

# MINISTER'S FOREWORD

#### **Catchments and Communities**



Partnerships and local community are at the heart of our Catchment Management Authorities (CMAs).

Victoria's CMAs pay a vital role in delivering placebased, on the ground action – improving the health and sustainable productivity of catchments and waterways across the State.

As Victoria's natural environments and waterways feel the impact of climate change, our CMAs are on the ground in each region restoring, enhancing, and building resilience for catchments.

Platylus surveys continue to find new animals, Wimmera Chia

This important work keeps our catchments healthy, for both the environment and essential human need, now and for future generations.

This 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 outcomes.

These practical, real-world outcomes show the impact of the Victorian Government's significant \$248 million investment into catchment management over the past four years.

It also showcases the resourcefulness of CMAs to enhance and leverage additional funding, their innovation, their role in stimulating regional Victorian economies, all while building community resilience to the impacts of floods, bushfires, and drought.

Partnerships are intrinsic to CMAs.
Community involvement in decision-making is maximised through collaboration with Traditional Owners, community groups, government agencies, and Landcare.

Across the state CMAs proudly lead the Victorian Government's regional support for Landcare, working in close coordination with more than 600 Landcare groups and 64 community facilitators.



Above: Spoonbills feeding at Black Swamp.

Statewide in 2023-24 alone, these partnerships enabled an incredible 720,000 hectares (ha) of pest animal control and more than 13,000 ha of planting and revegetation. More than 4,700 ha of agricultural land was improved through more sustainable land practices and 50,000 community members joined CMA-led events, with 1,000 partnerships established or maintained.

CMAs also play a key role in supporting floodplain management – with more than 12,000 planning applications assessed and approved with specialist advice protecting community assets and precious floodplains.

Healthy waterways are necessary for thriving communities.

The work of CMAs with communities and for communities ensures we can face whatever challenges come our way and continue to enjoy our way of life.



The Hon. Gayle Tierney MP Minister for Water

# VIC CATCHMENTS CHAIR OVERVIEW



We are excited to present our eleventh Actions and Achievements Report which outlines the amazing contributions made by Victoria's CMAs and Melbourne Water in partnership with their

The ongoing legacy delivered by CMAs was recognised by being awarded the Nature Positive Award at the 35th National Banksia Sustainability Awards. This is an amazing honor and great recognition for the more than 26 years of service our CMAs have collectively given to Victoria. The feedback from the Banksia Foundation judges was that our ability to form partnerships and work in an integrated manner was a standout.

Once again CMAs have demonstrated their capacity to get things done despite significant challenges for our communities. Many regions were continuing to recover from floods and devastating fires that affected the west of Victoria. Despite these challenges CMAs pushed on and significant projects funded through the Victorian Government's Environmental Contribution Tranche 5 were completed. CMAs then moved to submit new project proposals to be delivered in the 6th tranche of funding for the Victorian Government's consideration. We look forward to working with DEECA to implement these projects over the next four years.

New Australian Government National Heritage Trust projects were approved and are now being implemented. Victoria's CMA's have worked in a professional, proactive manner with the Australian Government to ensure the transition to the new program has been as smooth as possible for our partners.

Climate change is an ever-present challenge and CMAs are well placed to be working to understand and prepare our communities and catchments so they can mitigate and adapt to remain resilient. This was recognised via funding from the Australian Government for a joint project between CMAs, Agriculture Victoria and Landcare Victoria to deliver the Carbon Outreach Project for Victoria. This project supports farmers and land managers to make informed decisions to reduce emissions and store carbon.

CMAs have developed Emergency Preparedness and Response Plans for Biodiversity and Agricultural Natural Assets with the support of the Australian Government. These plans have filled a significant gap in emergency preparedness and resilience for our most at risk natural assets. We are now working with emergency services agencies to embed these plans in Victoria's emergency management planning system.

Biosecurity continues to be a priority for Victoria. CMAs are now represented on Victoria's Biosecurity Interagency Committee and are participating in discussions to inform priority actions. We have reinforced the role CMAs and communities can play in biosecurity and the value in regional planning.

CMAs have been supporting DEECA with the review of the Victorian Waterway Management Strategy (VWMS) and are now embarking on the redevelopment of their Regional Waterway Strategies. This provides another opportunity for meaningful engagement with the community as we seek to reprioritise our outcomes and actions for waterway management.

All of these efforts and many more are aimed at building on our previous achievements improving our catchments and communities despite the challenges we face, ensuring we can continue to enjoy our way of life.

C. Jerkins

**Cath Jenkins** 

Chair, Vic Catchments

# BOARD CHAIRS

The Vic Catchments Forum was established in February 2017 to showcase Victoria's integrated catchment management framework. Each CMA region has a Ministerially appointed Board of local people responsible for setting strategic directions for regional land, biodiversity and water management and monitoring and





**Euan Ferguson AFSM** NORTH CENTRAL

and the second

GOULBURN BROKEN

**Ewan Waller** 

Sarah Parker



Dr Christine Cunningham (PhD)



Greg Wilson (MAICD)





🕻 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.

#### **WIMMERA**

Covers 30,000 km<sup>2</sup> 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

#### **GLENELG HOPKINS**

Covers 26,000 km<sup>2</sup>, characterised by dramatic coastlines and flat volcanic plains in the south, the Grampians, Dundas Tablelands and Central Highlands in the north, and 22% of Victoria's wetlands. One of Australia's most productive farming regions with 80% used for agriculture.

#### MALLEE

Covers almost 40,000 km<sup>2</sup> 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.

**NORTH CENTRAL** 

CORANGAMITE

#### **NORTH CENTRAL**

Covers 30,000 km<sup>2</sup> (13% of the State). It is home to 250,000 people, is valued for its internationally recognised environmental assets and supports a diverse agriculture sector.

**NORTH EAST** 

#### **GOULBURN BROKEN**

Covers 24,000 km<sup>2</sup> of which two thirds is under private ownership. 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**

Extends across 19,000 km<sup>2</sup> between the Murray River in the north, Victorian Alps in the south and Warby Ranges in the west. The region is home to 100,000 people, provides 38% of Murray Darling Basin's water and is 55% public land.

#### **EAST GIPPSLAND**

Covers 22,000 km<sup>2</sup> and approximately 80% publicly owned mainly as significant State forests, national parks and coastal parks. Features the Ramsar listed Gippsland Lakes and six declared Heritage Rivers.

#### **GIPPSLAND**

PORT PHILLIP &

**GOULBURN** 

**BROKEN** 

#### **WEST GIPPSLAND**

Covers 18,000 km<sup>2</sup> from Warragul to the Gippsland Lakes and from the Great Dividing Range to Wilsons Promontory. It provides most of Victoria's electricity, 60% of Melbourne's water storage and 20% of Australia's milk production.

#### **CORANGAMITE**

**GLENELG HOPKINS** 

MALLEE

Extends across 13,000 km<sup>2</sup> of which 78% is in private ownership. Its landscape is geographically diverse with spectacular coasts, vast volcanic plains and the soaring old growth forests of the Otways.

#### **PORT PHILLIP & WESTERNPORT**

Spans 13,000 km<sup>2</sup> that feed into Port Phillip and Western Port. Home to over five million people whilst boasting some of Victoria's most productive farming lands and spectacular parks. Home to all four State floral and faunal emblems.

# CMAS GET IT DONE

2023-24 ACHIEVEMENT HIGHLIGHTS

### Over 100 new visitor facilities installed across Victoria

promoting and encouraging people to engage in the environment.

## Over 50,000 people engaged in CMA lead events

from field days, farm walks, information sessions, all raising awareness and knowledge across the State.

Biodiversity is an important piece of the catchment puzzle, with

close to 3,000 ha of vegetation protection, enhancement and establishment work undertaken.

In partnership with Agriculture Victoria, industry groups and farmers

4,700 ha of land has undergone positive agricultural practice change.

CMAs are supporting floodplain management with

#### over 12,000 approvals and advice

helping to protect our precious floodplains and community assets.

CMAs play an important role in supporting biosecurity efforts across the State with close to

40,000 ha of weeds control and over 720,000 ha of pest animal control.

CMAs work in partnership with the community, local, State and Federal governments and Traditional owners

with 925 partners working collaboratively with CMAs.

#### Over 1200 publications

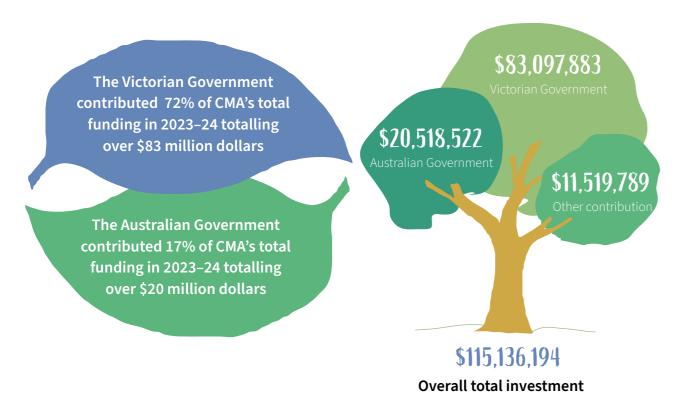
allow CMAs to share their knowledge, highlight great work with partners, increase awareness and showcase the great work being undertaken in catchment management.

We are a capable and efficient network of people delivering projects on behalf of the Australian and Victorian governments.

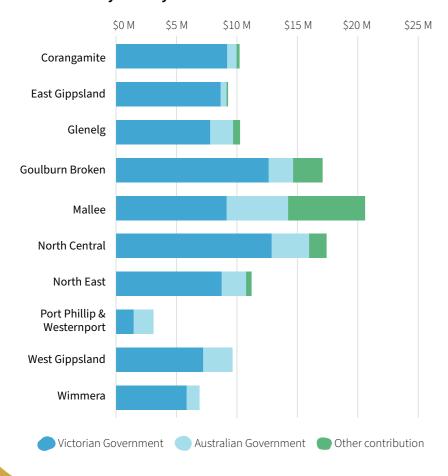
Partnerships are one of our biggest strengths and we share this success with everyone – Traditional Owners, partner organisations, community and government.



#### **STATEWIDE INVESTMENT 2023-24**



#### Investment by CMA by fund source





\* employee data for Melbourne Water is not included due to the scope of work they undertake outside of catchment management. To view their employment data, view the Annual Report 2023-24 at melbournewater.com.au

#### **COMBINED CMA OUTPUTS FOR 2023-24**

Output description	Unit	2023–24 Actuals			
		Victorian Government	Australian Government	Other Organisations	Tota
tructural works					
Channel	Km	84	-	-	84
Water storage	Number	46	-	-	46
Pump	Number	2	-	-	2
Irrigation structure	На	10,478	-	5,372	15,85
Waterway structure	Number	735	123	5	863
Terrestrial structure	Number	-	29	-	29
Terrestrial feature	Number	87	-	-	87
Monitoring structure	Number	142	238	31	411
Fence	Km	359	19	17	395
Visitor facility	Number	119	-	-	119
Road	Km	53	-	-	53
Crossing	Number	15	-	-	15
Marine and coastal Structure	Number	-	-	-	-
nvironmental works					
Vegetation	На	2,871	30	16	2,91
Weed control	На	29,050	9.300	97	38,44
Pest animal control	На	260,396	460,354	-	720,7
Over-abundant wildlife	На	-	-		-
Threatened species response	Number	47	-	-	47
Emergency species response	Number	-	-	-	-
Soil treatment	На	-	-	-	-
Earth works	Number	106	5	-	111
Rubbish removal	На	246	-	-	246
anagement services					
Grazing	На	594	48	-	643
Agricultural practice change	На	4,412	-	288	4,70
Water	Number	138	2	-	140
Fire regime	Number	6	1	-	7
lanning and regulation					
Approval and advice	Number	12,422	3	20	12,44
Management agreement	Number	353	25	17	395
Assessment	Number	5,047	417	39	5,50
Engagement event	Number of participants	44,751	4,403	2,512	51,66
Partnership	Number	879	42	4	925
Plan	Number	415	13	5	433
Publication	Number	1,102	113	38	1,25
Information management system	Number	70	-	2	72

# SUPPORTING SELF DETERMINATION

Across Victoria, CMAs are working to elevate self determination for **Traditional Owners.** 

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"I definitely want to give a shout out to our allies that walk beside us and believe ... they have been great in understanding the need to reintroduce culture to Country. This has been a great opportunity for two mobs to come together and build our cultural strength."

