

Regional Riparian Action Plan

Working in partnership to improve riparian
land in regional Victoria



The Department of Environment, Land, Water and Planning proudly acknowledges and pays its respects to Victoria's Native Title holders and Traditional Owners and their rich culture and intrinsic connection to Country.

The department also recognises and acknowledges the contribution and interests of other Aboriginal people and organisations in waterway management.

Finally, the department acknowledges that the past injustices and continuing inequalities experienced by Aboriginal people have limited, and continue to limit, their proper participation in land, water and natural resource management. The department is endeavouring to increase the involvement of Traditional Owners and other Aboriginal people to be partners and active participants in waterway management.

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Accessibility

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MINISTER'S FOREWORD

Healthy riparian land – the land that runs along river banks and beside wetlands – is critical to the health of our waterways.

Across Victoria, many farmers, Traditional Owners and Landcare groups are already working in partnership with catchment management authorities to improve riparian land. Supported by state government incentives, actions undertaken include planting native trees and fencing riparian areas on farms to manage stock access.

This new Regional Riparian Action Plan continues our proud history of successful partnerships to improve riparian land to protect and improve waterway health, protect drinking water quality for Victorian communities, support agriculture, increase habitat for native animals and plants, increase recreational opportunities such as fishing, and maintain sites of cultural significance for Traditional Owners and other Aboriginal groups.

The Andrews Government's investment in accelerating riparian works – an extra \$10 million in the 2015-16 State Budget – is good news for regional communities and especially regional jobs and growth. Several hundred additional people will be employed across rural and regional Victoria implementing the plan, directly working for catchment management authorities or working in industries supplying materials for onground works, such as fencing contractors and plant nurseries.

The riparian activities outlined in the action plan for the five-year period 2015-16 to 2019-20 were guided by regional Waterway Strategies – which were developed by catchment management authorities in consultation with catchment communities – and complement riparian policy and actions in the Victorian Waterway Management Strategy.

This action plan will be implemented by a range of partners – landholders, Traditional Owners, Landcare groups, local communities, catchment management authorities – working together to protect and improve riparian land to ensure that future Victorians will be able to enjoy our waterways as we do today.

I look forward to seeing the results of their work in implementing this plan and continuing to achieve healthier riparian land and waterways for the benefit of all Victorians.

A handwritten signature in black ink, appearing to read 'Lisa Neville'.

The Hon Lisa Neville MP
Minister for Environment, Climate Change and Water



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1 INTRODUCTION

Victorians value their waterways and the protection of riparian land in Victoria has long been recognised as important¹. Riparian land adjoins rivers, creeks, estuaries, lakes and wetlands (often called ‘frontage’ or ‘river bank’). It can vary from a narrow strip to a wide corridor and is often the only remaining area of remnant vegetation in the landscape.

A 2009 survey² of more than 7,000 Victorians revealed that 99 per cent of respondents want healthy waterways in their areas. The majority (83 per cent) felt ‘most connected’ to a local waterway, usually the stretch of river closest to where they live. Most people surveyed visit waterways for recreational purposes, to enjoy the scenery, native plants and animals or to walk, hike, cycle, picnic or fish.

Improving the environmental condition of waterways, particularly riparian land in priority areas, is a critical task to sustain populations of native plants and animals, provide opportunities for recreation and protect cultural values. Improving the environmental condition of waterways also supports economic development through important industries such as tourism and agriculture.

The objective for the management of riparian land, particularly Crown frontage³, is to maintain or improve its condition to support its environmental, social, cultural and economic values.

