CMA's procedures on its website at MalleeCMA.com.au/corporate-policies/.

IBAC Victoria

Address: Level 1, North Tower, 459 Collins Street, Melbourne, VIC 3000
Mail: IBAC, GPO Box 24234, Melbourne Victoria 3001
Internet: www.ibac.vic.gov.au
Phone: 1300 735 135

Table 36 | Disclosures under the *Public Interest Disclosure Act 2012*

Disclosures under the <i>Public Interest Disclosure Act 2012</i>	2020–21	2019–20
The number of disclosures made by an individual to the Mallee CMA and notified to the Independent Broad-based Anti-corruption Commission.	0	0

Catchment and Land Protection Act 1994

The Mallee CMA was established in 1997 under the *Catchment and Land Protection Act 1994* (CaLP Act) and has responsibilities under the *Water Act 1989* (Vic), Statement of Obligations and the CaLP Act, Statement of Obligations.

The Statement of Obligations for both the CaLP Act and Water Act were re-issued in January 2018 and were applied to the Mallee CMA's 2018–2023 Corporate Plan and reported against in the 2018–19 and subsequent Annual Reports.

CaLP Act responsibilities are set out on page 7 of this Annual Report. The Mallee CMA is compliant with these establishing act requirements.

Office-based environmental impacts

The Mallee Catchment Management Authority (CMA) strives to implement and improve sustainable practices in its operations in both the office and field environment. The Mallee CMA has modified its business activities in accordance with the Environmental Sustainability Policy. The policy identifies environmental impacts and measures for the reduction in usage of resources and waste production. As a member of the Victorian

Government - Irymple site user group, the Mallee CMA has made a commitment to modifying its practices to facilitate a site-wide reduction in environmental impacts via an improvement in sustainability.

As a tenant of the Victorian Government site at Irymple, utility resource usage is monitored and controlled by the Department of Jobs, Precincts and Regions (DJPR) as the landlord. All steps taken to reduce environmental impact implemented by the Mallee CMA contribute to the whole of site energy efficiencies and contribute toward the reduction in (DJPR) energy resource usage.

Further information on office-based environmental impacts is presented in Table 37 below.

Table 37 | Mallee CMA office-based environmental impacts

Outputs	Activity	2020–21 Actual
Energy use	Total energy usage segmented by primary source, including Green Power (mega joules)	*
	Greenhouse gas emissions associated with energy use, segmented by primary source and offsets (tonnes CO ₂ -e)	*
	Percentage of electricity purchased as Green Power (%)	*
	Units of energy used per full time employee (mega joules per FTE)	*
	Units of energy used per unit of office area (mega joules per m ²)	*
Waste and recycling	Total units of office waste disposed of by destination (kilograms per year)	*
	Total units of office waste disposed of per FTE by destination (kilograms per FTE)	*
	Recycling rate (% of total waste by weight)	*
	Waste disposal - separation of office waste into 'classes' e.g. paper, recyclable plastics, rubbish	*
	Reduction and recycling of cartridges (through suppliers) and consumables containers (through site)	100%
	Re-use and/or recycling (recycled when replaced with new handsets) of mobile phones and unserviceable equipment Surplus or obsolete equipment sent to Waste Management Centre - Mildura Rural City Council 'Around Again' re-use facility	100%
Paper use	Total units of A4 equivalent copy paper used (reams) Default printer settings to double-sided and save to user boxes for release, to reduce paper usage	88
	Units of A4 equivalent copy paper reams used per FTE	1.6
	Percentage of recycled content in copy paper purchased	100%
Water consumption	Total units of metered water consumed by water source (kilolitres)	*
	Units of metered water consumed in offices per FTE (kilolitres per FTE)	*
	Units of metered water used in offices per unit of office area (kilolitres per m ²)	*

Continued...

Table 37 | Mallee CMA office-based environmental impacts *Continued...*

Outputs	Activity	2020–21 Actual
Transport	Total energy consumption by vehicle fleet segmented by vehicle/ fuel type (mega joules)	5,934,504 Diesel (18,204)
		6,535,236 Unleaded (11,968)
	Total vehicle travel associated with operations segmented by vehicle/ fuel type (kilometres)	111,553 Diesel
		108,100 Unleaded
	Total distance travelled by air (kilometres)	8,196
Greenhouse gas emissions	Total greenhouse gas emissions associated with vehicle fleet	76
	Total greenhouse gas emissions associated with air travel	2
	Total greenhouse gas emissions associated with energy use	*
	Total greenhouse gas emissions associated with waste disposal	*
	Greenhouse gas emissions offsets purchased	Nil
Procurement	<p>The Mallee CMA Purchasing and Procurement Policy includes environmental procurement as an essential consideration. (Participation % of FTE)</p> <p>Employees are required to purchase goods and services that have reduced impacts on the environment.</p> <p>Employees are also required to consider environmental impacts and opportunities during the procurement process. Employees undertaking procurement should consider where appropriate the inclusion of minimum environmental requirements in specifications.</p> <p>Environmental requirements can be defined in relation to performance standards, the impact of the good or service on the environment and/or in relation to supplier's environmental management practices.</p> <p>The Mallee CMA policy also requires employees to undertake socially responsible procurement which includes the protection of the environment and the conservation of resources.</p>	100%

Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.



Mallee CMA 4x4 driver training.

Additional information available on request

In compliance with the requirements of the Standing Directions of the Minister for Finance, details in respect of the items listed below have been retained by the Mallee CMA and are available (in full) on request, subject to the provisions of the *Freedom of Information Act 1982*:

- details of publications produced by the agency about itself, and how these can be obtained
- details of major promotional and public relations activities undertaken by the agency 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

The information is available on request to:

Freedom of Information Team

Mallee Catchment Management Authority

Post: Mallee CMA, PO Box 5017, Mildura, Victoria 3502

Phone: 03 5051 4377

Email: foi@malleecma.com.au

Additional information included in the annual report

Details in respect of the following items have been included on the pages indicated below:

- a list of the Mallee CMA's major committees, the purposes of each committee – from page 47;
- details of changes in FOI fees – page 62;
- training undertaken to improve the occupational health and safety of employees - page 56.

Information that is not applicable to the Mallee CMA

The following information is not relevant to the Mallee CMA for the reasons set out below:

- details of shares held by senior officers; no shares have ever been issued in the Mallee CMA; and
- details of overseas visits undertaken; no Board members or senior executives took overseas work-related trips in 2020–21.

Asset Management Accountability Framework (AMAF) maturity assessment

The Asset Management Accountability Framework is a mandatory framework for managing public assets in Victoria that seeks to ensure an organisation's implementation is both fit for purpose and achieves organisational objectives.

Prior to the end of the reporting year, an independent review was conducted as an assurance activity to measure and validate the level of asset maturity assessment of the organisation. In comparison to the other public sector organisations Mallee CMA has a small asset base and does not own any large infrastructure, land or buildings.

Mallee CMA's target maturity rating is 'competence', meaning systems and processes are fully in place, consistently applied and systematically meeting the AMAF requirement, including a continuous improvement process to expand system performance above AMAF minimum requirements.

Leadership and accountability (requirements 1 to 19)

Mallee CMA has met or exceeded its target maturity level under all applicable requirements in this category.

Planning (requirements 20 to 23)

Mallee CMA has met or exceeded its target maturity level in this category.

Acquisition (requirements 24 and 25)

Mallee CMA has met its target maturity in this category.

Operation (requirements 26 to 40)

Mallee CMA has met its or exceeded target maturity in this category.

Disposal (requirement 41)

Mallee CMA has met its target maturity level in this category.

Social Procurement Framework

In accordance with Victoria's Social Procurement Framework (SPF), the Mallee CMA Social Procurement Strategy was developed in March 2020 and is fully committed to supporting the Government's direction in advancing social and sustainable outcomes not just for our region but for the State of Victoria.

Procurement has been outlined as a core business and strategic function by the Victorian Purchasing Government Board (VGPB) and Mallee CMA is committed to pursuing social and ethical objectives through procurement activities in accordance with the Victorian SPF.

The Mallee CMA Strategy has prioritised four key SPF objectives and associated reporting metrics which have been detailed in Tables 38 and 39. As managers of the largest catchment area in the State of Victoria, these objectives were selected in line with the Mallee CMA's strategic direction, values and project responsibilities.



Mallee CMA case study in the 2019–20 Whole of Victorian Government Social Procurement Framework Annual Report.

Table 38 | Prioritised SPF objectives 2020–21

Outputs	Activity	2020–21 Actual
Opportunities for Victorian Aboriginal People	Increase employment opportunities for Victorian Aboriginal people	Number as a proportion of the suppliers used by Mallee CMA and the monetary value Number of suppliers that employ Victorian Aboriginal people on contracts awarded by Mallee CMA and the monetary value
Opportunities for Victorians with disability	Increase engagement opportunities with suppliers which hire, support and promote continued employment for Victorians with a disability	Number as a proportion of the suppliers used by Mallee CMA and the monetary value
Sustainable Victorian social enterprise and Aboriginal business sectors	Identify engagement with sustainable Victorian social enterprises and Aboriginal business sectors	Number as a proportion of the suppliers used by Mallee CMA and the monetary value
Women's Equality and Safety	Gender equality within Victorian government suppliers	Number as a proportion of the suppliers used by Mallee CMA that have a gender equality policy and the monetary value

Achievements

An analysis of the Mallee CMA's procurement activity considered the spend patterns and categorisation that existing projects and contracts had identified as specific opportunities relating to social and sustainable procurement objectives.

The Mallee CMA continually engages and participates in **Social Procurement Framework training sessions** in order to remain consistent with our Social Procurement Framework Strategy, to update our policies and processes with relevant government changes and for the continuous improvement of business practice.

Mallee CMA has undergone a **comprehensive review of procurement policies, procedures, forms, and processes** to ensure our procurement activities are consistent with the Victorian Social Procurement Framework. Some changes we made were:

- Updating our Vendor Application Form which now includes metrics for identifying organisations that are owned by Victorian Aboriginal People. This assisted in identifying organisations that created a social benefit in line with one of our prioritised SPF objectives; and
- To our procurement processes, including requiring suppliers we engage to adhere to the Victorian Government's Supplier Code of Conduct and sign a form agreeing to the Code.

Part 4 Other Disclosures

The review is ongoing and will continue as a means of continuous business improvement and practice.

System enhancements have been implemented to ensure suppliers can be easily identified with the capability of delivering social and/or sustainable services, or have policies and procedures which coincide with SPF objectives. These system enhancements are active, and a historic cataloguing of suppliers has also been undertaken.

The four priority SPF objectives in Table 38 provided a foundational platform for engaging in social and sustainable practices. The Mallee CMA remains committed to achieving social and sustainable procurement objectives where we are able, for the advancement of the Victorian Social Procurement Framework.

The Mallee CMA will prioritise the upskilling of staff and updating of policies & procedures for the continuance of achieving SPF objectives in all aspects of business practice.

Provided in the achievements against the SPF objectives and metrics report below is the first year of data collected and therefore no comparison information is available. Information for SPF objectives not in the report was unavailable in this reporting period. Mallee CMA will continue to develop our processes and systems to ensure we are able to track suppliers we engage in relation to social and environmental procurement activities.

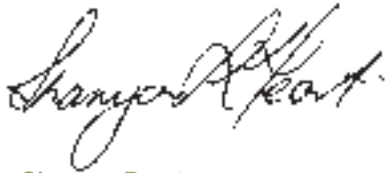
Table 39 | Achievements against SPF objectives and metrics

SPF Objective: Opportunities for Victorian Aboriginal people*		2020–21
SPF reporting metrics	Total spend with verified Victorian Aboriginal suppliers	\$889.13
	Number of verified Victorian Aboriginal suppliers engaged	4
	Proportion of Victorian Aboriginal suppliers engaged	1.3%
	Total spend with suppliers that employ Victorian Aboriginal people	\$2,392.13
	Number of suppliers that employ Victorian Aboriginal people on contracts with Mallee Catchment Management Authority	9
	Proportion of suppliers that employ Victorian Aboriginal people on contracts with Mallee Catchment Management Authority	2.9%
SPF Objective: Opportunities for Victorians with disability*		2020–21
SPF reporting metrics	Total spend with verified Victorian social enterprises led by a mission for people with disability and Australian Disability Enterprises (ADEs)	\$77.65
	Number of verified Victorian social enterprises led by a mission for people with disability and ADEs engaged	3
	Number of suppliers that employ Victorians with disability on contracts with the Mallee Catchment Management Authority	1
	Proportion of Victorian Disability suppliers engaged	1.0%
SPF Objective: Sustainable Victorian social enterprises and Aboriginal business sectors*		2020–21
SPF reporting metrics	Total spend with verified Victorian Aboriginal suppliers	\$889.13
	Number of verified Victorian Aboriginal suppliers engaged	4
	Proportion of Victorian Aboriginal suppliers engaged	1.3%
	Total spend with verified Victorian social enterprises	\$294.10
	Number of verified Victorian social enterprises engaged	3
	Proportion of Victorian social enterprises engaged	1.0%
SPF Objective: Women's equality and safety*		2020–21
SPF reporting metrics	Total spend with Women's equality and safety suppliers	\$1,923.81
	Number of suppliers that have implemented a family violence leave policy	1
	Proportion of suppliers that have implemented a family violence leave policy	0.3%
	Number of suppliers that have a gender equality policy	5
	Proportion of suppliers that have a gender equality policy	1.6%
SPF Objective: Sustainable Victorian regions		2020–21
SPF reporting metrics	Number of suppliers that employ people who live in regions experiencing entrenched disadvantage on contracts with Mallee Catchment Management Authority	36
	Number of suppliers engaged within regions experiencing entrenched disadvantage	36
	Total spend with suppliers within the regions experiencing entrenched disadvantage	\$7,825
SPF Objective: Supporting safe and fair workplaces		2020–21
SPF reporting metrics	Number of suppliers that attest to compliance with the Supplier Code of Conduct	55
	Proportion of suppliers that attest to comply with the Supplier Code of Conduct	18%
SPF Objective: Environmentally sustainable business practices		2020–21
SPF reporting metrics	Number of contracts entered in to with suppliers that have a clause for environmentally sustainable business practices	39

Attestation for financial management compliance

Mallee Catchment Management Authority Financial Management Compliance Attestation Statement

I Sharyon Peart, on behalf of the Responsible Body, certify that the Mallee Catchment Management Authority has no Material Compliance Deficiency with respect to the applicable Standing Directions under the *Financial Management Act 1994* and Instructions.

A handwritten signature in black ink, appearing to read 'Sharyon Peart'.

Sharyon Peart

Board Chair
Mallee Catchment Management Authority

29 September 2021

Part 5

Financial Statements

For the year ended 30 June 2021



Declaration in Financial Statements

The attached financial statements for the Mallee Catchment Management Authority have been prepared in accordance with Direction 5.2 of the Standing Directions of the Assistant Treasurer under 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 2021 and financial position of the Authority at 30 June 2021.

At the time of signing, we are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.

We authorise the attached financial statements for issue on 29 September 2021.

Sharon Peart
Chairperson
Mallee Catchment Management Authority

Jenny Collins
CEO and Accountable Officer
Mallee Catchment Management Authority

Meagan Crozier CPA
Chief Finance Officer
Mallee Catchment Management Authority

Independent Auditor's Report

To the Board of Mallee Catchment Management Authority

Opinion	<p>I have audited the financial report of Mallee Catchment Management Authority (the authority) which comprises the:</p> <ul style="list-style-type: none"> • balance sheet as at 30 June 2021 • comprehensive operating statement for the year then ended • statement of changes in equity for the year then ended • cash flow statement for the year then ended • notes to the financial statements, including significant accounting policies • declaration in the financial statements. <p>In my opinion, the financial report presents fairly, in all material respects, the financial position of the authority as at 30 June 2021 and its financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 7 of the <i>Financial Management Act 1994</i> and applicable Australian Accounting Standards.</p>
Basis for Opinion	<p>I have conducted my audit in accordance with the <i>Audit Act 1994</i> which incorporates the Australian Auditing Standards. I further describe my responsibilities under that Act and those standards in the <i>Auditor's Responsibilities for the Audit of the Financial Report</i> section of my report.</p> <p>My independence is established by the <i>Constitution Act 1975</i>. My staff and I are independent of the authority in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's <i>APES 110 Code of Ethics for Professional Accountants</i> (the Code) that are relevant to my audit of the financial report in Victoria. My staff and I have also fulfilled our other ethical responsibilities in accordance with the Code.</p> <p>I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.</p>
Board's responsibilities for the financial report	<p>The Board of the authority is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the <i>Financial Management Act 1994</i>, and for such internal control as the Board determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.</p> <p>In preparing the financial report, the Board is responsible for assessing the authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is inappropriate to do so.</p>

Auditor's responsibilities for the audit of the financial report

As required by the *Audit Act 1994*, my responsibility is to express an opinion on the financial report based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit 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 authority's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board
- conclude on the appropriateness of the Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the authority's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the authority to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

MELBOURNE
1 October 2021



Paul Martin
as delegate for the Auditor-General of Victoria

Comprehensive Operating Statement
For the financial year ended 30 June 2021

			\$
	Notes	2021	2020
Income from transactions			
Government contributions	2.2.1	14,827,615	12,037,493
Interest	2.2.2	131,616	413,371
Other income	2.2.3	6,925,201	5,862,284
Total income from transactions		21,884,432	18,313,148
Expenses from transactions			
Employee expenses	3.1.1	5,777,705	5,817,176
Grants and incentives	3.2	257,505	1,083,049
Depreciation	4.1.1	210,395	200,931
Amortisation	4.2	-	42,261
Other operating expenses	3.3	12,699,544	9,965,285
Total expenses from transactions		18,945,149	17,108,702
Net result from transactions (net operating balance)		2,939,283	1,204,446
Other economic flows included in net result			
Net gain/(loss) on disposal of non-financial assets	8.1	-	10,068
Total other economic flows – included in net result		-	10,068
Comprehensive result		2,939,283	1,214,514

Notes:

(i) This format is aligned to AASB 1049 Whole of Government and General Government Sector Financial Reporting.

(ii) Net gain/(loss) on non-financial assets includes unrealised and realised gains/(losses) from revaluations, impairments, and disposals of all physical assets and intangible assets, except when these are taken through the asset revaluation surplus.

The accompanying notes form part of these financial statements

Balance Sheet

As at 30 June 2021

	Notes	2021	2020
Assets			
Financial assets			
Cash and deposits	6.1	43,118,256	39,498,064
Receivables	5.1	3,287,660	3,269,734
Total financial assets		46,405,916	42,767,798
Non-financial assets			
Prepayments	5.3	-	65,799
Plant and equipment	4.1	460,484	598,233
Intangible assets	4.2	-	-
Total non-financial assets		460,484	664,032
Total assets		46,866,400	43,431,830
Liabilities			
Payables	5.2	978,166	515,418
Employee related provisions	3.1.2	1,138,550	1,106,011
Total liabilities		2,116,716	1,621,429
Net assets		44,749,684	41,810,401
Equity			
Accumulated surplus/(deficit)		3,333,639	699,251
Reserves	8.2	37,318,710	37,013,815
Contributed capital		4,097,335	4,097,335
Net worth		44,749,684	41,810,401

Note:

(i) This format is aligned to AASB 1049 Whole of Government and General Government Sector Financial Reporting.

The accompanying notes form part of these financial statements

Cash Flow Statement

For the financial year ended 30 June 2021

	Notes	2021	2020
Cash flows from operating activities			
Receipts			
Receipts from government		16,363,421	11,833,595
Interest received		131,616	413,371
Goods and services tax received from the ATO (a)		186,473	495,042
Other receipts		6,925,201	5,862,284
Total receipts		23,606,711	18,604,292
Payments			
Payments to suppliers and employees		(19,913,873)	(18,097,761)
Total payments		(19,913,873)	(18,097,761)
Net cashflows from/(used in) operating activities	6.1.1	3,692,838	506,531
Cash flows from investing activities			
Purchases of non-financial assets		(72,646)	(174,559)
Proceeds from sale of non-financial assets		-	81,363
Payment for intangible assets		-	12
Net cashflows from/(used in) investing activities		(72,646)	(93,184)
Net increase/(decrease) in cash and cash equivalents		3,620,192	413,347
Cash and cash equivalents at the beginning of the financial year		39,498,064	39,084,717
Cash and cash equivalents at the end of the financial year	6.1	43,118,256	39,498,064

Notes:

(i) This format is aligned to AASB 1049 Whole of Government and General Government Sector Financial Reporting.

(a) GST received from the Australian Taxation Office is presented on a net basis

The accompanying notes form part of these financial statements

Statement of Changes in Equity
For the financial year ended 30 June 2021

					\$
	Notes	Reserves	Accumulated surplus / (deficit)	Contributed capital	Total
Balance at 1 July 2019		35,814,050	684,502	4,097,335	40,595,887
Net result for the year		-	1,214,514	-	1,214,514
Transfers to/(from) reserves		1,199,765	(1,199,765)		-
Balance at 30 June 2020		37,013,815	699,251	4,097,335	41,810,401
Net result for the year		-	2,939,283	-	2,939,283
Transfers to/(from) reserves	8.2	304,895	(304,895)	-	-
Balance at 30 June 2021		37,318,710	3,333,639	4,097,335	44,749,684

Notes:

(i) This format is aligned to AASB 1049 Whole of Government and General Government Sector Financial Reporting.

The accompanying notes form part of these financial statements

**Notes to the Financial Report
for the year ended 30 June 2021**

1. ABOUT THIS REPORT

The Mallee Catchment Management Authority (the Authority) is a government authority of the State of Victoria, established by the *Catchment and Land Protection Act 1994*.

A description of the nature of its operations and its principal activities is included in the **Report of Operations**, which does not form part of these financial statements.

Its principal address is:

Agriculture Victoria
315-341 Koorlong Avenue
Irymple, Victoria, 3498

Basis of preparation

These financial statements are in Australian dollars and the historical cost convention is used unless a different measurement basis is specifically disclosed in the note associated with the item measured on a different basis.

The accrual basis of accounting has been applied in preparing 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.

Consistent with the requirements of AASB 1004 *Contributions*, contributions by owners (that is, contributed capital and its repayment) are treated as equity transactions and, therefore, do not form part of the income and expenses of the Authority.

Judgements, estimates and assumptions are required to be made about financial information being presented. The significant judgements made in the preparation of these financial statements are disclosed in the notes where amounts affected by those judgements are disclosed. Estimates and associated assumptions are based on professional judgements derived from historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Revisions to accounting estimates are recognised in the period in which the estimate is revised and also in future periods that are affected by the revision. Judgements and assumptions made by management in applying AAS that have significant effects on the financial statements and estimates are disclosed in the notes under the heading: 'Significant judgement or estimates', and relate to:

- Employee benefit provisions (Note 3.1.2);
- Accrued expenses (Note 5.2);
- Determining whether the performance obligations are sufficiently specific so as to determine whether the arrangement is within the scope of AASB 15 or AASB 1058 (Note 2.2.1);
- Commitments for expenditure (Note 6.2);
- Fair value determination of assets and liabilities (Note 7.3).

Notes to the Financial Report for the year ended 30 June 2021

COVID-19 impact

Australia has experienced significant changes to the societal and economic environment due to the global pandemic caused by the Coronavirus (COVID-19). The outbreak of COVID-19 has created highly uncertain circumstances for households, businesses and governments.

The Australian Government announced measures to help the economy withstand and recover from the economic impact of COVID-19, which include, but are not limited to:

- Job Keeper and Job Seeker payments;
- Business financial assistance packages;
- Moratorium on rental evictions as well as rental relief grants; and
- Essential workers receiving free childcare during the crisis.

During the reporting period, the Authority received funding from the Working for Victoria initiative, which was launched in April 2020 as part of the Victorian Government's \$1.7 billion Economic Survival Package to assist people get back into work, including those who lost their jobs as a result of the coronavirus pandemic.

Since then, Working for Victoria has partnered with more than 200 employers including local governments, social enterprises, community organisations and businesses to create more than 12,000 jobs for Victorians.

As one of the partnering agencies the Authority has helped to rebuild community confidence as Victoria's economy recovers by proving 69 local people with employment.

The Authority does not expect to have an adverse material impact on the financial statements as a result of COVID-19. Where the Authority believes a material impact is likely as a result of the COVID-19 pandemic, it will include details of the possible impact and provide COVID-19 updated figures or estimates where appropriate.

Compliance information

These general purpose financial statements have been prepared in accordance with the *Financial Management Act 1994* and applicable Australian Accounting Standards (AASs) which include Interpretations, issued by the Australian Accounting Standards Board (AASB). In particular, they are presented in a manner consistent with the requirements of AASB 1049 *Whole of Government and General Government Sector Financial Reporting*.

Where appropriate, those AASs paragraphs applicable to not-for-profit entities have been applied. Accounting policies selected and applied in these financial statements ensure 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.

2. FUNDING DELIVERY OF OUR SERVICES

Introduction

The Authority's primary objective is to facilitate integrated and ecological sustainable management of the natural, cultural and productive landscapes occurring within the region. Programs and projects are developed to deliver against the region's priorities for these landscapes.

To enable the Authority to fulfil its objective and provide outputs it receives income (predominantly accrual based government contributions). The Authority also receives Salinity levies collected specifically to offset salinity impact of irrigation development.

Structure

- 2.1 Summary of income that funds the delivery of our services
- 2.2 Income from transactions

2.1 Summary of income that funds the delivery of our services

			\$
	Notes	2021	2020
Government Contributions	2.2.1	14,827,615	12,037,493
Interest	2.2.2	131,616	413,371
Other Income	2.2.3	6,925,201	5,862,284
Total income that funds delivery of services		21,884,432	18,313,148

Revenue and income that fund delivery of the Authority's services are accounted for consistently with the requirements of the relevant accounting standards disclosed in the following notes.

2.2 Income from transactions

2.2.1 Government contributions

Income recognised under AASB 1058

	2021	2020
State Government		
State Government Contributions	3,355,163	1,508,459
Integrated Water Management	-	17,000
Catchment Governance	843,200	843,200
Basin Plan	-	205,000
Threatened Species Protection Initiative	1,539,950	1,411,147
Sustainable Irrigation Program	396,700	308,000
Landcare Program	431,729	271,612
Environmental Partnership Program	-	60,500
Environmental Water Program	478,000	531,000
Environmental Water Holder	609,414	437,754
Water Management Program	1,661,000	1,515,000
Our Catchment Our Communities	631,000	391,000
Total State Government contributions	9,946,156	7,499,672
Commonwealth Government		
Commonwealth Contributions	5,000	52,529
The Living Murray	2,425,042	2,183,356
National Landcare Program	2,451,417	2,301,936
Sustainable Diversion Limits	-	-
Total Commonwealth Government contributions	4,881,459	4,537,821
Total Government contributions	14,827,615	12,037,493

Notes to the Financial Report for the year ended 30 June 2021

The Authority has determined that the grant income included in the table above under AASB 1058 has been earned under arrangements that are either not enforceable and/or linked to sufficiently specific performance obligations.

Income from grants without any sufficiently specific performance obligations, or that are not enforceable, is recognised when the Authority has an unconditional right to receive cash which usually coincides with receipt of cash. On initial recognition of the asset, the Authority recognises any related contributions by owners, increases in liabilities, decreases in assets, and revenue ('related amounts') in accordance with other Australian Accounting Standards. Related amounts may take the form of:

- (a) contributions by owners, in accordance with AASB 1004;
- (b) revenue or a contract liability arising from a contract with a customer, in accordance with AASB 15;
- (c) a lease liability in accordance with AASB 16;
- (d) a financial instrument, in accordance with AASB 9; or
- (e) a provision, in accordance with AASB 137 *Provisions, Contingent Liabilities and Contingent Assets*.

