



# Annual Report / 2019–20





# Acknowledgements



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## Cover Images

- 1 Irrigation channel and grapevines.
- 2 Traditional Owners 'Talk Water' at Bidgee Lagoon.
- 3 Kayaking on Psyche Lagoon, Credit: Lisa Milne.
- 4 Drought Employment on-ground works near Birchip.

The images in this Annual Report were captured before coronavirus (COVID-19) restrictions were implemented.

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.

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# 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 2020.

**Sharon Peart**  
Board Chair  
Mallee Catchment Management Authority

23 September 2020



# Part 1

## Year in Review

### Chair's Report

The work delivered by the Mallee Catchment Management Authority (CMA) during 2019–20 demonstrates the organisation's ongoing 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 2019–20 documents our progress toward delivering Victorian Government objectives and priorities, with 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 2016* and *Our Catchments, Our Communities 2016–20*.

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 2019–20 Ministerial Expectations for the organisation.

### Waterway and Catchment Health

Delivery of over 10,000 hectares (ha) and 297 kilometres (km) of environmental works by Mallee CMA in 2019–20 represents significant progress against targets set by the *Mallee Waterway Strategy* for the region's priority waterways. Ongoing application of the Regional Riparian Action Plan, a Victorian Government initiative, has built on this strategic approach by further targeting investment and accelerating improvement in the condition of riparian land for priority waterways. Of particular note is the suite of works implemented at the Mallee CMA's Flagship Waterway Project '*There's nothing common about Merbein Common*'. This program, which also delivers against large-scale waterway restoration projects outlined in *Water for Victoria*, has achieved significant improvements in habitat condition across the site by implementing appropriate water regimes, rationalising non-arterial user made tracks and repairing key access roads, controlling priority pest plants, and establishing native vegetation.

### 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 2019–20, this included supporting carbon sequestration/offset initiatives such as identifying carbon abatement partnership opportunities with Traditional Owners; and establishing carbon yields and implementation costs associated with environmental plantings to inform CMA's assisting Water Corporations with carbon offsetting requirements: both of which are being undertaken in partnership with each of the Victorian CMAs.

### 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 the delivery of these action was

progressed in 2019–20 with the completion of the Victorian Mallee Irrigation Region Land and Water Management Plan. This 2020–29 Plan was developed in partnership with regional stakeholders to build on previous achievements and support continuous improvement in irrigation and salinity management.

### Community engagement and partnerships

We have worked hard throughout the year to ensure meaningful involvement of our community in NRM, with 2019–20 seeing the delivery of a significant number of both targeted and whole of community NRM education activities. Highlights included the successful delivery of 25 field days (656 participants), 56 workshops (792 participants), and 6 forums (354 participants). Work such as this helps ensure we are supporting a well-informed and empowered community with the skills and confidence to identify, direct and implement change.

### Recognising and supporting Aboriginal cultural values and economic inclusion in the water sector

In recognition of the important role Aboriginal people play in caring for Country, we have partnered with Traditional Owners throughout the year to conduct On-Country cultural heritage assessments and Aboriginal Waterway Assessments. These assessments 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.

### Recognising recreational values

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 25 individual visitor facilities installed in 2019–20. Through community-driven projects, these works have been prioritised and delivered to improve community amenity through opportunities for bushwalking, cycling, canoeing, camping and recreational angling.

### Supporting resilient and liveable cities and towns

Through our membership on the Northern Mallee Integrated Water Management forum, Mallee CMA is leading the delivery of key measures that aim to enhance urban waterway values and support resilient communities. In 2019–20 this has included the identification of improvements and planning for sustainable outcomes at Lake Hawthorn, Lake Ranfurly, Psyche Bend Lagoon, and Woorlong Wetlands.

### 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, delivering engagement activities in partnership with diverse community groups, ensuring appropriate gender balance on recruitment panels, and encouraging staff participation in events that promote LGBTIQ awareness and inclusion. Development of the Mallee CMA Social Procurement Strategy in 2019–20 will also ensure compliance with Victoria's Social Procurement Framework, and support progress against our objectives for achieving broader social benefits through the delivery of NRM focused programs.

### 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 2019–22 period was achieved in October 2019.

### Conclusion

It is with pleasure, I present to you the Mallee CMA's Annual Report 2019–20.



**Sharon Peart**  
Board Chair  
Mallee Catchment Management Authority

23 September 2020

## 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 2013–19*)

### 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 values and behaviours stated below.



**Figure 1** | Mallee CMA Values and Behaviours.

## Manner of establishment and responsible Ministers

The Mallee Catchment Management Authority (CMA) is established under the *Catchment and Land Protection Act 1994* (Vic) (CaLP Act). The responsible Ministers for the period from 1 July 2019 to 30 June 2020 were the Hon. Lisa Neville MP, Minister for Water 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 km<sup>2</sup>, 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.

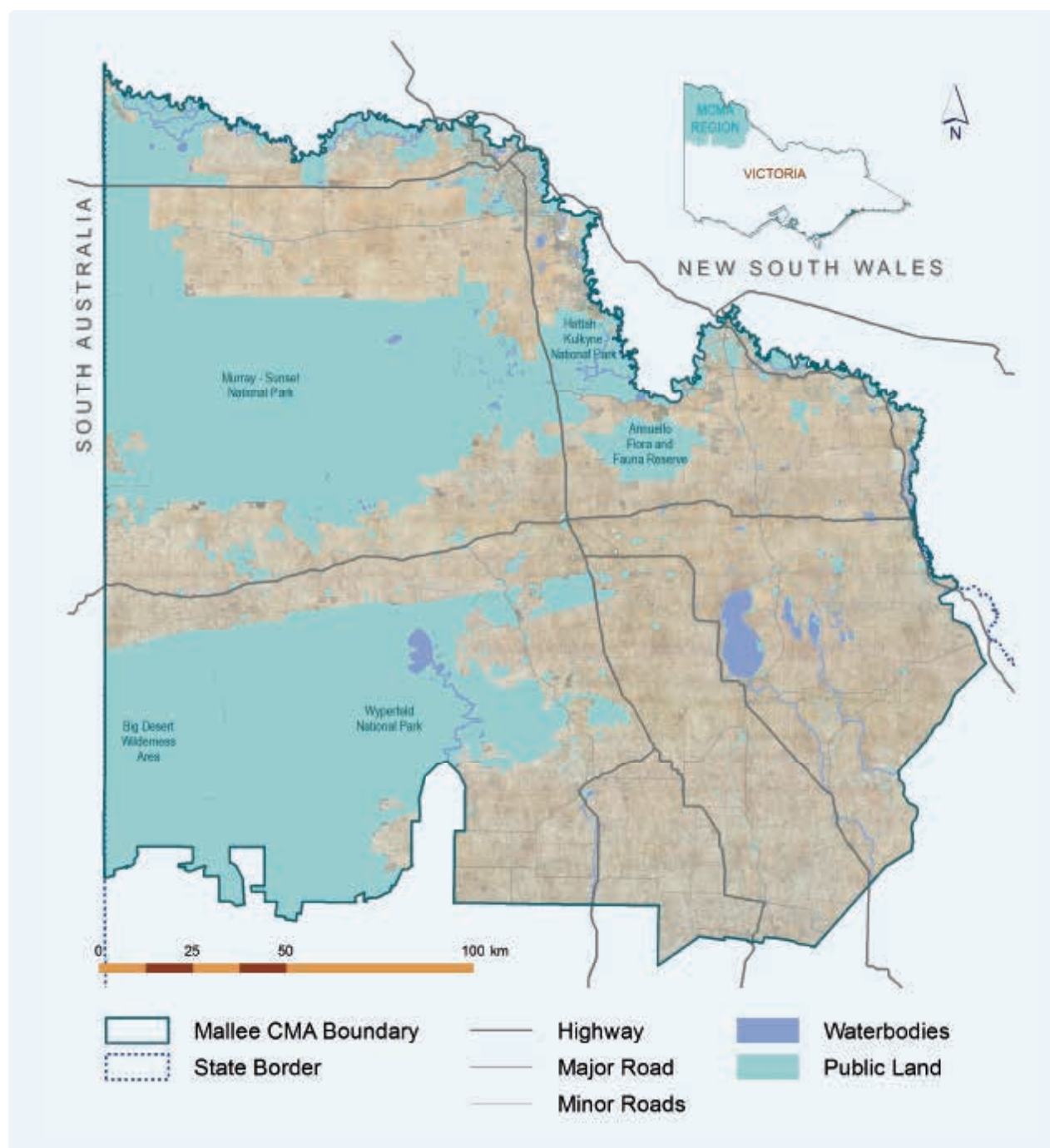


Figure 2 | Map of Mallee CMA region.



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 2013–19 (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;
- Adopt and promote 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 caretaker of river health and provide regional leadership on issues relating to river health; and
- Undertake 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 2019–24* establishes three objectives to inform organisational priorities in delivering against our vision over the next five years.

Thematic areas and strategic outcomes the Mallee CMA is seeking 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 2019–24 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.
	Culture & Heritage	Cultural heritage sites are being recognised and protected as an integral component of all land, water and biodiversity management processes.
Strengthen our capacity to operate as a corporately and socially responsible organisation.	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 2019–24*. 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:

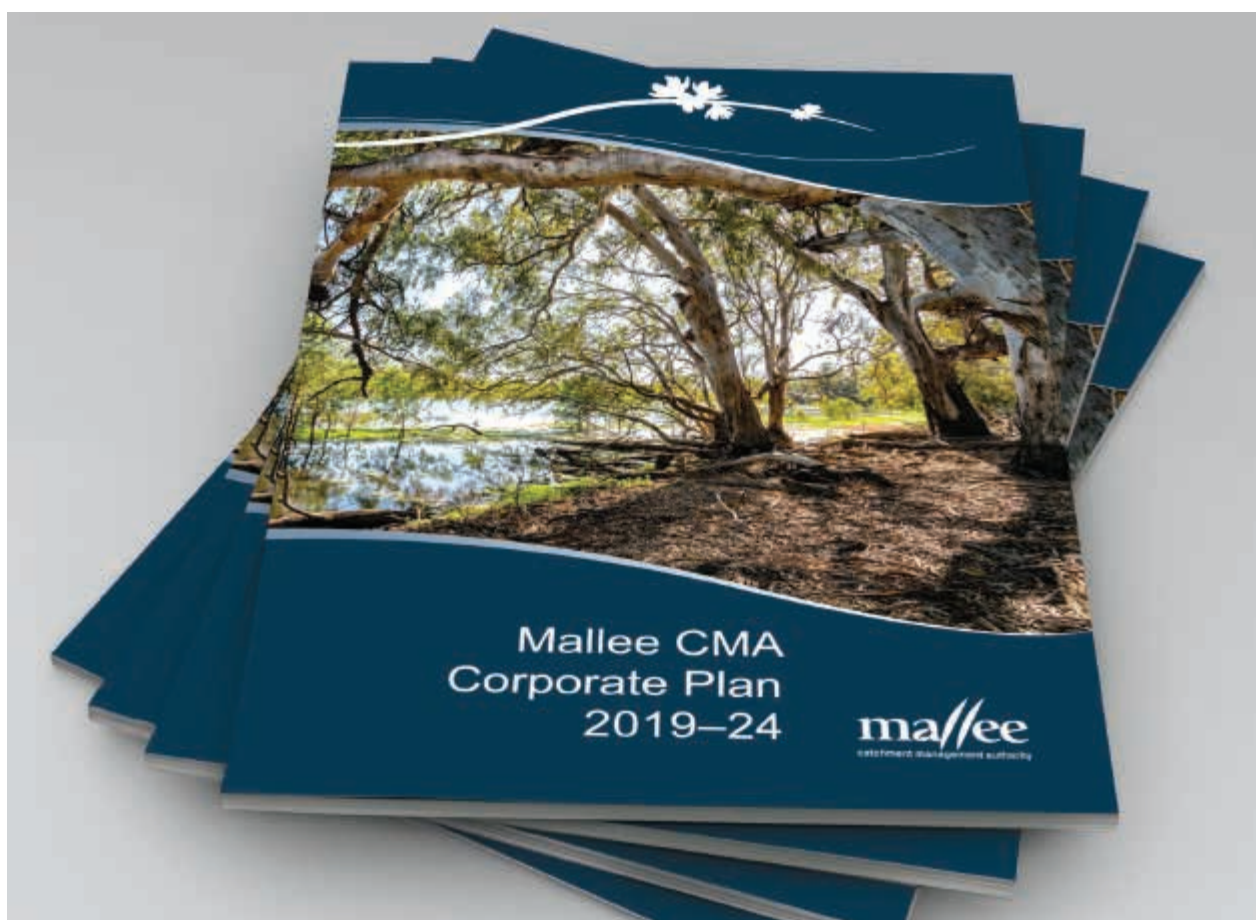
1. Waterway and Catchment Health
2. Climate Change
3. Water for Agriculture
4. Community Engagement and Partnerships
5. Recognise and support Aboriginal cultural values and economic inclusion in the water sector
6. Recognise recreational values
7. Resilient and liveable cities and towns
8. Leadership,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

Organisational performance against outcome indicators and activity measures established for each business objective and associated themes (i.e. as detailed by the 2019–24 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 2019–24.



## 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 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:

- Our Catchments, Our Communities Strategy (2016–19), a State framework for effective community engagement in catchment management
- Community Engagement and Partnerships Framework for Victoria's Catchment Management Authorities (2017)
- Mallee CMA Stakeholder Engagement and Communication Plan (2019–20)
- DELWP Aboriginal Inclusion Plan: Munganin – Gadhaba (2016–20)
- Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016)
- Mallee CMA Indigenous Participation Plan (2016)
- Mallee CMA Reconciliation Action Plan (2018)
- Mallee Landcare Support Strategy (2013–18)
- Ministerial Expectations for 'community engagement and partnerships', 'recognise and support Aboriginal cultural values and economic inclusion in the water sector', and recognise recreational values (2019–20).

#### Outcome Indicators and Performance Measures

Progress against these strategic outcomes is measured through organisational performance against seven 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 40,325 participants over the 2015–20 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 64 per cent increase in 'awareness of NRM issues' being reported by participants, and an average 13 per cent increase in skills to 'address threat processes'.

Educational and informative materials produced to promote our region, the NRM programs being delivered and involvement opportunities also continue to reach a large and diverse audience. Engagement via social media channels has continued to steadily increase since launching on platforms such as Twitter, Instagram, and Facebook, with Mallee CMA Facebook posts alone growing from 330 in 2017–18 to 554 posts in 2018–19 and 408 posts in 2019–20. The average daily reach of our Facebook page (number of people with any page content enter their screen) for 2017–18 was 2,236 people, remaining stable in 2018–19 (average of 2,275 people per day) and a slight decline in 2019–20 (average of 1,291 per day). In the past three years 19 of our Facebook posts reached over 10,000 people including a video of Regent parrots at Hattah (<https://www.facebook.com/malleecma/posts/755878121419645>), a post about Murray Cod at Mullaroo Creek (<https://www.facebook.com/malleecma/posts/832547937085996>), a post on the Quandong tree and how Aboriginal people use it (<https://www.facebook.com/malleecma/posts/765107297163394>), and a post developed by the Millewa-Carwarp community to show just how serious

the current drought conditions are (<https://www.facebook.com/137316683275795/posts/956189851388470>).

Working with regional stakeholders to increase cooperative action in the planning and delivery of programs continues to be a focus, with an average of 164 formal partnerships and 149 management agreements (covering 46,173 ha) established and/or maintained annually to support these processes. Delivery against 'management agreement' measures in 2019–20 was lower than average however, with several initiatives being in their final year and having a reduced focus on the implementation of associated works programs.

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 Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016) and directly progress objectives and priority actions identified within the Mallee CMA Indigenous Participation Plan (2016–2019). This has included the ongoing coordination of the Mallee Aboriginal Reference Group (ARG), which provides an important, direct connection to Traditional Owner and Aboriginal community groups across the Victorian Mallee. The group meets quarterly to participate in regional planning processes, and to identify opportunities for Aboriginal people to be involved in the delivery of associated NRM initiatives; with the positive influence of this consultation demonstrated through annual increases in the proportion of engagement activity participants identifying as Aboriginal or Torres Strait Islander.

Direct engagement with our region's two Registered Aboriginal Parties is also facilitating Traditional Owner participation in the delivery of NRM focused activities. Over the reporting period this has included engaging First People of the Millewa-Mallee Aboriginal Corporation to undertake Aboriginal Waterway Assessments at priority waterways; and Barengi Gadjin Land Council Aboriginal Corporation to deliver revegetation programs. On-Country field trips are 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 2019–20 is provided in the Community section of the Condition and Management Report (see Appendix 2).*

### Activity Indicators and Performance Measures

Performance against the organisations 2019–20 priority activities for progressing community capacity outcomes, including actual delivery against budgeted targets are provided in Table 3. Overall, 90 per cent of performance targets were achieved or exceeded over the reporting period.

Completion of the Mallee CMA Indigenous Participation Plan, scheduled to be submitted to government (Department of Agriculture, Water and the Environment) in 2019–20 was delayed in response to COVID-19 social distancing restrictions. As the committee leading development of the plan (Aboriginal Reference Group) was unable to meet over the March-June period to consider endorsement of the final Draft Plan as planned, finalisation has been deferred to when meetings can recommence.

All 2019–20 incentive funding allocated to private land managers under the Sustainable Irrigation Program was fully committed to works which deliver water use efficiency improvements on farm; with incentive payments made on completion of specified activities (i.e. as per management agreement). Some participating landholders have required longer timeframes than anticipated to complete these works however, with the associated time extension meaning that a proportion (27 per cent) of the scheduled payments have also been deferred to 2020–21.

COVID-19 responses (i.e. social distancing requirements and media restrictions) also directly impacted the number of engagement events, media articles and social media posts (and associated views) that could be delivered throughout the March to June period in 2020. While all associated annual performance targets were still able to be achieved or exceeded by utilising alternative delivery mechanisms (e.g. online), a small proportion of planned activities that require in person and/or field-based approaches were deferred to 2020–21.

### Key initiatives and projects

Initiatives which supported our delivery against the stated priority activities and associated performance targets in 2019–20 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	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Community engagement &amp; partnerships</b>							
<b>Ministerial Expectation:</b> A strong community engagement focus that is a cornerstone of all MCMA functions.	Community Engagement and Partnering Framework for Victorian CMAs (2017) key indicators delivered against (i.e. meeting best practice standards).	per cent	n/a	n/a	92	100	100
	Aboriginal Participation Guidelines for Victorian CMAs: Implementation Plan – Pathways to Participation' key outcomes delivered against.	per cent	n/a	n/a	91	100	100
<b>Mallee RCS: Increased participation in community engagement and capacity building activities</b>	Community/stakeholder participation in engagement events/activities.	number of participants	8,586	9,135	8,905	7,695	6,004
		number of events	508	681	660	670	588
	Participants rating engagement activities as 'good' or 'excellent'.	per cent of respondents	98	92	93	97	99
	Participants at engagement activities identifying as Aboriginal or Torres Strait Islander.	per cent of respondents	4	6	12	17	28
<b>Ministerial Expectation:</b> Increased cooperative action in planning and delivering priority NRM activities.	Formal partnerships established or maintained to inform project planning and delivery processes.	number of partnerships	182	149	145	175	168
	Management agreements established or maintained with land managers to deliver targeted NRM activities.	number of management agreements	164	163	156	157	106
		area (ha) covered by management agreements	n/a	n/a	45,475	73,398	19,647
<b>Mallee RCS: Increased awareness of the region's natural, cultural and productive values.</b>	Awareness of NRM issues reported by capacity building activity participants.	per cent increase (average)	n/a	58	66	71	61
<b>Mallee RCS: Increased skills in identifying and delivering priority NRM activities.</b>	Skills to address threat processes reported by capacity building focused activity.	per cent increase (average)	n/a	16	12	15	8
<b>Ministerial Expectation:</b> Increased information sharing in promoting NRM and associated evidence base	Communication materials produced to promote programs, activities, etc.	number of publications	349	330	509	568	439
	Social media (Facebook) to promote activities, values, threats etc.	number of posts	n/a	n/a	330	554	408
		number of views	n/a	n/a	32,394	495,546	487,415
<b>Recognise and support Aboriginal cultural values and economic inclusion in the water sector</b>							
<b>Ministerial Expectation:</b> Effective engagement of Traditional Owner's.	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	0	100	100	100



**Table 3 |** Performance against 2019–20 Community Capacity for NRM activity measures.

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Community engagement &amp; partnerships</b>						
<b>Ministerial Expectation:</b> Build extensive, effective and consistent approaches to community engagement and partnerships in regional planning and implementation	2019–20 Mallee CMA Stakeholder Engagement Plan priorities delivered against.	per cent	100	100	0	✓
	Communication and Engagement Plans developed, implemented and reported to meet internal and/or government requirements.	number	8	8	0	✓
	'Formal' community and regional delivery partner forums facilitated/ coordinated to meet government and/or internal requirements.	number of forums	24	24	0	✓
<b>Ministerial Expectation:</b> Work collaboratively with organisations and communities to strengthen engagement approaches and capacity.	Formal partnerships established/ maintained.	number of partnerships	168	154	9	✓
	Funding allocated to Community Grants expended (i.e. provided to community groups).	per cent	100	100	0	✓
<b>Mallee RCS: Identify, and where appropriate support regional responses to emerging threats and opportunities</b>	Regional response programs/initiatives delivered.	number	2	2	0	✓
	Regional response programs/initiatives supported.	number	5	5	0	✓
<b>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</b>	Participants attending engagement events.	number	6,004	4,794	26	✓
	Participants rating engagement activities as 'good' or 'excellent'.	per cent of respondents	99	>90	0	✓
	Communication materials produced and disseminated.	number of publications	439	410	7	✓
<b>Mallee RCS: Support land managers act as responsive and effective stewards of our natural, cultural and productive landscapes</b>	Funding allocated to land manager incentives/grants expended (i.e. provided to private land managers).	per cent	73	100	-27	■
<b>Recognise and support Aboriginal cultural values and economic inclusion in the water sector</b>						
<b>Ministerial Expectation:</b> Engage with Traditional Owners in water planning and management and report on outcomes	Engagements with Traditional Owner groups in water planning and management.	number	22	20	10	✓
<b>Mallee RCS: Support Indigenous communities to participate in the development, delivery, and evaluation of NRM programs and activities.</b>	Engagement event participants identifying as Aboriginal or Torres Strait Islander.	per cent of respondents	28	>15	0	✓
	Mallee CMA committee/reference group members identifying as Aboriginal or Torres Strait Islander.	per cent	31	>25	0	✓
	Plans/reports provided to government detailing plans for Aboriginal inclusion, participation, engagement and employment.	per cent	5	6	-17	■
	Management agreements established/ maintained with private and public land managers.	number	106	97	6	✓

Continued...

**Table 3** | Performance against 2019–20 Community Capacity for NRM activity measures. *Continued...*

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Recognise recreational values</b>						
<b>Ministerial Expectation:</b> Engage with the community to identify and prioritise opportunities to deliver recreational objectives relating to the management of water and waterways	Community groups engaged in processes to identify/prioritise recreational objectives.	number	19	15	27	✓
<b>Ministerial Expectation:</b> Share information about community recreation objectives relating to waterways with organisations seeking to prioritise investment in regional development, recreation, community wellbeing and tourism objectives	Organisations that information on recreational objectives shared with.	number	8	8	0	✓
<b>Ministerial Expectation:</b> 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	✓



Participating in BugWatch to learn about the health of our waterways.

**Table 4 |** Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Community Capacity for NRM' activities and associated performance targets.

Program/Initiative	Key 2019–20 outputs and achievements
<b>Waterway Health Program</b>	<p>Projects including the Regional Riparian Action Plan (RRAP), On-Ground Works, 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"> <li>• <b>78 events delivered (671 participants)</b> to promote the region's riparian values and engage stakeholders in their management. This included ongoing support for Citizen Science activities such as 'Waterwatch'. Now in its eighteenth year, this program collects data for nine sites at Kings Billabong and Sandilong Creek. Citizen scientists are also continuing to monitor bird populations as part of a volunteer group established in 2017–18. Over the last twelve months, they have surveyed 10,827 birds across 31 sites in the Mallee CMA region, with data stored in Birdlife Australia's online portal. An additional 8 volunteers were also provided with bird monitoring training in 2019–20.</li> </ul>  <p>Citizen science volunteers provided data on over 10,000 birds across 31 sites in 2019–20.</p> <ul style="list-style-type: none"> <li>• <b>30 publications disseminated</b> to promote program achievements and engage regional stakeholders. This included <b>12 Facebook posts</b>, reaching a combined audience of <b>23,600</b>. A key focus for communications in 2019–20 was to promote the completion of Stage 1 at the Merbein Common Flagship Waterway Site, and the environmental and recreational outcomes that associated works are providing.</li> <li>• <b>20 formal partnerships established/maintained</b> 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.</li> <li>• <b>3 community groups</b> (OzFish Unlimited, Nyah Lions Club and Nyah-Nyah West Football Netball Club) engaged through the Angler Riparian Partnership Program and RRAP Landcare Grants to deliver riparian restoration works.</li> </ul>
<b>Environmental Water Program</b>	<p>Projects including Environmental Watering Reserve Officers, Community Engagement and Shared Benefits are supported by the Mallee CMA, through funding from the Victorian Government's Environmental Water Program.</p> <ul style="list-style-type: none"> <li>• <b>127 publications</b> (visual, written) 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) to promote seasonal watering proposals and delivery, and over 100 social media posts to promote program achievements and opportunities for the community to be involved.</li> <li>• <b>49 events delivered (1,092 participants)</b> with a focus on developing water literacy for key stakeholders, including four Talk Water on Country events which engaged 80 traditional owners in sharing knowledge and planning for environmental water events. Citizen science-based activities have also continued, including bird monitoring, waterbug blitz, and bat monitoring workshops that engaged new participants from the community across the region.</li> <li>• <b>18 formal partnerships established and/or maintained</b> with governmental departments, water authorities and natural resource managers from three states to ensure collaboration and support of the environmental watering program. This included working with a number of government departments, water authorities and natural resource managers from three states to ensure collaboration and support of the environmental watering program.</li> </ul> <ul style="list-style-type: none"> <li>• <b>20 agreements established</b> with land holders/managers to enable delivery of water to privately owned wetlands and to undertake works at public wetland sites.</li> <li>• <b>204 Assessments</b> (e.g. cultural, environmental, spatial and social) to monitor inundation extent and ecological responses to watering and support continuous improvement. This included 100 surface water assessments to ground-truth LiDAR and Digital Elevation Model (DEM) data used to map the topography of individual wetlands, enhancing capacity to evaluate actual inundation extent against the proposed extent.</li> </ul>  <p>Mallee CMA Program Manager Environmental Water Delivery Emma Healy explains the spring watering proposal for Bidgee Lagoon as part of 'Talk Water on Country' activities.</p>

Continued...



**Table 4 |** Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Community Capacity for NRM' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements
Basin Plan	<p>The Basin Plan Implementation project is supported by Mallee the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> <li>51 participants at targeted events seeking to engage with the community on the complexity of floodplain ecology, and to highlight the vital role environmental water plays in supporting this ecology. Microbat information and monitoring activities delivered as part of this program had excellent participation from the community.</li> </ul>  <p>Microbat information and monitoring events have been popular with the local community.</p> <ul style="list-style-type: none"> <li>4 publications including; a video explaining the wet and dry cycles that are natural and essential to Murray River wetlands, a '3D interactive walkthrough' of environmental watering phases; and a case study promoting the use of new technology to survey fish habitat and associated results.</li> <li>6 formal partnerships established and/or maintained through coordination of and/or participation in forums such as the Weir Pool Manipulation Project Steering Committee. With representation from Mallee CMA, NSW Department of Planning, Industry and Environment, and the Victorian Environmental Water Holder; this steering committee facilitates joint planning of weir pool operations and the ongoing review/ approval of associated MER processes.</li> </ul>
Our Catchments, Our Communities Program	<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"> <li>Implementation of the 2019–20 Our Catchments Our Communities Communication and Engagement Plan supported delivery of 14 Engagement events delivered (183 participants), 7 publications disseminated and 19 formal partnerships established/maintained to facilitate stakeholder/community input into development and delivery of the Tyrrell Project; a community-driven project that celebrates the unique social, cultural and environmental values of an iconic landscape. A partnership with Green Lake Committee of Management has been ongoing throughout the Tyrrell Project. In 2019–20 the group installed four picnic tables, three chairs and an entrance sign to improve recreational facilities at Green Lake. The group has been formally recognised by DELWP for their achievements in delivering an 'outstanding project' for the local community and visitors.</li> </ul>  <p>Green Lake Committee of Management have been formally recognised for delivering an 'outstanding project' for the local community and visitors.</p> <ul style="list-style-type: none"> <li>A further 17 events (346 participants) were facilitated and 9 formal partnership arrangements established/maintained to support delivery against broader state-wide priorities identified in the <i>Our Catchments, Our Communities' Integrated Catchment Management Strategy</i>. This included workshops with the Mallee Aboriginal Reference Group, the Land and Water Community Advisory Committee, and Catchment Partnership Committees (Biodiversity and Sustainable Agriculture) to engage members in the planning, implementation, and evaluation of regional NRM activities.</li> <li>Ongoing coordination/facilitation of the Catchment Partnership Agreement (CPA) forum was also supported to further strengthen collaborations between key regional delivery partners. Mallee CMA, LMW, MRCC, Trust for Nature, DELWP, and Department Jobs, Precincts and Regions (DJPR) are signatories to the CPA</li> <li>9 community members receiving 'regional leadership grants' to support their attendance at events such as the National Reconciliation Action Plan Conference and Women in Leadership Forum. Two events (the Building Climate Resilience Event and the Launch of the First People of the Millewa Mallee Aboriginal Corporation) also received sponsorship under this grant program, to provide support for guest speakers and showcase local community leaders.</li> </ul>

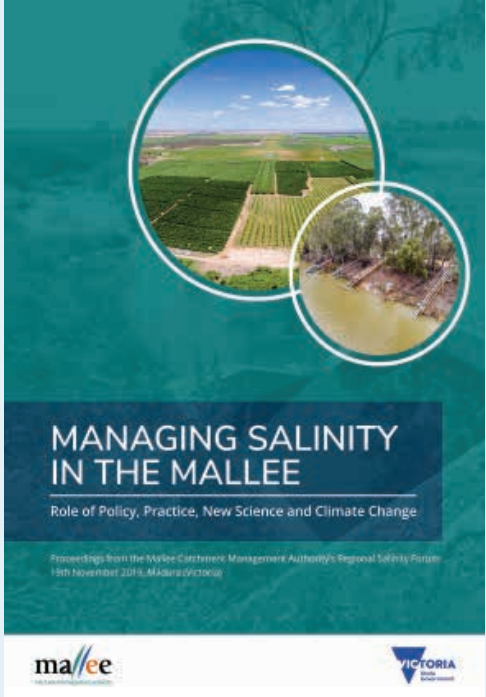
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**Table 4 |** Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Community Capacity for NRM' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements
<b>Sustainable Irrigation Program</b>	<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"> <li>• 17 Plans, including 8 on-farm (130 ha) Irrigation and Drainage Management Plans (IDMP) to support improved on-farm water use efficiency, and subsequent reductions in groundwater accessions.</li> <li>• 21 publications disseminated to promote and/or report key 19–20 activities. This included release of the 2019 Crop Report Addendum which collates longitudinal data (20 year) on irrigation development in the Mallee, and an investigation into the implications of climate change on Mallee horticultural industries to support ongoing adaptation planning processes.</li> <li>• 123 Engagement events delivered (538 participants) including; 8 workshops to facilitate feedback on the draft Land and Water Management Plan, and 2 regional Climate Change workshops conducted by videoconference.</li> <li>• Progressing reviews of 3 BSM2030 accountable actions; Legacy of History (Dryland Clearance and Irrigation Development), and Nyah to SA Border Salinity Management Plan.</li> <li>• Implementation of recommendations arising from previous five-year review of Sunraysia Drying of the Drains Accountable Actions, including; the establishment of additional drainage monitoring sites, and a review of the EC factor applied to total dissolved solids.</li> <li>• 12 formal partnerships established/maintained to support the development and delivery of sustainable irrigation activities in the Mallee Region. This included ongoing coordination of a Project Steering Committee to lead renewal of the Mallee Irrigation Region Land and Water Management Plan.</li> </ul> <div>  <p>Victorian Mallee Irrigation Region Land and Water Management Plan / 2020–29</p> <p>The 2020–29 Victorian Mallee Irrigation Region Land and Water Management Plan was developed in partnership with regional stakeholders.</p> </div> <ul style="list-style-type: none"> <li>• Completion of the 2020–29 Victorian Mallee Irrigation Region Land and Water Management Plan (LWMP). The final Plan was submitted for DELWP approval in June 2020 following comprehensive consultation processes and endorsement from regional delivery partners.</li> </ul>
<b>Floodplain Management</b>	<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"> <li>• 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). A key activity delivered by the committee in 2019–20 was development of the MFMS Monitoring, Evaluation and Reporting Plan; establishing a framework to assess and report progress against regional priorities, outcomes and objectives.</li> <li>• Progressing the completion of 3 flood studies (assessments) to provide regional stakeholders with more accurate data and mapping for improved management of future flood events (e.g. Tyrrell and Lalbert Creek Flow Investigation).</li> </ul>
<b>Victorian Landcare Program</b>	<p>The Victorian Landcare Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> <li>• 23 Regional Landcare groups provided with ongoing coordination and support.</li> <li>• 26 Landcare/community groups provided with devolved grants under management agreement to support the delivery of local priorities.</li> <li>• 116 Landcare members participating in 15 awareness raising/training events including project management and grant writing workshops.</li> </ul>