~ Uncle Dozer Atkinson Moiraduban clan, Bangerang Nation



#### North East CMA

#### **Working Together**

Aboriginal Water Officers work closely to build relationships with non-recognised Traditional Owner groups. Working alongside six non-recognised Traditional Owner groups, they also support North East CMA's engagement with the region's three Registered Aboriginal Parties (RAP).

Across 2023-24. the officer:

· Supported the establishment of four Aboriginal Water Officer positions within three non-RAP groups: Bangerang Aboriginal Corporation, Duduroa Dhargal Aboriginal Corporation and Konermar Buller Jaithmatang. This will build the capacity of these organisations to access funding directly from government programs and deliver on their aspirations for water on Country.

- Assisted with the organisation of knowledgesharing workshops led by non-recognised Traditional Owner groups in the region including flood recovery, weaving and mentoring.
- Supported five non-RAP groups to design and lead their at least two projects that align with their aspirations for water on Country.
- Supported non-RAP groups to develop their capacity to take on greater leadership roles within the water sector through funds to support training, including Wise Water Ways, Certificate III in Cultural Heritage Management and prescribed burning training.



East Gippsland CMA

#### **Talikatoor - Gippsland Lakes**

The Gippsland Lakes are part of the traditional lands, waters and sea Country of the Gunaikurnai People, who have cared for Country for tens of thousands of years.

Significant Victorian Government investment enabled Gippsland Lakes Coordinating Committee to guide a plan that has seen 22 partners achieve 48 projects. A key priority is to empower Traditional Owners through joint management and self-determination, supporting capacity building and active involvement in managing the Gippsland Lakes.

Gunaikurnai Land and Waters Aboriginal Corporation is leading projects that protect the Gippsland Lakes outer barrier by controlling pest plant and animal species. This will help heal Country by improving coastal habitats and protecting migratory waterbird populations.

Efforts also focus on understanding and protecting cultural values from shoreline erosion impacts by mapping high priority areas and improving infrastructure and facilities for recreational users to prevent damage to culturally significant areas.

Additionally, work includes assessment and monitoring of culturally important and threatened bird population including Borun (Pelican), the father of Gunaikurnai people, Little and Fairy Terns, Hooded Plovers and Latham's Snipe.

On Country crews surveyed the landscape for artefacts and midden sites, evidence of their rich history. This work supports young people to spend time on Country, protect and practice culture and better understand the movements of the Old Ancestors.

On the Lower Tambo River, GLaWAC has enhanced and protected areas of cultural and environmental significance by controlling weeds, revegetating areas, and contributing to long term bank stabilisation and

Through the Understanding and Improving Aquatic Habitats and Ecosystems project, the GLaWAC NRM team has built capacity to monitor Country, collecting DNA samples at various sites around the Lakes. This Traditional Owner led project integrates cultural and environmental values to build a clearer picture of the biodiversity and health of the Gippsland Lakes.

# PARTNERSHIPS AT OUR HEART





# Community based partnerships help keep Victoria's waterways healthy for future generations.

Ever wondered how CMAs get so much done?
Partnerships! They're at the heart of everything we do. In our over 25 year history, we've established and maintained over 36,000 meaningful partnerships and supported over 1,400 Landcare groups. This vast network of collaborations spans government bodies, local communities, Traditional Owner groups, and private sector stakeholders. Working with the powerhouse of Landcare and delivering Landcare grants leverages resources and expertise, maximising impact resulting in phenomenal landscape change and community impact.

#### North East CMA

#### **Partnering for Macquarie Perch**

In the state's north east, partnerships are bringing back the Maccas to Livingstone Creek. This reach has been identified as key refuge and breeding habitat for the Dartmouth Dam cohort of Macquarie perch (Macquaria australasica) which seasonally migrate up the waterway.

The project (funded through Nature Fund) is addressing several key habitat and connectivity issues in the Livingstone Creek in Omeo. Partnerships are working to survey for fish and platypus with Arthur Rylah Institute, capture broodstock for breeding and release of 4,000 Macquarie Perch fingerlings with Victorian Fisheries Authority and contributing to Traditional Ecological Knowledge and remote sensing for weed control with Jaithmathang TABOO and cultural mapping of the Omeo area with Konermar Buller Jaithmatang.

Together, they have fenced four kilometres along Livingstone Creek and installed timber at 12 sites and 10 rock seeding sites to create fish habitat.

#### West Gippsland CMA

#### For the love of the Tarwin

Community love of waterways is often where catchment management begins. In South Gippsland, the Tarwin River is loved by Landcare and the community who want to partner with West Gippsland CMA and local council to spread the love.

This grassroots, ground up approach led by Landcare is building momentum. They believe the Tarwin has great potential to harness the motivations of the local community to get involved in activities benefiting the river and biodiversity.

In 2023 South Gippsland Landcare Network and community organised a paddle along the Tarwin to highlight their love for the river and wish to revive it. On the day, swans travelled with the flotilla of

kayaks as the group paddled past and saw works already completed to provide inspiration to fill in the remaining pieces of the 'jigsaw puzzle'.

The catchment being the shape of the heart led to the project's name and even t-shirts – all showing how much the community loves their catchment.



#### North Central CMA

# Importance of water and culture

In the Mid Murray floodplain forests, partnerships are ensuring water for the environment delivers cultural and ecological benefits.

Basket sedge is culturally important to local First Nations people, who use it to weave traditional practical and artistic pieces.
Barapa Barapa, Wamba Wemba,Wadi Wadi, Djaara, and Yorta Yorta First Nations peoples harvested basket sedge and other culturally important native grasses from Gunbower and Guttrum forests, and local First Nations women came together to learn and showcase their skills.

Sixteen women collected the sedge and grasses before gathering at Barham for something very special. They weaved the grasses and sedges into amazing creations and taught young people some impressive harvesting and weaving skills they will one day pass down to future generations.

This event is a great example of the importance of the right flows at the right time of year for First Nations people and the things that matter to them.

#### East Gippsland CMA

#### Cann River can do

Flowing through far East Victoria, Cann River has seen a lot of change since the 1800s. Historically, the fertile floodplains were cleared for agriculture, paddocks ploughed, and riverbanks cleared to access water. This caused bank erosion, channel widening, and stripping of topsoil.

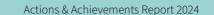
Partnerships with landholders to exclude stock from the river have resulted in the Flagship reach being fully fenced for over 20 years and native vegetation restored along the river to facilitate natural recovery processes.

Maintenance is essential to ongoing success and Moogji Aboriginal Council has worked to control weeds and plant a selection of native vegetation to increase diversity.

Cann River Landcare Group has worked tirelessly on an area within the Cann River Caravan Park. Their efforts have transformed the river access into a great spot for locals and visitors.

It's partnerships with Aboriginal groups, landholders, and the community all playing vital roles





# FLAGSHIP WATERWAYS



Goulburn Broken

#### **Walking with Waring**

Taungurung people are the Traditional Owners of the land and waters through which Waring (mid Goulburn River) flows.

Waring sustains many important cultural, environmental, social and economic values, but impacts from river regulation, altered flow regimes and land use changes affect river health.

Waring Flagship Waterways project enables Goulburn Broken CMA and Taungurung Land and Waters Council (TLaWC) to partner in healing and caring for the Waring waterscape. The Walking with Waring project plan was developed together to guide governance, healing and caring for Waring through on-ground works and bringing people together to achieve this.

The Waring Healing Country Group (GB CMA and TLaWC staff) met regularly to prioritise and plan on-ground (healing) works. Weed control and revegetation at several sites along Waring included tackling a large willow infestation.

The Waring Healing Country Group and Baan Ganalina (Guardians of Water) Taungurung Water Knowledge Group met on Country to review and plan future works. Coming together to learn, share and to celebrate achievements is critical to partnership building and ongoing project success.



#### Wimmera CMA

#### Wimmera Clearwater Revival

Wimmera Clearwater Revival Flagship project works with land managers and community groups to deliver onground works that protect and enhance the economic, social, cultural recreational and environmental values of the upper Wimmera Catchment.

During 2023-24, the program constructed 13 erosion control structures across seven high priority sites to stabilise the bed and banks and reduce the amount of sediment moving downstream and impacting on high value waterways. Landholder engagement and site assessment and prioritisation were undertaken for nine new erosion control sites

Riparian protection and enhancement landholder incentives worked with 11 landholders to deliver works across 54.6 hectares of river frontage including 15.1 kilometres of fencing, 8.95 hectares of revegetation and pest plant and animal control.

Works were complemented by 44.9 hectares of weed control along priority waterways near Stawell and Elmhurst. These were delivered by Project Platypus in consultation with Landcare and land managers for a coordinated approach.

#### Glenelg Hopkins CMA

#### **Rivers of Warrnambool Flagship Waterways Project**

Waterbugs, weed control, fish hotels and more, the Rivers of Warrnambool Flagship Project engaged the community and protected and improved condition of the rivers surrounding Warrnambool in south-west Victoria.

A total of 152 hectares of works were completed including 87 hectares of weed control, 6.3 kilometres of fencing and over 40,200 plants at 16 revegetation sites across the Merri, Hopkins Rivers and Brucknell Creek catchments.

Sixty fish habitat structures were installed with pre and post habitat fish surveys clearly indicating increased fish numbers.

Community was central with eight school groups enjoying education and planting sessions. Anglers were also involved, helping to build fish hotels to bring habitat back and Warrnambool Society for Growing Australian Plants was supported to publish 'Plants of the Great South West'.

eDNA testing across 140 kilometres of waterways detected over 60 species including the threatened Platypus, Little Galaxias, Glenelg Spiny Crayfish and Pygmy Perch.





# **BACK FROM** THE BRINK

Healthy, connected rivers and protected wetlands help to support threatened species such as Plains Wanderers, Pygmy Perch, Grayling and Platypus.

We are proud to be working together with Traditional Owners, partners and community to restore, transform and reinforce landscapes – to give threatened species a fighting chance and in some cases, bring them back from the brink of extinction...



#### **Protecting precious shorebirds**

Working to enhance and protect world renowned Corner Inlet has been a team effort led by West Gippsland CMA that has so far spanned decades. The precious Ramsar wetland is a recognised haven for migratory shorebirds, some critically endangered. In 2023-24 works focussed on protecting the area's Ramsar values including treating spartina, controlling foxes to protect threatened shorebirds, improving water quality, and safeguarding 136 hectares of saltmarsh including a 25 hectare Trust for Nature covenant.

Ongoing bird monitoring helps to raise community awareness of the birds' plight so we can work together as a community to protect these special species.

#### North Central CMA

#### Plains for wanderers

One of Australia's rarest birds – the Plains-wanderer is critically endangered and at risk of imminent extinction due to 99 % of its native grassland habitat being lost to land clearing.

North Central CMA's Plains for Wanderers project aims to improve grassland habitat and mitigate predators on Victoria's northern plains, home to one of two core Plainswanderer population strongholds in the world.

Partnering with First Nations people, Trust for Nature, Parks Victoria, local landholders, DEECA, Northern Plains Conservation Alliance, and Australia's National Recovery Team, this involves community education, improving grazing practices and rabbit and fox control across grasslands in north central Victoria to help prevent the loss of this iconic species.

Results so far are hopeful with latest monitoring detecting 33 adults (19 female and 14 male) and 17 juveniles, including two clutches of chicks. That equates to a population of 731 in managed sites. under management - encouraging numbers giving quiet hope that imminent



#### Corangamite CMA

#### **Restoring the Barwon**

Barwon River from Geelong to Barwon Heads is home to many native fish including estuary perch and shortfinned eels, and threatened species such as Australian grayling, Yarra pygmy perch and platypus.

Over time, snags and timber have been removed from the river leaving fish and platypus with little or no

Using timbers recovered from storms and floods in June 2021 by Emergency Recovery Victoria, the CMA has 'resnagged' a 4.5 kilometre stretch in the lower Barwon with over 700 tonnes of timber strategically dropped into the river, restoring vital habitat while also improving the fishery and overall river health.

