

VICTORIAN CATCHMENT MANAGEMENT AUTHORITIES'
ACTIONS & ACHIEVEMENTS REPORT



CONTENTS



WE ACKNOWLEDGE THE TRADITIONAL OWNERS
OF THE COUNTRY ON WHICH WE WORK
AND PAY OUR RESPECTS TO THEIR ELDERS
PAST, PRESENT AND FUTURE.

FRONT COVER: WAVY MARSHWORT (*NYMPHOIDES CRENATA*)

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FOREWORD



Catchment Management Authorities (CMAs) are at the front line of natural resource management and side-by-side with regional communities. The 2020-21 Victorian Catchment Management Authorities' Actions and Achievements Report demonstrates how our CMAs continue to protect and enhance our natural environment while contributing to social, economic, and cultural community values.

In their key role as Victoria's waterway managers CMAs have continued to grow the River Detectives education program, now including 80 participating schools across five regions, with interest received from other regions. The program supports young people to become actively involved in caring for our precious waterways. In the north of the state, the construction of a fishway at Koondrook Weir will enable, for the first time in decades, movement of native fish up and down Gunbower Creek and to the open water of the Murray River. The fishway is part of the Victorian Government's \$17 million Waterway Environmental Works Stimulus Package to address key threats to river health and native fish populations in northern Victoria

CMAs are champions for supporting Traditional Owner self-determination in natural resource management and helping to close the gap. They recognise the unique relationship with Country and the knowledge that Traditional Owners have, and seek opportunities for this knowledge to guide action through project work and employment. As an example, Traditional Owner knowledge is key to the planning

and delivery of water for the environment to wetlands and waterways across the state to ensure cultural values are considered.

Working in partnership with communities is vital to the success of CMAs. CMAs proudly lead the Victorian Government's regional support for Landcare including the provision of grants, training opportunities, planning assistance and networking. CMAs work with the 600 Landcare groups and 64 facilitators employed under the 2021-24 Victorian Landcare Facilitator Program. It's working in partnership that has also enabled 912,113 hectares of pest plant and animal control and 5,494 hectares of revegetation across the state.

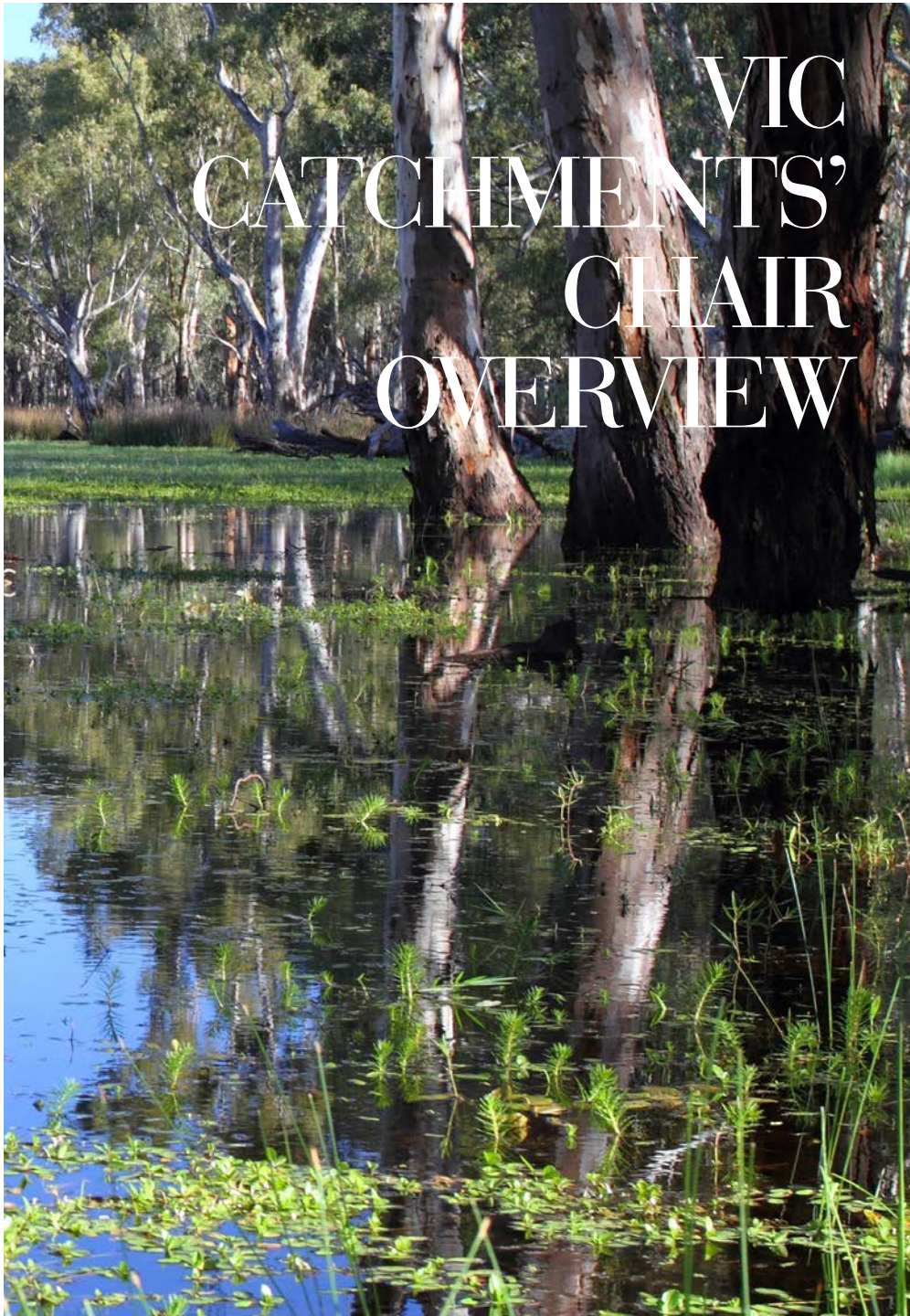
2020-21 continued to be a challenging year for many people in the face of the ongoing coronavirus (COVID-19) pandemic. CMAs tapped into the Victorian Government's \$500 million Working for Victoria initiative which provided employment for people who lost their jobs due to the impacts of the pandemic. CMAs employed a total of 291 people out of the 6700 employed as part of the initiative, who undertook a broad range of environmental and agricultural works on public and private land across the state.

In 2021, the Victorian Government legislated a net-zero emissions target by 2050. CMAs are continuing to undertake works that help buffer both agriculture and the natural environment against climate change. Climate change is a clear focus for natural resource management. It is placing pressure on our natural resources and communities, and all projections point to this increasing. All our actions must be viewed through a climate-change lens. Each CMA is renewing its Regional Catchment Strategy which will support the protection of our natural resources in a hotter and drier future. As an example, most CMAs are investigating or have projects and programs in place to explore the barriers and opportunities to deliver local carbon offsets to achieve environmental outcomes.

There are some wonderful examples in this report of all these achievements and more outlined in case studies from across the state.

A blue ink signature of Hon Lisa Neville MP.

Hon Lisa Neville MP
Minister for Water



VIC CATCHMENTS' CHAIR OVERVIEW



This year's Actions and Achievements Report is a remarkable testament to the dedication and creativity of all our Catchment Management Authorities and their personnel. We are so very proud of their efforts to continue to deliver despite the COVID-19 pandemic. The fact that we are seeing evidence of an improvement in the condition of our natural resource base, and an increase in populations of some threatened and vulnerable species, is an achievement to be celebrated.

Not only is this year's significant natural resource management activity across Victoria putting a spotlight on our work, it is also building our catchments' resilience in the face of climate change.

Victoria's 10 Catchment Management Authorities (CMAs) continued to adapt quickly to the changing circumstances of the COVID-19 pandemic keeping their communities informed and engaged, and delivering world-class land, water and biodiversity programs. In addition, each CMA called on the strong partnerships between CMAs, communities and Traditional Owners to renew the next iteration of their Regional Catchment Strategies. These strategies are the guiding framework for the management of land, water, coasts and biodiversity in each region of Victoria.

The recovery from the 2019-20 bushfires continued in Gippsland and north east Victoria. The relevant CMAs are working with the community to restore riparian zones to protect water quality in our

waterways. Nest box programs for species that have lost hollows to the fires have also been a focus of recovery work as has pest and weed control.

The Victorian Government's \$500 million Working for Victoria initiative helped to keep the state moving and people working. 291 individuals affected by the pandemic were employed across seven CMA areas. They undertook works to improve waterway health and land management through pest plant and animal control, native revegetation, and fencing.

The CMAs partnership with the Australian Government through the National Landcare Program has also delivered strong outcomes in 2020-21. Through the Australian Government's National Landcare Program, the CMAs with support from the community achieved a combined 1,129 hectares of revegetation, 440,376 hectares of pest plant and animal control and 8,881 hectares of agricultural practice change. It has also built the capacity and relationships to deliver the next iteration of the program.

As we head towards 2022 all these efforts help build the resilience of our natural resources and our communities, so they remain vibrant and productive.

Sharyon Peart, Chair Vic Catchments



CMA CHAIRS

2020-21

EACH CMA HAS A MINISTERIALLY APPOINTED BOARD OF LOCAL PEOPLE RESPONSIBLE FOR SETTING STRATEGIC DIRECTIONS FOR REGIONAL LAND, BIODIVERSITY AND WATER MANAGEMENT, AND MONITORING AND EVALUATING ITS PERFORMANCE.



CORANGAMITE
ALICE KNIGHT



EAST
GIPPSLAND
EWAN WALLER



GLENELG
HOPKINS
ANTONY FORD



GOULBURN
BROKEN
HELEN REYNOLDS



MALLEE
SHARYON PEART



NORTH
CENTRAL
JULIE MILLER MARKOFF



NORTH EAST
LEANNE MULCAHY



PORT PHILLIP &
WESTERNPORT
TANIA FOSTER



WEST
GIPPSLAND
PETER JENNINGS OAM



WIMMERA
PETER HILBIG

CMA REGIONS

VICTORIA'S INTEGRATED CATCHMENT MANAGEMENT FRAMEWORK IS WORKING TO PROTECT AND ENHANCE OUR RIVERS AND LANDSCAPES WHILE SUPPORTING PRODUCTIVITY FROM OUR LAND AND WATER RESOURCES.

NORTH CENTRAL

The North Central region covers 30,000 square kilometres (13% of the state). It is valued for its internationally recognised environmental assets, including Ramsar-listed wetlands, rich cultural history, and a diverse and productive agriculture sector.

MALLEE

The Mallee region covers almost 40,000 square kilometres making it the largest catchment area in Victoria. It runs along the Murray River from Nyah to the South Australian border and south through vast dryland cropping areas and public reserves.

WIMMERA

The Wimmera region covers 30,000 square kilometres straddling the Wimmera River. Agriculture is the dominant land use, economic driver and employment sector. A quarter of the 50,000 people who live in the region depend directly on agriculture for their income.

GLENELG HOPKINS

The Glenelg-Hopkins region covers 26,000 square kilometres and is characterised by flat volcanic plains in the south, with the Grampians, Dundas Tablelands and Central Highlands dominant in the north. With 80% of the region cleared for agriculture, it is one of the most productive farming areas in Australia.

CORANGAMITE

The Corangamite region extends across 13,000 square kilometres of which 78% is in private ownership. The region has rich and diverse landscapes ranging from expansive volcanic plains to coastal environments and the Otway Ranges.

GOULBURN BROKEN

The Goulburn Broken region covers over 24,000 square kilometres of which two thirds is under private ownership. It extends north from the outskirts of Melbourne to the Murray River. It yields 11% of the Murray Darling Basin's water despite making up only 2% of its area.

NORTH EAST

The North East region extends across 19,000 square kilometres between the Murray River in the north, Victorian Alps in the south and the Warby Ranges in the west. The region is home to 100,000 people, provides 38% of the Murray-Darling Basin's water and is 55% public land.

EAST GIPPSLAND

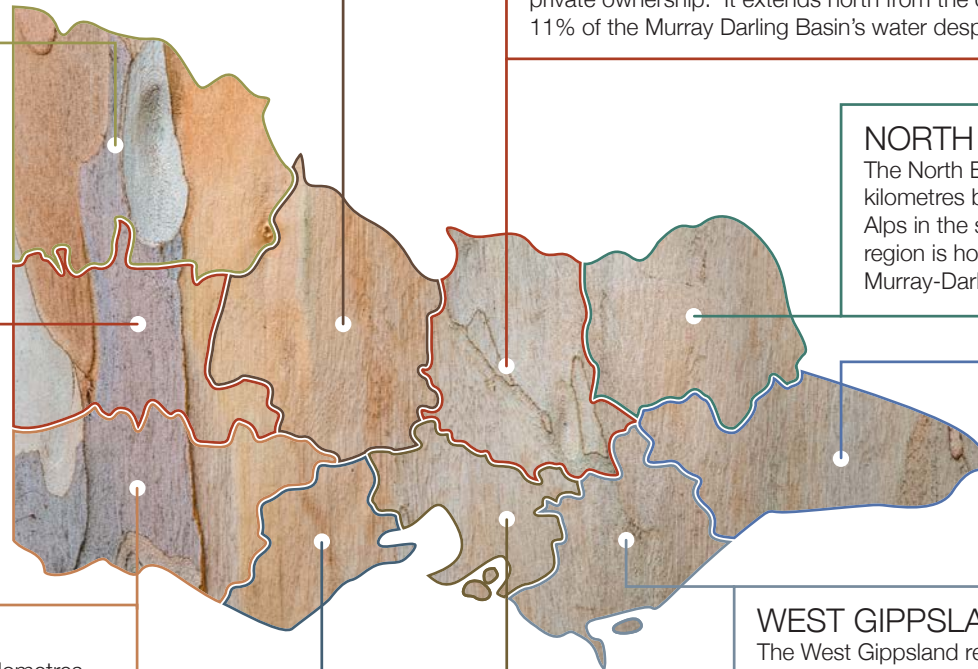
The East Gippsland region covers 22,000 square kilometres and is approximately 80% public managed land, mainly as significant State forests, national and coastal parks.

WEST GIPPSLAND

The West Gippsland region covers 18,000 square kilometres from Warragul to the Gippsland Lakes and from the Great Dividing Range to Wilsons Promontory. It provides the majority of Victoria's electricity, 60% of Melbourne's water storage and 20% of Australia's milk production.

PORT PHILLIP & WESTERNPORT

Spanning 13,000 square kilometres that feed into Port Phillip Bay and Western Port, this region has a resident population of over 5 million whilst also boasting some of Victoria's most productive farming lands and spectacular parks that are home to all four State flora and fauna emblems. On 1 January 2022, The Port Phillip and Westernport Catchment Management Authority officially integrated into Melbourne Water.



PARTNERSHIPS

MANY INDIVIDUALS, GROUPS AND ORGANISATIONS CONTRIBUTE TO THE HEALTH OF OUR RIVERS AND LANDSCAPES. PARTNERSHIPS ARE VITAL TO EFFECTIVELY SUSTAIN OUR ENVIRONMENT, UNDERPIN OUR ECONOMY AND PROVIDE A RANGE OF SOCIAL AND RECREATIONAL BENEFITS FOR LOCAL COMMUNITIES.

LOCAL COMMUNITIES

Local communities make a significant contribution to catchment management. Many community members volunteer their time to participate in activities such as planting days, clean-up days, Landcare and monitoring programs such as Waterwatch and EstuaryWatch.

COMMUNITY GROUPS & VOLUNTEERS

Significant contributions are made by volunteers and organised community groups including Landcare, conservation management networks, 'Friends of' groups and committees of management.

VICTORIAN AND AUSTRALIAN GOVERNMENT DEPARTMENTS

A range of government agencies and statutory bodies implement strategies, policies and programs for the management of landscapes and resources. They provide investment to deliver and support vital on-ground action.

TRADITIONAL OWNERS & ABORIGINAL COMMUNITIES

Aboriginal people have a strong and continuing connection with the land. Traditional Owners have important cultural obligations to manage traditional lands and waterways. Their ecological knowledge, experience and practices are incorporated into the planning and management of natural resources.

AGRICULTURAL INDUSTRIES

Agricultural industry groups support extensive networks of land managers through research, development and extension programs. Supporting best practice, agricultural industry is vital for the networks and access to improve natural resources.

VICTORIA'S CATCHMENT MANAGEMENT AUTHORITIES

Each CMA has a Ministerially appointed Board of local people. Board members are appointed for their skills and experience to address challenges and benefit the regional environment and economy. CMAs have established partnerships with many organisations and community sectors.

WATER CORPORATIONS

Victoria's 19 water corporations lead urban and rural water supply, sewerage disposal and treatment, recycled water and drainage services. They deliver water to entitlement holders including working with the Victorian Environmental Water Holder and CMAs to deliver environmental water. On 1 July 2021, Greater Western Water was formed by bringing together Western Water and City West Water.

LOCAL GOVERNMENT

Victoria's 79 local councils are significant contributors to catchment management through the regulation of land use and development, public land management, strategic planning including environmental strategies and urban stormwater plans, and support to landholders and community groups.

LANDOWNERS

CMAs work with landowners and managers to support sustainable management of their land. Thousands of landowners across Victoria make a significant contribution to protecting and improving the health of natural assets, ecosystems and significant places.

UNIVERSITIES & RESEARCH INSTITUTIONS

Universities and other institutions undertake research and produce information to improve understanding of natural systems and support adaptive management approaches to enable continued improvement.



SUPPORTING COMMUNITIES

COMMUNITY ENGAGEMENT

Genuine engagement with regional communities is at the heart of all CMA work. In 2020-21, Victoria's CMAs maintained 695 partnerships and saw 53,556 people participate in CMA, and their partners' events. CMAs also have strong online engagement, with a combined social media following of 886,884 followers.

LANDCARE SUPPORT

CMAs proudly lead the Victorian Government's support for Landcare including the provision of grants, training opportunities, planning assistance and networking. CMAs work with the 600 Landcare groups and 64 facilitators employed under the 2021-24 Victorian Landcare Facilitator Program. The partnerships between Landcare and CMAs are deep and crucial for the protection of Victoria's environments.

PRODUCTIVE AGRICULTURE

CMAs support agricultural industries to be productive and profitable. CMAs have partnerships and projects with the dairy, beef, sheep, grains, fruit, vegetable, wine, equine, apiary, and other industries improving production and efficiency, boosting farmer profit and supporting the long-term future of agriculture.

TRADITIONAL OWNER PARTICIPATION

CMAs are proud to work together with Traditional Owner organisations and their communities daily. CMAs provide a lead for others to follow, having direct partnerships with Indigenous organisations and steering funding into Indigenous projects. The Victorian CMAs Aboriginal Participation Guidelines promote engagement and work with Traditional Owners and their communities to manage, improve the health of their lands and waters along with the wellbeing of their people walking together on Country. CMAs also work with Traditional Owners as part of the 'Supporting Aboriginal Victorians to care for Country' initiative to implement the

Victorian Traditional Owner Cultural Fire Strategy - delivering on commitments in the Self-determination Reform Framework and the Victorian Aboriginal Affairs Framework 2018-23.

EMERGENCY RESPONSE

CMAs play a critical role in building community resilience to cope with and recover from natural disasters. Victoria's eastern and northern regions experienced unprecedented bushfire events in the 2019-20 summer, amplified by prolonged drought conditions in the years prior. CMAs are supporting local communities with bushfire recovery, particularly around agriculture and landscape restoration and protecting at-risk priority infrastructure (e.g. roads, bridges).

REGIONAL EMPLOYMENT

CMAs are significant employers, with a total of 404 people directly employed in 2020-21. The majority of CMA revenue goes out to projects involving landholders, contractors and partner organisations, generating significant employment and economic activity. CMAs supported the Victorian Government's Working for Victoria initiative, employing people impacted by the COVID-19 pandemic, while delivering a valuable community service and environmental outcomes.

LEVERAGE & CO-INVESTMENT

CMAs add value to government investment and bring multiple funding sources together to deliver integrated on-ground works. In 2020-21, Victorian Government funding through Victoria's CMAs was complemented by \$41.2 million of funding from other sources, including the Australian Government. It is estimated that for every \$1 of government funding spent on the ground, the community contributes more than \$5 of in-kind and financial support through activities such as Landcare and volunteering.



VICTORIA'S CMAS ENABLE REGIONAL COMMUNITIES AND GOVERNMENTS TO WORK TOGETHER IN NATURAL RESOURCE MANAGEMENT. IN 2020-21 CMAS WERE DIRECTLY INVOLVED IN DEVELOPING AND IMPLEMENTING GOVERNMENT POLICIES AND STRATEGIES PROVIDING AN IMPORTANT CONDUIT BETWEEN GOVERNMENT AND COMMUNITY.

SUPPORTING GOVERNMENT

GOVERNANCE & LEADERSHIP

CMAs are Victorian Government statutory authorities which apply the highest standards of governance to ensure taxpayer's money is managed and expended responsibly and achieves optimum outcomes. The Victorian Auditor General's Office audits CMA finances each year. Annual Reports are tabled in Parliament and made publicly available.

REGIONAL CATCHMENT STRATEGIES

The 10 Regional Catchment Strategies are key documents that integrate Victorian Government and Australian Government policies and strategies with local community knowledge and priorities. They are roadmaps for healthy and sustainable catchments. CMAs coordinate, develop and implement the strategies in collaboration with their communities and partner agencies and use them to provide strategic guidance to government.

VICTORIAN GOVERNMENT

CMAs play a key role in implementing Victoria's environmental and agricultural strategies and initiatives. In 2020-21 CMAs successfully delivered their component of Working for Victoria which provided employment for people impacted by the COVID-19 pandemic, while delivering a valuable community service. CMAs also delivered projects to improve the health of catchment and communities as part of the rollout of 'Water for Victoria' and Protecting Victoria's Environment - Biodiversity 2037 programs.

AUSTRALIAN GOVERNMENT

The Australian Government invests significantly in CMAs to undertake environmental and agricultural work in Victoria. Between 2018 and 2023, it will invest \$97.5 million dollars into Victoria as part of its National Landcare program supporting vital on-ground projects that offer benefits to our environment, farms and communities.