*Continued...*


**Table 4** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Community Capacity for NRM' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements
<b>Threatened Species Initiative</b>	<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"> <li>• <b>24</b> Formal partnerships established and/or maintained to facilitate collaborative approach to planning and delivery.</li> <li>• <b>100</b> Assessments (cultural, and invasive species) undertaken to evaluate the effectiveness of on-ground works and help inform future delivery priorities.</li> <li>• <b>77</b> Engagement events delivered (<b>332</b> participants), <b>35</b> publications disseminated and <b>24</b> formal partnerships established/maintained to facilitate stakeholder/community input into the development and delivery of project activities. This included workshops with the Mallee Biodiversity Catchment Partnership Committee and meetings with landholders to facilitate a collaborative approach to planning and delivery.</li> <li>• Implementation of the Biodiversity Response Plan <i>Traditional Owner Engagement and Participation Plan</i> included the development of a training package designed to provide Traditional Owner groups with the opportunity to obtain skills to deliver on-ground works in NRM projects.</li> <li>• <b>26</b> Management agreements established and/or maintained with private land managers to facilitate the delivery of priority works programs.</li> </ul>
<b>Victorian Drought Employment Program</b>	<p>The Victorian Drought Employment Program is supported by the Mallee CMA, through funding from the Victorian Government.</p> <ul style="list-style-type: none"> <li>• <b>26</b> 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 are also supported to undertake training in areas such as remote first aid, chemical handling and cultural heritage training.</li> </ul>
<b>Mallee Salinity Investment Plan</b>	<p>Salinity Offsetting Charges and the Salinity Offset Levy are collected specifically to offset salinity impact of irrigation development from Nyah to the South Australian Border.</p> <div>  <p><b>MANAGING SALINITY IN THE MALLEE</b> Role of Policy, Practice, New Science and Climate Change</p> <p>Proceedings from the Mallee Catchment Management Authority's Regional Salinity Forum, 15th November 2019, Mallee VIC 3600</p> <p>mallee CATCHMENT MANAGEMENT AUTHORITY</p> <p>VICTORIA GOVERNMENT</p> <p>The Victorian Mallee Regional Salinity Forum was attended by more than sixty professionals representing the local irrigation industry, groundwater modelling and salinity management to ensure dissemination of current knowledge in salinity and irrigation management.</p> </div> <ul style="list-style-type: none"> <li>• <b>63</b> Engagement events delivered (<b>391</b> participants) and <b>26</b> publications developed/disseminated to promote and/or report key activities. An ongoing focus of these activities is to re-build community awareness, understanding, and commitment to the salinity management framework. This included delivery of the Victorian Mallee Regional Salinity Forum, which was attended by more than 60 professionals from local irrigation industry, groundwater modelling and salinity management to share current knowledge in salinity and irrigation management.</li> <li>• <b>13</b> 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).</li> <li>• <b>9</b> on-farm Irrigation and Drainage Management Plans (IDMP) to support on-farm (96 ha) water salinity outcomes.</li> <li>• Ongoing monitoring of <b>23</b> surface water sites (flow and salinity) and <b>406</b> groundwater bores (depth and salinity) to inform associated modelling and reporting requirements. This included the construction of <b>26</b> new bores in 2019–20.</li> <li>• 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.</li> </ul>

*Continued...*



**Table 4 |** Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Community Capacity for NRM' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements
<b>Murray-Darling Basin Plan</b>	<p>The Victorian Murray Floodplain Restoration Project (previously Sustainable Diversion Limit (SDL) works program) is funded by the Commonwealth Department of Agriculture and Water Resources.</p> <ul style="list-style-type: none"> <li>• <b>14 Events (232 participants)</b> to engage regional stakeholders and the wider community members in the planning, development, and implementation of environmental infrastructure projects. This included presentations, field trips, and workshops with a broad range of stakeholder groups (e.g. Traditional Owners, irrigators, water authorities, water traders, local government, community NRM groups, and environmental water holders).</li> <li>• <b>2 partnerships</b> maintained with stakeholder advisory groups (west and central sites) to facilitate collaborative approaches to planning and delivery.</li> </ul> <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"> <li>• <b>31 Assessments</b> 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 <b>26</b> written publications.</li> <li>• <b>18 events</b> engaged <b>110</b> participants in activities such as field days and workshops. With target audiences including Aboriginal stakeholders, private and public landholders, Commonwealth and Victorian Environmental Water Holders, and the Operational Advisory Group (OAG).</li> </ul>
<b>National Landcare Program</b>	<p>Regional Land Partnership Projects including; Core Services, Threatened Species Services, Threatened Ecological Community Services, Soil Services and Ramsar Services are the supported by the Mallee CMA through funding provided by the Australian Government's National Landcare Program.</p> <ul style="list-style-type: none"> <li>• <b>52 Engagement events</b> delivered (<b>1,263</b> 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.</li> <li>• <b>7 Stewardship management agreements</b> established with private landowners covering 84 ha of priority Buloke Woodlands</li> </ul>  <p>Birchip Landcare Group are undertaking a monitoring program to determine the persistence of Plains-wanderer. CREDIT: Dr. David Baker-Gabb.</p> <ul style="list-style-type: none"> <li>• Plains-wanderer habitat identified and surveyed for species presence through a partnership with Birchip Landcare Group and Trust for Nature.</li> <li>• Continued, effective function of the Mallee CMA Aboriginal Reference Group in fostering communications with Aboriginal stakeholders and providing input into regional initiatives and plans.</li> <li>• <b>38 Assessments</b> undertaken to support ongoing monitoring of the impacts of investment over time on both threat mitigation (short-term) and resource condition (long-term). Included delivery of a survey by the Birchip Landcare Group to verify the persistence of Plains-wanderer based on a review of previously surveyed habitat and potential habitat. The Adaptive Management Predator Experiment (AMPE) established in 2018–19 in partnership with the National Malleefowl Recovery Team is continuing investigation into the efficacy and impact of fox baiting programs.</li> <li>• <b>46 publications</b> disseminated to engage stakeholders and promote delivery against National Landcare priorities. These included <b>5</b> social media posts to <b>6,590</b> Facebook followers; <b>37</b> audio and written publications (factsheets, media releases, poster displays, radio interviews); <b>2</b> virtual field days of regional feedlot-focused research trials, reaching an estimated audience of <b>39</b> community members/industry representatives; and production of <b>2</b> editions of the Mallee Farmer Newsletter, a longstanding and well recognised publication with a circulation of around <b>1,200</b>.</li> </ul>

## Business Objective 2

Protect and enhance the region's natural, cultural and productive values.

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

- Water for Victoria (2016)
- Mallee Waterway Strategy (2014–22)
- Regional Riparian Action Plan (2015–20)
- Environmental Watering Management Plans
- Our Catchments, Our Communities Strategy (2016–19)
- Hattah-Kulkyne Lakes Ramsar Site Ecological Character Description (2011) and Annual Work Plan (2019–20)
- Ministerial Expectations for 'waterway and catchment health' and 'recognise recreational values' (2019–20).

#### Outcome Indicators and Performance Measures

Progress against these strategic outcomes 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 5).

Delivery of over 11,000 ha and 297 km of environmental works over the 2015–20 reporting period represents significant progress against both the short term (activity/output) and medium-term (outcome) targets set by the Mallee Waterway Strategy 2014–22 (MWS) for priority waterways within each of the region's 23 Waterway Management Units. Ongoing application of the Regional Riparian Action Plan 2015–20 (RRAP), a Victorian Government initiative, has built on the MWS by further targeting investment and accelerating improvement in the condition of riparian land for priority waterways.

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 Woolong complex) has continued to be a priority

under State funded Waterway Health funded 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 Flagship Waterway Project 'There's nothing common about Merbein Common'. This initiative has delivered significant improvements in habitat condition across by rationalizing non-arterial user made tracks and repairing key access roads (38 km), controlling priority pest plants (343 ha), establishing native vegetation (6 ha), and installing fish habitat structures (9).

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 57 individual visitor facilities installed over the past three years. These have included picnic and camping facilities, fishing platforms, canoe launches, new walking tracks, and interpretation/appreciation signage.

Ongoing community engagement has supported the identification of local recreational values and priorities for regional waterways. The information is communicated back to the community and other stakeholders via a range of mediums (e.g. short videos, Facebook posts) and through formal planning processes (i.e. EWMP reviews, Seasonal Watering Proposals, and Site Delivery Plans). Partnerships developed with tourism groups such as Murray Off-road Adventures, Houseboats Mildura, and Mildura and Swan Hill information centres are also helping to promote community recreation objectives and the shared benefits of waterway management.

Further detail on Waterway condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2019–20 is provided in the Waterway section of the Condition and Management Report (see Appendix 2).

#### Activity Indicators and Performance Measures

Performance against our organisations 2019–20 priority activities for progressing Waterway outcomes, including actual delivery against budgeted targets are provided in Table 6. Overall, 94 per cent of performance targets were achieved or exceeded in the reporting period. While 2019–20 targets for the number of watering regimes delivered annually was consistent to previous years, 12 of the 45 planned environmental water deliveries were deferred including deliveries to three via the Wimmera Mallee Pipeline and nine at Hattah Lakes. As 2019–20

was a second exceptionally dry year in a row, the primary focus of the watering program was to maintain existing ecosystem condition and resilience in priority waterways and continue to provide critical access to water across the landscape. Delivery of environmental water was targeted at providing the greatest range of habitats and resources possible across a wide landscape whilst staying prudent and economical with water use.

Initiatives which supported our delivery against the stated priority activities and associated performance targets in 2019–20 included both State and Commonwealth funded programs. An overview of their contribution in relation to Waterway management is provided in Table 7.

## Key initiatives and projects

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

Outcome Indicators	Performance measures	Unit of measure	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Waterway and Catchment Health</b>							
<b>Ministerial Expectation &amp; Mallee RCS: Improved health of priority waterways &amp; their catchments.</b>	Waterways treated for priority pest animal species	hectares	15,262	8,716	34,748	8,624	5,714
	Waterways treated for priority weed species	hectares	2,687	1,783	8,149	3,310	2,178
	Native vegetation established	hectares	6	6	32	100	6
	Road rationalisation and repair works	kilometres	52	2	4	37	18
	Exclusion fencing installed	kilometres	13	80	25	39	27
	Watering regimes delivered to meet environmental objectives (i.e. as per Environmental Watering Management Plan)	number	58	54	48	48	34
		hectares	2,897	8,633	6,696	559	2,557
<b>Recognise recreational values</b>							
<b>Ministerial Expectation: Increased recreational opportunities provided by waterway management.</b>	Watering regimes delivering against recreational objectives	per cent	100	100	100	100	100
	Visitor facilities installed	number	0	0	7	25	25





Track rationalisation at Merbein Common is reducing recreational impacts on priority habitat.



Table 6 | Performance against 2019–20 Waterway activity measures.


Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Waterway and Catchment Health</b>						
<b>Ministerial Expectation &amp; Mallee RCS: Implement priority management activities established by the Mallee Waterway Strategy (2014–22), the associated Regional Riparian Action Plan (2015–20), and related actions in Water for Victoria (2016); with a priority focus on the regions large scale waterway projects outlined in Water for Victoria</b>	Waterways treated for priority pest animal species	hectare	5,714	5,678	1	✓
	Waterways treated for priority weed species	hectare	2,178	2,151	1	✓
	Native vegetation established	hectare	6	6	0	✓
	Terrestrial features and structures installed	number	34	34	0	✓
	Road rationalisation and repair works	km	18	15	20	✓
	Water for Victoria identified priority sites managed to support delivery against identified environmental, economic, social and cultural outcomes	number	3	3	0	✓
<b>Ministerial Expectation: Implement Rivers 2040 framework to track progress and report back to communities on our Flagship Waterway (Merbein), incorporating citizen science</b>	Area managed to deliver against Rivers 2040 Flagship Waterway (Merbein) targets	hectare	37	37	0	✓
	Communication materials produced/ disseminated annually to report progress/achievements against Rivers 2040 framework	number	7	5	40	✓
	Citizen science initiatives delivered annually to support implementation of the Rivers 2040 framework	number	2	2	0	✓
<b>Water Act SoO: Implement the Murray-Darling Basin Authority's The Living Murray Program at Lindsay, Mulcra and Wallpolla Islands; and Hattah Lakes</b>	TLM sites managed, monitored and reported as per contractual/government requirements	number	2	2	0	✓
<b>Water Act SoO: Develop and implement Seasonal Watering Proposals to align with and deliver against site based Environmental Watering Management Plans</b>	Seasonal Watering Proposals submitted annually in line with stated requirements and accepted by associated partners/stakeholders	number	4	4	0	✓
	Environmental Water Management Plans EWMP's reviewed annually	per cent	34	22	56	✓
	Watering regimes delivered annually	number	34	45	-24	■
<b>Mallee RCS: Implement priority actions established by the Mallee Floodplain Management Strategy (2018)</b>	MFMS priority management actions progressed by annual works programs	percentage	69	69	0	✓
	Annual outputs delivering against MFMS priority management actions	number	10	10	0	✓
<b>Recognise recreational values</b>						
<b>Ministerial Expectation: Plan for and provide water services that explicitly consider recreational values as part of existing frameworks</b>	Community evaluation surveys undertaken to identify recreational values/priorities for local waterways	number	5	5	0	✓
	Environmental water delivery events providing recreational benefits annually	per cent	100	100	0	✓
	Visitor facilities established	number	25	25	0	✓

**Table 7 |** Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Waterway' activities and associated performance targets.

Program/Initiative	Key 2019–20 outputs and achievements	
<b>Waterway Health Program</b>	<p>Projects including the Regional Riparian Action Plan (RRAP), On-Ground Works, Water Statutory Functions, and Ramsar Management are supported by the Mallee CMA, through funding from the Victorian Government's Waterway Health Program. Works are targeted to priority waterways with the objective of improving associated riparian values.</p> <ul style="list-style-type: none"> <li>• Ongoing delivery against the Mallee Riparian Action Plan (2015/16 – 2019/20); building on the Mallee Waterway Strategy (2014–22) by further targeting investment and accelerating improvement in the condition of riparian land for priority waterways. Delivery against these priorities collectively achieved: <b>918 ha</b> and <b>18 km</b> of targeted on-ground works (e.g. revegetation, track rationalisation, pest plant and animal control, and exclusion fencing delivered in partnership with land managers and local community groups. 19–20 delivery included completion of a three-year willow control program aiming to achieve 100 per cent eradication of active trees on the Victorian side of the Murray River from Merbein to Wallpolla (<b>25 km</b> of river frontage), and Nichols Point to Colignan (<b>90 km</b> of river frontage).</li> <li>• Completion of stage one of the Mallee CMA's Flagship Waterway Project '<i>There's nothing common about Merbein Common</i>' with the finalisation of priority actions across the 37 ha site in 2019–20 (e.g. track rationalisation and repair works). Monitoring the impact of these works is supported by local volunteers participating in two ongoing citizen science programs (i.e. bird and micro-bat monitoring).</li> </ul>	
<b>Environmental Water Program</b>	<p>Projects including Environmental Watering Reserve Officers, Community Engagement and Shared Benefits 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"> <li>• <b>11</b> Environmental Water Management Plans (EWMP's) reviewed and updated, for Murray River wetland/floodplain, and Wimmera Mallee Pipeline sites. These reviews also incorporated feedback received from local stakeholders through <b>2</b> surveys and targeted engagement of <b>3</b> community groups to identify recreational objectives and priorities.</li> <li>• <b>4</b> Seasonal Watering Proposals developed in consultation with key project stakeholders (i.e. the Victorian Environmental Water Holder (VEWH), Parks Victoria (PV), and the Department of Environment, Land, Water, and Planning (DELWP)). These proposals encompassed priority waterways within the Hattah Lakes, Lower Murray Wetlands, Wimmera Mallee Pipeline Wetlands, and Lindsay, Wallpolla, and Mulcra areas.</li> <li>• <b>10</b> Environmental Watering Delivery Proposals/Plans developed in consultation with land managers, community groups and other stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>7</b> visitor facilities installed including canoe launches at Kings Billabong, interpretative signage at Kings Billabong and Merbein Common, and solar light installations at Nyah boat Ramp.</li> </ul>  <p>Access ramp to a canoe launch at Kings Billabong.</p> <p><b>34</b> watering regimes to deliver against associated Seasonal Watering Proposal and Environmental Water Management Plan, encompassing:</p> <ul style="list-style-type: none"> <li>• <b>3</b> reaches (Potterwalkagee Creek, Mullaroo Creek and Mulcra Island) provided with environmental water, targeting 366 ha of priority waterways.</li> <li>• <b>30</b> wetlands (<b>2,148</b> ha) receiving environmental water deliveries, including 9 Wimmera Mallee Pipeline (29 ML), 18 Lower Murray (8,551 ML), 5 Wallpolla Island (4,045 ML), and 1 Hattah Lakes (12,300 ML).</li> <li>• <b>1</b> wetland (Margooya Lagoon) managed by operating regulator structures to introduce a drying phase.</li> </ul>  <p>Wetting cycle at Sandy Creek.</p>

Continued...

**Table 7** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Waterway' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements	
Our Catchments Our Communities	The Our Catchments, Our Communities Program is supported by the Mallee CMA, through funding from the Victorian Government. Works are focused on enhancing the ecological function of priority waterways through integrated catchment management.	
	<ul style="list-style-type: none"> <li>• 0.3 ha of native vegetation established at Culgoa to improve the habitat and species diversity of the site. Three natural ground features (hollow log structures) were placed at Tchum Lake South Aquatic Club to create additional habitat for native wildlife.</li> <li>• 235 ha of pest plant and rabbit control completed at Lake Maribed, to protect/enhance the condition and resilience of riparian habitat.</li> </ul>	<ul style="list-style-type: none"> <li>• 3 km of exclusion fencing and bollards installed by private land managers along Tyrrell Creek and Lake Tyrrell.</li> <li>• 11 visitor facilities including seating, picnic tables at Green Lake; shade shed at Culgoa, and a sky lounge at Lake Tyrrell.</li> </ul>  <p>The Lake Tyrrell 'Sky Lounge' includes signage explaining the cultural importance of astronomy to Traditional Owners.</p>
Floodplain Management	Implementation of the Flood and Emergency Resilience project is supported by the Mallee CMA, through funding from the Victorian Government.	
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	
Natural Disaster Relief and Recovery Arrangements (Flood Recovery).	Mallee CMA, through funding from the Victorian Government, is implementing the Victorian Flood Recovery Program for the repair/replacement of infrastructure impacted by 2016 flood event.	
	<ul style="list-style-type: none"> <li>• 7 visitor facilities installed through works on interpretive signage at lock island.</li> </ul>	<ul style="list-style-type: none"> <li>• 0.2 km of road/track repair works.</li> <li>• 4 culvert repair works</li> </ul>
National Landcare Program	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.	
	<ul style="list-style-type: none"> <li>• 1,800 ha managed for Weeds of National Significance (e.g. Boxthorn, Bridal Creeper, Prickly pear) to reduce competition within fringing woody vegetation of the 12 Ramsar listed lakes.</li> </ul>	<ul style="list-style-type: none"> <li>• 5,167 managed for goats to reduce grazing impacts within priority river red gum and black box floodplain habitat.</li> </ul>



Before and after environmental water phases at Woolshed Creek.



## 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 at the federal level (i.e. EPBC Act); and 133 species and six communities listed at the state level (i.e. FFG Act).

Native vegetation across the Mallee once covered some 3,919,887 ha, 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 stated 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 (2015–20)
- Commonwealth and Victorian Recovery Plans/Action Statements for target threatened species and communities
- Mallee Biolinks Plan (2016–19).

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

Delivery of over 1.7 million ha and 235 km of environmental works over the 2015–2020 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 rescue completion, grazing and predation impacts; and stock 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 4 threatened ecological communities (e.g. Buloke Woodlands, Mallee Bird Community) across eight priority landscapes.



Targeted works support the recovery of Regent Parrots at Hattah.

Ongoing implementation of the National Landcare Program (NLP Phase 2) is delivering against Federal 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 (2013–18) 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 and Northern Mallee Tender program).

Further detail on Biodiversity condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2019–20 is provided in the Biodiversity section of the Condition and Management Report (see Appendix 2).

## Activity Indicators and Performance Measures

Performance against the organisations 2019–20 priority activities for progressing Biodiversity outcomes, including actual delivery against budgeted targets are provided in Table 9. Overall, 100 per cent of performance targets were achieved or exceeded in the reporting period.

## Key initiatives and projects

Initiatives which supported our delivery against the stated priority activities and associated performance targets in 2019–20 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	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Mallee RCS: Improved ecosystem services provided by targeted terrestrial habitat</b>	Habitat treated for priority pest animal species	hectares	66,972	93,008	457,370	327,306	280,967
	Habitat treated for priority weed species	hectares	41,338	48,251	158,882	123,756	108,297
	Native vegetation established	hectares	280	609	269	463	434
	Exclusion fencing installed	kilometres	79	95	31	25	5
<b>Mallee RCS: Improved viability of targeted threatened species &amp; communities</b>	Threatened flora species targeted by works programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	n/a	3	3	3
	Threatened fauna species targeted by work programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	n/a	18	18	16
	Threatened ecological communities targeted by works programs to deliver against associated Action Statement/ Recovery Plan	number	n/a	n/a	4	4	4

**Table 9** | Performance against 2019–20 Biodiversity activity measures.


Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>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</b>	Habitat treated for priority pest animal species	hectare	280,967	260,228	8	✓
	Habitat treated for priority weed species	hectare	108,297	107,112	1	✓
	Native vegetation established	hectare	434	401	8	✓
	Exclusion fencing installed	kilometer	5	5	0	✓
<b>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</b>	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	133,877	135,757	-1	○
<b>Mallee RCS: Align the delivery of threatened species and communities programs with associated Action Statements and Recovery Plans</b>	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	✓
<b>Mallee RCS: Implement priority actions established by the Mallee Biolinks Plan (2016-19)</b>	Mallee Biolinks Plan priority landscapes and corridors included in works programs	percentage	81	>75	0	✓
	Mallee Biolinks Plan priority management actions delivered against	percentage	93	>75	0	✓



Hoary Scurf-pea (*Cullen cinereum*) is listed as endangered in Victoria.



**Table 10** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Biodiversity activities and associated performance targets.

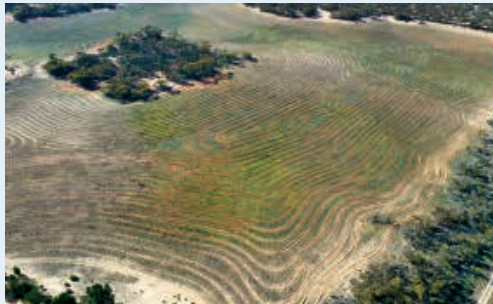
Program/Initiative	Key 2019–20 outputs and achievements
<b>Threatened Species Initiative</b>	<p>Biodiversity On-ground Actions and Biodiversity Response Planning projects are delivered by the Mallee CMA, through funding from the Victorian Government to progress implementation of the Victorian Biodiversity Strategy.</p> <p>Delivery against actions identified by State 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"> <li>• 16 threatened species (e.g. Mallee Emu-wren, Regent Parrot, Malleefowl, Carpet Python, Mallee Worm Lizard, Yellow Swainson-pea)</li> <li>• 4 threatened ecological communities (e.g. Buloke Woodlands, Mallee Bird Community);</li> <li>• across 11 priority landscapes (Annuello, Wandown, Cardross Lakes, Hattah-Kulkyne Lakes System &amp; 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.</li> </ul>  <p>Targeted works program are being implemented to support the recovery of species such as the Mallee Emu-wren. Credit: Matthew Jones, Birdlife Australia.</p> <p>Key 2019–20 activities delivered in partnership with land managers and community groups included:</p> <ul style="list-style-type: none"> <li>• 120 ha of native vegetation planted to re-establish critical habitat within the Cardross target area.</li> <li>• 93,190 ha of habitat managed for priority weeds (e.g. boxthorn, cactus, bridal creeper, buffel grass).</li> <li>• 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). This included targeted rabbit and fox control programs delivered in partnership with private land managers.</li> </ul>

Continued...



Carpet Python a threatened species targeted as a priority for works to support its recovery in the Mallee.

**Table 10** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Biodiversity activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements	
<b>National Landcare Program</b>	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 their Threatened Species Strategy (2015–20) and National Recovery Plans.	
	<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"> <li>• 92 ha of existing Malleefowl habitat enhanced through supplementary planting (tubestock) of indigenous species.</li> <li>• 19,537 ha of critical Malleefowl habitat managed for rabbits and feral goats to reduce grazing impacts and support regeneration outcomes.</li> <li>• 15,107 ha of critical Malleefowl and Plains Wanderer habitat managed for Weeds of National Significance (e.g. boneseed, boxthorn, bridal creeper).</li> <li>• 14,957 ha of targeted fox control delivered in partnership with Malleefowl Recovery Group as part of the national Adaptive Management Predator Experiment.</li> </ul>	<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"> <li>• 440 ha managed for Weeds of National Significance (e.g. Boxthorn, Bridal Creeper, Hudsons Pear) to reduce competition.</li> <li>• 1,564 ha managed for rabbits to reduce grazing impacts and promote regeneration.</li> </ul>  <p>Revegetation works are seeking to reconnect isolated Malleefowl populations.</p>
<b>Victorian Environmental Partnerships Program</b>	Northern Mallee Bush Tender program being delivered by the Mallee CMA through funding provided by the Victorian Government to support the protection and enhancement of priority habitat on private land.	
	<p>In 2019–20 tender participants delivered the following actions within high-value remnants of native vegetation:</p> <ul style="list-style-type: none"> <li>• 5 km of stock exclusion works; 127 ha of revegetation; 2,722 ha of targeted weed control works; 2,277 ha of rabbit control.</li> </ul>	



Established revegetation site.

## 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 given over to 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 stated outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Mallee Dryland Sustainable Agriculture Strategy (2017–23)
- 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' (2019–20)

### 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 ha, with the rate of this expansion demonstrated by the 2,470 ha (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 CaLP Act. In 2019–20 the progressive total of salinity debits was 18.46 EC, with a 0.46 EC increase estimated for the Nyah to SA Border irrigation region and no change to the impact at Nyah-Colignan. With a total salinity credit allocation of 23.22 EC the region is currently 4.77 EC in credit overall, and remains compliant at a regional scale.

Ongoing delivery of the Mallee Irrigation Incentive Program (MIIP) in partnership with Agriculture Victoria (DJPR) has continued to provide an effective mechanism by which 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 2015–19 reporting period, these two programs have collectively improved 3,372 ha of irrigation infrastructure, encompassing 2,062 ha of irrigation upgrades/conversions and 1,265 ha of scheduling equipment installed. The water use efficiency gains achieved by these works is estimated to be 6,189 Mega litres (ML). With salinity benefits estimated to be 15,911 tonnes/year reduction in salt to the Murray River.

#### *Dryland agriculture*

Mallee CMA delivery against dryland agriculture outcomes is primarily funded under the Commonwealth's National Landcare Program (NLP). The completion of Phase 1



(2013–18) 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 during 2019–20. However, Agriculture Victoria continued to fund the establishment of stock containment areas in 2019–20 as part of the dry seasonal conditions support package.

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 (2017–23) 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 2015–20 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 2019–20 is provided in the Land section of the Condition and Management Report (see Appendix 2).

## Activity Indicators and Performance Measures

Performance against the organisations 2019–20 priority activities for progressing Land outcomes, including actual delivery against budgeted targets are provided in Table 11.

### *Irrigated land*

Irrigation infrastructure improvements delivered under the Sustainable Irrigation Program (i.e. delivering against Victorian Mallee Irrigation Region Land and Water Management Plan priorities) significantly exceeded 2019–20 targets. This was primarily a result of the uncharacteristically large areas being managed by

several of the successful incentives applicants. The area achieved under 2019–20 Salinity Investment Plan funded incentives was however in line with annual targets.

Three of the region's five accountable action reviews were progressed as per BSM2030 Register requirements in 2019–20, with commencement of the Nyah to SA Border Salinity Management Plan (N2B SMP) and two Register B entries (Legacy of History reviews for Dryland Clearance and Irrigation Development. The remaining scheduled reviews (Reduced Salinity Impacts 1 and 2) have both been placed on hold pending completion of the Sunraysia Model Review (SMR) currently being undertaken by the Murray Darling Basin Authority (MDBA) in partnership with Victoria and New South Wales.

Improvements in the strategic framework informing delivery of regional sustainable irrigation management activities have also been significantly progressed by review and renewal of the Victorian Mallee Irrigation Region Land and Water Management Plan (LWMP). The 2020–29 Plan represents the fourth iteration of the plan (i.e. dating back to the Salinity Management Plans of the 1990's), and builds on previous achievements and the regions evidence base by:

- Striving for continuous improvement in the adoption of best management practices for irrigation;
- Refining the salinity management framework by updating salinity models and reviewing salinity impact charges;
- Renews efforts to mitigate or offset the environmental impacts of irrigation and river operations;
- Refocusing support for Aboriginal partnerships; and
- Encouraging the irrigation community to be forward-looking and resilient.

### *Dryland agriculture*

Performance against our organisations 2019–20 priority activities for progressing Dryland Agriculture outcomes, including actual delivery against budgeted targets are provided in Table 12. Overall, 100 per cent of performance targets were achieved, with 2019–20 activities focusing on enhancing stakeholder capacity to deliver against groundcover and soil organic carbon outcomes.

## Key initiatives and projects

Initiatives which supported our delivery against the stated priority activities and associated performance targets in 2019–20 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	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Irrigated Land</b>							
<b>Ministerial Expectation &amp; Mallee RCS: Improved productivity &amp; resilience of the Victorian Mallee irrigation sector</b>	Irrigable area	hectares	76,245	n/a	78,775	81,150	81,245
	Irrigation infrastructure upgrades/conversions	hectares	632	193	276	582	379
	Irrigation scheduling equipment installed	hectares	506	161	196	182	220
	Estimated water use efficiency (WUE) gains achieved by works	ML	1,596	1,292	1,199	1,036	1,066
	Estimated salinity benefits (i.e. reduced irrigation recharge) achieved by works	tonnes/year reduction in salt to Murray River	2,546	3,112	2,770	3,312	4,171
	Salinity credit uptake	EC at Morgan	16.66	17.30	17.86	18	18.46
<b>Dryland Agriculture</b>							
<b>Mallee RCS: Improved productive capacity &amp; resilience of dryland agricultural soils within the Victorian Mallee</b>	On-ground R&D sites managed to identify, validate and promote improved management practices	number	9	10	10	0	1
	Stock containment areas established	number	34	53	26	0	0
	Sand dunes reclaimed	number	22	11	26	0	0
	Vegetation (non-indigenous) established for salinity management	hectares	57	39	95	0	0
	Proportion of the Mallee with more than 50% groundcover in March	per cent	88	95	95	71	70



Stock containment helps maintain groundcover and reduce erosion during periods of low rainfall.

**Table 12** | Performance against 2019–20 Land activity measures.




Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Irrigated Land</b>						
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	✓
Promote sustainable irrigation management practices to support the growth and viability of regional communities	Irrigation infrastructure upgrades/ conversions for improved WUE	hectares	201	35	763	✓
	Irrigation scheduling equipment installed for improved WUE	hectares	66			
Support implementation and reporting of Victoria's salinity impact obligations under the Basin Salinity Management 2030 Strategy	Compliance with DELWP guidelines for Annual BSM2030 Implementation Report	per cent	100	100	0	✓
	Accountable action reviews progressed as per BSM2030 Register	per cent	75	100	-25	■
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	178	332	0	✓
	Irrigation scheduling equipment installed for salinity benefits	hectares	154			
	Annual Mallee Salinity Investment Plan priority activities progressed	per cent	100	100	0	✓
<b>Dryland Agriculture</b>						
Implement priority actions established by the Mallee Dryland Sustainable Agriculture Strategy (2017-23)	On-ground research & demonstration 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	✓



Centre Pivot.