Monitoring has shown significant improvements in native fish habitat, up to 38% increase in woody habitat density, and an increase in recruitment and the diversity of native fish species since the timber was installed. Victorian Fisheries Authority has also contributed through restocking of estuary perch into the improved habitat.



#### Wimmera CMA

#### **Building resilient Malleefowl** communities

Working in partnership with public and private land managers and key stakeholders including the National Malleefowl Recovery Group this project implements actions from the national recovery plan. In 2023-24 the team worked to protect over 48 hectares of high quality Malleefowl habitat on private property through stock exclusion and pest plant and animal control.

In partnership with Parks Victoria, 134,000 hectares of targeted fox baiting was undertaken in Little Desert National Park and Tooan State Park. Over 9,500 hectares of public and private land was surveyed to identify potential Malleefowl mounds to priortise and direct future conservation activities.

#### East Gippsland CMA

#### **Buchan fishway success**

Two threatened species of native fish were discovered during monitoring following the construction of the Buchan River fishway that allows native fish to move and migrate without being blocked by the Buchan River's potable water supply log weir.

Monitoring after construction found an endangered Australian grayling at the top of

the fishway that can now freely migrate upstream to reproduce. An endangered Cox's gudgeon was also discovered.

Other species found included Tupong, Common Galaxias, Australian Smelt and Longfinned Eel.



<sup>Australian</sup> Grayling: Bucha

#### Melbourne Water

#### **Connecting critical habitat**

Yarra Valley and Melbourne's foothills are home to Victoria's two faunal emblems: Helmeted Honeyeater and Leadbeater's Possum. Both critically endangered, with less than 1% of the riparian forest and floodplain habitat remaining. With around 200 Helmeted Honeyeaters and fewer than 40 lowland subspecies of Leadbeater's Possums left in the wild, urgent action is required to secure their habitats and prevent extinction.

Melbourne Water's Yarrra4Life program identified a suitable site to determine if these areas could support habitat connectivity for the two threatened species. Findings revealed areas proposed by the landholder could form valuable habitat corridors, particularly for the Helmeted Honeyeater.









# CORANGAMITE

#### 2023-24 Achievements

- As a regional leader in action on climate change, we explored how natural capital approaches could be applied to our business operations through the development of a Natural Capital Roadmap.
- ► Completed the Small Blocks Big Dreams project, empowering over 150 landholders to create environmentally sustainable properties and launched the Small Blocks Big Dreams Healthy Hectares Landholder Guide.
- ► Continued our focus on priority waterways through the Upper Barwon and Living Moorabool Flagship projects and the Curdies River Coordinating Committee, delivering on-ground works, community participation, environmental water, and land stewardship.

#### Our future vision

Healthy and productive lands and waters cared for and enjoyed by thriving communities.

Corangamite Regional Catchment Strategy



 ${\it EstuaryWatch\ monitoring\ at\ Barwon\ Heads}.$ 



Western District Lakes Ramsar site near Colac.



Corangamite CMA has led a partnership of Victorian State Government agencies, two local governments and Wadawurrung Traditional Owners to deliver a ten-year masterplan to further connect the community to the Lower Moorabool and Lower Barwon Rivers while protecting and enhancing the environmental and cultural values of the corridor. Kitjarra- dja-bul Bullarto langi-ut is the Wadawurrung name for the project; it translates to "places of many stories".

#### LOCATION

Lower Moorabool River and lower Barwon River corridors from Meredith to Barwon Heads

#### TRADITIONAL OWNERS

Wadawurrung Country

#### **OUTPUTS**

- 12 partnerships (agency)
- 3 nublications
- 4 Management Agreements (binding non-perpetual)

#### **INVESTMENT (4 YEARS)**

\$1.65 million

#### **PARTNERS**

Wadawurrung Traditional Owners
Aboriginal Corporation, Department
of Energy Environment and Climate
Action, Barwon Water, City of Greater
Geelong, Golden Plains Shire Council,
Parks Victoria, G21 Geelong Region
Alliance, Tourism Greater Geelong and
the Bellarine, Barwon Coast Committee
of Management, and the Department of
Jobs Skills Industry and Regions

#### CASE STUDY

#### Kitjarra-dja-bul Bullarto langi-ut

The Kitjarra-dja-bul Bullarto langi-ut project covers the lower Moorabool River and lower Barwon River corridors stretching from near Meredith in the north, through the urban area of Geelong, down to the Barwon Heads estuary in the south. The natural assets of the project area and their ongoing enjoyment are increasingly under threat from rapid population growth, tourism pressures and climate change. Furthermore, fragmented management across five separate public land managers complicates and delays efforts to improve access, connectivity, and amenity.

The final masterplan was publicly released by the Hon. Christine Couzens MP at a ceremony on the banks of the Moorabool River on 14 February 2024; the result of a three-year \$1.65 million program funded by DEECA as an action of the Rivers of the Barwon (Barre Warre Yulluk) Action Plan. The key initiative of the program was the development of the Kitjarradja-bul Bullarto langi-ut masterplan developed in consultation with Wadawurrung Traditional Owners, community groups, river user groups, land managers and the general community. The masterplan includes a 10-year program of environmental and infrastructure works including re-vegetation, weed control, water flow and quality improvements, shared cycle and walking trails, boating facilities, and a new proposed public open space.

Other activities delivered to support the masterplan included:

- A review of the governance and funding model for the project.
- Development of a business case for investment in masterplan implementation.
- \$533.5k investment in design and approvals of three high priority masterplan projects
- Development of funding bids.

Corangamite CMA is working with project partners to progress masterplan implementation with eight of the nine high priority projects now commenced. Project funding of \$533,500 was invested in progressing three high priority projects to a shovel-ready state. \$1.4 million in Victorian Government investment was secured for re-vegetation projects along the corridor through the Green Links Program with an application submitted for a further \$1.7 million in Australian Government funding for fishway installation. This is in addition to approximately \$16.7 million investment from project partners in high priority masterplan projects.

The review of the governance and funding model provides a blueprint for a financially sustainable initiative and efficient delivery of a complex series of masterplan projects. Recommended changes to the governance and funding model from the review were tested with the Strategic Advisory Committee and Working Group and will continue to be explored.

Above: Lower Barwon Wetlands.

#### CASE STUDY

# **Curdies River Coordinating Committee**

The Curdies River flows through the Country of the Kirrae Whurrung People of the Maar Nation and is highly valued for its cultural importance, biodiversity, recreational opportunities, history, and as a water supply source.

Originating at Lake Purrumbete, south of Camperdown, the river flows through the Heytesbury farming district, one of Australia's largest milk-producing regions, before discharging into Bass Strait at Peterborough.

A 2005 study by Deakin University identified dairy effluent, excessive fertilizer run-off, stock rates, and erosion as the main nutrient contributors in the catchment. Despite management efforts, blue-green algal blooms were detected in the estuary from 2019 to 2024, prompting more coordinated efforts to manage nutrient concentrations.

The Curdies River Coordinating Committee, established in 2022, provides a platform for knowledge sharing, consultation, and collaboration to improve the river's health. The Committee includes representatives from management agencies and the local community, including Corangamite CMA, Agriculture Victoria, West Vic Dairy, DEECA, Eastern Maar Aboriginal Corporation, Parks Victoria, Corangamite Shire Council, Moyne Shire Council, EPA, Heytesbury & District Landcare Network, Wannon Water, Fonterra, Great Ocean Road Coastal and Parks Authority, Southern Rural Water, and six community representatives.

The Committee's functions include sharing research and local knowledge, consulting on management plans and strategies, supporting collaboration, and advising on communication materials and approaches to inform the broader community about river management.

In 2023-24, the Committee achieved several key milestones in the Curdies River Catchment:

- Installing 35 instream structures for fish habitat.
- Planting 30 hectares of streamside vegetation.
- Engaging seven EstuaryWatch and three WaterWatch participants for water quality monitoring.
- Completing the 2023 Curdies Water Quality Report.
- Engaging eight landowners for nine kilometres of stock exclusion fencing and revegetation.
- Completing 25 Farm Environmental Plans.
- Involving eight farmers in the Sustainable Dairies program.
- Receiving over 200 responses to the Community Values Survey, showing strong community attachment.
- Holding a nutrient advisor session with 29 participants.

While there is no quick fix to address the nutrient and blue green algae issues in the catchment, these collaborative efforts aim to reduce nutrient levels and improve the river's health long-term.

Above: Curdies Perch search.



The Curdies River and its tributaries have a history of high nutrient inputs from the catchment. The estuary has a wide, shallow embayment that limits flushing, and is prone to the accumulation of sediment and nutrients. In response to these, the estuary regularly experiences blue green algal blooms.

#### **LOCATION**

Curdies River Catchment

#### TRADITIONAL OWNERS

astern Maar Country

#### **OUTPUTS**

- 35 instream structures for fish habitat
- 30 hectares of streamside revegetation
- 10 citizen science participants in EstuaryWatch and WaterWatch
- 9 kilometres stock exclusion fencing
- 25 Farm Environmental Plans

#### **INVESTMENT**

In 2023-24, the program received funding from State Government, Corangamite CMA and in-kind partner contributions.

#### PARTNERS

Corangamite CMA, Agriculture Victoria, West Vic Dairy, DEECA, Eastern Maar Aboriginal Corporation, Parks Victoria, Corangamite Shire Council, Moyne Shire Council, Environment Protection Authority Victoria, Heytesbury District Landcare Network, Wannon Water, Fonterra, Great Ocean Road Coastal and Parks Association, Southern Rural Water, and six community representatives.

# "The highlighted projects include the Gippsland Lakes program and the platypus habitat project and are wonderful examples of multiple agencies and together to complete projects that enhance and support our exceptional natural environments now and into the future." **Ewan Waller** Gippsland Lakes Outer Barrier. Actions & Achievements Report 2024

# EAST GIPPSLAND

#### 2023-24 Achievements

- Maintaining strong partnerships with Gunaikurnai Land and Waters Aboriginal Corporation and Moogji Aboriginal Council. They are key partners in the development and delivery of the Gippsland Lakes and waterways programs.
- ▶ Delivered the three-year waterway health program (EC5), including Gippsland Lakes projects, Mitchell and Cann Flagship Waterways, Integrated Catchment Management, Environmental Water, Buchan River Fishway, Statutory Functions and Supporting Communities.
- ► The sustainable agriculture program, focussing on building the capacity and capability of landholders across the region by increasing and improving ground cover, carbon farming, mental health support and building partnerships.

#### **Our future vision**

We are leaders in integrated catchment management, partnering with our communities to enhance East Gippsland's landscapes, biodiversity and cultural heritage.

East Gippsland Regional Catchment Strategy



Buchan Primary School students release Southern Pygmy Perch into the Buchan River.



Mitchell River community paddle.



The Gippsland Lakes are a series of coastal lagoons and fringing wetlands that cover approximately 60,000 hectares; fed by five major rivers spread across a catchment of over 20,000 square kilometres connected to the ocean at Lakes Entrance. The Gippsland Lakes are part of the Traditional Lands and Waters of the Gunaikurnai People, who have cared for Country for tens of thousands of years.

#### LOCATION

East and West Gippsland

#### TRADITIONAL OWNERS

Gunaikurnai

#### OUTPUTS

- 15 / hectares of revegetation
- 23,380 nectares of pest animal contro
- · 3 throatoned species respons
- 3 threatened species response actions
- 15 terrestrial features (frog bogs
- 34.4 kilometres fencing

#### INVESTMENT (4 YEARS)

\$7.5M

#### PARTNERS

West Gippsland CMA, Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC), Parks Victoria, Greening Australia, BirdLife Australia, Trust for Nature, Gippsland Ports, Gippsland Water, Wellinton Shire Council, Southern Rural Water, DEECA, DAFF, EPA, Monash University, Latrobe Catchment Landcare Network, Field and Game Australia, Federation University, East Gippsland Landcare Network, Victorial Landcare

#### CASE STUDY

#### Gippsland Lakes – Love Our Lakes

Listed as a wetland of international significance under the Ramsar Convention, the Gippsland Lakes are diverse and provide many important habitats for threatened species. The lakes serve as feeding and breeding grounds for migratory birds travelling from Siberia and the Arctic Circle annually. The Lakes are central to regional tourism, supporting recreational fisheries, boating, camping and visitation.