CLIMATE CHANGE ADAPTATION

CMAs continue to undertake works that help buffer both agriculture and the natural environment against climate change. Regional adaptation is enabled by the collaborative Natural Resource Management Climate website (nrclimate.vic.gov.au) which provides a common platform to access climate change adaptation planning for natural resource management across Victoria.

MARINE & COASTAL PLANNING

CMAs assist with implementing the *Marine and Coastal Act 2018* and have an increased role in strategic planning, advice on coastal erosion risk and monitoring. CMAs support implementation of the Victorian Coastal Strategy with various coast enhancement projects in partnership with community groups and others.

MURRAY-DARLING BASIN PLAN

CMAs contribute to the Basin Plan by planning and delivering water for the environment, implementing Sustainable Diversion Limits supply measure projects, contributing to Basin Salinity Management Strategy 2030, supporting irrigation efficiency works and engaging northern Victoria communities to better understand the Plan. 2020-21 saw the completion of the \$2 billion Connections Project - the largest irrigation modernisation project in Australian history - delivering 429 gigalitres of annual water savings for environmental use and on farms in northern Victoria.

2020-21 HIGHLIGHTS



912,113ha
of pest plant &
animal control

that's an area five times the size of Port Phillip Bay

5,494ha
of vegetation
planted



that's an area 141 times the size of the
Royal Botanic Gardens

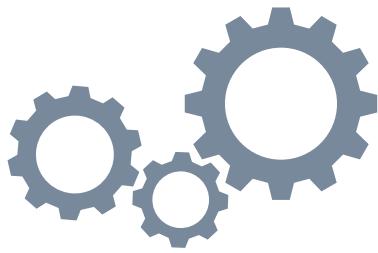


56,959 event
participants



746km
of fencing

that's about the distance
of a road trip from Hamilton
to Cann River



867 partnerships
established or maintained

that's an average of 87 collaborative arrangements
at each CMA



8,892ha
of improved
agricultural
practices

that's 14.3 times the size of
the Melbourne Metropolitan area



65,561
Facebook
followers

that's about the
population of the City
of Greater Shepparton



2,015
publications

that's an average of 202
for each CMA

2020-21 OUTPUTS

● CMAs are at the front line of natural resource management and side-by-side with regional communities.

● CMAs convert revenue to action, spending more than 80% of their revenue on direct service delivery.

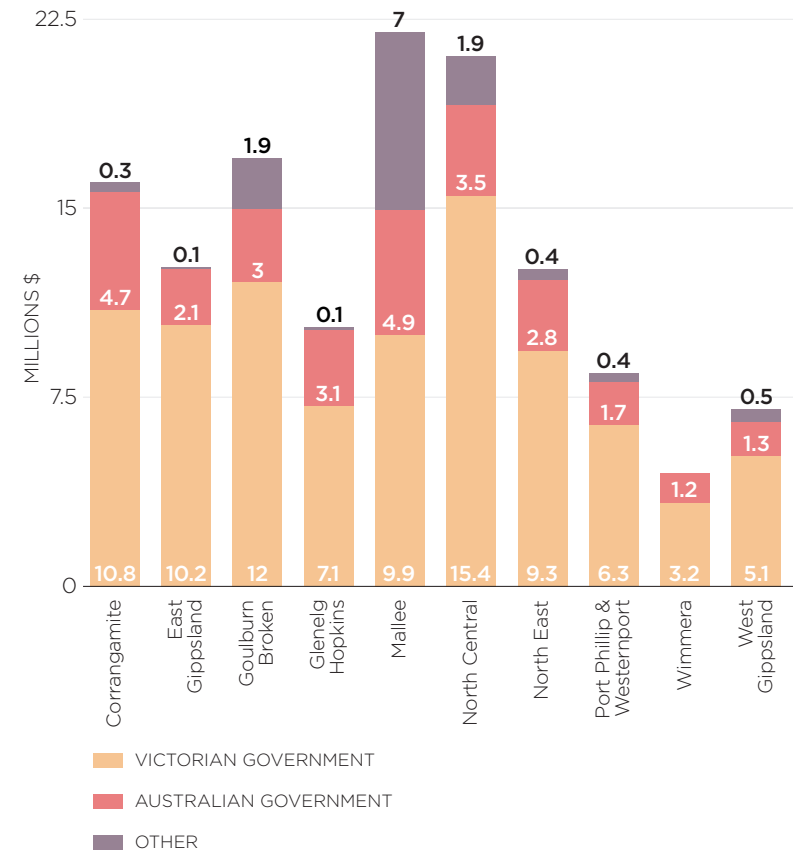
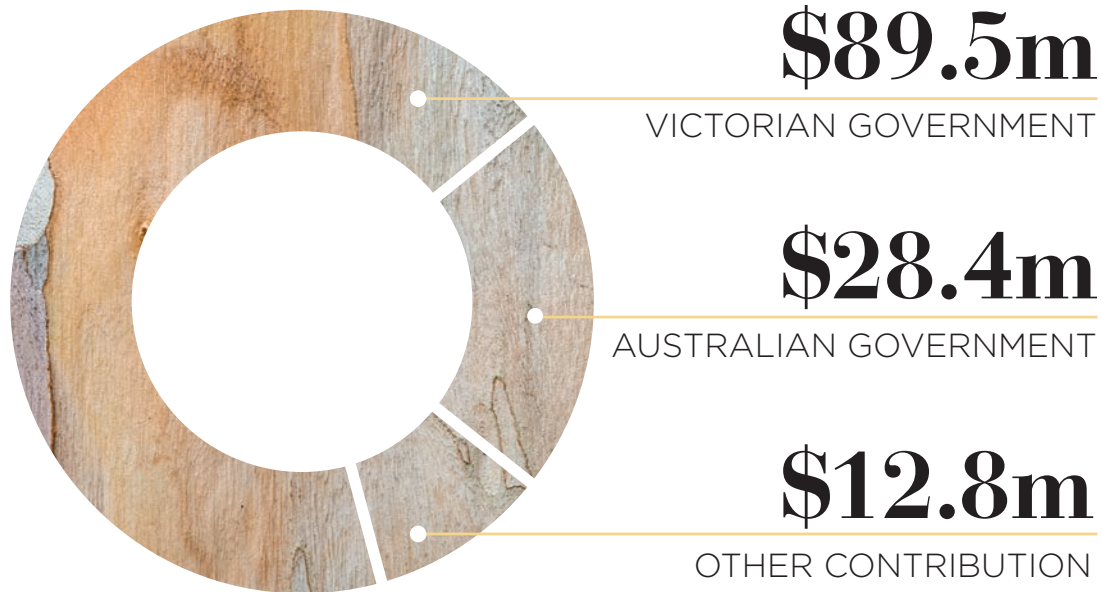
● CMAs get it done in project delivery including:

- 728,900 hectares of pest animal control
- 5,494 hectares of vegetation planted
- 56,959 event participants
- 746 kilometres of fencing
- 867 partnerships established or maintained
- 8,892 hectares of improved agricultural practices
- 2,015 publications

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.1 Channel (km)	73	125			125
1.2 Water storage (no.)	57	97	12	22	131
1.3 Pump (no.)	4	5		1	6
1.4 Irrigation infrastructure (ha)	52	1,965		39	2,004
1.5 Waterway structure (no.)	169	173	18	74	265
1.6 Terrestrial structure (no.)	36	1	35	35	71
1.7 Terrestrial feature (no.)	70	73	27	70	170
1.8 Monitoring structure (no.)	115	132	9	12	153
1.9 Fence (km)	291	576	52	118	746
1.10 Visitor facility (no.)	50	201		2	203
1.11 Road (km)	5	73	8	0	81
1.12 Crossing (no.)	2	2			2
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	2,828	4,168	1,129	197	5,494
2.2 Weed control (ha)	125,553	135,639	45,306	2,268	183,213
2.3 Pest animal control (ha)	463,228	285,818	395,070	48,012	728,900
2.4 Over-abundant wildlife control (ha)	0	2			2
2.5 Threatened species response (no.)	14	2	21		23
2.6 Emergency species response (no.)	2		1		1
2.7 Soil treatment (ha)	0				
2.8 Earth works (no.)	85	48			48
2.9 Rubbish removal (ha)	5	10,277		4	10,281
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	2,222	2,659	1,663	135	4,457
3.2 Agricultural practices (ha)	19,211	11	8,881		8,892
3.3 Water (no.)	72	188	1		189
3.4 Fire regime (no.)	23	3	31		34
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	5,564	10,141	27	380	10,548
4.2 Management agreement (no.)	304	209	147	14	370
4.3 Assessment (no.)	2,487	4,423	4,952	194	9,569
4.4 Engagement event (no. participants)	17,883	36,111	17,115	3,733	56,959
4.5 Partnership (no.)	452	647	74	146	867
4.6 Plan (no.)	500	290	178	21	489
4.7 Publication (no.)	986	1,105	719	191	2,015
4.8 Information management system (no.)	43	56	9	4	69

INVESTMENT

DURING 2020-21 THE FOLLOWING INVESTMENT WAS MADE THROUGH VICTORIA'S CMAs:





STATEWIDE CASE STUDIES

THESE CASE STUDIES ILLUSTRATE THE CMAS'
COMBINED ACHIEVEMENTS ACROSS A NUMBER
OF PRIORITY AREAS IN 2020-21.



- 1 River Detectives explore catchment map, North Central CMA
- 2 River Detectives students learning about waterbug monitoring with John Gooderham, Corangamite CMA
- 3 Identifying waterbugs, North Central CMA



RIVER DETECTIVES

“They not only have developed their scientific skills, but their presentation skills, resilience, leadership and their ability to communicate to wide variety of audiences.”

River Detectives educator

LOCATION

North Central, Corangamite, North East and Wimmera CMA regions, and Melbourne Water region.

OUTPUTS 2020-21

80 schools participating in: 294 engagement event participants presented to 8 incursions/online webinars, 42 participants attending 7 teacher training events, 2 publications (1 video & 1 school gate sign produced)

PARTNERS

North Central CMA, North East CMA, Wimmera CMA, Corangamite CMA, Melbourne Water, Waterwatch Victoria.

REGIONAL STRATEGIES

Regional Catchment Strategies.

FUNDING

DELWP VWPIF EC4. Funding of \$351,481 invested over five years since 2016.

River Detectives is a highly regarded statewide education initiative run by Catchment Management Authorities (CMAs). It inspires teachers and students to understand and appreciate their local waterway through engaging, cross-curricular, citizen-science activities.

The program supports young people to become actively involved in caring for our precious waterways. At its core it engages young people to become future stewards of the environment.

This focus is at the heart of the River Detectives program and aligns with the hunger that schools have for programs that provide opportunities for their students to take meaningful action to address real local environmental issues.

In recent years, the program has expanded from supporting around 20 schools in the North Central CMA region (2016) to 80 participating schools across five regions, with interest received from other regions. The North Central CMA plays a statewide coordination role with facilitators rolling out the program with schools in each region.

In a perfect example of how the program inspires young people to become future stewards of the environment, we have documented the story of Tess Williamson.

In 2009, Tess was a Grade Four student at Woodend Primary School when she got involved in the North Central River Detective program. Tess was inspired by her involvement to study environmental science at university and to become a Waterwatch volunteer.

Tess explains how the Waterwatch and River Detective programs educate and

nurture future environmental stewards:

“A Waterwatch Facilitator would visit the school and teach the students about water quality and waterbugs. I’ve always been interested in the environment, but this helped prompt me to follow a path that would potentially lead to a career in environmental management.

“I think it’s really important to have this type of data collected for our waterways so we can help to inform government decisions or for scientists to have access to the data so they can understand what is happening in our waterways across Victoria.

“I have been collecting data over a couple of years now and although I can see the water quality isn’t too bad, there are still other impacts I see including rubbish, shopping trolleys etc. However, I can see that the community cares for the site as I often see people actively cleaning up the rubbish.”

In addition to her monitoring, Tess shares her knowledge and skills with young Scout Cubs in Woodend. “Being involved in the program has given me more of an understanding of the impact people can have on waterways; for example, how detergents can increase phosphate levels and how most human activity will have an impact on a waterway in some way.”

Tess is now studying Biology and Environmental Science at university and continues to keep a watchful eye on Five Mile Creek.

What a great demonstration of the positive impact of the River Detectives Program!

WORKING FOR VICTORIA



1 Fraser Myers, a member of the Wodonga Working for Victoria team, clears weeds along the Kiewa River in January 2021, North East CMA

“Parklands Albury Wodonga has been grateful for the support of a skilled Working for Victoria team over the past five months. In just two days a week, this team has enabled delivery of some of our 2030 Strategic Plan projects in 2021.”

Ant Packer, Parklands Albury Wodonga

Working for Victoria is a \$500 million Victorian Government initiative and part of the \$1.7 billion Economic Survival and Jobs package launched in April 2020 as a response to the COVID-19 pandemic. The program placed more than 6,700 workers in new roles and provided employment for people who had lost their jobs due to the impacts of coronavirus, while delivering a valuable community service.

Glenelg Hopkins CMA employed two 10-person crews to assist public land managers and local farmers and Landcare groups with their private property natural resource management activities. The works crews were based in Hamilton and Warrnambool/Portland and employed people in need of work from the communities of Coleraine, Cavendish, Mortlake, Dunkeld, Hamilton and Warrnambool. The crews assisted with revegetation, fencing, weed control and rabbit harbor destruction. Key achievements included 50,080 trees across 47 properties, 4.6 km of stock exclusion fencing, 88 ha of rabbit control and 500 ha of weed control.

North Central CMA employed 15 people for a total 291 work weeks over 10 months to support public and individual land managers with revegetation, fencing and pest plant and animal control. At Reed Bed Swamp one crew established 10,000 plants and fenced exclusion plots for giant rushes.

Mallee CMA supported 69 participants to undertake a broad range of environmental and agricultural works across the region including revegetation, pest plant and animal control, fencing and rubbish removal.

Goulburn Broken CMA provided employment and training opportunities for 71 local people over eight months.

Wimmera CMA employed more than 40 individuals over 10 months. Flexible work arrangements ensured that participants were able to continue to manage caring and other commitments whilst participating in the program. Participants undertook a variety of training and skill development activities including on the job training and formal qualifications. Two participants who met during the program have started a new rural fencing business in the region.

Port Phillip & Westernport CMA delivered four on-ground projects totalling \$3.3 million and created the equivalent of 55 full-time jobs over six months.

WORKING FOR VICTORIA



1 Corryong team members repair fencing in the Upper Murray, *North East CMA*

2 Working for Victoria crew protecting giant rushes at Reed Bed Swamp, *North Central CMA*



North East CMA employed three project teams comprising 21 new staff who worked collaboratively with a range of organisations to improve catchment health and provide agricultural benefits post bushfires in north east Victoria. Works included creating new fence lines and fence restoration, undertaking woody weed control along waterways and protecting revegetation zones. Key achievements included 314 engagement event participants, 280 ha of weed control, 0.25 ha track clearing, 30 km fencing and 17 ha revegetation.

Training and professional development opportunities were also provided for those seeking employment. Several team members have moved onto longer-term contracts with local businesses.

Participants said they enjoyed:

- Learning new skills that will be helpful for gaining future employment
- Giving back to the community
- Helping those in need, such as landholders who have been dealing with the repercussions of bushfires and COVID-19
- Working within a great team
- Getting to know new places in Victoria
- Learning from crew members and landholders about practical conservation
- Seeing how even a small amount of help can make an immense difference to someone's wellbeing.

LOCATION

Statewide

FUNDING

Victorian Government \$500 million

PARTNERS

Trust for Nature, BlazeAid, Landcare Networks and groups, local governments, schools, recreation groups, public and private landholders.

ABORIGINAL PARTICIPATION AND ENGAGEMENT

PARTNERSHIP AGREEMENTS

Victoria's CMAs work closely with Traditional Owners and have partnership agreements with many Registered Aboriginal Parties and Aboriginal organisations, including:

- Barapa Barapa Wamba Wemba Water for Country Steering Committee
- Barengi Gadjin Land Council Aboriginal Corporation
- Bunurong Land Council Aboriginal Corporation
- Dja Dja Wurrung Clans Aboriginal Corporation
- Eastern Maar Aboriginal Corporation
- Gunaikurnai Land and Waters Aboriginal Corporation
- Gunditj Mirring Traditional Owner Aboriginal Corporation
- Martang Pty Ltd
- Taungurung Land and Waters Council
- Wadawurrung Traditional Owners Aboriginal Corporation
- Wurundjeri Woiwurrung Cultural Heritage Aboriginal Corporation
- Yorta Yorta Nation Aboriginal Corporation
- Jaithmathang Traditional Ancestral Bloodline Owners First Nations Aboriginal Corporation
- Dhudhuroa Waywurru Aboriginal Corporation
- Duduroa-Dhargal Aboriginal Corporation



Victoria's CMAs are champions for increasing Traditional Owner participation in natural resource management and helping to close the gap. They recognise the unique relationship with Country and the knowledge that Traditional Owners have and seek opportunities for this knowledge to be utilised through project work and employment.

They maintain a high representation of Aboriginal people and provide grants and/or planning support to help the management of Aboriginal-owned or managed business enterprises.

CMAs each implement an Indigenous Participation Plan. Importantly, the growing participation of Aboriginal organisations and people in natural resource management is also helping achieve social and economic benefits. CMAs are involved in activities that are improving education, employment, health, culture, heritage, language, recognition and harmony.

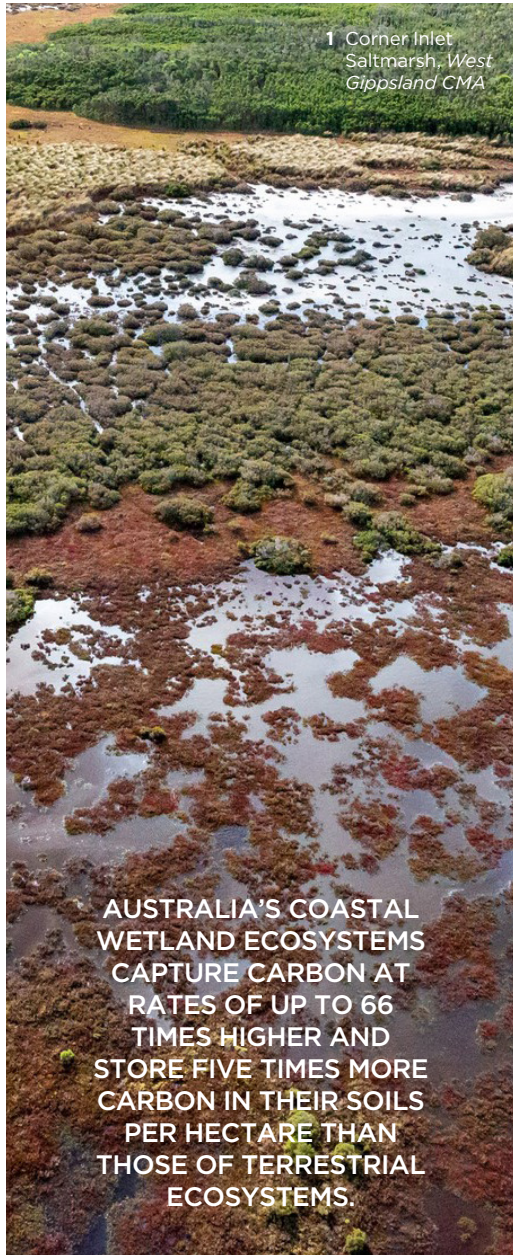
Highlights of 2020-21 include:

- Glenelg Hopkins CMA partnered with DELWP Forest Fire division and the Gunditj Mirring Traditional Owners Aboriginal Corporation to use cultural burning on an area of south-eastern red-tailed black cockatoo habitat.
- North Central CMA engaged the region's seven Traditional Owner groups to renew the North Central Regional Catchment Strategy 2021-27 with each providing their perspectives on what Country means to them.
- Port Phillip & Westernport CMA maintained partnership agreements with all three Registered Aboriginal Parties (Bunurong, Wurundjeri and Wadawurrung) and held six formal partnership meetings.
- Wimmera CMA coordinated a range of professional development opportunities to support Aboriginal Victorians as

future leaders in integrated catchment management.

- Corangamite CMA supported Wadawurrung Traditional Owners Aboriginal Corporation to conduct cultural burns as a management tool in Grassy Eucalypt Woodlands and embed Traditional Owner practices into natural resource management.
- Mallee CMA conducted a well-received series of 'Talk Water and Cultural Values' events in partnership with Traditional Owners at key waterway sites to share knowledge and inform future environmental water planning.
- Goulburn Broken CMA engaged Yorta Yorta and Taungurung land management crews to deliver environmental management across Traditional Country to control pest plants and animals, and to increase extent and diversity of habitat through revegetation activities.
- North East CMA and DELWP collaborated to support non-registered Traditional Owners/First Nations groups in the region to engage, participate and lead priority water activities by employing an Aboriginal Water Officer.
- East Gippsland CMA continues to host the Gunaikurnai Traditional Owner Land Management Board, supporting the Executive Officer, Project Officer and Board members. This arrangement builds capability by sharing management skills and builds cultural awareness and long-term relationships among CMA staff and GKTOLMB members.
- West Gippsland CMA worked with the Gunaikurnai Land and Waters Aboriginal Corporation on the Cultural Water Project. A highlight was the first time a traditional name has been used in a West Gippsland CMA project 'Stories of Wirn Wirndook yerung – the Macalister River.

COLLABORATIVE ACTION ON CLIMATE CHANGE



In May 2021, the Victorian Government unveiled its ambitious Climate Change Strategy and interim targets, positioning Victoria as a leader in tackling climate change and one of the first in the world to legislate a net-zero emissions target by 2050.

Catchment Management Authorities are at the forefront of delivering on the government's climate change targets. Here is a snapshot of their contributions.

All CMAs have collaborated on a Natural Resource Management Climate website, nrmclimate.vic.gov.au, which provides a common platform to access climate change adaptation planning for natural resource management across Victoria.