**Table 13** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority ‘Land’ activities and associated performance targets.

Program/Initiative	Key 2019–20 outputs and achievements	
<b>Sustainable Irrigation Program</b>	<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"> <li>Ongoing delivery of Mallee Irrigation Incentives Program in partnership with Agriculture Victoria (DJPR). These incentives supported <b>19</b> works projects to be undertaken by irrigators for improved on-farm water use efficiency and subsequent reductions in groundwater accessions. They delivered <b>201</b> ha of irrigation infrastructure upgrades, <b>66</b> ha of water use monitoring equipment, and <b>8</b> irrigation drainage management plans covering <b>130</b> ha.</li> </ul>  <p>Irrigation incentives support improvements in on-farm water use efficiency.</p> <ul style="list-style-type: none"> <li>Ongoing coordination and communication of the Seasonal Annual Use Limit (SAUL) adjustment process.</li> <li>Annual BSM2030 implementation as per government requirements; with the salinity impact of irrigation development for Nyah to SA Border SMP estimated to have increased by 0.7 EC to account for irrigation development in 2018–19. No change was determined for the Nangiloc-Colignan SMP, bringing the total Mallee salinity credit uptake to 18.0 EC as of June 2019; within the 20.62 EC salinity credit allocations for these areas.</li> </ul>	
<b>Mallee Salinity Investment Plan</b>	<p>Activities delivered by projects funded from Salinity Offsetting Charges and the Salinity Offset Levy, (collected specifically to offset salinity impact of irrigation development from Nyah to the South Australian Border).</p> <ul style="list-style-type: none"> <li>Ongoing delivery of the Mallee Irrigation Incentives Program for salinity benefit in 2019–20 supported the implementation of <b>22</b> individual works projects, delivering; <b>178</b> ha of irrigation infrastructure upgrades, <b>154</b> ha of water use monitoring equipment, and <b>9</b> irrigation drainage management plans covering <b>96</b> ha. Collectively the salinity benefits (i.e. reduced irrigation recharge) achieved by these works is estimated to be a <b>4,171</b> tonnes/year reduction in salt to the Murray River.</li> </ul>  <p>Lake Hawthorn.</p> <ul style="list-style-type: none"> <li>Delivery against <b>Water for Victoria Action 4.8</b> (i.e. improve salinity management in the Mallee) progressed through a review of the Mallee Salinity Management Framework and associated Five-year Investment Plan to ensure that regional priorities/activities are consistent with policy changes; and through ongoing delivery against these priorities.</li> </ul>	
<b>National Landcare Program</b>	<p>Regional Land Partnership Soils Services are supported by the Mallee CMA through funding provided by the Australian Government’s National Landcare Program.</p> <p>Funding secured in 2019–20 under the Federal Government’s Regional Land Program ‘Soils Services to deliver against their stated priorities for wind erosion and soil organic carbon. Targeted programs implemented in partnership with Agriculture Victoria, Birchip Cropping Group, and Mallee Sustainable Farming included:</p> <ul style="list-style-type: none"> <li>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.</li> </ul>  <p>Canola crop.</p> <ul style="list-style-type: none"> <li>Ongoing implementation of the revised Mallee Soil Erosion and Land Use Monitoring Framework to deliver against federal/state/regional MER requirements.</li> <li>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.</li> <li>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.</li> </ul>	

## 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 however 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* (the Amendment Act) 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 over the next five years, the Mallee CMA will continue to work with regional partners and local stakeholders to deliver against 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 stated 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 (2016)
- Mallee Indigenous Ecological Knowledge Guidelines (2016)
- DELWP Aboriginal Inclusion Plan: Munganin – Gadhaba (2016–20)
- Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (2016)
- Mallee CMA Indigenous Participation Plan (2016).

### Outcome Indicators and Performance Measures

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

Since records commenced in 2016, the Mallee CMA has undertaken over 400 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 Aboriginal Victoria (AV); 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 AV 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 131 and 449 respectively.

Further detail on Culture and Heritage condition benchmarks, medium-term trends, and the expected contribution of activities delivered 2019–20 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 organisations 2019–20 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 in the reporting period.

### Key initiatives and projects

Initiatives which supported our delivery against the stated priority activities and associated performance targets in 2019–20 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	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Mallee RCS: Increased number of Cultural Heritage assessments</b>	Cultural heritage assessments undertaken by MCMA programs at proposed works sites	number	n/a	51	113	144	98
<b>Mallee RCS: Increased number/area of Cultural Heritage Management Plans (CHMPs)</b>	CHMP's approved and lodged by MCMA with Aboriginal Victoria	number	n/a	n/a	5	7	2
		area	n/a	n/a	17,916	300	812
<b>Mallee RCS: Increased number of registered Aboriginal features and places</b>	Registered Aboriginal Places (ACHRIS)	number	n/a	4,274	4,334	4,345	4,405
	Components Recorded (ACHRIS)	number	n/a	5,679	5,832	6,031	6,128

**Table 15** | Performance against 2019–20 Culture and Heritage activity measures.

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Mallee RCS: Implement all activities that may affect Indigenous sites, places, values or communities in line with Mallee CMA Cultural Heritage Assessment Policy (2016) to ensure that all obligations set out by the Aboriginal Heritage Amendment Act 2016 are met.</b>	Non-compliance reports registered	number	0	0	0	✓
<b>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.</b>	MCMA cultural heritage assessments engaging and/or employing Aboriginal people	per cent	100	100	0	✓
<b>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.</b>	Cultural heritage assessments undertaken by MCMA programs at proposed works sites	number	98	98	0	✓
	Cultural heritage management plans approved and lodged by MCMA with Aboriginal Victoria	number	2	2	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 2019–20 outputs and achievements
<b>Waterway Health Program</b>	<p>Projects including the Regional Riparian Action Plan (RRAP), On-Ground Works, Water Statutory Functions, and Ramsar Management are supported by the Mallee CMA, through funding from the Victorian Government's Waterway Health Program. Works are targeted to priority waterways with the objective of improving associated riparian values.</p> <p>1 Cultural Heritage Management Plan lodged: Karadoc sandbar, Kings Billabong Park (783 ha).</p>
<b>Our Catchments Our Communities</b>	<p>The Our Catchments, Our Communities Program is supported by the Mallee CMA, through funding from the Victorian Government. Works are focused on enhancing the ecological function of priority waterways through integrated catchment management.</p> <p>1 Cultural Heritage Management Plan lodged: Uttiwillock Wetland (29 ha);</p>
<b>Across all Programs</b>	<p>All 2019–20 funding initiatives delivering on-ground works programs have contributed to the delivery of <b>98</b> cultural heritage assessments undertaken at proposed works sites.</p> <p>Through these programs, Mallee CMA continues to apply a unique method of bollard installation developed in 2018–19. The traditional method of digging a hole and concreting a bollard would trigger a CHMP in culturally sensitive areas, 200 m either side of a known or historical waterway. The new method involves securing bollards into robust precast concrete slabs that are placed on the ground. In consultation with Traditional Owners, Mallee CMA eliminates ground disturbance using these bollards in sensitive locations to ensure the protection of cultural heritage.</p> <div> </div> <p>Merbein Common bollard installation works - using bollards secured into precast concrete slab, no ground disturbance is required for culturally sensitive areas.</p>



A spearhead found near Lindsay Island.

## Business Objective 3

Strengthen our capacity to operate as a corporately and socially responsible organisation.

### 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 CaLP Act 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 will do this through leveraging strengths from difference in gender, culture, generational groups, ethnicity, and 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 stated outcome will also contribute to achieving priorities established by key policy and strategic frameworks, including:

- Mallee CMA Risk Management Policy (2020)
- Mallee CMA Cultural Competency Framework (2018)
- Mallee CMA Diversity and Inclusion Plan (2017–22)
- Mallee CMA HR and Integrity 2020 Strategy
- Mallee CMA Internal Control, Compliance & Integrity Framework (2020)
- Mallee CMA Quality Objectives (2019)
- Mallee CMA Strategic Internal Audit Plan (2019–20)
- Mallee CMA Asset Management Strategy (2019–21)
- Mallee CMA Fraud and Corruption Prevention Plan (2020–23)
- Mallee CMA Social Procurement Strategy (2019–21)
- Mallee CMA Workforce Strategy (2019–22)

- Ministerial Expectations for 'leadership, diversity and culture', and 'improved performance and demonstrating outcomes' (2019–20).

### 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 2019–22 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 have also been progressed in line with legislated requirements and government guidelines over the 2015–20 reporting period. This has included completion of the Mallee Floodplain Management Strategy (2018), submission of the Victorian Mallee Irrigation Region Land and Water Management Plan for government endorsement (2020), and a mid-term review of the Mallee Waterway Strategy. Final review and renewal processes for the 2013–19 RCS also commenced in 2019–20, with a mid-term review completed in 2017.

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 have included delivering engagement activities in partnership with diverse community groups (e.g. Sunraysia Multicultural Ethnic

Communities), completion of cultural awareness training by 64 per cent of Mallee CMA staff, 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.

Through the implementation of the newly-developed Mallee CMA Social Procurement Strategy we are committed to embedding social procurement throughout the organisation's procurement process, by building social procurement capability to enable the organisation to undertake, measure and report on social procurement initiatives. Reporting on the implementation of the Strategy will commence in 2020–21.

### Activity Indicators and Performance Measures

Performance against the organisations 2019–20 priority activities for progressing Governance and Compliance outcomes, including actual delivery against budgeted targets is provided in Table 18. Overall, 90 per cent of performance targets were achieved or were within 5 per cent of the budgeted outputs.

Annual variance in budgeted output actuals resulted in six of the 21 output types reported in 2019–20 delivered more than +/- 10 per cent of annual target. This encompassed 5 (irrigation structure, fence, crossing, engagement event and partnership) exceeding targets; and 1 (watering regime) not meeting targets as a result of the planned program being scaled back in response to dry seasonal conditions.

Due to the Covid-19 pandemic the VPSC 'People Matter' survey was postponed. A shorter version focusing on Health and Wellbeing is planned for October 2020.

### Key initiatives and projects

An overview of key initiatives that supported delivery against the stated Governance and Compliance priority activities and associated performance targets in 2019–20 is provided in Table 19.



Kangaroo at Wimmera Mallee Pipeline Wetland.



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

Outcome Indicators	Performance measures	Unit of measure	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Improved performance and demonstrating outcomes</b>							
<b>Ministerial Expectation:</b> 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	n/a	0	0	0
<b>MCMA QMS: Accountability</b>	Quality Management System (QMS) initiatives implemented to support ongoing improvements/efficiencies	number	n/a	n/a	5	4	6
<b>MCMA QMS: Guarantee high-quality outcomes</b>	Government approval/acceptance of MCMA Annual Reports, Corporate Plans, Board/Audit & Risk Committee performance assessment reports, and legislated regional strategies/ action plans	per cent	100	100	100	100	100
<b>MCMA QMS: Integrity embedded within decision making</b>	Statutory requirements (permits, referrals, advice, and licenses) responded to within the prescribed period (<20 working days)	per cent	100	98	100	100	100
<b>MCMA QMS: Excellence in everything we do.</b>	Registered stakeholder feedback which is 'positive'	per cent	94	97	98	89	100
	Participants rating the delivery of information at engagement activities as good/excellent	per cent	95	89	92	97	98
<b>Leadership, diversity and culture</b>							
<b>Ministerial expectation:</b> Increased diversity and inclusion in the workplace	MCMA Diversity & Inclusion Plan workforce initiatives implemented	per cent	n/a	n/a	n/a	97	100
<b>MCMA QMS: Leveraging, Innovation and Knowledge sharing.</b>							



Environmental watering at Hattah.

**Table 18** | Performance against 2019–20 Governance and Compliance activity measures.

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Improved performance and demonstrating outcomes</b>						
<b>Ministerial Expectation:</b> 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	✓
<b>MCMA QMS: Satisfy Investors</b> <b>Ministerial Expectation:</b> Demonstrate outcomes of government investment into waterways & catchment health  <b>MCMA QMS: Responsiveness</b>  <b>CaLP Act SoO: NRM strategies and action plans developed in line with government policy and guidelines</b>	Compliance with DELWP 2018-19 Annual Report guidelines	per cent	100	100	0	✓
	Compliance with DELWP 2020-25 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	✓
	Strategic planning, evaluation and reporting frameworks being developed in line with government requirements	number	12	12	0	✓
<b>MCMA QMS: Delivery on-time every time within budget</b>	Annual variance in budgeted financial (expenditure) actuals (+/-)	per cent	-9	<10	0	✓
	Annual variance in budgeted output actuals (+/-)	per cent	29	<10	19	■
<b>Ministerial Expectation:</b> Deliver efficiency through shared services, smarter procurement and lower-cost technology  <b>MCMA QMS: Continuously improve systems, processes and reporting</b>	Management actions implemented to improve MCMA QMS; including initiatives delivered and/or supported to achieve efficiencies	number	6	6	0	✓
<b>MCMA QMS: Integrity in procurement and HR practices</b>	MCMA staff, Board, and committee members completing Fraud & Corruption prevention awareness training	per cent	100	100	0	✓
	Compliance with conflict of interest policy ( <i>nil non-compliance reports</i> )	per cent	100	100	0	✓
	Compliance with HR delegation policy ( <i>nil non-compliance reports</i> )	per cent	100	100	0	✓
<b>MCMA QMS: Satisfy Customers</b>	'Works on waterway' statutory referrals responded to within required timeframes (< 20 days)	per cent	100	100	0	✓
	Registered stakeholder feedback which is 'positive'	per cent	100	>90	0	✓
	Participants rating their overall enjoyment of MCMA delivered events/activities as good/excellent (or fair/poor)	per cent	99	>90	0	✓
	Participants rating the delivery of information at MCMA events/activities as good/excellent (or fair/poor)	per cent	98	>90	0	✓

Continued...

Table 18 | Performance against 2019–20 Governance and Compliance activity measures. *Continued...*


Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Leadership, diversity and culture</b>						
<b>Ministerial Expectation:</b> Implement strategies that will increase cultural diversity in the workforce and gender equity in executive leadership  <b>MCMA QMS: Leadership, diversity and culture</b>	MCMA Diversity & Inclusion Plan key activities/initiatives progressed	number	18	18	0	✓
	Priorities established by the MCMA Diversity & Inclusion Plan annual 'Action Plan' implemented	per cent	100	100	0	✓
<b>Ministerial Expectation:</b> Encourage staff participation in the Victorian Public Sector Commission "People Matter Survey"  <b>MCMA QMS: Leadership, diversity and culture</b>	Staff participating in 'People Matter' survey	per cent	n/a	85	n/a	■
<b>MCMA QMS: Strengthen Learning &amp; Development</b>	MCMA Learning & Development Framework priority actions implemented	number	7	7	0	✓
	MCMA staff participating in Learning & Development initiatives	per cent	100	100	0	✓
<b>MCMA QMS: Develop a Positive Risk Culture</b>	MCMA risk culture improvement actions implemented	number	3	3	0	✓



Fishing platform installed at Kings Billabong.



**Table 19** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Governance and Compliance' activities and associated performance targets

Program/Initiative	Key 2019–20 outputs and achievements	
<b>Catchment Governance Program</b>	<p>The Mallee CMA delivers against corporate and statutory functions set out under CaLP Act through funding support provided by the Victorian Government.</p> <ul style="list-style-type: none"> <li>• <b>10</b> Ordinary Board Meetings conducted and ongoing operation of associated sub-committees; including the Audit and Risk Committee (<b>10</b> meetings) and Remuneration Committee (<b>2</b> meetings).</li> <li>• Ongoing operation of the <b>Land and Water Advisory Committee</b>, maintaining a two-way communication channel between Board and members of the Victorian Mallee community (<b>3</b> meetings).</li> <li>• Development, implementation and reporting of business plans to support compliance with legislative obligations; including the 2018-19 <b>Annual Report</b>, 2020-25 <b>Corporate Plan</b>, 2017-22 <b>Diversity and Inclusion Plan</b>, and <b>Learning and Development Framework</b> in accordance with Government guidelines.</li> <li>• Development and implementation of the Mallee CMA <b>Social Procurement Strategy</b>.</li> </ul> <ul style="list-style-type: none"> <li>• <b>16</b> information management systems maintained, including: social media platforms and MCMA website; Technology One, financial and document management systems; and Rabid Global Staff &amp; Contractor Induction and Incident Reporting system. Delivery against the organisations 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.</li> </ul>	
	 <p>Mallee CMA Plans and Frameworks.</p>	
<b>Waterway Health Program</b>	<p>Water Statutory Functions as required under Part 10 and 11 of the Water Act (1989) are delivered by the Mallee CMA, through funding from the Victorian Government's Waterway Health Program.</p> <ul style="list-style-type: none"> <li>• Delivery against the Mallee CMA statutory responsibilities with regard to floodplain management and works on waterways included: <b>62</b> referrals, <b>52</b> approvals/advice, and <b>10</b> permits. Average response time in 2019–20 was <b>10</b> days.</li> <li>• Supporting development, public consultation and submission processes associated with <b>1</b> local government (Mildura Rural City Council) planning scheme amendment.</li> <li>• Ongoing application of <b>Floodzoom</b> program, including Planning System module for processing and responding to integration floodplain referrals, advice and works on waterways permits.</li> <li>• Ongoing participation in <b>6</b> forums, including the State-wide Floodplain Management Forum, Flood Study Inception Meetings, MRCC Municipal Emergency Management Planning Committee, and Mildura Flood Working Group.</li> </ul>	



Beulah Weir assists with flood mitigation on Yarriambiack Creek.

## Theme: Integrated Catchment Management

Mallee CMA programs and projects are developed to deliver against regional priorities as detailed in the 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)
- Our Catchments, Our Communities Strategy (2016–19).
- 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 (2019–20).

### Outcome Indicators and Performance Measures

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

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 identifying carbon abatement partnership opportunities with Traditional Owners; and establishing carbon yields and implementation costs associated with environmental plantings to inform CMA's assisting Water Corporations with carbon offsetting requirements: both of which are being undertaken in partnership with each of the Victorian CMA's. 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.

Through our membership on the Northern Mallee Integrated Water Management forum, Mallee CMA has led the delivery of three measures which aimed to enhance urban waterway values and support resilient communities (i.e. Lake Hawthorn & Ranfurly IWM Plan, Kings, Psyche & Woorlong Wetland Management Strategy, and Supporting Aboriginal Values). Significant collaboration with stakeholders has resulted in the completion of the three projects, the outcomes of which will be used to implement collaborative water management opportunities. Support is also being provided to a fourth measure; the Lower Mallee Water led Sunraysia Regional Water Balance project.

Mallee CMA programs and projects are developed to deliver against regional priorities as detailed in the RCS. 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. Under this framework key threatening processes and associated interventions are prioritised 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. The effectiveness of this framework is demonstrated by the extent to which Mallee CMA NRM activities are delivering against priority actions (90 per cent average), and the high proportion of associated works that are being delivered within priority landscapes (92 per cent average) over the 2015–20 reporting period.

Ongoing implementation of the 2016–20 Mallee CMA Integrated Catchment Management (ICM) project: “The Tyrrell Project – Ancient Landscapes, New Connections” is delivering substantial progress against RCS identified actions for one of its 17 priority landscapes; the Avoca Basin Terminal Lakes System and Creeklines. It is also directly delivering against Action 3.1 of the State-wide Our Catchments, Our Communities Strategy (OCOC); specifically, in regards to the Strategies’ stated success measure of ‘integrated catchment management projects delivering against RCs priorities’.

## Activity Indicators and Performance Measures

Performance against our organisations 2019–20 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 in the reporting period.

## Key initiatives and projects

An overview of key initiatives that supported our delivery against the stated Integrated Catchment Management priority activities and associated performance targets in 2019–20 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	2015–16	2016–17	2017–18	2018–19	2019–20
<b>Climate Change</b>							
<i>Ministerial Expectation:</i> Active/collaborative investigation into new opportunities to sequester carbon	Carbon sequestration/offset initiatives supported	number	n/a	n/a	n/a	2	3
<i>Ministerial Expectation:</i> Increased landscape resilience under a changing climate	Mallee NRM Plan for Climate Change adaptation actions (6 year) delivered against	per cent	n/a	88	88	94	94
<b>Resilient and liveable cities and towns</b>							
<i>Ministerial Expectation:</i> 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	n/a	4	4
<b>Improved performance and demonstrating outcomes / Waterway and catchment health</b>							
<i>Ministerial Expectation:</i> Increased application & promotion of ICM strategies which support enhanced environmental, social, cultural & economic outcomes	Mallee RCS strategic actions (6 year) delivered against	per cent	76	92	93	95	95
	On-ground works delivered within Mallee RCS priority landscapes	per cent	n/a	81	92	99	96
	Initiatives implemented to demonstrate ICM outcomes	number	0	1	1	1	1



Table 21 | Performance against 2019–20 Integrated Catchment Management activity measures.

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Climate Change</b>						
Explore opportunities to sequester carbon / provide carbon offsets in partnership with land managers and Traditional Owners	Carbon sequestration/offsets opportunities progressed in partnership with land managers and other regional stakeholders	number	3	3	0	✓
	Stakeholders engaged in the identification and planning of carbon sequestration/offset activities	number	291	250	16	✓
<b>Resilient and liveable cities and towns</b>						
<b>Ministerial Expectation:</b> 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	IWM forums participated in	number	1	1	0	✓
<b>Ministerial Expectation:</b> Participate in the development and implementation of integrated water management plans, particularly through prioritising measures to enhance urban waterway values	IWM priority measures supported	number	4	4	0	✓
<b>Improved performance and demonstrating outcomes</b>						
<b>Ministerial Expectation:</b> Work collectively via Vic Catchments membership to strengthen collaboration/performance in the Catchment management sector in Victoria	Priority actions/projects identified within Vic Catchments 2018-19 Strategic Framework actively supported	per cent	100	100	0	✓
<b>Ministerial Expectation:</b> Deliver regional Our Catchments, Our Communities Integrated Catchment Management program, including leading the development and implementation of new catchment partnership agreements (CPA).	OCOC priority actions progressed annually (i.e. CMA resp.)	number	6	6	0	✓
	Priority actions identified by the CPA Annual Plan progressed annually	per cent	86	>75%	0	✓
<b>Mallee RCS:</b> Support the ongoing measurement, and where required development of catchment condition (long term); outcome (medium-term) and output (short term) indicators to facilitate improved reporting and evaluation processes at both the regional and state scale	Regional 'MER' focused forums coordinated	number	6	6	0	✓
	'MER' Plans/Frameworks developed, implemented or reported annually	number	6	6	0	✓

Continued...

**Table 21** | Performance against 2019–20 Integrated Catchment Management activity measures. *Continued...*

Activity Indicators	Performance measures	Unit of measure	2019–20 actual	2019–20 target	Performance variation (%)	Result
<b>Waterway and catchment health</b>						
<b>Ministerial Expectation:</b> Better demonstrate the environmental, social, cultural and economic outcomes achieved through government investment into waterways & catchment health	Materials produced/promoted annually to promote the value of, and outcomes achieved through integrated catchment management (ICM) approaches to regional delivery.	number	12	13	-8	✓
<b>Mallee RCS:</b> Support the identification, development and implementation of landscape-scale programs which address key threats to the Mallee's natural, cultural and productive landscapes; while delivering environmental outcomes for multiple asset classes	RCS priority landscape Implementation Plans reviewed/updated	per cent	100	100	0	✓
<b>Mallee RCS:</b> Target NRM activities to locations that will deliver the greatest environmental, social and economic return on investment.	On-ground works outputs delivered within RCS priority landscapes.	per cent	96	>75	0	✓



Cronomby Tanks at Woomelang provides opportunities for bushwalking, birdwatching and fishing.

**Table 22** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Integrated Catchment Management' activities and associated performance targets.

Program/Initiative	Key 2019–20 outputs and achievements	
<b>Catchment Governance Program</b>	<p>The Mallee CMA delivers against corporate and statutory functions set out under CaLP Act through funding support provided by the Victorian Government.</p>	
	<p>Ongoing participation in regional and state-wide planning, evaluation and reporting forums, including:</p> <ul style="list-style-type: none"> <li>• 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, OCOC Annual Summit, and VCMA 'Climate Ready Natural Resource Management Planning in Victoria' website)</li> <li>• Membership of the 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.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Application and maintenance of regional evidence base to support the collection, collation and communication of information required by RCS and Corporate Plan reporting frameworks.</li> </ul>
<b>Our Catchments Our Communities</b>	<p>The Our Catchments, Our Communities Program is supported by the Mallee CMA, through funding from the Victorian Government.</p>	
	<p>Delivery against Action 1.2: of the OCOC Strategy in 2019–20 (i.e. Strengthen community engagement in regional planning and implementation) has included:</p> <ul style="list-style-type: none"> <li>• Ongoing engagement of <b>2</b> community advisory committees (Land and Water Advisory Committee and Aboriginal Reference Group) and <b>3</b> regional partnership committees (Mallee Catchment Partnership Agreement Forum, Water-Biodiversity Catchment Partnership Committee, Sustainable Agriculture Catchment Partnership Committee) to seek member input on regional planning and delivery processes.</li> <li>• Ongoing coordination and facilitation of the <b>Catchment Partnership Agreement</b> forum to enhance knowledge sharing between members and further strengthen collaborative approaches to NRM in the region.</li> <li>• Ongoing implementation of the <b>Mallee Community Capacity for NRM</b> 'Program' Monitoring Framework to quantify the effectiveness and impact of community/stakeholder engagement activities, and determine the extent of capacity change they provide.</li> </ul>	<p>Delivery against Action 2.1 of the OCOC Strategy in 2019–20 (i.e. Ensure alignment between state, regional and local plans that impact on land, water and biodiversity, and Regional Catchment Strategies) has included:</p> <ul style="list-style-type: none"> <li>• Collation and provision of Mallee CMA data for inclusion in the 2019-20 Victorian Catchment Management Authorities' Actions and Achievements Report.</li> <li>• Participation in DELWP Output Data Standard/Output Delivery Standard processes to provide input into the Biodiversity Division review.</li> </ul> <p>Delivery against Action 3.1 of the OCOC Strategy in 2019–20 (i.e. Implement an investment framework that supports coordination and accountability for the delivery of RCS priorities) has included:</p> <ul style="list-style-type: none"> <li>• Implementation of the 2016–20 Mallee CMA ICM project: "The Tyrrell Project – Ancient Landscapes, New Connections". This community-driven landscape-scale project is working across the Avoca Basin (RCS priority landscape) to improve environmental assets (e.g. Lake Tyrrell, its creeks and wetlands) and enhance recreational and tourism opportunities.</li> </ul> <p>Opportunities to explore carbon sequestration and provision of carbon offsets in partnership with land managers and traditional owners have included:</p> <ul style="list-style-type: none"> <li>• <b>2</b> key initiatives progressed, including the 'Carbon Abatement Partnership Opportunities with Traditional Owners' project being delivered by VCMA's, and work being undertaken to identify how VCMA's can assist Water Corporations with self-generating carbon offsetting projects.</li> </ul>
	 <p>OCOC, Tyrrell Project logo.</p>	

Continued...



**Table 22** | Key outputs delivered under government programs/initiatives contributing to the achievement of 2019–20 priority 'Integrated Catchment Management' activities and associated performance targets. *Continued...*

Program/Initiative	Key 2019–20 outputs and achievements	
Integrated Water Management Program	The Integrated Water Management Program is supported by the Mallee CMA, through funding from the Victorian Government.	
	<p>Delivery of three Integrated Water Management (IWM) Projects in 2019–20 included:</p> <ul style="list-style-type: none"> <li>• Significant community consultation to collate and develop 1 report on Community Values at Psyche Bend Lagoon and Woorlong Wetland to inform Integrated Water Management Planning</li> <li>• 1 remediation options assessment study on Psyche Bend Lagoon and Woorlong Wetland to inform future management of the site.</li> <li>• Significant collaboration with First People of the Millewa Mallee to undertake an Aboriginal Waterways Assessment at Psyche Bend Lagoon and Woorlong Wetlands Complex.</li> </ul>	<ul style="list-style-type: none"> <li>• Successful completion of the Lake Ranfurly and Lake Hawthorn Integrated Management Plan in collaboration with stakeholders to better coordinate actions between responsible agencies to manage the lakes.</li> </ul>



Psyche Bend Lagoon was a key location for Aboriginal Waterway Assessments undertaken in 2019–20.

# 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 the table below.

**Table 23** | Five year financial summary.

Five year financial summary	2019–20 \$'000	2018–19 \$'000	2017–18 \$'000	2016–17 \$'000	2015–16 \$'000
<b>Revenue</b>					
Commonwealth Government contributions	4,538	4,650	5,646	6,252	4,455
State Government contributions	7,500	7,181	7,293	6,530	7,194
Other revenue	6,275	3,962	4,055	3,142	6,064
<b>Total Revenue</b>	<b>18,313</b>	<b>15,793</b>	<b>17,026</b>	<b>15,924</b>	<b>17,713</b>
<b>Expenditure</b>					
Employee benefits expenses	5,817	4,957	5,000	4,789	5,250
Grants and Incentives	1,083	1,365	1,518	1,766	2,730
Other operating expenses	9,966	10,470	9,161	7,817	10,088
<b>Total Expenditure</b>	<b>18,866</b>	<b>16,793</b>	<b>15,679</b>	<b>14,372</b>	<b>18,068</b>
<b>Assets</b>					
Financial assets	42,768	41,544	41,990	40,933	38,997
Non-financial assets	664	738	953	1,152	1,224
<b>Total Assets</b>	<b>43,432</b>	<b>42,282</b>	<b>42,943</b>	<b>42,085</b>	<b>40,221</b>
<b>Liabilities</b>					
Current liabilities	1,460	1,565	1,286	1,672	1,616
Non-current liabilities	161	122	80	65	104
<b>Total Liabilities</b>	<b>1,621</b>	<b>1,687</b>	<b>1,366</b>	<b>1,737</b>	<b>1,720</b>

### 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 2020–21.

Mallee CMA reported a surplus of \$1,214,514 (2019: deficit \$982,521) for the financial year. Assets exceed liabilities by \$41,810,401 (2019: \$40,595,887). Financial assets \$42,767,798 (2019: \$41,519,875) of which \$32,775,380 is held for Salinity Offset Funds (2019: \$31,576,020).

### 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

The Mallee CMA has provided assistance to certain companies and organisations. Financial assistance provided in 2019–20 was as follows:

**Table 24** | Disclosure of grants and transfer payments.

Organisation	Payments \$	Organisation	Payments \$
<b>Victorian Landcare Program</b> On-ground works that protect and restore the Victorian landscape.		<b>Safeguarding Hattah &amp; Raak Plain Catchment Areas</b> Pest plant and animal control.	
Annuello Landcare Group	11,119	4 Landholders	39,500
Berrillock Landcare Group	9,119	<b>Yarrara Ridge: Conserving Victoria's Semi-arid Environments</b> Pest plant and animal control.	
Beulah Landcare Group	13,119	6 Landholders	39,500
Birchip Landcare Group	13,225	<b>Improving conservation of the Southern Mallee Dunefields</b> Pest plant and animal control.	
Culgoa Landcare Group	8,119	3 Landholders	26,000
Curyo-Watchupga Landcare Group	10,119	<b>Tyrrell: Preserving an Ancient Salina Landscape</b> Pest plant and animal control.	
Hopetoun Landcare Group	21,831	2 Landholders	37,500
Kooloonong-Natya Landcare Group	11,119	<b>Robinvale to Nyah: Conserving Robinvale Plains &amp; Murray</b> Pest plant and animal control.	
Lalbert Landcare Group	9,119	Nyah District Golf Club	10,000
Mallee Landcare Group	13,601	2 Landholders	20,000
Manangatang Landcare Group	13,119	<b>RLP Threatened Species Services</b> Pest plant and animal control, fencing, revegetation and stewardship works.	
Merbein Golf Club	8,000	Birchip Landcare Group	30,000
Millewa Carwarp Landcare	31,729	National Malleefowl Recovery Group	11,000
Murrayville Landcare Group	19,984	1 Landholder	2,000
Nullawil Landcare Group	10,119	<b>RLP Threatened Ecological Communities Services</b> On-ground works for weed and pest animal control, habitat assessments, revegetation and stock exclusion fencing.	
Nyah West Landcare Group	9,119	Hopetoun Landcare Group	29,939
Oz Fish Unlimited	1,578	Nullawil Landcare Group	53,012
Sea Lake Landcare Group	10,119	Waitchie Landcare Group	7,049
Ultima Landcare Group	9,050	<b>Nyah to SA Border Incentives</b> System checks, scheduling (technology improvements).	
Waitchie & District Landcare Group	10,119	5 Landholders	25,744
Woomelang Lascelles Landcare Group	13,119	<b>Salinity Offset Fund</b> Irrigation Incentives, including system checks, scheduling, system upgrades and irrigation drainage management plans.	
Yelta Landcare Group	8,488	25 Landholders	175,493
<b>Regional Riparian Action Plan</b> Pest plant and animal control.		<b>Sustainable Irrigation Program</b> Irrigation Incentives, including system checks, system upgrades and irrigation drainage management plans.	
Nyah District Lions Club	45,000	15 Landholders	180,536
<b>Improving the Health of Waterway program</b> Pest plant and animal control, habitat mapping and track restoration.		<b>TOTAL</b>	
Oz Fish Unlimited	18,182		1,128,055
1 Landholder	10,000		
<b>Our Catchments Our Communities</b> Pest plant and animal control, fencing, revegetation works and track maintenance.			
Tchum Lake Aquatic Club	4,545		
18 Landholders	50,739		
<b>Cowangie Connection</b> Pest plant and animal control.			
7 Landholders	37,285		
<b>Annuello &amp; Wandown: Enhancing Mallee - Murray biolinks</b> Pest plant and animal control.			
2 Landholders	10,000		



## Subsequent events

### Coronavirus restriction in Victoria

The State of Victoria has introduced more restrictions post balancing date in response to the “second wave” of Coronavirus pandemic. The measures implemented included stricter limitations on the operation of businesses in Victoria. The tighter restrictions have resulted in

the closure of businesses and further reductions in commercial activities, which may directly or indirectly affect Mallee CMA. The Victorian Government has agreed policies to address the financial impacts of Coronavirus on some of the State controlled entities. These policies will ensure the Mallee CMAs’ continued operation throughout the Coronavirus pandemic.