Over the past three years the Victorian Government has allocated \$7.5 million to successfully deliver 48 projects by 22 partners across four key areas. This success of delivery of the projects was through continued cooperation between Traditional Owners, land and waterway managers, community groups, individual landowners, and other regional partners.

Throughout this time the Gippsland Lakes Ramsar Site Management Plan has been renewed involving input from all partners including a significant community consultation process. This plan establishes the framework and strategic direction for maintaining the site's unique ecological character.

Among the many inspiring projects were the construction of 10 "frog bog" wetlands by Greening Australia on private land for the threatened Green and Golden Bell Frog and Growling Grass Frogs. These frog bogs create important refuge and a link with priority habitats, allowing frogs to disperse into fringing wetlands of the Gippsland Lakes. Last summer's frog monitoring showed the highest number of individual frog species ever recorded in one place. This monitoring, part of the Ramar Site monitoring, helps identify priority frog habitats and directs conservation efforts for maximum impact.

The privately owned Flannagan Island, home to more wildlife than people and legally protected under a Trust for Nature conservation covenant, has enjoyed a further two years of habitat restoration for migratory and wading birds. With multiple partners able to work together to complete weed control, pest animal control, vegetation and bird surveys and rejuvenate the island's native plant species it has provided successful breeding ground for many species.

Additionally, significant work was done on the lower Avon River by West Gippsland CMA to improve the waterway for fish and recreational users. This included installing instream woody habitat to support fish populations, repairing fishing platforms, planting native vegetation, and conducting fish surveys to measure the project's success. These efforts enhance the connectively and condition around Lake Wellington in the Gippsland Lakes.

Above: Growling Grass Frog, image by Love Our Lakes.

#### CASE STUDY

#### Mitchell River Platypus Habitat

With the support of local landholders who allowed access to the river, a series of instream wood structures were strategically placed in the Mitchell River near Wuk Wuk. The structures serve multiple functions aimed at benefiting the existing platypus populations by providing essential food and shelter.

Lindenow South Primary School students were very excited about assisting with this project. They spent weeks researching everything they could about platypus. On the morning before working on site, the students collaborated with local NRM contractors, Wildlife Unlimited within their classroom to recreate platypus habitat, reinforcing the importance of their contribution to the project.

Once on site on the banks of the Mitchell River the students rolled up their sleeves, donned their gloves and planted vegetation suitable for the riverbank site. This hands-on activity was not only educational but also very rewarding for the students who were enthusiastic about getting the plants in the ground.

As the vegetation establishes, it will complement the habitat structures by providing a whole range of benefits. Some of these benefits include reducing sediment runoff into the river, improving water quality, providing habitat for terrestrial animals, food for aquatic animals, and shade for the water, which helps control water temperature during the hotter months.

The Mitchell River is a lifeline for local communities, providing habitat for wildlife, recreational opportunities, and essential resources.

Ongoing work includes enhancing a targeted priority area along the Mitchell River floodplain, spanning from Glenaladale to Lind Bridge just upstream of Bairnsdale. Priority frontages along the lower Mitchell River have been identified for stock exclusion fencing initiatives. Weed control and revegetation effort will also be carried out.

Over the past three years, a collaborative effort involving multiple partners has concentrated on enhancing and diversifying an area along the lower Mitchell River.

Working together to benefit the environment is what makes projects like this so special. The collaboration between local landholders, who provide access and support and students, who bring energy, enthusiasm and hard work demonstrates that partnerships are the key to protecting species like the platypus and the environment for future generations.

Above: Lindenow South Primary School student planting on the banks of the Mitchell River.



Platypus are known to exist in the Mitchell River with locals often sighting them. To ensure they continue to exist and thrive in this river the East Gippsland CMA has placed habitat structures at two locations and enlisted the help of a local primary school to complement the structures by planting native vegetation.

#### LOCATION

Mitchell River, East Gippsland

TRADITIONAL OWNERS

Gunaikurna

#### OUTPUTS

- 8 waterway structures
- 4 partnerships
- 18 event participants

#### INVESTMENT

\$80,000 – Funded by Victorian State Government

#### **PARTNERS**

DEECA, Landholder, GLaWAC, Lindenov South Primary School, Wildlife Unlimited



# GLENELG HOPKINS

#### 2023-24 Achievements

- ► After bushfires around Raglan and Beaufort the Regional Works Crew assisted land managers to retain livestock (5 kilometres fencing) and protect waterways and stock water dams (9 temporary sediment control structures).
- ► Continuation of programs to improve recreational infrastructure and accessibility through replacing ageing 'fixed' jetties with floating structures at the Sandy Waterholes boat launch, Glenelg River and the Fitzroy River estuary.
- ▶ Raising low-lying sections of Beach Road, Nelson alleviates flooding during periods of elevated estuary levels. Replacing the road's Eel Creek culvert opened 720 hectares of freshwater wetland for diadromous fish including Tupong and Eel.

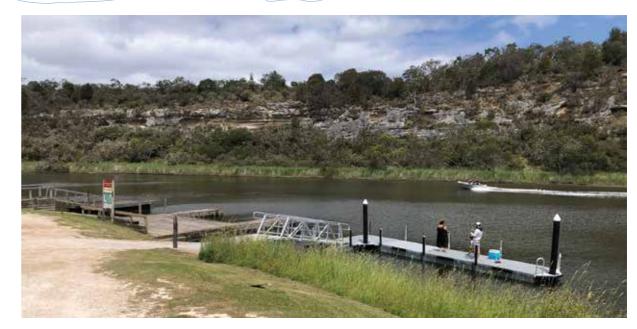
#### **Our future vision**

Empowered communities nurturing a rich and connected landscape for all – today, tomorrow, together.

Glenelg Hopkins Regional Catchment Strategy



Glenelg Hopkins Regional Works Crew replace fences lost to fire in early 2024.



Community enjoying upgraded facilities at Sandy Waterholes on the Glenelg River estuary.



The Greater Grampians region is a productive agricultural landscape with grazing and high rainfall zone cropping. It is also a landscape of over 2,500 wetlands. The extent of the region's wetlands has declined by around 50% since European settlement, and will further decline without intervention and adoption of more sustainable agricultural practices.

#### LOCATION

Upper catchments of Wannon and Hopkins Rivers ~ 620,000 hectares

#### TRADITIONAL OWNERS

Nadawurrung and Eastern Maai

#### **OUTPUTS (3 YEARS)**

- 680 hectares of Dryland Agricultura Practice Change (8 farms)
- 146 hectares Flora assessment (20 wetlands)
- 7956 hectares Fauna Survey (167 wetlands)
- 4 Management Agreements (114 hectares of Seasonal Herbaceou Wetlands)
- 4 Landcare Group Strategie (380.000 hectares)
- Nearly 2,000 participants in engagement events

#### **INVESTMENT (3 YEARS)**

DEECA EC5 Our Catchments, Our Communities-\$1.35M

#### PARTNERS

Beyond Bolac Catchment Action Group, Upper Hopkins Land Management Group Upper Mount Emu Landcare Network, Southern Grampians Landcare Network, Eastern Maar Aboriginal Corporation, Wadawurrung Traditional Owners Aboriginal Corporation

CASE STUDY

# On-ground Stewardship in the Greater Grampians region

This project focused on strategic partnerships to improve catchment health and climate resilience through activities that supported wetland cultural knowledge, health and connectivity in the Greater Grampians landscape.

The project built on the legacy of the previous EC4 Our Catchments our Communities project, by supporting Landcare groups and Traditional Owners to lead and deliver this work to manage and protect wetlands.

Listening, walking and talking on Country with Eastern Maar Aboriginal Corporation (EMAC) and Wadawurrung Traditional Owner Aboriginal Corporation (WTOAC) is a highlight, building on relationships and increasing landholder understanding and awareness of cultural heritage. Cultural Heritage induction activities demystified and increased participant knowledge of what to do if they find potential culturally significant artefacts.

Engagement between the two Aboriginal Corporations, the CMA and Landcare groups has helped identify activities to support Country Plans for both Traditional Owner groups. Three Landcare groups secured funding to develop or review their strategies, covering around 310,000 square kilometres and incorporate priorities from local Country Plans and the Regional Catchment Strategies. A partnerships officer was employed at EMAC support by Glenelg Hopkins and Corangamite CMAs.

Integrated catchment management was core to the project success, taking a multifaceted approach to improving agricultural sustainability and wetland knowledge and management.

A Precision Agriculture on-farm trial project demonstrated it's possible to improve crop yield while also protecting natural assets, like wetlands. The project was a collaboration between several Landcare groups, managed by Beyond Bolac Catchment Action Group and a Ballarat agronomy company. Four farms participated, with 566 hectares of soil sampling, management plans and agricultural practice change.

A Precision Ag Community Field Day attracted significant interest from local land managers and agronomists. A natural capital consultancy, completed a cost benefit and economic analysis of seasonal wetlands in agriculture in the Greater Grampians region presenting results at the field day showing that incentives are an important tool for preventing cropping in wetlands.

Swamp Stewardship Expression of Interests resulted in 146 hectares of wetlands flora being surveyed across nine farms. Four farms, totalling 114 hectares, entered into eight-year agreements to protect seven EPBC listed Seasonal Herbaceous Wetlands. A trial hydrological restoration on one 62 hectare wetland added an additional 13 hectares, providing additional breeding time for birds, frogs and flora. 166 wetlands (7,956 hectares) were surveyed for Australasian Bitterns and frogs.

Above: On site discussion with farmers Nathan and Josh Blomeley, Tim Hill (BBCAG Chair), and Meera Cameron and Geoff Ross (both Precision Aq) about their on-farm precision agriculture trial at Nerrin Nerrin.

CASE STUDY

# Removal of the Bromfield Street weir

The lower Merri River in Warrnambool has been given a boost with the removal of Bromfield Street Weir in Warrnambool. This significant project enhances fish migration, boosts biodiversity, and improves recreational opportunities.

The Bromfield Street weir was constructed in 1907 as part of the Merri Scheme to supply town water to Warrnambool. Despite the scheme's decommissioning in 1939, the physical structure remained in the waterway. In addition to concerns over the public safety aspect of the ageing structure, the weir was identified as one of Victoria's 20 high-priority fish barriers targeted for removal. Fish monitoring downstream of the weir showed that habitat availability was a limiting factor for larger fish. The weir also prevented genetic mixing of non-migratory species such as Yarra Pygmy Perch.

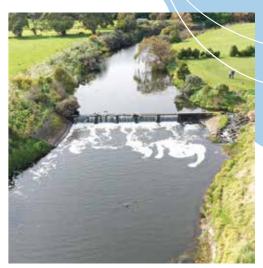
The removal process was carried out with careful consideration of minimising environmental impact and ensuring community engagement. Environmental experts and engineering teams from Glenelg Hopkins CMA and local demolition firm employed best practices to dismantle the weir while minimising disturbance to the surrounding ecosystem. Community input and support were integral in ensuring the success of the removal project. Rehabilitation works following the removal of the structure included revegetating the bank areas.

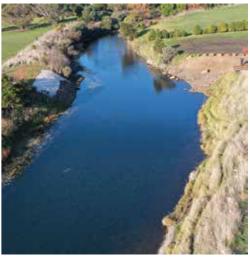
Located 14 kilometres upstream from the river mouth, the weir removal increased the length of unimpeded flow by 50% to 21 kilometres from the estuary to the next upstream barrier. The next barrier upstream, a low rock bar, is 'drowned out' multiple times a year, meaning removing the weir effectively opened up access to 647 kilometres of waterways within the Merri River catchment.

This provides more connected habitats, a healthier ecosystem, and means fish populations can move up and down the river, improving opportunities for increased genetic diversity and climate change resilience. The weir removal is already benefiting a range of native fish species including Estuary Perch, Black Bream, Australian Grayling and Yellow-eye Mullet.

The Merri River is also a favourite spot for flatwater paddling and rowing, and the site is now a safer access point, enhancing recreational opportunities for the community.

Top: Merri River Warrnambool before removal of the Bromfield St weir. Bottom: Merri River Warrnambool after removal of the Bromfield St weir.