Corangamite CMA has implemented a carbon offset program to allow local governments and water authorities to invest in carbon offset opportunities. It has also increased its knowledge base to allow for soil carbon farming and investing in blue carbon and teal carbon project methodologies. As a business the Corangamite CMA has committed to reach net-zero emissions by 2024, reach 100% renewable energy by October 2021 and help establish the Barwon South West Climate Alliance as a founding member.

North Central CMA developed its Climate Change Adaptation and Mitigation Plan in 2015 which remains a relevant guide for climate action in the region. The Plan describes the implications of climate change for the region's land, water and biodiversity resources and maps the relative vulnerability of waterways and remnant native vegetation, along with their carbon potential. The Plan also identifies a range of adaptation and mitigation actions.

North Central CMA is actively investigating new opportunities to sequester carbon through its Plan2Farm project. The project

involves 20 farmers working to build drought resilience into their irrigated farming businesses by preparing for, and adapting to, future droughts and climate change in by planning for future water market scenarios.

Working with its partners, the North Central CMA is exploring the barriers and opportunities to deliver local carbon offsets to achieve environmental outcomes including how local carbon offsets can help achieve objectives in Coliban Water's 2030 Strategy. It continues to work alongside the region's Traditional Owners in support of the statewide Carbon Abatement Partnership Opportunities.

Port Phillip and Westernport CMA is delivering Growing Carbon - a three-year pilot project to explore the potential to utilise local revegetation projects to generate carbon offsets. This project aims to support Victoria's water industry to take actions on climate change and achieve net-zero greenhouse gas emissions as soon as possible while also contributing to the restoration of environmental functions, improving biodiversity and water quality across the region. The project is working with water authorities and in 2020-21 sought expressions of interest from landholders seeking to undertake biodiverse carbon offset revegetation projects on their property.

As part of the Port Phillip and Westernport CMA's Smart Farming for Western Port project, funded through the National Landcare Program, a seven-week Regenerative Agriculture Training Program was delivered by the Western Port Catchment Landcare Network in 2020-21. The training, led by experts in the field, catered to farmers located in high rainfall areas and was significantly oversubscribed, highlighting the strong interest. A series of online resources was developed, which

includes a regenerative agriculture video series created as part of the project which has had over 25,000 views.

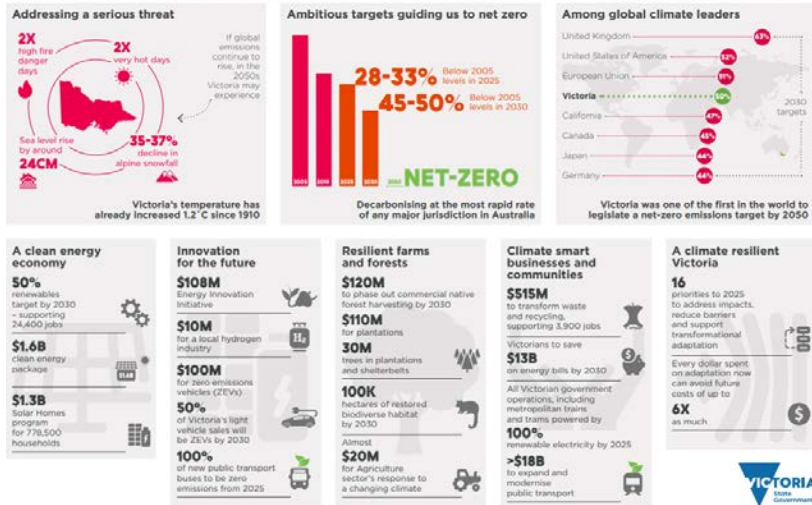
West Gippsland CMA is tackling climate change through a range of measures including using 100% green energy, revegetation and investing in programs and research to reduce emissions. A key action is the Gippsland Regional Climate Change Adaptation Project focusing on protecting, enhancing and managing several coastal saltmarsh and fringing wetland areas. This work will manage and enhance characteristics at priority wetland sites to allow the indigenous vegetation communities and associated fauna to respond and adapt to future climate conditions. It will incorporate trialing species mixes to help build ecosystem resilience to the impacts of climate change. Saltmarshes protect coastal foreshores by absorbing the energy of wind and wave action and providing a buffer that helps minimise erosion. With predicted increases in storm surge intensity and rising sea levels associated with climate change, these habitats will become increasingly important in protecting coasts. Saltmarsh and fringing wetlands capture and store large quantities of carbon both in plants and in the sediment below ('blue carbon'). Australia's coastal wetland ecosystems capture carbon on a per hectare basis at rates of up to 66 times higher and store five times more carbon in their soils than those of terrestrial ecosystems such as forests.

East Gippsland CMA has completed an assessment of total emissions from all its operations and is currently in the statutory planning approvals stages of installing solar panels on all East Gippsland CMA-owned buildings. The aim is to reach a position of net-zero emissions by December 2022.

COLLABORATIVE ACTION ON CLIMATE CHANGE

VICTORIA'S CLIMATE CHANGE STRATEGY

Our pathway to achieve net-zero emissions by 2050 and build resilience to the impacts of climate change



CLIMATE READY NATURAL RESOURCE MANAGEMENT PLANNING IN VICTORIA

This website provides access to regional natural resource management planning for climate change information developed by each of the 10 Catchment Management Authorities across Victoria. This includes information on regional climate change projections, impacts of climate change on natural resources, priority areas for climate change adaptation, carbon sequestration and management opportunities.



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 2016 Mallee Natural Resource Management Plan for Climate Change. In 2020-21 this included supporting initiatives such as the State-wide Carbon Sequestration Analysis Project being undertaken in partnership with Victorian CMAs and Water Corporations to establish regional carbon yields and implementation costs associated with environmental planting offsets.

Wimmera CMA is supporting efforts to build climate-resilient agriculture in the region. In 2020-21 it secured funding to begin delivering the Data Driven Drought Resilience Project, designed to increase the agriculture sector's resilience to climate variability by providing a networked, catchment-wide soil moisture probe and weather station network. Project Partners include Agriculture Victoria, Birchip Cropping Group, Perennial Pasture Systems, Wimmera Development Association, Victorian No-Till Farmers Association and Longerenong College.

Wimmera CMA also worked successfully with partners to develop and implement project activities under the Australian Government Future Drought Fund investment streams. These projects provide the region's farmers with resources to continue their efforts to build climate resilience in their businesses. Wimmera CMA continues to participate in the Victorian Government's TAKE2 Pledge program contributing to Victoria's target of net-zero greenhouse gas emissions by 2050.

North East CMA includes in its Corporate Plan 2021-26, a strategy priority to build on nature's capacity to sequester carbon, with a five-year outcome to increase carbon storage in north east Victoria through programs that enhance nature's capacity to sequester carbon. During 2021-22, North East CMA will seek to develop a policy and target to reach net-zero emissions.

An additional key strategic priority is to continue to protect the region's water resources as they come under increasing pressure in a changing climate. This is of local, state and national importance as north east Victoria provides 38% of the water in the Murray-Darling Basin and there is a clear expectation of a greater demand upon that water. Combined with the forecast reduction in the volume of water in the catchment, strategic planning and the appropriate use of the available water will be increasingly critical in a changing climate.

Through two National Landcare Program Regional Land Partnership initiatives during 2020-21, North East CMA delivered the Alpine Dairy Industry Climate Adaptation Plan and commenced the North East Victorian Disaster Recovery and Climate Leadership Program.

Glenelg Hopkins CMA's Future Ready Regions project, funded through the Australian Government's Future Drought Fund, will develop an online platform for farmers and provide them with the tools and data to plan for adverse drought conditions. The project began in late 2021 with online website development. It will continue to develop its online toolkit for farm planning, and extension work with landholders, over the course of the five-year project.

COLLABORATING TO PROTECT OUR THREATENED SPECIES



PETER ROSE, PROJECT MANAGER, NORTH CENTRAL CMA, WADES THROUGH THE SHALLOWS OF THIRD REEDY LAKE MARSH TO SET FYKE NETS ALONG THE EDGES TO HELP CAPTURE SOUTHERN PURPLE SPOTTED GUDGEON (MOGURNDA ADSPERSA). THESE TRAPS WERE SET TO COLLECT THE FISH AS PART OF A CAPTIVE BREEDING PROGRAM.
IMAGE COURTESY DOUG GRIMESY

WITH FUNDING FROM BOTH THE AUSTRALIAN AND VICTORIAN GOVERNMENTS, CATCHMENT MANAGEMENT AUTHORITIES COLLECTIVELY HAVE DELIVERED EXCEPTIONAL OUTCOMES IN PROTECTING SOME OF AUSTRALIA'S MOST THREATENED SPECIES.

The Australian Government's 2015-20 Threatened Species Strategy included actions to protect and recover 70 priority species of mammals, birds and plants. Consultation during the 2020-21 year has resulted in the new 2021-31 Threatened Species Strategy which sets the Australian Government's forward plan for action to protect and recover Australia's threatened plants, animals and ecological communities, and includes a 10-year vision: "Australia's threatened species are valued, protected and on the path to recovery"

Protecting Victoria's Environment - Biodiversity 2037, released in 2017, shifts Victoria's conservation management approach from planning for individual threatened species towards broader-scale threat management. This approach benefits multiple species, however, some endangered and critically endangered species will need specialised interventions.

In 2020-21 the Victorian Government provided more than \$200 million for its annual biodiversity response. \$300,000 was allocated to take urgent action to protect the platypus - now officially a threatened species and listed as vulnerable in Victoria - through restoration works at key habitat sites and to develop a long-term action plan to ensure the future of the unique mammal.

COLLABORATING TO PROTECT OUR THREATENED SPECIES

HIGHLIGHTS FROM 2020-21:

North Central CMA continued to implement its Native Fish Recovery Program, particularly in the lower Loddon catchment where water for the environment is helping the recovery of native fish populations. Two exciting recent finds include the discoveries by fish ecologists of: (1) the southern purple spotted gudgeon (a small colourful native fish declared extinct in Victoria in 1998) in Third Reedy Lake, part of the Kerang Lakes Ramsar complex, and (2) some of the biggest and healthiest Murray-Darling rainbowfish (listed as vulnerable) ever seen in Reedy Lagoon in Gunbower Forest.

A captive breeding program for the southern purple spotted gudgeon is helping to build the fish numbers and distribution back up to what they were before European occupation, river regulation, and the introduction of pest species.

Corangamite CMA and its partners coordinated the release of 36 captive-bred, endangered, orange-bellied parrots into the wild at three sites in a bid to attract migrating birds and give them a better chance of survival. This builds on the first four years of a trial which has seen 80 captive-bred birds released. This project is supported by the Corangamite CMA, BirdLife Australia, Melbourne Water and Parks Victoria, through funding from the Australian Government's National Landcare Program, the Victorian Government's Icon Species Program, Zoos Victoria and the Moonlit Sanctuary Wildlife Conservation Park.

Glenelg Hopkins CMA has achieved several delivery highlights under the Australian Government's National Landcare Program: BirdLife Australia's Hooded Plover program now involves 350+ land managers and 58 chicks surviving and fledging as a direct result of the project; 33 sites will protect and enhance over 211 ha of Australasian bittern habitat; 31 eastern barred bandicoots released at the Tiverton enclosure site; and Gunditj Mirring Traditional Owner Aboriginal Corporation conducted traditional burns to improve habitat for red-tailed black cockatoos.

Port Phillip and Westernport CMA led the French Island Data Support project helping to protect threatened species (including the long-nosed potoroo) on French Island by reviewing remote camera images gathered as part of the Feral Cat Free French Island project. Two support officers reviewed over 1.9 million images, which laid the foundation for a comprehensive feral cat eradication program.

Wimmera CMA delivered a wild-to-wild small mammal pilot project which aims to re-establish local populations of the Mitchell's hopping mouse (*Notomys mitchellii*) and fat-tailed dunnart (*Sminthopsis crassicaudata*) in the Wimmera. This pilot project aims to spread the risk for these species across the landscape by re-establishing a greater number and broader distribution of populations whilst being a key learning opportunity to inform future actions in this area.

Mallee CMA supported the recovery of 23 priority threatened species and communities by delivering 390,000 ha of invasive species control works within terrestrial habitat critical to their persistence. These targeted biodiversity works also included revegetating 210 ha of public and private land to reconnect isolated Malleefowl populations with core habitat; and re-establishing key canopy and understory species across 92 ha of degraded Buloke Woodland remnants. The project is jointly funded through the CMA, the Australian Government's National Landcare Program, and the Victorian Government.

North East CMA delivered the Regional Land Partnerships mountain pygmy-possum Recovery Project. This involved: predator control of cats and foxes on 27,000 ha in and around their habitat using baiting, traps and shooting; removal of weeds (*Salix* spp.) across 537 ha across the Mt Hotham and Bogong High Plains areas; production and release of three videos highlighting the plight of the Mountain Pygmy-possum and the collaborative effort to save the species; and completion of 20 days of monitoring effort, with a total of 270 trap nights undertaken at 12 trapping sites across nine local populations in the Alpine National Park. The project was supported by the CMA, through funding from the Australian Government's National Landcare Program.

Following habitat destruction from the 2019-20 bushfires East Gippsland CMA placed over 30 artificial nest hollows in priority locations close to available feed trees, providing additional breeding opportunities

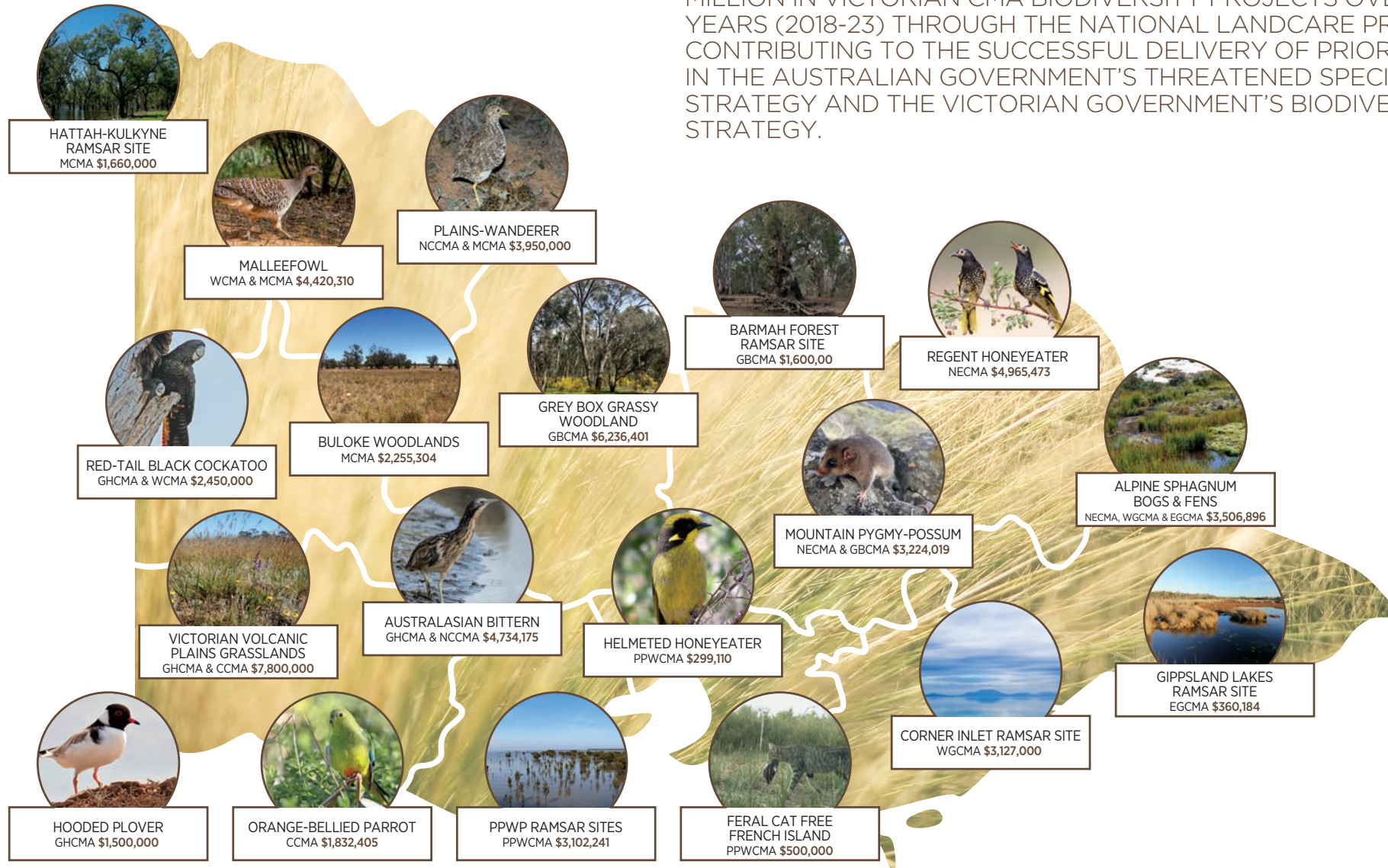
for local and displaced glossy black cockatoos. It is hoped that other species such as powerful owls and masked owls might also take advantage of these artificial hollows, as they too lost a lot of their nesting hollows.

As part of the Protecting Our Ponds project, West Gippsland CMA undertook an assessment of aquatic life in March 2021. The ponds were found to support listed threatened species of fish including dwarf galaxias and Flinders pygmy perch and nine rare or threatened plant species, previously not known to be in the area. These included several species of fireweed, a range of herbs such as rare winged water-starwort, eastern bitter-cress and pale swamp everlasting along with river swamp wallaby-grass and the small grey scentbark tree.

The Goulburn Broken CMA began a trial to re-establish the threatened southern pygmy perch in the Tahbilk Lagoon. The project, implemented with ARI and Tahbilk Winery, aims to reduce the risk of southern pygmy perch extinction by supplementing wild populations and re-establishing them where they have become extinct. The Linking Landscapes and Communities project, focussed on conserving Grey Box Grassy Woodlands, has helped improve and increase habitat for the superb parrot and the regent honeyeater. This project is supported by the GBCMA through funding from the Australian Government's National Landcare Program.

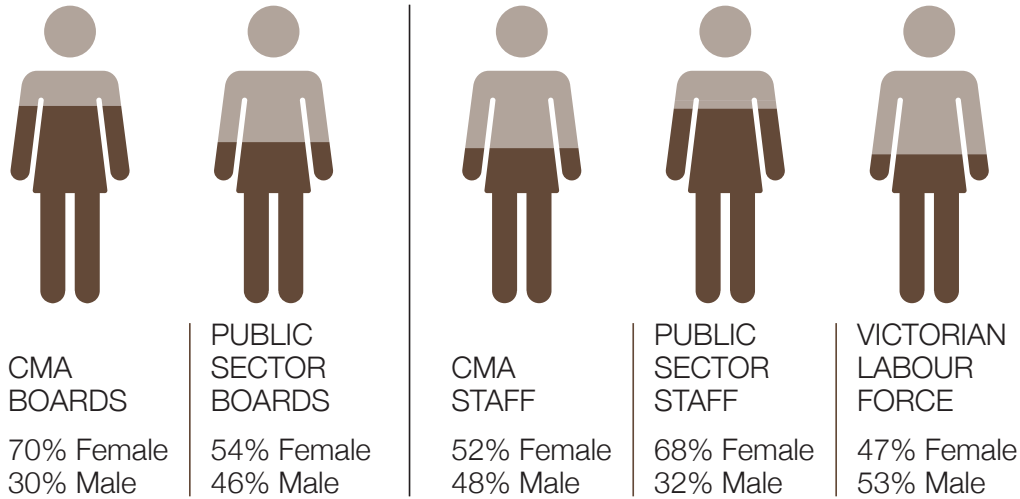
PROTECTING OUR BIODIVERSITY

THE AUSTRALIAN GOVERNMENT HAS INVESTED OVER \$57 MILLION IN VICTORIAN CMA BIODIVERSITY PROJECTS OVER FIVE YEARS (2018-23) THROUGH THE NATIONAL LANDCARE PROGRAM, CONTRIBUTING TO THE SUCCESSFUL DELIVERY OF PRIORITIES IN THE AUSTRALIAN GOVERNMENT'S THREATENED SPECIES STRATEGY AND THE VICTORIAN GOVERNMENT'S BIODIVERSITY 2037 STRATEGY.



GENDER EQUALITY AND DIVERSITY

GENDER



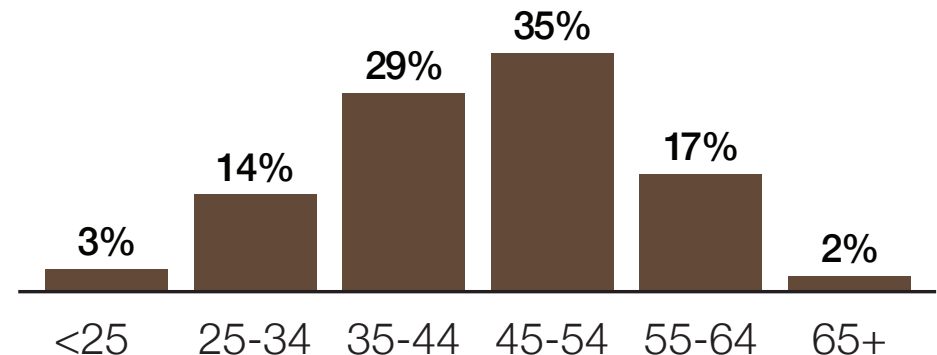
Victoria's CMAs embrace and bring to life the Victorian Government's commitment to diversity and inclusion. CMAs have always acknowledged and welcomed the unique perspectives of all employees and fostered a culture of inclusion where everyone feels valued and respected. CMAs establish safe and equitable workplaces, conduct cultural awareness activities, increase female representation in the workforce, introduce opportunities for flexible working arrangements and increase the representation of Aboriginal people. Victorian CMA workforce data now highlights these advances. There is excellent gender balance in CMAs. At the Board level, 70% of CMA Board members in 2020-21 were female, including six female chairs. At the staff level, a total of 409 employees are comprised of 52% females and 48% males.