Income received for specific purpose grants for on-passing is recognised simultaneously as the funds are immediately on passed to the relevant recipient entities.

Grants recognised under AASB 15

Income from grants that are enforceable and with sufficiently specific performance obligations are accounted for as revenue from contracts with customers under AASB 15. Revenue is recognised at a point in time when the Authority has completed the performance obligation. Consideration received in advance of recognising the associated revenue from the customer is recorded as a contract liability. Where the performance obligations is satisfied but not yet billed, a contract asset is recorded. In 2020-21 the Authority has not recognised any contract asset under AASB 15 (2020: Nil), and has recognised Deferred Revenue of \$489,291 under AASB 15 as a contract liability (Note 5.2) (2020: Nil).

2.2.2 Interest income

	\$	
	2021	2020
Interest from financial assets not at fair value through profit and loss		
Interest on bank deposits	131,616	413,371
Total interest from financial assets not at fair value through profit and loss	131,616	413,371

Interest income includes interest received on bank deposits. Interest income is recognised using the effective interest method, which allocates interest over the relevant period.

2.2.3 Other income

	\$	
	2021	2020
Salinity levies	3,364,491	3,902,666
Victorian Murray Floodplain Restoration Project	3,487,609	1,875,604
Sundry income	73,101	84,014
Total other income	6,925,201	5,862,284

Salinity levies are collected under the Ministerial 'policies for managing water use licences in salinity impact zones (2007)', whereby each mega litre of new or increased Annual Use Limit (AUL) attracts a capital or ongoing charge to contribute to the costs of works and measures to offset salinity impacts. Income relating to salinity levies is recognised when received.

The Victorian Murray Floodplain Restoration Project is a regional partnership coordinated by Lower Murray Water and supported by Mallee Catchment Management Authority to deliver ecological benefits to wetlands, native fish, birds and plants at nine sites along the Murray River in northern Victoria. The nine sites are now going through the various environmental, planning and works approval processes.

Sundry income is paid parental leave and reimbursements for trainees.

The Authority has determined that the other income included in the table above under AASB 1058 has been earned under arrangements that are either not enforceable and/or linked to sufficiently specific performance obligations.

3. THE COST OF DELIVERING OUR SERVICES

Introduction

This section provides an account of the expenses incurred by the Authority in delivering services and outputs. In Section 2, the funds that enable the provision of services were disclosed and in this note the cost associated with provision of services are recorded.

Structure

- 3.1 Expenses incurred in delivery of services
- 3.2 Grant expenses
- 3.3 Other operating expenses

3.1 Expenses incurred in delivery of services

			\$
	Notes	2021	2020
Employee benefits expense	3.1.1	5,777,705	5,817,176
Grants and incentives	3.2	257,505	1,083,049
Other operating expenses	3.3	12,699,415	9,965,285
Total expenses incurred in delivery of services		18,734,625	16,865,510

3.1.1 Employee benefits in the comprehensive operating statement

			\$
	Notes	2021	2020
Salaries and wages, annual leave and long service leave		5,289,159	5,337,600
Termination benefits		4,279	-
Defined Contribution Superannuation	3.1.3	484,267	479,576
Total employee benefits expenses		5,777,705	5,817,176

Employee expenses include all costs related to employment including wages and salaries, fringe benefits tax, leave entitlements, termination payments, payroll tax and WorkCover premiums.

The amount recognised in the comprehensive operating statement in relation to superannuation is employer contributions for members of defined contribution superannuation plans that are paid or payable during the reporting period. The Authority does not contribute to any defined benefit superannuation plans.

Termination benefits are payable when employment is terminated before normal retirement date, or when an employee accepts an offer of benefits in exchange for the termination of employment. Termination benefits are recognised when the Authority is demonstrably committed to terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or providing termination benefits as a result of an offer made to encourage voluntary redundancy.

Notes to the Financial Report
for the year ended 30 June 2021

3.1.2 Employee benefits in the balance sheet

Significant judgement, employee benefit provisions: In measuring employee benefits, consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using a single weighted average discount rate based on market yields of national government bonds in Australia that reflects the estimated timing and amount of benefit payment.

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 and recorded as an expense during the period the services are delivered.

	\$	
	2021	2020
Current provisions:		
Annual leave		
Unconditional and expected to settle within 12 months	294,919	307,800
Unconditional and expected to settle after 12 months	101,951	62,517
Time in lieu and rostered days off		
Unconditional and expected to settle within 12 months	4,360	4,360
Long service leave		
Unconditional and expected to settle after 12 months	472,636	462,987
Provisions for on-costs		
Unconditional and expected to settle within 12 months	32,711	34,093
Unconditional and expected to settle after 12 months	78,881	73,075
Total current provisions for employee benefits	985,458	944,832
Non-current provisions		
Employee benefits	134,063	141,144
On-costs	19,029	20,034
Total non-current provisions for employee benefits	153,092	161,179
Total provisions for employee benefits	1,138,550	1,106,011

	\$	
	2021	
Reconciliation of movement in on-cost provision		
Opening balance	127,202	
Additional provisions recognised	3,419	
Closing balance	130,621	
Current	111,592	
Non-current	19,029	

**Notes to the Financial Report
for the year ended 30 June 2021**

Wages and salaries, annual leave and sick leave: Liabilities for wages and salaries (including non-monetary benefits, annual leave and on-costs) are recognised as part of the employee benefit provision as current liabilities, because the Authority does not have an unconditional right to defer settlements of these liabilities.

The liability for salaries and wages are recognised in the balance sheet at remuneration rates which are current at the reporting date. As the Authority expects the liabilities to be wholly settled within 12 months of reporting date, they are measured at undiscounted amounts.

The annual leave liability is classified as a current liability and measured at the undiscounted amount expected to be paid, as the Authority does not have an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

No provision has been made for sick leave as all sick leave is non-vesting and it is not considered probable that the average sick leave taken in the future will be greater than the benefits accrued in the future. As sick leave is non-vesting, an expense is recognised in the Statement of Comprehensive Income as it is taken.

Employment on-costs such as payroll tax, workers compensation and superannuation are not employee benefits. They are disclosed separately as a component of the provision for employee benefits when the employment to which they relate has occurred.

Unconditional annual leave and LSL are disclosed as a current liability; even where the Authority 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 LSL liability are measured at either undiscounted value, if the Authority expects to wholly settle within 12 months, or present value, if the Authority does not expect to wholly settle within 12 months.

Conditional LSL 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. This non-current LSL is measured at present value.

Any gain or loss following revaluation of the present value of non-current LSL liability is recognised as a transaction.

3.1.3 Superannuation contributions

Employees of the Authority are entitled to receive superannuation benefits. The Authority only contributes to defined contribution plans.

	Paid contributions for the year		Contributions outstanding at year end	
	2021	2020	2021	2020
Defined contribution plans				
VicSuper	238,995	231,913	27,919	20,685
Other Superannuation Funds	245,272	247,663	36,577	30,238
Total	484,267	479,576	64,496	50,923

**Notes to the Financial Report
for the year ended 30 June 2021**

3.2 Grant expenses

	\$	
	2021	2020
Payments for specific purposes	257,505	1,083,049
Total grant expenses	257,505	1,083,049

Grant expenses are contributions of the Authority's resources to another party for specific purposes where there is no expectation that the amount will be repaid in equal value (either by money, goods or services).

Grants can be either operating or capital in nature. The Authority only makes special purpose grants which are paid for a particular purpose and/or have conditions attached regarding their use.

Grant expenses are recognised in the reporting period in which they are paid or payable. Grants only take the form of cash.

3.3 Other operating expenses

	\$	
	2021	2020
Supplies and services		
Purchase of services (including remuneration of auditors)	1,009,670	992,871
Consultancies - project based	2,856,334	2,545,366
Contractors - project based	6,446,477	5,017,740
Project operations and maintenance	1,869,057	743,595
Office expenses	192,472	351,570
Leases - short-term	325,534	314,144
Total other operating expenses	12,699,544	9,965,286

Other operating expenses generally represent the day-to-day running costs incurred in normal operations.

Supplies and services are recognised as an expense in the reporting period in which they are incurred.

Project based consultancy and contractor expenses relate to specific on ground projects undertaken by the Authority and do not include expenses of a corporate nature.

Lease payments include short-term leases recognised on a straight-line basis, which have a term of 12 months or less. Refer to note 6.2.2.

4. KEY ASSETS AVAILABLE TO SUPPORT OUTPUT DELIVERY

Introduction

The Authority controls non-financial physical assets and investments that are utilised in fulfilling its objectives and conducting its activities. They represent the resources that have been entrusted to the Authority to be utilised for delivery of those outputs.

Fair value measurement: Where the assets included in this section are carried at fair value, additional information is disclosed in Note 7.3 in connection with how those fair values were determined.

Structure

4.1 Total plant and equipment

4.2 Intangible assets

4.1 Total plant and equipment

	Gross carrying amount		Accumulated depreciation		Net carrying amount	
	2021	2020	2021	2020	2021	2020
Motor vehicles at fair value	787,311	748,067	(429,797)	(277,475)	357,514	470,592
Office furniture and equipment at fair value	46,951	56,724	(30,873)	(31,816)	16,078	24,908
Plant and equipment at fair value	216,013	230,528	(129,121)	(127,795)	86,892	102,733
Net carrying amount	1,050,275	1,035,319	(589,791)	(437,086)	460,484	598,233

Initial recognition: Items of plant and equipment, are measured initially at cost and subsequently revalued at fair value less accumulated depreciation and impairment. Where an asset is acquired for no or nominal cost, the cost is its fair value at the date of acquisition.

The cost of a leasehold improvements is capitalised and depreciated over the shorter of the remaining term of the lease or their estimated useful lives.

Subsequent measurement: Plant and equipment are subsequently measured at fair value less accumulated depreciation and impairment. Fair value is determined with regard to the asset's highest and best use (considering legal or physical restrictions imposed on the asset, public announcements or commitments made in relation to the intended use of the asset) and is summarised below by asset category.

Motor vehicles are valued using the current replacement cost method. The Authority 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 an experienced fleet manager in the Authority who set relevant depreciation rates during use to reflect the utilisation of the vehicles.

Fair value for **plant and equipment** that are specialised in use (such that it is rarely sold other than as part of a going concern) is determined using the current replacement cost method.

Refer to Note 7.3 for additional information on fair value determination of plant and equipment.

Impairment of plant and equipment

The recoverable amount of primarily non-cash-generating assets of not-for-profit entities, which are typically specialised in nature and held for continuing use of their service capacity, is expected to be materially the same as fair value determined under AASB 13 *Fair Value Measurement*, with the consequence that AASB 136 does not apply to such assets that are regularly revalued.

**Notes to the Financial Report
for the year ended 30 June 2021**

4.1.1 Depreciation and amortisation

Charge for the period		\$
	2021	2020
Motor vehicles	152,322	141,829
Office furniture and equipment	8,441	9,502
Plant and equipment	49,633	49,600
Total depreciation and amortisation	210,396	200,931

All plant and equipment and other non-financial physical assets that have finite useful lives, are depreciated.

Depreciation is generally calculated on a straight line basis, at rates that allocate the asset's value, less any estimated residual value, over its estimated useful life. Typical estimated useful lives for the different asset classes for current and prior years are included in the table below:

Asset	(years) Useful life
Motor vehicles	4 to 8
Office furniture and equipment	3 to 25
Plant and equipment	3 to 15

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period, and adjustments made where appropriate.

Leasehold improvements are depreciated over the shorter of the lease term and their useful lives.

4.1.2 Reconciliation of movements in carrying amounts of plant and equipment

					\$
2021	Motor vehicles at fair value	Office furniture and equipment at fair value	Plant and equipment at fair value	Total	
Opening balance	470,592	24,907	102,734	598,233	
Additions	39,244	-	33,402	72,646	
Disposals	-	(9,773)	(47,917)	(57,690)	
Depreciation	(152,322)	944	(1,327)	(152,705)	
Closing balance	357,514	16,078	86,892	460,484	

					\$
2020	Motor vehicles at fair value	Office furniture and equipment at fair value	Plant and equipment at fair value	Total	
Opening balance	526,713	34,409	134,780	695,902	
Additions	156,992	-	17,554	174,546	
Disposals	(71,284)	-	-	(71,284)	
Depreciation	(141,829)	(9,502)	(49,600)	(200,931)	
Closing balance	470,592	24,907	102,734	598,233	

**Notes to the Financial Report
for the year ended 30 June 2021**

4.2 Intangible assets

	Computer software		Total	
	2021	2020	2021	2020
Gross carrying amount				
Opening balance	-	597,540	-	597,540
Closing balance	-	-	-	-
Accumulated amortisation				
Opening balance	-	(555,267)	-	(555,267)
Amortisation of intangible non-produced assets	-	555,267	-	555,267
Closing balance	-	-	-	-
Net book value at the end of the financial year	-	-	-	-

Initial recognition

Purchased 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. Amortisation begins when the asset is available for use, that is, when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

The Authority does not have any internally generated intangible assets.

Subsequent measurement

Intangible non-produced assets with finite lives are amortised as an 'other economic flow' on a straight line basis over their useful lives. The amortisation period is 3 years.

The Authority does not have any intangible produced assets.

Impairment of intangible assets

Goodwill and intangible assets with indefinite useful lives (and intangible assets not yet available for use) are tested annually for impairment and whenever there is an indication that the asset may be impaired. Intangible assets with finite useful lives are tested for impairment whenever an indication of impairment is identified.

Significant intangible assets

The Authority has capitalised software expenditure for the acquisition of its Technology One and related software. The carrying amount of the capitalised software expenditure is zero. Its useful life is 3 years and was fully amortised in 2020.

**Notes to the Financial Report
for the year ended 30 June 2021**

5. OTHER ASSETS AND LIABILITIES

Introduction

This section sets out those assets and liabilities that arose from the Authority's controlled operations

Structure

- 5.1 Receivables
- 5.2 Payables
- 5.3 Prepayments

5.1 Receivables

	2021	2020
Contractual		
Income receivable	-	-
Other receivables	3,233,810	3,255,718
Statutory		
GST input tax receivable	53,850	14,016
Total receivables	3,287,660	3,269,734
Represented by:		
Current receivables	3,287,660	3,269,734

Receivables consist of:

Contractual receivables are classified as financial instruments and categorised as 'financial assets at amortised costs'. They are initially recognised at fair value plus any directly attributable transaction costs. The Authority holds the contractual receivables with the objective to collect the contractual cash flows and therefore subsequently measured at amortised cost using the effective interest method, less any impairment.

Statutory receivables do not arise from contracts and are recognised and measured similarly to contractual receivables (except for impairment), but are not classified as financial instruments for disclosure purposes. The Authority applies AASB 9 for initial measurement of the statutory receivables and as a result statutory receivables are initially recognised at fair value plus any directly attributable transaction cost.

**Notes to the Financial Report
for the year ended 30 June 2021**

5.2 Payables

	Notes	2021	2020
Contractual			
Supplies and services		488,574	395,310
Amounts payable to government and agencies		301	120,108
Contract liabilities	5.2.1	489,291	-
Statutory			
Other taxes payable		-	-
Total payables		978,166	515,418
Represented by:			
Current payables		978,166	515,418

Payables consist of:

Contractual payables are classified as financial instruments and measured at amortised cost. Accounts payable represent liabilities for goods and services provided to the Authority prior to the end of the financial year that are unpaid; and

Statutory payables that 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 contracts.

Payables for supplies and services have an average credit period of less than 30 days. No interest is charged on contractual payables.

The terms and conditions of amounts payable to the government and agencies vary according to the particular agreements and as they are not legislative payables, they are not classified as financial instruments.

Maturity analysis of contractual payables ^(a)

								\$
2021	Carrying amount	Nominal amount	Less than 1 month	Maturity dates				
				1 - 3 months	3 months - 1 year	1-5 years	5+ years	
Supplies and services	488,574	488,574	488,574	-	-	-	-	-
Amounts payable to government and agencies	301	301	301	-	-	-	-	-
Total	488,875	488,875	488,875	-	-	-	-	-

								\$
2020								
Supplies and services	395,310	395,310	395,310	-	-	-	-	-
Amounts payable to government and agencies	120,108	120,108	120,108	-	-	-	-	-
Total	515,418	515,418	515,418	-	-	-	-	-

(a) Maturity analysis is presented using the contractual undiscounted cash flows.

**Notes to the Financial Report
for the year ended 30 June 2021**

5.2.1 Contract liabilities

\$

	2021	2020
Contract liabilities		
Opening balance brought forward	-	-
Less: transfer to revenue recognition	-	-
Plus: liability recognised based on measure of progress during the year	489,291	-
Total contract liabilities	489,291	-
represented by:		
Current contract liabilities	489,291	-

Contract liabilities includes amounts recognised for revenue received in advance, which has been assessed under AASB 15 Revenue from Contracts with Customers. While this amount has been disclosed under liabilities for completeness of disclosures, it is not an amount payable by the Authority.

Contract liabilities are derecognised and recorded as revenue when the contracted services have been completed and the revenue earned. Contract liabilities for the reporting period relate to the project: Building Transformative Resilience in the Mallee to the Effects of Drought, whereby the contracted amount was received upfront but work on the project not yet commenced.

5.3 Other non-financial assets

\$

	2021	2020
Current other assets		
Prepayments	-	65,799
Total current other assets	-	65,799
Total other Assets	-	65,799

Other non-financial assets include prepayments, which represent payments in advance of receipt of goods or services or the payments made for services covering a term beyond that financial accounting period.

**Notes to the Financial Report
for the year ended 30 June 2021**

6. HOW WE FINANCED OUR OPERATIONS

Introduction

This section provides information on the sources of finance utilised by the Authority during its operations and other information related to financing activities of the Authority.

This section includes disclosures of balances that are financial instruments (such as cash balances). Notes 7.1 and 7.3 provide additional, specific financial instrument disclosures.

Structure

- 6.1 Cash flow information and balances
- 6.2 Commitments for expenditure

6.1 Cash flow information and balances

Cash and deposits, including cash equivalents, 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 which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

	2021	2020
Cash on hand	1,000	1,000
Cash and deposits disclosed in the balance sheet	43,117,256	39,497,064
Balance as per cash flow statement	43,118,256	39,498,064

The Authority is responsible for the facilitation and coordination of catchments in an integrated and sustainable manner. This is achieved by undertaking projects funded by state and federal government. 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 Energy, Environment and Climate Change and the Minister for Water.

The projects funded by the state and commonwealth governments can be undertaken over multiple financial years and 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 significant cash and cash equivalents that will be utilised to complete these projects in future financial years.

6.1.1 Reconciliation of net result for the period to cash flow from operating activities

	2021	2020
Net result for the period	2,939,412	1,214,514
Non-cash movements		
(Gain)/loss on disposal of non-current assets	-	(10,068)
Depreciation and amortisation of non-current assets	210,395	243,192
Movements in assets and liabilities		
Decrease/(increase) in receivables	(17,925)	(834,576)
(Decrease)/increase in employee related provisions	32,539	230,123
Decrease/(increase) in prepayments	65,799	(41,266)
(Decrease)/Increase in payables	462,618	(295,389)
Net cash flows from/(used in) operating activities	3,692,838	506,530

**Notes to the Financial Report
for the year ended 30 June 2021**

6.2 Commitments for expenditure

Commitments for future expenditure include operating and capital commitments arising from contracts. These commitments are recorded below at their nominal value and are exclusive of GST. 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.

6.2.1 Total commitments payable

					\$
Nominal amounts	Less than 1				
2021	year	1 - 5 years	5+ years	Total	
Other commitments payable	4,072,559	662,493	-	4,735,052	
Total commitments	4,072,559	662,493	-	4,735,052	

					\$
Nominal amounts	Less than 1				
2020	year	1 - 5 years	5+ years	Total	
Other commitments payable	2,641,079	936,585	-	3,577,664	
Total commitments	2,641,079	936,585	-	3,577,664	

6.2.2 Leases

For any new contracts entered into, the Department considers whether a contract is, or contains a lease. A lease is defined as 'a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration'. To apply this definition the Department assesses whether the contract meets three key evaluations:

Whether the contract contains an identified asset, which is either explicitly identified in the contract or implicitly specified by being identified at the time the asset is made available to the Department and for which the supplier does not have substantive substitution rights;

Whether the department has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use, considering its rights within the defined scope of the contract and the department has the right to direct the use of the identified asset throughout the period of use; and

Whether the department has the right to take decisions in respect of 'how and for what purpose' the asset is used throughout the period of use.

This policy is applied to contracts entered into, or changed, on or after 1 July 2019.

At 30 June 2021 the authority does not have any lease liabilities (2020 - \$0).

Short-term leases and leases of low-value assets

The Department has elected to account for short-term leases and leases of low-value assets using the practical expedients. Instead of recognising a right-of-use asset and lease liability, the payments in relation to these are recognised as an expense in profit or loss on a straight-line basis over the lease term.

At 30 June 2021 the authority does not have any commitments for short-term or low value leases.

7. RISKS, CONTINGENCIES AND VALUATION JUDGEMENTS

Introduction

The Authority is exposed to risk from its activities and outside factors. In addition, it is often necessary to make judgements and estimates associated with recognition and measurement of items in the financial statements. This section sets out financial instrument specific information, (including exposures to financial risks) as well as those items that are contingent in nature or require a higher level of judgement to be applied, which for the Authority related mainly to fair value determination.

Structure

- 7.1 Financial instruments specific disclosures
- 7.2 Contingent assets and contingent liabilities
- 7.3 Fair value determination

7.1 Financial instruments specific disclosures

Introduction

Financial instruments arise out of contractual agreements that give rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Due to the nature of the Authority's activities, certain financial assets and financial liabilities arise under statute rather than a contract (for example taxes, fines and penalties). Such assets and liabilities do not meet the definition of financial instruments in AASB 132 *Financial Instruments: Presentation*.

Categories of financial assets

Financial assets at amortised cost

Financial assets are measured at amortised costs if both of the following criteria are met and the assets are not designated as fair value through net result:

- the assets are held by the Authority to collect the contractual cash flows, and
- the assets' contractual terms give rise to cash flows that are solely payments of principal and interests.

These assets are initially recognised at fair value plus any directly attributable transaction costs and subsequently measured at amortised cost using the effective interest method less any impairment.

The Authority recognises the following assets in this category

- cash and deposits; and
- receivables (excluding statutory receivables)

Categories of financial liabilities

Financial liabilities at amortised cost are initially recognised on the date they are originated. They are initially measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, these financial instruments are measured at amortised cost with any difference between the initial recognised amount and the redemption value being recognised in profit and loss over the period of the interest bearing liability, using the effective interest rate method. The Authority recognises accounts payable (excluding statutory payables and contract liabilities) in this category.

**Notes to the Financial Report
for the year ended 30 June 2021**

7.1.1 Financial instruments: Categorisation

				\$
2021	Cash and deposits	Financial assets at amortised cost (AC)	Financial liabilities at amortised cost (AC)	Total
Contractual financial assets				
Cash and deposits	43,118,256	-	-	43,118,256
Receivables ^(a)				
Other contractual receivables	-	3,233,810	-	3,233,810
Total contractual financial assets	43,118,256	3,233,810	-	46,352,066
Contractual financial liabilities				
Supplies and services	-	-	488,574	488,574
Amounts payable to government and agencies	-	-	301	301
Total contractual financial liabilities	-	-	488,875	488,875
				\$
2020	Cash and deposits	Financial assets at amortised cost (AC)	Financial liabilities at amortised cost (AC)	Total
Contractual financial assets				
Cash and deposits	39,498,064	-	-	39,498,064
Receivables ^(a)				
Other contractual receivables	-	3,255,718	-	3,255,718
Total contractual financial assets	39,498,064	3,255,718	-	42,753,782
Contractual financial liabilities				
Supplies and services	-	-	395,310	395,310
Amounts payable to government and agencies	-	-	120,108	120,108
Total contractual financial liabilities	-	-	515,418	515,418

Note:

(a) The total amounts disclosed here exclude statutory amounts (e.g. amounts owing from Victorian Government and GST input tax credit recoverable and taxes payable).

**Notes to the Financial Report
for the year ended 30 June 2021**

7.1.2 Financial instruments: Net holding gain/(loss) by category

	\$	
	Total interest income/ (expense)	Total
2021		
Contractual financial assets		
Financial assets at amortised cost – other than on derecognition	131,616	131,616
Total contractual financial assets	131,616	131,616
Contractual financial liabilities		
Financial liabilities at amortised cost		-
Total contractual financial liabilities	-	-

	\$	
	Total interest income/ (expense)	Total
2020		
Contractual financial assets		
Financial assets at amortised cost – other than on derecognition	413,371	413,371
Total contractual financial assets	413,371	413,371
Contractual financial liabilities		
Financial liabilities at amortised cost	-	-
Total contractual financial liabilities	-	-

The net holding gains or losses disclosed above are determined as follows:

- for financial liabilities measured at amortised cost, the net gain or loss is calculated by taking the interest expense, plus or minus foreign exchange gains or losses arising from the revaluation of financial liabilities measured at amortised cost; and
- for financial asset and liabilities that are mandatorily measured at or designated at fair value through net result, the net gain or loss is calculated by taking the movement in the fair value of the financial asset or liability.

7.1.3 Financial risk management objectives and policies

As a whole, the Authority's financial risk management program seeks to manage credit, liquidity and interest rate risks and the associated volatility of its financial performance. The Authority is not exposed to foreign currency or equity price risks.

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement, and the basis on which income and expenses are recognised, with respect to each class of financial asset, financial liability and equity instrument above are disclosed in Note 7.3 to the financial statements.

The main purpose in holding financial instruments is to prudentially manage the Authority's financial risks within the government policy parameters.

The Authority's main financial risks include credit risk, liquidity risk and interest rate risk. The Authority manages these financial risks in accordance with its financial risk management policy.

The Authority uses different methods to measure and manage the different risks to which it is exposed. Primary responsibility for the identification and management of financial risks rests with the Board of the Authority.

Notes to the Financial Report for the year ended 30 June 2021

Financial instruments: Credit risk

Credit risk refers to the possibility that a borrower will default on its financial obligations as and when they fall due. The Authority's exposure to credit risk arises from the potential default of a counter party on their contractual obligations resulting in financial loss to the Authority. Credit risk is measured at fair value and is monitored on a regular basis.

Credit risk associated with the Authority's contractual financial assets is minimal because the main debtors are the Victorian and Commonwealth Government. For debtors other than the Government, it is the Authority's policy to only deal with entities with high credit ratings, where appropriate.

In addition, the Authority does not engage in hedging for its contractual financial assets and mainly obtains contractual financial assets that are on fixed interest, except for cash and deposits, which are mainly cash at bank. As with the policy for debtors, the Authority's policy is to only deal with banks with high credit rating.

Provision of impairment for contractual financial assets is recognised when there is objective evidence that the Authority will not be able to collect a receivable. Objective evidence includes financial difficulties of the debtor, default payments, debts that are more than 60 days overdue, and changes in debtor credit ratings.

Except as otherwise detailed in the following table, the carrying amount of contractual financial assets recorded in the financial statements, net of any allowances for losses, represents the Authority's maximum exposure to credit risk without taking account of the value of any collateral obtained.