#### LOCATION

1erri River, Warrnambool

#### TRADITIONAL OWNERS

Eastern Maar

#### **OUTPUTS**

- Engagement Events 93 attendees
- Publications 3
- Water Structure 1
- Assessment Fauna 2

#### INVESTMENT

\$772,000 over life of project through the Victorian State Government EC5 program

#### PARTNERS

Warrnambool City Council, Eastern Maar Aboriginal Corporation, Merri Alliance, Mad for the Merri River, Warrnambool and District Angling Club, Allansford and District Angling Club, Koroit and District Angling Club

Actions & Achievements Report 2024 Actions & Achievements Report 2024 Actions & Achievements Report 2024

# have underpinned successful in the Goulburn Broken catchment for over 25 years. Collaborating and partnering Sarah Parker Actions & Achievements Report 2024

# GOULBURN BROKEN

#### 2023-24 Achievements

- ► Completion of the Kynmer Creek regulator in Barmah Forest which will restore a more natural hydrological regime to the waterway and allow greater volumes of water to enter during winter and spring and exclude unseasonal high summer flows
- ► Renewal of the Shepparton Irrigation Region Land and Water Management Plan that guides efforts to protect and enhance the land, water and communities of the region.
- Began works as part of the Mid Goulburn River/ Waring flagship waterway project, a longterm collaboration with Traditional Owners -Taungurung Land and Waters Council - to work together on culturally and ecologically important waterway sites.

#### Our future vision

Resilient landscapes, thriving communities.

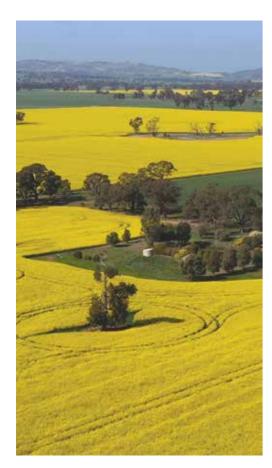
Goulburn Broken Regional Catchment Strategy



Wetland monitoring at Moodie Swamp.



After a wet season, waterbird numbers have increased across the catchment, including Eastern Great Egret.



A plan that guides efforts to protect and enhance the land, water and communities of the Shepparton Irrigation Region has been updated.

#### LOCATION

Shepparton Irrigation Regio

#### TRADITIONAL OWNERS

Yorta Yorta Nation Aboriginal Corporation and Taungurung Land and Waters Council

#### OUTPUTS

- Draft for Public Consultation
- Three community engagement event
- Finalised plan

#### INVESTMENT (4 YEARS)

\$450,00

#### **PARTNERS**

Yorta Yorta Nation Aboriginal Corporation, Taungurung Land and Waters Council, DEECA, North Centra CMA, Agriculture Victoria, Goulburn-Murray Water CASE STUDY

#### Planning a prosperous future for Shepparton Irrigation Region

The Shepparton Irrigation Region Land and Water Management Plan 2050 is a renewal of what is Australia's longest-running natural resource management plan. It was first designed more than 30 years ago in response to a salinity crisis and to protect and enhance the natural assets of the region.

The plan considers environmental elements while supporting sustainable development of the irrigation industry, which is vital for the local economy and Australia's food security.

Over the renewal journey, the plan has been refined based on extensive feedback from the community and relevant industries. A collaborative approach ensures the needs and interests of stakeholders are considered.

The renewed plan focuses on five critical attributes (Biodiversity, Resilient Communities, Farm and Regional Prosperity, Water Availability and Drainage) which are under pressure in the Shepparton Irrigation Region socio-ecological system. Aligned with the United Nations Sustainable Development Goals and using a resilience approach, the SIRLWMP 2050 aims to capture and communicate the region's uniqueness and complexity.

The plan has been recognised nationally and internationally for its successful implementation of best practices in catchment management.

The new 2050 plan was officially endorsed by the Goulburn Broken CMA Board in June 2024. Goulburn Broken CMA's Sustainable Landscapes Manager, Carl Walters, said the plan was the result of extensive consultation with stakeholders from across the region.

"We listened carefully to the concerns and ideas from farmers, environmentalists and community members and we've incorporated that communication into the renewed plan."

He said the renewal process provided the opportunity to reflect on all the plan had achieved over more than 30 years.

"It's useful to look back and learn from the past but now it's time to look forward and pave the way for a prosperous future for the Shepparton Irrigation Region."

Shepparton Irrigation Region People and Planning Integration Committee chair, Kelvin Bruce, said it was crucial to take a longlens approach to planning for the future. "In the beginning, I thought it was a bit ambitious to be planning for the next 30 years but now I realise it's essential that we do," Mr Bruce said.

"How else can we be nimble enough to deal with challenges as they arise and take advantage of opportunities when they are presented."

Above: The land and water management plan sets the goals for the Shepparton Irrigation Region into the future.

CASE STUDY

# Fifty years on, waterway flows naturally again

Located in the iconic Barmah National Park, Kynmer Creek is a small, seasonal channel that branches off the Murray River in the far eastern part of the forest and flows mostly along the southern boundary.

In the 1970s, Kynmer Creek was artificially altered to assist forestry operations that were taking place at the time. A large block of soil was installed in the waterway to restrict elevated summer flows in the Murray River from entering Kynmer Creek.

This resulted in the creek not flowing as it naturally had been in winter-spring when there would have been more frequency and greater volumes of water.

This year, Victorian Government funded works to excavate the creek bed to remove the block of soil and install a regulator were completed.

The new infrastructure restores a more natural flow pattern to the creek. The regulator's gates can be operated to allow greater volumes of water to enter the waterway during winter and spring, as would have occurred before the creek was altered, and stop unseasonal high summer flows that are a result of river regulation.

The return to a more natural flow pattern improves riparian and wetland habitat for turtles and native fish in Kynmer Creek. Prior to construction of the regulator, fish movement was unable to be managed as flows into the creek could not be controlled. Now fish will be able to migrate as they previously did.

The Barmah-Millewa Forest supports the largest river red gum forest in Australia and is the largest and most intact freshwater floodplain system along the Murray River.

The regulator and its operation are part of the Living Murray Program, one of the longest-running river restoration projects in Australia, which includes engineering solutions and water to protect and preserve habitat for plants and animals.

The construction of the regulator has also created a bridge over the creek that improves vehicle access to the eastern end of the forest; particularly beneficial for emergency vehicles.

So, with the passing of time, research and increased understanding of the benefits of water for the environment and floodplain infrastructure, the ecological health of Kynmer Creek is set to improve.

Top: The newly constructed Kynmer Creek regulator in Barmah National Park. Bottom: The mouth of Kynmer Creek.





The installation of a regulator at Kynmer Creek will restore more natural flows to the waterway and improve habitat for native fish, turtles and other species.

#### LOCATION

Kynmer Creek in Barmah National Park

#### TRADITIONAL OWNERS

Yorta Yorta

#### OUTPUTS

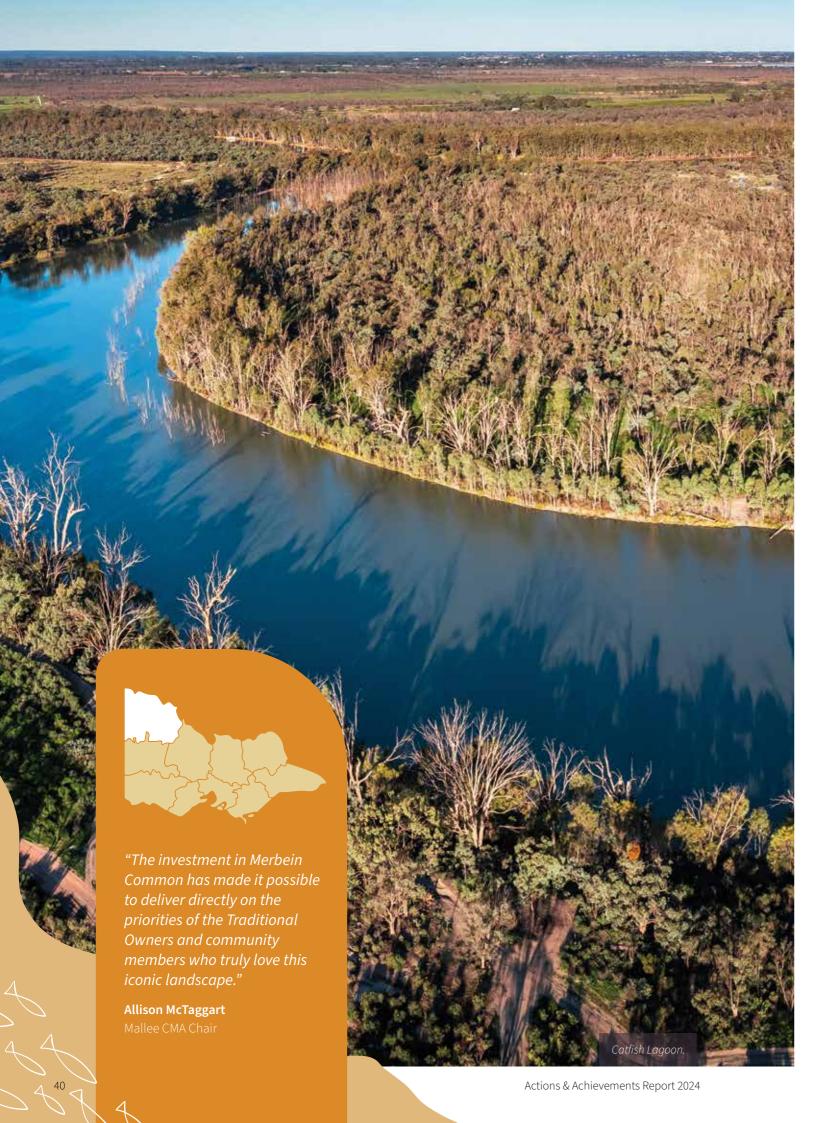
- Completion of concept designs
- Completion of detailed design
- Approvals
- Construction
- Commissioning/testing

#### INVESTMENT

Victorian Government Building Works stimulus package

#### PARTNERS

Victorian Government, Moira Shire Council, Parks Victoria, Goulburn-Murray Water, Yorta Yorta Nation Aboriginal Corporation, Murray Darling Basin Authority



# MALLEE

#### 2023-24 Achievements

- ▶ Delivered over 420,000 hectares of targeted environmental works to enhance the region's priority natural, cultural, and productive landscapes. This included Traditional Owner-led practices which have been applied to over 40,000 hectares to manage and heal Country.
- Partnerships underpin our work, with advice and input from stakeholders received through established forums including the Salinity Accountability Advisory Committee, Aboriginal Reference Group, and Land and Water Advisory Committee
- ► Completed an Airborne Electro Magnetic (AEM) Survey along 770 kilometres of the Murray River corridor to map saline groundwater and inform future management priorities.

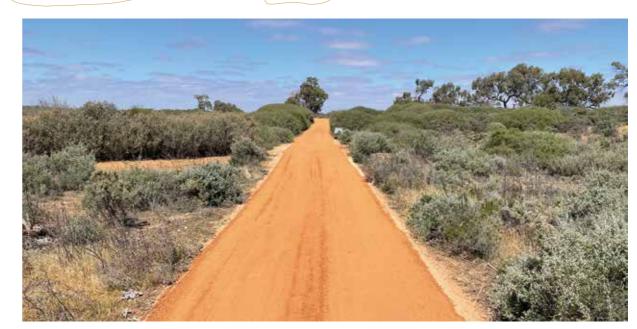
#### Our future vision

Healthy and resilient landscapes being cared for by connected communities.

Mallee Regional Catchment Strategy



Engagement event at Tchum Lake.



Walking track upgrades at Lake Cullulleraine delivered through EC5 funding.



Don't let the name fool you - Merbein Common may sound it, but it's anything BUT common.

#### LOCATION

#### TRADITIONAL OWNERS

#### OUTPUTS

#### **INVESTMENT (4 YEARS)**

#### **PARTNERS**

#### CASE STUDY

#### There's nothing common about **Merbein Common!**

Deeply loved by Traditional Owners and community members, Merbein Common is a floodplain reserve nestled in a bend of the Murray River in far north-west Victoria. Located west of Mildura, the common is steeped in Aboriginal cultural significance; it has a series of nationally significant wetlands; and is home to more than 196 fauna and 88 flora species, many of which are protected by international agreements. It's also one of the region's most popular fishing and camping spots.