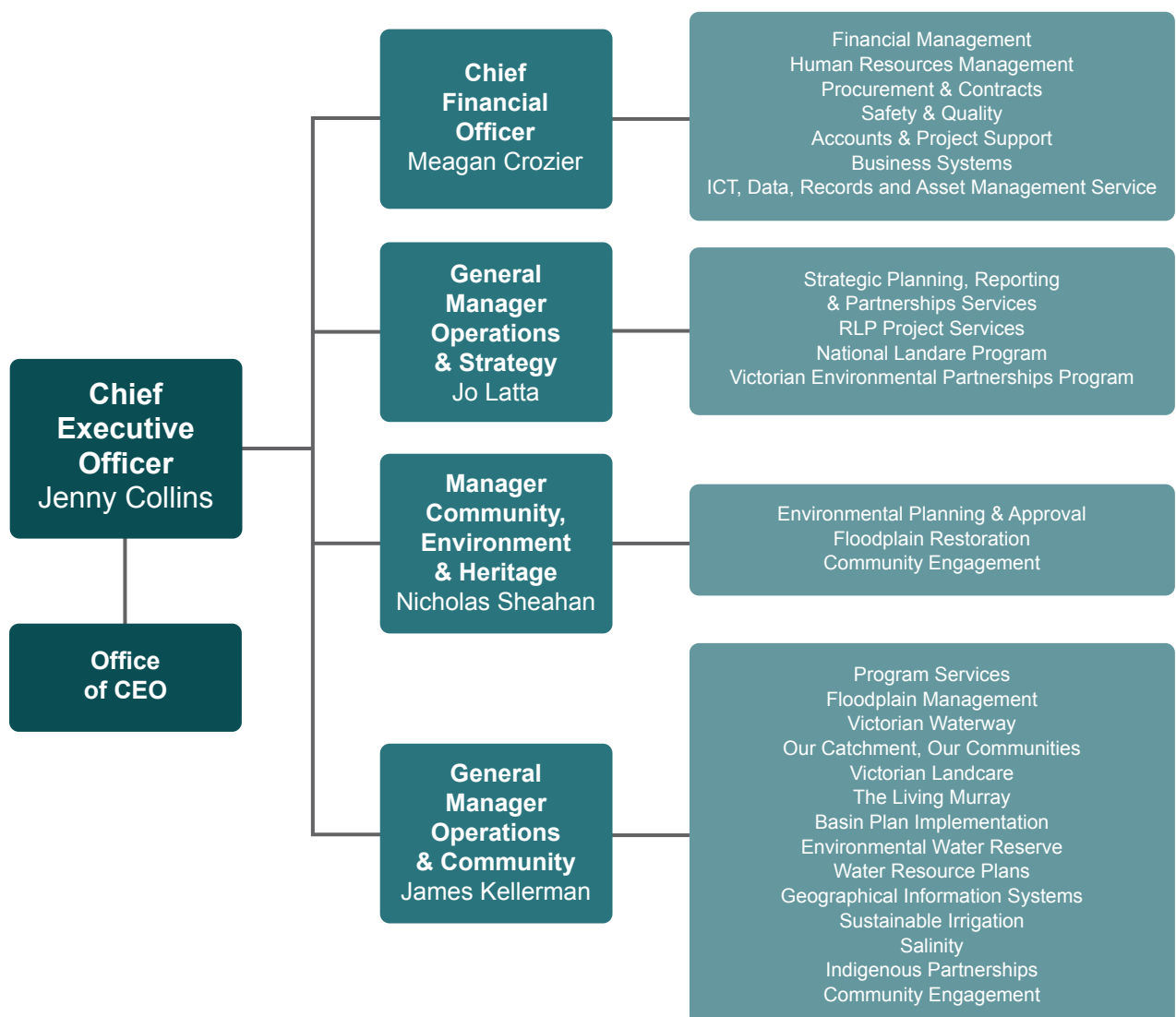
Sarah Holmes from EnviroEDU a local environmental education organisation.

# 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 2019–20.

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 and a Salinity Accountability Advisory Committee 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.

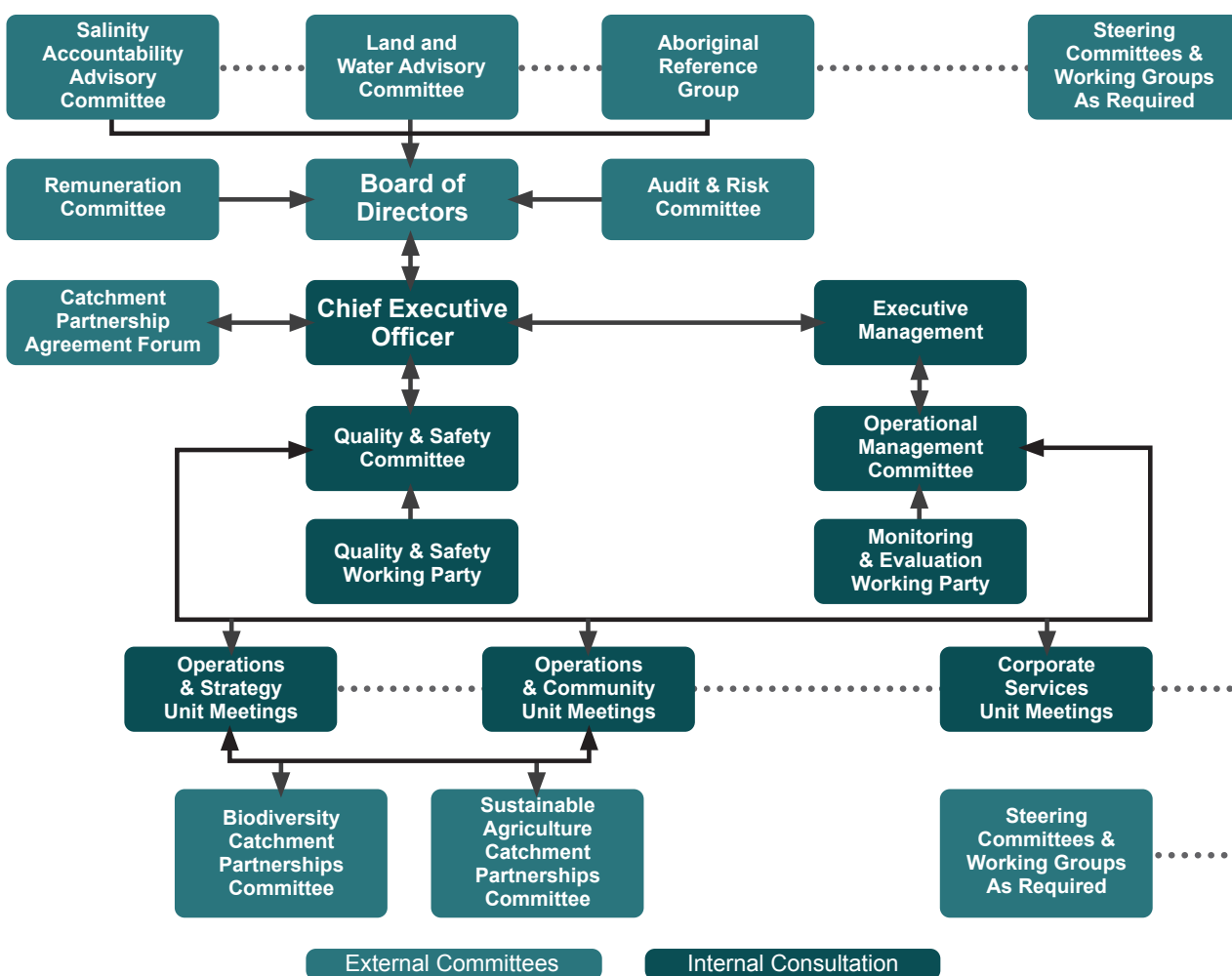


Figure 5 | Mallee CMA organisational and governance structure 2019–20.



## 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 the 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 as:

- Chair - Mallee CMA Remuneration Committee;
- Chair - Victorian Catchments; and
- Member - Mallee CMA 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 and is a member of the Board of Mallee Family Care.

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 as:

- Deputy Chair - Mallee CMA Board;
- Chair - Salinity Accountability Advisory Committee; and
- Member - Mallee CMA 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 was a Director of Mallee Sustainable Farming up until 30 June 2018 and Chair of the Murray Primary Health Network North West Community Consultative Committee. Allison formerly held roles with the Australian Table Grape Association as the Manager for Communications and Industry Analysis, and the Murray Primary Health Network as a Workforce Development Officer.

Allison's background includes over 10 years as a Human Resource Manager in agribusiness, extensive work in 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 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 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 as:

- Member - Land and Water Advisory Committee; and
- 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 as:

- Member - Audit and Risk Committee; and
- Proxy - Aboriginal Reference Group.

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 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) for eight years.

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 with her husband in 2013.

Monica currently represents the Mallee CMA 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.

### **Geoff Anderson**

Geoff's Board membership expired during the reporting year, his term of appointment was from 12 November 2016 to 30 September 2019.

### **Tony Martin**

Tony's Board membership expired during the reporting year, his term of appointment was from 01 October 2015 to 30 September 2019.



### Board meetings attended

Ten Ordinary Board Meetings (OBMs) were held during the 2019–20 financial year. The Board Chair approved all Board member absences during the reporting period.

**Table 25** | Board membership, terms and meeting attendance 2019–20.

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	8
Robert Matthews	01 October 2017	30 September 2021	10	10
Jacquelyn Turfrey	01 October 2017	30 September 2021	10	8
Janice Kelly	01 October 2019	30 September 2023	7	7
Monica Munro	01 October 2019	30 September 2023	7	7
Tony Martin <sup>(1)</sup>	01 October 2015	30 September 2019	3	2
Geoff Anderson <sup>(1)</sup>	12 November 2016	30 September 2019	3	3

<sup>(1)</sup> Membership expired during the 2019–20 period.

### Audit and Risk Committee membership

The Audit and Risk Committee (ARC) consisted of the following members in 2019–20:

- Allison McTaggart, (Chair) Mallee CMA Board Member
- Kellie Nulty, Mallee CMA Board Member (New appointment 23 October 2019)
- Tony Martin, Mallee CMA Board Member (Board term expired 30 September 2019)
- Jacquelyn Turfrey, Mallee CMA Board Member
- Grant Martinella, Independent Member (as of April 2020 extension of appointment to 30 April 2022)
- Inga Dalla Santa, Independent Member (as of April 2020 extension of appointment to 30 April 2023)

The role of the ARC is to oversee and advise the Mallee CMA on matters of accountability and internal control affecting its operations. Key responsibilities of the ARC include the oversight of:

- Financial performance and the financial reporting process, including the annual financial statements;
- The scope of work, performance and independence of internal audit;
- The scope of work, performance and independence of the external auditor and maintain effective communication (including the Auditor General and the Auditor General's duly appointed agents and representatives);
- The operation and implementation of the risk management framework;
- Matters of accountability and internal control affecting the operations of the Mallee CMA;

- The effectiveness of financial management systems and other systems of internal control;
- Review of Governance Policies;
- The Mallee CMA's process for monitoring compliance with laws and regulations and its own code of conduct and code of financial practice; and
- Review information in the report of operations on financial management, performance and sustainability before it is released to Parliament.

The Mallee CMA Board appoint the ARC members annually and endorse external ARC members for three-year terms with extension of up to a further three years.

Meetings are scheduled monthly, and at any other time on request of a committee member or the internal or external auditor. Not less than nine meetings are held per reporting year. In the reporting period 2019–20, the committee met 10 times. Attendance of committee members is detailed in the table on page 59.

**Table 26** | Audit and Risk Committee membership, terms and meeting attendance 2019–20.

Member	Appointed	Appointment review	Eligible meetings	Attended meetings
Allison McTaggart <sup>1</sup>	25 October 2017	30 September 2020	10	10
Kellie Nulty <sup>2</sup>	23 October 2019	30 September 2020	6	6
Tony Martin <sup>3</sup>	25 October 2015	30 September 2019	3	2
Jacquelyn Turfrey <sup>1</sup>	25 October 2017	30 September 2020	10	7
Grant Martinella	14 December 2015	30 April 2022	10	10
Inga Dalla Santa	24 February 2016	30 April 2023	10	9

<sup>1</sup> Re-appointment 23 October 2019    <sup>2</sup> New appointment 23 October 2019    <sup>3</sup> Board membership term expired 30 September 2019

## Board committees

The Audit and Risk Committee, Remuneration Committee, Salinity Accountability Advisory Committee, and community committees of the Board 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 010 GPOL Chief Executive Officer (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; and
- 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 this policy every two (2) years at the first Remuneration Committee 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; and
- Ensuring records are managed securely and in accordance with Public Record Office Victoria (PROV) Principles.

Members of the Remuneration Committee during the 2019–20 reporting period were:

- Sharyon Peart (Chair), Board Chair;
- John Cooke, Deputy Board Chair; and
- Allison McTaggart, Board Member/Audit and Risk Committee Chair.

The Remuneration Committee met twice during the 2019–20 reporting period.

### Salinity Accountability Advisory Committee

The Salinity Accountability Advisory Committee (SAAC) is pursuant to the Mallee CMA's obligations under the CaLP Act 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:

- All matters relating to Accountable Actions under Schedule B of the Murray-Darling Basin (MDB) Agreement at the regional level;
- The management and maintenance of the Mallee Regional Salt Register; and
- Administration of the Salinity Offset Charges, which are collected to specifically offset Nyah to the South Australian (SA) Border Irrigation Development salinity impact.

The SAAC is not a decision-making body. In broad terms, the committee allows detailed attention to be given to particular matters, and then makes recommendations to the Mallee CMA Board for consideration. The committee may seek specific advice from stakeholders in relation to matters under review before making recommendations to the Board.

Members of the SAAC during the 2019-20 reporting period:

Mallee CMA representatives:

- John Cooke (Chair), Deputy Board Chair
- Robert Matthews, Board Member
- Monica Munro, Board Member
- Don Arnold, Manager Salinity and Irrigation

Agency representatives:

- Department of Environment, Land, Water and Planning (DELWP) representatives
- Lower Murray Water (Board and staff representatives)

Community members:

- Peter Jones
- Owen Lloyd
- Terri Wilson
- Troy Richman

Executive Officer:

- Don Arnold, Manager Salinity and Irrigation

The Salinity Accountability Advisory Committee met three times during the reporting period.

### Land and Water Advisory Committee

In accordance with the Mallee CMA Land and Water Advisory Committee (LWAC) Terms of Reference, the core function of the LWAC is to:

- Provide general advice to the Board on the development and delivery of projects and programs from a community perspective; and
- 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 27** | LWAC membership 2019–20.

Member	Appointed	Appointment review
Robert Biggs (Chair)	24 April 2018	30 June 2022
Keith Barber	23 March 2016	30 June 2021
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 2019–20 reporting period.

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

- Kellie Nulty;
- Robert Matthews; and
- Janice Kelly.

### Aboriginal Reference Group

In accordance with the Mallee CMA Aboriginal Reference Group (ARG) Terms of Reference, the core function of the ARG is to provide advice and guidance to the Mallee CMA on:

- How to engage Aboriginal stakeholders in relevant Natural Resource Management (NRM) project planning;
- Aboriginal stakeholder needs and environmental values, including how these may be addressed through the organisation's work; and
- Emerging Aboriginal stakeholder issues and perspectives relevant to NRM.

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

**Table 28** | ARG membership 2019–20.

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 (FPMMAC)	26 April 2017	30 June 2023
Andrew Kirby	24 April 2018	30 June 2020
Marie Murray	24 April 2018	30 June 2020
Tayla Muir	26 June 2019	30 June 2020

The ARG met four times during the 2019–20 reporting period. At least one Board member attends ARG meetings.

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

- Sharyon Peart; or
- Jacquelyn Turefry (proxy).



# Part 3

## Workforce Data

### Employment and conduct principles

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* without discrimination. Employees have been correctly classified in workforce data collections.

### Public Sector Values and Employment Principles

The Mallee CMA adheres to the *Public Administration Act 2004* established for 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.

To ensure the values of this legislation are embedded within the Mallee CMA's 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 Catchment Management Authority (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 have implemented the following initiatives.

#### Leading the Way

Leading the Way is a Victorian State 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, improve 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 Initiative priorities have been agreed, and a governance structure together with accountability process elements and tools based on leading practice has been developed to support delivery of these strategies.

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

#### COVID-19

With the outbreak of the worldwide Coronavirus (COVID-19) Pandemic, Mallee CMA Recovery Management Team developed and implemented a Pandemic Influenza Action Plan to manage the operational aspects of preparing for, responding to, and mitigating the impacts of this pandemic.

The Action Plan is currently in the Targeted Action Response stage. This stage has staff working from home, and remaining compliant with social distancing and hygiene requirements when in the field.

Mallee CMA is committed to welcoming staff back to a safe and healthy workplace when restrictions allow. Substantial planning, preparation and improvement works have been undertaken at the Main Office site to ensure staff are fully supported and provided with adequate resources for a smooth transition back to work when appropriate.

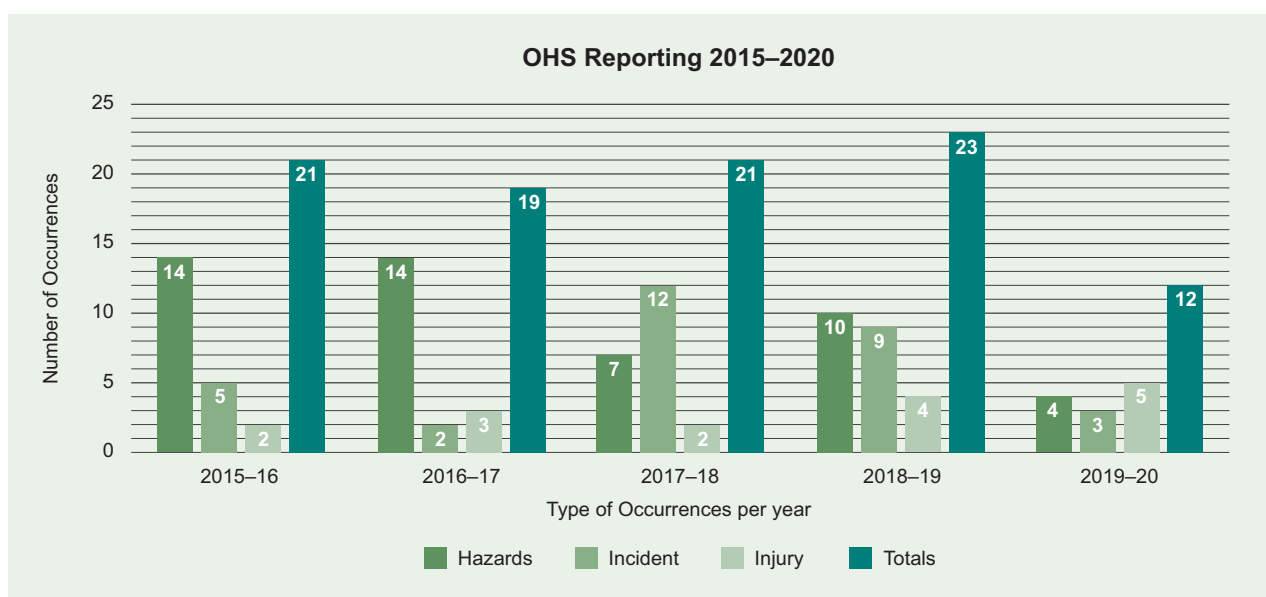
### Training

All staff complete OHS&W training via the online training and reporting portal Rapid Global. Reminders for refresher training are automatically generated by the system ensuring training is kept up to date and easily

monitored. The Rapid Global system provides various statistical reports of training and staff competency. Further improvement has been the development of an OHS&W training plan for face to face training for high risk activities.

Due to the low numbers of hazards reported over the reporting period incident reporting has been identified for refresher training and will take place via Rapid Global. Emphasis will be placed on reporting hazards which have the potential to become incidents or injuries.

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. Participation in the Victorian CMA OHS Forum has seen continued harmonisation of safety systems and reporting.



**Figure 6** | Mallee CMA OHS reported occurrences 2015 to 2020.

### 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, whilst injuries are noted for reporting purpose only.

Reporting hazards provide 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 and injuries.

Over the five-year period safety related incidents across the Mallee CMA were reduced by 11 which equates to a reduction 47.8 per cent.

There was one notifiable incident 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 Work Cover claim for the 2019–20 reporting period, the result of this claim was a

lost time injury. All other reported injuries were minor with nil fatalities occurring in the reporting period.

Given the overall low number of claims over the reporting period there was no trend identified in types of instances reported.

**Table 29** | Performance against OHS management measures.

Measures	Key Performance Indicators	2019–20	2018–19	2017–18
<b>Incidents</b>	Number of incidents (rate per 100 FTE)	24	41	40
<b>Claims</b>	Number of claims (rate per 100 FTE)	1	0	4
	Number of lost time claims (rate per 100 FTE)	1	0	2
	Number of claims exceeding 13 weeks (rate per 100 FTE)	1	Nil	Nil
<b>Fatalities</b>	Fatality claims	0	Nil	Nil
<b>Claim costs</b>	Average cost per standard claim	\$13,874	Nil	Nil
<b>Return to work</b>	Percentage of claims with return to work plans <30 days	0	Nil	Nil
<b>Management commitment</b>	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
<b>Consultation and participation</b>	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
<b>Risk management</b>	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%



## Comparative Workforce Data

The following table 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 (2020), and in the last full pay period in June of the previous reporting period (2019).

Employees have been correctly classified in workforce data collections.

**Table 30** | Details of employment levels in June 2019 and 2020 <sup>(i)</sup>.

	June 2020						June 2019					
	All Employees		Ongoing <sup>(ii)</sup>		Fixed term & Casual		All Employees		Ongoing <sup>(ii)</sup>		Fixed term & Casual	
	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE	Head count	FTE
<b>Gender</b>												
Male	26	22	16	16	10	6.96	25	24.15	17	17	8	7.15
Female	29	28	15	14.40	14	13.60	30	27.24	16	15.20	14	12.04
Self-described	n	n	n	n	n	n	n	n	n	n	n	n
<b>Age</b>												
15-24	1	1	0	0	1	1	1	1			1	1
25-34	11	10.60	4	4	7	6.60	14	13.59	6	6	8	7.59
35-44	14	13.40	12	11.4	2	2	12	11.20	12	11.20		
45-54	14	14	8	8	6	6	14	12.65	8	8	6	4.65
55-64	13	10.75	6	6	7	4.75	13	12.20	7	7	6	5.20
65+	2	0.81	0	0	2	0.81	1	0.75			1	0.75
<b>Classification</b>												
CEO	1	1			1	1	1	1			1	1
General Managers	3	3	2	2	1	1	3	3	2	2	1	1
Managers	8	7.40	7	6.40	1	1	9	8.40	9	8.40		
Project/ Support Staff	43	39.56	22	22	21	17.56	42	38.99	22	21.80	20	17.19
<b>Total</b>	<b>55</b>	<b>50.96</b>	<b>31</b>	<b>30.40</b>	<b>24</b>	<b>20.56</b>	<b>55</b>	<b>51.39</b>	<b>33</b>	<b>32.20</b>	<b>22</b>	<b>19.19</b>

'n' denotes that no data has been collected

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

<sup>(ii)</sup> 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.

## 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 Policy on Executive Remuneration in Public entities applies.

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 8.6 Related Parties.

During the reporting period the Mallee CMA had one employee on an Office of Public Sector Executive Remuneration (OPSER) contract who is female.

## Diversity and Inclusion Policy

At the Mallee CMA our vision is to develop a diverse workforce and a culture of inclusion in all areas of our business by valuing social and professional identity, alternative thoughts, backgrounds, experiences, uniqueness and creativity. We will do this as a reflection of community diversity. Building a diverse and inclusive workforce is how we can demonstrate the highest value for our people, our stakeholders and our community.

We need people who think and approach problems differently, who are willing to challenge the status quo, and who come from different backgrounds.

The Mallee CMA's Diversity and Inclusion Plan 2017-22 was accepted by the Minister for Water in 2017. A target of the Plan is to ensure diversity and inclusion training is provided in all employee and board member e-learning inductions within 12 months. The following table outlines the Mallee CMA's actual progress against this target in 2018-19 and 2019-20.

**Table 31** | Progress against Diversity and Inclusion policy initiative.

Diversity and Inclusion policy initiative	Target	Actual progress in 2018-19	Actual progress in 2019-20
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%



Mallee CMA Diversity and Inclusion Plan.

# Part 4

## Other Disclosures

### Expenditure of funds within the Mallee Salinity Investment Plan 2019–20

The Ministerial Determination of Salinity Impact Zones and Salinity Impact Charges (2019) 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. Funds forwarded to the Mallee CMA in 2019–20 totalled \$3,902,632.

Total expenditure in 2019–20 within the Mallee Salinity Investment Plan was \$3,036,204. Projects delivered included:

- Implementation of a governance framework to deliver regional monitoring and reporting obligations under the *Water Act 2007* (Cth) and CaLP Act;
- 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 (\$332,197);
- The review and refinement of four numerical groundwater models used to estimate salinity impacts of private diversion irrigation in the Victorian Mallee. The new models reflect the actual physical processes occurring between land surface, groundwater and river systems. Taking three years to develop, the models are large and hydro-geologically complex, especially in the near Murray River environment. They quantify the groundwater driven impact on river salinity resulting from irrigation development. The models were accredited as fit for purpose in August 2019 (\$26,598);
- The Psyche-Woorlong wetland complex has been used to dispose of irrigation drainage water for decades. The current water management regime is not supportive of ecological health. A first-pass engineering options assessment for a potential remediation program at Psyche Bend Lagoon and Woorlong Wetland was completed (\$101,780);
- A business case to scope the feasibility of an Airborne Electromagnetic (AEM) survey to inform salinity management, established the cost of proceeding with the current level of uncertainty at approximately \$1.55 million per annum. By providing more detailed data on subsurface geology, AEM provides the Mallee CMA with the capacity to reduce uncertainty and hence save on the cost of managing salinity by approximately 20 per cent yielding an annual cost saving of \$310,000 (\$132,465);
- Investment in Regional Capacity Development facilitated implementation of a communications strategy addressing community understanding and input into the salinity management framework. Over the reporting period the campaign titled 'The salt beneath our feet' was continued at a series of public and online forums engaging community on salinity related topics. As part of the program a Regional Salinity Forum was staged in Mildura in November 2019 (\$250,373);
- Annual data collection from Mallee groundwater observation bores (\$150,269) and irrigation drainage monitoring stations (\$192,781), 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, all drainage and stream flow water monitoring sites were upgraded consistent with an agree maintenance program and conversion to telemetry (\$299,312);
- Stage two and three of a four stage groundwater bore maintenance and reconditioning program was implemented (\$297,727);

- A program of study to validate crop water requirement and root zone drainage results obtained during 2015–2018 using satellite-based techniques. The results from the study will play a critical role in providing input data to modelling work for estimating the salinity impact of new irrigation developments, with improved confidence and accuracy at regional scale (\$233,333);
- 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 (\$169,663);
- 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 (\$212,178).

The balance of funds as at 30 June 2020 is \$32,775,380. 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

The Mallee CMA has no contracts commenced and/or completed to which the Local Jobs First - VIPP applied in the reporting period.

## Government advertising expenditure

Mallee CMA expenditure in the 2019–20 reporting period on government campaign expenditure was nil.

## Consultancy expenditure

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

In 2019–20, there were 56 consultancies where the total fees payable to the consultants was \$10,000 or greater. The total expenditure incurred during 2019–20 in relation to these consultancies was \$2,409,859.88 (excl. GST).

Details of individual consultancies are outlined on the Mallee CMA's website, at [www.malleecma.com.au](http://www.malleecma.com.au) in the Resources tab.

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

In 2019–20, there were 45 consultancies engaged during the year, where the total fees payable to the consultants were less than \$10,000. The total expenditure incurred during 2019–20 in relation to these consultancies was \$140,822.67 (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.
- 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.

## Information and Communication Technology (ICT) expenditure

The Mallee CMA had a total ICT expenditure of \$773,582.70, with the details shown below for the reporting period.

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.

**Table 32** | ICT expenditure 2019–20.

All operational ICT expenditure	ICT expenditure relating to projects to create or enhance ICT capabilities		
Business As Usual (BAU) ICT expenditure	Non-Business As Usual (Non-BAU) ICT expenditure	Operational expenditure (OPEX)	Capital expenditure (CAPEX)
<b>Total</b>	<b>Total (A + B)</b>	<b>A</b>	<b>B</b>
\$664,269.89	\$134,662.85	\$125,762.85	\$8,900.00



### Disclosure of major contracts

The Mallee CMA did not award any major contracts (valued at \$10 million or more) during 2019–20 reporting period.

### 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 the Mallee CMA's website 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.

From 1 September 2017, the FOI Act has been amended 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.foi.vic.gov.au](http://www.foi.vic.gov.au). An application fee of **\$29.60** 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](mailto:foi@malleecma.com.au)

#### FoI statistics

One Freedom of Information (FOI) request was received from the general public during the 12 months ended 30 June 2020. The decision was made within the statutory 30-day time period.

#### 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.foi.vic.gov.au](http://www.foi.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 Disclosures Act 2012

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

Mallee CMA has an established Public Interest Disclosures policy and procedure and is committed to ensuring transparency and accountability in its administrative and management practices. Mallee CMA supports the making of disclosures that reveal corrupt conduct, conduct involving a substantial mismanagement of public resources, or conduct involving a substantial risk to public health and safety or the environment. Mallee CMA takes all reasonable steps 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 policy and procedure on its website at <https://www.malleecma.com.au/corporate-policies/>

### How do I make a Protected Disclosure?

Mallee CMA is a public body for the purposes of the PID Act, however, is not authorised to receive public interest disclosures under the PID Act.

You can make a public interest disclosure about Mallee CMA or its Board members, contractors, volunteers, or employees by contacting Independent Broad-based Anti-corruption Commission (IBAC) on the details below.

### Independent Broad based Anti-Corruption Commission (IBAC) Victoria

Address: Level 1, North Tower, 459 Collins Street, Melbourne, VIC 3000  
Mail: GPO Box 24234, Melbourne Victoria 3001  
Phone: 1300 735 135  
Internet: [www.ibac.vic.gov.au](http://www.ibac.vic.gov.au)  
Email: See the website above for the secure email disclosure process, which also provides for anonymous disclosures.

**Table 33** | Disclosures under the *Public Interest Disclosures Act 2012*.

Disclosures under the <i>Public Interest Disclosures Act 2012</i>	2019–20	2018–19
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 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 2018–23 Corporate Plan and reported against in this 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 committed 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 the following table.

Table 34 | Mallee CMA office-based environmental impacts.