There has been no material change to the Authority's credit risk profile in 2020-21.

Credit quality of contractual financial assets

	Financial institution (triple-A credit rating)	Government agencies (triple-A credit rating)	Other (min triple-B credit rating)	Total
2021				
Financial assets				
Financial assets with loss allowance measured at 12-month expected credit loss				
Cash and deposits (not assessed for impairment due to materiality)	42,753,266	363,990	-	43,117,256
Total contractual financial assets	42,753,266	363,990	-	43,117,256

Credit quality of contractual financial assets that are neither past due nor impaired

	Financial institution (triple-A credit rating)	Government agencies (triple-A credit rating)	Other (min triple-B credit rating)	Total
2020				
Financial assets				
Cash and deposits	38,257,363	1,239,701	-	39,497,064
Total contractual financial assets	38,257,363	1,239,701	-	39,497,064

(a) The total amounts disclosed here exclude statutory amounts

Impairment of financial assets under AASB 9

The Authority records the allowance for expected credit loss for the relevant financial instruments, applying AASB 9 Expected Credit Loss approach. Subject to AASB 9 impairment assessment include the Authority's contractual receivables and statutory receivables. While cash and cash equivalents are also subject to the impairment requirements of AASB 9, there was no identified impairment loss.

Contractual receivables at amortised cost

Contracted receivables are considered to have low credit risk, taking into account the counterparty's credit rating, risk of default and capacity to meet contractual cash flow obligations in the near term. As the result, the Authority does not estimate any doubtful debts or credit risk associated with its contracted receivables for the 12 month period.

**Notes to the Financial Report
for the year ended 30 June 2021**

Statutory receivables at amortised cost

The Authority's non-contractual receivables arising from statutory requirements are not financial instruments. However, they are nevertheless recognised and measured in accordance with AASB 9 requirements as if those receivables are financial instruments.

Statutory receivables are considered to have low credit risk, taking into account the counterparty's credit rating, risk of default and capacity to meet contractual cash flow obligations in the near term. As the result, the Authority does not estimate any credit risk associated with its statutory receivables for the 12 month period. No loss allowance has been recognised.

Financial instruments: Liquidity risk

Liquidity risk arises from being unable to meet financial obligations as they fall due. The Authority settles financial obligations within 30 days and in the event of a dispute, making payments within 30 days from the date of resolution.

The Authority is exposed to liquidity risk mainly through the financial liabilities as disclosed in the face of the balance sheet. The Authority manages its liquidity risk by:

- maintaining an adequate level of uncommitted funds that can be drawn at short notice to meet its short-term obligations;
- holding investments and other contractual financial assets that are readily able to be liquidated; and
- careful maturity planning of its financial obligations based on forecasts of future cash flows.

The Authority's exposure to liquidity risk is deemed insignificant based on prior periods' data and current assessment of risk. Cash for unexpected events is generally sourced from liquidation of available-for-sale financial investments.

Financial instruments: Interest rate risk

Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates. The Authority does not hold any interest bearing financial instruments that are measured at fair value, and therefore has no exposure to fair value interest rate risk.

Cash flow interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Authority has minimal exposure to cash flow interest rate risks through cash and deposits and term deposits that are at floating rate.

The Authority manages this risk by mainly undertaking fixed rate financial instruments with relatively even maturity profiles, with only insignificant amounts of financial instruments at floating rate. Management has concluded for cash at bank, as financial assets that can be left at floating rate without necessarily exposing the Authority to significant bad risk, management monitors movement in interest rates on a frequent basis.

The carrying amounts of financial assets and financial liabilities that are exposed to interest rates and the Authority's sensitivity to interest rate risk are set out in the table that follows.

Interest rate exposure of financial instruments						\$
2021	Weighted average interest rate %	Carrying amount	Fixed interest rate	Variable interest rate	Non bearing interest	
Financial assets						
Cash and deposits	0.92%	43,118,256	-	43,117,256	1,000	
Receivables^(a)						
Other contractual receivables		3,233,810	-	-	3,233,810	
Total financial assets		46,352,066	-	43,117,256	3,234,810	
Financial liabilities						
Payables^(a)						
Supplies and services		488,574	-	-	488,574	
Amounts payable to government and agencies		301	-	-	301	
Total financial liabilities		488,875	-	-	488,875	

(a) The total amounts disclosed here excludes deferred contract revenue and statutory amounts.

**Notes to the Financial Report
for the year ended 30 June 2021**

2020	Weighted average interest rate %	Carrying amount	Fixed interest rate	Variable interest rate	Non bearing interest
Financial assets					
Cash and deposits	0.92%	39,498,064	-	39,497,064	1,000
Receivables					
Other contractual receivables		3,335,533	-	-	3,335,533
Total financial assets		42,833,597	-	39,497,064	3,336,533
Financial liabilities					
Payables ^(a)					
Supplies and services		395,310	-	-	395,310
Amounts payable to government and agencies		120,108	-	-	120,108
Total financial liabilities		515,418	-	-	515,418

(a) The total amounts disclosed here exclude statutory amounts

Interest rate risk sensitivity

		\$	
		-100 basis points	+100 basis points
2021	Carrying amount	Net result	Net result
Contractual financial assets			
Cash and deposits	43,118,256	(431,183)	431,183
Total impact	43,118,256	(431,183)	431,183

		\$	
2020			
Contractual financial assets			
Cash and deposits	39,498,064	(394,981)	394,981
Total impact	39,498,064	(394,981)	394,981

7.2 Contingent assets and contingent liabilities

The Authority does not have any contingent assets or contingent liabilities.

7.3 Fair value determination

Significant judgement: Fair value measurements of assets and liabilities

Fair value determination requires judgement and the use of assumptions. This section discloses the most significant assumptions used in determining fair values. Changes to assumptions could have a material impact on the results and financial position of the Authority.

This section sets out information on how the Authority determined fair value for financial reporting purposes. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The following assets and liabilities are carried at fair value:

- plant and equipment and vehicles

In addition, the fair value of other assets and liabilities that are carried at amortised cost, also need to be determined for disclosure purposes.

The Authority determines the policies and procedures for determining fair values for both financial and non-financial assets and liabilities as required.

Fair value hierarchy

In determining fair values a number of inputs are used. To increase consistency and comparability in the financial statements, these inputs are categorised into three levels, also known as the fair value hierarchy. The levels are as follows:

- 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.

The Authority 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 Authority monitors changes in the fair value of each asset and liability through relevant data sources to determine whether revaluation is required.

How this section is structured

For those assets and liabilities for which fair values are determined, the following disclosures are provided:

- carrying amount and the fair value (which would be the same for those assets measured at fair value);
- which level of the fair value hierarchy was used to determine the fair value; and
- in respect of those assets and liabilities subject to fair value determination using Level 3 inputs:
 - a reconciliation of the movements in fair values from the beginning of the year to the end; and
 - details of significant unobservable inputs used in the fair value determination.

This section is divided between disclosures in connection with fair value determination for financial instruments (refer to Note 7.3.1) and non-financial physical assets (refer to Note 7.3.2).

**Notes to the Financial Report
for the year ended 30 June 2021**

7.3.1 Fair value determination of financial assets and liabilities

The fair values and net fair values of financial assets and liabilities are determined as follows:

- Level 1 – the fair value of financial instrument with standard terms and conditions and traded in active liquid markets are determined with reference to quoted market prices;
- Level 2 – the fair value is determined using inputs other than quoted prices that are observable for the financial asset or liability, either directly or indirectly; and
- Level 3 – the fair value is determined in accordance with generally accepted pricing models based on discounted cash flow analysis using unobservable market inputs.

The Authority currently holds a range of financial instruments that are recorded in the financial statements where the carrying amounts are a reasonable approximation of fair value, either due to their short-term nature or with the expectation that they will be paid in full by the end of the 2020-21 reporting period.

These financial instruments include:

Financial assets	Financial liabilities
Cash and deposits	Payables:
Receivables:	· supplies and services
· income receivable	· amounts payable to government and agencies
· other contractual receivables	

**Notes to the Financial Report
for the year ended 30 June 2021**

7.3.2 Fair value determination of non-financial physical assets

Fair value measurement hierarchy					\$
	Carrying amount as at 30 June	Fair value measurement at end of reporting period using:			
		Level 1	Level 2	Level 3	
2021					
Plant, equipment and vehicles at fair value:					
Motor vehicles	357,514	-	357,514	-	
Office furniture and equipment	16,078	-	-	16,078	
Plant and equipment	86,892	-	-	86,892	
Total of plant, equipment and vehicles at fair value	460,484	-	357,514	102,970	
					\$
2020					
Plant, equipment and vehicles at fair value:					
Motor vehicles	470,592	-	470,592	-	
Office furniture and equipment	24,908	-	-	24,908	
Plant and equipment	102,733	-	-	102,733	
Total of plant, equipment and vehicles at fair value	598,233	-	470,592	127,641	

There have been no transfers between levels during the period.

Vehicles are held at fair value and fair value is determined using the current replacement cost method. The Authority 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 the Chief Finance Officer of the Authority who sets relevant depreciation rates during use to reflect the utilisation of the vehicles.

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 current replacement cost method. As depreciation adjustments considered as significant, unobservable inputs, these assets are classified as Level 3 fair value measurements.

There were no changes in valuation techniques throughout the period to 30 June 2021

For all assets measured at fair value, the current use is considered the highest and best use.

Reconciliation of Level 3 fair value movements				\$
	Office furniture and equipment	Plant and equipment	Total	
2021				
Opening balance	42,543	134,505	177,048	
Purchases (sales)	(9,773)	(14,515)	(24,288)	
Depreciation	944	(1,327)	(383)	
Closing balance	33,714	118,663	152,377	
				\$
2020				
Opening balance	34,410	134,780	169,190	
Purchases (sales)	(13,720)	(76,491)	(90,211)	
Depreciation	21,853	76,216	98,069	
Closing balance	42,543	134,505	177,048	

There were no unrealised gains or losses (2020: nil) on non-financial assets.

Description of significant unobservable inputs to Level 3 valuations

	Valuation technique	Significant unobservable inputs
Office furniture and equipment	Replacement cost	Cost per unit Useful life of 3 to 25 years
Plant and equipment	Replacement cost	Cost per unit Useful life of 3 to 15 years

Significant unobservable inputs have remained unchanged since June 2020.

Notes to the Financial Report for the year ended 30 June 2021

8. OTHER DISCLOSURES

Introduction

This section includes additional material disclosures required by accounting standards or otherwise, for the understanding of this financial report.

Structure

- 8.1 Other economic flows included in net result
- 8.2 Reserves
- 8.3 Responsible persons
- 8.4 Remuneration of executives
- 8.5 Related parties
- 8.6 Remuneration of auditors
- 8.7 Subsequent events
- 8.8 Australian Accounting Standards issued that are not yet effective
- 8.9 Glossary of technical terms

8.1 Other economic flows included in net result

Other economic flows are changes in the volume or value of an asset or liability that do not result from transactions. Other gains/(losses) from other economic flows include the gains or losses from the revaluation of the present value of the long service leave liability due to changes in bond interest rates.

	\$	
	2021	2020
Net gain/(loss) on non-financial assets		
Net gain/(loss) on disposal of plant and equipment	-	10,068
Total net gain/(loss) on non-financial assets	-	10,068
Total other gains/(losses) from other economic flows	-	10,068

8.2 Reserves

	\$	
	2021	2020
Committed funds reserve ^(a)		
Balance at beginning of financial year	3,238,435	3,238,030
Transfers to/(from) accumulated surplus	(684,128)	405
Balance at end of financial year	2,554,307	3,238,435
Salinity offset reserve ^(b)		
Balance at beginning of financial year	32,775,380	31,576,020
Transfers to/(from) accumulated surplus	989,023	1,199,360
Balance at end of financial year	33,764,403	32,775,380
Capital renewals reserve ^(c)		
Balance at beginning of financial year	1,000,000	1,000,000
Transfers to/(from) accumulated surplus	-	-
Balance at end of financial year	1,000,000	1,000,000
Total reserves	37,318,710	37,013,815

(a) The committed funds reserve contains amounts allocated to the completion of specific projects.

(b) The salinity offset reserve contains the amount held by the Authority in accordance with ministerial policies for managing water use licences in salinity impact zones under the *Water Act 1989*.

(c) The capital renewals reserve contains amounts that have been set aside by the Authority for the purpose of funding capital projects.

8.3 Responsible persons

In accordance with the Ministerial Directions issued by the Minister for Finance under the *Financial Management Act 1994*, the following disclosures are made regarding responsible persons for the reporting period.

Names

The persons who held the positions of Ministers and Accountable Officer in the Authority are as follows:

The Hon. Lisa Neville MLA, Minister for Water	1 July 2020 to 30 June 2021
The Hon. Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change	1 July 2020 to 30 June 2021
The Hon. Richard Wynne MP, Acting Minister for Water	15 February 2021 to 30 June 2021

Responsible Persons

Sharyon Peart, Board Chair	1 July 2020 to 30 June 2021
Dr John Cooke, Board member, Deputy chair	1 July 2020 to 30 June 2021
Allison McTaggart, Board Member	1 July 2020 to 30 June 2021
Kellie Nulty, Board Member	1 July 2020 to 30 June 2021
Robert Matthews, Board Member	1 July 2020 to 30 June 2021
Jacquelyn Turfey, Board Member	1 July 2020 to 30 June 2021
Janice Kelly, Board Member	1 July 2020 to 30 June 2021
Monica Munro, Board Member	1 July 2020 to 30 June 2021

Accountable Officer

Jennifer Collins, Chief Executive Officer	1 July 2020 to 30 June 2021
---	-----------------------------

Remuneration

Remuneration received or receivable by the Accountable Officer in connection with management of the Authority during the reporting period was in the range: \$255,000-\$265,000 (2020: \$245,000-\$255,000).

8.4 Remuneration of executives

The Authority does not have any executive officers that meet the definition of Financial Reporting Directions (FRDs) 21C disclosures of executive officers, other than ministers and the CEO during the reporting period (2020: none).

The CEO, to whom the Victorian Government's Public Entity Executive Remuneration (PEER) Policy applies, is an accountable officer whose remuneration has been disclosed in note 8.4 Responsible Persons.

**Notes to the Financial Report
for the year ended 30 June 2021**

8.5 Related parties

The Mallee Catchment Management Authority is statutory authority established by the *Catchment and Land Protection Act 1994*.

The Authority is a wholly owned and controlled entity of the State of Victoria.

Related parties of the authority include:

- all key management personnel and their close family members;
- all cabinet ministers and their close family members; and
- all departments and public sector entities that are controlled and consolidated into the whole of state consolidated financial statements.

Any related party transactions have been entered into on an arm's length basis.

Key management personnel of the Authority includes Portfolio Ministers, board members and the chief executive officer;

- The Hon Lisa Neville MLA, Minister for Water
- The Hon Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change
- The Hon Richard Wynne MP, Acting Minister for Water
- Sharyon Peart, Board Chair
- Dr John Cooke, Board Member, Deputy Chair
- Allison McTaggart, Board Member
- Kellie Nulty, Board Member
- Robert Matthews, Board Member
- Jacquelyn Turfey, Board Member
- Janice Kelly, Board Member
- Monica Munro, Board Member
- Jennifer Collins, Chief Executive Officer

The compensation detailed below excludes the salaries and benefits the Portfolio Ministers receives. The Ministers' remuneration and allowances are set by the *Parliamentary Salaries and Superannuation Act 1968* and is reported within the Department of Parliamentary Services' Financial Report.

Remuneration comprises employee benefits in all forms of consideration paid, payable or provided by the entity, or on behalf of the entity, in exchange for services rendered, and is disclosed in the following categories.

Short-term employee benefits include amounts such as wages, salaries, annual leave or sick leave that are usually paid or payable on a regular basis, as well as non-monetary benefits such as allowances and free or subsidised goods or services.

Post-employment benefits include pensions and other retirement benefits paid or payable on a discrete basis when employment has ceased.

Other long-term benefits include long service leave, other long service benefits or deferred compensation.

Termination benefits include termination of employment payments, such as severance packages.

	\$	
Compensation of KMP	2021	2020
Short-term employee benefits	366,884	356,152
Post-employment benefits	39,751	41,105
Other long-term benefits	11,812	7,659
Termination benefits	-	-
Total compensation	418,447	404,916

**Notes to the Financial Report
for the year ended 30 June 2021**

Government Related Entities

During the year the Authority reported related party transactions with the following government related entities:

Name of Government Entity	Details Transaction	Nature of Relationship	Receipts	Outstanding Receipts	Payments	Commitments
Department of Environment Land Water and Planning	Provision grant funding to undertake projects	Significant influence	10,627,939	46,543	-	-
Department of Environment Land Water and Planning	Purchase of goods/services to undertake projects	Significant influence	-	-	1,118,723	153,320
Department of Jobs, Precincts and Regions	Provision grant funding to undertake projects	Significant influence	20,505	-	-	-
Department of Jobs, Precincts and Regions	Purchase of goods/services to undertake projects	Significant influence	-	-	606,100	159,733
Lower Murray Water	Reimbursement of costs associated with joint project.	Joint responsibility	7,202,661	946,431	-	-
Lower Murray Water	Purchase of goods/services to undertake projects	Joint responsibility	-	-	12,967	-
Treasury Corporation Victoria	Banking - Interest on TCV term deposits	Government service provider	131,412	-	-	-
Parks Victoria	Purchase of goods/services to undertake projects	Significant influence	-	-	181,500	-
Wimmera Catchment Management Authority	Purchase of goods/services to undertake projects	Joint responsibility	-	-	47,300	-
Victorian Auditor General's Office	Purchase of goods/services to undertake projects	Government service provider	-	-	17,270	-

**Notes to the Financial Report
for the year ended 30 June 2021**

Victorian State Emergency Services	Provision grant funding to undertake projects	Joint responsibility	8,470	-	-	-
Victorian Government Solicitors Office	Purchase of goods/services to undertake projects	Government service provider	-	-	18,664	14,880

**Notes to the Financial Report
for the year ended 30 June 2021**

Other Related Party Transactions

During the year the Authority reported related party transactions with the following key management personnel:

Name of counterparty	Details Transaction	Relationship	Receipts	Outstanding Receipts	Payments	Commitments
Department of Environment Land Water and Planning	Provision grant funding to undertake projects	Contractor	10,627,939	46,543	-	-
Department of Environment Land Water and Planning	Purchase of goods/services to undertake projects	Contractor	-	-	1,118,723	153,320
Intec Mildura	Purchase of goods/services to undertake projects	Related party of Board Member	-	-	231,452	45,781
Lower Murray Water	Reimbursement of costs associated with joint project.	Board Deputy Chair	7,202,661	946,431	-	-
Lower Murray Water	Purchase of goods/services to undertake projects	Board Deputy Chair	-	-	12,967	-
La Trobe University	Purchase of goods/services to undertake projects	Member of La Trobe Advisory Board	-	-	78,890	-
MADEC	Payments to traditional owners for cultural heritage.	Partner is a KMP	-	-	193,119	-
Murray Darling Basin Authority	Purchase of goods/services to undertake projects	Consultant	-	-	30,000	-
Sunraysia Institute of TAFE	Provision of Staff Training	Member	-	-	23,690	85,667

All other transactions that have occurred with KMP and their related parties have not been considered material for disclosure. In this context, transactions are only disclosed when they are considered necessary to draw attention to the possibility that the Authority's financial position and profit or loss may have been affected by the existence of related parties, and by transactions and outstanding balances, including commitments, with such parties.

**Notes to the Financial Report
for the year ended 30 June 2021**

8.6 Remuneration of auditors

	2021	2020
Victorian Auditor-General's Office		
Audit or review of the financial statements	16,400	15,700
Total remuneration of auditors	16,400	15,700

(a) The Victorian Auditor-General's Office is not allowed to provide non-audit services

8.7 Subsequent events

The continuing COVID-19 health pandemic is not expected to significantly affect the operations, the results of those operations, or the state of affairs of the Authority in future financial years.

8.8 Australian Accounting Standards issued that are not yet effective

Certain new and revised accounting standards have been issued but are not effective for the 2020-21 reporting period. These accounting standards have not been applied to the Model Financial Statements. The Authority is reviewing its existing policies and assessing the potential implications of these accounting standards which includes:

AASB 2020-1 Amendments to Australian Accounting Standards - Classification of Liabilities as Current or Non-Current

This Standard amends AASB 101 to clarify requirements for the presentation of liabilities in the statement of financial position as current or non-current. It initially applied to annual reporting periods beginning on or after 1 January 2022 with earlier application permitted, however the AASB has recently issued AASB 2021-1 Amendments to Australian Accounting Standards - Classification of Liabilities as Current or Non-Current - Deferral of Effective Date to defer the application by one year to periods beginning on or after 1 January 2023. The Authority will not early adopt the Standard.

Other Amending Standards

Several other amending standards and AASB interpretations have been issued that apply to future reporting periods, but are considered to have limited impact on the Authority's reporting.

- AASB 17 *Insurance Contracts*.
- AASB 1060 *General Purpose Financial Statements – Simplified Disclosures for For-Profit and Not-for-Profit Tier 2 Entities*.
- AASB 2020-2 *Amendments to Australian Accounting Standards – Removal of Special Purpose Financial Statements for Certain For-Profit Private Sector Entities*.
- AASB 2020-3 *Amendments to Australian Accounting Standards - Annual improvements 2018-20 and other Amendments*.
- AASB 2020-7 *Amendments to Australian Accounting Standards - Covid-19 Rent Related Concessions: Tier 2 Disclosures*.
- AASB 2020-8 *Amendments to Australian Accounting Standards - Interest Rate Benchmark Reform - Phase 2*.
- AASB 2020-9 *Amendments to Australian Accounting Standards - Tier 2 Disclosures: Interest Rate Benchmark Reform (Phase 2) and Other Amendments*.

8.9 Glossary of technical terms

The following is a summary of the major technical terms used in this report.

Amortisation is the expense which results from the consumption, extraction or use over time of a non-produced physical or intangible asset. This expense is classified as an 'other economic flow'.

Commitments include those operating, capital and other outsourcing commitments arising from non-cancellable contractual or statutory sources.

Comprehensive result is the amount included in the operating statement representing total change in net worth other than transactions with owners as owners.

Controlled item generally refers to the capacity of a department to benefit from that item in the pursuit of the entity's objectives and to deny or regulate the access of others to that benefit.

Current grants are amounts payable or receivable for current purposes for which no economic benefits of equal value are receivable or payable in return.

Depreciation is an expense that arises from the consumption through wear or time of a produced physical or intangible asset. This expense is classified as a 'transaction' and so reduces the 'net result from transaction'.

Effective interest method is the method used to calculate the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset or, where appropriate, a shorter period.

Employee benefits expenses include all costs related to employment including wages and salaries, fringe benefits tax, leave entitlements, redundancy payments, defined benefits superannuation plans, and defined contribution superannuation plans.

Ex gratia expenses mean the voluntary payment of money or other non-monetary benefit (e.g. a write-off) that is not made either to acquire goods, services or other benefits for the entity or to meet a legal liability, or to settle or resolve a possible legal liability or claim against the entity.

Financial asset is any asset that is:

- cash;
 - an equity instrument of another entity;
 - a contractual right:
 - to receive cash or another financial asset from another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity;
- or
- a contract that will or may be settled in the entity's own equity instruments and is:
 - a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
 - a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

Financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial liability is any liability that is:

- a contractual obligation:
 - to deliver cash or another financial asset to another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
- a contract that will or may be settled in the entity's own equity instruments and is:
 - a non derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
 - a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include instruments that are

Notes to the Financial Report for the year ended 30 June 2021

Financial statements comprise:

- a balance sheet as at the end of the period;
- a comprehensive operating statement for the period;
- a statement of changes in equity for the period;
- a cash flow statement for the period;
- notes, comprising a summary of significant accounting policies and other explanatory information;
- comparative information in respect of the preceding period as specified in paragraph 38 of AASB 101 *Presentation of Financial Statements*; and
- a statement of financial position as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements in accordance with paragraphs 41 of AASB 101.

Grant expenses and other transfers are transactions in which one unit provides goods, services, assets (or extinguishes a liability) or labour to another unit without receiving approximately equal value in return. Grants can either be operating or capital in nature.

While grants to governments may result in the provision of some goods or services to the transferor, they do not give the transferor a claim to receive directly benefits of approximately equal value. For this reason, grants are referred to by the AASB as involuntary transfers and are termed non reciprocal transfers. Receipt and sacrifice of approximately equal value may occur, but only by coincidence. For example, governments are not obliged to provide commensurate benefits, in the form of goods or services, to particular taxpayers in return for their taxes.

Grants can be paid as general purpose grants which refer to grants that are not subject to conditions regarding their use. Alternatively, they may be paid as specific purpose grants which are paid for a particular purpose and/or have conditions attached regarding their use.

General government sector comprises all government departments, offices and other bodies engaged in providing services free of charge or at prices significantly below their cost of production. General government services include those which are mainly non market in nature, those which are largely for collective consumption by the community and those which involve the transfer or redistribution of income. These services are financed mainly through taxes, or other compulsory levies and user charges.

Grants for on passing are grants paid to one institutional sector (e.g. a State general government entity) to be passed on to another institutional sector (e.g. local government or a private non-profit institution).

Infrastructure systems provide essential services used in the delivery of final services or products. They are generally a complex interconnected network of individual assets and mainly include sewerage systems, water storage and supply systems, and public transport assets owned by the State.

Interest expense represents costs incurred in connection with borrowings. It includes interest on advances, loans, overdrafts, bonds and bills, deposits, interest components of finance lease repayments, and amortisation of discounts or premiums in relation to borrowings.

Interest income includes unwinding over time of discounts on financial assets and interest received on bank term deposits and other investments.

Investment properties are properties held to earn rentals or for capital appreciation or both. Investment properties exclude properties held to meet service delivery objectives of the State of Victoria.

Joint ventures are contractual arrangements between the Authority and one or more other parties to undertake an economic activity that is subject to joint control and have rights to the net assets of the arrangement. Joint control only exists when the strategic financial and operating decisions relating to the activity require the unanimous consent of the parties sharing control (the venturers).

Leases are rights conveyed in a contract, or part of a contract, the right to use an asset (the underlying asset) for a period of time in exchange for consideration

Net acquisition of non-financial assets (from transactions) are purchases (and other acquisitions) of non-financial assets less sales (or disposals) of non-financial assets less depreciation plus changes in inventories and other movements in non-financial assets. Includes only those increases or decreases in non-financial assets resulting from transactions and therefore excludes write offs, impairment write downs and revaluations.

Net financial liabilities is calculated as liabilities less financial assets, other than equity in PNFCs and PFCs. This measure is broader than net debt as it includes significant liabilities, other than borrowings (e.g. accrued employee liabilities such as superannuation and long service leave entitlements). For the PNFC and PFC sectors, it is equal to negative net financial worth.

**Notes to the Financial Report
for the year ended 30 June 2021**

Net financial worth is equal to financial assets minus liabilities. It is a broader measure than net debt as it incorporates provisions made (such as superannuation, but excluding depreciation and bad debts) as well as holdings of equity. Net financial worth includes all classes of financial assets and liabilities, only some of which are included in net debt.

Net gain on equity investments in other sector entities measured at proportional share of the carrying amount of net assets/(liabilities) comprises the net gains relating to the equity held by the general government sector in other sector entities. It arises from a change in the carrying amount of net assets of the subsidiaries. The net gains are measured based on the proportional share of the subsidiary's carrying amount of net assets/(liabilities) before elimination of inter sector balances.