Three per cent of the Victorian CMA staff have Aboriginal heritage, clearly above the 1% employed in the Victorian public sector. CMAs also actively pursue opportunities to engage Aboriginal businesses and contractors through their social procurement strategies. CMAs have a healthy age profile amongst employees, with 18% of staff 35 years of age or younger and 19% that are 55 or older. The healthy gender and age profiles of CMA staff are at least partly due to CMAs supporting flexible working arrangements. CMAs remain committed to being model employers and active leaders within regional communities for diversity and inclusion. Each CMA has an active Diversity and Inclusion Plan that sets a pathway for further improvement in the years ahead.

WORK LOCATION



STAFF AGE PROFILE



REGIONAL ACTIONS AND ACHIEVEMENTS

THIS SECTION PRESENTS SIGNIFICANT ACHIEVEMENTS AND KEY OUTPUTS DELIVERED BY EACH CMA IN 2020-21. CASE STUDIES FROM EACH REGION PROVIDE A SNAPSHOT OF THESE OUTPUTS IN ACTION, HIGHLIGHTING THE BROAD RANGE OF WORK BEING UNDERTAKEN IN PARTNERSHIP WITH THE COMMUNITY AND DEMONSTRATING THE TANGIBLE ON-GROUND IMPACTS OF CMA PROJECTS, PROGRAMS AND STRATEGIES.





CORANGAMITE

KEY EVENTS AND INSIGHTS

- **THE AUSTRALIAN GOVERNMENT'S WILD OTWAYS INITIATIVE COMMUNITY ENVIRONMENT GRANTS PROGRAM**
The Community Environment Grants Program delivered as part of the Australian Government's Wild Otways Initiative is a \$1M investment to protect and restore native plants, wildlife, and coastal environments between Bells Beach to Peterborough, and the Otways hinterland. Funding to date has supported 23 community projects investing \$855,000 in community-led on-ground works benefitting species including the masked owl, long-nosed potoroos, swamp antechinus, broad-toothed rat and native orchids. This project is supported by the CMA, through funding from the Australian Government's Environment Restoration Fund.
- **LOWER BARWON INFRASTRUCTURE PROJECT**
A new Tidal Barrage Weir and Fishways has been installed on the Lower Barwon Wetlands. The installation involved collaboration with Arthur Rylah Institute, Pensar Infrastructure and Australasian Fish Passage Services. The \$2M project is an investment by the Victorian Government in water infrastructure in internationally significant wetlands and is essential for maintaining fishing and recreational opportunities in the Barwon River through Geelong for decades to come. Three complementary fishways enable migrating fish to pass through the weir. The new cone fishway is the first of

its type to be built on a coastal system in Victoria. A new regulator and fishway have also been constructed at nearby Reedy Lake.

- **RCS RENEWAL ONLINE COMMUNITY ENGAGEMENT**
With the support of the Catchment Partners, the Corangamite CMA delivered a comprehensive community engagement program of 18 online community workshops across nine landscape systems. Over 200 people attended the workshops with 44% community participants. This level of community participation is stronger than we have previously achieved using traditional face-to-face mechanisms such as community meeting, open houses, or community workshops.
- **GRASSY EUCALYPT WOODLANDS CULTURAL BURNING PROGRAM**
The Cultural Burning Program supports the Wadawurrung Traditional Owners Aboriginal Corporation to conduct cultural burns on public and private land. The project aims to improve the understanding of the use of cultural burning as a management tool in Grassy Eucalypt Woodlands and embed Traditional Owner practices in natural resource management. The program is a partnership between land managers and stakeholders including the Corangamite CMA, DELWP, Parks Victoria, Forest Fire Management Victoria, Golden Plains Shire Council, CFA and private landholders.
- **ORANGE-BELLIED PARROT PROTECTION PROJECT**
The Corangamite CMA partnered with DELWP and Zoos Victoria to deliver the mainland release of 36 captive-bred orange-bellied parrots. Fourteen parrots

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.1 Channel (km)	73	69			69
1.2 Water storage (no.)	0	3			3
1.5 Waterway structure (no.)	11	11			11
1.7 Terrestrial feature (no.)	0	1	27		28
1.8 Monitoring structure (no.)	7	24			24
1.9 Fence (km)	17	34			34
1.10 Visitor facility (no.)	18	78			78
1.11 Road (km)	5	18			18
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	216	437	167		604
2.2 Weed control (ha)	2,314	4,061	424		4,485
2.3 Pest animal control (ha)	266	1,350	48		1,398
2.4 Over-abundant wildlife control (ha)	0	2			2
2.9 Rubbish removal (ha)	0	7			7
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	1,472	1,265			1,265.29
3.2 Agricultural practices (ha)	811		373		373
3.3 Water (no.)	10	55			55
3.4 Fire regime (no.)	8	3	8		11
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	15	1,624			1,624
4.2 Management agreement (no.)	68	44	43		87
4.3 Assessment (no.)	370	373	283		656
4.4 Engagement event (no. participants)	970	6,697	1,052		7,749
4.5 Partnership (no.)	69	182			182
4.6 Plan (no.)	234	11	37		48
4.7 Publication (no.)	64	80	52		132
4.8 Information management system (no.)	0	19			19

were released at Lake Connemare on the Bellarine Peninsula, aiming to attract wild migrating birds to the areas of good-quality food and habitat resources. The program is investigating improved approaches to monitoring the birds, trialling a new Automated VHF tracking system to great success. Just two birds

were observed migrating from Tasmania to the mainland in 2016. In 2021 this number increased to over 180 birds. This project is supported by the CMA, through funding from the Australian Government's National Landcare Program.





BOOSTING RECREATIONAL WATER USE INITIATIVE



“This project will enhance the recreation use of the Barwon through Geelong through improved facilities, improved access, and increased promotion of the facilities now available to the community”

Alice Knight, Chair, Corangamite CMA

LOCATION

The Barwon River (Barwon through Geelong) in South Geelong.

OUTPUTS 2020-21

Marnock Vale Launching Facilities (aka Canoe landing area)
Rowing Precinct Landing extension
Wal Whiteside Platform
Yollinko Wetland Walk and River Platform

PARTNERS

Department of Environment, Land, Water and Planning (DELWP)
Victorian Fisheries Authority (VFA)
City of Greater Geelong.

REGIONAL STRATEGIES

Corangamite Regional Waterway Strategy.

FUNDING

Victorian Government - 2.5 year funding agreement with DELWP including the extension. Additional funding partners include City of Greater Geelong, Victorian Fisheries Authority and direct and in-kind contributions from Corangamite CMA, including project management.

The Corangamite CMA has overseen the installation of a new Wal Whiteside Multi-Use Platform on the Barwon River in South Geelong, improving access, and allowing for increased passive recreation, fishing, canoe launching motorboat berthing and passive recreation.

The Barwon River Multi-Use Platform project has involved installing four multi-use and accessible platforms along the Barwon River parklands through Geelong, Wal Whiteside Multi-Use Platform, Yollinko Wetland Walk and Multi-Use Platform, Rowing Precinct Landing Extension, Marnockvale Launching Facilities Upgrade.

The Corangamite CMA is the waterway manager for the Barwon River through Geelong, a 20km stretch of the waterway from the Queens Park Bridge at the upstream end, through to the lower breakwater (just upstream of lake Connewarre). This responsibility includes maintaining and enhancing the riverbanks and various adjacent reserves and providing associated services and facilities.

The Barwon through Geelong section of the Barwon River is heavily utilised by a range of community members for various recreational activities. Given the region's growing population, further opportunities exist to create more recreational value for this part of the Barwon River. Popular recreational activities associated with the river include rowing, water skiing, canoeing and fishing and a network of access trails that attract many cyclists, walkers and joggers.

This project has created new platforms for improved access to the Barwon River that cater to various levels of abilities and various users. The new multi-use platforms are installed close to existing assets and structures to maximise the benefits.

This new investment will enhance the recreational use of the Barwon through Geelong for the local Geelong community and those who visit for years to come.

- 1 From left to right; Corangamite CMA Chair Alice Knight accompanied by Harriet Shing MP, Karen Lau, Executive Director Cities and Towns DELWP, Corangamite CMA General Manager, Sarah Holland-Clift, *Corangamite CMA*
- 2 Old Wal Whiteside Multi-Use Platform on the Barwon River, *Corangamite CMA*
- 3 New and completed Whiteside Multi-Use Platform on the Barwon River, *Corangamite CMA*



DEWING CREEK

“This project has been able to deliver significant benefits to the Geelong and surrounding regions. The long-term effects of this project will be enjoyed for generations to come”

Alice Knight, Chair, Corangamite CMA



LOCATION

Dewing Creek is a tributary of the Barwon River flowing out of the Otway National Park through Barwon Water-owned land into the Wurdiboluc channel and through to the Wurdiboluc dam.

OUTPUTS 2020-21

57 ha of drinking water catchment were protected, 32,000 plants were grown at the genU nursery in Geelong and planted on site, 9 km of frontage was protected, 8 off-stream waterpoints installed, 18 ha of remnant bush protected and close to 10 km of fencing installed eDNA technology has been used and detected platypus on the project site. This is the first time in decades they have been detected in this section of the Barwon River.

PARTNERS

Upper Barwon Landcare Network, Barwon Water, genU.

REGIONAL STRATEGIES

Corangamite Regional Catchment Strategy.

FUNDING

\$231,010 total cost of works
Project signed in 2018
Completed Spring 2020

Dewing Creek is a tributary of the Barwon River flowing out of the Otway National Park through Barwon Water-owned land into the Wurdiboluc channel and through to the Wurdiboluc dam. As this land was leased to a grazing enterprise, the tributary, which is key to supplying Geelong's population with drinking water, was threatened by stock access and grazed to the water's edge.

The potential benefits of removing stock access to water at this site were very clear as the project would create a riparian corridor and link a previous riparian restoration project downstream with the Otway National Park, upstream. When the project was completed in 2020-21 a total of 2,800 metres of waterway frontage was fenced off from cattle thanks to the funding of 9,750 metres of fencing works. This resulted in 57 ha of stock free and revegetated riverbanks. This project also funded eight stock water points, removed one hectare of willows and planted over 30,000 trees and grasses.

The project achieved larger gains than initially planned for, as Barwon Water provided larger buffer widths in some sections of the project than the minimum required by the Corangamite CMA. There is now a continuous buffer of vegetation from the headwater of Dewing Creek to Barwon Water's offtake channel, creating cleaner drinking water for Geelong. Longer term these works will be extended across property titles downstream, to create continuous buffers in the Upper Barwon Flagship program.

Since these works have been completed, the Upper Barwon Landcare Network has detected platypus presence (eDNA sampling) for the first time in decades. Projects like this are a great example of how the Waterway Protection Program has been making an impact on the health of waterways and farming properties.

- 1 Before works commenced on Dewing Creek this site was grazed to the edge, *Corangamite CMA*
- 2 Stage one planting after image, summer 2019, *Corangamite CMA*



EAST GIPPSLAND

PADDLING THE BUCHAN RIVER, *EAST GIPPSLAND CMA*

EAST GIPPSLAND

KEY EVENTS AND INSIGHTS

- MALLACOOTA COMMUNITY EVENT**
 The East Gippsland CMA and Arthur Rylah Institute ecologists hosted a series of well-attended boat cruises and walk and talks for the community in Mallacoota. Participants were able to learn how the catchments are responding following the Black Summer fires and what changes are occurring as the environment recovers. Cruising on the bottom lake and walking a track close to the township, community members learnt about the different phases of flora and fauna recovery, including where animals live during and after fire and the various adaptations and responses plants have to fire as well as the impact on water quality in the region.
- FENCING**
 Fencing repairs continue along the Genoa River following fires and heavy rainfall. As much as residents are thankful for rain after years of drought, sometimes there is too much for some low-lying areas to hold. When fencing gets damaged due to heavy rainfall and flooding, the East Gippsland CMA works with landholders to repair the damage to ensure stock don't have access to the riverbanks and native vegetation is protected. Fencing to protect vegetation is vital to improving and maintaining the health of rivers. Ongoing partnerships with local landholders are also integral to keeping our rivers healthy.

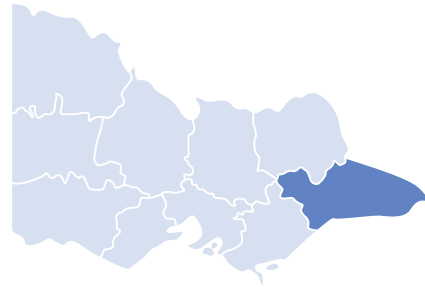


- GLOSSY BLACKS**
 Glossy black cockatoos might not be in abundance, but they certainly have a lot of friends! Following the recent bushfires much of their territory was destroyed, reducing food sources and available nesting hollows. Over 30 artificial nest hollows were put in priority locations close to available feed trees, providing additional breeding opportunities for local and displaced glossy black cockatoos. It is hoped that other birds such as powerful owls and masked owls might also use the artificial hollows, as they too lost a lot of their nesting hollows.
- SOWING THE GAP**
 The East Gippsland CMA has partnered with farmers to improve drought resilience for beef and sheep farms. The project, known as Sowing the Gap, commenced in mid-2021 and runs until 2022. A project steering group has representatives from East Gippsland CMA, Gippsland Agricultural Group, Southern Farming Systems, East Gippsland Shire, Wellington Shire and Agriculture Victoria. This group aims to help beef and sheep farmers build their knowledge and understanding of cropping options to manage the impacts of future droughts.
- REMOTE FIRE RECOVERY, WEED CONTROL**
 Targeted woody weed control is continuing along several waterways in far East Gippsland affected by the black summer bush fires. The East Gippsland CMA undertook multiple weed control projects across a two-year funding period, with over 2,000 ha of woody weed control across 14 waterways complete. Targeted woody weed

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.2 Water storage (no.)	14	21			21
1.5 Waterway structure (no.)	126	2		70	72
1.6 Terrestrial structure (no.)	35		35		35
1.7 Terrestrial feature (no.)	70	70			70
1.8 Monitoring structure (no.)	12	5	7		12
1.9 Fence (km)	15	117			117
1.10 Visitor facility (no.)	2	2			2
1.11 Road (km)	0.1	0.1			0.1
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	41	40			40
2.2 Weed control (ha)	1,389	2,032	155		2,187
2.3 Pest animal control (ha)	4,302	4,000	550		4,550
2.9 Rubbish removal (ha)	5	4.15			4.15
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	79	135			135
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	242	368	1	1	370
4.2 Management agreement (no.)	15	13	1		14
4.3 Assessment (no.)	126	54	124		178
4.4 Engagement event (no. participants)	941	635	49	15	699
4.5 Partnership (no.)	148	130	5		135
4.6 Plan (no.)	18	15	1		16
4.7 Publication (no.)	170	102	26		128
4.8 Information management system (no.)	3	3			3

- control allows for the early detection and management of colonising and transforming species such as willows. These works also contribute to achieving broader river health objectives.
- BUCHAN BUSHFIRE RECOVERY**
 Waterway recovery works are now well underway in the Buchan area. The East Gippsland CMA has been working with landholders to replace damaged fencing

along the river, where a partnership agreement exists. Future work includes weed control and planting of native species to help stabilise the banks. Erosion control structures damaged during the fires will be replaced. These essential structures reduce the risk of the river cutting new channels in floods. Design and repair works on these sites will be completed over the next two years.



LOCATION

Victorian Eastern Alps, Coastal East Gippsland, East Gippsland Region.

OUTPUTS 2020-21

3,750 ha of pest animal control
 485 ha of woody and non-woody weed control
 5 ha of erosion management
 3 plans
 40 flora assessment surveys
 32 fauna assessment surveys
 34 monitoring datasets
 35 nest boxes

PARTNERS

Parks Victoria, BirdLife Australia.

REGIONAL STRATEGIES

The East Gippsland Regional Catchment Strategy and East Gippsland Bushfire Recovery Plan prioritises weed and pest control after fire to ensure pests and weeds do not severely impact recovery efforts. Weeds and pests are quick invaders that need controls in place for native plants and animal recovery.

FUNDING

Australian Government's National Landcare Program.

PROTECTING VULNERABLE SPECIES FOLLOWING BUSHFIRES

“Bushfire recovery is a long-term effort, and everyone working collaboratively with the same objectives and goals will see results into the future that benefit the community, the environment and the species that need our help.”

Ewan Waller, Chair, East Gippsland CMA Board

The 2020-21 bushfires were exceptional in size, with over 1,000,000 ha, or 56%, of East Gippsland burnt. Recovery efforts are varied and include projects to help already critically endangered ecological communities as well as threatened animal and bird species.

Supported by the East Gippsland CMA through funding from the Australian Government's National Landcare Program, projects undertaken by our partners contributed to emergency pest mitigation and habitat protection.

The Alpine Peatlands are a unique part of the Victorian Alps, often referred to as Sphagnum Bogs. They are a nationally threatened ecological community found high in the alps at the head of our catchments. They act like a sponge absorbing and holding moisture and are a great water filtration system, providing significant habitat for some endemic and threatened species. Parks Victoria has been controlling pest animals and undertaking large-scale weed control in fire-affected areas. It was encouraging to see vegetation recovery at a peatland site feral pigs had heavily impacted. By removing pig impacts, the peatland has regenerated, with native vegetation having the opportunity to re-establish at the site.

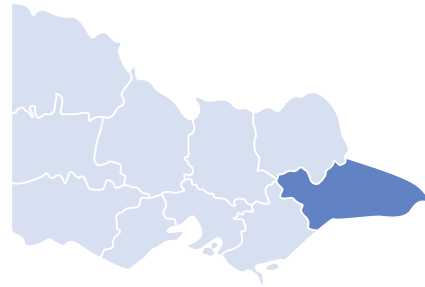
Littoral Rainforests weren't spared during the devastating bushfires and were already a critically endangered ecological community vulnerable to weed infestation. These rainforests occur along the east coast of Australia, with several in coastal

areas of East Gippsland. With increased visibility, a window of opportunity arose for Parks Victoria to focus on controlling pest animals such as deer and weeds in surrounding areas to help protect these rainforests. There was also an opportunity to monitor the recovery of flora species unique to these rainforests.

The fires destroyed much of the glossy black cockatoo territory in East Gippsland, reducing food sources and available nesting hollows. BirdLife Australia, supported by the Australian Government's Bushfire Recovery Package for Wildlife and their Habitat program, installed 35 artificial nest hollows in priority locations. Following months of preparation, BirdLife Australia identified the most suitable sites to install the hollows in unburnt areas where the birds' food and water were available. Careful management over the coming years is essential, with a whole range of people and groups pitching in to help this species have the best chance it can into the future.

The bushfires heavily impacted East Gippsland's landscapes, and some areas will take many years to recover. Projects like these are important, as is all partners and the community working together.

- 1 Alpine Peatlands, *EGCMA*
- 2 EGCMA & Parks Victoria Staff - Boardwalk at Cape Conran, *EGCMA*
- 3 Glossy black cockatoo, *EGCMA Sean Phillipson*



IMPROVING HABITAT FOR FISH

“It’s great to see works that benefit native fish species, the underwater environment of the Gippsland Lakes as well as anglers with funds raised through Recreational Fishing Licence fees.”

Ewan Waller, Chair, East Gippsland CMA



LOCATION

Gippsland Lakes and surrounding river systems, East Gippsland.

OUTPUTS 2020-21

Waterway Structure - 104 large wood
Waterway Structure - 1 rock seeding
Engagement Event - 1 (15 participants)
Partnerships - 8
Publications written - 6

PARTNERS

Victorian Fisheries Authority (VFA),
DELWP, Gippsland Ports, GLaWAC,
Friends of Beware Reef, Angling Clubs,
Ozfish, general community.

REGIONAL STRATEGIES

Gippsland Lakes Ramsar Site
Management Plan, Gippsland Lakes
Priorities Plan, Gippsland Lakes
Fishery Recreational Fishery Plan, East
Gippsland Waterway Strategy and East
Gippsland Regional Catchment Strategy.

FUNDING

Funded by the Victorian Fisheries
Authority using Recreational Fishing
Licence Fees 2019-20.



Sections of the Gippsland Lakes and surrounding river systems, particularly estuarine reaches, have reduced levels of large woody debris compared to our more natural systems. This debris provides fish habitat, bed diversity, scour pools, channel formation and bank protection.

With funding from the Victorian Fisheries Authority, the East Gippsland CMA has given the Gippsland Lakes a boost with over 50 fish habitat logs and rock structures placed in Tambo Bay and areas near the mouths of the Nicholson and Tambo Rivers.

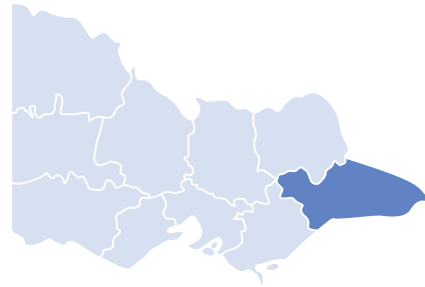
Early planning included identifying areas in the Gippsland Lakes that were suitable for additional habitat. Local angling clubs were instrumental in assisting with the best and most appropriate locations. Angling club members were also on hand to witness the first logs being delivered to their new home in Tambo Bay. Aboard the Lady Jodie, members joined East Gippsland CMA staff as the logs travelled via barge to their destination.

Local farmers played their part by offering redgum stumps, laying in their paddocks. Limestone rocks were also placed in the deeper location in Tambo Bay, which along with the stumps, will create an artificial reef home to species such as black bream, bass and estuary perch.

The Victorian Government remains committed to improving the health of the Gippsland Lakes, recognising the important environmental, social, cultural and economic values that it provides. Recreational fishing and improving habitat for native fish is a critical focus for future work on the Gippsland Lakes.

The fish habitat projects also contribute to achieving targets described within the Gippsland Lakes Ramsar Site Management Plan aimed at improving and maintaining the diversity and abundance of native fish.