Outputs	Activity	2019–20 Actual	Comment
Energy use	Total energy usage segmented by primary source, including Green Power (mega joules)	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	Greenhouse gas emissions associated with energy use, segmented by primary source and offsets (tonnes CO <sub>2</sub> -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 <sup>2</sup> )	*	
Waste and recycling	Total units of office waste disposed of by destination (kilograms per year)	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	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	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	Reduction and recycling of cartridges and consumables containers	100%	Cartridge recycled through suppliers. Containers recycled through site.
	Re-use and/or recycling of mobile phones and unserviceable equipment	100%	Mobile phones are recycled when replaced with new handsets. Surplus or obsolete equipment sent to Waste Management Centre - Mildura Rural City Council 'Around Again' re-use facility
Paper use	Total units of A4 equivalent copy paper used (reams)	408	
	Units of A4 equivalent copy paper used per FTE (reams per FTE)	8.3	Double-sided printing and printer user boxes are set as default to reduce paper usage
	Percentage of recycled content in copy paper purchased (%).	100%	
Water consumption	Total units of metered water consumed by water source (kilolitres)	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	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 <sup>2</sup> )	*	
Transport	Total energy consumption by vehicle fleet segmented by vehicle/ fuel type (mega joules)	848,595.246 MJ 754,983 MJ	Diesel – 25,311.80 L Unleaded - 19,966.50 L
	Total vehicle travel associated with Entity operations segmented by vehicle/ fuel type (kilometres);	219,608 km 44,204 km	Vehicles fuelled with Diesel Vehicles fuelled with Unleaded
	Total Greenhouse gas emissions from vehicle fleet	113.95	(tonnes CO <sub>2</sub> -e)
	Total distance travelled by air (kilometres)	114,659 km	

Continued...

**Table 34** | Mallee CMA office-based environmental impacts. *Continued...*

Outputs	Activity	2019–20 Actual	Comment
Greenhouse gas emissions	Total greenhouse gas emissions associated with vehicle fleet	113.95	(tonnes CO <sub>2</sub> -e)
	Total greenhouse gas emissions associated with air travel	29	(tonnes CO <sub>2</sub> -e)
	Total greenhouse gas emissions associated with energy use (tonnes CO <sub>2</sub> -e)	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	Total greenhouse gas emissions associated with waste disposal (tonnes CO <sub>2</sub> -e)	*	Entries marked with an asterisk (*) contribute to the whole of Victorian Government Site - Irymple managed by the landlord, DJPR.
	Greenhouse gas emissions offsets purchased	Nil	(tonnes CO <sub>2</sub> -e)
Procurement	<p>The Mallee CMA Purchasing and Procurement Policy includes environmental procurement as an essential consideration.</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%	Participation by % of FTE



Revegetation site at Birchip.



## 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*:

- a statement that declarations of pecuniary interests have been duly completed by all relevant officers;
- details of publications produced by the agency about itself, and how these can be obtained;
- details of any major external reviews carried out on the agency;
- details of major promotional, public relations and marketing 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;
- a general statement on industrial relations within the agency, and details of time lost through industrial accidents and disputes; and
- details of all consultancies and contractors, including consultants/contractors engaged, services provided, and expenditure committed for each engagement.

The information is available on request to:

Freedom of Information Team

Mallee Catchment Management Authority

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

Phone: 03 5051 4377

Email: [foi@malleecma.com.au](mailto: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, and the extent to which the purposes have been achieved – page 58;
- details of changes in FoI fees charged by the Mallee CMA – page 68;
- assessments and measures undertaken to improve the occupational health and safety of employees – page 61.

## 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 2019–20.

## Compliance with DataVic Access Policy

Consistent with the Victorian Government's DataVic Access Policy (2012), the Mallee CMA made one data set available on the DataVic website in 2019–20.

Information included in this Annual Report will also be made available at <http://www.data.vic.gov.au/> in the following electronic readable formats: XLS.

Since the policy was introduced, the Mallee CMA has made available to the public data tables from Annual Reports since 2014–15.



Pumps on the Murray River.

## Attestation for financial management compliance with Ministerial Standing Direction 5.1.4

### **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.



**Sharyon Peart**

Board Chair

Mallee Catchment Management Authority

23 September 2020

# Part 5

## Financial Statements

For the year ended 30 June 2020



### 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 Minister for Finance 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 2020 and financial position of the Authority at 30 June 2020.

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 12 October 2020.

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

**Sharyn Peart**  
Chairperson  
Mallee Catchment Management Authority

A handwritten signature in black ink, appearing to read 'J. Collins'.

**Jenny Collins**  
CEO and Accountable Officer  
Mallee Catchment Management Authority

A handwritten signature in black ink, appearing to read 'Meagan Crozier'.

**Meagan Crozier CPA**  
Chief Finance Officer  
Mallee Catchment Management Authority

## Independent Auditor's Report

### To the Board of Mallee Catchment Management Authority

<b>Opinion</b>	<p>I have audited the financial report of Mallee Catchment Management Authority (the authority) which comprises the:</p> <ul style="list-style-type: none"> <li>• balance sheet as at 30 June 2020</li> <li>• comprehensive operating statement for the year then ended</li> <li>• statement of changes in equity for the year then ended</li> <li>• cash flow statement for the year then ended</li> <li>• notes to the financial statements, including significant accounting policies</li> <li>• declaration in the financial statements.</li> </ul> <p>In my opinion, the financial report presents fairly, in all material respects, the financial position of the authority as at 30 June 2020 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>
<b>Basis for Opinion</b>	<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 APES 110 <i>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>
<b>Board's responsibilities for the financial report</b>	<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  
16 October 2020



Paul Martin  
*as delegate for the Auditor-General of Victoria*

**Comprehensive Operating Statement**  
For the financial year ended 30 June 2020

			\$
	Notes	2020	2019
<b>Income from transactions</b>			
Government contributions	2.2.1	12,037,493	11,830,307
Interest	2.2.2	413,371	775,255
Other income	2.2.3	5,862,284	3,186,339
<b>Total income from transactions</b>		<b>18,313,148</b>	<b>15,791,901</b>
<b>Expenses from transactions</b>			
Employee expenses	3.1.1	5,817,176	4,957,177
Grants and incentives	3.2	1,083,049	1,365,477
Depreciation	4.1.1	200,931	202,929
Amortisation	4.2	42,261	199,160
Other operating expenses	3.3	9,965,285	10,068,547
<b>Total expenses from transactions</b>		<b>17,108,702</b>	<b>16,793,290</b>
<b>Net result from transactions (net operating balance)</b>		<b>1,204,446</b>	<b>(1,001,389)</b>
<b>Other economic flows included in net result</b>			
Net gain/(loss) on disposal of non-financial assets	8.1	10,068	18,868
<b>Total other economic flows – included in net result</b>		<b>10,068</b>	<b>18,868</b>
<b>Comprehensive result</b>		<b>1,214,514</b>	<b>(982,521)</b>

*The accompanying notes form part of these financial statements*

**Balance Sheet****As at 30 June 2020**

	Notes	2020	2019
\$			
<b>Assets</b>			
<b>Financial assets</b>			
Cash and deposits	6.1	39,498,064	39,084,717
Receivables	5.1	3,269,734	2,435,158
<b>Total financial assets</b>		<b>42,767,798</b>	<b>41,519,875</b>
<b>Non-financial assets</b>			
Prepayments	5.3	65,799	24,533
Plant and equipment	4.1	598,233	695,902
Intangible assets	4.2	-	42,273
<b>Total non-financial assets</b>		<b>664,032</b>	<b>762,708</b>
<b>Total assets</b>		<b>43,431,830</b>	<b>42,282,583</b>
<b>Liabilities</b>			
Payables	5.2	515,418	810,807
Employee related provisions	3.1.2	1,106,011	875,889
<b>Total liabilities</b>		<b>1,621,429</b>	<b>1,686,696</b>
<b>Net assets</b>		<b>41,810,401</b>	<b>40,595,887</b>
<b>Equity</b>			
Accumulated surplus/(deficit)		699,251	684,502
Reserves	8.2	37,013,815	35,814,050
Contributed capital		4,097,335	4,097,335
<b>Net worth</b>		<b>41,810,401</b>	<b>40,595,887</b>

The accompanying notes form part of these financial statements

## Cash Flow Statement

For the financial year ended 30 June 2020

	Notes	2020	2019
<b>Cash flows from operating activities</b>			
<b>Receipts</b>			
Receipts from government		11,833,595	10,672,804
Interest received		413,371	775,255
Goods and services tax received from the ATO (a)		495,042	662,671
Other receipts		5,862,284	3,186,339
<b>Total receipts</b>		<b>18,604,292</b>	<b>15,297,069</b>
<b>Payments</b>			
Payments to suppliers and employees		(18,097,761)	(17,195,327)
<b>Total payments</b>		<b>(18,097,761)</b>	<b>(17,195,327)</b>
<b>Net cashflows from/(used in) operating activities</b>	6.1.1	<b>506,531</b>	<b>(1,898,258)</b>
<b>Cash flows from investing activities</b>			
Payments for investments		-	(2,037,657)
Proceeds from sale of investments		-	38,037,657
Purchases of non-financial assets		(174,559)	(309,006)
Proceeds from sale of non-financial assets		81,363	141,063
Payment for intangible assets		12	-
<b>Net cashflows from/(used in) investing activities</b>		<b>(93,184)</b>	<b>35,832,056</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>413,347</b>	<b>33,933,798</b>
Cash and cash equivalents at the beginning of the financial year		39,084,717	5,150,919
<b>Cash and cash equivalents at the end of the financial year</b>	6.1	<b>39,498,064</b>	<b>39,084,717</b>

Note:

(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 2020

\$

	Notes	Reserves	Accumulated surplus / (deficit)	Contributed capital	Total
<b>Balance at 1 July 2018</b>		<b>36,873,448</b>	<b>607,625</b>	<b>4,097,335</b>	<b>41,578,408</b>
Net result for the year		-	(982,521)	-	(982,521)
Transfers to/(from) reserves		(1,059,398)	1,059,398	-	-
<b>Balance at 30 June 2019</b>		<b>35,814,050</b>	<b>684,502</b>	<b>4,097,335</b>	<b>40,595,887</b>
Net result for the year		-	1,214,514	-	1,214,514
Transfers to/(from) reserves	8.2	1,199,765	(1,199,765)	-	-
<b>Balance at 30 June 2020</b>		<b>37,013,815</b>	<b>699,251</b>	<b>4,097,335</b>	<b>41,810,401</b>

The accompanying notes form part of these financial statements

## **1. ABOUT THIS REPORT**

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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:

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'.

### **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 created highly uncertain circumstances for households, businesses, community and governments.

The COVID-19 pandemic remains a constantly evolving situation and the Australian Government's response involves a diverse range of activities and measures undertaken by a variety of Australian Public Service departments and agencies. These include a declaration of a State of Emergency for Victoria, lockdown restrictions of varying levels across the state in both metropolitan and rural Victoria, as well as the societal impacts of face masks and social distancing, all which are believed to help restrict the spread of COVID-19.

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
- Enhancing the instant asset write-off
- Backing business incentive
- Boosting cash flow for employers
- Temporary early release of superannuation
- Temporarily reducing superannuation minimum drawdown rates

Whilst the impact of these measures is not expected to have a material impact on the financial statements and accompanying notes, the Authority will identify where appropriate any impacts or items which require significant judgement or estimation in deriving item balances.

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.

### Notes to the Financial Report for the year ended 30 June 2020

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#### Compliance information

These general purpose financial statements have been prepared in accordance with the FMA and applicable Australian Accounting Standards (AASs) which include Interpretations, issued by the Australian Accounting Standards Board (AASB).

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.

#### New Accounting Standards

Where required, the application of new accounting standards will be disclosed within the notes. Where it would provide further understanding of the application of these accounting standards, details of significant judgements, estimates and assumptions used will be detailed in the relevant section of the notes.

## 2. FUNDING DELIVERY OF OUR SERVICES

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### 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

	\$	
	2020	2019
Government Contributions	12,037,493	11,830,307
Interest	413,371	775,255
Other Income	5,862,284	3,186,339
<b>Total income that funds delivery of services</b>	<b>18,313,148</b>	<b>15,791,901</b>

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.



**Notes to the Financial Report  
for the year ended 30 June 2020**

**2.2 Income from transactions**

**2.2.1 Government contributions**

	2020	2019
<b>State Government</b>		
State Government Contributions	1,508,459	1,241,522
Integrated Water Management	17,000	68,000
Catchment Governance	843,200	843,200
Basin Plan	205,000	195,000
Threatened Species Protection Initiative	1,411,147	1,387,847
Sustainable Irrigation Program	308,000	317,000
Landcare Program	271,612	192,086
Environmental Partnership Program	60,500	-
Environmental Water Program	531,000	519,000
Environmental Water Holder	437,754	394,057
Water Management Program	1,515,000	1,587,000
Our Catchment Our Communities	391,000	436,000
<b>Total State Government contributions</b>	<b>7,499,672</b>	<b>7,180,712</b>
<b>Commonwealth Government</b>		
Commonwealth Contributions	52,529	52,459
The Living Murray	2,183,356	2,107,263
National Landcare Program	2,301,936	2,087,308
Sustainable Diversion Limits	-	402,565
<b>Total Commonwealth Government contributions</b>	<b>4,537,821</b>	<b>4,649,595</b>
<b>Total Government contributions - income recognised as income of a not-for-profit entity</b>	<b>12,037,493</b>	<b>11,830,307</b>

The Authority has determined that all grant income is recognised as income of not-for-profit entities in accordance with AASB 1058.

The impact of initially applying AASB 1058 on the Authority's grant revenue is described in Note 8.3. Due to the modified retrospective transition method chosen in applying AASB 1058, comparative information has not been restated to reflect the new requirements [AASB 1058.C3(b)]. The adoption of AASB 1058 did not have an impact on Other comprehensive income and the Statement of Cash flows for the financial year.

Income from grants that are enforceable and with sufficiently specific performance obligations and accounted for as revenue from contracts with customers. Revenue is recognised when the Authority satisfies the performance obligation by providing the relevant services. This is recognised based on the consideration specified in the funding agreement and to the extent that it is highly probable a significant reversal of the revenue will not occur. The funding payments are normally received in advance or shortly after the relevant obligation is satisfied.

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.

**Notes to the Financial Report  
for the year ended 30 June 2020**

**Previous accounting policy for 30 June 2019**

Grant income arises from transactions in which a party provides goods or assets (or extinguishes a liability) to the Authority without receiving approximately equal value in return. While grants may result in the provision of some goods or services to the transferring party, they do not provide a claim to receive benefits directly of approximately equal value (and are termed 'non-reciprocal' transfers). Receipt and sacrifice of approximately equal value may occur, but only by coincidence.

Some grants are reciprocal in nature (i.e. equal value is given back by the recipient of the grant to the provider). The Authority recognises income when it has satisfied its performance obligations under the terms of the grant. [AASB 1004]

For non-reciprocal grants, the Authority recognises revenue when the grant is received.

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

**2.2.2 Interest income**

	2020	2019
<b>Interest from financial assets not at fair value through profit and loss</b>		
Interest on bank deposits	413,371	775,255
<b>Total interest from financial assets not at fair value through profit and loss</b>	<b>413,371</b>	<b>775,255</b>

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**

	2020	2019
Salinity levies	3,902,666	3,101,249
Victorian Murray Floodplain Restoration Project	1,875,604	-
Sundry income	84,014	85,090
<b>Total other income</b>	<b>5,862,284</b>	<b>3,186,339</b>

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.

Sundry income is paid parental leave and reimbursements for trainees.

Other income is income of a not-for-profit entity and is recognised when the Authority has an unconditional right to receive cash which usually coincides with the receipt of cash.

**Notes to the Financial Report  
for the year ended 30 June 2020**

### 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.

*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.

#### 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	2020	2019
Employee benefits expense	3.1.1	5,817,176	4,957,177
Grants and incentives	3.2	1,083,049	1,365,477
Other operating expenses	3.3	9,965,285	10,068,547
<b>Total expenses incurred in delivery of services</b>		<b>16,865,510</b>	<b>16,391,201</b>

#### 3.1.1 Employee benefits in the comprehensive operating statement

	Notes	2020	2019
Salaries and wages, annual leave and long service leave		5,337,600	4,558,709
Termination benefits		-	2,356
Defined Contribution Superannuation	3.1.3	479,576	396,112
<b>Total employee benefits expenses</b>		<b>5,817,176</b>	<b>4,957,177</b>

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 2020**

**3.1.2 Employee benefits in the balance sheet**

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.

	2020	2019
<b>Current provisions:</b>		
<b>Annual leave</b>		
Unconditional and expected to settle within 12 months	307,800	255,979
Unconditional and expected to settle after 12 months	62,517	25,684
<b>Time in lieu and rostered days off</b>		
Unconditional and expected to settle within 12 months	4,360	6,045
<b>Long service leave</b>		
Unconditional and expected to settle after 12 months	462,987	401,438
<b>Provisions for on-costs</b>		
Unconditional and expected to settle within 12 months	34,093	28,393
Unconditional and expected to settle after 12 months	73,075	60,160
<b>Total current provisions for employee benefits</b>	<b>944,832</b>	<b>777,699</b>
<b>Non-current provisions</b>		
Employee benefits	141,144	85,985
On-costs	20,034	12,205
<b>Total non-current provisions for employee benefits</b>	<b>161,179</b>	<b>98,190</b>
<b>Total provisions for employee benefits</b>	<b>1,106,011</b>	<b>875,889</b>

	2020
<b>Reconciliation of movement in on-cost provision</b>	
<b>Opening balance</b>	<b>100,758</b>
Additional provisions recognised	26,444
<b>Closing balance</b>	<b>127,202</b>
<b>Current</b>	<b>107,168</b>
<b>Non-current</b>	<b>20,034</b>

**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.



**Notes to the Financial Report  
for the year ended 30 June 2020**

**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.

	Paid contributions for the year		Contributions outstanding at year end	
	2020	2019	2020	2019
<b>Defined contribution plans</b>				
VicSuper	231,913	172,502	20,685	20,685
Other Superannuation Funds	247,663	223,610	30,238	30,238
<b>Total</b>	<b>479,576</b>	<b>396,112</b>	<b>50,923</b>	<b>50,923</b>

### 3.2 Grant expenses

	2020	2019
Payments for specific purposes	1,083,049	1,365,477
<b>Total grant expenses</b>	<b>1,083,049</b>	<b>1,365,477</b>

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 money.

### 3.3 Other operating expenses

	2020	2019
<b>Supplies and services</b>		
Purchase of services (including remuneration of auditors)	992,871	1,182,515
Consultancies - project based	2,545,366	2,282,097
Contractors - project based	5,017,740	5,489,476
Project operations and maintenance	743,595	593,310
Office expenses	665,714	521,149
<b>Total other operating expenses</b>	<b>9,965,285</b>	<b>10,068,547</b>

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 similar expenses of a corporate nature.

#### 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	
	2020	2019	2020	2019	2020	2019
Motor vehicles at fair value	748,067	735,320	(277,475)	(208,608)	470,592	526,712
Office furniture and equipment at fair value	56,724	68,964	(31,816)	(34,554)	24,908	34,410
Plant and equipment at fair value	230,528	243,045	(127,795)	(108,265)	102,733	134,780
<b>Net carrying amount</b>	<b>1,035,319</b>	<b>1,047,329</b>	<b>(437,086)</b>	<b>(351,427)</b>	<b>598,232</b>	<b>695,902</b>

**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 2020**

**4.1.1 Depreciation and amortisation**

Charge for the period			\$
	2020	2019	
Motor vehicles	141,829	134,381	
Office furniture and equipment	9,502	16,278	
Plant and equipment	49,600	52,270	
<b>Total depreciation and amortisation</b>	<b>200,931</b>	<b>202,929</b>	

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**

					\$
2020	Motor vehicles at fair value	Office furniture and equipment at fair value	Plant and equipment at fair value	Total	
<b>Opening balance</b>	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)	
<b>Closing balance</b>	<b>470,592</b>	<b>24,907</b>	<b>102,734</b>	<b>598,233</b>	

					\$
2019	Motor vehicles at fair value	Office furniture and equipment at fair value	Plant and equipment at fair value	Total	
<b>Opening balance</b>	550,687	26,277	135,055	712,019	
Additions	232,603	24,410	51,995	309,008	
Disposals	(122,196)	-	-	(122,196)	
Depreciation	(134,381)	(16,278)	(52,270)	(202,929)	
<b>Closing balance</b>	<b>526,713</b>	<b>34,409</b>	<b>134,780</b>	<b>695,902</b>	

**Notes to the Financial Report  
for the year ended 30 June 2020**

**4.2 Intangible assets**

	Computer software		Total	
	2020	2019	2020	2019
<b>Gross carrying amount</b>				
Opening balance	597,540	597,540	597,540	597,540
Closing balance	-	597,540	-	597,540
<b>Accumulated amortisation</b>				
Opening balance	(555,267)	(356,107)	(555,267)	(356,107)
Amortisation of intangible non-produced assets	555,267	(199,160)	555,267	(199,160)
Closing balance	-	(555,267)	-	(555,267)
<b>Net book value at the end of the financial year</b>	<b>-</b>	<b>42,273</b>	<b>-</b>	<b>42,273</b>

**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 (2019: \$42,273). Its useful life is 3 years and will be fully amortised in 2020.



**Notes to the Financial Report  
for the year ended 30 June 2020**

**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**

	2020	2019
<b>Contractual</b>		
Other receivables	3,255,718	2,010,330
<b>Statutory</b>		
GST input tax receivable	14,016	424,828
<b>Total receivables</b>	<b>3,269,734</b>	<b>2,435,158</b>
Represented by:		
Current receivables	3,269,734	2,435,158

**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 2020**

**5.2 Payables**

	2020	2019
<b>Contractual</b>		
Supplies and services	395,310	656,634
Amounts payable to government and agencies	120,108	54,173
<b>Statutory</b>		
Other taxes payable	-	100,000
<b>Total payables</b>	<b>515,418</b>	<b>810,807</b>
Represented by		
Current payables	515,418	810,807

Payables consist of:

**Contractual payables**, 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 <sup>(a)</sup>**

	Carrying amount	Nominal amount	Less than 1 month	1 - 3 months	Maturity dates 3 months - 1 year	1-5 years	5+ years
<b>2020</b>							
Supplies and services	395,310	395,310	395,310	-	-	-	-
Amounts payable to government and agencies	120,108	120,108	120,108	-	-	-	-
<b>Total</b>	<b>515,418</b>	<b>515,418</b>	<b>515,418</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2019</b>							
Supplies and services	656,634	656,634	656,634	-	-	-	-
Amounts payable to government and agencies	54,173	54,173	54,173	-	-	-	-
<b>Total</b>	<b>710,807</b>	<b>710,807</b>	<b>710,807</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

**5.3 Other non-financial assets**

	2020	2019
<b>Current other assets</b>		
Prepayments	65,799	24,533
<b>Total current other assets</b>	<b>65,799</b>	<b>24,533</b>
<b>Total other Assets</b>	<b>65,799</b>	<b>24,533</b>

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 2020

### 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.

	2020	2019
Cash on hand	1,000	1,000
Cash and deposits disclosed in the balance sheet	39,497,064	39,083,717
<b>Balance as per cash flow statement</b>	<b>39,498,064</b>	<b>39,084,717</b>

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

	2020	2019
<b>Net result for the period</b>	<b>1,214,514</b>	<b>(982,521)</b>
<b>Non-cash movements</b>		
(Gain)/loss on disposal of non-current assets	(10,068)	(18,868)
Depreciation and amortisation of non-current assets	243,192	402,089
<b>Movements in assets and liabilities</b>		
Decrease/(increase) in receivables	(834,576)	(1,595,315)
(Decrease)/increase in employee related provisions	230,123	9,663
Decrease/(increase) in prepayments	(41,266)	(24,533)
(Decrease)/Increase in payables	(295,389)	311,227
<b>Net cash flows from/(used in) operating activities</b>	<b>506,530</b>	<b>(1,898,258)</b>

**Notes to the Financial Report  
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Commitments for future expenditure include 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					
2020	Less than 1 year	1 - 5 years	5+ years	Total	
Other commitments payable	2,641,079	936,585	-	3,577,664	
<b>Total commitments</b>	<b>2,641,079</b>	<b>936,585</b>	<b>-</b>	<b>3,577,664</b>	

					\$
Nominal amounts					
2019	Less than 1 year	1 - 5 years	5+ years	Total	
Other commitments payable	2,404,865	440,420	-	2,845,285	
<b>Total commitments</b>	<b>2,404,865</b>	<b>440,420</b>	<b>-</b>	<b>2,845,285</b>	



### Notes to the Financial Report for the year ended 30 June 2020

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#### 7. RISKS, CONTINGENCIES AND VALUATION JUDGEMENTS

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##### 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) in this category.

**Notes to the Financial Report  
for the year ended 30 June 2020**

**7.1.1 Financial instruments: Categorisation**

				\$
	Cash and deposits	Financial assets at amortised cost (AC)	Financial liabilities at amortised cost (AC)	Total
<b>2020</b>				
<b>Contractual financial assets</b>				
Cash and deposits	39,498,064	-	-	39,498,064
<b>Receivables <sup>(a)</sup></b>				
Other contractual receivables	-	3,255,718	-	3,255,718
<b>Total contractual financial assets</b>	<b>39,498,064</b>	<b>3,255,718</b>	<b>-</b>	<b>42,753,782</b>
<b>Contractual financial liabilities</b>				
Supplies and services	-	-	395,311	395,310
Amounts payable to government and agencies	-	-	120,108	120,108
<b>Total contractual financial liabilities</b>	<b>-</b>	<b>-</b>	<b>515,418</b>	<b>515,418</b>

(a) The total amounts disclosed here exclude statutory amounts

				\$
	Cash and deposits	Financial assets at amortised cost (AC)	Financial liabilities at amortised cost (AC)	Total
<b>2019</b>				
<b>Contractual financial assets</b>				
Cash and deposits	39,084,717	-	-	39,084,717
<b>Receivables <sup>(a)</sup></b>				
Other contractual receivables	-	2,010,330	-	2,010,330
<b>Total contractual financial assets</b>	<b>39,084,717</b>	<b>2,010,330</b>	<b>-</b>	<b>41,095,047</b>
<b>Contractual financial liabilities</b>				
Supplies and services	-	-	656,634	656,634
Amounts payable to government and agencies	-	-	54,173	54,173
<b>Total contractual financial liabilities</b>	<b>-</b>	<b>-</b>	<b>710,807</b>	<b>710,807</b>

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 2020**

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

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

	\$	
	Total interest income/ (expense)	Total
<b>2019</b>		
<b>Contractual financial assets</b>		
Financial assets at amortised cost – other than on derecognition	775,255	775,255
<b>Total contractual financial assets</b>	775,255	775,255
<b>Contractual financial liabilities</b>		
Financial liabilities at amortised cost	-	-
<b>Total contractual financial liabilities</b>	-	-

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  
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**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 ratings.

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 2019-20.

**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
2020				
<b>Financial assets</b>				
<b>Financial assets with loss allowance measured at 12-month expected credit loss</b>				
Cash and deposits (not assessed for impairment due to materiality)	38,257,363	1,239,701	-	39,497,064
Statutory receivables (with no impairment loss recognised)	-	-	-	-
<b>Total contractual financial assets</b>		<b>1,239,701</b>	<b>-</b>	<b>39,497,064</b>

**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
2019				
<b>Financial assets</b>				
Cash and deposits	36,006,799	1,066,588	-	37,073,387
Contractual receivables <sup>(a)</sup>	-	2,010,330	-	2,010,330
<b>Total contractual financial assets</b>	<b>36,006,799</b>	<b>3,076,918</b>	<b>-</b>	<b>39,083,717</b>

(a) The total amounts disclosed here exclude statutory amounts

**Impairment of financial assets under AASB 9 – applicable from 1 July 2018**

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.



### Notes to the Financial Report for the year ended 30 June 2020

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#### 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.

#### 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.

**Notes to the Financial Report  
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**Interest rate exposure of financial instruments**

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

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

**Notes to the Financial Report  
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2019	Weighted average interest rate %	Carrying amount	Fixed interest rate	Variable interest rate	Non bearing interest
<b>Financial assets</b>					
Cash and deposits	1.38%	39,084,717	-	39,083,717	1,000
<b>Receivables</b>					
Other contractual receivables		2,010,330	-	-	2,010,330
<b>Total financial assets</b>		<b>41,095,047</b>	<b>-</b>	<b>39,083,717</b>	<b>2,011,330</b>
<b>Financial liabilities</b>					
<b>Payables <sup>(a)</sup></b>					
Supplies and services		656,634	-	-	656,634
Amounts payable to government and agencies		54,173	-	-	54,173
<b>Total financial liabilities</b>		<b>710,807</b>	<b>-</b>	<b>-</b>	<b>710,807</b>

(a) The total amounts disclosed here exclude statutory amounts

Interest rate risk sensitivity				\$
		-100 basis points	+100 basis points	
2020	Carrying amount	Net result	Net result	
<b>Contractual financial assets</b>				
Cash and deposits	39,498,064	(394,981)	394,981	
<b>Total impact</b>	<b>39,498,064</b>	<b>(394,981)</b>	<b>394,981</b>	

				\$
2019				
<b>Contractual financial assets</b>				
Cash and deposits	39,084,717	(390,847)	390,847	
Investments and other financial assets	-	-	-	
<b>Total impact</b>	<b>39,084,717</b>	<b>(390,847)</b>	<b>390,847</b>	

## **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

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 2020**

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**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
· other contractual receivables	· amounts payable to government and agencies

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**Notes to the Financial Report  
for the year ended 30 June 2020**

**7.3.2 Fair value determination of non-financial physical assets**

**Fair value measurement hierarchy**

2020	Carrying amount as at 30 June	Fair value measurement at end of reporting period using:		
		Level 1	Level 2	Level 3
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
<b>Total of plant, equipment and vehicles at fair value</b>	<b>598,232</b>	<b>-</b>	<b>470,592</b>	<b>127,640</b>

2019	Carrying amount as at 30 June	Fair value measurement at end of reporting period using:		
		Level 1	Level 2	Level 3
Plant, equipment and vehicles at fair value:				
Motor vehicles	526,712	-	526,712	-
Office furniture and equipment	34,410	-	-	34,410
Plant and equipment	134,780	-	-	134,780
<b>Total of plant, equipment and vehicles at fair value</b>	<b>695,902</b>	<b>-</b>	<b>526,712</b>	<b>169,190</b>

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 2020

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

**Notes to the Financial Report  
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**Reconciliation of Level 3 fair value movements** \$

2020	Office furniture and equipment	Plant and equipment	Total
<b>Opening balance</b>	34,410	134,780	169,190
Purchases (sales)	(13,720)	(76,491)	(90,211)
Depreciation	21,853	76,216	98,069
<b>Closing balance</b>	<b>42,543</b>	<b>134,505</b>	<b>177,048</b>

**2019** \$

<b>Opening balance</b>	26,277	135,055	161,332
Purchases (sales)	(13,720)	(76,491)	(90,211)
Depreciation	21,853	76,216	98,069
<b>Closing balance</b>	<b>34,410</b>	<b>134,780</b>	<b>169,190</b>

There were no unrealised gains or losses (2019: nil) on non-financial assets.

**Description of significant unobservable inputs to Level 3 valuations**

2019 and 2018	Valuation technique	Significant unobservable inputs
Office furniture and equipment	Replacement cost	Cost per unit Useful life of office furniture and equipment
Plant and equipment	Replacement cost	Cost per unit Useful life of plant and equipment

Significant unobservable inputs have remained unchanged since June 2019.

## 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 Change in accounting policies
- 8.4 Responsible persons
- 8.5 Remuneration of executives
- 8.6 Related parties
- 8.7 Remuneration of auditors
- 8.8 Subsequent events
- 8.9 Australian Accounting Standards issued that are not yet effective
- 8.10 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.

	2020	2019
<b>Net gain/(loss) on non-financial assets</b>		
Net gain/(loss) on disposal of plant and equipment	10,068	18,868
<b>Total net gain/(loss) on non-financial assets</b>	<b>10,068</b>	<b>18,868</b>
<b>Total other gains/(losses) from other economic flows</b>	<b>10,068</b>	<b>18,868</b>

### 8.2 Reserves

	2020	2019
<b>Committed funds reserve <sup>(a)</sup></b>		
Balance at beginning of financial year	3,238,030	5,407,099
Transfers to/(from) accumulated surplus	405	(2,169,069)
<b>Balance at end of financial year</b>	<b>3,238,435</b>	<b>3,238,030</b>
<b>Salinity impact charges <sup>(b)</sup></b>		
Balance at beginning of financial year	31,576,020	30,466,348
Transfers to/(from) accumulated surplus	1,199,360	1,109,672
<b>Balance at end of financial year</b>	<b>32,775,380</b>	<b>31,576,020</b>
<b>Capital renewals reserve <sup>(c)</sup></b>		
Balance at beginning of financial year	1,000,000	1,000,000
Transfers to/(from) accumulated surplus	-	-
<b>Balance at end of financial year</b>	<b>1,000,000</b>	<b>1,000,000</b>
<b>Total reserves</b>	<b>37,013,815</b>	<b>35,814,050</b>

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

(b) The salinity impact charges 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.