Net lending/borrowing is the financing requirement of government, calculated as the net operating balance less the net acquisition of non-financial assets. It also equals transactions in financial assets less transactions in liabilities. A positive result reflects a net lending position and a negative result reflects a net borrowing position.

Net operating balance – net result from transactions: Net result from transactions or net operating balance is a key fiscal aggregate and is revenue from transactions minus expenses from transactions. It is a summary measure of the ongoing sustainability of operations. It excludes gains and losses resulting from changes in price levels and other changes in the volume of assets. It is the component of the change in net worth that is due to transactions and can be attributed directly to government policies.

Net result is a measure of financial performance of the operations for the period. It is the net result of items of revenue, gains and expenses (including losses) recognised for the period, excluding those classified as 'other non-owner movements in equity'.

Net worth is calculated as assets less liabilities, which is an economic measure of wealth.

Non-financial assets are all assets that are not financial assets. It includes inventories, land, buildings, infrastructure, road networks, land under roads, plant and equipment, cultural and heritage assets, intangibles and biological assets such as commercial forests.

Non-financial public sector represents the consolidated transactions and assets and liabilities of the general government and PNFC sectors. In compiling statistics for the non-financial public sector, transactions and debtor/creditor relationships between sub-sectors are eliminated to avoid double counting.

Non-produced assets are assets needed for production that have not themselves been produced. They include land, subsoil assets, and certain intangible assets. Non-produced intangibles are intangible assets needed for production that have not themselves been produced. They include constructs of society such as patents.

Operating result is a measure of financial performance of the operations for the period. It is the net result of items of revenue, gains and expenses (including losses) recognised for the period, excluding those that are classified as 'other non-owner movements in equity'. Refer also 'net result'.

Other economic flows included in net result are changes in the volume or value of an asset or liability that do not result from transactions. In simple terms, other economic flows are changes arising from market remeasurements. They include gains and losses from disposals, revaluations and impairments of non-current physical and intangible assets; fair value changes of financial instruments and agricultural assets; and depletion of natural assets (non-produced) from their use or removal.

Other economic flows – other comprehensive income comprises items (including reclassification adjustments) that are not recognised in net result as required or permitted by other Australian Accounting Standards. They include changes in physical asset revaluation surplus; share of net movement in revaluation surplus of associates and joint ventures; and gains and losses on remeasuring available-for-sale financial assets.

Payables includes short and long-term trade debt and accounts payable, grants, taxes and interest payable.

Notes to the Financial Report for the year ended 30 June 2021

Produced assets include buildings, plant and equipment, inventories, cultivated assets and certain intangible assets. Intangible produced assets may include computer software, motion picture films and research and development costs (which does not include the start-up costs associated with capital projects).

Public financial corporations are bodies primarily engaged in the provision of financial intermediation services or auxiliary financial services. They are able to incur financial liabilities on their own account (e.g. taking deposits, issuing securities or providing insurance services). Estimates are not published for the public financial corporation sector.

The public non financial corporation (PNFC) sector comprises bodies mainly engaged in the production of goods and services (of a non financial nature) for sale in the market place at prices that aim to recover most of the costs involved (e.g. water and port authorities). In general, PNFCs are legally distinguishable from the governments which own them.

Receivables include amounts owing from government through appropriation receivable, short and long-term trade credit and accounts receivable, accrued investment income, grants, taxes and interest receivable.

Sales of goods and services refers to income from the direct provision of goods and services and includes fees and charges for services rendered, sales of goods and services, fees from regulatory services and work done as an agent for private enterprises. It also includes rental income under operating leases and on produced assets such as buildings and entertainment, but excludes rent income from the use of non-produced assets such as land. User charges includes sale of goods and services income.

Supplies and services generally represent cost of goods sold and the day to day running costs, including maintenance costs, incurred in the normal operations of the Authority.

Taxation income represents income received from the State's taxpayers and includes:

- payroll tax, land tax and duties levied principally on conveyances and land transfers;
- gambling taxes levied mainly on private lotteries, electronic gaming machines, casino operations and racing;
- insurance duty relating to compulsory third party, life and non life policies;
- insurance company contributions to fire brigades;
- motor vehicle taxes, including registration fees and duty on registrations and transfers;
- levies (including the environmental levy) on statutory corporations in other sectors of government; and
- other taxes, including landfill levies, licence and concession fees.

Transactions are those economic flows that are considered to arise as a result of policy decisions, usually an interaction between two entities by mutual agreement. They also include flows into an entity such as depreciation, where the owner is simultaneously acting as the owner of the depreciating asset and as the consumer of the service provided by the asset. Taxation is regarded as mutually agreed interactions between the government and taxpayers. Transactions can be in kind (e.g. assets provided/given free of charge or for nominal consideration) or where the final consideration is cash. In simple terms, transactions arise from the policy decisions of the Government.

Appendices

1 Disclosure Index

The Mallee Catchment Management Authority (CMA) annual report is prepared in accordance with all relevant Victorian legislation and pronouncements. This index has been prepared to facilitate identification of the CMA's compliance with statutory disclosure requirements.

Table 1 | Ministerial Directions and Financial Reporting Directions Disclosure index

Legislation	Requirement	Page
Report of Operations		
<i>Charter and purpose</i>		
FRD 22I	Manner of establishment and the relevant Ministers	6
FRD 22I	Purpose, functions, powers and duties (Objectives, functions, powers and duties)	7
FRD 22I	Key initiatives and projects	8
FRD 22I	Nature and range of services provided	6
<i>Management and structure</i>		
FRD 22I	Organisational structure	46
<i>Financial and other information</i>		
FRD 10A	Disclosure index	113
FRD 12B	Disclosure of major contracts	62
FRD 15E	Executive officer disclosures	55
FRD 22I	Employment and conduct principles	55
FRD 22I	Occupational health and safety policy	55
FRD 22I	Summary of the financial results for the year	44
FRD 22I	Significant changes in financial position during the year	44
FRD 22I	Major changes or factors affecting performance	44
FRD 22I	Subsequent events	45
FRD 22I	Application and operation of Freedom of Information Act 1982	62
FRD 22I	Compliance with building and maintenance provisions of Building Act 1993	63
FRD 22I	Statement on Competitive Neutrality Policy	63
FRD 22I	Application and operation of the Public Interest Disclosure Act 2012	63
FRD 22I	Workforce Inclusive Policy	59
FRD 22I	Details of consultancies over \$10,000	61
FRD 22I	Details of consultancies under \$10,000	61

Continued...

Appendix 1 Disclosure Index

Table 1 | Ministerial Directions and Financial Reporting Directions Disclosure index *Continued...*

Legislation	Requirement	Page
FRD 22I	Disclosure of government advertising expenditure	61
FRD 22I	Disclosure of ICT expenditure	62
FRD 22I	Statement of availability of other information	66
FRD 22I	Asset Management Accountability Framework maturity assessment	66
FRD 22I	Social Procurement Framework	66
FRD 24D	Reporting of office based environmental data	64
FRD 25D	Local Jobs First	61
FRD 29C	Workforce Data disclosures	58
SD 3.2.1	Audit committees – membership & responsibilities	51
SD 5.2	Specific requirements under Standing Direction 5.2	70
Compliance attestation and declaration		
SD 5.1.4	Attestation for compliance with Ministerial Standing Direction	70
SD 5.2.3	Declaration in report of operations (Responsible Body Declaration)	2
Financial Statements		
Declaration		
SD 5.2.2	Declaration in Financial Statements	70
Other requirements under Standing Directions 5.2		
SD 5.2.1(a)	Compliance with Australian accounting standards and other authoritative pronouncements	70
SD 5.2.1(a)	Compliance with Standing Directions	70
SD 5.2.1(b)	Compliance with Model Financial Report	70
Other disclosures as required by FRDs in notes to the financial statements		
FRD 9B	Departmental Disclosure of Administered Assets and Liabilities by Activity	NA
FRD 10A	Disclosure index	113
FRD 11A	Disclosure of Ex gratia Expenses	NA
FRD 12B	Disclosure of major contracts	62
FRD 13	Disclosure of Parliamentary Appropriations	NA
FRD 21C	Disclosures of Responsible Persons, Executive Officers and other Personnel (Contractors with Significant Management Responsibilities) in the Financial Report	103
FRD 103I	Non financial physical assets	85
FRD 110A	Cash Flow Statements	75
FRD 112D	Defined Benefit Superannuation Obligations	81
FRD 114C	Financial Instruments – general government entities and public non-financial corporations	88
Legislation		
<i>Freedom of Information Act 1982</i>		62
<i>Building Act 1993</i>		63
<i>Local Jobs First Act 2003</i>		61
<i>Public Interest Disclosures Act 2012</i>		63
<i>Financial Management Act 1994</i>		70
<i>Catchment and Land Protection Act 1994</i>		63
<i>Water Act 1989</i>		7

Appendices

2 Condition and Management Report

Background

This condition and management report for 2020-21 aims to fulfil the Mallee CMA's annual reporting requirements as outlined in Section 19B of the CaLP Act 1994, which states that: Each Authority must submit to the Minister each year, a report on the condition and management of land and water resources in its region and the carrying out of its functions.

The report provides an assessment of the condition of the region's environment and a reflection on the likely impact of annual actions, events and observed change.

A key purpose of monitoring catchment condition and annual progress against management priorities is to help identify opportunities for adapting and changing the way we manage the environment.

Condition and management are reported against five headline themes to align with Regional Asset classes identified by the Mallee RCS 2013–2019. Further detail on these is provided in Table 2.

An overview of any key events (e.g. climatic, policy changes) that occurred in 2020–21 which may have influenced the management and/or condition of our regional assets is also provided within this report.

Table 2 | Headline theme, regional asset and definition

Headline theme	RCS Regional Asset	Definition
Community	Community capacity for NRM	The inherent knowledge, understanding and willingness that the community has for effective and sustainable natural resource management.
	Culture and heritage	Locations that have recognised cultural, historical or spiritual significance to all or part of the Mallee and/or Australian community.
Waterways	Rivers	Rivers, streams, their tributaries, and surrounding riparian land (including the floodplain).
	Wetlands	Individual wetlands, wetland complexes, and their associated floodplain ecosystems (including groundwater dependent ecosystems and the groundwater flow systems and aquifers they are reliant on)..
Biodiversity	Threatened species and communities	Populations of threatened or significant species; occurrences of threatened communities.
	Terrestrial habitat	Individual ecological classes or spatial occurrences of ecological vegetation classes based on their intrinsic value to their contribution to landscape processes (e.g. connectivity, refugia, buffering etc.).
Land	Soils	All soils regardless of their tenure and type of land system to which they are subject.
	Agricultural land	All parts of the landscape developed for the purpose of agricultural production.
	Groundwater	Groundwater resources that are utilised for human use such as irrigation or stock and domestic water supply.

Key Events and Insights

Climate

Annual climatic conditions can have a significant impact on both the condition and management of regional assets. In 2020–21, the Mallee region experienced ‘average’ rainfall over the cooler months (April to November) (Figure 1) and ‘average’ to ‘below average’ in the warmer period (October to April) (Figure 2).

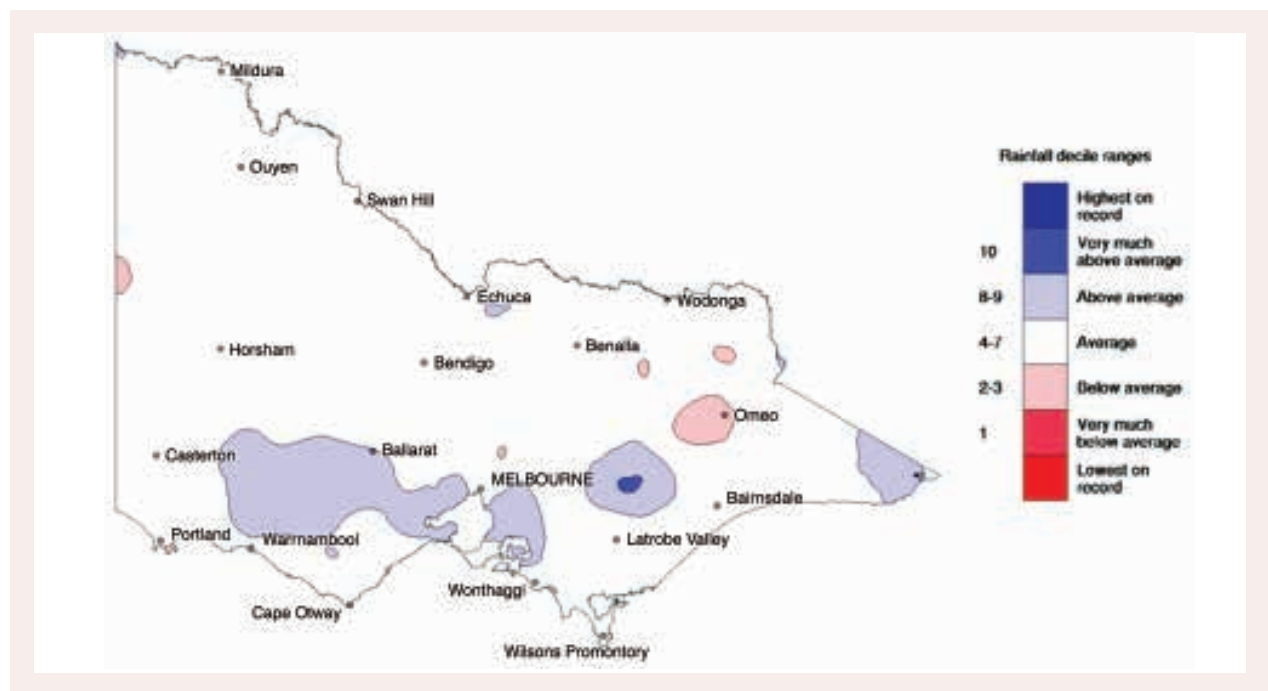


Figure 1 | Victorian Rainfall Deciles 1 April 2020 to 30 November 2020 (Source: Australian Bureau of Meteorology)

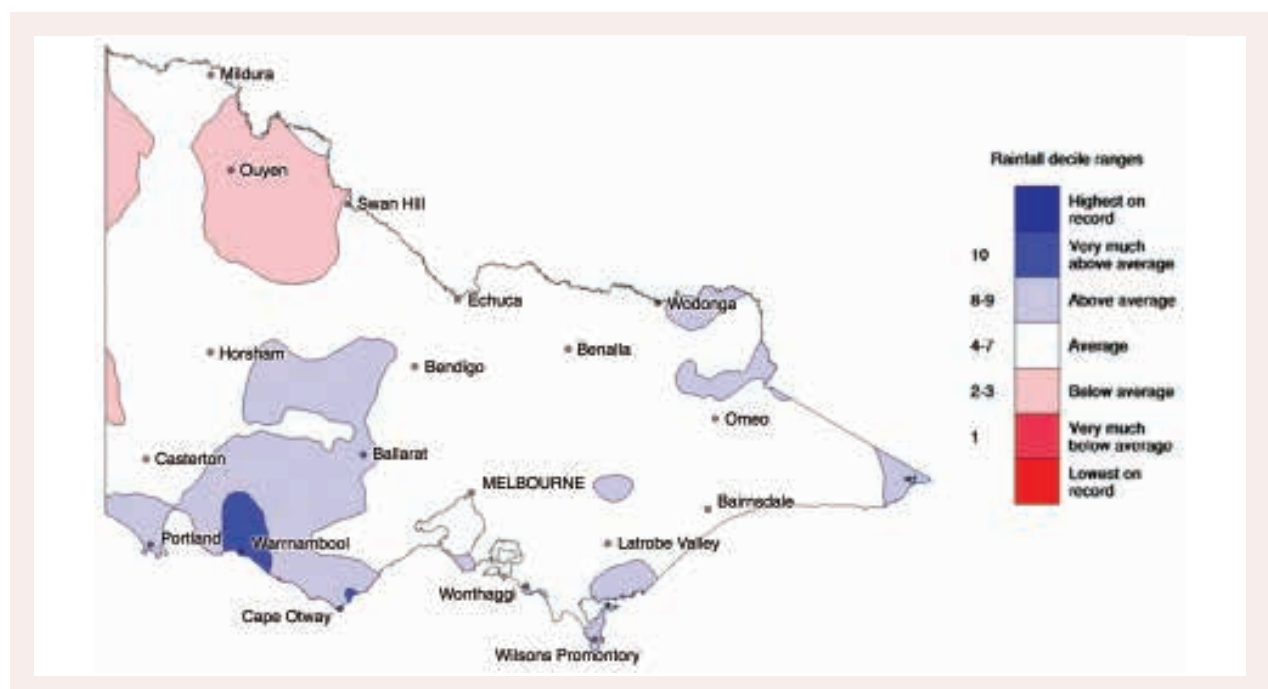


Figure 2 | Victorian Rainfall Deciles 1 October 2020 to 30 April 2021 (Source: Australian Bureau of Meteorology)

Key climatic events experienced throughout 2020–21 included:

- Following a largely dry 2019–20, winter rainfall in 2020 ranged from 100 per cent (Hopetoun) to 78 per cent (Mildura) of the long-term average. This variability included Manangatang (central Mallee) which recorded its highest winter daily rainfall on record (24mm) on 9 August 2020.
- While average rainfall conditions were recorded across the region in spring 2020, temperatures were above average; with Mildura, Ouyen and Walpeup all recording their highest spring temperatures on record (>45o) on 28 November 2020. Strong winds were also experienced throughout spring, with a large dust storm occurring on 2 September 2020.
- The region returned to below average rainfall throughout summer 2020, ranging from 43 per cent (Hopetoun) to 79 per cent (Mildura) of the long-term average. This trend continued into autumn, with rainfall totals being below to very much below average for much of the region. Overall, the Mallee received less than 40 per cent of autumn mean rainfall; with totals of only 20 per cent (12.8 mm) of the long-term average recorded in the north (Mildura) and 30 per cent (18.4 mm) in the south (Hopetoun).

- Water inflows to the key Murray, Goulburn and Darling storages, while higher than the previous three years, also continued to be below average during 2020–21 (see Figure 3). However, for the first time since 2017–18, Victorian Murray regulated high reliability water shares reached 100 per cent allocation on 15 February 2021.

Delivery Partnerships

Over 250,000 ha of targeted environmental works were undertaken in 2020–21 to protect the region's priority natural, cultural and productive landscapes. Effective partnerships with our community are integral to the success of these on-ground activities. In 2020–21, this included the provision of 50 individual funding grants to both community groups (8) and private land managers (42).

Community engagement and capacity building approaches also continued to be well supported. In 2020–21, this resulted in 6,275 stakeholders participating in 501 individual events. Evaluation of these activities identified 98 per cent of surveyed participants rating the overall delivery of events as either 'excellent' (69 per cent) or as 'good' (29 per cent).

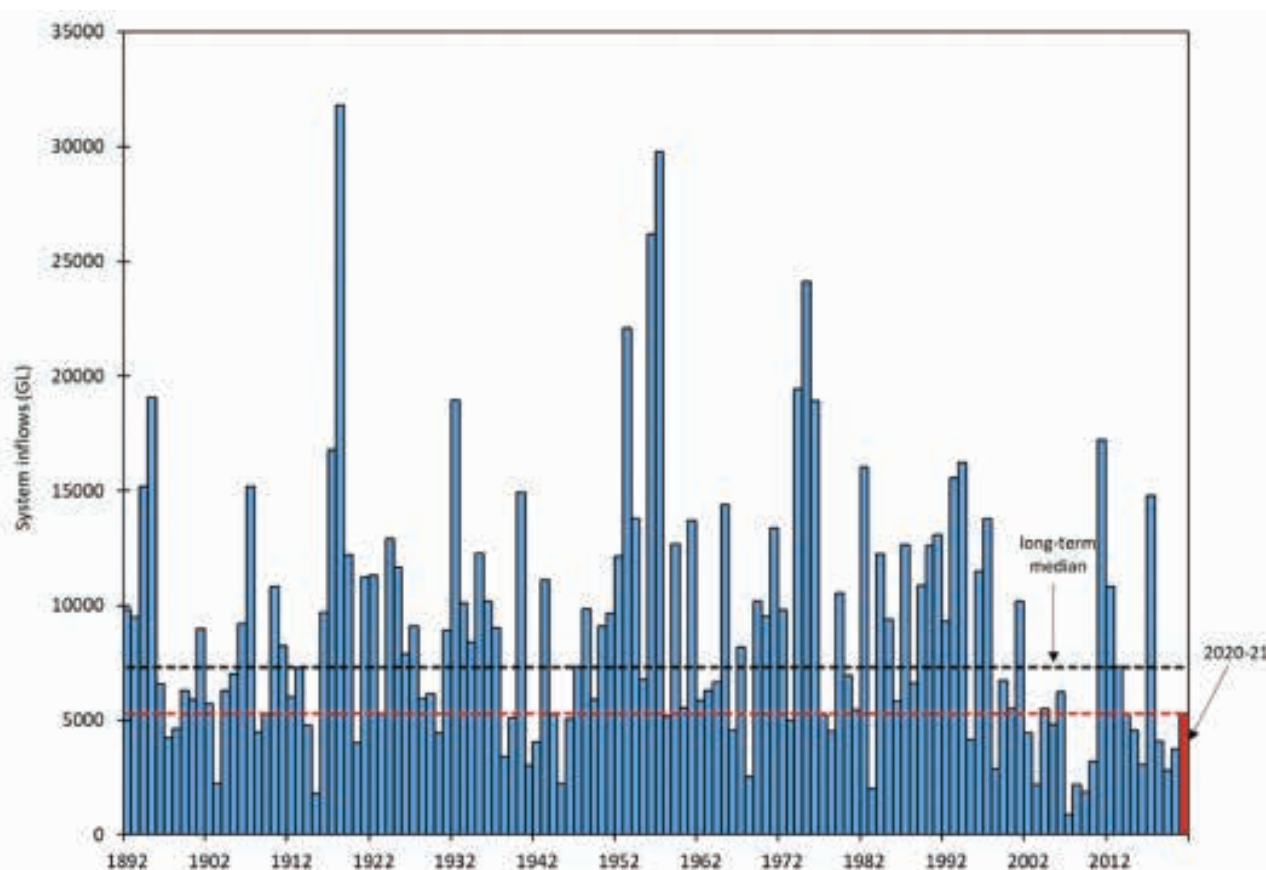


Figure 3 | River Murray system inflows - water year totals (to end May) since 1892. *Inflows exclude Snowy Hydro inflows, inter-valley trade delivery, managed environmental inflows and inflows to the Menindee Lakes* (Source: Murray Darling Basin Authority)

Planning for these delivery partnerships and engagement activities continues to be informed and enhanced by advice received from regional stakeholders through forums such as the Mallee CMA's Aboriginal Reference Group and the Land and Water Advisory Committee.

This regional partnership framework also includes the Mallee Catchment Partnership Agreement which was established in 2017-18 with the aim of:

- Strengthening coordination, collaboration, and accountability;
- Reducing duplication; and
- Providing clarity on roles and responsibilities between key catchment management partners.

Seven key regional organisations are signatories to the Agreement; spanning local government, water corporations, State Government departments/agencies, and non-governmental organisations.

Opportunities for partnerships that support integrated outcomes across the broader region were identified and progressed through participation in the Mallee's two Catchment Partnership Committees (CPCs). These Sustainable Agriculture and Biodiversity/Water focused forums deliver against the objectives of the Mallee Catchment Partnership Agreement by enhancing knowledge sharing between members and further strengthening collaborative approaches to natural resource management (NRM).

Mallee CMA also continued to operate several program delivery focused forums to support delivery partner and stakeholder input into associated planning, implementation and evaluation processes. In 2020–21, these included:

- Mallee Regional Catchment Strategy Steering Committee;
- Salinity Accountability Advisory Committee;
- Mallee Floodplain Management Strategy (FMS) Implementation Steering Committee;
- The Living Murray (Hattah and Lindsay, Mulcra, Wallpolla) Operations Groups;
- Hattah Ramsar Site Coordinating Committee;
- Victorian Murray Floodplain Restoration Project Stakeholder Advisory Groups (West and Central); and
- Seasonal Adjustment to Annual Use Limits (AUL) Review Panel.

Strategic Framework

The following strategic documents were developed or reviewed by the region in 2020–21, representing ongoing advances in the planning, delivery, and evaluation of both NRM and governance focused activities.

- Mallee CMA Annual Report (2019–20);
- Mallee CMA Corporate Plan (2021–2026);
- Mallee CMA Engagement Strategy (2021–22);
- Mallee CMA Indigenous Participation Plan (2020–2023);
- Victorian Mallee Irrigation Region Land and Water Management Plan (2020–2029);

- Merbein Common Flagship Site Monitoring Evaluation and Reporting Plan (2020–2023);
- Seasonal Watering Proposals (2021–22) for The Living Murray Icon Sites, Lower Murray wetlands and Wimmera Mallee Pipeline wetlands; and
- Environmental Water Management Plans (30).

Final review and processes for the 2013–2019 Mallee Regional Catchment Strategy (RCS) was also progressed in 2020–21, with a renewed strategy scheduled to be completed in December 2021.

Management

The RCS (2013–2019) sets 20-year objectives and six-year strategic actions for each Regional Asset class to inform and direct the planning, implementation, evaluation, and reporting of NRM activities in the Mallee. The management assessment sections of this report summarise annual (2020–21) progress against these strategic actions.

The RCS also provides a framework for strategic action to support integrated and targeted efforts of the region's land managers, government agencies and community groups. The overall extent and distribution of 2020–21 management actions delivered within the region's priority landscapes (i.e. Catchment Assets and Corridors) under each headline theme are illustrated spatially in Figure 4. Catchment Assets represent significant landscapes for priority attention (i.e. deliver the greatest environmental, economic and social return on effort), while priority corridors have been identified as the best places for biodiversity corridors between two or more Catchment Assets to support ongoing adaptation processes.

Detail of the specific activity types these actions represent and their contribution to regional priorities is provided in the following sections. A summary of the RCS sub-strategy that each activity type was delivered under is also provided in Attachment XX.