- 1 Contractors placing logs into sites, *EGCMA*
- 2 Local farmers played their part, *EGCMA*
- 3 Local angling clubs were involved from the beginning, *EGCMA*



TARGETING REMOTE WEEDS

“Following bushfires, weeds tend to thrive and are the first to grow, so getting on top of the invasive ones is a priority for us. Working from the top down is an approach the East Gippsland CMA believes makes sense and works.”

Ewan Waller, Chair, East Gippsland CMA



LOCATION

East Gippsland CMA Region.

OUTPUTS 2020-21

1,179 ha woody weed control
5.4 FTE employed to deliver and oversee on-ground recovery works
16 community engagement event – 365 participants

PARTNERS

Bushfire Recovery Victoria; local contractors; landholders; Department of Land, Water, Environment and Planning; Parks Victoria.

REGIONAL STRATEGIES

East Gippsland Regional Catchment Strategy, East Gippsland Fire Recovery Plan.

FUNDING

Victorian Government bushfire recovery funding.



Since the 2019-20 bushfires the East Gippsland CMA has been working with agencies, community groups, and individuals on recovery programs consistent with the East Gippsland Fire Recovery Plan. This includes controlling invasive weeds in remote upper catchments.

Remote weed control targets emerging woody weeds along the headwaters of East Gippsland's waterways affected by fire, including the Far East, Snowy, Tambo and the Upper Mitchell catchment areas.

The risk of weed invasion dramatically increases after fires, leading to new or more severe infestations of weeds and reduces the ability of native plants to recover. Native plants provide habitat for threatened species of fauna and flora.

Targeting weeds from the top down is about stopping the weeds from spreading further down the catchment.

This project will reduce the impact of high-threat weeds spreading in the region and contribute to the recovery of threatened flora species, critical habitat and significant ecological vegetation communities such as the Alpine Peatlands.

Selected watercourses affected by fire have been treated for willow, particularly targeting *Salix cinerea*. *Salix cinerea* willow is a seeding species, and watercourses provide perfect conditions for the seeds to germinate and quickly take over. With reduced canopy cover post fires, there is an increased risk of watercourses being susceptible to weed infestations.

Local contractors are employed to get the job done. As well as undertaking a significant job, they get to see some exciting things. Whilst undertaking remote weed control, a highlight was sighting the critically endangered spotted tree frog, which hadn't been seen in the area since 2019.

Recovering from bushfires takes a lot of effort from many people and organisations. Working together is the key, and we are proud to partner with the community, landholders, government agencies and non-government organisations to get the job done. Our projects are varied, but they are all focused on delivering on the priorities in the local recovery plan.

So far, over 1,000 ha of weed control has been undertaken, with more planned in the coming season.

- 1 Upper Mitchell area, *Habitat Creations*
- 2 Spotted tree frog, *Habitat Creations*
- 3 Contractors at work in the Timbarra River, EGMA



GLENELG HOPKINS

GLENELG HOPKINS

KEY EVENTS AND INSIGHTS

- REGIONAL CATCHMENT STRATEGY**
 Despite the challenges of COVID-19 the Glenelg Hopkins CMA has still been able to successfully coordinate the development of the region's most significant natural resource management planning document – the Glenelg Hopkins Regional Catchment Strategy (RCS). The RCS is the key planning document for integrated catchment management across the catchment, and for the first time has been developed by an online interactive platform. The CMA Board approved the draft for public consultation on 30 June. The strategy was submitted to the Minister on 30 September 2021. The development of the RCS attracted approximately 900 participants at engagement events and involved 70 organisations/groups.
- VICTORIA NATURE FESTIVAL**
 The CMA joined the inaugural Victoria Nature Festival in September 2020. Originally planned as an in-person event, the two-week festival pivoted to an entirely online event as a 'window into nature' during Victoria's lockdown period. In an organisational-first, we delivered three live-streamed events through Facebook. Events at Budj Bim National Park, Walker Swamp, and the Victorian Volcanic Grasslands attracted 3,347 people. Videos from these events have been viewed over 14,800 times.

The involvement with the Nature Festival has allowed Glenelg Hopkins CMA to deliver messages to an entirely new public audience.

- WORKING FOR VICTORIA**
 Glenelg Hopkins CMA employed two 10-person crews as part of the \$500 million Working for Victoria program which the Victorian Government launched in April 2020. The crews assisted public land managers and local farmers and Landcare groups with their private property natural resource management activities. They worked across the region, assisting with revegetation, fencing, weed control and rabbit harbor destruction. Key achievements included 50,080 trees across 47 properties, 4.6 km of stock exclusion fencing, 88 ha of rabbit control and 500 ha of weed control.

- FISHERIES HABITAT PROGRAM**
 Recreational anglers continued their strong partnership with the Glenelg Hopkins CMA highlighted by the commencement of the Australian Government's Fisheries Habitat Program working with recreational anglers across all our estuaries. The Glenelg Hopkins CMA continues to support and sponsor recreational events for local fishing clubs as well as state-wide events such as the Victorian Bream Classic.

- NATIONAL LANDCARE PROGRAM**
 There have been several delivery highlights under the Australian Government's National Landcare Program including:

 BirdLife Australia's Hooded Plover program has grown from 40 to 1,500 volunteers in 15 years with 350+ land

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.2 Water storage (no.)	6	6	12		18
1.5 Waterway structure (no.)			18		18
1.8 Monitoring structure (no.)	72	72			72
1.9 Fence (km)	60	60	20		80
1.12 Crossing (no.)	2	2			2
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	1,177	1,173	118		1,291
2.2 Weed control (ha)	1,605	1,165	700		1,865
2.3 Pest animal control (ha)	2069	369	1,755		2,123
2.5 Threatened species response (no.)	4		15		15
2.8 Earth works (no.)	1	1			1
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	551	441	1,347		1,788
3.3 Water (no.)	10	9			9
3.4 Fire regime (no.)	15		15		15
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	427	422	2		424
4.2 Management agreement (no.)	73	45	21		66
4.3 Assessment (no.)	497	73	3,894		3,967
4.4 Engagement event (no. participants)	4,000	1,648	5,917		7,565
4.5 Partnership (no.)	24	24			24
4.6 Plan (no.)	20	6	17		23
4.7 Publication (no.)	176	57	133		190
4.8 Information management system (no.)	9	9			9

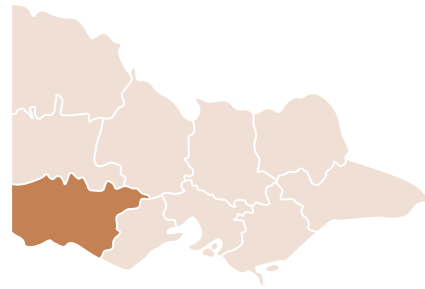
managers, as well as 58 chicks surviving and fledging as a direct result of the project. 33 sites approved for funding which will protect and enhance over 211 ha of Australasian Bittern habitat.

Implementation of a pilot project for online delivery of Whole Farm Plan training.

Release of approximately 31 eastern barred bandicoots at the Tiverton enclosure site

Gunditj Mirring Traditional Owner Aboriginal Corporation conducting traditional burns to improve habitat for red-tailed black cockatoos.





LOCATION

Nangeela State Forest.

OUTPUTS 2020-21

2 assessments
20 engagement event participants
1 plan
16 ha fire

PARTNERS

Gunditj Mirring Traditional Owners Aboriginal Corporation, DELWP Forest Fire and Glenelg Hopkins CMA.

REGIONAL STRATEGIES

Glenelg Hopkins Regional Catchment Strategy, Barwon South West Bushfire Management Strategy 2020.

FUNDING

Australian Government's National Landcare Program. Funded for four years 2019 – 2023.

CULTURAL BURNING FOR RED-TAILS OF THE GLENELG PLAIN

“The south-eastern red-tailed black cockatoo is highly sensitive to fire, and managing bushfire risk while not compromising the species habitat is very challenging. The cool burning methods employed by Traditional Owners in the region are providing important information on how best to manage these risks.”

Antony Ford, Chair, Glenelg Hopkins CMA

The endangered south-eastern red-tailed black cockatoo occurs as a single population in south-west Victoria and south-east South Australia. The species has a highly specialised feeding habit, limited to the fruit of brown and desert stringybark. However, this food resource can be compromised through the practice of fuel-reduction burning in instances where fire scorches the tree canopy, as this can largely inhibit food production for up to a decade.

As an alternative burning method, Gunditj Mirring Traditional Owners Aboriginal Corporation (GMTOAC) is re-introducing cultural burning into red-tailed black cockatoo habitat. In addition to supporting cultural practices, the project aims to protect the species' food resources, as well as reduce bushfire risk using cool burning techniques.

DELWP Forest Fire division identified areas of the bird's habitat planned for fuel reduction burning, and then presented these areas to GMTOAC as potential cultural burning sites. Once a site was chosen, Glenelg Hopkins CMA established a vegetation monitoring plot within the burn area to examine changes in vegetation/fuel composition and potential impacts on south-eastern red-tailed black cockatoo food resources.

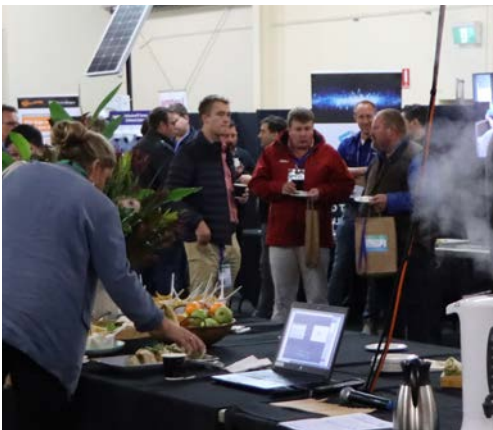
The project's first burn occurred on July 17, 2020. GMTOAC representatives, alongside DELWP Forest Fire crew members and Glenelg Hopkins CMA staff, burnt 16 ha of heathland and stringybark woodland. The cool burning resulted in a low-intensity

and patchy burn that prevented fire from scorching the stringybark trees canopy.

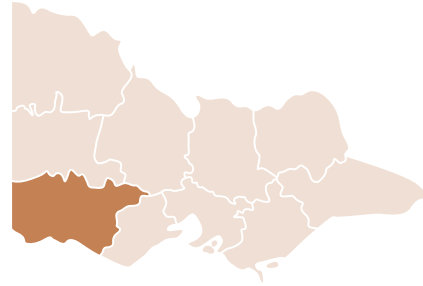
Glenelg Hopkins CMA staff re-visited the site in October 2020 to undertake the first post-burn vegetation survey. Data revealed that while the burn was patchy, it was also highly species-specific in the plants that were affected. These results suggest that the Traditional Owners cool burning methods allow fire to select and reduce fuel of the more flammable species, while leaving plants with low-flammability largely untouched.

Glenelg Hopkins CMA staff will continue to monitor the site over the next two years to see whether these initial changes in vegetation composition persist. If so, it is possible that the traditional burning methods employed have reduced the site's bushfire risk, while preventing the initial losses in habitat cover usually associated with fuel reduction burning.

- 1 Gunditj Mirring Traditional Owners Aboriginal Corporation Isiah Knight and Braydon Saunders burning the heathland surrounding red-tailed black cockatoo feeding habitat, *Ben Zeeman GHGMA*
- 2 Gunditj Mirring Traditional Owners Aboriginal Corporation's Amira Nicholson and Nicole Hudson burning the heathland surrounding red-tailed black cockatoo feeding habitat, *Ben Zeeman GHGMA*
- 3 Burn area and vegetation monitoring plot. Yellow shading indicates area burnt. Cross indicates the vegetation monitoring plot. Photos below taken of transect lines within the vegetation monitoring plot pre-burn. Surveys of the plot were undertaken pre- and post-burn to examine the vegetation response to cultural burning, *Aerial image: Google Earth Imagery 2020*



DIGITAL INNOVATION AND SMART AGRICULTURE FESTIVAL



“DISA is a wonderful example of collaboration by Glenelg Hopkins CMA, local government and producers to inspire smart, efficient and sustainable farming.”

Antony Ford, Chair, Glenelg Hopkins CMA

LOCATION

Hamilton.

OUTPUTS 2020-21

200 engagement event participants
8 Publications

PARTNERS

Southern Grampians Shire Council, Southern Farming Systems, Western District Grasslands Society Branch and Glenelg Hopkins CMA.

REGIONAL STRATEGIES

Glenelg Hopkins Regional Catchment Strategy, Southern Grampians Shire Council Digital Transformation Strategy.

FUNDING

Australian Government’s National Landcare Program.

The second Digital Innovation and Smart Agriculture (DISA) Festival was held in Hamilton in May 2021 with the theme “Smart Regions”. It provided insights into the latest on-farm commercial agricultural technology, including Glenelg Hopkins CMA trials of digital technology in sustainable management and building farm resilience.

The conference provided the opportunity for Glenelg Hopkins CMA to showcase some of the activities of the Sustainable Agriculture team including application of digital technology in sustainable management and building farm resilience.

Southern Grampians Shire Council coordinated the festival, with GHCMA a major partner and workshop host, alongside the Western District Grasslands Society Branch. The festival brought together people from a range of sectors including government, education and commercial, all with one thing in common: an interest in digital agriculture.

Day one consisted of 12 short workshops across three themes: Precision Land Management, Animal Management and On Farm Connectivity, and Monitoring and Safety. The partnership between AgVic, Western District Grasslands Society Branch and the CMA was showcased in a session on the Smart Farm trials and was a great chance to hear from farmers applying the technology on their farm.

Day two focused on “bigger picture”

issues related to digital agriculture such as supply chain, meeting market demands, sustainability and education. The day also generated some interesting debate through the panel discussions with subject matter experts.

Highlights included:

Southern Precision’s presentation on digital technology to map and design drain lines for waterlogging.

Agriculture Victoria and University of Melbourne discussion on soil moisture probes in pasture to identify key seasonal “tipping points” in a Western Victoria property.

Southwest TAFE and RIST highlighting advancements in tech approaches to learning

The DISA festival was a great success and grew significantly since the first in 2019, with over 200 attendees in 2021, it is planned again for 2023. This project is supported by the Glenelg Hopkins CMA through funding from the Australian Government’s National Landcare Program.

- 1** Farmers listen to the D1 Store Drone Presentation at DISA 2021, *Southern Grampians Shire Council*
- 2** Tim Hammond (D1 Store) and Bindi Hunter (Ag Vic) discuss Drones on Farm, *Southern Grampians Shire Council*
- 3** BA full Exhibition Room at DISA 2021, *Aerial image: Google Earth Imagery 2020, Southern Grampians Shire Council*



GOULBURN BROKEN

BROLGA AND CHICKS, GOULBURN BROKEN CMA

GOULBURN BROKEN

KEY EVENTS AND INSIGHTS

- WORKING FOR VICTORIA**
 The Goulburn Broken CMA had the privilege of being able to deliver two employment programs during the year. The GMID Drought Employment Program, which started back in December 2019 and continued until January 2021, supported farmers, farm workers and local agribusiness workers impacted by drought; and the Working for Victoria program, which ran from November 2020 to June 2021, provided employment and training opportunities to local people impacted by COVID-19. The programs were extremely successful in achieving employment opportunities for 71 local people.
- ENVIRONMENTAL WATER PROGRAM**
 As part of the Goulburn Broken CMA environmental water program, a total of 1000 ML was delivered to Gaynor Swamp to promote growth of wetland vegetation and provide habitat for waterbirds. This was the largest environmental water delivery to this wetland to date. A pulse of environmental water was also delivered down the lower Goulburn River in November 2020 to promote golden perch movement and breeding. Monitoring captured a large number of golden perch eggs during the fresh, indicating it was successful. Hundreds of waterbirds successfully bred in Boals Deadwoods wetland in Barmah Forest.

Environmental water was delivered to the wetland during the breeding event to maintain water levels.

- FLOOD PREPAREDNESS**
 The new Goulburn Broken Community Flood Intelligence Portal was launched in September 2020. The portal covers 14 communities at risk from flooding with detailed flood data to assist with land-use planning, building, flood insurance and flood preparedness. The portal is a joint project with four local councils with a fifth council to join later.
- REGION RESILIENCE STRATEGY**
 The Goulburn Murray Region Resilience Strategy was launched in December 2020 with a community driven taskforce established in 2021 to implement the actions from the strategy. The taskforce committee was established in June 2021 and will now focus on the priorities moving into the future from a resilience perspective with emphasis on the following key interventions: Futures for Agriculture, Learning for Change, Circular Economy, Natural and Built Assets and Leadership and Coordination.
- TRADITIONAL OWNER LAND MANAGEMENT CREWS**
 Yorta Yorta and Taungurung land management crews delivered environmental management across Traditional Country to control pest plants and animals, and to increase extent and diversity of habitat through revegetation activities. The crews carried out cultural burns on public and private land in partnership with the Goulburn Broken CMA, the CFA, Parks Victoria and DELWP. The Traditional Owner land management crews are critical to the successful implementation of the Linking

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.1 Channel (km)		55			55
1.2 Water storage (no.)		32			32
1.4 Irrigation infrastructure (ha)		1,271			1,271
1.5 Waterway structure (no.)		20			20
1.8 Monitoring structure (no.)		21			21
1.9 Fence (km)	14	81	10		91
1.10 Visitor facility (no.)		2			2
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	325	471	130	6	607
2.2 Weed control (ha)	11,889	10,440	1,057	36	11,533
2.3 Pest animal control (ha)	102,643	42,900	81,819		124,719
2.9 Rubbish removal (ha)		3,915			3,915
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	289	274	182		456
3.4 Fire regime (no.)	2		8		8
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	17	1,608			1,608
4.2 Management agreement (no.)	16	19	26		45
4.3 Assessment (no.)	1,170	2,066	155		2,221
4.4 Engagement event (no. participants)	246	2,570	1,024		3,594
4.5 Partnership (no.)	45	112			112
4.6 Plan (no.)	32	71	36	1	108
4.7 Publication (no.)	169	62	130	2	194
4.8 Information management system (no.)	1	3			3

Landscapes and Communities project, which delivered 125 ha of revegetation, 819 ha of pest animal control, and 643 ha of weed control in 2020-21. The project is supported by the CMA through funding from the Australian Government's National Landcare Program.

- REGIONAL CATCHMENT STRATEGY RENEWAL**
 During 2020-21, extensive engagement activities were undertaken as part of

the Regional Catchment Strategy (RCS) renewal. This included webinars, fact sheets, over 40 online engagement workshops through existing forums and specific Goulburn Broken RCS on-line workshops. This resulted in over 1,000 comments being incorporated into a high-quality on-line draft RCS that was released at the end of June 2021. The Goulburn Broken CMA looks forward to releasing the final strategy in 2021-22.





LOCATION

Shepparton Irrigation Region.

OUTPUTS 2020-21

1 written report (30-year achievements summary), 30-year outputs; 737 km channel (drain), 3,567 water structures (reuse system), 330,801 hectares irrigation systems improved (laser levelling), 81 gigalitres water savings, 1,822 ha fenced, 2,078 hectares revegetation, 4,456 plans (whole farm plans).

PARTNERS

Regional community, landowners and farmers, Goulburn Murray Landcare Network, three local governments, Yorta Yorta Nation Aboriginal Corporation, Taungurung Land and Waters Council, Goulburn Valley Environment Group, VFF, Goulburn Murray Water, Agriculture Victoria, DELWP, Goulburn Valley Water, Commonwealth Government, universities and schools.

REGIONAL STRATEGIES

SIR Land and Water Management Plan 1990-2020.

FUNDING

\$650 million of state and commonwealth government funding over 30 years. \$2 billion of investment by the regional community over 30 years.

30 YEARS DONE!

A RECORD OF THE ACHIEVEMENTS OF THE SHEPPARTON IRRIGATION REGION LAND AND WATER MANAGEMENT PLAN (SIRLWMP) OVER 30 YEARS

“We are proud that our farmers, communities and agencies have worked closely for so long to make large-scale and sensible on-ground changes happen.”

Kelvin Bruce - Chair of the SIR People and Planning Integration Committee

2020/21 marks the 30th anniversary of the SIRLWMP - a plan established to direct strategic investment into on-ground works that build long-term environmental, social and economic outcomes across the irrigated landscape of the Goulburn Broken and parts of the North Central catchments.

SIR People and Planning Integration Committee chair Kelvin Bruce said the plan had been successful because it harnessed the right people and was based on sound science.

“We are proud that our farmers, communities and agencies have worked closely for so long to make large-scale and sensible on-ground changes.

“Good people keep participating while they have the power to influence the (SIR Land and Water Management) Plan's destiny.”

He said ongoing partnerships had enabled the Plan to adapt to changing circumstances.

“We have not wasted lessons from many unprecedented crises and from mistakes we made,” Mr Bruce said.

The Plan's focus broadened from salinity to include water quality, biodiversity, waterway management, water availability, climate change and community resilience.

Looking to the next 30 years, Mr Bruce said there was plenty still to be achieved.

“Against a backdrop of climate change, we face ongoing challenges to save species and to ensure all our consumptive and environmental water users receive a fair share.”

Over the 30 years, government investment of \$650 million was more than matched by farmer and community contributions of \$2 billion to implement over 300,000 hectares of on-ground actions through 7,057 incentives.

Achievements recorded in 30 Years Done! include: 4,456 whole-farm plans covering 326,092 hectares; 81 gigalitres of water saved for agriculture and the environment through farm efficiencies; annual salt loads into Murray River reduced by 6,500 tonnes; annual phosphorus loads from drains into river and streams reduced by over 60 tonnes; 737 kms of drains built; 52,847 ha protected by groundwater pumps; 3,567 reuse systems installed; 356 groundwater pumps installed; 1,822 ha of native vegetation fenced and 2,078 ha planted or direct seeded on private land and 330,801 ha laser levelled.

- 1 Linear move irrigation system at work, *Caroline Keenan*
- 2 Shepparton Irrigation Region People and Planning Integration Committee visits a Lancaster Dairy Farm, *Caroline Keenan*
- 3 Muckatah depression drain, *Unknown*



BIRDS FLOCK TO REVEGETATED LANDSCAPES

“I’ve been working in these plains for 20 years delivering revegetation incentives to farmers but in recent times I’ve been heartened by a genuine commitment to providing habitat for native birds and other wildlife.”