### Notes to the Financial Report for the year ended 30 June 2020

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#### 8.3 Changes in accounting policies

##### 8.3.1 Revenue from Contracts with Customers

In accordance with FRD 121 requirements, the Authority has applied the transitional provisions of AASB 15, under modified retrospective method with the cumulative effect of initially applying this standard against the opening retained earnings at 1 July 2019. Under this transition method, the Authority applied this standard retrospectively only to contracts that are not 'completed contracts' at the date of initial application. The Authority has not identified any contracts with customers under this transitional method. Comparative information has not been restated.

##### 8.3.2 Income of Not-for-Profit Entities

In accordance with FRD 122 requirements, the Authority has applied the transitional provision of AASB 1058, under modified retrospective method with the cumulative effect of initially applying this standard against the opening retained earnings at 1 July 2019. Under this transition method, the Authority applied this standard retrospectively only to contracts and transactions that are not completed contracts at the date of initial application. The Authority has not applied the fair value measurement requirements for right-of-use assets arising from leases with significantly below-market terms and conditions principally to enable the entity to further its objectives as allowed under temporary option under AASB 16 and as mandated by FRD 122.

Comparative information has not been restated.

Note 2.4.3 Grants includes details about the transitional application of AASB 1058 and how the standard has been applied to revenue transactions.

The adoption of AASB 1058 did not have an impact on Other comprehensive income and the Statement of Cash flows for the financial year.

##### 8.3.3 Leases

This note explains the impact of the adoption of AASB 16 Leases on the Authority's financial statements.

The Authority has applied AASB 16 with a date of initial application of 1 July 2019. The Authority has assessed its agreements and does not have any leases under AASB 16.

The Authority has elected to apply AASB 16 using the modified retrospective approach, as per the transitional provisions of AASB 16 for all leases for which it is a lessee. The cumulative effect of initial application is recognised in retained earnings as at 1 July 2019. Accordingly, the comparative information presented is not restated and is reported under AASB 117 and related interpretations.

Previously, the Authority determined at contract inception whether an arrangement is or contains a lease under AASB 117 and Interpretation 4 Determining whether an arrangement contains a Lease. Under AASB 16, the Authority assesses whether a contract is or contains a lease based on the definition of a lease as explained in note 7.2

##### *Leases classified as operating leases under AASB 117*

As a lessee, the Authority previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to the Authority. Under AASB 16, the Authority recognises right-of-use assets and lease liabilities for all leases except where exemption is availed in respect of short-term and low-value leases.

On adoption of AASB 16, the Authority recognised lease liabilities in relation to leases which had previously been classified as operating leases under the principles of AASB 117. These liabilities were measured at the present value of the remaining lease payments, discounted using the Authority's incremental borrowing rate as of 1 July 2019. On transition, right-of-use assets are measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as at 30 June 2019.

The Authority has elected to apply the following practical expedients when applying AASB 16 to leases previously classified as operating leases under AASB 117:

- Applied a single discount rate to a portfolio of leases with similar characteristics;
- Applied the exemption not to recognise right-of-use assets and liabilities for leases with less than 12 months of lease term;
- Excluded initial direct costs from measuring the right-of-use asset at the date of initial application; and
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

For leases that were classified as finance leases under AASB 117, the carrying amount of the right-of-use asset and lease liability at 1 July 2019 are determined as the carrying amount of the lease asset and lease liability under AASB 117 immediately before that date.

### **8.3.4 Transition impact on financial statements**

This note explains the impact of the adoption of the following new accounting standards for the first time, from 1 July 2019:

- AASB 15 Revenue from Contracts with Customers;
- AASB 16 Leases, and;
- AASB 1058 Income of Not-for-Profit Entities;

There is no impact on the financial statements due to the adoption of the above accounting standards.

### **8.4 Responsible persons**

In accordance with the Ministerial Directions issued by the Minister for Finance under the FMA, 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 2019 to 30 June 2020
The Hon. Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change	1 July 2019 to 30 June 2020

#### *Responsible Persons*

Sharyon Peart, Board Chair	1 July 2019 to 30 June 2020
Dr John Cooke, Board member, Deputy chair	1 July 2019 to 30 June 2020
Allison McTaggart, Board Member	1 July 2019 to 30 June 2020
Anthony Martin, Board Member	1 July 2019 to 30 September 2019
Geoff Anderson, Board Member	1 July 2019 to 30 September 2019
Kellie Nulty, Board Member	1 July 2019 to 30 June 2020
Robert Matthews, Board Member	1 July 2019 to 30 June 2020
Jacquelyn Turfey, Board Member	1 July 2019 to 30 June 2020
Janice Kelly, Board Member	1 October 2019 to 30 June 2020
Monica Munro, Board Member	1 October 2019 to 30 June 2020

#### *Accountable Officer*

Jennifer Collins, Chief Executive Officer	1 July 2019 to 30 June 2020
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#### **Remuneration**

Remuneration received or receivable by the Accountable Officer in connection with management of the Authority during the reporting period was in the range: \$245,000-\$255,000 (2019: \$240,000-\$250,000)



**Notes to the Financial Report  
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**8.5 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 accountable officer, during the reporting period.

The accountable officer's remuneration has been disclosed in note 8.6 Related parties.

**8.6 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
- Sharyon Peart, Board Chair
- Dr John Cooke, Board Member, Deputy Chair
- Anthony Martin, Board Member
- Allison McTaggart, Board Member
- Geoff Anderson, 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	2020	2019
Short-term employee benefits	356,152	310,585
Post-employment benefits	41,105	35,842
Other long-term benefits	7,659	6,642
Termination benefits	-	-
<b>Total number of responsible persons</b>	<b>11</b>	<b>9</b>
<b>Total compensation</b>	<b>404,916</b>	<b>353,069</b>

**Notes to the Financial Report  
for the year ended 30 June 2020**

**Government Related Entities**

During the year the Authority reported related party transactions with the following 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	State Government Department	10,112,135	-	-	-
Department of Environment Land Water and Planning	Purchase of goods/services to undertake projects	State Government Department	-	-	1,372,478	510,533
Department of Jobs, Precincts and Regions	Purchase of goods/services to undertake projects	State Government Department	-	-	674,370	698,500
Department of Treasury and Finance	Provision grant funding to undertake projects	State Government Department	-	-	-	-
Lower Murray Water	Salinity levies for managing water use licences in salinity impact zones. Reimbursement of costs associated with joint project.	State Government Agency	6,262,970	1,108,332	-	-
Lower Murray Water	Purchase of goods/services to undertake projects	State Government Agency	-	-	28,395	-
Treasury Corporation Victoria	Banking - Interest on TCV term deposits	State Government Agency	412,740	-	-	-
Parks Victoria	Purchase of goods/services to undertake projects	State Government Agency	-	-	222,200	-
East Gippsland Catchment Management Authority	Purchase of goods/services to undertake projects	State Government Agency	6,245	-	-	-
Wimmera Catchment Management Authority	Purchase of goods/services to undertake projects	State Government Agency	9,985	-	17,186	-
Port Phillip and Westernport Catchment Management Authority	Purchase of goods/services to undertake projects	State Government Agency	16,500	-	27,500	-
Victorian Fisheries Authority	Provision grant funding to undertake projects	State Government Agency	19,800	-	-	-
Victorian Government Solicitors Office	Purchase of goods/services to undertake projects	State Government Agency	0	-	5,868	5,800

**Notes to the Financial Report  
for the year ended 30 June 2020**

**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
Lower Murray Water	Salinity levies for managing water use licences in salinity impact zones. Reimbursement of costs associated with joint project.	Board Deputy Chair	6,262,970	1,108,332	-	-
Lower Murray Water	Purchase of goods/services to undertake projects	Board Deputy Chair	-	-	28,395	-
La Trobe University	Purchase of goods/services to undertake projects	Member of Advisory Board	-	-	171,047	-
MADEC	Payments to traditional owners for cultural heritage.	Partner is a KMP	-	-	99,282	910

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.

**8.7 Remuneration of auditors**

	\$	
	2020	2019
<b>Victorian Auditor-General's Office</b>		
Audit or review of the financial statements	15,700	15,700
<b>Total remuneration of auditors</b>	<b>15,700</b>	<b>15,700</b>

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

**8.8 Subsequent events**

**8.8.1 Coronavirus restriction in Victoria**

The State of Victoria has introduced more restrictions post balance date in response to the "second wave" of Coronavirus pandemic. The measures implemented included stricter limitations on the operation of businesses in Victoria. The tighter restrictions have resulted in the closure of businesses and further reductions in commercial activities, which may directly or indirectly affect Mallee CMA. Management does not expect the responses to significantly affect the authority's operations, the results of those operations, or the state of affairs but notes that it is difficult to estimate the potential impacts.

**8.8.2 Economic dependency**

The Authority is dependent on the Department of Environment, Land, Water and Planning for the majority of its revenue used to operate the entity. At the date of this report, the Board of Directors has no reason to believe the Department of Environment, Land, Water and Planning will not continue to support the Authority.

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

## 8.9 Australian Accounting Standards issued that are not yet effective

The following AASs become effective for reporting periods commencing after the operative dates stated.

Certain new Australian Accounting Standards (AAS) have been published which are not mandatory for the 30 June 2019 reporting period. The Authority assesses the impact of all these new standards and their early adoption where applicable.

Standard/Interpretation	Summary	Applicable for annual reporting periods beginning on	Impact on public sector entity financial statements
AASB 17 <i>Insurance Contracts</i>	The new Australian standard eliminates inconsistencies and weaknesses in existing practices by providing a single principle based framework to account for all types of insurance contracts, including reissuance contract that an insurer holds. It also provides requirements for presentation and disclosure to enhance comparability between entities. This standard does not currently apply to not-for-profit public sector entities. The AASB is undertaking further outreach to determine the applicability of this standard to the not-for-profit public sector.	1-Jan-21	The assessment has indicated that there will be no significant impact for the Authority.
AASB 2018-6 Amendments to Australian Accounting Standards – Definition of a Business	This standard amends AASB 3 Business Combinations to clarify the definition of a business, assisting entities to determine whether a transaction should be accounted for as a business combination or as an asset acquisition. The amendments: •clarify that to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs; •remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs; •add guidance and illustrative examples to help entities assess whether a substantive process has been acquired; •narrow the definitions of a business and of outputs by focusing on goods and services provided to customers and by removing the reference to an ability to reduce costs; and •add an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business.	1-Jan-20	The assessment has indicated that there will be no significant impact for the Authority.

**Notes to the Financial Report  
for the year ended 30 June 2020**

AASB 2018-7 Amendments to Australian Accounting Standards – Definition of Material	This standard amends AASB 101 Presentation of Financial Statements and AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments refine the definition of material in AASB 10 Events after the Reporting Period, include some supporting requirements in AASB 101 in the definition to give it more prominence and clarify the explanation accompanying the definition of material. The amendments also clarify the definition of material and its application by improving the wording and aligning the definition across AASB standards and other publications.	1-Jan-20	The new definition provides more clarification and explanation accompanying the definition of material which is consistent with the Authority's current materiality tests. The assessment has indicated that there will be no significant impact for the public sector.
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Standard/Interpretation	Summary	Applicable for annual reporting periods beginning on	Impact on public sector entity financial statements
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 ED 301 Classification of Liabilities as Current or Non-Current – Deferral of Effective Date with the intention to defer the application by one year to periods beginning on or after 1 January 2023. The Authority will not early adopt the Standard.	1-Jan-20	The Authority is in the process of analysing the impacts of this Standard. However, it is not anticipated to have a material impact.

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 1060 General Purpose Financial Statements – Simplified Disclosures for For-Profit and Not-for-Profit Tier 2 Entities (Appendix C).
- AASB 2018-6 Amendments to Australian Accounting Standards – Definition of a Business.
- AASB 2019-1 Amendments to Australian Accounting Standards – References to the Conceptual Framework.
- AASB 2019-3 Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform.
- AASB 2019-5 Amendments to Australian Accounting Standards – Disclosure of the Effect of New IFRS Standards Not Yet Issued in Australia.
- AASB 2020-2 Amendments to Australian Accounting Standards – Removal of Special Purpose Financial Statements for Certain For-Profit Private Sector Entities.



## 8.10 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

### Notes to the Financial Report for the year ended 30 June 2020

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**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 2020**

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**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 2020

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**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 legislations 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
<b>Report of Operations</b>		
<b><i>Charter and purpose</i></b>		
FRD 22H	Manner of establishment and the relevant Ministers	6
FRD 22H	Purpose, functions, powers and duties (Objectives, functions, powers and duties)	7
FRD 8D	Mallee CMA objectives, indicators and outputs	8
FRD 22H	Key initiatives and projects	10
FRD 22H	Nature and range of services provided	6
<b><i>Management and structure</i></b>		
FRD 22H	Organisational structure	53
<b><i>Financial and other information</i></b>		
FRD 8D	Performance against output performance measures	10
FRD 8D	Budget portfolio outcomes	10
FRD 10A	Disclosure index	119
FRD 12B	Disclosure of major contracts	68
FRD 15E	Executive officer disclosures	65
FRD 22H	Employment and conduct principles	61
FRD 22H	Occupational health and safety policy	61
FRD 22H	Summary of the financial results for the year	50
FRD 22H	Significant changes in financial position during the year	51
FRD 22H	Major changes or factors affecting performance	51
FRD 22H	Subsequent events	52
FRD 22H	Application and operation of <i>Freedom of Information Act 1982</i>	68
FRD 22H	Compliance with building and maintenance provisions of <i>Building Act 1993</i>	68

Continued...



## Appendix 1 Disclosure Index

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

Legislation	Requirement	Page
FRD 22H	Statement on Competitive Neutrality Policy	68
FRD 22H	Application and operation of the <i>Public Interest Disclosures Act 2012</i>	69
FRD 22H	Details of consultancies over \$10,000	67
FRD 22H	Details of consultancies under \$10,000	67
FRD 22H	Disclosure of government advertising expenditure	67
FRD 22H	Disclosure of ICT expenditure	67
FRD 22H	Statement of availability of other information	72
FRD 24D	Reporting of office-based environmental impacts	70
FRD 25D	Local Jobs First	67
FRD 29C	Workforce Data disclosures	64
SD 5.2	Specific requirements under Standing Direction 5.2	74
<b>Compliance attestation and declaration</b>		
SD 5.1.4	Attestation for compliance with Ministerial Standing Direction	73
SD 5.2.3	Declaration in report of operations	2
<b>Financial Statements</b>		
<b>Declaration</b>		
SD 5.2.2	Declaration in financial statements	74
<b>Other requirements under Standing Directions 5.2</b>		
SD 5.2.1(a)	Compliance with Australian accounting standards and other authoritative pronouncements	74
SD 5.2.1(a)	Compliance with Standing Directions	74
SD 5.2.1(b)	Compliance with Model Financial Report	74
<b>Other disclosures as required by FRDs in notes to the financial statements</b>		
FRD 9B	Departmental Disclosure of Administered Assets and Liabilities by Activity	X
FRD 11A	Disclosure of Ex gratia Expenses	X
FRD 13	Disclosure of Parliamentary Appropriations	X
FRD 21C	Disclosures of Responsible Persons, Executive Officers and other Personnel (Contractors with Significant Management Responsibilities) in the Financial Report	109
FRD 103H	Non Financial Physical Assets	89
FRD 110A	Cash Flow Statements	79
FRD 112D	Defined Benefit Superannuation Obligations	88
FRD 114C	Financial Instruments – general government entities and public non-financial corporations	96
<b>Legislation</b>		
<i>Freedom of Information Act 1982</i>		68
<i>Building Act 1993</i>		68
<i>Public Interest Disclosures Act 2012</i>		69
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# Appendices

## 2 Condition and Management Report

### Background

This condition and management report for 2019–20 aims to fulfil the Mallee CMA's annual reporting requirements as outlined in Section 19B of the CaLP Act, 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 four headline themes to align with Regional Asset classes identified by the Mallee RCS 2013–19. Further detail on these is provided in Table 36.

An overview of any key events (e.g. climatic, policy changes) that occurred in 2019–20 which may have influenced the management and/or condition of our regional assets is also provided within this report.

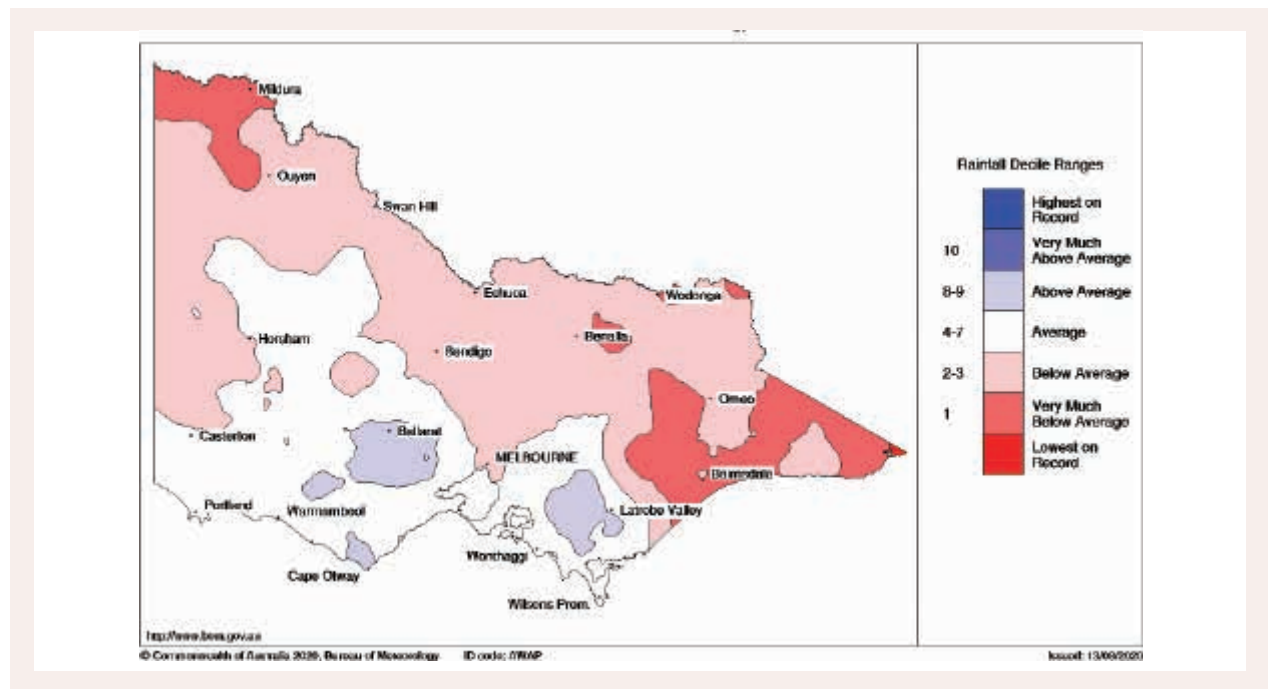
**Table 1** | Headline theme, regional asset and definition.

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.

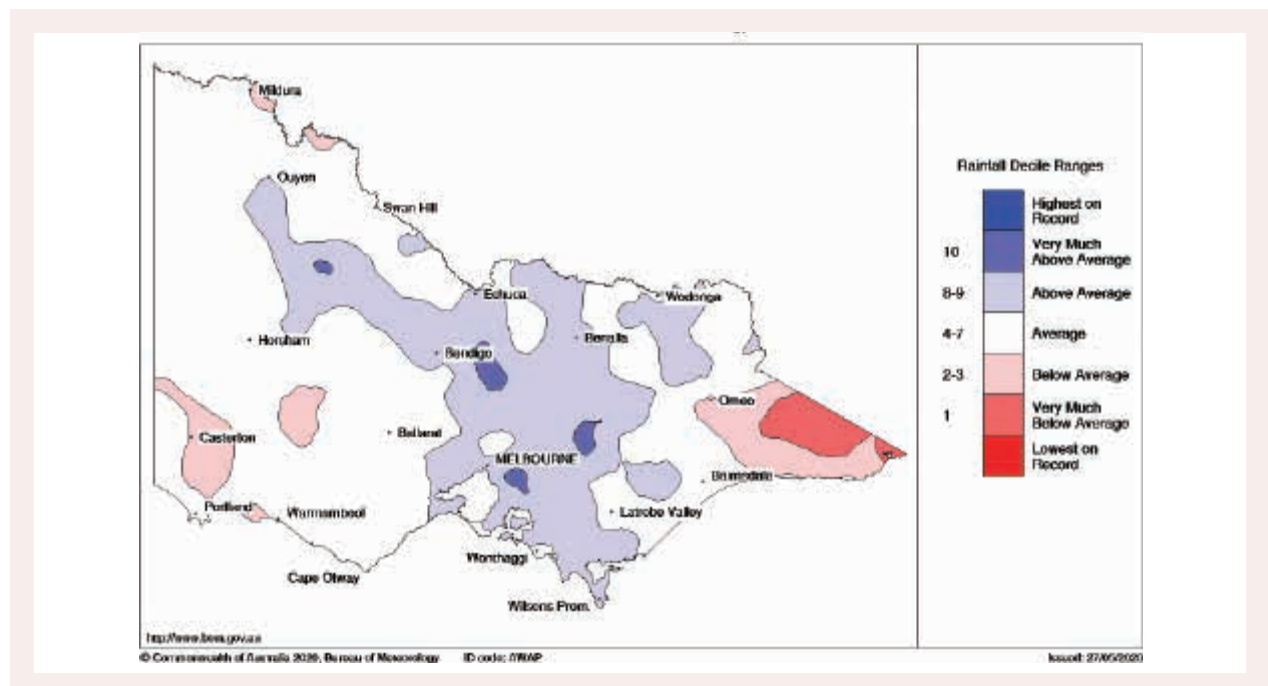
### Key Events and Insights

#### Climate

Annual climatic conditions can have a significant impact on both the condition and management of regional assets. In 2019–20, the Mallee region experienced 'below average' to 'very much below average' rainfall over the cooler months (April to November) (Figure 7) and 'average' to 'above average' in the warmer period (October to April) (Figure 8).



**Figure 1** | Victorian Rainfall Deciles 1 April 2019 to 30 November 2019 (Source: Australian Bureau of Meteorology).



**Figure 2** | Victorian Rainfall Deciles 1 October 2019 to 30 April 2020 (Source: Australian Bureau of Meteorology).

Key climatic events experienced throughout 2019–20 included:

- Following a dry 2018–19, winter rainfall in 2019 ranged from 'average' in the south, to 'very much below average' in the north. This variability included Manangatang (central Mallee) having their highest July daily rainfall on record (17.8mm), while the northern Millewa region received 42 per cent (10.4mm) of average July rainfall and 21 per cent (5.4mm) of the August average.
- Below-average rainfall continued throughout spring, with sites receiving between 32 per cent (Mildura) and 60 per cent (Hopetoun) of the long-term average. Temperatures were above average with the highest possible fire danger rating, a Code Red Day declared for the Mallee on 21 November due to the extreme heat. Strong winds were also associated with several significant dust storms in October and November, with an event on the 21 November reducing visibility at Mildura Airport to as low as 500 metres.
- Above average temperatures, and average (southern) to below average (northern) rainfall was recorded in summer, with dust storms also experienced in January 2020.
- In autumn, rainfall and temperature patterns returned to average across the region; with the Mildura site recording 134 per cent (85.8mm) of March-May rainfall after an extended period (i.e. > 2 years) of 'below' to 'very much below' average conditions.
- Water inflows to the key Murray, Goulburn and Darling storages also continued to be below average during 2019–20. For example, River Murray system inflows represented the driest 12 per cent of years on record, with wetter conditions in March and significant rainfall events in late April resulting in May inflows which contributed 20 per cent of the 2019–20 total. Water allocations to High-Reliability water shares held on the Victorian Murray reached 66 per cent allocation on 1 April 2020.

## Delivery Partnerships

Over 390,000 ha of targeted environmental works were undertaken in 2019–20 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 2019–20, this included the provision of 118 individual funding grants to both community groups (31) and private land managers (87).

Community engagement and capacity building approaches also continued to be well supported. In 2019–20, this resulted in some 6,004 stakeholders participating in 588 individual events. Evaluation of these activities identified 99 per cent of surveyed participants rated the overall delivery of events as either 'excellent' (70 per cent) or as 'good' (29 per cent).

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, Land and Water Advisory Committee, and Catchment Partnership Committees.

This regional partnership framework includes the Mallee Catchment Partnership Agreement forum which was established in 2017–18 to deliver on a key action of the Victorian Government's Our Catchments, Our Communities - Integrated Catchment Management in Victoria (2016–19). Seven key regional organisations are signatories to the Mallee Catchment Partnership Agreement; spanning local government, water corporations, State Government departments/agencies, and non-governmental organisations. These organisations met regularly throughout 2019–20 to progress their shared commitment of:

- Strengthening coordination, collaboration, and accountability;
- Reducing duplication; and
- Providing clarity on roles and responsibilities between key catchment management partners



Dust Storm approaching Mildura in November 2019. CREDIT: Admedia



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 2019–20, these included:

- Salinity Accountability Advisory Committee;
- Victorian Mallee Irrigation Region Land and Water Management Plan Steering Committee;
- Mallee Floodplain Management Strategy (FMS) Implementation Steering Committee;
- 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.

Strong partnerships between the Mallee CMA, Lower Murray Water and the Department of Environment, Land, Water, and Planning continued to improve salinity management in the Mallee, as part of delivering against Action 4.8 of the Victorian Government's Water for Victoria policy.

In 2019–20 this included:

- Reviewing and refining salinity management policy in response to emerging issues and sustainable irrigation requirements (e.g. reviews of the salinity offset charging process).
- Investing revenue from salinity charges to update our knowledge of the Victorian Mallee salinity impacts and the cost of offsets, consistent with Basin Salinity Management 2030.

### Strategic Framework

The following strategic documents were developed or reviewed by the region in 2019–20, representing ongoing advances in the planning, delivery, and evaluation of both NRM and governance focused activities.

- Mallee CMA Annual Report (2018–19);
- Mallee CMA Corporate Plan (2020–25);
- Mallee CMA Stakeholder Engagement Strategy (2019–20);
- Mallee CMA Social Procurement Strategy (2019–21);
- Victorian Mallee Irrigation Region Land and Water Management Plan (2020–29);
- Hattah-Kulkyne Lakes Ramsar Site Management Plan (2020–27) and Annual Action Plan (2020–21);
- Seasonal Watering Proposals (2020–21) for Living Murray Icon Sites, Lower Murray wetlands and Wimmera Mallee Pipeline wetlands;
- Mallee Floodplain Management Strategy Monitoring Evaluation and Reporting Plan (2020); and
- Victorian Murray Floodplain Restoration Project Monitoring Evaluation and Reporting Plans Ecological, Cultural and Socio-Economic Components.

Final review and processes for the 2013–19 Mallee RCS also commenced in 2019–20, with a renewed Strategy scheduled to be completed in 2020–21.

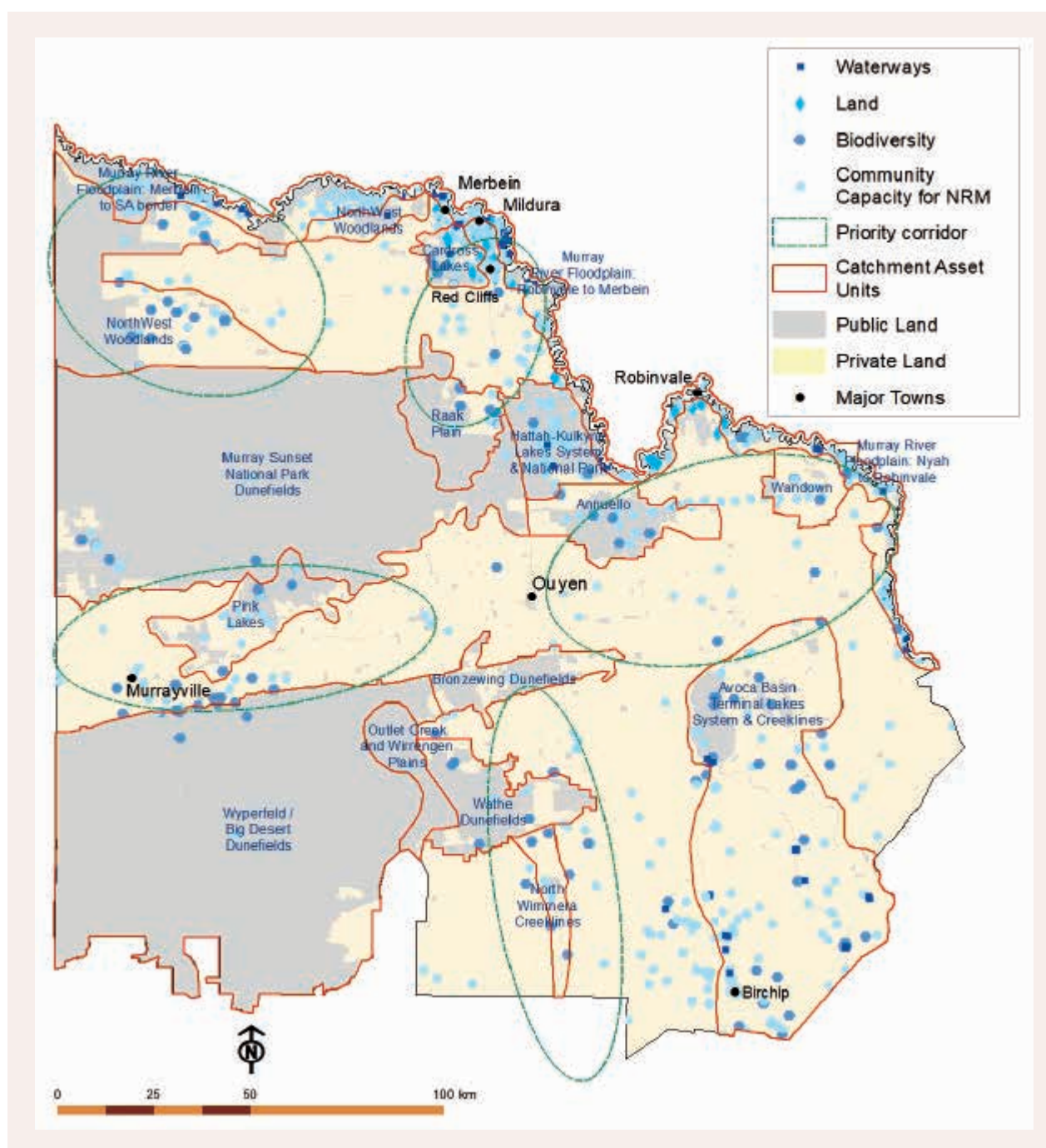
### Management

The RCS (2013–19) 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 (2019–20) 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 2019–20 management actions delivered within the region's priority landscapes (i.e. Catchment Assets and Corridors) under each headline theme are illustrated spatially in Figure 9. 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 on 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 A.





**Figure 3** | Spatial distribution of management actions (outputs) delivered in 2019–20 under each of the RCS headline themes.

As illustrated by Table 37, a large proportion of 2019–20 on ground management activity was delivered within the region’s priority landscapes. Ongoing application of this approach is ensuring 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 2** | Proportion (per cent) of 2019–20 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	91	41
Weed Control	97	53
Water Regime	99	40
Revegetation	100	29
Monitoring Structure	94	33
Road	100	62
Fence	100	24
Visitor Facility	100	24





\* Overlap of Catchment Asset and Priority Corridor boundaries means that collective per cent of works occurring within them 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 Table 38. 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.

**Table 3** | Assessment criteria for annual reporting.

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.





A summary of 2019–20 condition assessments for each of the RCS Regional Asset classes is provided in Table 39. Further detail on the evidence that informed these assessments is provided in the following sections.

**Table 4 |** Summary of 2019–20 condition assessment for each of the Mallee RCS (2013–19) Regional Asset classes and associated evidence base.

Headline Theme	Regional Assets	Previous 3 Year Assessment	2019–20 Condition Assessment	Summary of 2019–20 key evidence
Community	Community Capacity for NRM			Significant number <b>(6,004)</b> of stakeholders and broader community members participating in 2019–20 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.
	Culture and Heritage			<b>15</b> additional Cultural Heritage Management Plans (CHMPs) approved and lodged with Aboriginal Victoria in 2019–20. In total there are <b>106</b> Plans covering <b>40,009</b> ha. <b>60</b> additional Registered Aboriginal Place, bringing the total to <b>4,405</b> ; and a further <b>97</b> components (e.g. hearths, burial remains, scarred trees) recorded on ACHRIS ( <b>6,128</b> total). No additional non-Aboriginal heritage sites were registered in 2019–20, evidence however of resources being allocated for the maintenance and restoration of a selection of the <b>526</b> sites.
	Rivers & Wetlands			Significant areas of inundation achieved through environmental watering ( <b>33</b> sites x <b>2,557</b> ha in 2019–20) is having a demonstrable impact on waterway connectivity and both aquatic and riparian habitat condition. Over <b>7,800</b> ha of targeted threat mitigation works (e.g. invasive plant and animal management) delivered in 2019–20 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 2019–20 (e.g. environmental watering). While much of the region continued to experience an extended period of below average rainfall, some evidence to support the expectation that the significant area of threat mitigation works undertaken (i.e. over <b>360,000</b> ha) will provide a basis for future improvements as favourable climatic conditions occur.
	Terrestrial Habitat			Significant area of targeted works undertaken in 2019–20 to protect and enhance priority habitat ( <b>29,715</b> ha), with the <b>360,000</b> ha of works targeting threatened species/communities also expected to benefit the terrestrial habitat they were delivered in. Evidence of changes in the incidence of key threatening processes resulting from 2019–20 works programs. This included reductions in rabbit populations to <b>&lt;2</b> per ha (i.e. threshold required to support regeneration), reductions in goat presence (ranging from <b>85</b> to <b>92</b> per cent) within 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 improvements in habitat condition once grazing was removed (i.e. stock exclusion fencing), and evidence of ecological functionality returning to revegetated sites.