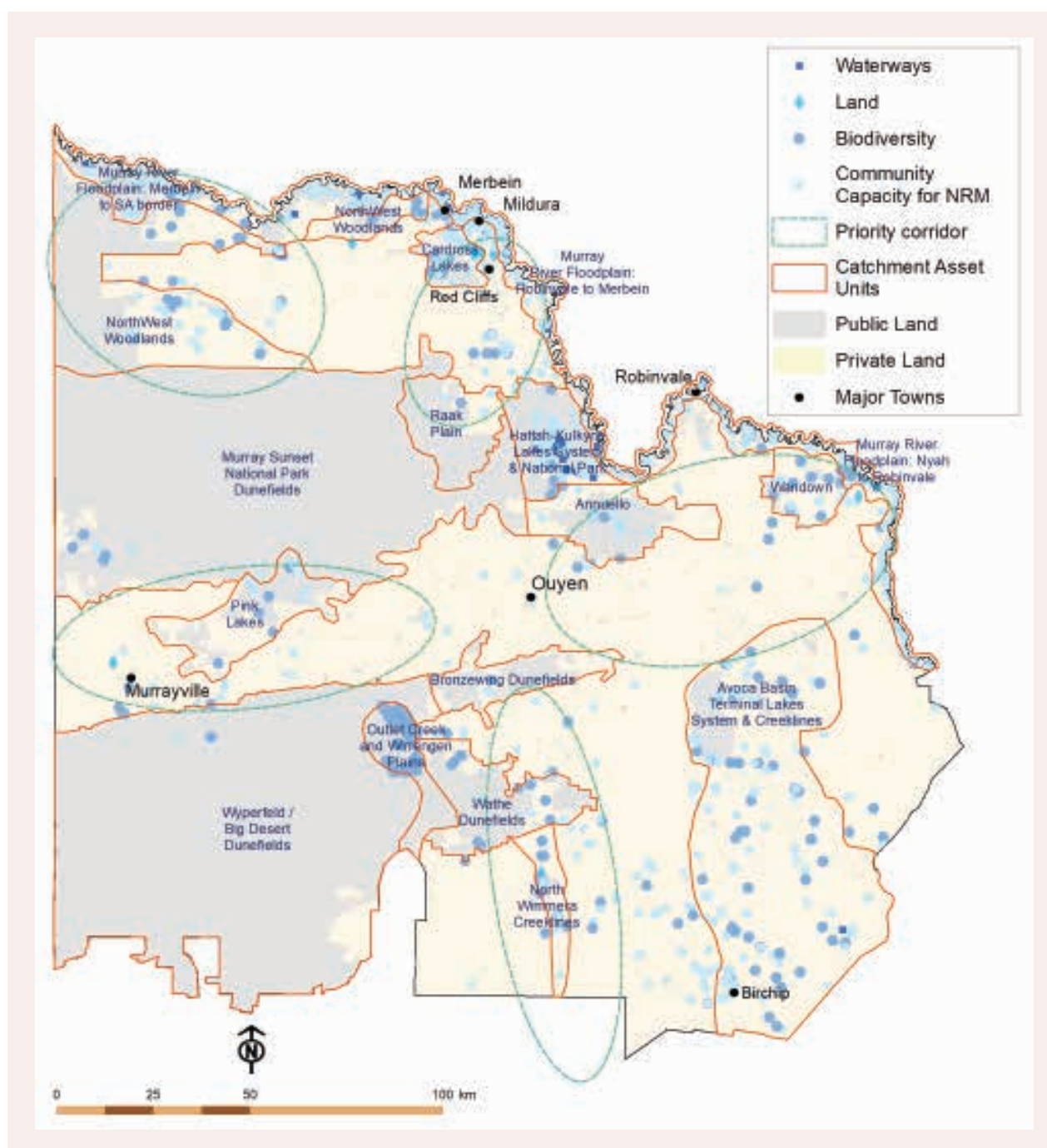


Figure 4 | Spatial distribution of management actions (outputs) delivered in 2020–21 under each of the RCS headline themes

As illustrated by Table 3, a large proportion of 2020–21 on-ground management activity was delivered within the region's priority landscapes. Ongoing application of this approach ensures the efficient and effective application

of NRM investment in the region. The integrated nature of NRM delivery in the Mallee also means actions delivered under one theme often achieve benefits across multiple asset types within the same landscape.

Appendix 2 Condition and Management Report

Table 3 | Proportion (per cent) of 2020–21 on-ground outputs delivered within the region's priority landscapes (Catchment Assets and Priority Corridors)

Output type	Delivered in priority landscapes (per cent)*	
	Catchment Assets	Priority Corridors
Pest Animal Control	82	42
Weed Control	78	37
Water Regime	100	4
Revegetation	99	73
Monitoring Structure	83	17
Road	100	0
Fence	99	24
Visitor Facility	69	85

* Overlap of Catchment Asset and Priority Corridor boundaries means that the collective percentage of works occurring within can be greater than 100 per cent.

Catchment Condition

The catchment condition assessment for each theme describes the level of confidence or concern catchment managers have in the future of the regional environment. The assessment is based on available science and

expert advice as well as evidence gained during the preceding year and uses the criteria detailed in Figure 5. A positive assessment indicates a level of optimism about future direction and a concerned or highly concerned assessment indicates a more pessimistic view of the direction of environmental change.





Assessment criteria		
1. Positive		An optimistic future with evidence that events during the year will have a positive impact on the longer term.
2. Neutral		A largely neutral state, where events during the year may have been significant but are within expected variation and will have little impact in the longer term.
3. Concerned		A level of concern that significant events during the year may have an adverse impact in the longer term.
4. Highly concerned		A high level of concern that significant events during the year are likely to have an adverse impact in the longer term.

Figure 5 | Assessment criteria for annual reporting





A summary of 2020–21 condition assessments for each of the RCS Regional Asset classes is provided in Table 4. Further detail on the evidence that informed these assessments is provided in the following sections.

Table 4 | Summary of 2020–21 condition assessment for each of the Mallee RCS (2013–2019) Regional Asset classes and associated evidence base

Headline Theme	Regional Assets	Previous 3 Year Assessment	2020–21 Condition Assessment	Summary of 2020–21 key evidence
Community	Community Capacity for NRM			Significant numbers (6,275) of stakeholders and broader community members participating in 2020–21 awareness, skill development, and collaboration events. Evaluations identified a high level of participant satisfaction in the delivery of these events. Improvements in capacity being reported by stakeholders engaged through education programs (i.e. awareness raising), incentive/grants programs (i.e. knowledge and skill development); and by those participating in community advisory/reference groups.
	Culture and Heritage			10 Cultural Heritage Management Plans (CHMPs) approved and lodged with First Peoples – State Relations in 2020–21, with a further 32 in preparation. In total there are 148 plans covering 58,900 ha. 58 additional Registered Aboriginal Places recorded, bringing the total to 4,463 , and a further 86 components (e.g. hearths, burial remains, scarred trees) recorded on ACHRIS (6,214 total). No additional non-Aboriginal heritage sites were registered in 2020–21, resources were allocated for the maintenance and restoration of a selection of the 526 registered sites.
	Rivers & Wetlands			Significant areas of inundation achieved through environmental watering (48 sites x 9,915 ha in 2020–21) is having a demonstrable impact on waterway connectivity and both aquatic and riparian habitat condition. Over 20,000 ha of targeted threat mitigation works (e.g. invasive plant and animal management) was delivered in 2020–21 to further secure environmental outcomes achieved by recent watering events, and to protect priority riparian landscapes. Site-based monitoring continues to identify reductions in threat incidence/impact and associated improvements in condition measures (e.g. native flora regeneration) resulting from these works.
Biodiversity	Threatened Species and Communities			Evidence of an increase in population numbers/distribution of threatened flora and fauna species experiencing favourable conditions in 2020–21 (e.g. environmental watering). While the region experienced average (winter and spring) to below average (summer and autumn) rainfall throughout 2020–21, there is some evidence to support the expectation that the significant area of targeted threat mitigation works undertaken (i.e. over 400,000 ha) will provide a basis for future improvements as favourable climatic conditions occur.
	Terrestrial Habitat			Significant area of works undertaken in 2020–21 to protect and enhance priority habitat (>390,000 ha), including actions targeting threatened species/communities that are also expected to benefit the terrestrial habitat they were delivered in. Evidence of changes in the incidence of key threatening processes resulting from 2020–21 works programs. This included reductions in rabbit populations to <1 per ha (i.e. maintaining abundance below the <2 per ha threshold required to support regeneration); reductions in goat presence (ranging from 15 to 79 per cent) to achieve <0.35 goats per km² target within most control areas; and quantified decreases in extent and density of target weed species. Evidence of condition improvements as a result of these threat mitigation actions. This included measurable improvements in habitat condition following grazing management actions, and evidence of ecological functionality returning to revegetated sites.

Continued...

Table 4 | Summary of 2020–21 condition assessment for each of the Mallee RCS (2013–2019) Regional Asset classes and associated evidence base *Continued...*

Headline Theme	Regional Assets	Previous 3 Year Assessment	2020–21 Condition Assessment	Summary of 2020–21 key evidence
Land	Dryland Agriculture & Soils			<p>On average 86 per cent of the region exceeded 50 per cent groundcover (target) throughout 2020–21, ranging from 72 per cent in summer to 96 per cent in winter. This result is slightly lower than the 20-year average of 87 per cent, and a 3 per cent increase from 2020–21. However, significant spatial variability continues to be evident, with the northern and eastern Mallee having substantial areas with less than 50 per cent groundcover from October to May in response to well below average rainfall. The influence of rainfall on total groundcover is further demonstrated by the area of bare ground recorded in 2020 (4 per cent) compared to 2019 (20 per cent), a result that cannot be attributed to specific management practices being applied in either year. Land system also has a major influence, with only 50 per cent of land classified as having a 'high' susceptibility to wind erosion (e.g. achieving the target of >50 per cent groundcover in April, whereas the target was achieved across 74 per cent of land area with 'very low' susceptibility).</p> <p>Leading into the 2021 cropping season, 3 per cent of surveyed paddocks were classified as bare (2 per cent cultivated and 1 per cent grazed), low/ grazed, 7 per cent as pasture, and 90 per cent as stubble (82 per cent standing and 8 per cent disturbed), with erosion observed in 10 per cent of the paddocks, all in moderate to high erosion susceptibility zones.</p> <p>While the widespread changes in management practices that have occurred over past years continue to reduce the overall potential for wind erosion, it is evident that there is a continuing need to identify and validate options for improving groundcover and soil protection in the higher erosion susceptibility areas, particularly to provide effective management responses in dry seasons.</p>
	Irrigated Agriculture & Groundwater			<p>From mid-2018 to mid-2019, the irrigable area increased by 2,470 ha, a 3 per cent increase from 78,775 ha to 81,245 ha. This is on par with the average expansion 2003 to 2006 which is the second highest growth rate since 1997. The gross value of irrigation agriculture (GVIA) in the Mallee CMA area is \$1.5 billion in 2020 (39 per cent of Victoria's GVIA). The region accounts for about 95 per cent of grapes and 50 per cent of nuts and fruit in Victoria. In 2020–21, the Annual Use Limit (AUL) available for irrigation in the Mallee region along the Murray River was 828,062 ML and the water diverted from the Murray River for irrigation was 512,644 ML (62 per cent AUL).</p> <p>Ongoing adoption of best management practice by irrigators is continuing to deliver significant improvements in on-farm water use efficiency, and measurable reductions in salt loads to the Murray River.</p> <p>Long-term observed downward trends in drainage outfalls to the Murray River and its environs, and groundwater mounds beneath the older irrigation areas, continued in 2020–21.</p> <p>Trend analysis of 549 regional groundwater bores identified a slight decrease in both water level and salinity compared with 2019–20; with both measures remaining stable over the longer term (i.e. 2013–2021).</p> <p>Metered extraction within the Murrayville GMA was 54 per cent of the licensed volume for 2019, and 11 per cent decrease in extraction from the 2019 season. Monitoring indicates that groundwater aquifer continues to demonstrate a recovering trend, with the annual 0.65 m drawdown threshold not exceeded for any of the resource condition assessment areas (based on 5 year rolling average). Salinity levels also remained stable in 2020.</p>

Community

The Mallee has a long history of the community generating and implementing innovative and complex NRM projects and plans, with established partnerships operating between all sectors of our community including land managers (public and private), industry groups, community-based groups, Aboriginal stakeholders, and government agencies and authorities. A well-informed community with the skills and confidence to identify, direct and implement change is essential for the maintenance of these partnerships and the NRM outcomes they deliver.

The region's long history of human occupation, spanning thousands of years, and the historical significance of its more recent non-Aboriginal history, requires sites of cultural and heritage significance to be given critical considerations in NRM activities.

This headline theme also includes the Culture and Heritage Regional Asset, for which the RCS set a long-term (20 year) objective of 'to protect the extent and condition of Cultural Heritage (Aboriginal and non-Aboriginal) sites across all Mallee Land Tenures.'

Table 5 summarises the key activities that contributed to the RCS' six-year strategic actions for Culture and Heritage and Community Capacity for NRM in 2020–21. Regional stakeholders engaged in the planning and delivery of these outputs included the Mallee CMA, DELWP, DJPR, Parks Victoria, water authorities, local government, Trust for Nature, Landcare and community based NRM groups, Birchip Cropping Group, Mallee Sustainable Farming, private sector industry groups, Traditional Owners, Aboriginal community, and private land managers.

Community Management

The RCS sets the long-term (20 year) objective for Community Capacity for NRM in the Mallee as being 'to increase community capacity for, awareness of, and participation in efforts to protect the Mallee's natural, cultural and agricultural landscapes.'



Mallee CMA on display at the Mildura Field Days.

Appendix 2 Condition and Management Report

Table 5 | Progress against RCS Strategic Actions for Culture and Heritage and Community Capacity for NRM

Strategic (6 Yr) Actions	2020–21 Progress
Culture & Heritage	
8.1.1. Continue to support the development and implementation of Local Government Heritage Overlays in the Mallee.	Ongoing review and application of Heritage Overlays as part of local council planning schemes. Amendments actively monitored and reported through LGA planning processes.
8.1.2. Continue to support the development and implementation of Cultural Heritage Management Plans in the Mallee.	10 Cultural Heritage Management Plans developed and implemented in line with Aboriginal Heritage Regulations. Actively monitored and reported through the Victorian Aboriginal Heritage Register.
8.1.3. Continue to support the protection and management of cultural heritage sites as an integral component of all land, water and biodiversity management processes.	117 cultural heritage assessments undertaken at proposed works sites. On-country visits to support improved identification and management of cultural heritage sites. Consideration and incorporation of Cultural Heritage values in regional strategies and management plans reviewed in 2020–21 (e.g. Mallee Regional Catchment Strategy, Environmental Watering Management Plans).
Community Capacity for NRM	
9.1.1. Continue to support the development and implementation of community education programs to increase awareness of the Mallee's natural, cultural and agricultural assets; and to encourage actions which contribute to their protection and enhancement.	Significant number of both targeted and whole of community NRM education activities delivered in 2020–21, including: <ul style="list-style-type: none"> • 46 field days (874 participants), 27 workshops/training events (1,602 participants), 28 presentations/displays (387 participants), 318 forums/meetings (2,750 participants) • 95 technical reports, 115 factsheets, 58 flyers/brochures, 4 media releases, 12 newsletters, 6 videos, 348 social media posts, 13 visitor facilities installed or maintained to enhance access and/or amenity.
9.1.2. Continue to support the development and implementation of programs which support land managers to act as responsive and effective stewards of our natural, cultural and productive landscapes.	Significant number of programs delivered to support private land managers implement priority management actions (e.g. revegetation, pest plant and animal control, irrigation system upgrades). Delivery mechanisms included market-based instruments (e.g. tenders and incentives), and performance-based grants; resulting in: <ul style="list-style-type: none"> • 43 management agreements with private land managers for delivery of NRM activities across 36,843 ha. <p>Education/training opportunities and ongoing technical support also provided as an integral part of these programs.</p> <p>534 assessments undertaken to support the identification/validation of effective management actions; measurement of long-term condition indicators; and the monitoring of integrated threat incidence and impact monitoring programs. Examples include:</p> <ul style="list-style-type: none"> • Mallee groundwater and surface water monitoring programs. • Pre and post works threat incidence/impact assessments (e.g. invasive plants and animals) to inform site prioritisation and evaluation processes. • Environmental watering monitoring program to determine inundation extent and ecological responses. • Mallee revegetation monitoring program to determine survival rates and long-term changes in habitat condition. • The Living Murray intervention and condition monitoring programs. • Evaluations undertaken as part of the Mallee Community Capacity for NRM Monitoring Framework.
9.1.3. Continue to develop and implement programs which support land managers to identify, and where appropriate, respond to emerging threats and opportunities.	26 drought affected farmers and workers in the Millewa/Carwarp region employed to undertake a range of environmental and social benefit focused works across the region. Participants were also supported to undertake training in areas such as remote first aid, chemical handling, cultural heritage, and environmental monitoring.

Continued...

Table 5 | Progress against RCS Strategic Actions for Culture and Heritage and Community Capacity for NRM *Continued...*

Strategic (6 Yr) Actions	2020–21 Progress
Community Capacity for NRM	
9.1.4. Continue to support the development and review of whole farm and landscape scale management plans which consider natural, cultural and productive landscapes.	<p>2 irrigators supported to develop Irrigation, Drainage Management Plans across 119 ha to inform system upgrades.</p> <p>Development of 93 detailed site management plans to inform the delivery of targeted works programs, including review and renewal of 30 environmental watering management plans and the development of 17 delivery plans/proposals to inform landscape scale management of the environmental water reserve.</p>
9.1.5. Continue to develop and implement programs which support Indigenous communities to promote and apply traditional ecological knowledge.	<p>Ongoing support to, and participation in the Mallee Aboriginal Reference Group to facilitate member participation in the planning and delivery of regional NRM activities.</p> <p>Opportunities to incorporate and promote traditional ecological knowledge actively sought and delivered through programs such as National Landcare Program, Environmental Watering, Waterway Health, Our Catchments Our Communities, and Biodiversity Response Planning.</p> <p><i>Also see 9.1.8</i></p>
9.1.6. Continue to support, enhance and participate in regional NRM partnerships to plan, deliver and report on the Mallee RCS and associated management plans.	<p>99 partnerships established and/or maintained to facilitate integrated approaches to the development, implementation, and review of regional NRM activities. This included:</p> <ul style="list-style-type: none"> • 2 community advisory committees supported to facilitate stakeholder input to the development, implementation, and review of NRM activities. • 6 regional partnership committees established/maintained to facilitate an integrated approach to the development, implementation and review of NRM activities. • 7 regional steering/advisory committees established/maintained to guide the development and implementation of key management strategies and plans. <p>Co-investment and leveraging opportunities actively identified and delivered through funding initiatives such as National Landcare Program, Our Catchments Our Communities, Threatened Species Initiative, Sustainable Irrigation, and Waterway Health.</p>
9.1.7 Implement and review the <i>Mallee Regional Landcare Support Strategy</i>¹.	<p>23 regional Landcare groups provided with ongoing coordination support.</p> <p>8 devolved grants provided to Mallee Landcare/community groups to support the delivery of local priorities.</p> <p>448 Landcare group members participating in 17 awareness raising/training events.</p>
9.1.8 Implement and review the <i>Mallee CMA Indigenous Participation Plan</i>².	<p>Continued effective function of the Mallee CMA Aboriginal Reference Group in fostering communications with Aboriginal stakeholders and providing input into regional initiatives and plans.</p> <p>24 Aboriginal On-Country visits supported.</p> <p>14 events (95 participants) facilitating Traditional Owner and Aboriginal community input into the development of key regional strategies/plans and the implementation of associated works programs.</p> <p>Review and renewal of the Mallee CMA Indigenous Participation Plan (2020–2023).</p>

¹ Attachment A details all outputs specifically delivered under Mallee Regional Landcare Support Strategy in 2020–21.

² Attachment A details all outputs specifically delivered under Mallee Indigenous Participation Plan in 2020–21.

Case Study

Community

Students at Tempy Primary School have started their journey to become citizen scientists, spending time in 2021 learning about Malleefowl and contributing to efforts to monitor and improve their habitat through revegetation.

Utilising the Malleefowl Recovery Group's 'The Malleefowl Education Kit', students have learnt about Malleefowl, their diet, habitat and breeding. Activities have included hearing from experts on Malleefowl and how they are monitored in the Mallee; a tour through the Mallee scrub to see Malleefowl habitat and active nests; seed collection and tree planting; learning about Malleefowl in Aboriginal culture; and a science experiment to examine how Malleefowl nests are built to investigate optimal temperatures required to hatch Malleefowl eggs.

At the end of the semester, students presented their Malleefowl project to the Victorian Malleefowl Recovery Group, showing what they had learnt.

This project is a prime example of how citizen science can complement the school curriculum, allowing students to engage in hands-on learning through field trips and scientific experiments while generating usable data. The project was well received in the school community, demonstrated by the school's commitment to undertake Malleefowl monitoring in the future by purchasing remote sensing cameras. The remote cameras will be operated in collaboration with Parks Victoria and a number of local conservationists, with the data being shared with the Victorian Malleefowl Recovery Group to inform ongoing monitoring in the region.



Tempy Primary students during a field trip to the Baring Wildlife corridor.

Community Condition

The Community Theme reports on the overall condition of both Community Capacity for natural resource management (NRM) and Culture and Heritage in the Mallee.

Community Capacity for NRM Benchmark

Historically, no regional-scale information has existed from which condition assessments of the Victorian Mallee community's capacity for NRM could be made. This information gap was addressed as part of the

Mallee RCS (2013–2019) MERI framework through the development of a Regional Community Capacity Monitoring Tool. This tool provides a measurable and repeatable assessment of the condition of community capacity for NRM at a regional scale. It is based on the Rural Livelihoods Framework, which identifies Community Capacity for NRM as a combination of human, social, natural, physical and financial capital. Scoring criteria have been assigned to each measure identified across the five categories of capital. Based on the data, each measure is scored on a five-point scale, where one indicates 'low capacity' and five indicates 'high capacity'.

The Regional Community Capacity Tool was applied during 2012–13 to collect baseline data from which scores for each of the five capitals were assigned. This assessment indicated that, overall, our community has 'medium' levels of capacity for NRM in the region³. Re-application of the tool in 2018 identified that at a regional scale, community capacity has remained relatively stable over the six-year period. Some fluctuations have occurred at

the indicator level, however while all indicators of human and financial capital moved in a positive direction, two of the five social capital measures showed a slight decline, specifically, the 'proportion of agricultural businesses with Landcare membership' and 'proportion of agricultural businesses participating in NRM projects or receiving funding' (see Figure 6).

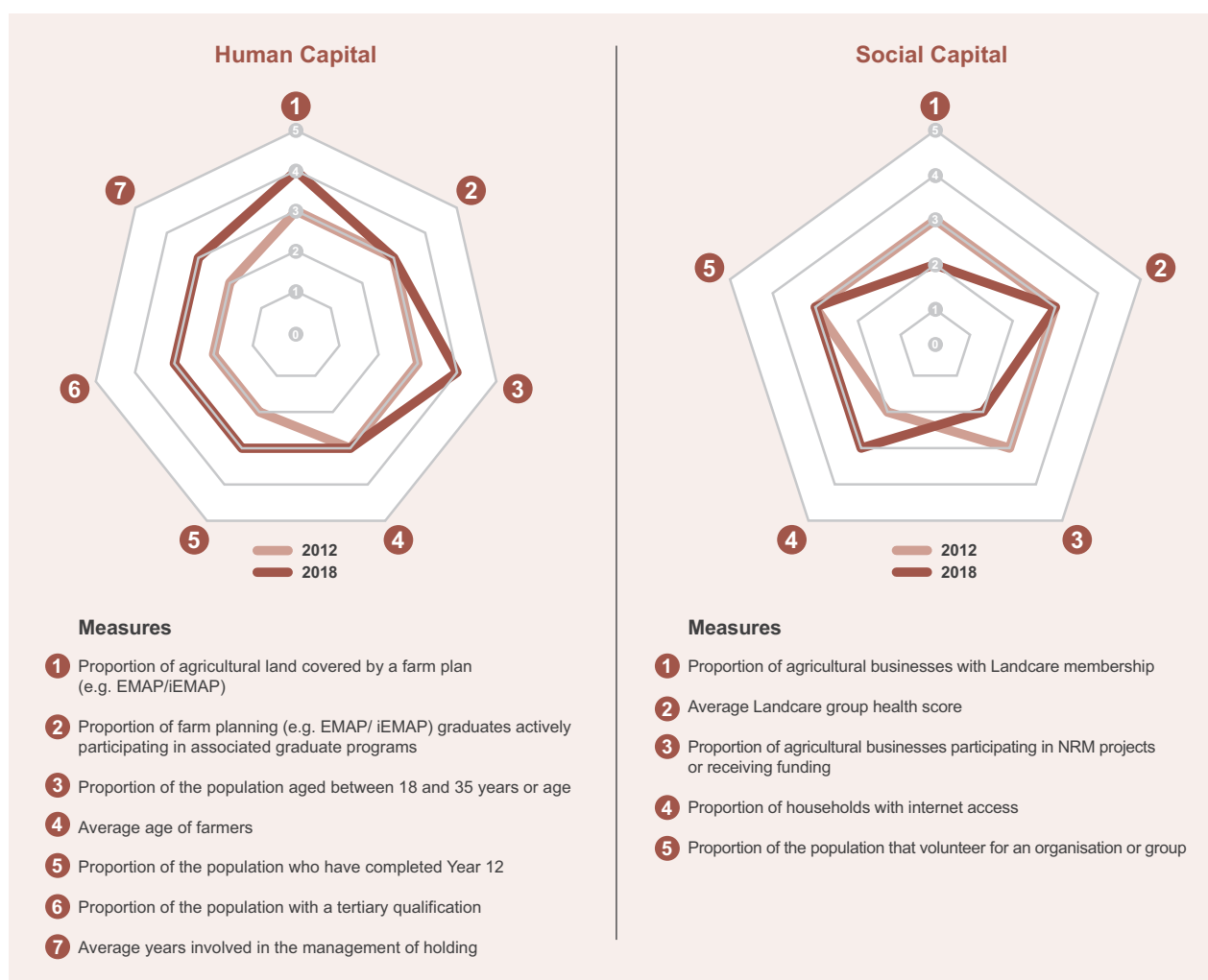


Figure 6 | Comparison of Regional Community Capacity Tool results between 2012 and 2018 (where 1 indicates 'low capacity' and 5 indicates 'high capacity')

³ RMCG (2013) Mallee Regional Community Capacity for NRM: Detailed Condition Report.

Appendix 2 Condition and Management Report

Annual data collected by the Victorian Landcare Program – Group Health Survey provides further detail on the capacity of the region's Landcare groups to participate in NRM over time (see Table 6 and Figure 7).

Table 6 | Number of group responses and their respective Landcare Group Health Scores for each year, Mallee Region – *data not available for 2016–17* (Source: Victorian Landcare Program)

Health Score	2012–13	2013–14	2014–15	2015–16	2017–18	2018–19	2019–20	2020–21
1 Just hanging on	1	0	1	4	1	0	2	1
2 Struggling along	2	5	5	7	2	5		2
3 Moving forward	8	4	8	7	5	8	6	7
4 Rolling along	5	5	6	7	5	2		5
5 Trail blazer	2	3	0	0	1	6	4	6
Total responses	18	17	20	25	14	21	12	21
Average Group Health Score	3.6	4.2	4.0	5.0	2.8	5.2	4.0	4.2

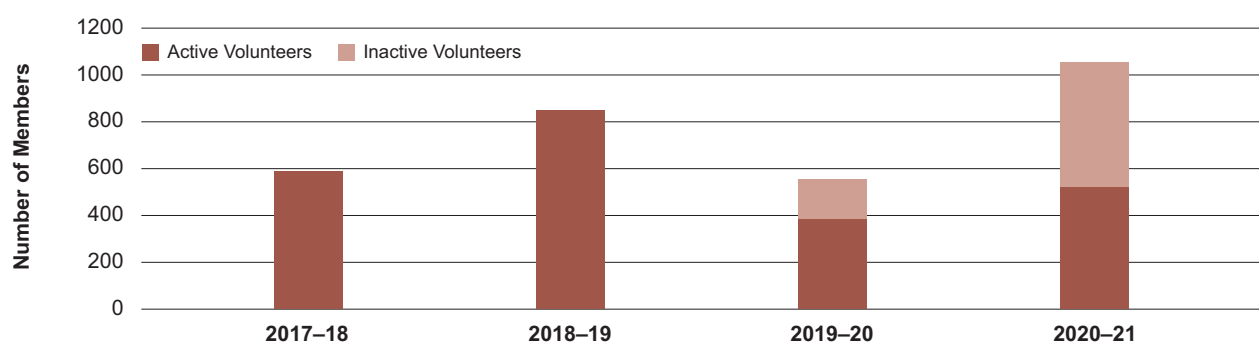


Figure 7 | Total number of Landcare Group members and their respective activity, Mallee Region (Source: Victorian Landcare Program)

Overall, in accordance with the underpinning theory of the Regional Community Capacity Tool, the results comparison between 2012 and 2018 demonstrates that the Mallee region has maintained a 'sustainable rural livelihood' during this time⁴.