Susan Sleight - Longwood Plains Conservation Management Network facilitator.

LOCATION

Longwood Plains

OUTPUTS 2020-21

1 flora assessment
40 fauna assessments
1 publication

PARTNERS

Longwood Plains Conservation Management Network
Landholders
Birds Bush and Beyond
LaTrobe University

REGIONAL STRATEGIES

Goulburn Broken Biodiversity Strategy 2015-20
Goulburn Broken Regional Catchment Strategy

FUNDING

Australian Government’s National Landcare Program.

We now better understand that revegetation is proving to be an important part of our biodiversity conservation efforts as it provides habitat for a wide variety of birds, many of which are in decline.

We often look to our conservation reserves as places for wildlife, however, we know that there just aren’t enough of these reserves across our varied landscapes to conserve all our wildlife into the future. If habitat loss is the biggest threat to our wildlife, then putting back habitat seems to make sense if we want to conserve biodiversity.

In the Longwood Plains area of the Goulburn Broken catchment, that is exactly what is happening. This area was mostly cleared, grazing and cropping land, with remnant vegetation dominated by trees along roadsides, waterways and in small patches. However, this area has seen many recent changes. Over more than 20 years, thousands of hectares of land have been revegetated. The landscape is now one of corridors and shelterbelts linking remnants along roadsides and waterways. But what is the real value of this hard work? In a recent study in the Longwood Plains, birds were surveyed in four different types of areas:

1. Open farmland
2. Revegetation less than five years old
3. Revegetation more than 10 years old
4. Conservation reserves.

In open farmland, there were 10 species of birds recorded, all the common ones we know, including magpies, ravens, galahs and cockatoos. In the reserve sites, 41 different species were recorded, of which eight were found nowhere else, attesting to their importance. But importantly, the young revegetation sites had 24 species (compared to 10 in un-revegetated areas), and in old revegetation 42 species were found, in which seven species were not found elsewhere in the landscape. A major reason that there are so many birds in revegetation is the presence of wattles and shrubs, which provide habitat for many of the smaller birds, such as insectivorous weebills and yellow-rumped thornbills, and seed eaters such as red-browed finch.

This study has therefore demonstrated that revegetation is playing a critical role in helping to conserve our wildlife, and so together with better management of our reserves, we can help conserve our unique wildlife into the future. This project is supported by the Goulburn Broken CMA through funding from the Australian Government’s National Landcare Program.

- 1 Eastern yellow robin, *Richard Gregson*
- 2 Yellow-rumped thornbill, *Tracey Cosier*
- 3 Revegetated land in the Longwood Plains, *Jim Begley*

MALLEE

SWANS ON LAKE KRAMEN, MALLEE CMA



MALLEE

KEY EVENTS AND INSIGHTS

- **TARGETED ENVIRONMENTAL WORKS**
Over 420,000 ha of targeted environmental works were undertaken in 2020-21 to protect the region's priority natural, cultural and productive landscapes. Key achievements included:

Delivering 39,776 ML of environmental water to 40 regional waterways, inundating 9,915 ha of priority floodplain habitat. Eleven of the 18 lakes within Hattah Kulkyne National Park were watered as part of this program; promoting further improvements in the ecological character of this internationally recognised site and providing critical water refuges that are supporting a high abundance and diversity of waterbirds. Undertaking 16,786 ha of pest plant and animal control works within the Hattah Ramsar site to maintain key invasive species (e.g. foxes, rabbits, goats, pigs) below critical thresholds is helping ensure that the environmental benefits of watering can be fully realised.

Supporting the recovery of 23 priority threatened species and communities by delivering 390,000 ha of invasive species control works within terrestrial habitat critical to their persistence. These targeted biodiversity works also included revegetating 210 ha of public and private land to reconnect isolated

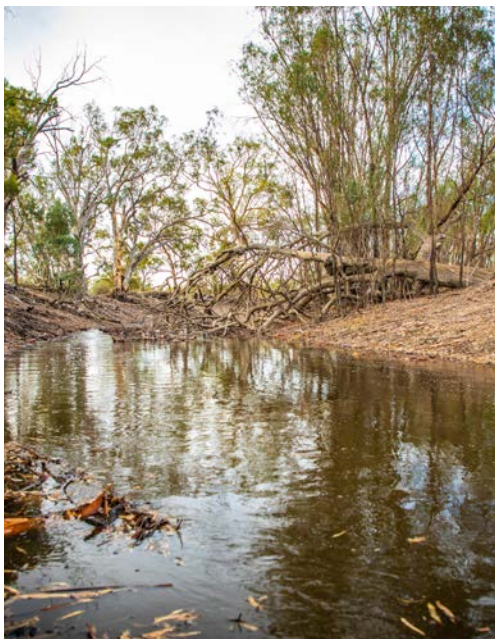
Malleefowl populations with core habitat; and the re-establishment of key canopy and understory species across 92 ha of degraded Buloke Woodland remnants.

- **COMMUNITY PARTNERSHIPS**
Effective partnerships with community are integral to the success of these on-ground activities, with 40 individual funding grants provided to eight community groups and 32 private land managers in 2020-21 to support environmental and capacity building outcomes.
- **WORKING FOR VICTORIA**
Annual works programs were also enhanced this year by activities delivered through two employment initiatives. The Working for Victoria and Drought Employment Programs collectively supported 69 participants to undertake a broad range of environmental and agricultural works across the region. This included revegetation, pest plant and animal control, fencing and rubbish removal and delivering against the priorities of local stakeholders. The outputs achieved by these works represent a large proportion of the areas etc. delivered that were in addition to 2020-21 targets (rubbish removal, fencing).
- **STAKEHOLDER ENGAGEMENT**
While COVID-19 restrictions impacted the number and type of engagement activities undertaken throughout the year, employing a combination of in-person and virtual approaches supported 6,275 stakeholders to participate in 501 individual events. Collectively, the field trips, citizen science programs, and forums Mallee CMA delivered continued

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.4 Irrigation infrastructure (ha)	57	90		39	159
1.6 Terrestrial structure (no.)	1	1			1
1.7 Terrestrial feature (no.)		2			2
1.8 Monitoring structure (no.)	24	10	2		12
1.9 Fence (km)	53	121			121
1.10 Visitor facility (no.)	9	13			13
1.11 Road (km)		1			1
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	669	226	495		721
2.2 Weed control (ha)	109,495	105,107	18,232		123,339
2.3 Pest animal control (ha)	283,201	222,983	71,519		294,502
2.9 Rubbish removal (ha)		3,047			3,047
3. MANAGEMENT SERVICES					
3.3 Water (no.)	46	48			48
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	101	102		10	112
4.2 Management agreement (no.)	47	39	8		47
4.3 Assessment (no.)	485	374	134	10	518
4.4 Engagement event (no. participants)	3,971	3,518	2,473	284	6,275
4.5 Partnership (no.)	95	73	23	3	99
4.6 Plan (no.)	113	77	27	2	106
4.7 Publication (no.)	288	230	75	22	327
4.8 Information management system (no.)	20	16	8	1	25

to receive positive feedback; with 66% of participants rating their overall delivery as 'excellent' and a further 32% as 'good'. A series of Talk Water and Cultural Values events held with Traditional Owners at key waterway sites to share knowledge and inform future environmental water planning is a key example of the approaches employed throughout the year to effectively engage with our communities.

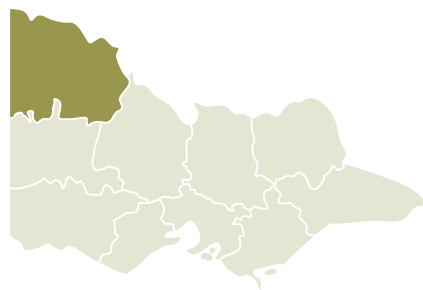
- **REGIONAL CATCHMENT STRATEGY RENEWAL**
Renewal and release of key regional strategic documents in 2020-21 (i.e. Victorian Mallee Irrigation Region Land and Water Management Plan and the Mallee Indigenous Participation Plan) represents ongoing advances in the planning, delivery and evaluation of both NRM and governance (i.e. organisational) focused activities.



HATTAH WATERING

“Mallee CMA is continuing to monitor the outcomes of delivering water to Hattah and the results are positive. We’ve seen 45 different bird species identified in the last month alone, many listed as vulnerable species.”

Sharyon Peart, Chair, Mallee CMA



LOCATION

Hattah-Kulkyne National Park.

OUTPUTS 2020-21

- 1 Approval & Advice
- 12 Publications
- 241 Engagement event participants
- 6 Monitoring structures
- 1 Watering event
- 20 Assessments
- 2 Partnerships
- 3 Plans
- 5 Information Management Systems

PARTNERS

Victorian Environmental Water Holder; Murray-Darling Basin Authority; DELWP; Parks Victoria; Goulburn Murray Water; Traditional Owners.

REGIONAL STRATEGIES

Mallee Regional Catchment Strategy 2013-19.

FUNDING

The Hattah Lakes Watering was supported by the Victorian Government’s Environmental Water and Aboriginal Water Programs and the Victorian Environmental Water Holder. Monitoring was supported by the Murray-Darling Basin Authority’s The Living Murray program.

The autumn delivery of water for the environment at the Hattah-Kulkyne National Park has provided great community, economic and environmental benefits. The lakes have been brought back to life through the delivery of environmental water after undergoing a drying phase over the past four years.

The Hattah Lakes are a system of interconnected wetlands within the Hattah-Kulkyne National Park, intermittently filled by Chalka Creek which connects the lakes to the Murray River.

Listed as a Ramsar site, the wetlands provide a vitally important mosaic of habitat for birds, animals and vegetation. The site also contains significant cultural and social values which continue to connect Traditional Owners and community members to the landscape.

During autumn, 13 of the 18 lakes received environmental water, supporting the significant ecosystem within the Park.

Lake Kramen was filled using water for the environment in spring 2019, and has undergone a drying phase over the past few years. As the water draws down, aquatic vegetation growing in the wetlands provides vital resources for animals such as waterbirds. Black swans feed on this vegetation and use it to build nests. Recently, Mallee CMA Project Officers observed black swan nests appearing across the lake. Through a short study, it was identified that over 2,200 birds

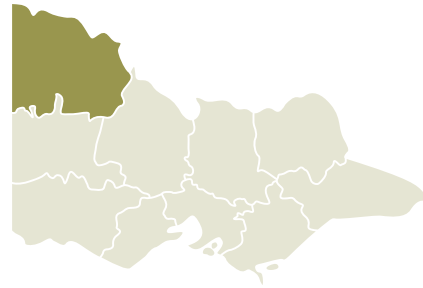
including hardhead duck, musk duck and regent parrot, all listed as vulnerable species have visited the site. A total of 45 black swan nests were also found across Lake Kramen during winter 2021.

Swan eggs, take around 40 days to hatch, the cygnets will take up to 150 days to become independent. This breeding event is a significant outcome achieved through the delivery of water for the environment.

The delivery of water at Hattah-Kulkyne National Park also has significant community benefits through recreational opportunities, such as camping, walking, bike riding and canoeing and provides opportunities to learn about the importance of the lakes and the ecosystem they support.

The Hattah Lakes are a highly regarded site for Apiarists who deploy hives to benefit from the increased tree flowering in response to environmental water delivery.

- 1 Delivery of environmental water in autumn at Hattah Lakes, *Mallee CMA*
- 2 Lake Hattah, *Mallee CMA*
- 3 First flows of water being delivered at Hattah Kulkyne National Park, *Mallee CMA*



LOCATION

Southern Mallee.

OUTPUTS 2020-21

92 ha of vegetation established
 15,121 ha of pest animal control
 2,068 ha of weed control
 7 Management Agreements
 23 Assessments
 28 Engagement Event participants
 4 Partnerships
 2 Plans
 5 Publications

PARTNERS

Barengi Gadjin Land Council Aboriginal Corporation
 Birchip Racecourse Reserve Committee of Management
 Yarriambiack Shire Council
 Private landholders

REGIONAL STRATEGIES

Mallee Regional Catchment Strategy 2013-19.

FUNDING

Australian Government's National Landcare Program.

RESTORING BULOKE WOODLANDS IN THE MALLEE

“The project at the Birchip Racecourse Recreation Reserve is a fantastic effort, to plant so many trees and water them. It will be an asset for the future. It will provide a great area for the birdlife, wildlife and the community.”

Jack Coffey, Chairman, Birchip Racecourse Reserve Committee of Management.

Mallee CMA is working in partnership with Barengi Gadjin Land Council, local land managers, and the community to restore precious remnants of Buloke Woodlands in the southern Mallee.

Buloke Woodlands of the Riverina and Murray Darling Depression, are an Endangered Ecological Community listed under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*. Extensively cleared for grazing and cropping, these woodlands now exist as scattered remnants on private and public land, subject to a number of ongoing threats to their survival. Regeneration of both canopy and understorey species represents one such threat, with many remnants having only veteran Buloke trees present; lacking vital mid-storey and ground layer components.

A five-year (2018-23) revegetation program is addressing this threat by restoring key canopy and understorey species within priority remnants. Working with Traditional Owners, Local Government, community groups and private land managers; some 300 ha of supplementary plantings are being established to help secure the future viability of these woodlands.

Barengi Gadjin Land Council (BGLC) are delivering the revegetation works, with their Dalki Garringa Native Nursery collecting the seed and growing the tubestock required each year.

In 2020-21 this encompassed 34,250 seedlings and 3.72 kilograms of seed being planted across 92 ha of Buloke remnants. Comprehensive rabbit control programs are also being undertaken by land managers and community groups to protect these new plantings from grazing, and to support natural regeneration processes within the broader remnants.

One of the sites being targeted by this program is the Birchip Racecourse Recreation Reserve, which at 45 ha represents a relatively large remnant of Buloke Woodland. The Reserve is managed by a community-based Committee of Management whose ongoing support has enabled over 23,000 tubestock to be established at the site over the past three years. Engagement activities are also being conducted at the Reserve to raise local awareness of Buloke Woodlands and the fauna which depend on them.

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

- 1** Works to protect seedlings at Birchip Racecourse Reserve, *Mallee CMA*
- 2** Dalki Garringa Native Nursery collecting seed for tubestock propagation and direct seeding, *Barengi Gadjin Land Council*
- 3** Watering Buloke Revegetation, *Barengi Gadjin Land Council*



NORTH CENTRAL

REEDY LAGOON, *DAVID KLEINERT*

NORTH CENTRAL

KEY EVENTS AND INSIGHTS

- BOOSTING NATIVE FISH RECOVERY**
 The North Central CMA, in partnership with Goulburn-Murray Water (GMW), continued the building of fishways at Cohuna and Koondrook weirs that will enable native fish, for the first time in decades, to move up and down Gunbower Creek and to the open water of the Murray River. The Victorian Environmental Water Holder and the Victorian Government co-funded the Koondrook fishway, and is part funded from the sale of water for the environment to irrigators; GMW fully funded the Cohuna fishway. The fishways complement the CMA's \$7.1 million Native Fish Recovery project to address key threats to river health and native fish populations in northern Victoria and part of the Victorian Government's \$17 million Waterway Environmental Works Stimulus Package.
- WATERWAYS AND WATER FOR THE ENVIRONMENT**
 Our collective waterway project works protected more than 20,700 ha through weed and pest control, fencing of riparian zones, and grazing management. We managed the delivery of 46,000 ML of water for the environment to improve fish movement and breeding, improve water quality and vegetation health, and enhance bird breeding, feeding and roosting opportunities. Through the Living Murray project, we delivered 10.4 GL into Gunbower Creek and 2.57 GL for Gunbower Forest.
- COMMUNITY ENGAGEMENT AND PARTNERSHIPS**
 COVID-19 restrictions impacted our traditional engagement methods, so

we adapted our approach to ensure the community is at the cornerstone of our activities. Working with our partners and the community we developed the 2021-27 draft North Central Regional Catchment Strategy (RCS). Over 270 engagement events attracted more than 3,900 participants. We engaged the seven Traditional Owner groups in the RCS renewal with each providing their perspectives on what Country means to them and how we can work together to care for it.

- SUPPORTING OUR COMMUNITIES AND GROUPS**
 Following extensive consultation, we submitted the draft Loddon Campaspe Irrigation Land and Water Management Plan to DELWP for endorsement. Our Regenerative Agriculture program staff worked with five community groups hosting 23 events with 504 landholders who manage over 105,000 ha. Our Regional Agriculture Landcare Facilitator kept farmers informed about workshops, field days, webinars, research, and publications. We delivered on new irrigation development referrals, including new potential industries - hemp and truffles. We approved an increase of 1,353 ML through groundwater, channel, and Loddon River delivery to support new development, with 573 ha flagged across the region for future irrigation enterprises.
- WORKING FOR VICTORIA**
 The North Central CMA received \$607,806 from the Working for Victoria initiative to employ locals to work on improving waterway health and land management through pest plant and animal control, native revegetation, and fencing. Fifteen individuals (11.2 FTE) were employed from September 2020 to June 2021, for a combined total of 291 weeks.



OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.1 Channel (km)	0	1			1
1.2 Water storage (no.)	11	12		1	13
1.3 Pump (no.)	4	5		1	6
1.5 Waterway structure (no.)	20	15			15
1.9 Fence (km)	54	43	14		57
1.10 Visitor facility (no.)		72			72
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	524	1,315	136	13	1,464
2.2 Weed control (ha)	2,509	3,946	101		4,047
2.3 Pest animal control (ha)	5,232	5,407	2,822		8,229
2.5 Threatened species response (no.)	8	2	5		7
2.8 Earth works (no.)	4				0
2.9 Rubbish removal (ha)		2,518			2,518
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	39	75			75
3.2 Agricultural practices (ha)	18,400		8,508		8,508
3.3 Water (no.)		46	1		47
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	3,864	3,903			3,903
4.2 Management agreement (no.)	21	11	11		22
4.3 Assessment (no.)	798	714	125	1	840
4.4 Engagement event (no. participants)	2,549	3,040	1,457	6	4,503
4.5 Partnership (no.)	22	53			53
4.6 Plan (no.)	42	47	11		58
4.7 Publication (no.)	46	65	44		109
4.8 Information management system (no.)	3	3			3

- THE BITTERN AT WIRRA-LO**
 Two rehabilitated wetlands on private property adjoining the 66 ha Wirra-Lo wetland complex in Murrabit West are increasing opportunities for *EPBC Act*-listed Australasian bittern and growling grass frog to feed, breed and forage. The wetlands design takes in the habitat requirements of the Australasian bittern. Growling grass frogs were recorded at Wirra-Lo up until 2003.

Improved habitat and an adequate watering regime have seen them return in 2020-21. During the year the Bringing Back the Bittern project achieved 3.4 km fencing, 35 ha of rabbit control, 2,704 ha of fox control, 70 ha of increased tall marsh habitat and engaged with 164 community members and partners. This project is supported by the North Central CMA through funding from the Australian Government's National Landcare Program.



LOCATION

North Central CMA region.

OUTPUTS 2020-21

3 ha slashing
10,000 plants established
Exclusion plots fenced
Pumping of environmental water for initial wetland fill

PARTNERS

Victorian Environmental Water Holder
Traditional Owners, Victorian Government's Working for Victoria Program.

REGIONAL STRATEGIES

Draft North Central Regional Catchment Strategy 2021-27, North Central Waterway Strategy 2014-22, North Central Community Engagement Strategy.

FUNDING

Bringing back the Bittern Australian Government's National Landcare Program \$76,850, Working for Victoria - \$12,272 (plants) and \$6567 (exclusion plots), VEWH \$68,000.

PUTTING THE REEDS BACK IN REED BED SWAMP

“The watering of Guttrum Forest has been a long-term goal of the Traditional Owners of the area for many years. The wetlands are of regional significance and have enormous cultural importance to the Wamba Wemba and Barapa Barapa People.”

Spokesperson for the Barapa Barapa Wamba Wemba Water for Country steering committee.

Reed Bed Swamp, in Guttrum State Forest, is a significant cultural and biodiverse wetland. The North Central CMA, Working for Victoria teams and Traditional Owners are halting the decline of the swamp by establishing and protecting more than 10,000 plants, including reeds and rushes, as well as culturally important food and medicine plants.

Once home to a lot of tall rushes and reeds, and other aquatic vegetation Reed Bed Swamp once provided a perfect refuge, feeding, and breeding spot for all kinds of frogs, turtles, and waterbirds including what is now one of Australia's most endangered birds, the Australasian bittern.

The swamp has deteriorated over the past century on the back of a changing climate, river regulation reducing the frequency and duration of flood flows and impacts of historic land management practices.

A natural flood in 2016 stimulated red gum seedlings to germinate across the wetland. Without follow-up flooding, the red gum saplings began to dominate the wetland, reducing the open-water habitat waterbirds such as swans, ducks and foraging waterbirds need.

A 2019 slashing trial of three hectares of red gum saplings followed by inundating them with water to drown them achieved a 95% success rate. This strategy is to be repeated.

Up to 500 ML of water was pumped via temporary pumps from the Murray River into the swamp during 2021 to halt the river red gum encroachment and give the wetland vegetation, including the recently planted reeds and other plants, a much-needed drink. The watering will prime the wetland vegetation ahead of a planned spring top-up to support bird breeding and feeding.

Encouraging the giant rushes in the right places Bringing Back the Bittern is contributing to national recovery efforts to increase the extent and quality of wetland habitats to protect endangered species.

By improving habitat at Reed Bed Swamp, we are creating the right conditions for the endangered Australasian bittern to return to the Guttrum State Forest where it hasn't been seen since the 1970s.

This project is jointly funded through the North Central CMA, the Australian Government's National Landcare Program, the Victorian Government's Working for Victoria Program, and the Victorian Environmental Water Holder.