However, it wasn't always this way. Merbein Common was a victim of early settlement, once used as the town's rubbish tip. Settlers on nearby fruit properties cut trees down to make trellises, paddleboats used the timber for the boilers, and a lot of Red Gum was cut to make railway sleepers. On top of that, the area was heavily grazed by cattle and very little vegetation remained.

But it's people's love of this unique stretch of Murray River floodplain that has brought it back from the brink. Over time, surrounding land use changed, and preservation groups have emerged to help rekindle the beauty of the common.

When planning the investment for EC5, community conversations were clear – people wanted to see investment continue to help bring this piece of river country back to its former glory.

From 2021 to 2024, Traditional Owners and community members have worked in partnership with Mallee CMA and Parks Victoria to ensure cultural, social and ecological values are restored at Merbein Common.

Among the highlights were the upgrading of most of the main access track to all weather access (greatly appreciated by locals and the many caravan owners who visit the common every week); 14 kilometres of track rationalisation to protect native vegetation and areas of cultural significance; 36 events; various water bug identification workshops with Traditional Owners; post-flood vegetation surveys; an extremely popular outdoor painting workshop called "Painting en plein air"; and an environmental education morning for members of a local disability group.

The work is not finished yet. Under EC6, we'll continue to deliver on local priorities for Merbein Common including more track upgrades, improving interpretative signage, fencing, bollards, signage, and mulching to limit vehicle disturbance and improve riparian condition.

We have also heard that community would like us to hold more activities where locals can get involved in monitoring native fish populations, birds, bats and frogs, so we are working on delivering these events as well!

Above: Picnic facilities overlooking "The Cutting" at Merbein Common.

#### CASE STUDY

#### **Watering Musk Duck wetland**

Dylan Lawson is standing beside Musk Duck Wetland, a 4.7 hectare wetland in the far north-western corner of Victoria, about 540 metres from the Murray River.

There's about 100 ML of water for the environment in the wetland in front of him. It's a peaceful place to be, you can hear the birds calling and, not too far away, people are chatting around the campfire.

But it's more than just water Dylan is looking at – it's self determination in action, and a demonstration of what true partnerships can deliver.

"I'd never seen water in here, except in the last floods that came through, so it's been a long time in the making to get water into Musk Duck," Dylan says. He is a Traditional Owner and an Aboriginal Water Officer from the First People of the Millewa-Mallee Aboriginal Corporation (FPMMAC), a custodian of this incredible landscape.

The wetland is on Ned's Corner Station, a 30,000 hectares conservation property that Trust for Nature is transitioning back to the ownership of FPMMAC. The lagoon filled naturally in the 2022/23 Murray River flood events, but after being dry for the previous five years and a hot summer, it didn't take long for the floodwater to disappear.

In short, Traditional Owners were keen to see water back in Musk Duck Wetland. Together with the Mallee Catchment Management Authority (CMA), the Victorian Environmental Water Holder (VEWH) and the Department of Environment, Energy and Climate Action (DEECA), hopes of delivering water for the environment to Musk Duck became a reality.

Water for the environment is water allocated and managed specifically to improve the health of rivers, wetlands and floodplains. Victoria has a robust process for managing water for the environment and this had to be negotiated sensitively, while respecting the wishes of the Traditional Owners.

FPMMAC worked closely with Mallee CMA, VEWH and DEECA to navigate the watering of Musk Duck, including everything from on-Country meetings to procurement and predelivery monitoring of environmental values.

FPMMAC's River Rangers, Seed Collection Team and Safe Haven crew will all be involved in monitoring environmental outcomes at Musk Duck Wetland, with Mallee CMA, VEWH and DEECA keen to continue to build on the strong partnership established with FPMMAC.

Above: Traditional Owner Dylan Lawson at Musk Duck Wetland.



#### LOCATION

#### TRADITIONAL OWNERS

#### INVESTMENT

#### PARTNERS

# "The work we do is all about what we love and create healthier landscapes for future **Euan Ferguson** Actions & Achievements Report 2024

# NORTH CENTRAL

#### 2023-24 Achievements

- ► Two Gen Zs, no phones, 100+ kilometres of waterway, two kayaks, and a film crew. Unplug and Play was a challenge that showcased the work we do, our amazing communities, and was a hit on social media.
- ▶ Building the \$6.5 million Taylor's Creek fishway connected 1,000 kilometres of waterways for our large-bodied fish. It also brought together local and state water agencies and the Yorta Yorta Nation Aboriginal Corporation.
- ▶ New opportunities in NRM began with planning for a regional community carbon program and hosting of a natural capital forum. Five councils joined together to investigate local revegetation offsets, and more than 100 landholders discovered more about the future of natural capital.



Kai Humphrey and Jessie Manuelyan on their groundbreaking Unplug and Play tour down Bendigo Creek

#### Our future vision

Working in Partnership for a Healthy Catchment.

North Central Regional Catchment Strategy



 $Work\ being\ undertaken\ on\ the\ construction\ of\ the\ Taylor's\ Creek\ fishway,\ connecting\ 1,000\ kilometres\ of\ waterways\ for\ native\ fish.$ 

NORTH CENTRAL





The Campaspe River is bouncing back better after the 2022 floods than it did in 2011, boosted by more than a decade of environmental flows and riverbank revegetation and protection.

#### LOCATION

Campaspe River from the headwaters in the Great Dividing Range to the confluence with the Murray River.

#### TRADITIONAL OWNERS

Dja Dja Wurrung , Taungurung , Yorta

#### OUTPUTS

- 8.6 kilometres of fencing
- 46 hectares of riverbank protected from grazing
- 26 hectares of weeds controlled

#### **INVESTMENT (4 YEARS)**

EC5 \$469,000

#### **PARTNERS**

Landcare Groups, Goulburn-Murray Water, Victorian Environmental Water Holder, Commonwealth Environmental Water Holder

#### CASE STUDY

#### **Caring for the Campaspe**

The 1-in-200-year 2011 floods decimated the Campaspe downstream of Lake Eppalock, and with the 2022 floods measured as about a 1-in-500-year event, the impact was expected to be worse.

However, the latest preliminary monitoring results have shown the riverbanks are healthier than after the 2011 floods, and key fish populations have bounced back almost immediately.

The results come on the back of 12 years of the Caring for the Campaspe fencing and revegetation project, and carefully managed water for environment flows.

The Caring for Campaspe project has worked with the community since the 2011 floods to protect and restore the riverbank.

Since 2011, more than 100 kilometres of fencing has been built, 668 hectares of weeds controlled, and 576 hectares of the banks revegetated. And it has paid off.

After the 2022 floods, once the North Central CMA was able to access the sites again, it found the riverbanks intact – the revegetation work had done its job in holding the bank together.

This is a remarkable achievement only made possible by leveraging the passion and commitment to river health of Campaspe landholders and the local community.

And the benefits of all that hard work over the years were clear in the water as well.

Arthur Rylah Institute fish surveys showed similar numbers of golden perch to what were found in the two years before the 2022 floods.

Murray cod were also captured in all three reaches of the river, ranging in size from 57mm to 802mm, including multiple young-of-year fish. That all points to a resilient fish population and a recovering river.

The fish numbers are proof the river is bouncing back. They are at the top of the food chain in the river channel, so if they're doing well, everything else that's in there is doing well.

Top: National Tree Day planting event with local Scouts on the banks of the Campaspe River. Bottom: Shared benefits from water for the environment, revegetation, and fencing.

#### CASE STUDY

# Soil Health Guide a key part of a farmer's toolkit

Healthy soils are fundamental to rural living and food production.

Australian soils are among some of the oldest and most weathered in the world. They generally contain low levels of organic matter and if not carefully managed can erode and degrade easily under traditional European farming practices. So, it's imperative to look after the soil we have. For farmers or rural property owners, soil is their most valuable asset. It provides structural support, water and nutrients for plant growth.

Understanding soil types, applying the appropriate management practices and monitoring soil quality are all important steps in protecting and enhancing soil health. That's why the North Central CMA teamed up with Agriculture Victoria to create the region's new Soil Health Guide – Carbon Edition.

This time, there was an added twist, with soil carbon information introduced. And new formats allow for the Guide to be accessed from anywhere.

As well as the trusty and hardy physical book farmers or gardeners can take with them anywhere, the Soil Health Guide is also now in ebook form, as well as online.

The website takes people through each test step-by-step, and includes instructional videos on how to understand, test, and improve soil.

No matter whether you're in a paddock, at your desk, on the lounge, or in the garden, landholders will have access to the information they need.

Not only are the guides perfect for north central Victoria, but they can be used anywhere in the world.

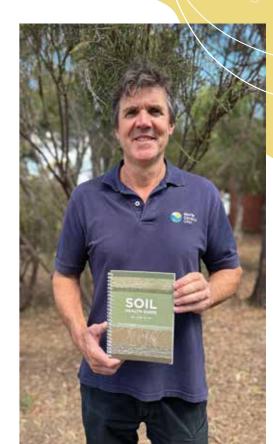
The toolkit identifies a range of simple tests anyone can do to determine management actions to improve soil health.

The Soil Health Guide looks at ground cover, biological activity, soil colour, pH, texture, topsoil, structure, compaction, and stability.

It also discusses the valuable role played by existing soil carbon stores and how they offer great benefit to both agricultural productivity and the wider environment.

To find out more, and to access the free resources, go to <a href="https://www.nccma.vic.gov.au/projects/agriculture/soil-health-guide">www.nccma.vic.gov.au/projects/agriculture/soil-health-guide</a>.

Above: North Central CMA's Darren Bain with a hard copy of the Soil Health Guide Carbon Edition.



A new resource will serve as a one-stopshop for farmers keen to understand and improve their soil health.

#### LOCATION

North central Victoria and beyon

#### TRADITIONAL OWNERS

Dja Dja Wurrung, Barapa Barapa, Wamba Wemba, Yorta Yorta, Taungurung, Wadi Wadi, and Wergaia represented by the Barengi Gadjin Land Council

#### **OUTPUTS**

- 10 videos
- One project website
- One Soil Health Guide hardcopy
- One Soil Health Guide eboo
- One Soil Health Guide interactive website

#### INVESTMENT

Australian Government Smart Farms Small Grants Program

#### **PARTNERS**

Agriculture Victor



# NORTH EAST

#### 2023-24 Achievements

- ► A \$1.164M investment by the Victorian Government enabled remedial works at 24 priority sites in catchments including the Mitta Mitta, Ovens & King and Kiewa to address 2022-23 flood damage.
- ► Completed the delivery of \$11.2M of investment (over four years) from the Victorian Government through the Environmental Contribution (EC) Tranche 5.
- ► Commenced significant projects through the Australian Government's Natural Heritage Trust that will protect iconic and culturally significant species including the Mountain Pygmy Possum and Bogong Moth and the Alpine Peatlands.



Diverse, healthy and connected landscapes and communities.

North East Regional Catchment Strategy



A platypus found during an Arthur Rylah Institute survey of the Upper Ovens River, north-east Victoria.



Staff from Arthur Rylah Institute undertake backpack electrofishing in the Upper Ovens River, north-east Victoria.



Between 2020 and 2024 North East CMA has been working with Traditional Owners, Landcare and community on projects focused on the Lower Kiewa, Upper Mitta Mitta and Upper Ovens rivers.

#### **LOCATION**

Kiewa, Mitta Mitta and Ovens Rive catchments

#### TRADITIONAL OWNERS

Duduroa-Dhargal Aboriginal Corporation, Dhudhuroa Waywurru Nations Aboriginal Corporation, Burraja Cultural Centre, Konermar Buller Jaithmatang

#### OUTPUTS

#### Lower Kiewa

- 54 integrated planning and delivery events covering 159 hectares
- 44 events supporting communities engaging 563 participants

#### Upper Mitta Mitta

- 360 hectares of weed control
- 23 hectares native tube stock planted

#### Upper Ovens

- 295 hectares woody weed control
- 20 engagement events
- 37 waterway structures installed

#### **INVESTMENT (4 YEARS)**

Victorian Government's Environmenta Contribution Fund Tranche 5 (EC5)

#### **PARTNERS**

Kiewa, Wodonga, Bonegilla, Yackandandah, BDPO Landcare; Parkland AW; Wodonga, Indigo, East Gippsland, Alpine councils; Ag Victoria; Murray Dairy; NE Water; ADF; DEECA; Parks Victoria; Friends of the Mitta; Omeo, Benambra, Bairnsdale Angling Clubs; Native Fish Australia; VFA; ATF; Omeo District Health; Alpine Fly Fishers; Wangaratta Fly Fishing CASE STUDY

# Communities caring for catchments on the Kiewa, Mitta Mitta and Ovens Rivers

The Our Catchments Our Communities (OCOC) Lower Kiewa Catchment Stewardship project was completed in 2024 and focused on the area of the Lower Kiewa catchment from the junction of the Kiewa and Murray Rivers upstream to Gundowring.