A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

Such resilience in the face of stresses and shocks is key to both livelihood adaptation and the ability of the community to effectively manage the natural resource base for both production and environmental outcomes.

Community Capacity for NRM Assessment 2020–21

Community capacity for NRM in the Mallee is considered to be improving, with evidence that the activities delivered in 2020–21 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
Significant numbers (6,275) of stakeholders and broader community members participating in 2020–21 awareness, skill development, and collaboration events. Evaluations identified a high level of participant satisfaction in regards to the delivery of these events.		
Improvements in capacity being reported by stakeholders engaged through education programs (i.e. awareness raising), incentive/grants programs (i.e. knowledge and skill development); and by those participating in community advisory/reference groups.		

⁴ RMC (2018) Mallee Regional Community Capacity for NRM: Detailed Condition Report.

Reason for assessment

Evaluation surveys undertaken for all engagement activities as part of the Mallee CMA's Targeted Community Capacity for NRM monitoring tool provide assessments on their 'effectiveness' and some measures of community capacity. Key findings included:

- In 2020–21, there were 6,275 participants at 501 individual engagement events (e.g. workshops, field days, meetings). Of those surveyed 69 per cent rated the overall delivery of these activities as excellent, and 29 per cent as good. In regards to the primary motivations for participating, 70 per cent cited 'learning about a topic', and a further 10 per cent as 'contributing to a discussion'. Survey respondents also reported a 36 per cent (average) increase in their awareness of specific NRM issues as a result of participation, and a 19 per cent (average) increase in skills to 'address threat processes.'
- Members of Mallee CMA Community and Partnership Advisory Committees rated the overall delivery of information at 2020–21 meetings as excellent (100 per cent). Opportunities to provide feedback were also rated highly (55 per cent excellent, 45 per cent good), with 90 per cent reporting a high level of confidence that the feedback and advice provided was being listened to and acted on.
- Participants in Mallee CMA tender and incentive programs delivered over the past five years initially identified 'addressing priorities within my Farm Plan' (47 per cent) as the primary reason for seeking support to undertake works. On completion, however, the 'desire to contribute to the general environmental management of the region' (39 per cent) was the highest reported motivation. Participants also reported increased awareness of key threatening processes, and an increase in skills to implement associated mitigation actions.

Culture and Heritage Benchmark

Information regarding culture and heritage sites has historically been gathered from a variety of sources including the local community, both anecdotally and from various publications and reports, through management plans, and government databases, which are in turn compiled from a variety of sources. As such, the total coverage and current condition of cultural heritage sites within the region can be difficult to gauge as information on known sites is variable in quality and sites themselves continue to be identified through various processes.

As no regional scale baseline information currently exists on the condition of the region's Culture and Heritage Assets, proxy condition indicators have been established using the assumption that being listed on the relevant heritage register affords some level of protection, and similarly, if sites are captured within a Co-management Agreement or a Cultural Heritage Management Plan, the asset is being protected through associated threat mitigation activities.



Scouts participate in a revegetation workshop.

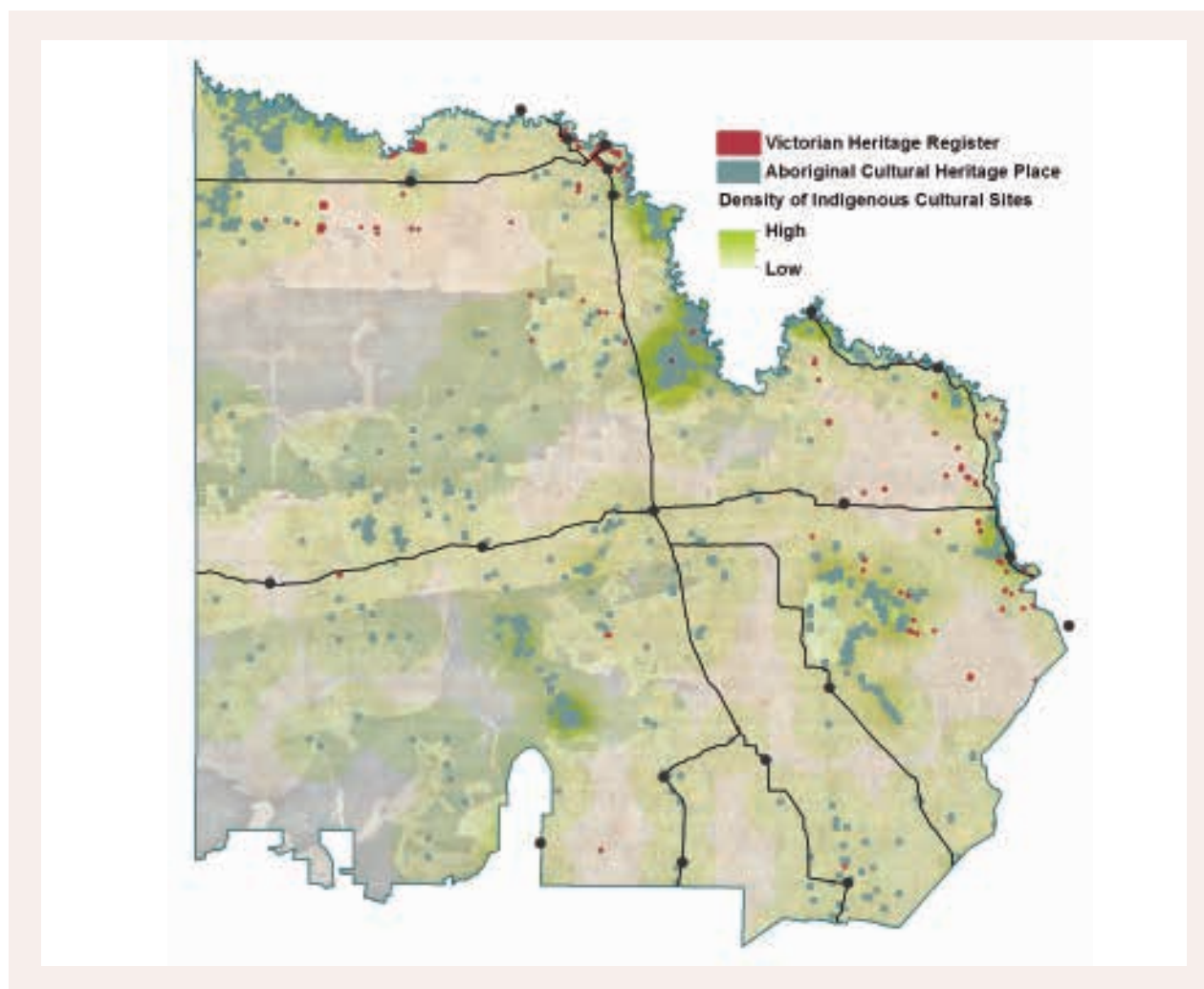


Figure 8 | Indicative Aboriginal and non-Aboriginal cultural heritage sites in the Mallee

Culture and Heritage Assessment 2020–21

The condition of Culture and Heritage assets in the Mallee is considered to be improving, with evidence that the management actions delivered in 2020–21 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
<p>10 additional Cultural Heritage Management Plans (CHMPs) approved and lodged with First Peoples – State Relations in 2020–21, with a further 32 in preparation. In total there are 148 Plans covering 58,900 ha.</p> <p>58 additional Registered Aboriginal Place, bringing the total to 4,463; and a further 86 components (e.g. hearths, burial remains, scarred trees) recorded on ACHRIS (6,214 total).</p> <p>No additional non-Aboriginal heritage sites were registered in 2020–21, however, there is evidence of resources being allocated to the maintenance and restoration of a selection of the 526 sites.</p>		

Reason for assessment

Ten Cultural Heritage Management Plans (CHMPs) were approved and lodged with First Peoples – State Relations in 2020–21, bringing the total to 116. A further 32 Plans are currently in the preparation phase. Collectively these Plans cover 58,900 ha 40,009 ha, a 45 per cent increase from 2019–20.

There are currently 4,463 Registered Aboriginal Places in the region, comprising 6,214 components and representing a two per cent increase (97 components) from 2019–20. The additional component types recorded in ACHRIS throughout 2020–21 included scarred trees (51), shell deposits (5), and low-density artefacts (22). Non-Aboriginal heritage sites include historical infrastructure, cemeteries, national parks and reserves, and parks and gardens. In 2020–21, no additional sites were registered on the Victorian Heritage database and/or planning scheme heritage overlays (526 in 2016–17). However, there is evidence of resources being allocated for future identification and conservation of places of cultural significance.

Waterways

The Mallee contains some 1,600 km of rivers/creeks and over 900 wetlands. Many of these waterways have been recognised as nationally and internationally important for the environmental, social, cultural and economic values they provide. This includes one Ramsar site (Hattah-Kulkyne Lakes); one Heritage River (Outlet Creek and Wirrengren Plain section of Wimmera River); and 16 sites listed on the Directory of Important Wetlands, Australia (e.g. Lindsay Island, Belsar Island, Kings Billabong, Lake Tyrrell and Raak Plain).

the Mallee's watercourses, wetlands, and associated riparian ecosystems and, in turn, the social, economic and environmental services that they provide to the community'.

Table 7 summarises the key activities that contributed to the RCS's six-year strategic actions for Waterway assets in 2020-21. Regional stakeholders engaged in the planning and delivery of these waterway related actions included Mallee CMA, DELWP, Parks Victoria, water authorities, local government, Landcare and other community-based NRM groups, members of the Aboriginal community, and private land managers.

Waterways Management

The RCS sets the long-term (20 year) objective for River and Wetland management in the Mallee as being 'to protect and enhance the environmental values of

Table 7 | Progress against RCS Strategic Actions for Waterways

Strategic (6 Yr) Actions	2020-21 Progress
1.1.1. Review the Mallee River Health Strategy and the Mallee Wetland Strategy, and develop and implement the Mallee Regional Waterway Strategy⁵.	<p>Significant progress made against Mallee Waterway Strategy 2014-22 (MWS) targets, including:</p> <ul style="list-style-type: none"> • 48 sites receiving environmental water (39,776ML), covering 9,915 ha • 11 ha of native (indigenous) vegetation established • 49 km of fencing/bollards installed • 3,139 ha of weed control (primarily woody weeds) • 16,986 ha of pest animal control (rabbits, foxes, feral pigs, feral goats). <p>All on-ground works delivered in line with actions identified by MWS for individual waterway management units, including each of the four priority sites identified by Water for Victoria:</p> <ul style="list-style-type: none"> • Merbein Common wetlands (2016-24 flagship waterway site) • Lindsay-Wallpolla Islands • Kings Billabong and Woolong complex (2020-24 flagship waterway site) • Belsar-Yungera Floodplain complex.
1.1.2. Review, update and implement the Mallee Floodplain Management Strategy 2018-28 (FMS).	<p>Delivery against Regional Works Plan is coordinated by the regional FMS Implementation Steering Committee, with key achievements including:</p> <ul style="list-style-type: none"> • Implementation of a Monitoring, Evaluation and Reporting (MER) Plan • Completion of Tyrrell and Lalbert Creek Flow Investigation and progressing the Murray River Flood Study to provide regional stakeholders with more accurate data and mapping for improved management of future flood events.

⁵ Attachment A details all outputs delivered under the Mallee Waterway Strategy in 2020-21.

Case Study

Waterways

The Hattah Lakes are a system of interconnected wetlands within the Hattah-Kulkyne National Park, intermittently filled by Chalka Creek, which connects the lakes to the Murray River. Listed as a Ramsar site, the wetlands provide a vitally important mosaic of habitat for birds, animals and vegetation. The site also contains significant cultural and social values which continue to connect Traditional Owners and community members to the landscape.

Thirteen of the 18 lakes received environmental water in 2020–21, supporting multiple ecological outcomes across the site. This included increased waterbird breeding activity, a good indicator of overall wetland health with successful breeding events indicating the presence of a wide range of aquatic organisms upon which the birds feed. Targeted surveys of colonial nesting waterbird nests recorded a total of 1,973 nests in 2020–21; with 1,917 classified as communal nesting waterbird nests, 51 as nests of other waterbird species and five White-bellied Sea-eagle nests. These numbers demonstrate the importance of the Hattah

Lakes system as an area for waterbird breeding and a refuge for waterbirds during dry times, with very little water present in other wetland systems of the Murray-Darling Basing during this period.

Lake Kramen was last filled using water for the environment in spring 2019, and has undergone a drying phase over the past few years. As the water draws down, aquatic vegetation growing in the wetlands provides vital resources for animals such as waterbirds. Black swans feed on this vegetation and use it to build nests. Monitoring of Lake Kramen in 2020–21 identified that over 2,200 birds including Hardhead Duck, Musk Duck and Regent Parrot, all listed as vulnerable species have visited the site. A total of 45 Black swan nests were also found. Swan eggs, take around 40 days to hatch, the cygnets will take up to 150 days to become independent. This breeding event is a significant outcome achieved through the delivery of water for the environment.



Nesting Black swans at Lake Kramen.

Waterways Condition

The Waterways theme reports on the condition of both rivers and wetlands in the Mallee. As per the RCS mid-term review recommendation, consideration of these assets has been combined under the one headline theme.

Rivers Benchmark

Periodic assessments on the condition of Mallee waterways were previously conducted as part of state-wide Index of Stream Condition (ISC) and Index of Wetland Condition (IWC) monitoring programs.

River/stream condition was measured by the ISC and measures condition according to five sub-indices (hydrology, physical form, streamside zone, water quality and aquatic life) that contain 23 key indicators, to provide a summary of the extent of change from natural or ideal conditions.

Assessments of river condition using the ISC were first conducted in 1999 and again in 2004 and 2010. In general, this monitoring identified that no major changes occurred to the condition of these waterways over this timeframe. While no general improvement was detected, overall deterioration appears to have been controlled⁶.

This is an encouraging result given the data collected in the third assessment period coincided with the end of the severe Millennium drought in south-eastern Australia. It is assumed that the targeted threat mitigation actions undertaken in the region over this period played an important role in minimising the impact of the drought and that they should assist with future improvements in condition under favourable climatic conditions.

The most recent (2010) ISC monitoring assessed 73 individual reaches in the region, with 4 per cent of stream length identified as being in moderate condition and the remaining as being in poor (64 per cent) or very poor (32 per cent) condition (see www.depi.vic.gov.au/water/water-resource-reporting/Third-Index-of-Stream-Condition-report).

Wetlands Benchmark

Wetland condition was assessed by the IWC according to six sub-indices (wetland catchment, hydrology, water properties, soils, biota, and physical form) and comprise 16 different measures. Monitoring is designed to identify significant changes in wetland condition from a theoretical reference condition (i.e. unmodified by human impacts associated with European settlement).

The IWC was applied in the Mallee between spring 2009 and autumn 2010 following a period of extended drought. Monitoring was conducted on 79 wetlands considered to be of high conservation value and a priority for management. Over half (53 per cent) of the assessed wetlands were identified as being in good or excellent condition, 42 per cent as being in moderate condition, and only five per cent as being in poor or very poor condition.

It is also noted although a high number of wetlands were assessed as being in good condition, there was a high level of variation evident in condition at the sub-index level. For example, 89 per cent of wetlands were identified as having poor or very poor hydrology condition, while 96 per cent had good to excellent physical form⁷.

NB: The Index of Stream Condition (ISC) and Index of Wetland Condition (IWC) monitoring programs have no scheduled iterations. Alternative monitoring frameworks to assess river and wetland condition are currently being established as part of the Mallee Regional Catchment Strategy renewal process and will be applied to determine change from benchmarks in future reports.

Waterways Assessment 2020–21

Summary of assessment

Both long-term and annual site-based assessments of regional waterway assets generally indicate a condition trend of stable to improving; with evidence that management actions undertaken in 2020–21 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
Significant areas of inundation achieved through environmental watering (48 sites x 9,915 ha in 2020–21) are having a demonstrable impact on waterway connectivity and both aquatic and riparian habitat condition.		
Over 20,000 ha of targeted threat mitigation works (e.g. invasive plant and animal management) delivered in 2020–21 to further secure environmental outcomes achieved by recent watering events, and to protect priority riparian landscapes.		
Site based monitoring continues to identify reductions in threat incidence/ impact and associated improvements in condition measures (e.g. native flora regeneration) resulting from these works.		

⁶ Department of Environment and Primary Industries (2013), Index of Stream Condition: *The third benchmark of Victorian river condition*.

⁷ Papas, P and Maloney, P (2012): *Victoria's wetlands (2009–2011): state wide assessments and condition monitoring*.

Reasons for assessment

Site-based assessments (both ongoing and annual) have identified improvements in the health of landscapes and associated species/communities where both environmental water and targeted threat mitigation activities are being delivered.

Environmental watering activities undertaken in 2020-21 continue to deliver habitat enhancement and waterway connectivity outcomes as demonstrated by:

- Long-term monitoring (2006 to 2021) being conducted at the Hattah Lakes and Lindsay-Mulcra-Wallpolla The Living Murray Icon Sites identified several measured indicators of environmental condition (i.e. River Red Gum, Black Box, wetland and floodplain vegetation, lignum, fish and waterbirds) continue to improve as a result of water application and associated works programs, with progress against the stated ecological objectives (condition targets) for each of these indicators recorded in 2020-21^{8,9}.
- Water availability in the form of both rainfall and flooding are key drivers of Hattah Lakes' plant community composition. The general positive temporal response pattern in monitored plant community metrics to flooding indicates that the system has benefited

from the environmental water deliveries in 2014, 2016, 2017-18 and 2019. However, the timeframes over which this change occurs can however vary according to individual communities and metrics. For example, intervention monitoring comparing watered and unwatered sites is reporting a positive response in Black Box health across the watered sites after one environmental watering event, with subsequent environmental watering events further improving tree health (see Figure 9)¹⁰. Inundation of River Red Gum communities for between 50-60 days during spring and early summer was found to improve canopy condition by between 10 and 30 per cent¹¹.

- For wetland and floodplain communities at Lindsay-Mulcra-Wallpolla islands, monitoring identifies vegetation composition responses according to wetland phases, with a shift from dominance of drought tolerant species to aquatic and amphibious species during flooding and watering events, to predominately damp terrestrial, then drought tolerant species during the drawdown phase¹².

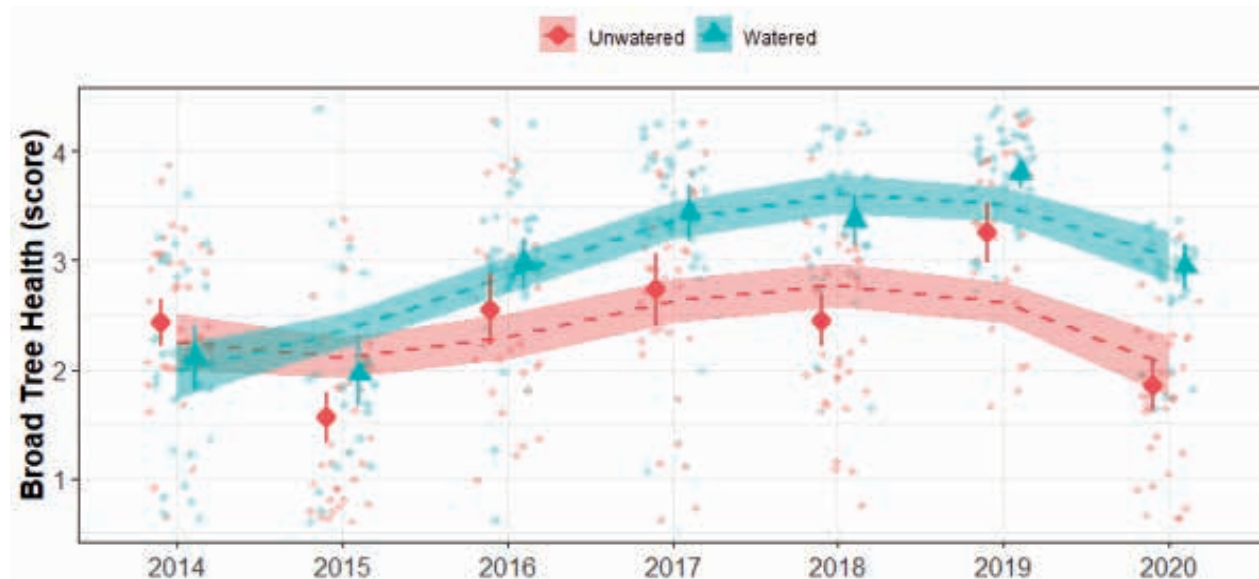


Figure 9 | Raw Black Box health data means (\pm 95 per cent confidence interval) for each year sampled at the unwatered (red circles) and watered (blue triangles) case study sites. Individual points (jitter) and associated loess smooth lines show trends in the raw data based on watering (unwatered – red; watered – blue) (Moxham et al. 2020)

⁸ Ecology Australia (2021) *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2020-21, Part A (Main Report) Draft*.

⁹ Ecology Australia (2021) *The Living Murray Condition Monitoring, Hattah Lakes 2020-21, Part A (Main Report) Draft*.

¹⁰ Moxham C., Duncan M., Leivers D. and Farmilo B. (2020) *The Living Murray Hattah Lakes Intervention Monitoring: Impact of Environmental Watering on Black Box health, reproduction and recruitment – Final Report 2020*. Unpublished Report for the Mallee Catchment Management Authority. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

¹¹ Moxham, C. and Gwinn, D. (2021). *Hattah Lakes floodplain tree condition: Modelling tree responses to environmental watering*. Unpublished Report. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

¹² Ecology Australia (2021) *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2020-21, Part A (Main Report) Draft*.

- Photopoint monitoring of priority wetlands, floodplains and creeks also provides important visual records to monitor changes in vegetation condition, structure and diversity in response to environmental water. Site-based observations for Wimmera Mallee Pipeline (WMP) connected wetlands in 2020–21 observed these wetlands providing critical habitat for a range of fauna, including reptiles, frogs, kangaroos; and an influx of extensive waterbird diversity and abundance¹².
- Lindsay-Mulcra-Wallpolla surveys recorded 43,545 fish, the second highest number recorded over the 2010–2021 monitoring program. While the high fish numbers appear to be driven by record numbers of Carp Gudgeon, numbers remained stable for a number of large-bodied native fish species including Murray Cod and Bony Herring and most small-bodied native fish species¹³.
- Targeted surveys of colonial nesting waterbird nests across 19 Hattah Lakes recorded a total of 1,973 nests, with 1,917 classified as communal nesting waterbird nests, 51 as nests of other waterbird species and five White-bellied Sea-eagle nests¹⁴. This represents a relatively large number of nesting sites, additional monitoring of the only site containing water at the time the surveys were conducted (Lake Kramen) recording 45 active Black Swan nests¹⁵.
- Targeted feral goat control programs are reducing populations within priority riparian landscapes. For example, aerial shooting programs conducted across the Hattah Ramsar site in 2020 and 2021 removed 371 goats from critical River Red Gum habitat. This represents a 79 per cent reduction in goat abundance (i.e. 1.43 goats per km² to 0.3) and is within the threshold target of <0.35 goats per km²¹⁷.
- The diversity of invasive plants at Hattah Lakes was the second lowest recorded over the seven-year monitoring period (2013–20), with targeted works to control invasive species undertaken over an extended period having a high level of success. However, extensive follow up works will however be required for longer term management outcomes¹⁸.
- Regeneration of native flora (e.g. River Cooba, Native Rush and River Red Gum) continued to be supported through the delivery of an extensive willow removal program along the Murray River. Follow up treatment of the 2017–18 and 2018–19 control areas built on the habitat improvement outcomes achieved and provided significant progress towards the aim of achieving 100 per cent eradication of active willow trees on the Victorian side of the Murray River from Mildura to Wentworth (25 km of river frontage) and from Nichols Point to Colignan (90 km of river frontage).
- Surveys of the extent and severity of feral pig damage to floodplain habitat in response to water availability recorded a reduction in extent of pig damage on Ramsar wetlands compared to 2018–19 results. The level of feral pig disturbance observed in 2020 was associated with reduced vegetative cover and organic litter, and increased exotic plant and bare groundcover. While a range of control methods are being implemented (e.g. trapping, shooting) within priority landscapes, further efforts/resources are required to effectively manage the threat¹⁹.
- Targeted fox control programs are reducing populations within critical waterbird breeding habitat. For example, baiting programs conducted at Ramsar wetlands in 2020 and 2021 removed 173 foxes from the target area, representing a 33 per cent reduction from the pre-works baseline²⁰.

While the majority of the region's comprehensive environmental watering monitoring programs are focused on the two TLM sites (Hattah and Lindsay-Mulcra-Wallpolla), this evidence base does support the assumption that positive outcomes are also being achieved at other watered sites. Given the scale and scope of environmental watering events delivered in 2020–21, it is anticipated that the extent of these impacts is also relatively significant.

In 2020–21, over 20,000 ha of targeted threat mitigation actions (e.g. invasive plant and animal management) were also undertaken to further secure the environmental outcomes achieved by recent watering events and to protect priority riparian landscapes. Key observations regarding the impact of these works include:

- Targeted rabbit control programs are maintaining populations within priority riparian landscapes below the regional threshold level of <1 rabbit per spotlight km. For example, post treatment assessments in Hattah found no rabbit activity per spotlight km at 91 per cent of the monitored sites¹⁶.

¹² Ecology Australia (2021) *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2020-21, Part A (Main Report) Draft*.

¹³ Mallee CMA (2020) unpublished report.

¹⁴ GHD (2021). Hattah colonial nesting waterbird surveys 2021.

¹⁵ GHD (2021). Black Swan nest and waterbird monitoring at Lake Kramen – June 2021.

¹⁶ Parks Victoria (2019). Spotlight Transect Scores - Hattah Area Autumn 2021

¹⁷ Mallee CMA (2021) unpublished report

¹⁸ Moxham C., Duncan M., Leever D. and Farmilo B. (2020) *The Living Murray Hattah Lakes Intervention Monitoring*.

¹⁹ Stead, M.S., Lethbridge, M.R. Wright-Simon S.L.G. (2020). *Hattah Lakes Icon Site feral pig damage mapping. EcoKnowledge report to the Mallee Catchment Management Authority*.

²⁰ Mallee CMA (2021) unpublished report.



Black Box revegetation at Hattah.

Biodiversity

Just over half (2,047,645 ha) of the region's native vegetation has been cleared since European settlement, particularly those vegetation communities growing on the more fertile alluvial soils (i.e. suitable for agriculture). However, large contiguous blocks of terrestrial habitat do exist, predominantly in large parks such as Murray-Sunset and Wyperfeld National Parks. Of the 1,872,233 ha of remaining vegetation, only 12 per cent occurs on private land.

This habitat supports a diverse and unique range of flora and fauna, with many species associated with the more arid interior having their southernmost distribution here. Several species are found nowhere else in Victoria; and many others are genetically distinct from their northern or southern relatives. Overall, the region contains 160 terrestrial and aquatic species which are listed as threatened at either Federal (27) or State (133) level; and 10 listed communities (4 federal and 6 state).