- 1** Working for Victoria crew protecting giant rushes, *North Central CMA*
- 2** Working for Victoria crew establishing exclusion plots, *North Central CMA*
- 3** Protected newly established plants in Reed Bed Swamp, *North Central CMA*



NATIVE FISH RECOVERY



“Most of our team have worked their whole lives dealing with the decline of threatened or endangered species, so to have an opportunity to be witnessing the opposite with the southern purple spotted gudgeon is something special.”

Adrian Martins, DELWP.



LOCATION

North Central CMA region.

OUTPUTS 2020-21

Ongoing construction of fishways
Water for the environment delivered to key wetlands. Increases in fish numbers for priority species.

PARTNERS

Arthur Rylah Institute, DELWP; MDBA; Parks Victoria; Goulburn Murray Water; VEWH; CEWO; Traditional Owners; Austral Research and Consulting; City of Greater Bendigo Council; Fish and recreational fishers' groups; Nature-Glenelg Trust; Middle Creek Farm Aquaculture.

REGIONAL STRATEGIES

North Central CMA's Native Fish Recovery Program, Draft North Central Regional Catchment Strategy 2021-27.

FUNDING

Victorian Government Fish Passage Stimulus Package (\$7.1 million)
Murray-Darling Basin Plan VEWH (Koondrook Weir).



Implementing the Native Fish Recovery Program in northern Victoria is achieving great outcomes, particularly in the lower Loddon catchment where water for the environment is helping the recovery of native fish populations.

Fish ecologists have made two exciting recent discoveries:

1. the southern purple spotted gudgeon (a small colourful native fish declared extinct in Victoria in 1998) in Third Reedy Lake, part of the Kerang Lakes Ramsar complex, and
2. some of the biggest and healthiest Murray-Darling rainbowfish (listed as vulnerable) ever seen in Reedy Lagoon in Gunbower Forest.

Following the discovery of the southern purple spotted gudgeon an Advisory Group was set up to develop a plan that would ensure the long-term survival of the species. Water for the environment was delivered to Third Reedy Lake to keep the water level stable, and the team went looking for more fish in nearby waterways. Another southern purple spotted gudgeon was soon discovered at Third Reedy, three were found at Kangaroo Lake, eight at Racecourse Lake and an astounding 66 at Middle Reedy Lake, next door to the original find.

A captive breeding program is now helping to build the fish numbers and distribution back up to what they were

before European occupation, river regulation, and the introduction of pest species.

A second captive breeding program has seen 1,600 southern pygmy perch released into four local wetlands in the Bendigo Creek and Axe Creek catchments, and two Gunbower Forest wetlands. Southern pygmy perch was last recorded in Gunbower Forest in 1997, and it's thought that the species has been locally extinct from the Bendigo Creek since the 1860s gold rush. The project is part of the Tri- State Alliance Magnificent Six project.

The North Central CMA, in partnership with Goulburn-Murray Water (GMW), continued the building of fishways at Cohuna and Koondrook weirs that will enable native fish, for the first time in decades, to move up and down Gunbower Creek and to the open water of the Murray River. The Victorian Environmental Water Holder and the Victorian Government co-funded the Koondrook fishway, partly from the sale of water for the environment to irrigators. GMW fully funded the Cohuna fishway. The fishways will complement the CMA's Native Fish Recovery project to address the key threats to native fish populations in northern Victoria.

- 1 Southern purple spotted gudgeon, *Doug Gimsey*
- 2 Fish ecologist at work, *Doug Gimsey*
- 3 Koondrook fishway during construction, *Lincoln Wellington, Goulburn Murray Water*

NORTH EAST

JAITHMATHANG RECONNECTION - MT LOCH



NORTH EAST

KEY EVENTS AND INSIGHTS

- NORTH EAST REGIONAL WATERWAY STRATEGY**
 The North East CMA commenced engaging collaboratively with the community, Traditional Owners, land managers and other stakeholders to improve the condition of the Upper Mitta River by addressing priority threats. This flagship program will see works commence in 2021-22 to improve riparian health and access, control invasive woody weeds in the headwaters, and improve habitat for aquatic species. The Securing Waterway Health & Upper Ovens Flagship project will build on previous waterway investments and deliver on the priority actions in the North East Regional Waterway Strategy and Water for Victoria.
- VICTORIAN GOVERNMENT'S LANDCARE GRANTS**
 Thirty-five Landcare and community groups received funding through the 2019-20 Victorian Government's Landcare Grants. The funds supported 29 engagement activities; 55 training events; 9.5 km of fencing across 17 sites; 17,700 trees planted across 152 revegetation sites; and 16 ha of weed control.
- ABORIGINAL WATER OFFICER**
 An Aboriginal Water Officer (AWO), employed collaboratively through DELWP and the North East CMA, is now supporting the region's non-registered



**NORTH EAST
CATCHMENT
MANAGEMENT
AUTHORITY**

Traditional Owners/First Nations Groups to engage, participate and lead priority water activities. Groups participating include Jaithmathang Traditional Ancestral Bloodline Owners First Nations Aboriginal Corporation, Dhudhuroa Waywuru Aboriginal Corporation, Duduroa-Dhargal Aboriginal Corporation, Dalka Warra Mittung Aboriginal Corporation and Bangerang Aboriginal Corporations.

- NORTH EAST REGIONAL FLOODPLAIN MANAGEMENT STRATEGY**
 The Rural City of Wangaratta has amended the planning overlays developed through the Wangaratta Urban Flood Study, including the impacts of climate change. The North East Regional Floodplain Management Strategy 2018-28 now includes updated hydrology with climate change and assessment of mitigation works for the Chiltern flood study; commencement of the Porepunkah Drainage Strategy and Stackey Gully Creek Strategy; Jack in the Box Creek and Felltimber Creek flood studies; ongoing work on the Kiewa River and Tributaries Flood Study and the Upper Murray Regional Flood Study. Works were undertaken to stabilise a portion of the CMA's Markwood levee on the Ovens River.
- REGIONAL AGRICULTURE LANDCARE FACILITATOR**
 (RALF) services are funded by the Australian Government's National Landcare Program. The program has supported the agricultural community in recovery from bushfire. More than 50 community meetings involved over 860 people in planning for recovery activities. The new Natural Disaster and Climate Change Leadership Program launched a strong partnership between

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.2 Water storage (no.)	13	9			9
1.5 Waterway structure (no.)	5	118			118
1.9 Fence (km)	46	58	4		62
1.10 Visitor facility (no.)	10	10			10
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	18	174	32		206
2.2 Weed control (ha)	1,629	1,024	22,262		23,286
2.3 Pest animal control (ha)	23,640	3,130	140,052		143,182
2.5 Threatened species response (no.)	1		1		1
2.6 Emergency species response (no.)	1		1		1
2.8 Earth works (no.)	40	47			47
2.9 Rubbish removal (ha)		17			17
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)	40	56			56
3.3 Water (no.)	3	3			3
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	442	524			524
4.2 Management agreement (no.)	40	14	32		46
4.3 Assessment (no.)	31	220	23		243
4.4 Engagement event (no. participants)	2,200	1,933	2,266		4,199
4.5 Partnership (no.)	37	19	24		43
4.6 Plan (no.)	14	3	14		17
4.7 Publication (no.)	75	77	53		130
4.8 Information management system (no.)	4	3	1		4

the Alpine Valleys Community Leadership program, Gardner Foundation, Central Hume Primary Care Partnership and the Victorian Government.

- MOUNTAIN PYGMY-POSSUM RECOVERY PROJECT**
 The Mountain Pygmy-possum Recovery Project funded by the Australian Government's National Landcare Program achieved:
 - Predator control of cats and foxes on 27,000 ha in and around mountain

pygmy-possum habitat.

Weed removal (*Salix* spp.) across 537 ha of the Mt Hotham and Bogong High Plains areas.

Production and release of three videos highlighting the collaborative effort to save the species.

20 days of monitoring, with a total of 270 trap nights undertaken at 12 sites distributed across nine local populations in the Alpine National Park.



UPPER MURRAY BUSHFIRE RECOVERY

“The 2019-20 bushfires significantly impacted communities, industries, ecosystems and waterways in north east Victoria. Victorian and Australian Government funding has supported the delivery of critical on-ground works that help our biodiversity, our towns and communities to recover.”

Leanne Mulcahy, Chair, North East CMA



LOCATION

Upper Murray in north east Victoria.

OUTPUTS 2020-21

432.3 ha of weed control, 3000 ha pest animal control, 23 property assessments, 9.9 km fencing, 8 engagement events and 314 participants, 16 management plans/agreements, 2.6 ha revegetation, 76 waterway structures, 58 Macquarie perch into captive, breeding and 400 released into the Buffalo River.

PARTNERS

Upper Murray Landcare Network and groups (4), Parklands Albury Wodonga, North East Blackberry Action Group, Trust for Nature, DELWP, Hancock Victorian Plantations, Parks Victoria, Fish and Angling organisations (3), Landcare Australia, CESAR Australia, Alpine Resort Management Boards (2), Traditional Owner corporations (2), Parks Victoria, La Trobe University, Zoos Victoria, Arthur Rylah Institute, private landholders.

REGIONAL STRATEGIES

North East Regional Catchment Strategy.

FUNDING

Victorian Government \$3,358,000
Australian Government's National Landcare Program \$650,000.

More than 430,000 ha (22%) of north east Victoria was burnt in December 2019 and January 2020. With the support of the Victorian Government and Australian Government's National Landcare Program, the North East CMA implemented four programs to support the recovery of affected communities, catchments and local flora and fauna in the Upper Murray.

- 1** Victorian Government's Bushfire Recovery Program has funded riparian works at 19 critical sites affected by the bushfires. The focus has been on bank stabilisation works that left unmanaged pose a high risk to essential public infrastructure (roads and bridges), and to river health. Achievements include:
 - 6.9 km fencing
 - 2.6 ha revegetation
 - 76 waterway structures built, including log jams to provide habitat; boulder seeding to create flow diversity, localised scour and habitat; and to prevent sediment impact and erosion across fire affected areas.
 - 245 ha weed control.
 - Arthur Rylah Institute conducted fish surveys by to determine the recovery of fish populations.

- 2** Victorian Government's Biodiversity Bushfire Recovery Grants allowed the North East CMA to work with impacted communities on local priority projects restoring habitat and biodiversity on fire-affected land.

- 3** Australian Government's Bushfire

Recovery Package for Wildlife and their Habitat program has supported high priority species impacted by fire. Working with our partners we coordinated the delivery of bushfire recovery works in Alpine areas, including:

- 62.5 ha of weed control to reduce threats to high priority species and vegetation communities on fire-impacted conservation covenants.
 - 3,000 ha pest animal control in Hancock Victorian Plantations.
 - Removal of 37 deer from Shelly Plantation to protect fire-impacted Alpine Peatlands.
 - Alpine Ecology Workshop at Dinner Plain.
- 4** Australian Government's National Landcare Program: Service Providers for Emergency Pest Mitigation and Habitat Protection. Achievements include:
 - 124.8 ha of weed control across burnt areas of Alpine Peatland complexes at Mt Buffalo and Alpine National Parks.
 - Ten management plans across 477 ha. Support for 11 landholders to manage fire-affected conservation covenants with habitat for EPBC-listed species.

- 1** Constructing log jams on Cudgewa Creek following the 2019-20 bushfires, *NECMA*
- 2** Log jams constructed on Nariel Creek following the 2019-20 bushfires, *David Anderson*
- 3** Regrowth in the Thowgla Valley, north east Victoria in June 2020, *NECMA*



REGENT HONEYEATER RECOVERY - BUSH FOR BIRDS



LOCATION

Priority, high value sites across north east Victoria.

OUTPUTS 2020-21

259 ha remnant vegetation protected and enhanced on private land (233 ha protected in perpetuity); 353 new paddock trees installed (18 ha available tree canopy for regent honeyeaters and swift parrots); 12.4 km fencing to protect habitat; 5.5 km fencing modified to improve remnant connectivity with established revegetation; 382 ha weed control; 44 ha ecological thinning to improve regent honeyeater habitat; Regent honeyeater and swift parrot surveys at 78 sites; 667 ha control of noisy miner across 55 sites; Bird surveys completed at 74 sites in partnership with Swamp, Rivers and Ranges.

PARTNERS

Australian Government, Regent Honeyeater Recovery Team, DELWP, Trust for Nature, local Landcare groups, Landcare Victoria, Traditional Owners/ First Nations groups, Parks Victoria, Birdlife Australia, private landholders.

REGIONAL STRATEGIES

North East RCS.

FUNDING

Australian Government 2019-23 Threatened Species & Communities.

“The Bush for Birds project provides incentives to farmers and landholders to restore and expand areas of native woodland that contain vital feeding habitat for threatened birds. When managed well, these areas provide benefits for lots of woodland birds and can help improve land value.”

Phillip Falcke, Project Officer, North East CMA

In partnership with Trust for Nature, 28 management agreements have been negotiated with landholders across 578 ha, to protect and enhance regent honeyeater and swift parrot habitat on private land. This second round of grants brings the total area under agreement to 1,604 ha.

Extensive land clearing in southern Australia over the past 150 years is threatening the habitat of the regent honeyeater (*Anthochaera Phrygia*) and the swift parrot (*Lathamus discolor*). Both species face extinction unless their woodland habitat is expanded and improved.

North East CMA, Trust for Nature and other key partners are working to deliver this project and address the key threats for the species in north east Victoria. Success in recovery of these endangered birds, identified as priority species in the Australian Government’s Threatened Species Strategy Action Plan 2015-16, will rely greatly on improved quality and quantity of woodland habitat.

The project area contains core regent honeyeater habitat within National Parks and private land remnants and is one of four main breeding areas remaining in Australia for the species.

Supporting a range of activities to help landholders improve remnant habitat can include fencing, weed control, remnant woodland restoration, and planting of new trees.

The Bush for Birds project now supports habitat improvement on 65 private landholder sites across north east Victoria, covering 1,604 ha. The project aims to increase the area of land permanently protected for biodiversity by establishing in-perpetuity conservation covenants by 200 ha.

- 1 A Regent honeyeater juvenile, *Dean Ingwersen*
- 2 Phillip Falcke, North East CMA, and Glen Johnson, DELWP, inspect remnant vegetation on a property in north east Victoria, *Mary-Anne Scully*



PORT PHILLIP & WESTERNPORT

WORK CREWS AT YELLINGBO NATURE CONSERVATION RESERVE, ANNETTE RUZICKA

PORT PHILLIP & WESTERNPORT

KEY EVENTS AND INSIGHTS

• WORKING FOR VICTORIA

In 2020-21, Port Phillip & Westernport CMA delivered four projects totalling \$3.3 million as part of the Victorian Government's Working for Victoria initiative. The equivalent of 55 full-time jobs were created for six months.

AGRICULTURAL & ENVIRONMENT WORK CREWS

The Agricultural and Environment Work Crews assisted farmers, organisations and community groups to deliver projects delayed by COVID-19. Six work crews made up of 50 staff improved 120 farms and environmental sites and supported 68 organisations and farmers.

FARMS2SCHOOLS

Farms2Schools used online school incursions to provide local students with an insight into how agricultural products got from the paddock to their plate. Three Farms2Schools Officers coordinated the program and supported 40 farmers to deliver 240 online incursions to almost 10,000 students.

FERAL CAT FREE FRENCH ISLAND PROJECT

The French Island Data Support project helped to protect threatened species on French Island by reviewing remote camera images gathered as part of the Feral Cat Free French Island project. Two support officers reviewed

over 1.9 million images, which laid the foundation for a comprehensive feral cat eradication program.

• TRADITIONAL OWNER PARTNERSHIPS

Port Phillip & Westernport registered Aboriginal Parties (Bunurong, Wurundjeri and Wadawurrung) and six formal partnership meetings were held in 2020-21. \$119,000 from Port Phillip & Westernport CMA projects was used to procure the services of Aboriginal organisations and businesses.

• LANDCARE PARTNERSHIPS

Port Phillip & Westernport CMA continued to actively support the region's Landcare and community environmental groups. Formal partnership agreements were established or maintained with nine of the region's 13 Landcare networks, and over 100 volunteers participated in online training and development opportunities hosted by PPWCMA. Applications for the Victorian Landcare Grants 2021-22 (applications closed in June 2021) were the most subscribed in PPWCMA history. 139 grant applications totalling \$1.4 million were received, five times more than the funds allocated to the region.

• NATIONAL LANDCARE PROGRAM

2020-21 was year three for the five-year projects funded by the Australian Government's National Landcare Program. Achievements included:

The Two Great Ramsar Wetlands project conducted 1,881 ha of pest animal control across the Western Port and Port Phillip Bay (western shoreline) Ramsar sites.

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.9 Fence (km)	0.3	0.3	0	1	1.3
1.10 Visitor facility (no.)	1	2			2
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)		224		132	356
2.2 Weed control (ha)	4,875	4,908	2,000	14	6,922
2.3 Pest animal control (ha)	35,279	5,218	29,070		34,288
2.9 Rubbish removal (ha)		769			769
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	16		14		14
4.3 Assessment (no.)	143	1	175	1	177
4.4 Engagement event (no. participants)	95	13,570	2,236	204	16,010
4.5 Partnership (no.)	18	14	14	8	36
4.6 Plan (no.)	33	8	33	1	41
4.7 Publication (no.)	35	305	199	39	540

The Regional Agriculture and Landcare Facilitator (RALF) project is funded by the Australian Government's National Landcare Program. It provided technical expertise on natural capital accounting and advocated for pilot projects in the region and supporting the design of on-ground works within the Bunyip Fire Recovery footprint.

The Smart Farming for Western Port project engaged 1,169 people in 65 (physical and online) events focused on sustainable land management, including field days, on-farm demonstrations, farmer discussion groups, and a regenerative agriculture training program.

• REGIONAL CATCHMENT STRATEGY

In 2020-21, the Port Phillip & Westernport CMA significantly advanced the renewal

of the Port Phillip and Western Port Regional Catchment Strategy. Over 100 key stakeholder organisations were directly consulted during the drafting of the strategy including Traditional Owners, regional agencies and community organisations.

• PPWCMA INTEGRATED INTO MELBOURNE WATER

In February 2021, the Victorian Government made the decision that the Port Phillip & Westernport CMA would be integrated into Melbourne Water on 1 January 2022. The catchment management and waterway management roles for the Port Phillip and Western Port region have been brought together under one organisation, bringing the region in line with the rest of Victoria.





FERAL CAT FREE FRENCH ISLAND

“French Island is home to an abundance of significant flora and fauna ... thanks to the hard work and dedication of the French Island community, government and conservation organisations, these species will now have a safe haven.”

Tania Foster, Chair, Port Phillip & Westernport CMA



LOCATION

French Island.

OUTPUTS 2020-21

3 surveys conducted
3 approvals obtained
2 agreements established and maintained
37,000 ha pest control
2 publications

PARTNERS

French Island Landcare Group, Zoos Victoria, Parks Victoria, Phillip Island Nature Parks.

REGIONAL STRATEGIES

Port Phillip and Western Port Regional Catchment Strategy, Biodiversity 2037 Western Port Ramsar Site Management Plan, Threatened Species Strategy.

FUNDING

Australian Government's National Landcare Program
Victorian Government (Invasive Species Funding, 2019-20 Waterway Health Funding and EC 5 Waterway Health Funding), Zoos Victoria (Wildlife Conservation Master Plan), Parks Victoria (in-kind contribution).



Since 2010, Port Phillip & Westernport CMA, Parks Victoria and French Island Landcare Group have been working collaboratively with landowners and residents of French Island to manage feral cats. French Island is now set to become one of Australia's five feral-cat-free islands under the Threatened Species Strategy.

French Island, in the Western Port Ramsar site, is a sanctuary for Victoria's wildlife. Over 230 bird species have been recorded including the white-bellied sea-eagle, king quail and the orange-bellied parrot.

The island also supports large populations of long-nosed potoroo and koalas. 74 eastern barred bandicoots as extinct in the wild on the mainland were released on the island to establish a population that is helping to bring this species back from the brink of extinction.

Many of the native species living on the island are highly susceptible to feral cat predation.

In 2015, the Australian Government identified French Island as one of five Australian islands suitable for feral cat eradication. A remote camera monitoring program has enabled the researchers to measure the impacts of feral cats on native wildlife and map the baseline activity of native wildlife populations on the island. This has laid the foundation for a comprehensive eradication program.

The eradication program is expected to take four years to achieve and is being delivered over three phases:

- Phase 1 (May - June 2021): reduce the feral cat population by up to 80% through multiple eradication methods
- Phase 2 (July 2021 - December 2022): remove the last remaining cats
- Phase 3 (January 2023 - April 2024): monitoring and surveillance to confirm the eradication has been successful.

The program uses a range of tools, including aerial and ground baiting with Curiosity®, cage and rubber-padded leghold trapping, and ground-based shooting with a focus on the national park and roadsides.

Extensive engagement with French Island residents has encouraged responsible pet ownership through a desexing program, raised awareness of the significant natural values of the island and provided training opportunities to support conservation practices on private land.

The Feral Cat Free French Island project is supported by the PPWCMA through funding from the Australian Government, the Victorian Government and Zoos Victoria in partnership with Parks Victoria, French Island Landcare Group and Phillip Island Nature Parks.

- 1 Feral cat caught on a remote camera with the Lewin's Rail, *French Island Landcare*
- 2 Long-nosed potoroo mother and baby captured on a remote camera, *French Island Landcare*
- 3 French Island is part of the Western Port Ramsar site, *PPWCMA*



LOCATION

Port Phillip and Western Port region.

OUTPUTS 2020-21

240 online incursions
49 schools participated
9963 students engaged
40 farmers participated
3 staff employed

PARTNERS

AUSVEG VIC.

REGIONAL STRATEGIES

FoodPrint Melbourne
Port Phillip and Western Port Regional
Catchment Strategy

FUNDING

Victorian Government (Working for
Victoria).

FARMS2SCHOOLS

“Gillian was so friendly and easy to understand ... she had a lovely manner with the students, and they loved seeing her beautiful farm and its animals. It was great to see and hear about the sustainable practices that operate throughout the farm.”

Derinya Primary School on their online incursion with Gillian from Gippslamb.