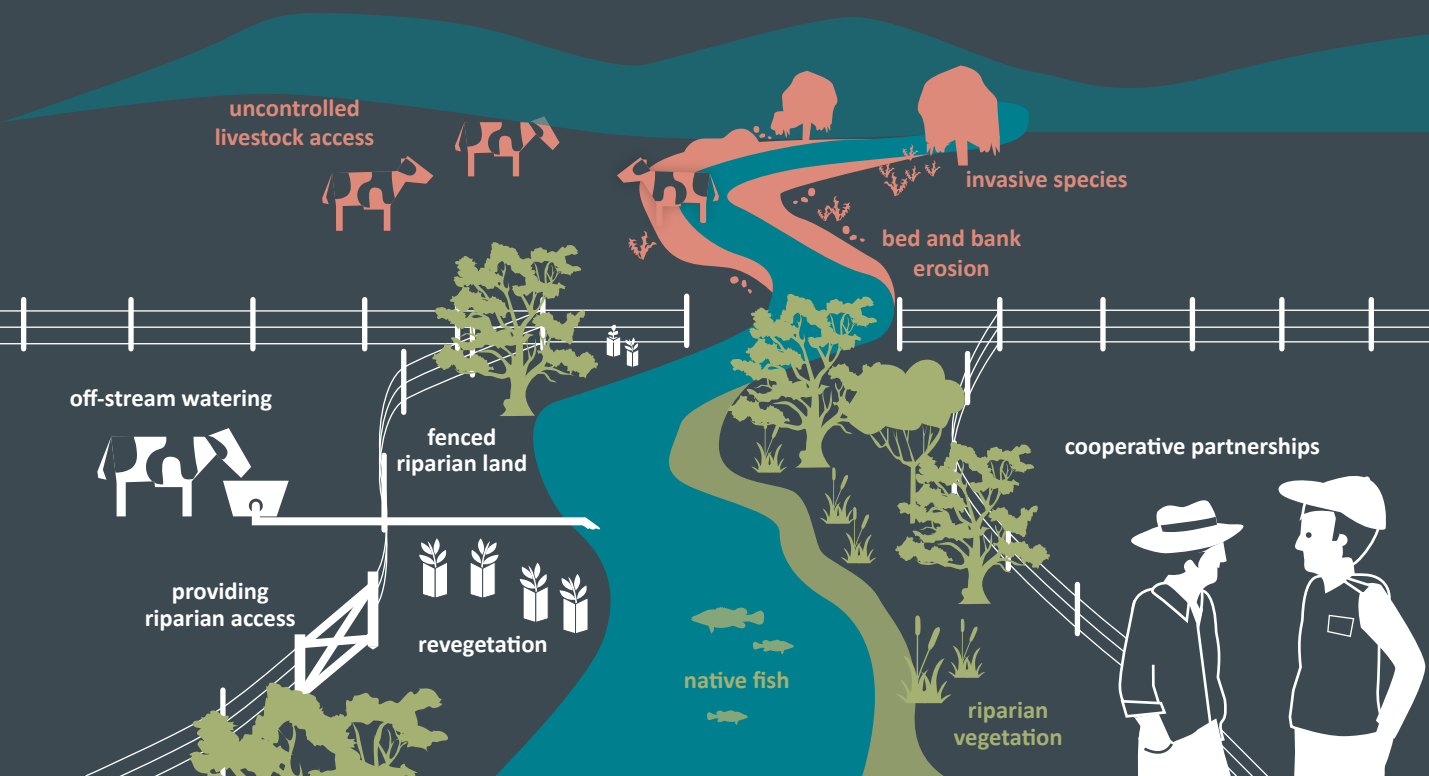
Traditional Owner and other Aboriginal involvement in riparian management

Victorian Traditional Owners have a strong connection to waterways as the lifeblood for Country. In particular, riparian land has significant cultural value for Traditional Owners and other Aboriginal people. Of the 35,000 Aboriginal places and significant sites recorded on the Aboriginal Heritage Registry (at 2011), 95 per cent occur within one kilometre of a waterway or water body⁴. These can include sites such as middens, scar trees and fish traps, as well as places with spiritual and ceremonial significance. The Federation of Victorian Traditional Owner Corporations has as one of its core principles in its Traditional Owner Water Policy Framework⁵ that Traditional Owners are committed to restoring the health of Victoria’s inland waters and protecting the values associated with these waters.

Traditional Owners and other Aboriginal people are important partners to catchment management authorities (CMAs) in the planning, implementation and monitoring of onground riparian works. A few CMAs already partner with Traditional Owner groups in the planning for their waterway and riparian programs. For example, the Glenelg Hopkins CMA has a long-term partnership with the Gunditjmara community that includes collaborating on the planning of riparian projects through an advisory group, particularly when waterway action plans are developed (see Section 2.2). Furthermore, many Traditional Owner businesses that collect seed and propagate tube stock, participate in pest plant and animal control programs and undertake riparian revegetation and fencing, already work in partnership with CMAs.

“It’s important to have water for the regeneration of food and medicine plants, and for habitat for fish, birds and animals – we need the places to bring the kids and teach. Things are disappearing. We used to have flax lily, river mint, and old man weed everywhere, now they’re nearly gone. Our people relied on that to live. The river was the supermarket; the bush was the shopping centre,” Sharnie Hamilton - Barapa Barapa Traditional Owner.

Figure 1 Some of the values (green), threats (red) and management activities (white) for riparian land



1.1 Purpose of this action plan

This Regional Riparian Action Plan (action plan) outlines riparian management outcomes and aspirational targets to be achieved across regional Victoria over the five-year period 2015-16 to 2019-20. Onground activities will be funded to accelerate improvement in the condition of riparian land for priority waterways.

The action plan also identifies additional statewide initiatives required to accelerate the delivery of onground riparian management works in Victoria.