Biodiversity Management

The RCS sets the long-term (20 year) objective for Threatened Species and Communities management in the Mallee as being “to protect and enhance the present diversity of Mallee threatened species and communities”; and for Terrestrial Habitat as being “to protect and enhance the extent, condition and ecological connectivity of high value terrestrial habitat across all Mallee Land tenures”.

Table 8 summarises the key activities that contributed to the RCS's six-year strategic actions for Threatened Species and Communities and Terrestrial Habitat in 2020–21. Regional stakeholders engaged in the planning and delivery of these outputs included Mallee CMA, DELWP, Parks Victoria, water authorities, local government, Trust for Nature, Landcare and other community based NRM groups, Aboriginal community, and private land managers.

Table 8 | Progress against RCS Strategic Actions for Threatened Species & Communities and Terrestrial Habitat

Strategic (6 Yr) Actions	2020–21 Progress
Threatened Species & Communities	
3.1.1. Continue to implement actions consistent with federal, state and regional prioritisation frameworks.	<p>Funding secured under the Victorian Threatened Species Initiative – Biodiversity Response Planning program to deliver against actions identified by state-wide framework (Protecting Victoria's Environment – Biodiversity 2037) as being a priority for the Mallee. Targeted works implemented to support the recovery of 16 threatened species and 4 threatened ecological communities across 11 priority landscapes (North West Woodlands; Wyperfeld Dunefields; Avoca Basin Terminal Lakes System and Creeklines; Cardross Lakes; Murray River Floodplain: Nyah to Robinvale; Hattah-Kulkyne Lakes System & National Park; Pink Lakes; Annuello; Wandown; North Wimmera Creeklines; and Wathe Dunefields).</p> <p>Funding secured under the Federal Government's Regional Land Program 'Threatened Species' and 'Threatened Communities' Services to deliver against actions identified by of Australian Government's Threatened Species Strategy (2015–20) as being a priority for the Mallee. Targeted works implemented to support the recovery of Malleefowl, Plains-wanderer and Buloke Woodlands.</p>
3.1.2. Continue to support the development, implementation and review of Action Statements and Recovery Plans for the region's threatened species and communities.	<p>Above programs supported significant delivery against priority management actions at both the individual species/communities and landscape scale, including the following²¹:</p> <ul style="list-style-type: none"> • 374 ha of native vegetation established to enhance priority habitat. • 295,905 ha of pest animal control (rabbit, fox, feral cat, feral goat, and feral pig). • 109,620 ha of weed control, to reduce critical threats to priority species/communities.
3.1.3. Support the implementation of ecologically appropriate burning regimes for protection of threatened species and communities.	Ongoing management and support provided by regional delivery partners (DELWP monitoring).
Terrestrial Habitat	
4.1.1. Review, update and implement the <i>Mallee Native Vegetation Plan</i>.	<p>No progress regarding review/update of <i>Mallee Native Vegetation Plan</i> - pending State Government direction.</p> <p>Ongoing delivery against regional priorities and management actions assumed (not actively monitored or reported at regional scale).</p>
4.1.2. Develop and implement a Regional Biolinks Plan to guide the delivery of cross-tenure habitat enhancement programs.	<p><i>Mallee Biolinks Plan</i> released June 2016 as part of the <i>Mallee NRM Plan for Climate Change (2016-19)</i>. Progress against priority actions achieved in 2020–21, included²²:</p> <ul style="list-style-type: none"> • 381 ha of native vegetation established to enhance priority linkages. • 44,473 ha of weed control to protect and priority habitat linkages. • 113,304 ha of pest animal control (rabbits and feral goats) and 17 km of stock exclusion fencing to reduce grazing impacts and support regeneration outcomes within priority habitat linkages. <p>Works delivered under the threatened species theme above (i.e. 3.1.2) also contributing to associated terrestrial habitat values.</p> <p>Priority Corridors targeted 2020–21 delivery included:</p> <ul style="list-style-type: none"> • West Millewa (enhancing linkages between Murray River floodplain and north-western casuarina woodland remnants). • Western Central Mallee (enhancing linkages between Murray Sunset National Park and the Wyperfeld/Big Desert). • Eastern Central Mallee (enhancing linkages between Murray River floodplain and Avoca Basin). • Yarriambiack (enhancing linkages along Yarriambiack Creek).

²¹ Attachment A details all outputs delivered under the broader Biodiversity theme in 2020–21.

²² Attachment A details all outputs delivered under the broader Biodiversity theme in 2020–21.

Biodiversity Condition

The Biodiversity theme reports on the overall condition of both terrestrial habitat and threatened species and communities (terrestrial and aquatic).

Threatened Species and Communities Benchmark

It is difficult to give a generalised picture on the condition of these assets given their fragmented nature within the Mallee landscape and the scope, scale and nature of associated indicators. Some populations of threatened species are comprehensively observed and reported on, while others remain somewhat cryptic due to insufficient resources or the nature of the species itself. Given the challenges associated with monitoring all threatened species and communities, proxy indicators are applied where available from which broad assumptions regarding the overall condition of these assets could be made, albeit often with a high degree of uncertainty.

Climatic factors can have significant impacts on the Mallee's biodiversity assets, with the ability of specific species/communities to respond to seasonal conditions an important consideration when assessing their condition. For example:

- Long-term monitoring of Malleefowl mounds in Victoria has shown breeding numbers in 2012 were higher than at any time in the past 20 years, in response to good rains and maturing habitat. However, numbers have continued to decline over subsequent years as a result of ongoing dry winter conditions; with 2018 numbers in particular significantly below average. Annual variations in this trend are also evident, with the number of active mounds recorded in 2020 being close (14 per cent below) to the long-term average; a substantial improvement on the previous two years in which breeding numbers were 20 per cent to 40 per cent below average²³. Furthermore, recent studies investigating the relationship between predator activity and Malleefowl breeding suggests climatic factors are having greater influence on declining numbers; with no conclusive evidence to date that Malleefowl breeding activity benefited from an apparent reduction in foxes²⁴.

- Five-year monitoring (2011-2018) of representative sites across the Mallee found that the presence or absence of threatened floristic species are also strongly influenced by external factors, particularly the interaction between seasonal conditions and grazing pressure. While several new species have been recorded in ungrazed remnants over the seven years, other species recorded in 2011 are no longer present. Given grazing regimes have not changed over the monitoring periods, it is expected that the extended dry conditions experienced across the region is the key factor influencing the decline of some species²⁵.
- Monitoring of Buloke woodlands within Murray Sunset National Park has shown limited recruitment of this nationally endangered ecological community. While juveniles were found at more sites in 2019 compared to the 2012 survey, the small number of young mature Buloke identified indicates juveniles are not progressing to maturity. A lack of herbivore damage and desiccated seedlings suggest juveniles are remaining in this stage due to climatic conditions²⁶.

Large bushfire events can also have a significant impact on the region's threatened species and communities. A key example is the loss of Black-eared Miner habitat after the 2014 Bronzewing Flora and Fauna Reserve fire. This has reduced the range of this endangered species' to just one site in Victoria, making the species extremely vulnerable to any future pressures²⁷. The endangered Mallee Emu-wren, which also has a particularly poor capacity to disperse post-fire, is restricted to three populations within the Victorian Mallee following its extinction in South Australia after a series of fires during 2014. Programs seeking to mitigate this threat are currently underway, with Mallee Emu-wren being reintroduced into South Australia's Ngarkat Conservation Park²⁸.

Further evidence of threatened species populations currently in decline within their constrained ranges include a study on the Arid Bronze Azure Butterfly which identified no evidence of the butterfly within the formerly occupied area of Pink Lakes. This suggests the distribution of the butterfly may have contracted, with the remaining known populations restricted to Hattah-Kulkyne National Park and adjacent freehold land²⁹.

²³ Benshemesh J and Stokie P: *Malleefowl monitoring in Victoria: 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2019–20, 2020–21*. Reports to the Victorian Malleefowl Recovery Group

²⁴ Benshemesh, J, Southwell, D, Barker, R. and McCarthy, M. (2020) *Citizen scientists reveal nationwide trends and drivers in the breeding activity of a threatened bird, the Malleefowl (Leipoa ocellata)*, *Biological Conservation*, Volume 246.

²⁵ Kenny, S., Duncan, M., Leever, D. and Moxham, C. (2019) *Quantifying the impact of land management practices on priority remnant vegetation across the dryland Mallee landscape monitoring program: five-year monitoring at a subset of 14 sites*. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

²⁶ Kenny S. and Moxham C. (2020). *Semi-arid woodland condition monitoring: report for Lake Albacutya and southern Murray-Sunset*. Unpublished Report for Parks Victoria. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

²⁷ Department of Environment and Energy (2019) *Threatened Species Strategy – Year three Progress report*.

²⁸ Department of Environment and Energy (2019) *Threatened Species Strategy – Year three Progress report*.

²⁹ Douglas, F (2012) *The distribution and conservation of the Arid Bronze Azure Butterfly in the Mallee area of north-western Victoria*. Unpublished report for the Mallee CMA).

It is also evident however that under favourable conditions, this declining trend may be reversed. For example:

- Following domestic stock removal, ongoing rabbit and weed control and revegetation at Ned's Corner, a property owned by Trust for Nature, more than 80 threatened species have been recorded in recent surveys, including the Multi-headed Sneezeweed that has not been recorded since 1853³⁰.
- Similarly, two listed flora species were recorded at Hattah Lakes for the first time in 2017-18. A population of 200+ plants of Slender Spurge, a species that has not been recorded in Victoria since 1982, and a population of around ten plants of Winged Plains-bush, representing a discovery of the first *Pluchea* species for Victoria and a massive range extension for the species (over 500km). An outcome which is largely attributed to the magnitude of recent flood events³¹.

Threatened Species and Communities Assessment 2020–21

Summary of assessment

Site-based assessments of individual threatened species and communities indicate a stable condition trend, with evidence that management actions undertaken in 2020–21 may support future improvements should favourable climatic conditions occur.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
Evidence of an increase in population numbers/distribution of threatened flora and fauna species experiencing favourable conditions in 2020–21 (e.g. environmental watering).		
While the region experienced average (winter & spring) to below average (summer & autumn) rainfall throughout 2020–21, some evidence exists to support the expectation that the significant area of targeted threat mitigation works undertaken (i.e. over 400,000 ha) will provide a basis for future improvements as favourable climatic conditions occur.		

Reasons for assessment

Long-term site-based monitoring (2013-21) identifies that individual species continue to respond to favourable conditions. For example, following environmental watering events at the Lindsay-Mulcra-Wallpolla The Living Murray Icon Site, the vulnerable Murray Cod was captured in record numbers in 2021, exceeding the previous record set in 2016³².

Similarly, monitoring at Hattah Lakes recorded double the abundance of vulnerable Regent Parrots in woodland near Lake Kramen as floodwaters receded following environmental watering in 2019. In 2020 flocks were observed feeding on seeds of native and introduced plants around the margins of receding lakes, and in previously flooded Black Box woodland, with groups up to 30 resting in trees on individual sites³³. In 2021 a large flock of more than 50 birds was also recorded at the site³⁴.

With largely dry conditions continuing to be experienced across the region in 2020–21 (i.e. average winter-spring rainfall and below average summer-autumn rainfall), the conditions provided to riparian habitat by environmental watering and associated increases in threatened species populations did not extend into the broader dryland region. It is however anticipated that the significant area of threat mitigation work undertaken within these terrestrial landscapes (i.e. over 400,000 ha) will provide a basis for future improvements should favourable climatic conditions occur.

Localised examples of instances where responses to ongoing management actions may be occurring are evident within the southern (higher rainfall) Mallee. This includes 2020 monitoring of semi-arid grasslands being managed through targeted pest plant and animal programs. The surveys verified the presence of one 'critically endangered' Plains-Wander and several 'near-vulnerable' Fat-tailed dunnarts, both of which have declined significantly across Victoria's northern and western plains in recent decades³⁵. Ongoing work is being undertaken to determine the persistence and range of these species in the southern Mallee, and to improve associated habitat.

³⁰ Trust for Nature (2018) Neds Corder Station: *One of the largest Victorian Private Conservation Reserves*.

³¹ Moxham C, Kenny S, Fanson B (2018). *The Living Murray Hattah Lakes Intervention Monitoring Annual Report 2018: Understorey Vegetation Program*.

³² Ecology Australia (2021) *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2020-21, Part A (Main Report) Draft*.

³³ Loyn, R, Eyles, D and Cheers, G. (2020) *Birds in Black Box woodlands and associated habitats along the Murray River from Hattah-Kulkyne NP to Lindsay Island, spring 2019 to autumn 2020*. Final report from surveys November 2019 to April 2020. Unpublished report for the Mallee CMA by Eco Insights.

³⁴ Ecology Australia (2021) *The Living Murray Condition Monitoring, Hattah 2020-21, Part A (Main Report) Draft*.

³⁵ Mallee CMA (2020) unpublished report.

Case Study

Biodiversity

The Buloke Woodlands of the Riverina and Murray Darling Depression are an Endangered Ecological Community listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC). Extensively cleared for grazing and cropping, these woodlands now exist as scattered remnants on private and public land, subject to a number of ongoing threats to their survival. Regeneration of both canopy and understorey species represents one such threat, with many remnants having only veteran Buloke trees present, lacking vital mid-storey and ground layer components.

A five-year (2018-2023) revegetation program is addressing this threat by restoring key canopy and understorey species within priority remnants. Working with Traditional Owners, local government, community groups and private land managers, 300 hectares (ha) of supplementary plantings are being established to help secure the future viability of these woodlands.

Barengi Gadjin Land Council (BGLC) is delivering the revegetation works, with its Dalki Garringa Native Nursery collecting the seed and growing the tubestock required each year. In 2020-21 this encompassed 34,250 seedlings and 3.72 kilograms of seed being planted across 92 ha of Buloke remnants. Comprehensive rabbit control programs are also being undertaken by land managers and community groups to protect these new plantings from grazing, and to support natural regeneration processes within the broader remnants.

One of the sites being targeted by this program is the Birchip Racecourse Recreation Reserve, which at 45 ha represents a relatively large remnant of Buloke Woodland.

The Reserve is managed by a community-based Committee of Management which has enabled over 23,000 tubestock to be established at the site over the past three years. Engagement activities are also being conducted at the reserve to raise local awareness of Buloke Woodlands and the fauna that depends on them.

This project is supported by the Mallee Catchment Management Authority, through funding from the Australian Government's National Landcare Program.



A staff member from the Dalki Garringa Native Nursery collecting seed for tubestock propagation and direct seeding.

Terrestrial Habitat Benchmark

State-wide modelling (i.e. Site Condition Assessment and Patch-based Landscape Context Assessment) of native vegetation quality considers the Mallee to be in better than average condition overall, with patches of habitat isolated in cleared landscapes typically in poorer condition. The DELWP NaturePrint model also determines the relative contribution of large blocks of vegetated areas in the region to biodiversity conservation in a state-wide context to be generally high (Figure 10).

Trends in measures of condition within major parks and reserves remain stable, if not slightly improving, as a result of the removal of grazing over 20 years ago and some large rainfall events experienced in the region over the same timeframe. This finding provides a good indication of the timeframe required for the recovery and restoration of Mallee habitats following the removal of grazing.

Within the more fragmented areas of the landscape, remnant vegetation subjected to interventions has also remained generally stable. Due to continuing threatening processes, declines in some measures of condition would however be expected within many remnants, especially those where threat mitigation actions have not occurred.

At a national scale, the 2020 condition and trajectory of native vegetation (i.e. tree cover, vegetation condition, and vegetation growth) in the Victorian Mallee was considered average to above average³⁶; with all three indicators improving from 2019, largely in response to the slightly better climatic conditions experienced over the winter to spring period. While Australia's overall vegetation condition improved seven per cent from the previous year, it remains four per cent below the 2000–2019 average³⁷.

³⁶ Centre for Water and Landscape Dynamics (2021). *2020 Environmental Report Card - Mallee*.

³⁷ Centre for Water and Landscape Dynamics (2021). *Australia's Environment in 2020 Summary Report*.

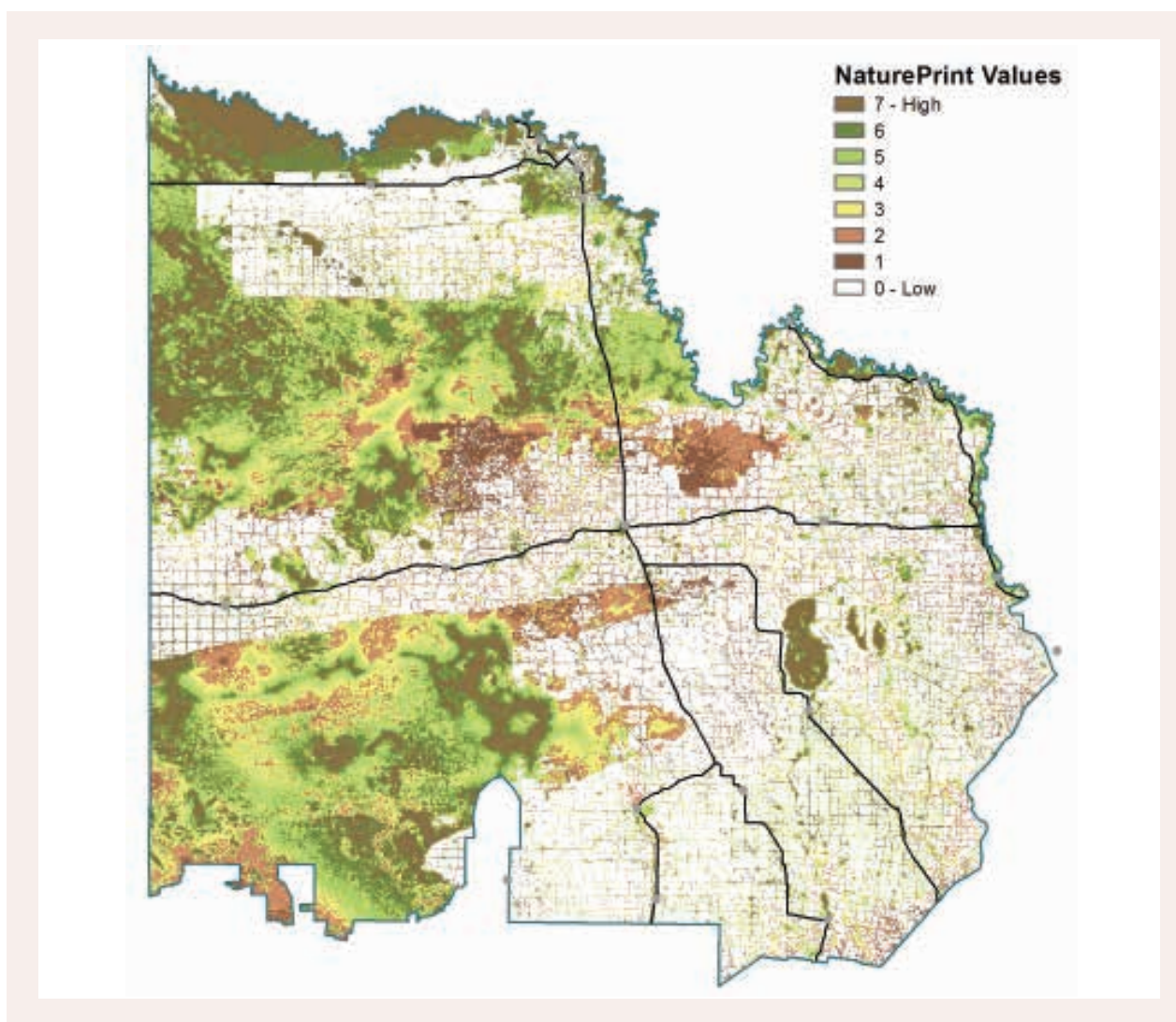


Figure 10 | Relative priority of Terrestrial Habitat Assets - NaturePrint Version 3 (State of Victoria 2014)

Terrestrial Habitat Assessment 2020–21

Summary of assessment

Monitoring of regional terrestrial habitat assets generally indicates a condition trend of stable to improving; with evidence that management actions undertaken in 2020–21 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
<p>Significant area of works undertaken in 2020–21 to protect and enhance priority habitat (>390,000 ha) including actions targeting threatened species/communities that are also expected to benefit the terrestrial habitat they were delivered in.</p> <p>Evidence of changes in the incidence of key threatening processes resulting from 2020–21 works programs. This included reductions in rabbit populations to <1 per ha (i.e. maintaining abundance below the <1 per ha threshold required to support regeneration); reductions in goat presence (ranging from 15 to 79 per cent) to achieve <0.35 goats per km² target within most control areas; and quantified decreases in extent and density of target weed species. Evidence of condition improvements as a result of these threat mitigation actions. This included measurable improvements in habitat condition following grazing management actions, and evidence of ecological functionality returning to revegetated sites.</p>		

Reasons for assessment

Over 390,000 ha of threat mitigation works were undertaken within the region's terrestrial habitat in 2020–21, including actions targeting specific threatened species and communities that will also directly impact the priority habitat they were delivered in. Key outputs included the establishment of 523 ha of native vegetation to enhance priority linkages and/or degraded remnants, 120,199 ha of weed control to reduce competition and protect priority habitat, and 255,175 ha of pest animal control (rabbit, goats) to reduce grazing impacts and support regeneration outcomes.

Site-based assessments (both ongoing and annual) have identified both a reduction in threat processes and associated habitat improvements resulting from these works.

Long-term control programs in the Mallee continue to maintain rabbit numbers below the regional threshold of <1 per spotlight km required to support regeneration processes. In 2021, ongoing transect monitoring of rabbit activity within the Mallee's four remnant rangeland communities reported 91 per cent of the kilometres surveyed had one or less rabbits recorded³⁸. Site-based monitoring of targeted control programs identified that 61 per cent of pre-treatment rabbit numbers were less than one rabbit/ha (range between 4 and 0 per ha) and that this increased to 88 per cent of sites post-treatment (range between 3.5 and 0 per ha)³⁹.

Monitoring of goat control programs has also identified a 42 per cent reduction in their presence within surveyed areas, with the majority of sites below the target threshold of <0.35 goats per km².

Site based monitoring of weed control programs also recorded significant reductions in the extent and density of targeted species. In 2020–21, these species were primarily weeds of national significance (WoNS) such as African Boxthorn (*Lycium ferocissimum*), Wheel Cactus (*Opuntia robusta*), Common Prickly-pear (*Opuntia stricta*), and Bridal creeper (*Asparagus asparagoides*). Across sites surveyed, there was a reduction in the average per centage of weed cover from four per cent pre-treatment to 1.5 per cent post-treatment across all sites surveyed.

Work to quantify the impact of stock exclusion fencing on the health of remnants has determined that natural regeneration is occurring across investment sites in all regions. However, recruitment levels remain low at many sites however as the time since stock exclusion has increased, large shrub recruitment in the south-east increased, while there was no effect of time since stock exclusion on woody species recruitment (trees or large shrubs) for the north-west or south-west regions of the Mallee. This result which may reflect the extended period of below average rainfall being experienced in the region⁴⁰.

Overall, this work identifies some recovery can be expected occur within five years of a patch of native vegetation being ungrazed, including increases in the total cover of native shrubs, litter, and native grasses. Low quality, recently fenced sites (<10 years) are expected to take longer to recover, however⁴¹; and linear remnants, which are more prone to edge effects, require at least 10 years before the impacts of removing grazing can be quantified⁴².

The appropriateness of undertaking re-vegetation activities as a targeted threat mitigation option is also being assessed by long-term monitoring programs in the region. Key observations include⁴³:

- Since monitoring commenced in 2011, 49 per cent of tubestock is recorded as surviving, and 69 per cent of directly seeded sites report germination. While some sites report low seedling survival rates, direct seeding outcomes at these sites have been successful.
- On average, 52 per cent of tubestock is recorded as surviving after 12 months. This number reduces to 47 per cent five years after establishment.
- Over the medium-term (i.e. >5 years) revegetation sites are showing evidence of ecological functionality returning to the site. Specific changes recorded include: improved soil condition (i.e. reduced erosion); a reduction in threats (e.g., kangaroos, rabbits and herbaceous weed); evidence of habitat utilisation (i.e. movement/utilisation of species primarily birds using these areas as corridors); and improved ecosystem function (e.g. evidence of ongoing natural regeneration).

³⁸ Parks Victoria (2021), unpublished data.

³⁹ Mallee CMA (2021), unpublished data.

⁴⁰ Moxham, C., Kenny, S., and Fanson, B. (2019) *Determining recruitment responses of native woody species to stock exclusion fencing*. Unpublished report for Environment and Community Programs, Department of Environment, Land, Water and Planning. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

⁴¹ Moxham, C. and Fanson, B. (2018). *Market Based Incentive Programs: validating vegetation responses to management interventions: Decision Framework*. Unpublished Client Report for the Environment and Community Programs, Biodiversity Division. Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

⁴² Moxham, C. Kenny, S., and Duncun M. Arthur Rylah Institute for Environmental Research (2016); *Quantifying the impact of land management practices on priority remnant vegetation across the dryland Mallee landscape: five-year monitoring report* for the Mallee CMA.

⁴³ Mallee CMA (2021), unpublished data.

Land

Some 62 per cent of the Mallee is under agricultural production, with an estimated 2.4 million ha of dryland farming and a further 81,245 ha of irrigation. The region produces up to 50 per cent of Victoria's cereals, almost 100 per cent of Victoria's dried vine fruits, 75 per cent of Victoria's table grapes, 68 per cent of Australia's almonds, 20 per cent of Australia's wine grapes, and significant proportions of the nation's citrus, avocados, olives and vegetables crops. Mallee soils play an essential role in supporting these productive landscapes and the region's broader ecosystems.

Under the *Water Act 1989*, the land area over the Murray Group Limestone Aquifer was declared a Water Supply Protection Area (WSPA) in 1998. The subsequent implementation of the Murrayville Area Groundwater Management Plan (GMP) from 2001 and ongoing monitoring of groundwater levels, salinity and metered extraction provides detailed information on groundwater condition and trends.

Land Management

The RCS sets the long-term (20 year) objective for the Soil Regional Asset as being 'to protect and enhance the environmental values and ecosystem services provided by Mallee soils'; and for Agricultural Land as being "to optimise the productive capacity of Mallee agricultural landscapes, while minimising any adverse impacts of associated management practices (both current and historical) on our natural and cultural landscapes".

This headline theme also includes the Groundwater Regional Asset, for which the RCS set a long-term (20 year) objective of "to protect the quality and availability of the Mallee's groundwater resource for current and future users".

Table 9 summarises the key activities that contributed to the RCS's six-year strategic actions for Soils, Agricultural Land and Groundwater assets in 2020-21. Regional stakeholders engaged in the planning and delivery of these outputs included the DELWP, DJPR, NSW Office of Environment and Heritage, water authorities, local government, Landcare, community based NRM groups, Birchip Cropping Group, Mallee Sustainable Farming, other industry groups, Aboriginal community, and private land managers.



Wheat and Canola crops in the Mallee.