Continued...

**Table 4** | Summary of 2019–20 condition assessment for each of the Mallee RCS (2013–19) Regional Asset classes and associated evidence base. *Continued...*

Headline Theme	Regional Assets	Previous 3 Year Assessment	2019–20 Condition Assessment	Summary of 2019–20 key evidence
Land	Dryland Agriculture			<p>On average <b>83</b> per cent of the region exceeded 50 per cent groundcover (target) throughout 2019–20, a 5 per cent decline from the previous year's average and 13 per cent lower than 2017–18. Significant spatial variability is evident however, with the northern 'Millewa' land system recording a decrease from <b>76</b> per cent in July to <b>8</b> per cent in December. Conversely, the southern 'Culgoa' land system recorded a <b>4</b> per cent decrease (100 to 96 per cent) over the same period. Above average dust activity was also recorded throughout the year, with November 2019 the dustiest month since records began in July 2005.</p> <p>Ongoing dry conditions experienced throughout the growing season played a significant role in the low groundcover levels recorded at both the whole of region and individual landscape scale. Total January to December rainfall recorded for Mildura was the lowest on record, with the Central Mallee recording decile 1 conditions and the Southern Mallee decile 2.</p> <p>Leading into the 2019 cropping season, <b>9</b> per cent of surveyed paddocks were classified as bare (i.e. fallow/grazed), <b>9</b> per cent as pasture, and <b>82</b> per cent as stubble. While it is evident that ongoing support is required in northern areas of the Mallee to accelerate the identification, validation and adoption of practices that promote increased groundcover and reduce erosion risk; without the widespread changes in management practices that have occurred over past years, regional erosion outcomes could have been significantly worse.</p>
	Irrigated Agriculture			<p>From mid-2018 to mid-2019, the irrigable area increased by <b>2,470</b> ha, a 3 per cent increase from <b>78,775</b> ha to <b>81,245</b> ha. This is on par with the average expansion 2003 to 2006 which is the second highest growth rate since 1997.</p> <p>Increased adoption of best management practice by irrigators achieved an estimated <b>4,171</b> tonne/year reduction in salt loads to the Murray River and significant improvements in on farm water use efficiency.</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 2019–20.</p> <p>Trend analysis of <b>526</b> regional groundwater bores identified a slight decrease in both water level and salinity compared with 2018–19, with both measures remaining stable over the longer term (i.e. 2013–20).</p> <p>Metered extraction within the Murrayville GMA was <b>65</b> per cent of the licensed volume for 2019, a <b>20</b> per cent decrease in extraction from the 2018 season. Monitoring indicates that groundwater aquifer continues to demonstrate a recovering trend. Salinity levels also remained stable in 2019.</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 are 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, require sites of cultural and heritage significance to be given critical considerations in NRM based 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 40 summarises the key activities that contributed to the RCS' six-year strategic actions for Culture and Heritage and Community Capacity for NRM in 2019–20 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.'



Informative signage installed at Lock 11 Island.



## 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	2019–20 Progress
<b>Culture &amp; Heritage</b>	
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.	2 Cultural Heritage Management Plans (over 800 ha) 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.	98 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 2019–20 (e.g. Victorian Mallee Irrigation Region Land and Water Management Plan, Environmental Watering Management Plans).
<b>Community Capacity for NRM</b>	
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 2019–20, including: <ul style="list-style-type: none"> <li>25 field days (656 participants), 56 workshops/training events (792 participants), 126 presentations/displays (1,000 participants), 372 forums/meetings (3,202 participants)</li> <li>110 technical reports, 5 factsheets, 8 flyers/brochures, 16 media releases, 1 newsletter, 13 videos, 188 social media posts, 25 visitor facilities installed or maintained to enhance access and/or amenity.</li> </ul>
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"> <li>95 management agreements with private land managers for delivery of NRM activities across 16,609 ha.</li> </ul> <p>Education/training opportunities and ongoing technical support also provided as an integral part of these programs.</p> <p>Opportunities to enhance public land management outcomes actively sought and delivered in 2019–20 through programs such as Waterway Health and Regional Land Partnerships. This supported:  <ul style="list-style-type: none"> <li>11 management agreements/contracts/permits established with public land managers for delivery of NRM activities across some 3,038 ha.</li> </ul> <p>430 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:  <ul style="list-style-type: none"> <li>Mallee groundwater and surface water monitoring programs.</li> <li>Pre and post works threat incidence/impact assessments (e.g. invasive plants and animals) to inform site prioritisation and evaluation processes.</li> <li>Mallee revegetation monitoring program to determine survival rates and long-term changes in habitat condition.</li> <li>The Living Murray intervention and condition monitoring programs.</li> <li>Evaluations undertaken as part of the Mallee Community Capacity for NRM Monitoring Framework.</li> </ul> </p></p>
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 are also supported to undertake training in areas such as remote first aid, chemical handling and 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	2019–20 Progress
<b>Community Capacity for NRM</b>	
<b>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</b>	<p><b>16</b> irrigators supported to develop Irrigation, Drainage Management Plans across <b>226</b> ha to inform system upgrades.</p> <p>Development of <b>93</b> detailed site management plans to inform the delivery of targeted works programs, including review and renewal of <b>11</b> environmental watering management plans and the development of <b>10</b> delivery plans/proposals to inform landscape scale management of the environmental water reserve.</p>
<b>9.1.5. Continue to develop and implement programs which support Indigenous communities to promote and apply traditional ecological knowledge.</b>	<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>Also see 9.1.8</p>
<b>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.</b>	<p><b>168</b> 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"> <li>• <b>2</b> community advisory committees supported to facilitate stakeholder input to the development, implementation, and review of NRM activities.</li> <li>• <b>9</b> regional partnership committees established/maintained to facilitate an integrated approach to the development, implementation and review of NRM activities.</li> <li>• <b>7</b> regional steering/advisory committees established/maintained to guide the development and implementation of key management strategies and plans.</li> </ul> <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>
<b>9.1.7 Implement and review the <i>Mallee Regional Landcare Support Strategy</i><sup>1</sup>.</b>	<p><b>23</b> regional Landcare groups provided with ongoing coordination support.</p> <p><b>31</b> devolved grants provided to Mallee Landcare/community groups to support the delivery of local priorities.</p> <p><b>169</b> Landcare group members participating in <b>20</b> awareness raising/training events.</p>
<b>9.1.8 Implement and review the <i>Mallee CMA Indigenous Participation Plan</i><sup>2</sup>.</b>	<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><b>17</b> Aboriginal On-Country visits supported.</p> <p><b>28</b> events (<b>386</b> participants) facilitating Traditional Owner and Aboriginal community input into the development of key regional strategies/plans and the implementation of associated works programs. This included:</p> <ul style="list-style-type: none"> <li>• Input into strategic planning (e.g. Mallee Regional Catchment Strategy and Victorian Biodiversity Response planning).</li> <li>• Development of Victorian Mallee Irrigation Region Land and Water Management Plan and Environmental Water Management Plan guidelines.</li> </ul>

<sup>1</sup> Attachment A details all outputs specifically delivered under Mallee Regional Landcare Support Strategy in 2019-20.

<sup>2</sup> Attachment A details all outputs specifically delivered under Mallee Regional Landcare Support Strategy in 2019-20.

### Case Study

### Community

Bats, echidnas, frogs, birds and bugs have piqued the curiosity of our community, with volunteers keen to participate in events to become citizen scientists and collect data from their local areas.

Citizen science programs are an important tool to provide community members with a strong understanding of floodplain and wetland ecology, and the role water for the environment plays.

Using specialised equipment such as the Anabat system, and online tools including Birdlife Australia's app. and the Echidna CSI app.; volunteers are taking a hands-on

approach to collecting scientific data required by key regional planning documents such as Environmental Water Management Plans and Seasonal Watering Proposals.

As one participant outlined, 'it gets people who don't have tertiary education to take part in science', with regular engagement with our citizen scientists also supporting increased awareness of how collective efforts are informing regional NRM priorities, and ultimately improving the condition of their local waterways.



Citizen scientist participating in a Waterbug Blitz workshops.

### 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.

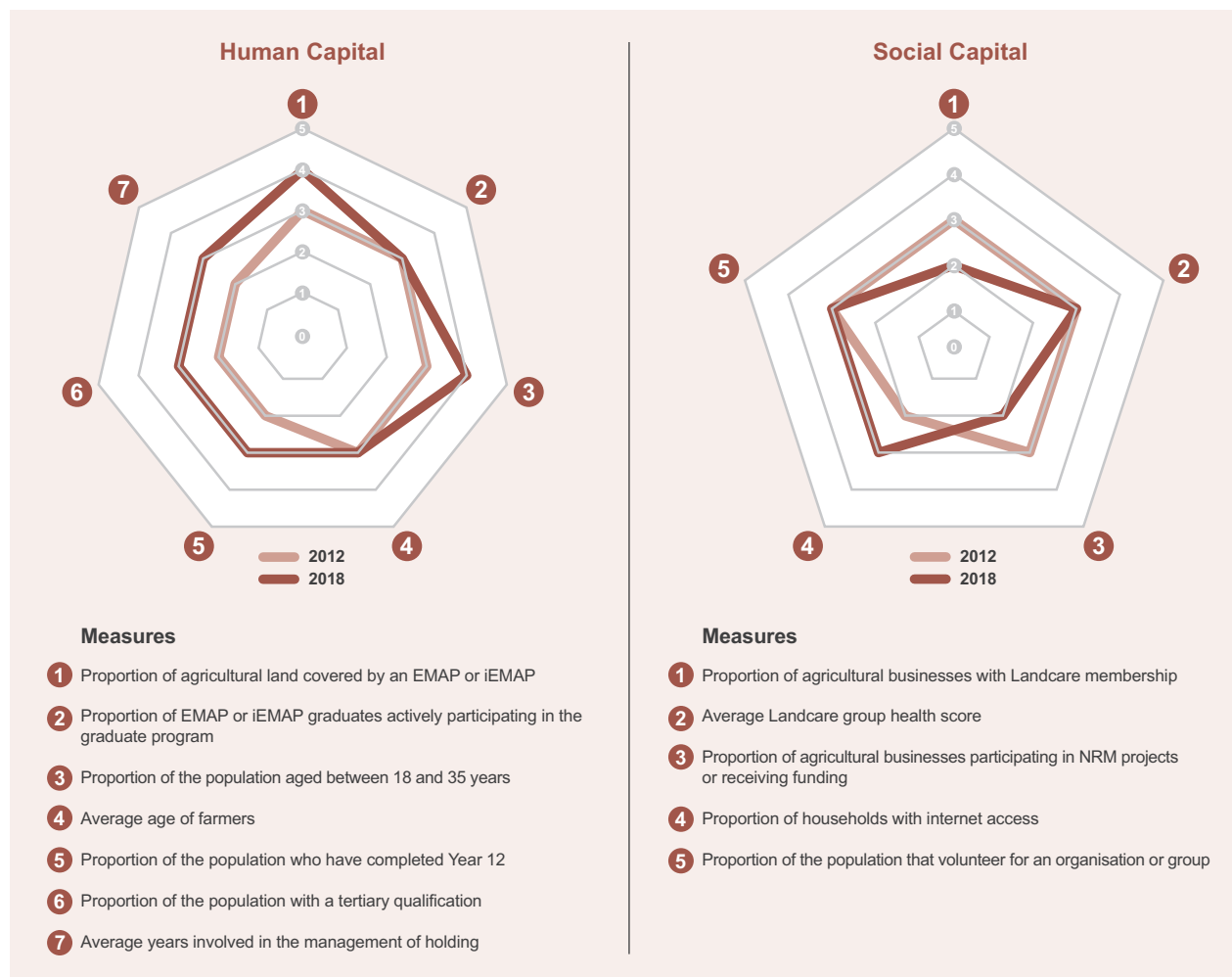
#### Community Capacity for NRM Benchmark

Historically, no regional-scale information has existed from which condition assessments of the Victorian Mallee community's capacity for natural resource management could be made. This information gap was addressed

as part of the Mallee RCS (2013–19) 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 natural resource management 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 natural resource management in the region<sup>3</sup>. Re-application of the tool in 2018 identified that at a regional scale, community capacity has remained relatively stable over the 6-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 10).



**Figure 4 |** Comparison of Regional Community Capacity Tool results between 2012 and 2018 (where 1 indicates 'low capacity' and 5 indicates 'high capacity')

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 time<sup>4</sup>.

*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.

<sup>3</sup> RMCG (2013) Mallee Regional Community Capacity for NRM: Detailed Condition Report.

<sup>4</sup> RMCG (2018) Mallee Regional Community Capacity for NRM: Detailed Condition Report.

### Community Capacity for NRM Assessment 2019–20

Community capacity for NRM in the Mallee is considered to be improving, with evidence that the activities delivered in 2019–20 will have a positive impact in the longer term.

Assessment	Previous 3 Year 	2019–20 
Summary of Evidence		
Significant number (6,004) of stakeholders and broader community members participating in 2019-20 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.		

#### 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 2019–20, there were 6,004 participants at some 588 individual engagement events (e.g. workshops, field days, meetings). Of those surveyed 70 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, 64 per cent cited 'learning about a topic', and a further 13 per cent as 'contributing to a discussion'. Survey respondents also reported a 61 per cent (average) increase in their awareness of specific NRM issues as a result of participation.

Members of Mallee CMA Community and Partnership Advisory Committees rated the overall delivery of information at the 2019–20 meetings as being excellent (40 per cent) or good (50 per cent). Opportunities to provide feedback were also rated highly (40 per cent excellent, 50 per cent good), with 80 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 identify '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' (48 per cent) is the highest reported motivation. Participants also report increased awareness of key threatening processes, and an increase in skills to implement associated mitigation actions.

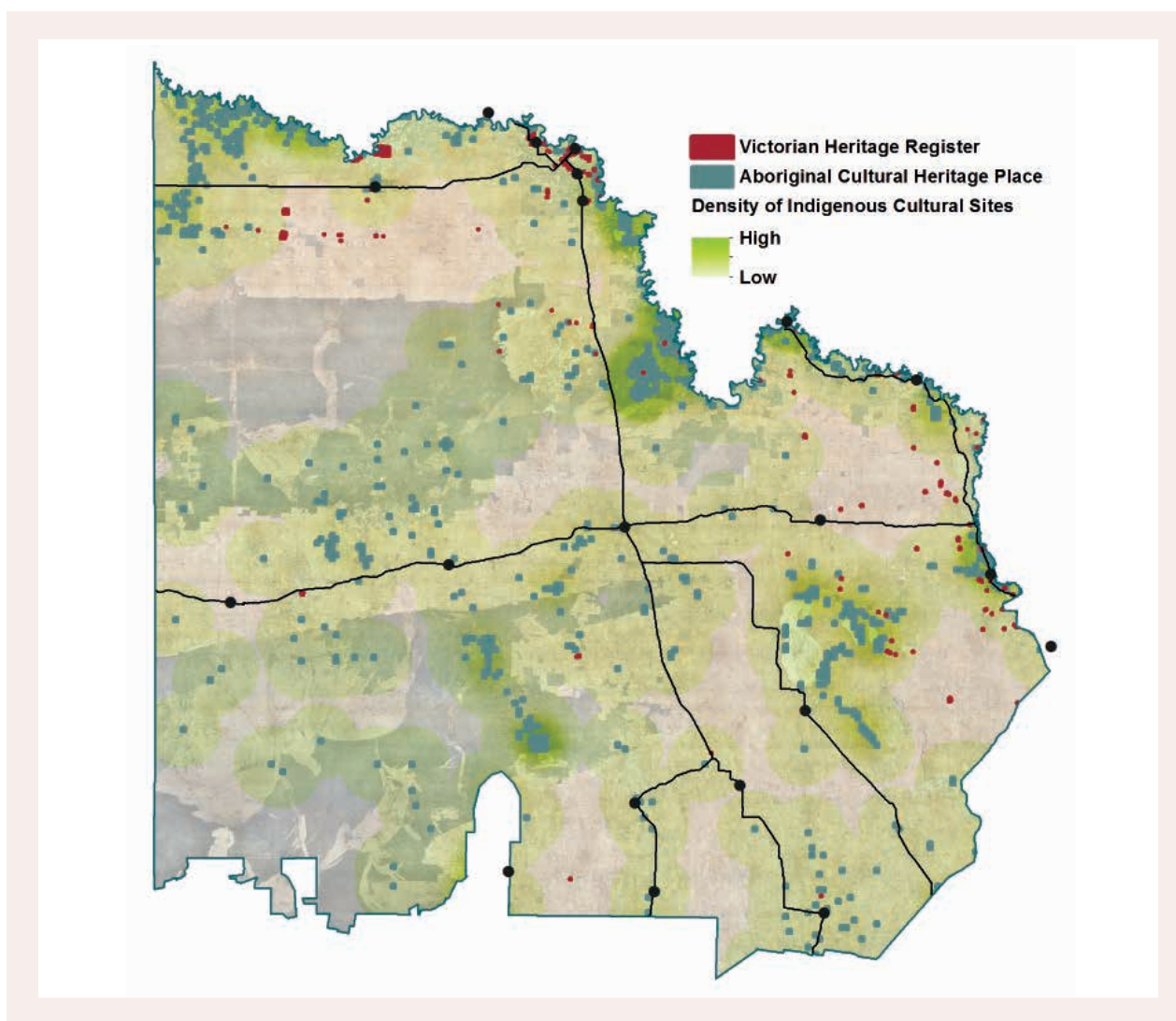
- Community groups receiving grants in 2019–20 also reported an increase in awareness of actions that can be taken to reduce key threatening processes, and in knowledge regarding implementation; particularly in regards to supporting regeneration processes and soil erosion management.

### 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 are 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.





**Figure 5** | Indicative Aboriginal and non-Aboriginal cultural heritage sites in the Mallee.

### Culture and Heritage Assessment 2019–20

The condition of Culture and Heritage assets in the Mallee is considered to be improving; with evidence that the management actions delivered in 2019-20 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2019–20
<b>Summary of Evidence</b>		
15 additional Cultural Heritage Management Plans (CHMPs) approved and lodged with Aboriginal Victoria in 2019-20. In total there are 106 Plans covering 40,009 ha.		
60 additional Registered Aboriginal Places, bringing the total to 4405; and a further 97 components (e.g. hearths, burial remains, scarred trees) recorded on ACHRIS (6,128 total).		
No additional non-Aboriginal heritage sites were registered in 2018–19, evidence however of resources being allocated for the maintenance and restoration of a selection of the 526 sites.		



## Appendix 2 Condition and Management Report

### *Reason for assessment*

Fifteen Cultural Heritage Management Plans (CHMPs) were approved and lodged with Aboriginal Victoria in 2019-20, bringing the total to 106. A further 31 Plans are currently in the preparation phase. Collectively these Plans cover 40,009 ha, a 5 per cent increase from 2018-19, with two (covering more than 800 ha) developed by Mallee CMA funded programs during 2019-20.

There are currently 4,405 Registered Aboriginal Places in the region, comprising 6,128 components and representing a 2 per cent increase (97 components) from 2018-19. The additional component types recorded in ACHRIS throughout 2018-19 included hearths (24), burial remains (1), scarred trees (48), and shell deposits (21).

Non-Aboriginal heritage sites include historical infrastructure, cemeteries, national parks and reserves, and parks and gardens. In 2019-20, 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. For example, the Mildura Rural City Council is conducting the Mildura Heritage Study to identify, assess and document post-contact places of cultural significance within the municipality and make recommendations for future conservation.



Canoe tree.

## 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 41 summarises the key activities that contributed to the RCS's six-year strategic actions for Waterway assets in 2019–20. 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 6** | Progress against RCS Strategic Actions for Waterways.

Strategic (6 Yr) Actions	2019–20 Progress
<b>1.1.1. Review the Mallee River Health Strategy and the Mallee Wetland Strategy, and develop and implement the Mallee Regional Waterway Strategy<sup>5</sup>.</b>	<p>Significant progress made against Mallee Waterway Strategy 2014–22 (MWS) targets, including:</p> <ul style="list-style-type: none"> <li>• 33 sites receiving environmental water (20,800 ML), covering 2,557 ha.</li> <li>• 6 ha of native (indigenous) vegetation established.</li> <li>• 27 km of fencing/bollards installed.</li> <li>• 18 km of road/track rationalisation and repair works.</li> <li>• 2,178 ha of weed control (primarily woody weeds).</li> <li>• 5,714 ha of pest animal control (rabbits and feral pigs).</li> </ul> <p>All on-ground works delivered in line with actions identified by MWS for individual waterway management units and Water for Victoria priority waterways, including:</p> <ul style="list-style-type: none"> <li>• Merbein common wetlands (Mallee CMA's Flagship Waterway Project)</li> <li>• Lindsay-Wallpolla Islands</li> <li>• Kings Billabong and Woorlong complex</li> <li>• Hattah-Kulkyne Lakes Ramsar site.</li> </ul> <p>Ongoing application of the Regional Riparian Action Plan 2015–20 (RRAP), a Victorian Government initiative, has also accelerated on-ground riparian management works to improve the health of riparian land.</p>
<b>1.1.2. Review, update and implement the Mallee Floodplain Management Strategy 2018–28 (FMS).</b>	<p>Delivery against Regional Works Plan (2018–20) is coordinated by the regional FMS Implementation Steering Committee, with key achievements to date including:</p> <ul style="list-style-type: none"> <li>• The development and implementation of a Monitoring, Evaluation and Reporting (MER) Plan</li> <li>• Progression of several flood studies to address identified gaps in the region's knowledge base. This includes a detailed study of Murray River storm water and riverine flooding scenarios; and reviews/updates of Tyrrell, Lalbert and Yarriambiack Creek flood mapping.</li> </ul>

<sup>5</sup> Attachment A details all outputs delivered under the Mallee Waterway Strategy in 2019–20.



### Case Study

### Waterways

Margooya Lagoon is currently experiencing a managed drying phase.

Margooya Lagoon was permanently inundated under the influence of the Lock 15 weir pool at Euston until a regulator was installed in 2009. This has allowed a drying phase to be re-instated for the lagoon.

As part of preparing for this drying phase, fish monitoring (including fyke netting) was undertaken in spring 2019 which did not detect any large bodied native fish in Margooya Lagoon. This drying phase will help reduce carp numbers in the wetland, supporting native fish and plants when refilled in autumn 2021.

Drying is important to wetlands, allowing plants to germinate, grow and produce a seed bank in preparation for wetter conditions in the future. The drying of the wetland consolidates sediments and allow vegetation to establish on the lakebed, which provides improved water quality, habitat and resources allowing native fish and waterbirds to flourish when water returns.

The Margooya Lagoon drying and floodplain watering events were developed in partnership with the Tati Tati Wadi Wadi Peoples. This project was supported by the Mallee CMA, through funding from the Victorian Government's 'Environmental Water' program.



Margooya Lagoon prior to drying phase.

### 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 are conducted as part of the state-wide Index of Stream Condition (ISC) and Index of Wetland Condition (IWC) monitoring programs.

River/stream condition is 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 has identified that no major changes have occurred to the condition of these waterways over this timeframe. While no general improvement was detected, overall deterioration appears to have been controlled<sup>6</sup>.

<sup>6</sup> Department of Environment and Primary Industries (2013), *Index of Stream Condition: The third benchmark of Victorian river condition*.

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.

A full report on Index of Stream Condition results is available at [www.depi.vic.gov.au/water/water-resource-reporting/Third-Index-of-Stream-Condition-report](http://www.depi.vic.gov.au/water/water-resource-reporting/Third-Index-of-Stream-Condition-report).

### Wetlands Benchmark

Wetland condition is 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 5 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 form<sup>7</sup>.

*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 and will be applied to determine change from benchmarks in future reports.*

### Waterways Assessment 2019–20

#### 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 2019–20 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2019–20
Summary of Evidence		
Significant areas of inundation achieved through environmental watering (33 sites x 2,557 ha in 2019–20) is having a demonstrable impact on waterway connectivity and both aquatic and riparian habitat condition.		
Over 7,800 ha of targeted threat mitigation works (e.g. invasive plant and animal management) delivered in 2019–20 to further secure environmental outcomes achieved by recent watering events, and to protect priority riparian landscapes.		
Site based monitoring has identified reductions in threat incidence/impact and associated improvements in condition measures (e.g. native flora regeneration) resulting from these works.		



Bidgee Lagoon was one of the locations for the Talk on Country community engagement events.

<sup>7</sup> Papas, P and Maloney, P (2012): *Victoria's wetlands (2009- 2011): state wide assessments and condition monitoring*.



### Reasons for assessment

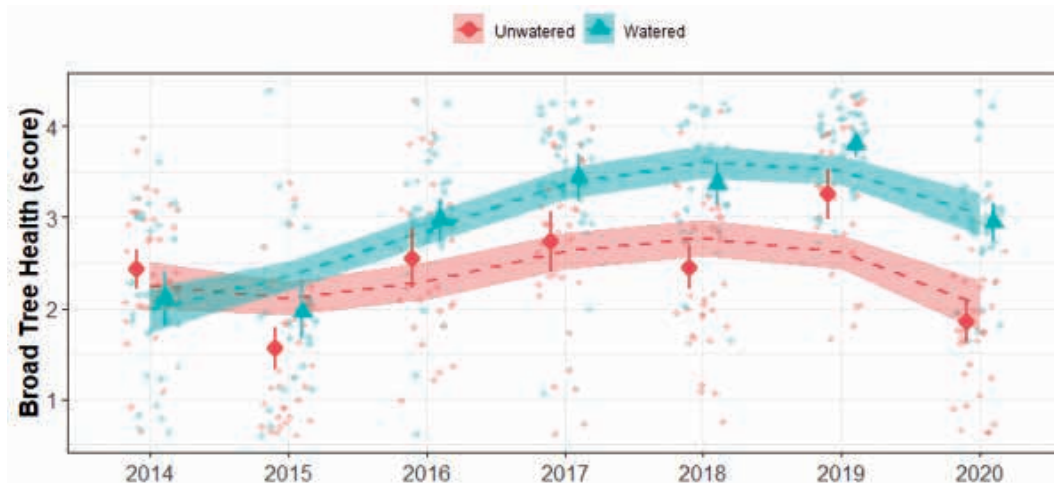
Site-based assessments (both ongoing and annual) have identified improvements in the health of landscapes and associated species/communities where both environmental water and targeted threat mitigation activities are being delivered.

Environmental watering activities undertaken in 2019–20 continue to deliver habitat enhancement and waterway connectivity outcomes as demonstrated by:

- Long-term monitoring (2006 to 2020) being conducted at the Hattah Lakes and Lindsay-Mulcra-Wallpolla Icon sites identified that several measured indicators of environmental condition (i.e. River Red Gum, Black Box, wetland and floodplain vegetation, lignum, cumbungi, 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 2019–20<sup>8</sup>.
- 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. 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, from one environmental watering event, with subsequent environmental watering events further improving tree health (see Figure 12)<sup>9</sup>. For wetland and floodplain communities, monitoring indicated the shift in vegetation composition according to wetland phases, with a shift from dominance of dry terrestrial species to dominance of aquatic and amphibious species during flooding and watering events, to predominately damp terrestrial and amphibious species during the drawdown phase<sup>10</sup>.

- Photopoint monitoring of priority wetlands, floodplains and creeks also provide 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 2019–20 observed these wetlands providing critical habitat for a range of fauna, including reptiles, frogs, kangaroos; and an influx of extensive waterbird diversity and abundance<sup>11</sup>.
- Lindsay-Mulcra-Wallpolla monitoring sites recorded the second highest number of fish than previous annual monitoring surveys. The higher number of fish is primarily due to record numbers of carp gudgeon, however the last three years have seen strong recruitment for a number of large-bodied native fish species including Murray Cod and Bony Herring and most small-bodied native fish species<sup>12</sup>.



**Figure 6** | The raw Blackbox health data means ( $\pm$  95% 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).

<sup>8</sup> Ecology Australia (2020) *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2019-20, Part A (Main Report) Draft*

<sup>9</sup> 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.

<sup>10</sup> Bloink C., Walker Z., Sharp J. and White M. (2020). *The Living Murray Condition Monitoring, Hattah Lakes 2019–20, Part A*. Unpublished report produced for Mallee Catchment Management Authority. Ecology Australia Pty Ltd, Fairfield.

<sup>11</sup> Mallee CMA (2020) unpublished report.

<sup>12</sup> Bloink C., Walker Z., Sharpe J., White M. (2020). *The Living Murray Condition Monitoring, Lindsay-Mulcra-Wallpolla 2019–20, Part A*. Unpublished report produced for Mallee Catchment Management Authority. Ecology Australia Pty Ltd, Fairfield.

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 over the past three years, it is anticipated that the extent of these impacts is also relatively significant.

In 2019–20, over 7,800 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 92 per cent of the monitored sites<sup>13</sup>.
- The diversity of invasive plants at Hattah Lakes was the second lowest recorded over the seven-year monitoring period (2013–20)<sup>14</sup>. Targeted works to control invasive species were undertaken over the 2019–20 period with a high level of success. Extensive follow up works will however be required for longer term management outcomes<sup>15</sup>.

- 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 in 2019-20 of the 2017-19 control areas has built on the habitat improvement outcomes achieved and provided significant progress towards the aim of achieving 100 per cent eradication of active 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 pig damage to floodplain habitat in response to water availability in 2019–20 has recorded a reduction in extent of pig damage on Ramsar wetlands compared to 2018–19 results. The current level of feral pig disturbance was however associated with reduced vegetative cover and organic litter, and increased exotic plant and bare ground cover. 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 threat<sup>16</sup>.



Fish monitoring at Mullaroo Creek.

<sup>13</sup> Parks Victoria (2019). *Spotlight Transect Scores - Hattah Area Autumn 2020*

<sup>14</sup> 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.

<sup>15</sup> 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.

<sup>16</sup> 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.





Mallee CMA delivered targeted works to support the recovery of Buloke Woodlands.

### 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). Large contiguous blocks of terrestrial habitat remain however, 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 42 summarises the key activities that contributed to the RCS's six-year strategic actions for Threatened Species and Communities and Terrestrial Habitat in 2019–20. 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 7 | Progress against RCS Strategic Actions for Threatened Species & Communities and Terrestrial Habitat.**

Strategic (6 Yr) Actions	2019–20 Progress
<b>Threatened Species &amp; Communities</b>	
<b>3.1.1. Continue to implement actions consistent with federal, state and regional prioritisation frameworks.</b>	<p>Funding secured under the Victorian Threatened Species Initiative – Biodiversity Response Planning program to deliver against actions identified by statewide framework (Protecting Victoria's Environment – Biodiversity 2037) as being a priority for the Mallee. Targeted works implemented to support the recovery of <b>16</b> threatened species and <b>4</b> threatened ecological communities across ten 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 &amp; National Park; Pink Lakes; Annuello; 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>
<b>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.</b>	<p>Above programs supported significant delivery against priority management actions at both the individual species/communities and landscape scale, including the following<sup>17</sup>:</p> <ul style="list-style-type: none"> <li>• <b>434</b> ha of native vegetation established to enhance priority habitat.</li> <li>• <b>5</b> km of stock exclusion fencing to protect and enhance priority habitat.</li> <li>• <b>280,968</b> ha of pest animal control (rabbit, fox, feral cat, feral goat, and feral pig) and <b>108,959</b> ha of weed control, to reduce critical threats to priority species/communities.</li> </ul> <p>Limited opportunities to support the development or review of Action Statements/Recovery Plans in 2019–20.</p>
<b>3.1.3. Support the implementation of ecologically appropriate burning regimes for protection of threatened species and communities.</b>	Ongoing management and support provided by regional delivery partners (DELWP monitoring).
<b>Terrestrial Habitat</b>	
<b>4.1.1. Review, update and implement the <i>Mallee Native Vegetation Plan</i>.</b>	<p>No progress regarding review/update of Mallee Native Vegetation Plan - pending State Government direction.</p> <p>Ongoing delivery against regional priorities and management actions assumed (not actively monitored or reported at regional scale).</p>
<b>4.1.2. Develop and implement a Regional Biolinks Plan to guide the delivery of cross-tenure habitat enhancement programs.</b>	<p>Mallee Biolinks Plan released June 2016 as part of the Mallee NRM Plan for Climate Change (2016–19). Progress against priority actions achieved in 2019–20, included<sup>18</sup>:</p> <ul style="list-style-type: none"> <li>• <b>127</b> ha of native vegetation established to enhance priority linkages.</li> <li>• <b>4,161</b> ha of weed control to protect and priority habitat linkages.</li> <li>• <b>25,426</b> ha of pest animal control (rabbit) and <b>5</b> km of stock exclusion fencing to reduce grazing impacts and support regeneration outcomes within priority habitat linkages.</li> </ul> <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 2019–20 delivery included:</p> <ul style="list-style-type: none"> <li>• West Millewa (enhancing linkages between Murray River floodplain and north western casuarina woodland remnants.</li> <li>• Western Central Mallee (enhancing linkages between Murray Sunset National Park and the Wyperfeld/Big Desert.</li> <li>• Eastern Central Mallee (enhancing linkages between Murray River floodplain and Avoca Basin).</li> <li>• Yarriambiack (enhancing linkages along Yarriambiack Creek).</li> </ul>

<sup>17</sup> Attachment A details all outputs delivered under the broader Biodiversity theme in 2019–20.