Across the project, North East CMA partnered with Duduroa Dhargal Aboriginal Corporation to support their stewardship of Ryans Lagoon, a complex of freshwater marshes listed in the Directory of Important Wetlands in Australia. The Corporation participated in revegetation, knowledge sharing of traditional practices, cultural burning and skills development.

Project agreements with other community groups delivered weed control and revegetation, improved recreational access, citizen science and water quality monitoring. Events ranged from walks to field days, weed control working bees, fauna spotlighting and frog identification walks.

The Upper Mitta Mitta Flagship project was completed in 2024 and aimed to protect and improve the condition of the river by addressing priority threats in collaboration with the community.

The three focus areas included:

- improving riparian health and access.
- headwater invasive woody week control.
- · securing aquatic species populations.

North East CMA and Parks Victoria have been working in partnership to update implementation plans for remote woody weed control in the Upper Mitta Mitta. We also hosted another successful Trees for Trout Day in partnership with the Australian Trout Foundation, which resulted in 500 tube stock planted at the Blue Duck Inn.

The Upper Ovens Flagship and On-ground works project was in its fourth and final year of the Victorian Government EC5 program. In the 2023-24, the project:

- Inspected 50 sites of prior investment/river health assets and removal of historic rusty rail (former rail line used in historic river stabilisation works) from four sites.
- Entered into five landholder management agreements to protect 19 hectares of riparian land in the Upper Ovens.
- Completed the angler partnership project Mayfly Rise 2.0 in Bright. This project installed 30 large boulders, rock beaching and three sites of large wood to improve aquatic species habitat in the Upper Ovens.

Above: Comparing notes at the Lower Kiewa Stewardship Project field day at Middle Creek, Baranduda in August 2023.

CASE STUDY

# 2023-24 Victorian Landcare Grants in north-east Victoria

Among the recipients of grants in 2023-24 was the *Kiewa Catchment Landcare Network Graze to Grow* program to support landholders in growing better livestock and pastures.

Building sustainable farming practices that support healthy soils and livestock, and assist with mitigating the impacts of climate change is a focus of Landcare in the Kiewa Valley.

This project ran a holistic grazing management course in the Kiewa Valley with David Hardwick from Soil Land Food and Dr Judi Earl from Holistic Management Australia. The training course for 20 landholders included three face-to-face workshops and 4 webinars over multiple months teaching landholders the basics of pasture biodiversity, seasonal budgeting, and planned grazing.

At the end of the course, participants had the skills and confidence to adopt these practices on their own property and share their learnings with the wider Landcare community.

A project undertaken by Wodonga Urban Landcare Network sought to stop the spread of Wodonga's worst garden plant escapees. Plant Me Instead was a 2023-24 Victorian Landcare Grant project and the Landcare group developed an online booklet identifying the worst garden escapees, why they're a problem, how they disperse and what home gardeners can do to stop the spread.

The booklet includes a list of Wodonga's 15 top garden escapees and how they impact on local parks, reserves and native wildlife. The project has included four presentations to community groups, two weed walks and talks, two local market stalls, media and social media posts and meetings with local commercial nurseries to reduce the sale of problem plants.

The project aimed to raise awareness of the threats posed by Wodonga's worst garden escapees, motivate residents to remove or control existing species, avoid planting them in future and encourage reporting of dumped garden waste.

Mitta Valley Landcare wanted to build on the work it began in 2021, re-vegetating and protecting remnant forest and wetlands. It fenced off 9.72 hectares of remnant forest with 880m of fencing on one site and on the other, fenced off and revegetated a wetland / corridor of .55 hectares with 316 metres of fencing and 560 seedlings.

It also ran a workshop and presentation. The year before, it ran multiple successful presentations on a range of topics from soils, dung beetles, pest management, frogs to wetland management involving hundreds of participants.

Because both sites being protected are along the Little Snowy Creek, Mitta Valley Landcare aimed to have one of its workshops in this area on native animals in particular birds in the areas being protected.

Above: Members of the public learn more about 'garden escapees' and what to plant instead at a stall in Albury Wodonga, image by Wodonga Urban Landcare.



The Victorian Government's Landcare Grants program saw an investment of \$318,250 for Landcare projects and support grants in north-east Victoria in 2023-24 and funded 24 projects for Landcare and community groups.

#### LOCATION

Across north-east Victoria

#### TRADITIONAL OWNERS

A number of Traditional Owner Groups

#### **OUTPUTS**

- 43 engagement activities
- 6 training events
- Fencing 4.59 kilometres at four sites
- 25,637 trees over 18 sites
- 139.5 hectares weed control over 18 site

#### INVESTMENT

Victorian Landcare Grants program

#### **PARTNERS**

Kiewa Catchment Landcare Network,
Wodonga Urban Landcare Network, Mitta
Valley Landcare, Beechworth Urban Landcare
& Sustainability, Bethanga Landcare,
Burgoigee Creek Landcare, Edi Black
Range Catchment, Gap Flat Catchment
Management, Greta Valley Landcare,
Gundowring Landcare, Honeysuckle – Spring
Creek Landcare, Indigo Creek Landcare, King
Basin Landcare, Milawa Markwood Oxley
Landcare, Mitta 2 Murray Landcare, Myrtleford
& District Landcare and Sustainability,
Parklands Albury Wodonga Ltd, Rutherglen
Landcare, Springhurst & Byawatha Hills
Landcare, Swamps, Rivers & Ranges Inc,
Upper Murray Landcare, Wangaratta
Landcare & Sustainability Inc, Warby Range
Landcare, Wooragee Landcare, Soil Land
Food, Agricultural Information & Monitoring
Services, City of Wodonga, Gardens 4 Wildlife
Albury Wodonga.

# "This project demonstrates the power of partnerships in driving innovation, and climate-adaptive solutions. By working together, we're not only generating valuable research data but also fostering a new generation of environmental stewards." (Speaking about the Living *Links Climate Future Plots* Research Partnership Project.) **Greg Wilson** 52 Actions & Achievements Report 2024

# PORT PHILLIP WESTERN PORT

#### 2023-24 Achievements

- ► Grow West, hosted by Melbourne Water, celebrated 20 years of landscape restoration, planting over 1.4 million seedlings, revegetating 2,500+ hectares, hosting 18 community planting days, and engaging 3,000+ volunteers.
- ▶ Building off the success of the inaugural pilot, Melbourne Water, Corangamite, and North East CMA's delivered the second Caring for Landcarers mentoring program, adding webinars and an overnight event, and launched a third round.
- ► In 2023-2024, Melbourne Water proudly supported 32 Project Grants and 79 Support Grants, investing \$592,750 in environmental volunteering through the Victorian Landcare Grants Program.

#### Our future vision

A healthy and resilient environment in the Port Phillip and Western Port region.

Melbourne Water Catchment Strategy



Bird watching across the plains wetland.



Kayaking along the Birrarung (Yarra River).



The Living Links Climate Future
Plots Research Project is setting the
benchmark for climate-adaptive
strategies in urban environments.
By establishing five experimental
plots in Melbourne's south east, this
collaborative effort is testing how
native plant species respond to future
climate scenarios, paving the way for
resilient landscapes that can thrive in a
changing world.

#### LOCATION

#### TRADITIONAL OWNERS

Bunurong & Wurundjeri Lan

#### OUTPUTS

- Establish 3 Climate Future Researc Plots by June 2024.
- Additional funding from Melbourne Water's Liveable Communities and Liveable Waterways (LCLW) Program has enabled the additional two plots to be established

#### **INVESTMENT**

EC 5 investment = \$18,000 LCLW investment = \$300,000 (including future plot maintenance costs over the next 3 years)

#### **PARTNERS**

Federation University, Melbourne University, City of Greater Dandenong, Maroondah Council, Knox Council, and the Bunurong Land Council CASE STUDY

#### Living Links Climate Future Plots Research Partnership Project

The Climate Future Plots Research Project is one of six collaborations funded by the Our Catchments, Our Communities EC5 Grant (2021 – 2024). Additional funding from Melbourne Water's Liveable Communities, Liveable Waterways will ensure the project continues until 2026. This initative was developed through the Living Links Partnership, which brings together 18 partners, including 10 Councils, Parks Victoria, South East Water, Bushwalking Victoria, Conservation Volunteers Australia, Field Naturists of Victoria, Holmesglen TAFE, and the Bunurong Land Council.

The Living Links Climate Future Plot Research Partnership Project involves contributions from Federation University, Melbourne University, Melbourne Water, City of Greater Dandenong, Maroondah Council, Knox Council, and the Bunurong Land Council.

After years of planning, the project progressed to the implementation phase in June 2024, with five Climate Future Research Plots established across the municipalities of Greater Dandenong, Knox and Maroondah. This milestone was celebrated with an official launch that included a traditional Bunurong Smoking Ceremony.

Federation University is leading the research and monitoring component of this innovative project. The research plots in Melbourne's south east will be used to evaluate how specially selected native plants respond to climate changes in urban environments. The goal is to assess how these plants adapt to predicted impacts of climate change, providing vital information that other land managers across Victoria can apply to create long-term, resilient vegetation management strategies.

Each of the five plots covers at least 1,250 square metres and contains up to 1,760 plants. The plots include five different plant species collected from four diverse climate zones across Victoria. The plants have been sourced from regions representing the climate conditions of 2024, 2050 and 2090, as outlined in the State Government's Guide to Creating Climate Future Plots (2020).

Each plant has been mapped using differential GPS to a precision of one centimetre, allowing highly accurate long-term monitoring of their growth and condition. Over the next few decades, this project will engage many current and future students from Federation University, as well as provide opportunities for local schools and agencies to participate in monitoring activities.

Top: Professor Singarayer Florentine ("Florry"), Restoration Ecologist, Federation University, image by Riley Fisher Photography.

CASE STUDY

# Building Resilient Vineyards through Eco-Friendly Practices

The EcoVineyards project, delivered in 2023-24 to growers in the Yarra Valley and Mornington Peninsula, is part of a three-year program. Seven EcoGrowers have developed Biodiversity Action Plans and established trial sites on their vineyards. These sites focus on agro-ecological methods to address environmental challenges in vineyards. Traditionally, undervine areas have been managed with herbicides or mowing. Now, establishing permanent groundcover with native grasses and forbs offers a sustainable, drought-resistant alternative that promotes soil health and supports beneficial insects.

Some trials have hand-sown native seeds under the vines, while two others have utilised hydro seeding, a method that has sparked significant interest for its potential to eliminate herbicide use. This approach could reduce both input costs and emissions. Different panels under the vines have been sown with a variety of native grasses, forbes (herbaceous flowering plant), or a mix of both. Since this method is new, the focus is on identifying which species thrive and which are harder to establish.

Other trials include functional biodiversity plantings, using goats for weed control along a drain line, and creating a chain of ponds to slow water flow and prevent soil erosion. One vineyard on the Mornington Peninsula has trialled Specialised Pheromone and Lure Application Technology (SPLAT ®), ecofriendly technology implemented for effective pest control through a variety of techniques, to manage the Light Brown Apple Moth. In this case, the mating disruptor allowed the vineyard to avoid insecticide use, while the untreated control block required intervention midway through the season.

Four engagement events on cover crops and groundcovers attracted over 100 participants, and regular site visits are conducted to support growers in maintaining their trials. Feedback and data collection continue as the trials progress.

In the final year of the project, the focus will shift to enhancing biodiversity in the vineyard, with attention on micro bats, beneficial arthropods, frogs, and raptors.



The three-year EcoVineyards program aims to accelerate the adoption of sustainable land stewardship practices, including vineyard cover crops, soil remediation, and functional biodiversity. These practices not only help vineyards adapt to extreme weather events, but also strengthen their resilience and support healthy agro-ecosystems.