Appendix 2 Condition and Management Report

Table 9 | Progress against RCS Strategic Actions for Soils, Agricultural Land and Groundwater

Strategic (6 Yr) Actions	2020–21 Progress
Soils	
5.1.1. Develop and implement a Regional Soil Health Plan for the Mallee.	No progress regarding development of Regional Soil Health Plan.
Agricultural Land	
6.1.1. Continue to implement the <i>Victorian Mallee Irrigation Region Land and Water Management Plan</i> .	<p>Renewal of the <i>Land and Water Management Plan</i> completed with DELWP endorsement and public release in March 2021.</p> <p>Irrigation infrastructure works delivered under Mallee Irrigation Incentives programs supported an estimated water use efficiency gain of 137 ML and a 483 tonnes/year reduction in salt to the Murray River. Works included⁴⁴:</p> <ul style="list-style-type: none"> • 26 ha of irrigation infrastructure upgrades/conversions • 22 ha of water use monitoring equipment • 119 ha covered by irrigation drainage management plans.
6.1.2. Develop and implement a strategy for Mallee dryland agricultural land as part of the Regional Soil Health Plan.	<p>Mallee Dryland Sustainable Agriculture Strategy (2017–23) completed in partnership with regional partners. 2020–21 progress made against targets included:</p> <ul style="list-style-type: none"> • Targeted communication/engagement activities to improve awareness (and ultimately adoption) of alternative farming systems which have the potential to significantly enhance groundcover levels in the northern Mallee • Increasing awareness of farm practices influencing soil carbon • Implementing a revised Mallee Soil Erosion and Land Use Monitoring Framework • Supporting the maintenance and data collection/collation requirements of two DustWatch nodes located within the region (Walpeup and Werrimull).
Groundwater	
7.1.1. Continue to implement the <i>Murrayville Groundwater Supply Protection Area Management Plan</i> .	Ongoing implementation actively monitored and reported (GWM Water).
7.1.2. Continue to implement actions from the <i>Western Region Sustainable Water Strategy</i> that apply to the Murrayville Groundwater Supply Protection Area.	Ongoing delivery against relevant actions assumed; not actively monitored or reported at regional scale.



Bore monitoring.

⁴⁴ Attachment A details all outputs delivered under the *Victorian Mallee Irrigation Region Land and Water Management Plan* in 2020–21.

Case Study

Land

Crop modelling, breeding and selection could help the Mallee's major horticultural industries prepare for climate change impacts such as higher summer temperatures, more extreme temperature events more often, and water scarcity.

Results of research undertaken by the Mallee Catchment Management Authority (CMA) and Agriculture Victoria show that over the next 20 years climate change impacts felt across the region could lead to reduced growing season length for most horticultural crops, which will in turn reduce yield. The research found that by 2070, without adaption, crop yield could be reduced by up to 30 per cent for almond and citrus plantings, and 35 per cent for some grape varieties.

Undertaken to investigate the impacts of climate change on irrigated agriculture in the Victorian Mallee, the research project used available evidence to provide information on potential adaptive strategies, and alternative crop types for regional production suitability.

Climate change represents a major challenge to the Mallee's horticultural industries, which are significant contributors to the \$616 million in agricultural outputs exported from the region every year.

Among the climate change adaption options identified by this research was changing to better suited varieties (as is already occurring within the industry) and also breeding and selection for traits to cope with an altered climate. While breeding new varieties can take decades, the yield impacts suggested by modelling undertaken could provide additional incentive for these efforts to increase. The research also found changes to existing varieties could be made to select for better form (for example tree, vine or fruit characteristics that can better withstand extreme climatic conditions).



Mallee grapevines drip irrigation.

Land Condition

The Land Theme reports on the overall condition of both soils/agricultural land and groundwater resources that are utilised for production purposes (i.e. Murray Group Limestone Aquifer). For reporting purposes these are separated into two categories; dryland and irrigated.

Dryland Agriculture Benchmark

The Mallee Soil Erosion and Land Management Survey provides a long-term (1978–2021) assessment of the condition of agricultural land within the dryland Mallee. Widespread changes in dryland agricultural management

practices observed over the past 20 years continue to dramatically reduce the risk, incidence and severity of soil erosion. The use of conventional fallow, for instance, has been reduced considerably, from between 30 per cent to 50 per cent of monitored sites in the 1990s to an average of less than five per cent over the past five years; a practice change which has significantly increased vegetation cover, soil aggregation and overall soil stability. As a result, erosion risk remains relatively stable.

There has however been an increase in the use of break crops over the past five years. Break crops such as legume crops produce more fragile stubbles which are prone to faster decomposition than cereals and may increase erosion risk.

Organic Carbon (OC) is typically below one per cent in Mallee soils but varies considerably (0.21 per cent to 1.7 per cent) across monitored sites according to their underlying soils texture (i.e. shifts from loam in the north to clay loam/clay soils in the south). A decline in median OC levels for all land systems has been observed from the 2010–2012 baseline assessments and while it is well documented that there is a temporal downward trend in OC levels in Australian cropping soils, OC can also vary within the season. Further monitoring is therefore required to determine if observed changes in OC as a soil health indicator is a long-term trend or due to short-term (seasonal) variation.

Dryland Assessment 2020–21

Summary of assessment

The condition of Soils and Agricultural Land (dryland) assets in the Mallee are considered to be generally stable. Ongoing dry conditions, reduced groundcover and increased erosion within the northern part of the region may have a negative impact on soil condition.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
<p>On average 86 per cent of the region exceeded 50 per cent groundcover (target) throughout 2020–21, ranging from 72 per cent in summer to 96 per cent in winter. This result is slightly lower than the 20-year average of 87 per cent, and a 3 per cent increase from 2019–20. However, significant spatial variability continues to be evident, with the northern and eastern Mallee recording substantial areas with less than 50 per cent groundcover from October to May in response to well below average rainfall. The influence of rainfall on total groundcover is further demonstrated by the area of bare ground recorded in 2020 (4 per cent) compared to 2019 (20 per cent), a result that cannot be attributed to specific management practices being applied in either year. Land system also has a major influence; with only 50 per cent of land classified as having a 'high' susceptibility to wind erosion (e.g. achieving the target of >50 per cent groundcover in April, whereas the target was achieved across 74 per cent of land area with 'very low' susceptibility).</p> <p>Leading into the 2021 cropping season, 3 per cent of surveyed paddocks were classified as bare (2 per cent cultivated and 1 per cent grazed), 7 per cent as pasture, and 90 per cent as stubble (82 per cent standing and 8 per cent disturbed); with erosion observed in 10 per cent of the paddocks, all in moderate to high erosion susceptibility zones.</p> <p>While the widespread changes in management practices that have occurred over past years continue to reduce the overall potential for wind erosion, it is evident that there is a continuing need to identify and validate options for improving groundcover and soil protection in the higher erosion susceptibility areas, particularly to provide effective management responses in dry seasons.</p>		

Reasons for assessment

Evidence that the majority of dryland farmers implemented management practices to reduce the risk and incidence of soil erosion over the 2020 growing season is provided by the Mallee Soil Erosion and Land Management Survey conducted in 2020⁴⁵. Specifically:

- By spring 2020, 84 per cent of the agricultural land was in crop (69 per cent cereals, 28 per cent legumes, 3 per cent oilseeds), 10 per cent in pasture, and 6 per cent was bare. This represents a significant increase in the total area in crop from 2019, which at 53 per cent was the lowest recorded since 2011 (excluding 2018 as data does not exist).
- Leading into the 2021 cropping season, 3 per cent of surveyed paddocks were classified as bare (2 per cent cultivated and 1 per cent grazed), 7 per cent as pasture, and 90 per cent as stubble (82 per cent standing and 8 per cent disturbed); with erosion observed in 10 per cent of the paddocks, all in moderate to high erosion susceptibility zones.

Groundcover observations demonstrate that on average 86 per cent of the region exceeded 50 per cent groundcover (target) throughout 2020–21, ranging from 72 per cent in summer to 96 per cent in winter (Table 10). This result is slightly lower than the 20-year average of 87 per cent, and a 3 per cent increase from 2019–20.

Table 10 | Percentage of the Mallee with more than 50 per cent groundcover in 2020–21 as determined from MODIS (Source: NSW Office of Environment and Heritage, June 2021)

Autumn/Winter 2020	Percentage
March 2019	71
April 2019	76
May 2019	88
June 2019	94
July 2019	96
August 2019	95
Spring/Summer 2020–21	Percentage
September 2019	90
October 2019	87
November 2019	80
December 2019	73
January 2020	71
February 2020	67
Autumn/Winter 2021	Percentage
March 2020	70
April 2020	80
May 2020	92
June 2020	96

⁴⁵ Agriculture Victoria (2020): *Monitoring Wind Erosion and Land Management in the Victorian Mallee – Annual Report*.

Significant spatial variability continues to be evident, with the northern and eastern Mallee having substantial areas with less than 50 per cent groundcover from October to May in response to well below average rainfall. The influence of rainfall on total groundcover is further demonstrated by the area of bare ground recorded in 2020 (four per cent) compared to 2019 (20 per cent), a result that can be largely attributed to climatic factors (i.e. 2019 rainfall for the northern Mallee was in the lowest decile recorded) rather than to specific management practices being applied in either year.

Land system also has a major influence, with only 50 per cent of land classified as having a 'high' inherent susceptibility to wind erosion (e.g. achieving the target of >50 per cent groundcover in April, whereas the target was achieved across 74 per cent of land area with 'very low' susceptibility). Groundcover can be used as an indicator of landscape resilience to erosion. Figure 11 shows the number of months that the >50 per cent groundcover target was met for each of the region's land systems in 2020. Overall the wind erosion protection

targets were met for longer periods of time in the southern Mallee (which includes the Hopetoun, Culgoa and Tempy land systems that have moderate to low wind erosion susceptibility) compared with the northern Mallee (which includes the Millewa land system that has moderate to high wind erosion susceptibility).

While ongoing dry conditions experienced throughout the region have played a significant role in the groundcover levels recorded at both the whole of region and individual landscape (i.e. Millewa) scale it is evident that this result would have been significantly worse without the widespread changes in management practices that have occurred throughout the region over past years, and which continue to adapt in response to seasonal conditions. It is also evident that ongoing support needs to be provided to farmers in susceptible landscapes to accelerate the identification, validation and adoption of practices that promote increased groundcover and reduce erosion risk, particularly in regards to providing effective management responses in dry seasons.

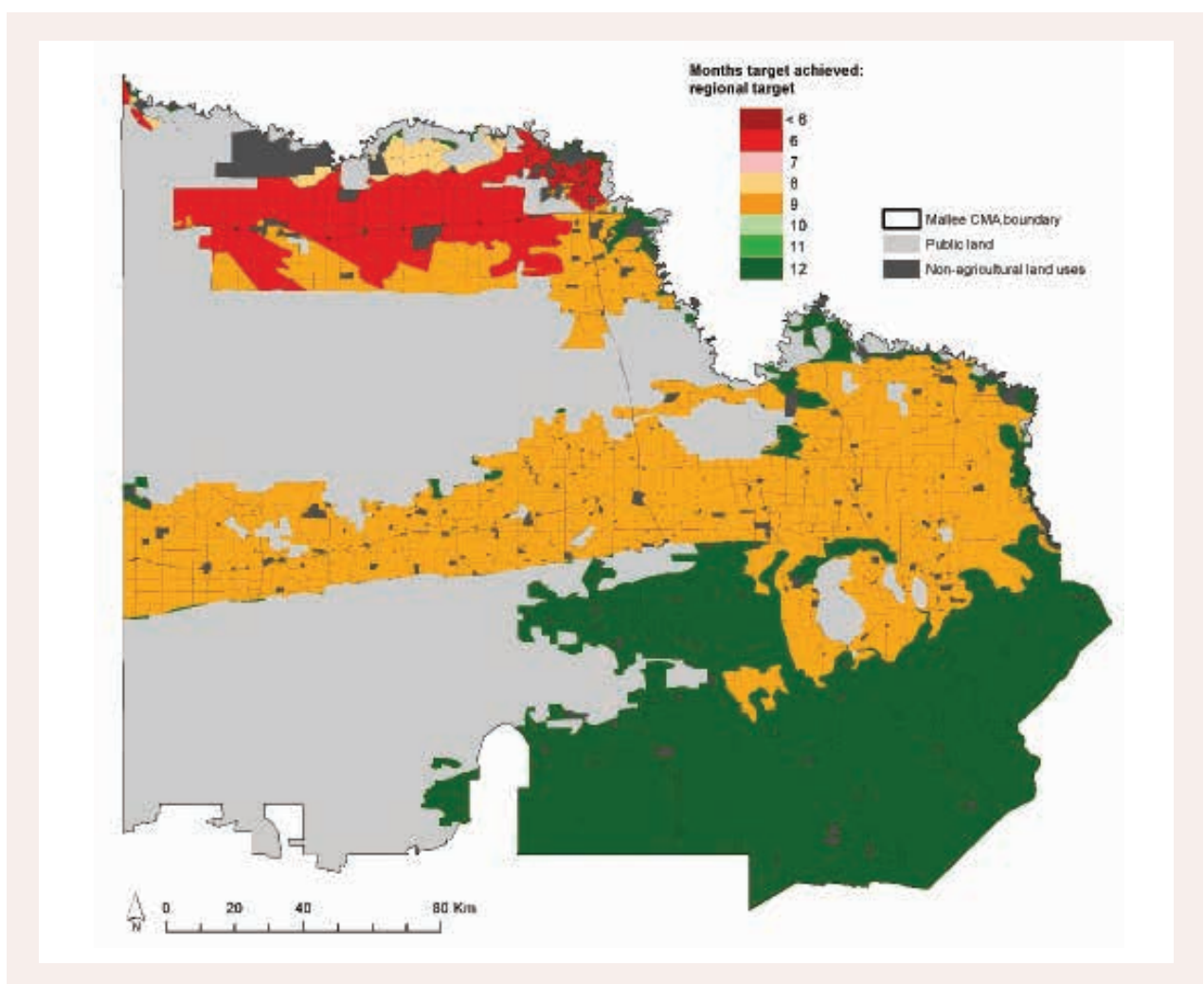


Figure 11 | Number of months targets for area protected against wind erosion (>50 per cent TVC) were achieved for 2020 (Source: Agriculture Victoria)

Irrigated Agriculture Benchmark

Assessing land health condition in relation to irrigation principally relies on the region's established modelling platforms, which in turn directly rely on groundwater and surface water monitoring data inputs.

The Victorian Mallee has continued to receive strong irrigation development growth. Between 1997 and 2019 (for which comprehensive irrigation crop data is available⁴⁶) irrigation development reliant on water from the Murray River has increased from 39,470 ha to 81,245 ha, representing a more than doubling of the irrigable area. A further 2,375 ha is irrigated in the Murrayville irrigation area.

The major irrigated crops are almonds, wine grapes, table grapes, citrus, olives, dried fruit and vegetables. In 2018–19 the irrigated agriculture in the region generated 33 per cent of Victoria's gross value of irrigated agricultural (GVIA) production, comprising 84 per cent of the gross value of grapes and 48 per cent of the gross value of fruit and nuts (ABS 2020).

Since water entitlement unbundling in 2007, the amount of water issued for irrigation from the Murray River as an Annual Use Limit (AUL) has increased by 55 per cent, from 518 gigalitres AUL in 2007 to 804 gigalitres AUL in 2020 as a result of new irrigation developments and redevelopments.

Drippers are the dominant irrigation method covering 49,635 ha, followed by overhead sprinklers (8,605 ha), low level sprinklers (8,580 ha), and furrow/flood irrigation (1,990 ha).

Monitoring data suggests the long-term observed downward trend in drainage outfalls to the Murray River and its environs, and groundwater mounds beneath the older irrigation areas are continuing. Average Murray River salinity readings downstream of the Mildura Weir continues to show a downward trend. For each decade since the 1990's the average river salinity has reduced from 300 EC (1990s) to 175 EC (2000s) to 137 EC (2010s). The average salinity for 2019 was 127 EC⁴⁷.

In relation to the Murrayville Groundwater Management Area (GMA), current levels of use are within the permissible consumptive volumes (11,005 ML/year) as defined by the Minister for Water in July 2017. While there has been some variability over recent years, it appears to be relatively stable for this non-renewable groundwater resource which is managed as far as practicable for long-term sustainability, with groundwater levels recovering between irrigation seasons.

The 2017–18 irrigation season was the first-year post implementation of the Murrayville GMA Local Management Plan. This plan describes a drawdown resource condition threshold of 0.65 m per year. The trigger for management intervention is two successive years of drawdown greater than the threshold based on a five-year rolling average. This threshold has not been exceeded in any of the bore groups for 2017–2020 period. Analysis of water levels in the key observation bores in the greatest use zone 10B-1 show that over the past 16 years the impact of extraction on seasonal groundwater levels based on a five-year rolling average is less than the 0.65 m threshold and demonstrating a recovering trend⁴⁸.

Irrigated Agriculture Assessment 2020–21

The condition of Irrigated Agriculture assets in the Mallee are considered to be stable to improving; with evidence that management actions undertaken in 2020–21 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2020–21
Summary of Evidence		
<p>From mid-2018 to mid-2019, the irrigable area increased by 2,470 ha, a three per cent increase from 78,775 ha to 81,245 ha. This is on par with the average expansion 2003 to 2006 which is the second highest growth rate since 1997. The gross value of irrigation agriculture (GVIA) in the Mallee CMA area is \$1.5 billion in 2020 (39 per cent of Victoria's GVIA). The region accounts for about 95 per cent of grapes and 50 per cent of nuts and fruit in Victoria. In 2020–21, the Annual Use Limit (AUL) available for irrigation in the Mallee region along the Murray River was 828,062 ML and the water diverted from the Murray River for irrigation was 512,644 ML (62 per cent AUL).</p> <p>Ongoing adoption of best management practice by irrigators is continuing to provide significant improvements in on farm water use efficiency, and measurable reductions in salt loads to the Murray River.</p> <p>Long-term observed downward trends in drainage outfalls to the Murray River and its environs, and groundwater mounds beneath the older irrigation areas, continued in 2020–21.</p> <p>Trend analysis of 549 regional groundwater bores identified a slight decrease in both water level and salinity compared with 2019–20; with both measures remaining stable over the longer term (i.e. 2013–2021).</p> <p>Metered extraction within the Murrayville GMA was 54 per cent of the licensed volume for 2020, an 11 per cent decrease in extraction from the 2019 season. Monitoring indicates that groundwater aquifer continues to demonstrate a recovering trend, with the annual 0.65 m drawdown threshold not exceeded for any of the resource condition assessment areas (based on five-year rolling average). Salinity levels also remained stable in 2020.</p>		

⁴⁶ MCMA (2019), *Mallee Horticulture Crop Report – 2019 Addendum*.

⁴⁷ MDBA (2019). *Mildura Weir downstream*. (<https://riverdata.mdba.gov.au/mildura-weir-chaffey-grave-yard>, Accessed 26/07/2019)

⁴⁸ GWM Water (2020). *Annual Report: Murrayville Local Management Plan (Groundwater)*.

Reason for assessment

From mid-2018 to mid-2019, the irrigable area increased by 2,470 ha or three per cent. This rate of expansion, 2,470 ha/year, is on a par with the average expansion rate from 2003 to 2006 of 2,562 ha/year, which is the second highest growth rate since 1997. The highest growth rate was from 2006 to 2009, with an average of 4,322 ha/year. The net increase of 2,470 ha was the balance of 2,515 ha expansion and 45 ha retired from irrigation⁴⁹.

The gross value of irrigation agriculture (GVIA) in the Mallee CMA area increased to \$1.5 billion in 2019–20, representing 39 per cent of Victoria's GVIA compared to 33 per cent the previous year. The region accounted for about 95 per cent of grapes and 50 per cent of nuts and fruit in Victoria (ABS 2021). In 2020–21, the Annual Use Limit (AUL) available for irrigation in the Mallee region along the Murray River was 828,062 ML, however the actual water diverted from the Murray River for irrigation was 512,644 ML or 62 per cent of AUL (MCMA 2021). Delivery of the Mallee Irrigation Incentive Program (MIIP) continues to provide an effective mechanism to support on-farm works and measures that improve irrigation management and deliver both water efficiency and salinity benefits. In 2020–21 these works collectively improved 48 hectares of irrigation infrastructure. The water use efficiency gains achieved by these works is estimated to be 137 ML, with salinity benefits estimated to be a reduction of 483 tonnes/year in salt to the Murray River (MCMA 2021).

However, the contribution of the 2020–21 works was significantly lower than the four year (2016–2020) annual average of 356 ha of improvements being delivered for

1,148 ML of water efficiency gains, and a 3,341 tonnes/year reduction in salt to the Murray River. This was due to the 2020–21 Mallee Irrigation Incentive Program (MIIP) being delayed to align with completion of a state-wide review of the irrigation incentive programs (and enable associated recommendations to be incorporated into regional delivery processes). With a high level of irrigator interest recorded following the program's launch on 30 April 2021, it is anticipated that associated gains will be achieved through 2021–22 delivery.

Throughout the year 549 groundwater bores were monitored for water level and salinity. Groundwater level measurements taken across this network showed a slight increase in the standing water level values from the measuring point (water levels falling) over 2020–21 compared to the previous year. Trend analysis completed from 2013 to present determined most of the bores showed no trend in either direction, neither rising nor falling (MCMA 2021).

Salinity measurements also demonstrated a slight overall decrease compared with the previous year. Trend analysis completed from 2013 to present determined that most of the bores showed no trend in either direction, neither increasing nor decreasing (MCMA 2021).

The salinity impact at Morgan per 1000 ML AUL for the period from 2007 to 2021 for Victorian Mallee is provided in Figure 11. The salinity impact per 1000 ML AUL is the second highest since 2007–08 (below 2009–10 irrigation season). In 2020–21, the L17 – L4 salinity impact zone with a salinity coefficient of 0.2 EC/1000 ML received 5,800 ML water which contributed to the higher salinity impact (MCMA 2021).

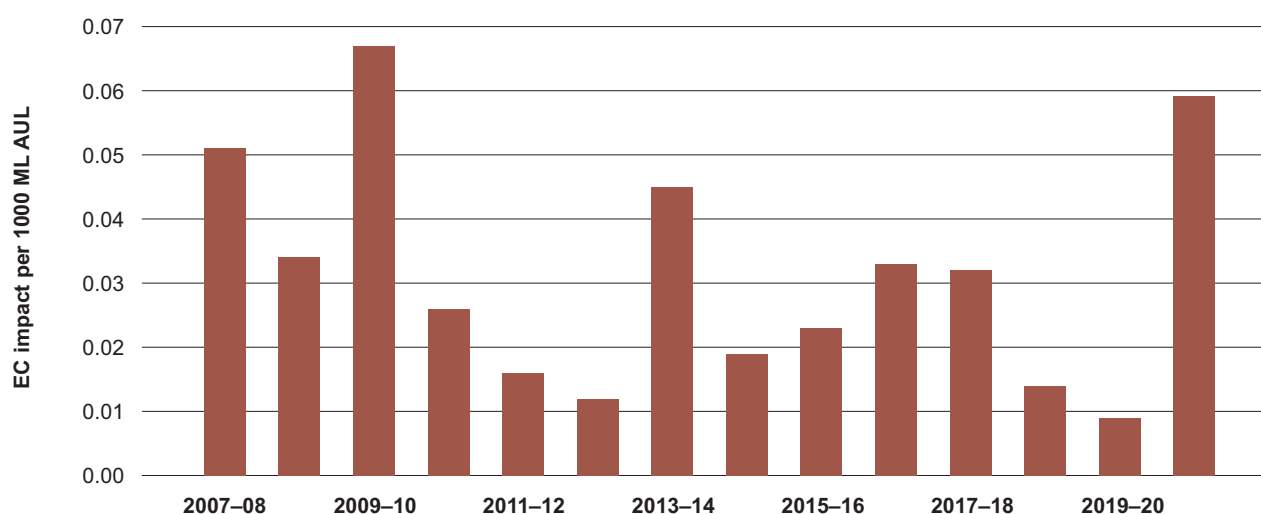


Figure 12 | Change in AUL salinity impact in the Victorian Mallee from 2007–08 to 2020–21 (Source: Mallee CMA)

⁴⁹ MCMA (2019), *Mallee Horticulture Crop Report – 2019 Addendum*

Appendix 2 Condition and Management Report

Annual calculations of salinity credit consumption through irrigation development is a key regional reporting requirement under both Basin Salinity Management (BSM) 2030 and the *Catchment and Land Protection Act 1994*. During this reporting period significant changes were made to the Nyah to South Australia Border Salinity Management Plan Accountable Action with its Register A entry revised down from 17.6 EC to 13.4 EC, and a shift from medium to high confidence. These changes represent a major achievement that concludes four years of investment in model development and salinity impact investigations.

The progressive total of salinity debits is now estimated at 15.25 EC, with the 4.2 EC reduction for the Nyah to South Australia border irrigation and no change to the impact from Nyah to Colignan. With a total salinity credit allocation of 23.22 EC the region is currently 7.97 EC in credit overall, and remains compliant at a regional scale (MCMA 2021).

In 2020, metered groundwater extraction (5,285 ML) within the Murrayville GMA was 54 per cent of the licenced volume, metered extraction within the Murrayville GMA was 54 per cent of the licensed volume for 2020, an 11 per cent decrease in extraction from the 2019 season and consistent with the average annual volume of extraction over the past 19 years. Monitoring indicates that while there is clear seasonal drawdown fluctuation in groundwater levels, the overall trend is that groundwater levels continue to demonstrate a recovering trend, with the annual 0.65 m drawdown threshold not exceeded for any of the resource condition assessment areas (based on five-year rolling average). Salinity levels also remained stable in 2020⁵⁰.

⁵⁰ GWM Water (2020). *Annual Report: Murrayville Local Management Plan (Groundwater)*.

Attachment A: Outputs delivered in 2020–21 under each of the Mallee RCS sub-strategies

Table 11 | Outputs delivered in 2020–21 under each of the Mallee RCS sub-strategies

Output Title	Measure	Biodiversity Strategy (TBD)	Mallee Floodplain Management Strategy	Regional Landcare Support Strategy	Mallee Dryland Sustainable Agriculture Strategy	Mallee Waterway Strategy	Land and Water Management Plan	Not Applicable	Grand Total
1.01 Channel	Km								0
1.04 Irrigation infrastructure	No. Sites	2				2	7	5	16
	Ha.	1				4	48	77	130
1.05 Waterway structure	No.								0
1.06 Terrestrial structure	No.								0
1.07 Terrestrial feature	No.	2							2
1.08 Monitoring structure	No.				2		10		12
1.09 Fence	No. Sites	5				14		1	20
	Km.	71				49		1	121
1.10 Visitor facility	No.					3		10	13
	No. Sites			3					3
1.11 Road	Km.			1					1
1.12 Crossing	No.								0
2.01 Vegetation	No. Sites	8		3		3			14
	Ha.	523		19		11			553
2.02 Weed control	No. Sites	70		6		11			87
	Ha.	120,148		51		3,139			123,338
2.03 Pest animal control	No. Sites	94		18		11			123
	Ha.	251,696		18,076		16,986			286,758
2.08 Earth works	No. Sites								0
3.02 Agricultural practices	No. Sites								0
	Ha.								0
3.03 Water	No.					48			48
	Ha.					9,915			9,915
4.01 Approval and advice	No.	11	78			9	18		116
4.02 Management agreement	No.	32	1		1	12		1	47
4.03 Assessment	No.	154		23	9	310	31	7	534
4.04 Engagement event	No. Events	105	15	14	45	152	63	107	501
	No. Participants	792	170	400	1,971	1,129	914	899	6,275
4.05 Partnership	No.	35	6	23	1	19	7	8	99
4.06 Plan	No.	5	4		10	79	6	3	107
4.07 Publication	No.	55	1	31	37	62	92	49	327
4.08 Information management system	No.		3		3	6	2	11	25

Notes

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings visible.