Coronavirus (COVID-19) presented many challenges for communities in the greater Melbourne area. Schools had to pivot to online learning and farmers had to keep producing with reduced resources and find alternate incomes in the wake of closed farm gates and markets.

The Farms2Schools program was created out of this need, as well a desire to provide the next generation with an insight into how food and fibre get from the paddock to their plate and the many career opportunities the industry offers.

Through funding from the Victorian Government’s Working for Victoria initiative, three skilled professionals were hired as Farms2Schools Officers to deliver the program across the Port Phillip and Western Port region from July to December 2020.

Farms2Schools was originally designed to deliver face-to-face incursions and excursions to primary and secondary schools, but COVID-19 restrictions meant it had to quickly turn into an innovative online program, delivering virtual incursions via digital platforms such as Zoom and Webex.

Whilst some farmers were initially tentative about using this technology, with the support of the Farms2Schools Officers many developed the confidence to present online, record their own videos and even live stream from their paddock.

The program was also a huge learning curve for students, who gained first-hand knowledge on where their food and fibre come from. They learnt about supply chains and how products can be exported to other countries and sold locally through farmers markets and farm gates. Students even experienced life on a farm – watching lambs being born and beehives being opened.

While Farms2Schools only ran for six months, its impact was clear. Participating schools reported an 84% increase in student knowledge and 98% of teachers said they would recommend the program. Students expressed their admiration and gratitude to farmers through letters and drawings.

The program has left a legacy of resources for teachers to continue to engage their students in conversations about the importance of sustainable agriculture. These include activity sheets, videos and a virtual farm which showcases how farmers manage their natural assets such as soil, water and biodiversity. These resources can be accessed at ppwcm.vic.gov.au/farms2schools.

1 Artwork by a student from Derinya Primary School after an online incursion with Gippslamb, *Derinya Primary School*

2 Tony and Sue Morgan from Orchard End Farms delivering a virtual farm tour, *Orchard End Farm*

WEST GIPPSLAND

PLATYPUS (COURTESY ANN KILLEEN)



WEST GIPPSLAND

KEY EVENTS AND INSIGHTS

- SUSTAINABLE IRRIGATION PROGRAM**
 This year concluded four years of funding under the state government's Sustainable Irrigation Program. Over the four years, we reviewed more than 8,000 ha of land under the irrigation farm plan process. This equates to around one fifth of the total area of the Macalister Irrigation District and is the basis for future innovation, investment and productivity. We also delivered a further 3,500 ha of improved irrigation through the on-farm incentives part of the program.
 The investment in new and more efficient irrigation systems has seen around 7,000 megalitres of water savings annually, valued at around \$1.4 million per year.
- NEWRY PIPELINE PARTNERSHIP**
 Southern Rural Water (SRW) constructed new irrigation infrastructure for its customers in the Newry area. A partnership between SRW and West Gippsland CMA saw the delivery of 30 Irrigation Farm Plans (IFPs) to the customers affected. The partnership implemented a range of communication strategies to ensure the target group, consisting mainly of dairy farmers, were aware of the construction and the opportunity to develop IFPs. The construction, along with the IFPs has the potential for significant water and time savings for the farm businesses and positive

flow-on effects for local waterways and the Gippsland Lakes.

- NATIONAL LANDCARE PROGRAM**
 Three key projects continue to be delivered as part of the Australian Government's National Landcare Program - the Alpine Peatlands Protection, Corner Inlet Connections and the Sustainable Agriculture Project. In addition to these projects, the program supports the Regional Agricultural Landcare Facilitator position and our Indigenous Partnership Program.
 In 2020-21, we undertook a detailed analysis of the Corner Inlet Connections and Alpine Peatlands projects to develop updated implementation plans for years three to five. The analysis and the renewed implementation plans will ensure the best return on investment.
- FISHERIES HABITAT RESTORATION PROGRAM**
 In partnership with Yarram Yarram Landcare Network, we secured \$400,000 over three years to restore 12 ha of riparian area along tributaries within the catchment, creating a buffer between waterways and adjacent farmland. The project also includes restoring another 12 ha of Broadleaf Seagrass (*Posidonia australis*) habitat in Corner Inlet. The project is working with recreational fishers and local farmers in an integrated approach to catchment management. The project is supported by the CMA, through funding from the Australian Government's Fisheries Habitat Restoration Program.

OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.2 Water storage (no.)	14	14			14
1.4 Irrigation infrastructure (ha)	604	604			604
1.5 Waterway structure (no.)	2			2	
1.8 Monitoring structure (no.)	11				0
1.9 Fence (km)	22	18	4		22
1.11 Road (km)	8		8		8
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	103	85	11	6	103
2.2 Weed control (ha)	732	459	242	31	732
2.3 Pest animal control (ha)	43,461			43,461	43,461
2.8 Earth works (no.)	0.16			0.16	0.16
3. MANAGEMENT SERVICES					
3.3 Water (no.)	12	12			
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)	1,312	1,302	10		1,312
4.2 Management agreement (no.)	10	8	2		10
4.3 Assessment (no.)	582	541	37	4	582
4.4 Engagement event (no. participants)	2,750	2,500	219	31	2,750
4.5 Partnership (no.)	37	36	1		37
4.6 Plan (no.)	50	47	2	1	50
4.7 Publication (no.)	125	123	2		125

- REGIONAL CATCHMENT STRATEGY RENEWAL**
 This has been an important year in the development of the next iteration of the West Gippsland CMA Regional Catchment Strategy (RCS). Input has been sought from the community on views and aspirations for managing land, water and biodiversity in their

local areas. The consultation process involved an online survey and a series of focus groups and interviews with participation by community members across each local area. More than 170 people responded to the online survey from across the region, with 39 people involved in targeted focus online workshops.



LOCATION

Bena, South Gippsland.

OUTPUTS 2020-21

Weed control works – 0.66ha

PARTNERS

Bass Coast Landcare Network (co – funding)
WGCM
Greening Australia
Private landholders

REGIONAL STRATEGIES

West Gippsland Regional Waterway Strategy
West Gippsland Regional Catchment Strategy
West Gippsland Catchment Management Authority Regional Landcare Support Plan

FUNDING

Supply Bill funding in 2020-21

PARTNERING TO IMPROVE FOSTER CREEK

“This partnership makes a great riparian protection project even more special.”

Peter Jennings, Chair, West Gippsland CMA

For new farmers buying their first property, it can be hard to work out where to start when improving the land. But Bena beef farmer Chris Miller made his first job contacting his local Landcare network and West Gippsland CMA.

Chris and his family bought a 110-acre property in the hills of Bena, South Gippsland just over four years ago.

“We’d been keen to buy something for a while,” says Chris. “And this property just grabbed us. It’s one of the tributaries where Foster Creek starts and it’s got beautiful old remnant gum trees. We call it the forest.”

“The creek though was completely infested with hawthorns and the size of the job at hand was stressing me out, almost keeping me awake at night.”

Hawthorns are a noxious weed that can be found in grasslands, farms, woodlands and forests. Their invasive success is due in part to their tolerance of a wide range of soils and conditions. They are also spread via birds and their suckers can be spread by other animals.

“We had so many hawthorns in the creek,” continued Chris. “And they were huge. I have neither the skills nor time to be able to remove them, so receiving a partnership grant made this massive job possible.”

The removal of hawthorns, fencing and revegetating the top of Foster Creek at Chris’ place has been made possible

through a partnership between Bass Coast Landcare Network, Greening Australia and West Gippsland CMA.

The Community Partnerships funding, from the Victorian State Government, aims to build on projects like Chris’ where there is a willingness to work together, but not quite enough funding to tackle a big project.

Bass Coast Landcare Network’s Executive General Manager, Dave Bateman, is excited about the partnership project. “Chris and Michelle’s property has some of the largest Strzelecki gums in our region,” said Dave.

Chris and Michelle are running beef cattle on the property, but Chris says the environmental side of managing a property is just as important. “We believe we can do this work, create wildlife corridors, improve water quality, provide shade and shelter for our cattle and run a productive property.

“I’m really proud of our farm and how we’re improving it.”

- 1 Chris shows WGCM staff member through the remnant gums on his property, *Janine Clark WGCM*
- 2 Chris stands in front of his revegetation project, *Janine Clark WGCM*
- 3 Chris with one of his remnant gums at the headwaters of the Foster Creek. He’s surrounded by huge hawthorns, *Janine Clark WGCM*



LOCATION

Macalister Irrigation District.

OUTPUTS 2020-21

122 farm plans covering 8,102 ha (>15% of Macalister Irrigation District), 101 improved irrigation systems covering 3,517 ha, Advice provided to 1416 irrigators, 14 Agronomic assessments, 1082 participants in engagement events 182 publications,

PARTNERS

Agriculture Victoria
Private landholders
Southern Rural Water

REGIONAL STRATEGIES

Lake Wellington Land and Waterway Management Plan
West Gippsland Regional Catchment Strategy
West Gippsland Regional Waterway Strategy

FUNDING

On-farm water use efficiency and best practice (CW513-57) = \$3,523,000
Irrigation Frameworks (CW513-59) = \$1,145,000
Irrigation Drainage (CW513-60) = \$200,000
Total Program Funding = \$4,868,000

INNOVATION PUSHES AG SECTOR HIGHER

“Adjusting the program due to the ongoing drought was arguably the most important work that our staff did over the program.”

Peter Jennings, Chair West Gippsland CMA

Farm businesses in the Macalister Irrigation District are more efficient, productive, resilient and less polluting following the conclusion of the sustainable irrigation program (SIP). The program managed by West Gippsland CMA saw \$2 million of funding allocated to a range of irrigation initiatives leading to a further \$7 million in investment by individual farm businesses.

West Gippsland Chief Executive Officer Martin Fuller said this was a prime example of the great outcomes that happen when government agencies and the farming sector get together with common goals.

“The sustainable irrigation program saw more than 8,000 ha of land reviewed under the irrigation farm plan process. This equates to around one fifth of the total area of the Macalister Irrigation District and is the basis for future innovation, investment and productivity. There was a further 3,500 hectares of improved irrigation through the on-farm incentives part of the program.

“The success and demand for the Farm Planning Program is evidence of the progressive culture found locally where conducting a whole-farm plan is now seen as an essential aspect of future planning for any farm business.

“The investment in new and more efficient irrigation systems, which has seen around 7,000 megalitres in water savings annually,

valued at around \$1.4 million per year, reflects the demand by farmers to make the best possible use of every drop of irrigation water that comes onto their property,” added Mr Fuller.

Better planning on farms and more efficient, modern irrigation systems has also had a positive impact on the local environment with a notable reduction in nutrient laden irrigation water leaving farms, entering drains and creeks, and ending up in the Gippsland Lakes.

“Long-term monitoring for nutrients from the MID shows that some of the measures we look for were at their lowest level over the last four years. Suggesting the program has been highly successful,” said WGCMA Lands Program Co-ordinator Anthony Goode.

“It is a great reflection on the local farming community that the hard work and considerable investment over recent years has seen a significant reduction in farm run-off and nutrient being exported into local waterways,” added Anthony.

- 1 Macalister Irrigation District Farmer Andre Meyer on his farm, *Gerard Callinan WGCMA*
- 2 Vegetable farm in the Macalister Irrigation District, *Gerard Callinan WGCMA*
- 3 Vegetable farm in the Macalister Irrigation District, *Gerard Callinan WGCMA*

WIMMERA

LANDSBOROUGH FARMER ZOE CROUCH IN BARLEY CROP, *WIMMERA CMA*

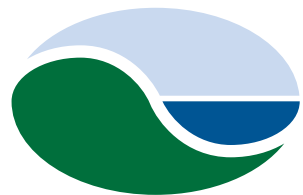


KEY EVENTS AND INSIGHTS

- WORKING FOR VICTORIA**
 Wimmera CMA employed more than 40 individuals over 10 months under the Victorian Government's Working for Victoria initiative. Flexible work arrangements based across the Wimmera ensured that participants were able to continue to manage caring and other commitments whilst participating in the program. A range of partners and community groups were supported to deliver works that would have otherwise not been completed because of COVID-19 restrictions. Participants undertook a variety of training and skill development activities including on the job training and formal qualifications. Two participants who met during the program have started a new rural fencing business in the region.
- DEVELOPMENT OF WIMMERA SOUTHERN MALLEE STRATEGIC DIRECTIONS STATEMENT**
 Wimmera CMA led the finalisation of the Wimmera Strategic Directions Statement (SDS). The SDS describes how organisations in the Wimmera will work together to bring about new approaches to water management using an integrated water management (IWM) approach. This approach aims to improve

resilience and liveability in cities and towns across the region. The statement includes a list of opportunities including projects and strategies collaboratively developed by the Wimmera's IWM Forum partners. IWM Forum partners have committed their organisations to the SDS.

- WIMMERA SOUTHERN MALLEE: SOCIO-ECONOMIC SURVEY VALUE OF RECREATIONAL AND ENVIRONMENTAL WATER**
 A report on the findings of the four-year study was developed for the period from 2017 to 2020. The report outlines some of the factors influencing social and economic benefits of waterways including water quality, water persistence, COVID-19 restrictions and supporting infrastructure. The report also makes recommendations about what the community can do to increase the benefits that these waterways produce. The report highlights the importance of waterways to community health and wellbeing during COVID-19 restrictions.
- INTERNAL ABORIGINAL RECOGNITION AND CAPACITY BUILDING**
 Wimmera CMA coordinated a range of professional development opportunities as part of our contribution to state-wide efforts to support Aboriginal Victorians as future leaders in integrated catchment management. This included support for staff members to undertake Our Catchments Our Communities Aboriginal Leadership Grant activities, and support for secondments by local Traditional Owners aligned with their professional development goals.



Wimmera CMA

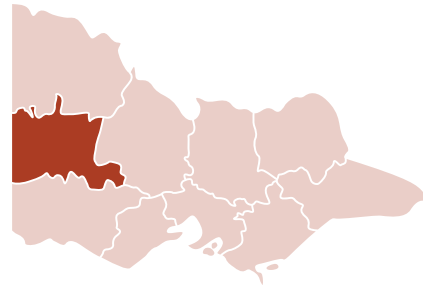
OUTPUT	TARGET	ACTUAL			TOTAL
		STATE	FED	OTHER	
1. STRUCTURAL WORKS					
1.5 Waterway structure (no.)		7			
1.9 Fence (km)		44.6			44.6
1.10 Visitor facility (no.)		22			22
1.11 Road (km)		53			53
2. ENVIRONMENTAL WORKS					
2.1 Vegetation (ha)	40	22	40		62
2.2 Weed control (ha)	78	2,496	133.81		2,629.81
2.3 Pest animal control (ha)	42,138	462	67,435		67,897
3. MANAGEMENT SERVICES					
3.1 Grazing (ha)		412.15	133.81		545.96
3.2 Agricultural practices (ha)		10.9			10.9
3.3 Water (no.)		15			15
4. PLANNING AND REGULATION					
4.1 Approval and advice (no.)		288			288
4.2 Management agreement (no.)		16	3		19
4.3 Assessment (no.)		7	2		9
4.4 Engagement event (no. participants)	422		422	2,509	2,931
4.5 Partnership (no.)	7	4	7		11
4.6 Plan (no.)		5			5
4.7 Publication (no.)	5	4	5		9

- FUTURE DROUGHT FUND**
 The Australian Government's Future Drought Fund aims to help Australian farms and communities prepare for the impacts of drought. Wimmera CMA worked successfully with partners throughout 2020-21 to develop and contribute to implementation of project activities under most Future Drought Fund investment streams. These new projects will provide the region's farmers with more resources to continue their efforts to build drought resilience.

- WILD-TO-WILD FUNDING**
 Wimmera CMA was successful in obtaining from the Victorian Government to deliver a wild-to-wild small mammal pilot project which aims to re-establish local populations of the Mitchell's hopping-mouse (*Notomys mitchellii*) and fat-tailed dunnart (*Sminthopsis crassicaudata*) in the Wimmera. This pilot project aims to spread the risk for these species across the landscape by re-establishing a greater number and broader distribution of populations whilst being a key learning opportunity to inform future actions in this area.



HORSHAM WEIR POOL ACTIVATION



“The Horsham weir pool plays an important part in providing economic, social, cultural and environmental benefits to Horsham and our region.”

Peter Hillbig, Chair, Wimmera CMA

LOCATION

Horsham - Wimmera River.

OUTPUTS 2020-21

- 1.9 Fence - 5.62km
- 1.11 Road/Trail - 3.52km
- 3.1 Grazing Regime - 8.4ha
- 3.2 Agricultural Practices - 10.9ha
- 4.2 Management Agreement - 2
- 4.5 Partnership (mixed) - 3

PARTNERS

Horsham Rural City Council, Barengi Gadjin Land Council, Regional DELWP, Wimmera River Improvement Committee and private landholders.

REGIONAL STRATEGIES

Wimmera Regional Catchment Strategy
Wimmera Waterway Strategy 2014-22.

FUNDING

\$150,000

Wimmera CMA worked with Horsham Rural City Council, DELWP, and private landholders to increase public access of the Horsham weir pool for social and recreational benefits, while protecting its cultural and environmental values. This project involved identifying opportunities for improved recreational access and risks and putting appropriate management measures including infrastructure.

The activation of the Horsham weir pool on Barringgi Gadyin (Wimmera River) is an Integrated Catchment Management (ICM) project which plays an important role in improving the liveability of the region. The sustainable activation of the weir pool has contributed to a range of liveability benefits, including clean water, cooler environment, tourism, visual amenity and encouraging active living. The involvement of community in the project has facilitated social inclusion and empowerment.

The Wimmera Southern Mallee socio-economic study of recreational and environmental water has consistently shown that the value of health benefits generated by the region's waterways over the past four years has been around \$1.5 million per annum for Wimmera Southern Mallee residents and up to \$4 million per annum for all residents

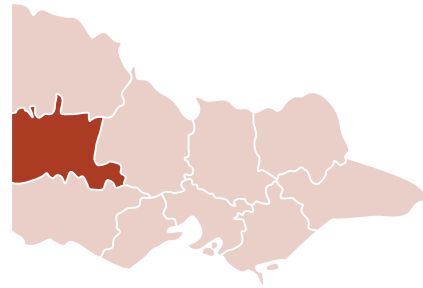
in regional Victoria. The Horsham weir pool is one of the major contributors to this figure due to its proximity to the Wimmera's largest town. The study found that this was even more important as people utilised the weir pool even more for their exercise during COVID-19 when other activities were restricted.

Wimmera CMA worked with partners including Horsham Rural City Council, Barengi Gadjin Land Council, and DELWP to sustainably improve recreational access along the Wimmera River in a sustainable way. This included the rehabilitation of 3.5 kms of tracks and fencing making the river frontage accessible to the public. An additional 10 hectares of Crown water frontage was opened to public access, resulting in an additional 3.4 kilometres of riverfront walking and cycling tracks which will form part of a 21 km loop following the construction of two new foot bridges later this year.

- 1 Improved public access at the Wimmera River Weir Pool, Horsham, *Wimmera CMA*
- 2 Track repairs adjacent to the Horsham Weir Pool, *Wimmera CMA*



WIMMERA REGIONAL AGRICULTURE LANDCARE FACILITATOR



“The pandemic has forced us to re-think how we deliver engagement activities and allowed us to evolve and adapt methods of engagement. The lesson I’ve learnt is that we shouldn’t underestimate the ability of our target audiences to embrace the use of technology as a way to engage and communicate.”

Bronwyn Bant, Wimmera RALF.

LOCATION

Region wide.

OUTPUTS 2020-21

Supported 10 groups
Supported 2 projects

PARTNERS

Agriculture Victoria, Landcare, Perennial Pasture Systems, Vic No-Till, Birchip Cropping Group.

REGIONAL STRATEGIES

Wimmera Regional Catchment Strategy
Wimmera Carbon Ready Plan.

FUNDING

Australian Government’s National Landcare Program.

Wimmera Regional Agriculture Landcare Facilitator (RALF) services are funded and supported by the Australian Government’s National Landcare Program to provide significant assistance across the Wimmera’s farming communities and agricultural industries. Establishing and building partnerships with key groups is central to the RALF role.

While the COVID-19 pandemic impacted on community participation within the natural resource management sector, the Wimmera Regional Agriculture Landcare Facilitator (RALF) played a significant role in establishing and building partnerships with key groups to assist efforts to adopt new and innovative sustainable agriculture practices.

RALF partnerships contributed, for example, to Wimmera CMA securing funding to begin delivering the Data Driven Drought Resilience Project. This project is designed to increase the agriculture sector’s resilience to climate variability by providing a networked, catchment-wide soil moisture probe network. 2021 was the first year of the 18-month project. Project partners included Agriculture Victoria, Birchip Cropping Group, Perennial Pasture Systems, Wimmera Development Association, Victorian No-Till Farmers Association and Longerenong College.

The Australian Government’s Future Drought Fund aims to help Australian farms and communities prepare for the impacts of drought. With support from the RALF Wimmera CMA worked successfully with partners throughout 2020-21 to develop and contribute to implementation of project activities under most Future Drought Fund investment streams. These new projects will provide the region’s farmers with more resources to continue their efforts to build drought resilience.

A regular Wimmera Partnerships Forum, supported by the RALF, continued to bring together Landcare facilitators, ag group project officers and other extension personnel from Agriculture Victoria active within the region, to coordinate support for farmers, share learnings and promote partnerships. The forum adapted and continued to meet online where required according to COVID-19 related restrictions.

Many groups are looking for opportunities to reconnect and inject fresh motivation and inspiration into local Landcare and community group based activities after a challenging 2020-21 and the RALF is well positioned to assist these efforts.

- 1 Wimmera RALF Bronwyn Bant supports the Wimmera Land Use and Land Management Transect survey, *Wimmera CMA*
- 2 Landsborough farmer Zoe Crouch inspects her barley crop with the Wimmera RALF, *Marty Schoo*
- 3 Wimmera farming family, *Marty Schoo*

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**National
Landcare
Program**



Projects featured in this report were supported by Victoria's 10 CMAs, the community and a range of partners through funding from the Australian Government's National Landcare Program and the Victorian Government.