#### LOCATION

Mornington Peninsula & Yarra Valley

#### TRADITIONAL OWNERS

Bunurong/Wurundjeri Woi-wurrung

#### OUTPUTS

- 7 agriculture practice change
- 7 management agreements
- 4 engagement events
- 6 accacements

#### **INVESTMENT**

Wine Australia, delivered through Retallack Viticulture

#### PARTNERS

Retallack Viticulture, Mornington Peninsula Wine, Yarra Valley Wine

Actions & Achievements Report 2024 Actions & Achievements Report 2024

Above: EcoVineyards engagement event.

# Durt'Yowan (Latrobe River) near Yallourr Mikaela Power Actions & Achievements Report 2024

# WEST GIPPSLAND

#### 2023-24 Achievements

- ▶ Delivered Spartina control in Corner Inlet Ramsar site to protect saltmarsh with 1,165 hectares of Spartina weed treated and 110,221 hectares of surveillance work completed.
- Our partnership with Bunurong Land Council Aboriginal Corporation resulted in the formation of a Traditional Owner-led Strong Country working group and a new team located in Gippsland.
- ► Completed a three year program of flood recovery for the community including 1.4 kilometres of armouring, two rock chutes, 2.9 kilometres of earthworks and 20.5 kilometres of fencing.

#### Our future vision

Catchment Health – Gippsland's Wealth.
West Gippsland Regional Catchment Strategy



St Pauls school ready to release Dwarf Galaxias.



Sale Common - Borun (pelican).

WEST GIPPSLAND



Rivers are dynamic and ever changing - like Rainbow Creek in Central Gippsland that formed during an exceptional flood event in 1952 when it jumped course from the main Carran Carran (Thomson River).

#### LOCATION

#### TRADITIONAL OWNERS

#### OUTPUTS

#### **INVESTMENT**

58

#### CASE STUDY

#### **Future shines bright for Rainbow Creek**

When the flooding caused Rainbow Creek to escape the main river, it carved a new channel through the surrounding, lower lying farmland and created significant disruption to the local community downstream.

Stretching 80 kilometres between the towns of Cowwarr and Heyfield and running mainly through private agricultural land, Rainbow Creek is where the Carran Carran (Thomson River) naturally wants to flow. Cowwarr Wier was constructed in 1959 to keep the main river following its original course, deliver water to Rainbow Creek and provide irrigation offtake for the Macalister Irrigation District.

Despite the construction of the weir, there is still a risk that a flood will cause the main river to again jump course and create a new path (known as an avulsion) to the lower-lying Rainbow Creek. Such an event would be damaging to local agricultural businesses and also pose a risk to the Gippsland Lakes from large amounts of sediment and silts entering the waterways. West Gippsland CMA is working with the community to manage this risk and keep the rivers healthy and flowing.

"For the past four years, we've been delivering the Thomson and Rainbow Management Plan to manage the avulsion risk and improve waterway health for the benefit of agriculture, community and the Gippsland Lakes," said Board Chair, Mikaela Power.

Together with landholders, the CMA planted 27,800 trees over 28 hectares, treated 22 hectares of weeds, including willow removal, and built close to five kilometres of fencing to protect the river and strengthen its banks. A major highlight was fencing a continuous two kilometre stretch along the Rainbow to create an extra wide buffer that protects and future proofs the young river and enhances biodiversity.

The team also worked to reduce avulsion hotspots (where the river is most likely to form new channels) through armouring banks with rock and grass chutes.

"We are thankful for the community who have been instrumental in this project through participating on a panel to shape the original plan and then supporting the actions to implement it."

"It demonstrated what is possible when we work together with a community that has remained engaged and involved in the project from the outset. Together we are reshaping history and helping to nurture the young, fast-flowing Rainbow Creek to become a stable, resilient and healthy waterway." Ms Power said.

Top: West Gippsland CMA Catchment & Community Project Officer Kelsey Tong inspects planting at Rainbow Creek.

#### CASE STUDY

#### **Durt'Yowan - The Life Source**

Durt'Yowan (Latrobe River) is undergoing a significant transition, creating an opportunity to transform this precious river back to a healthy state so it can withstand future challenges brought on by climate change, coal mine closures and increased water demands.

The CMA is part of a collective effort to improve the health of Durt'Yowan, from the mountains to the Gippsland Lakes. Across 2023-24, a suite of initiatives was implemented to celebrate the river, promote its health and work for a better

The centrepiece was a short film sharing the river's story - its significance to Gunaikurnai, rich history, ups and downs and the exciting possibilities for the next chapter. Launched on World Rivers Day 2023, it was shown at community presentations at towns along its course with Q&A sessions to spark conversation. Community and industry interest continues to grow with screenings nationally and internationally through online and in person presentations to discuss challenges and opportunities for the river and the communities along its length.

In another key initiative, Victorian Fisheries Authority (VFA), community members and the CMA released 10,000 native migratory Bass into Traralgon Creek that flows into Durt'Yowan.

"Over the past two decades, we have been working with Traditional Owners, landholders, partners and community to improve the health of the catchment to allow these fish to thrive. This Bass stocking is only made possible by this work to secure environmental flows and improve river health," said Board Chair Mikaela Power.

"This release also represents hope for the river. Bass were recently listed as 'rare' in Victoria and the VFA's stocking program, along with delivering water for the environment, means they are now off the Threatened Species list."

In addition, the CMA and Green Team students from St Pauls Anglican Grammar School, released 70 adult Dwarf Galaxias fish into a wetland on Wades Creek in Traralgon.

Dwarf Galaxias are native to West Gippsland's rivers and are now Threatened in Victoria. Over their life, the fish will make their way into Durt' Yowan where the CMA has fenced off stock, planted native vegetation and, for over a decade, has delivered water for the environment to provide conditions native fish need.

"These initiatives are just the beginning of the next chapter for Durt'Yowan and West Gippsland CMA will continue to advocate for and protect this river that has supported us for thousands of years," Ms Power concluded.

Above: Releasing native bass into Traralgon Creek.

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With some big changes on the horizon for the Latrobe River, or Durt'Yowan as Gunaikurnai people have called it for thousands of years, West Gippsland CMA is focussed on the future of the system and determined to advocate on behalf of the river and its ongoing health.

#### LOCATION

#### TRADITIONAL OWNERS

#### **OUTPUTS**

#### **INVESTMENT**



# WIMMERA

#### 2023-24 Achievements

- ▶ Partnered with Barengi Gadjin Land Council to construct 'The Ranch Billabong Pipeline' reconnecting the Ranch Billabong to the Barringgi Gadyin (Wimmera River).
- ► Wimmera CMA and Victorian Fisheries Authority held the largest Victorian VFA fishing forum in Horsham with around 50 anglers sharing information and improving their knowledge.
- ► Supported Horsham Rural City Council with their planning scheme amendment which was approved by the Planning Minister. This amendment incorporates six Wimmera CMA flood studies into planning overlays.

#### **Our future vision**

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

Wimmera Regional Catchment Strategy



Cormorants at Dock Lake.



Wimmera River Horsham.



Wimmera CMA has partnered with Barengi Gadjin Land Council, Arthur Rylah Institute, Australian Government and the Department of Energy, Environment and Climate Action to enhance the cultural and environmental values of the Ranch Billabong, on the Wimmera River near Dimboola.

#### LOCATION

Ranch Billabong, Barringgi Gadyin (Wimmera River) Dimboola

#### TRADITIONAL OWNERS

Wotjobaluk Peoples

#### OUTPUTS

- 1 partnership
- 1 trail maintained
- 1 waterway structure (pipeline
- 2 publications
- 5 assessments

#### **INVESTMENT**

Integrated water management, EC5 – Water for the Environment in the Wimmera, Our Catchments, Our Communities , and Lower Wimmera Flagship

#### **PARTNERS**

Barengi Gadjin Land Council

CASE STUDY

# Partnering to deliver cultural and environmental outcomes at the Ranch Billabong

Located adjacent to Barringgi Gadyin (Wimmera River) at Dimboola, the culturally significant Ranch Billabong site has been home to many generations of the Wotjobaluk Peoples and remains a Special Place today for gathering, sharing and connecting with culture.

In partnership with Barengi Gadjin Land Council and other stakeholders we have been supporting efforts to achieve the priority goals for the site as outlined in the Country Plan 'Growing what is Good: voices of the Wotjobaluk Nations'.

Works at the site have included carp removal, flora, fauna and water quality monitoring, revegetation and the construction of visitor facilities including walking tracks, interpretive signage and access crossings.

A priority goal for the site was to restore a natural flooding regime to the billabong system to improve water quality, vegetation health and bird and fish habitat.

Prior to this year watering of the site could only be achieved via pumping from the Wimmera River in collaboration with the Victorian Environmental Water Holder. A focus of the partnership between Wimmera CMA and the Land Council was to improve the capacity of Traditional Owners to monitor condition and plan for and deliver water, with the long-term vision of creating a permanent connection between the Billabong and the Wimmera River.

This vision was realised in 2023-24 with the construction of a 163 metre directional drilled pipeline connecting the billabong to the Wimmera River. In addition to providing a permanent connection and reducing the costs associated with watering, this project empowers Traditional Owners to regulate water levels in the billabong to support cultural and environmental outcomes.



Top: eDNA testing at the Billabong. Above: The pipeline being constructed

CASE STUDY

# Wimmera native fish recovery program

Delivering on the objectives of the *Wimmera Native Fish Management Plan 2022*, Wimmera CMA implemented two significant fish translocation activities.

A River Blackfish 'Wirrup' project involved translocating fish from Mt Zero Channel, an ecologically inappropriate waterway where some of the species had been trapped, to a nearby stretch of MacKenzie River - a tributary of the Wimmera River that receives environmental-water allocations and is an historically natural home of the fish.

Collaborators in the project included Arthur Rylah Institute, Barengi Gadjin Land Council and Native Fish Australia's Wimmera branch and support from GWM Water.

Translocation of 60 adult fish from the Mt Zero Channel, included both males and pregnant females, happened in October and Wimmera CMA completed a follow-up survey in March to establish success of the project. The survey confirmed the translocated fish were fit and healthy. Based on this initial success, planning commenced for another translocation to capture brood stock for breeding in 2024-25.

Wimmera CMA also collaborated with partners to prepare one of the Wimmera's ecological wetlands for the release and surrogacy of rare small-bodied Murray Darling Basin fish – Olive Perchlet and Southern Purple-spotted Pygmy Perch.

Funded by the Murray Darling Basin Authority, this opportunistic project involved Victorian Fisheries Authority, Yarrilinks Landcare Network, a land manager and Barengi Gadjin Land Council. The CMA also invited the involvement of year-nine students from Horsham's St Brigid's College. The surrogacy project was an extension of similar activities in neighbouring CMA regions also part of the Murray Darling Basin.

Project leaders began planning further releases of Murray Darling Basin species into other Wimmera wetlands as well as a Wimmera Southern Pygmy Perch project in future years.



Top: Jarod Lyon from Arthur Rylah Institute prepares River Blackfish 'Wirrup' for translocation from Mt Zero Channel to MacKenzie River. Above: Victorian Fisheries Authority's Sam Fawke and Wimmera CMA's Deb Nitschke help Horsham St Brigid's College students prepare native fish for release into a Wimmera wetland.



Native fish under threat in the Wimmera and broader Murray Darling Basin were the subject of Wimmera CMA speciestranslocation efforts during 2023-2024.

#### LOCATION

Wimmera (northern Grampians and northern Wimmera)

#### TRADITIONAL OWNERS

Jardwadjali and Wotjobaluk

#### OUTPUTS

- Species reintroduction; species introduction; wild-to-wild translocation; establish new population; connectivity intervention.
- 2 partnerships
- 2 fauna assessments
- 2 engagement event
- 1 vegetation native endemic

#### **INVESTMENT**

Wimmera CMA funded River Blackfish translocation, including \$28,115 for ARI translocation activities and managed costs to cover time, permits and plants into the wetland surrogacy project.

#### **PARTNERS**

Arthur Rylah Institute; Victorian Fisheries Authority; Barengi Gadjin Land Council; Murray Darling Basin Authority; Yarrilinks Landcare Network; Native Fish Australia Wimmera Branch; St Brigid's College Horsham

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