<sup>18</sup> Attachment A details all outputs delivered under the broader Biodiversity theme in 2019–20.



### 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. Numbers have continued to decline over subsequent years however as a result of ongoing dry winter conditions; with 2018 numbers in particular being significantly below average. Annual variations in this trend are also evident, with the number of active mounds recorded in 2019 being close to the long-term average<sup>19</sup>. 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 foxes<sup>20</sup>.
- Five-year monitoring (2011–18) 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 species<sup>21</sup>.

- 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 conditions<sup>22</sup>.

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 pressures<sup>23</sup>. 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 their extinction in South Australia after a series of 2014 fires. Programs seeking to mitigate this threat are currently underway, with Mallee Emu-wren being reintroduced into South Australia's Ngarkat Conservation Park<sup>24</sup>.

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 land<sup>25</sup>.

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 1853<sup>26</sup>.

<sup>19</sup> Benshemesh J and Stokie P: *Malleefowl monitoring in Victoria: 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2019-20*. Reports to the Victorian Malleefowl Recovery Group

<sup>20</sup> 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.

<sup>21</sup> 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.

<sup>22</sup> 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.

<sup>23</sup> Department of Environment and Energy (2019) *Threatened Species Strategy – Year three Progress report*.

<sup>24</sup> Department of Environment and Energy (2019) *Threatened Species Strategy – Year three Progress report*.

<sup>25</sup> 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).

<sup>26</sup> Trust for Nature (2018) *Neds Corder Station: One of the largest Victorian Private Conservation Reserves*.



- 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 500 km). An outcome which is largely attributed to the magnitude of recent flood events<sup>27</sup>.

## Threatened Species and Communities Assessment 2019–20

### Summary of assessment

Site based assessments of individual threatened species and communities indicate a stable condition trend, with evidence that management actions undertaken in 2019–20 may support future improvements should favourable climatic conditions occur.

Assessment	Previous 3 Year	2019–20
<b>Summary of Evidence</b>		
Evidence of an increase in population numbers/distribution of threatened flora and fauna species experiencing favourable conditions in 2019–20 (e.g. environmental watering).		
While much of the region continued to experience an extended period of below average rainfall, some evidence to support the expectation that the significant area of threat mitigation works undertaken (i.e. over 360,000 ha) will provide a basis for future improvements as favourable climatic conditions occur.		

### Reasons for assessment

Long-term site-based monitoring (2013–20) identifies that individual species continue to respond to favourable conditions. For example, following environmental watering events at the Lindsay-Mulcra-Wallpolla icon site, the vulnerable Murray Cod was captured in record numbers for two consecutive years, with 2020 surveys representing a three-fold increase in the abundance recorded in 2018.

Similarly, monitoring at Hattah Lakes recorded double the abundance of vulnerable Regent Parrots in woodland near Lake Kramen as floodwaters receded in autumn 2020. Flocks were witnessed feeding on seeds of native and introduced plants round the margins of receding lakes, and in previously flooded black box woodland, with groups up to 30 resting in trees on individual sites<sup>28</sup>.

With the dry conditions experienced across the region in 2018–19 extending up until autumn 2020, 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 360,000 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 2019–20 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 decades<sup>29</sup>. Ongoing work is being undertaken to determine the persistence and range of these species in the southern Mallee, and to improve associated habitat.

### Terrestrial Habitat Benchmark

State-wide modelling (i.e. Site Condition Assessment and Patch-based Landscape Context Assessment), native vegetation quality across the Mallee is considered 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 statewide context to be generally high (Figure 13).

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. 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.

<sup>27</sup> Moxham C, Kenny S, Fanson B (2018). *The Living Murray Hattah Lakes Intervention Monitoring Annual Report 2018: Understorey Vegetation Program*.

<sup>28</sup> 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.

<sup>29</sup> Mallee CMA (2020) unpublished report.

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<sup>30</sup>; whereas Australia's overall vegetation condition was the poorest since 2002: 7 per cent lower than the previous year and 10 per cent below the 2000–18 average<sup>31</sup>.

### Case Study

### Biodiversity

A new study into the endangered winged peppergrass has discovered a 10-fold population boom.

The endangered Winged Peppergrass (*Lepidium monoplacoides*) has suffered a widespread decline from land clearance and other human-induced changes following European settlement. In the Mallee CMA region, it is known to occur within Hattah-Kulkyne and Wyperfeld National Parks.

In 2003, only 150 plants remained at the Hattah-Kulkyne National Park. This year, the study by the Arthur Rylah Institute, in partnership with the Mallee CMA found 2,433 plants, up from 250 in 2018. This is encouraging discovery in terms of the Winged Peppergrass's survival.

Grazing animals, weeds, salinity and biomass accumulation are threats may be contributing factors to the decline in the Winged Peppergrass populations at these sites. This research helps to better understand the landscape characteristics that drive this species occurrence and can be used to prioritise management in the protection of the species to ensure its survival in the future.

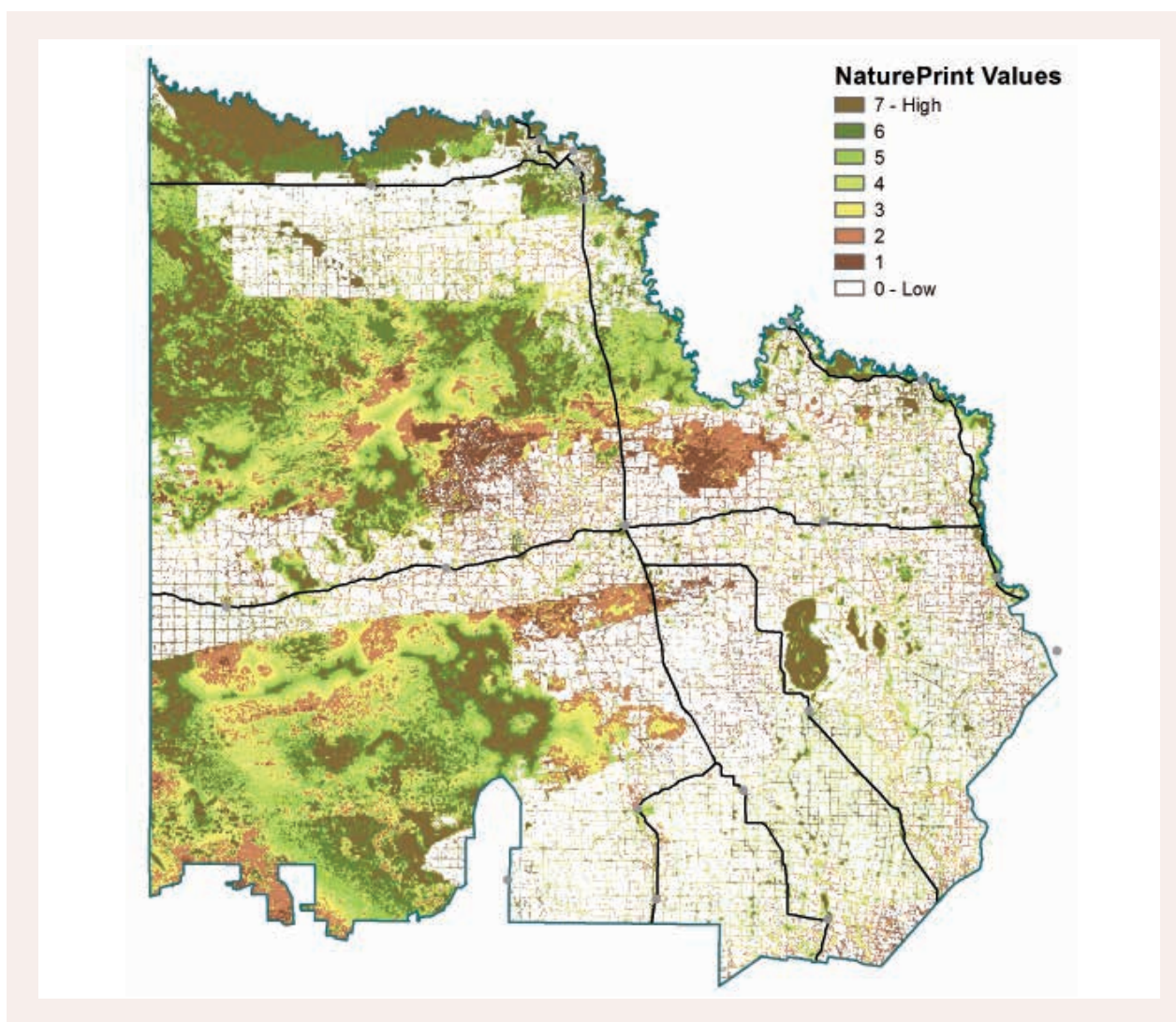
These important works were made possible through funding from the Victorian Government's 'Waterway Health' program, which is helping to improve management of the Hattah-Kulkyne Lakes, an internationally recognised complex of wetlands listed under the Ramsar Convention.



Winged Peppergrass at the Hattah-Kulkyne National Park.

<sup>30</sup> Centre for Water and Landscape Dynamics (2020). 2019 Environmental Report Card - Mallee.

<sup>31</sup> Centre for Water and Landscape Dynamics (2020). Australia's Environment in 2019 Summary Report.



**Figure 7** | Relative priority of Terrestrial Habitat Assets - NaturePrint Version 3 (State of Victoria 2014).

## Terrestrial Habitat Assessment 2019–20

### 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 2019–20 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2019–20
Summary of Evidence		
<p>Significant area of targeted works undertaken in 2019–20 to protect and enhance priority habitat (29,715 ha); with the 360,000 ha of works targeting threatened species/communities 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 2019–20 works programs. This included reductions in rabbit populations to &lt;2 per ha (i.e. threshold required to support regeneration), reductions in rabbit presence (ranging from 85 to 92 per cent) within control areas and quantified decreases in extent and density of target weed species.</p> <p>Evidence of condition improvements as a result of these threat mitigation actions. This included improvements in habitat condition once grazing was removed (i.e. stock exclusion fencing); and evidence of ecological functionality returning to revegetated sites.</p>		



### Reasons for assessment

Significant areas of terrestrial habitat were targeted for threat mitigation actions in 2019–20, including: the establishment of **127** ha of native vegetation to enhance priority linkages, **4,161** ha of weed control to reduce competition and protect priority habitat, and **25,426** ha of pest animal control (rabbit, goats) to reduce grazing impacts and support regeneration outcomes.

Further to this, the 360,000 ha of pest plant and animal control programs undertaken in 2019–20 to support the recovery of the region's threatened species and communities, also directly impacts the terrestrial habitat in which these works were delivered.

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 <2 per spotlight km required to support regeneration processes. In 2020, ongoing transect monitoring of rabbit activity within the Mallee's four remnant rangeland communities reported that 93 per cent of the kilometres surveyed had 1 or less rabbits recorded<sup>32</sup>. Site based monitoring of targeted control programs identified that 71 per cent of pre-treatment rabbit numbers were less than one rabbit/ha (range between 5 and 0 per hectare) and that this increased to 83 per cent of sites post-treatment (range between 4 and 0 per hectare)<sup>33</sup>.

Site based monitoring of weed control programs also recorded significant reductions in the extent and density of targeted species. In 2019–20, 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 percentage of weed cover from 7 per cent pre-treatment to 1 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. Recruitment levels remain low at many sites however as the time since stock exclusion has increased, large shrub recruitment in the Southeast increased, while there was no effect of time since stock exclusion on woody species recruitment (trees or large shrubs) for the Northwest or Southwest regions of the Mallee. A result which may reflect the extended period of below average rainfall being experienced in the region<sup>34</sup>.

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, however<sup>35</sup>; and linear remnants, which are more prone to edge effects, require at least 10 years before the impacts of removing grazing can be quantified<sup>36</sup>.

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 include<sup>37</sup>:

- Since monitoring commenced in 2011, 46 per cent of tubestock are 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, 56 per cent of tubestock are recorded as surviving after 12 months. This number reduces to 43 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); the absence of 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 natural regeneration).

<sup>32</sup> Parks Victoria (2020), unpublished data.

<sup>33</sup> Mallee CMA (2020), unpublished data.

<sup>34</sup> 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.

<sup>35</sup> 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.

<sup>36</sup> 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.

<sup>37</sup> Mallee CMA (2020), 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 43 summarises the key activities that contributed to the RCS's six-year strategic actions for Soils, Agricultural Land and Groundwater assets in 2019–20. 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, and other industry groups, Aboriginal community, and private land managers.



Grape vines.



## Appendix 2 Condition and Management Report

**Table 8** | Progress against RCS Strategic Actions for Soils, Agricultural Land and Groundwater.

Strategic (6 Yr) Actions	2019–20 Progress
<b>Soils</b>	
5.1.1. Develop and implement a Regional Soil Health Plan for the Mallee.	No progress regarding development of Regional Soil Health Plan.
<b>Agricultural Land</b>	
6.1.1. Continue to implement the <i>Victorian Mallee Irrigation Region Land and Water Management Plan</i> .	<p>Renewal of the Land and Water Management Plan completed with submission of 2020–29 Plan to DELWP in June 2020 (endorsement pending).</p> <p>Irrigation infrastructure works delivered under Mallee Irrigation Incentives program supported an estimated water use efficiency gain of 1,066 ML and a 4,171 tonnes/year reduction in salt to the Murray River. Works included<sup>38</sup>:</p> <ul style="list-style-type: none"> <li>• 379 ha of irrigation infrastructure upgrades/conversions</li> <li>• 220 ha of water use monitoring equipment</li> <li>• 226 ha covered by irrigation drainage management plans.</li> </ul>
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. 2019–20 progress made against targets included:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Increasing awareness of farm practices influencing soil carbon</li> <li>• Implementing a revised Mallee Soil Erosion and Land Use Monitoring Framework</li> <li>• Supporting the maintenance and data collection/collation requirements of two DustWatch nodes located within the region (Walpeup and Werrimull).</li> </ul>
<b>Groundwater</b>	
7.1.1. Continue to implement the <i>Murrayville Groundwater Supply Protection Area Management Plan</i> .	Ongoing implementation actively monitored and reported (GWMWater).
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.



Cereals represented 59 per cent of dryland crops grown in 2019.

<sup>38</sup> Attachment A details all outputs delivered under the *Victorian Mallee Irrigation Region Land and Water Management Plan* in 2019–20.

## Case Study

## Land

Soil organic carbon (SOC) is considered the basis to soil fertility with soils high in SOC helping maintain agricultural production. It could be assumed that widespread practice change experienced in the Victorian Mallee over the past 30 years like reduced cultivation, stubble retention and increased groundcover would translate into increased carbon stocks. This is not necessarily the case however, with many studies identifying that SOC is continuing to decline over time, regardless of rotation, stubble management or tillage practices.

It is evident that improved management practices within an existing farming system such as increased water-use and nutrient use efficiency, retaining stubbles, and moving to minimum or zero tillage may be low in SOC sequestration potential. Whereas larger shifts within the farming system such as replacing fallows with crops, increasing the proportion of pasture crops, and pasture cropping have a greater potential to sequester SOC.

As Mallee soils are typically low in SOC, targeted management practices are required to ensure that these stocks do not decline further. A project being delivered by Birchip Cropping Group is seeking to assist farmers make informed decisions by establishing an assessable soil carbon and land management data set of 150 sites across the Mallee. These sites are monitored annually to determine changes in SOC, any interactions with the land management practices employed, and associated productivity outcomes.

Workshops are also conducted to present results and increase participant awareness of the production capability of Mallee soils, constraining factors, and which production practices can influence changes in soil characteristics.

This project is supported by Mallee Catchment Management Authority, through funding from the Australian Government's National Landcare Program.



Harvest in the Mallee.

### 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 (1978–2020) 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.

## Appendix 2 Condition and Management Report

Organic Carbon (OC) is typically below one per cent in Mallee soils but varies considerably (0.21 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 2010–12 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 2019–20

#### Summary of assessment

The condition of Soils and Agricultural Land (dryland) assets in the Mallee are considered to be generally stable. Some management practices employed within the northern part of the region in 2019–20 may have a negative impact on soil condition however.

Assessment	Previous 3 Year	2019–20
<b>Summary of Evidence</b>		
<p>On average 83 per cent of the region exceeded 50 per cent groundcover (target) throughout 2019–20, a 5 per cent decline from the previous year's average and 13 per cent lower than 2017–18. Significant spatial variability is evident however, with the northern 'Millewa' land system recording a decrease from 76 per cent in July to 8 per cent in December. Conversely, the southern 'Culgoa' land system recorded a 4 per cent decrease (100 to 96 per cent) over the same period. Above average dust activity was also recorded throughout the year, with November 2019 the dustiest month since records began in July 2005.</p> <p>Ongoing dry conditions experienced throughout the growing season played a significant role in the low groundcover levels recorded at both the whole of region and individual landscape scale. Total January to December rainfall recorded for Mildura was the lowest on record, with the Central Mallee recording decile 1 conditions and the Southern Mallee decile 2.</p> <p>Leading into the 2019 cropping season, 9 per cent of surveyed paddocks were classified as bare (i.e. fallow/grazed), 9 per cent as pasture, and 82 per cent as stubble. While it is evident that ongoing support is required in northern areas of the Mallee to accelerate the identification, validation and adoption of practices that promote increased groundcover and reduce erosion risk; without the widespread changes in management practices that have occurred over past years, regional erosion outcomes could have been significantly worse.</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 2019 growing season is provided by the Mallee Soil Erosion and Land Management Survey conducted in 2019<sup>39</sup>. Specifically:

- Leading into the 2019 cropping season, nine per cent of surveyed paddocks were classified as bare, nine per cent as pasture, and 82 per cent as stubble. Of the 'bare' paddocks three per cent were cultivated, two per cent grazed, and four per cent disturbed (i.e. harrowed, chained).
- By spring 2019, 51 per cent of Mallee was in crop (30 per cent cereals, 16 per cent legumes, 5 per cent oilseeds), six per cent in pasture, and 18 per cent was bare. This represents the lowest total area in crop since 2011 (excluding 2018 as data does not exist); with cereals at its lowest but an increase in legume crops compared to any previous year.

Groundcover observations demonstrate that on average 83 per cent of the region exceeded 50 per cent groundcover (target) throughout 2019–20 (Table 44), a 5 per cent decline from the previous year's average and 13 per cent lower than 2017–18. This also varied throughout the year in response to rainfall.

Leading into the 2019 cropping season, below average rainfall conditions continued with most sites receiving between 10 and 30 per cent of mean total rainfall in March and less than 10 per cent of their April average. As a result, March groundcover was well below average for this time of year, with 71 per cent of the region having more than the 50 per cent target. This result represents the end of a short-term trend of increasing groundcover, with March records showing that 95 per cent of the region achieved the 50 per cent cover target in 2018 and 2017,

**Table 9 |** Percentage of the Mallee with more than 50 per cent groundcover in 2019–20 as determined from MODIS (Source: NSW Office of Environment and Heritage, June 2020).

Autumn/Winter 2019	Percentage
March 2019	71
April 2019	76
May 2019	88
June 2019	94
July 2019	96
August 2019	95
Spring/Summer 2019–20	Percentage
September 2019	90
October 2019	87
November 2019	80
December 2019	73
January 2020	71
February 2020	67
Autumn/Winter 2020	Percentage
March 2020	70
April 2020	80
May 2020	92
June 2020	96

<sup>39</sup> Coombes, R; Sheffield, K; Robson, S (2019): *Monitoring Wind Erosion and Land Management in the Victorian Mallee – Annual Report*.

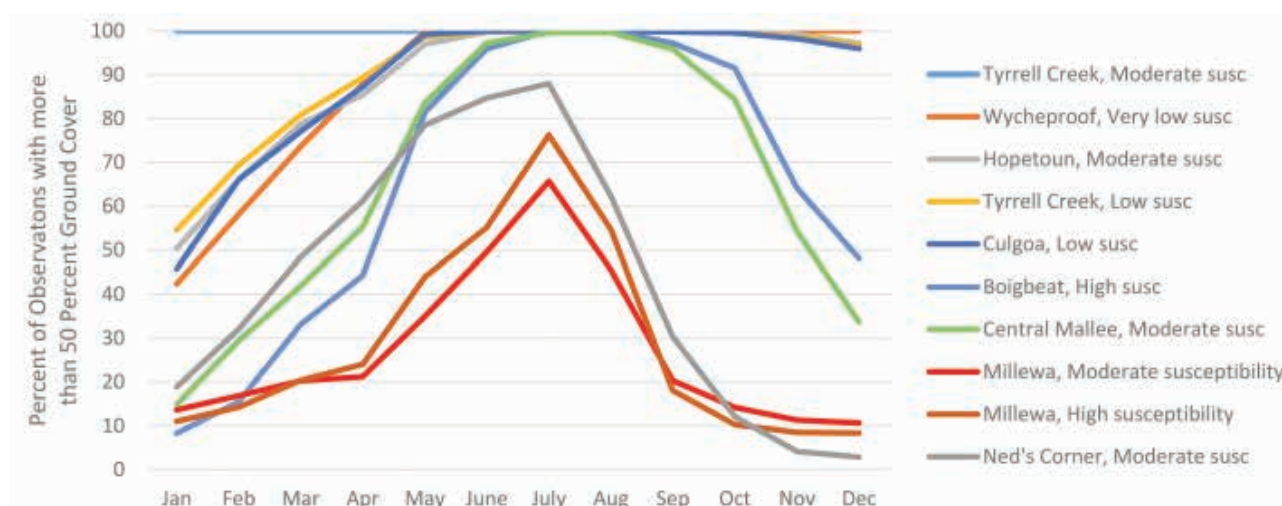
88 per cent in 2016 and 2015, and 80 per cent in 2014 (March DustWatch Reports: NSW Office of Environment and Heritage).

Between 94 per cent and 96 per cent of the region overall had more than the 50 per cent groundcover throughout the 2019 winter and most of the spring. Following harvest, and over the 2019–20 summer period, groundcover declined substantially however, with only 67 per cent of the region achieving the 50 per cent cover target in February 2020.

From July 2019 to April 2020 the Mallee also recorded the most dust activity since the commencement of the DustWatch program in 2005. There were four to eight times more events (depending on location) than in the previous worst year of 2009.

A return to average rainfall patterns across the region in autumn 2020 has supported increased groundcover into the 2020 cropping season (i.e. April to June). This follows more than two years of 'below' to 'very much below' average conditions.

Groundcover can be used as an indicator of landscape resilience to erosion. Figure 14 shows the region's five land system wind erosion susceptibility areas with the most cover compared with the five land system wind erosion susceptibility areas with the lowest cover. In 2019 groundcover was the lowest in the Millewa and Ned's Corner land systems, where rainfall was in the lowest decile recorded. The highly susceptible Boigbeat and the moderately susceptible Central Mallee also recorded more than 50 per cent of the area with less than 50 per cent groundcover in December.



**Figure 8** | Percentage observations/area land system wind erosion susceptibility zones with high cover and low cover with more than 50 per cent cover in 2019, as determined from MODIS fractional ground cover maps (source: *Monitoring Wind Erosion and Land Management in the Victorian Mallee – Annual Report*).

Groundcover in the Millewa land system peaked in July with 76 per cent of the highly susceptible area and 65 per cent of the moderately susceptible area with more than 50 per cent groundcover. By December less than 10 per cent of the highly susceptible Millewa area met the target groundcover level of 50 per cent. This represents the lowest recorded and most rapid decline in groundcover levels for highly susceptible soil in the Millewa land system since 2009.

While ongoing dry conditions experienced throughout the region have played a significant role in the low 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 however 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.

### 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.



## Appendix 2 Condition and Management Report

The Victorian Mallee has continued to receive strong irrigation development growth. Between 1997 and 2019 (for which comprehensive irrigation crop data is available<sup>40</sup>) 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.

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 irrigation.

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 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 EC<sup>41</sup>.

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 0.65m per year. The trigger for management intervention is two successive years of drawdown greater than the threshold based on a five-year rolling average. The threshold was not exceeded in any of the bore groups for 2017–18. 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 0.65m threshold and demonstrating a recovering trend<sup>42</sup>.

### Irrigated Agriculture Assessment 2019–20

The condition of Irrigated Agriculture assets in the Mallee are considered to be stable to improving; with evidence that management actions undertaken in 2019–20 will have a positive impact in the longer term.

Assessment	Previous 3 Year	2019–20
Summary of Evidence		
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.		
Increased adoption of best management practice by irrigators achieved an estimated 4,171 tonne/year reduction in salt loads to the Murray River and significant improvements in on farm water use efficiency.		
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 2019–20.		
Trend analysis of 516 regional groundwater bores identified a slight decrease in both water level and salinity compared with 2018–19; with both measures remaining stable over the longer term (i.e. 2013–2020).		
Metered extraction within the Murrayville GMA was 65 per cent of the licensed volume for 2019, a 20 per cent decrease in extraction from the 2018 season. Monitoring indicates that groundwater aquifer continues to demonstrate a recovering trend. Salinity levels also remained stable in 2019.		

### Reason for assessment

Delivery of the Mallee irrigation incentives program for salinity benefit in 2019–20 supported the implementation of 22 individual works projects, delivering; 178 ha of irrigation infrastructure upgrades, water use monitoring equipment installed across 154 ha, and irrigation drainage management plans developed for 96 ha. Collectively the salinity benefits (i.e. reduced irrigation recharge) achieved by these works is estimated to be a 4,171 tonnes/year reduction in salt to the Murray River.

<sup>40</sup> MCMA (2019), *Mallee Horticulture Crop Report – 2019 Addendum*.

<sup>41</sup> MDBA (2019), *Mildura Weir downstream*. (<https://riverdata.mdba.gov.au/mildura-weir-chaffey-grave-yard>, Accessed 26/07/2019)

<sup>42</sup> GWM Water. *Murrayville GMA 2018 Annual Report*.

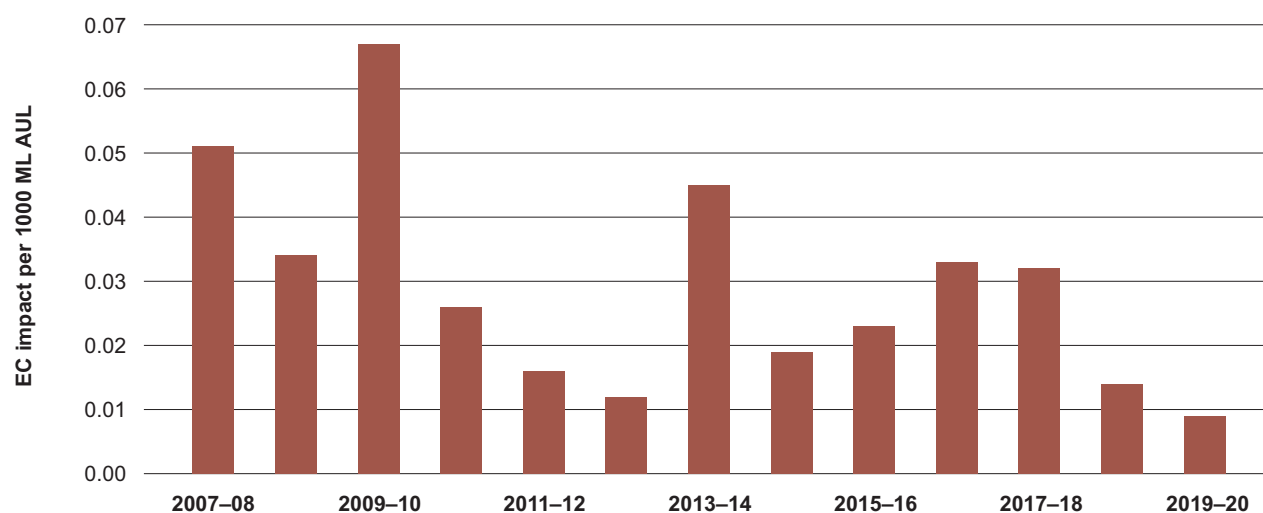
A further 19 works projects were completed in 2019–20 by irrigators for improved on farm water use efficiency and subsequent reductions in groundwater accessions. These delivered 201 ha of irrigation infrastructure upgrades, water use monitoring equipment across 66 ha, and irrigation drainage management plans for 130 ha; with estimated water use efficiency gains of 1,066 ML.

Throughout the year 516 groundwater bores were monitored for water level and salinity. Groundwater level measurements (680) taken in 2019–20 showed a slight overall decrease in standing water level across the entire Mallee CMA network compared with 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.

Salinity measurements (436) 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.

The salinity impact at Morgan per 1,000 ML AUL for the period from 2007 to 2020 for Victorian Mallee is provided in Figure 15. The low salinity impact in 2019–20 (0.009 EC) is due to the bulk of AUL (> 99 per cent) being issued to low impact (LI) zones, with more than 75 per cent of the AUL issued having no salinity impact.

Overall, the 2019–20 salinity impact of irrigation development from Nyah to the SA Border is estimated to have increased by 0.46 EC. No change was determined for the Nangiloc-Colignan SMP, bringing the total Mallee salinity credit uptake to 18.46 EC as of June 2020; within the 20.62 EC salinity credit allocations for these areas. In 2019, metered groundwater extraction (6,368 ML) within the Murrayville GMA was 65 per cent of the licenced volume. While being considerably less than the previous year (85 per cent of entitlement), the overall extraction volume was 1,300 ML above the annual average (calculated since 2001). Observations from the bore monitoring network indicate that the aquifer continues to demonstrate a recovering trend. Salinity levels also remained stable at monitored sites<sup>43</sup>.



**Figure 9** | Change in AUL salinity impact in the Victorian Mallee from 2007–08 to 2019–20 (Source: Mallee CMA).

<sup>43</sup> GWM Water. Murrayville WSPA 2019 Annual Report.

## Attachment A: Outputs delivered in 2019–20 under each of the Mallee RCS sub-strategies

**Table 10** | Outputs delivered in 2019–20 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						41		41
	Ha.						600		600
1.05 Waterway structure	No.					9			9
1.06 Terrestrial structure	No.					1			1
1.07 Terrestrial feature	No.					33			33
1.08 Monitoring structure	No.				2	18	14		34
1.09 Fence	No. Sites	1				14			15
	Km.	5				27			32
1.10 Visitor facility	No.					25			25
1.11 Road	No. Sites					8			8
	Km.					18			18
1.12 Crossing	No.					6			6
2.01 Vegetation	No. Sites	5				9			14
	Ha.	434				6			440
2.02 Weed control	No. Sites	57		4		13			74
	Ha.	106,721		1,252		2,365			110,338
2.03 Pest animal control	No. Sites	81		12		7			100
	Ha.	258,263		22,704		5,715			286,682
2.08 Earth works	No. Sites								0
	No. Sites								0
3.02 Agricultural practices	Ha.								
	No.					33			33
3.03 Water	Ha.					2,514			2,514
4.01 Approval and advice	No.	11	95	18		37	160	2	323
4.02 Management agreement	No.	32		22	25	23	25	1	128
	Ha.	9,994		518,027	491	8,523	632	7	537,674
4.03 Assessment	No.	142		32	5	294	40	15	528
4.04 Engagement event	No. Events	108	31	20	36	161	186	46	588
	No. Participants	594	357	169	1,109	2,097	929	749	6,004
4.05 Partnership	No.	24	7	23	15	69	13	17	168
4.06 Plan	No.	10			1	64	29	17	121
4.07 Publication	No.	60		17	26	206	57	73	439
4.08 Information management system	No.				2	1	1	12	16