The *Victorian Waterway Management Strategy* (VWMS)⁶ provides the overarching framework for government, in partnership with the community, to maintain and improve the condition of Victoria's waterways. Within this is a framework to maintain and improve the environmental condition of priority public and private riparian land. It includes policies, principles and actions related to the management of riparian land.

Catchment management authorities are responsible for waterway management across regional Victoria. During 2013-2014, each CMA developed a regional Waterway Strategy (RWS) in partnership with regional stakeholders. The RWSs outline regional goals for waterway management and identify priority waterways for investment over an eight-year period. They include a costed regional work program of management activities for priority waterways, including priority riparian management activities (e.g. fencing, revegetation, weed and pest animal management and off-stream watering infrastructure).

This action plan builds on the RWSs by outlining the riparian management outcomes and aspirational targets to be achieved over a five-year period through an accelerated program of riparian management activities.

1.2 The importance of riparian land

Healthy riparian land provides:

- habitat for native flora and fauna, including rare and threatened species
- a connection to other remnant vegetation and a corridor for movement of native animals and plants
- cultural values, especially sites of significance to Traditional Owners
- stability for river bed and banks, minimising erosion
- grazing, shelter and access to water for stock
- a filter for nutrients and sediment from catchment runoff, which improves water quality, especially up-stream of drinking water supplies
- a supply of food for fish and other in-stream organisms from organic matter entering the water
- a supply of large wood, which forms important in-stream habitat for many native fish and invertebrates
- recreational opportunities, such as walking, picnicking, swimming and fishing
- tourism opportunities.

1 In 1991, the Land Conservation Council acknowledged that a cooperative approach was needed for protecting riparian land (LCC, 1991). More recently, the *Victorian River Health Strategy* (NRE, 2002) highlighted the importance of riparian land protection and the *State of the Environment* report (CES 2008) highlighted the importance of more ambitious riparian improvement targets and improved connectivity of riparian land.

2 DSE 2011

3 See section 3.4 for an explanation of 'Crown frontage'

4 FVTOW, 2014

5 FVTOW, 2014

6 DEPI, 2013a

Riparian land across Victoria is subject to many threats including:

UNCONTROLLED STOCK ACCESS



WEEDS



EROSION



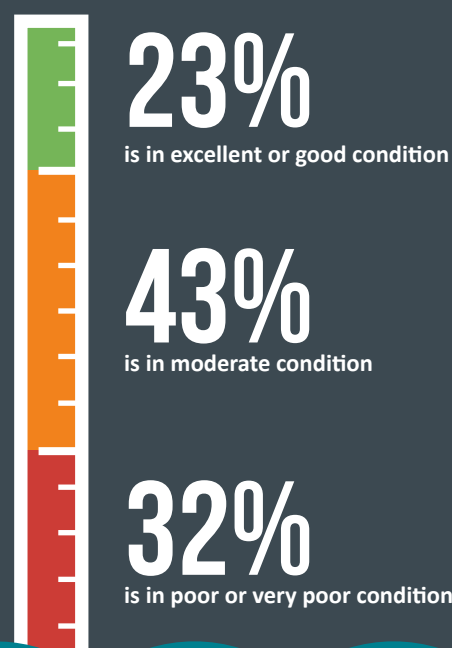
RECREATIONAL PRESSURE



URBANISATION



Currently, of riparian land in Victoria:



Riparian land across Victoria is subject to many threats, including uncontrolled stock access, weeds, erosion, lack of or degraded riparian vegetation due to past land clearing, recreational pressure and urbanisation.

Currently, 23 per cent of riparian land in Victoria is in excellent or good condition, 43 per cent in moderate condition and 32 per cent in poor or very poor condition (2 per cent of stream length had insufficient data to allow its condition to be determined)⁷. Figure 1 summarises the values, threats and management actions for riparian land. The current threats and condition data show that more work is required to accelerate the improvement of riparian land across the state.

The current threats and condition data highlight that more work is required to accelerate the improvement of riparian land across the state.

Climate change

Recent climate change projections indicate higher temperatures and reduced rainfall in south-eastern Australia⁸. This will impact waterways through reduced flows and higher water temperatures. Maintaining or improving the condition of riparian land will help mitigate some of these impacts by regulating in-stream temperatures by shading waterways. Improved riparian land also provides habitat and enhanced connectivity for plants and animals seeking more suitable environments due to climate change impacts. Efforts focused on improving the condition of riparian land are therefore a practical response to climate change.

Working in partnership with landholders

Over the past 15 years, CMAs and government have worked in voluntary partnership with landholders to undertake riparian management activities, typically through management agreements. Management activities include fencing, revegetation, maintenance or improvement of existing indigenous vegetation, controlled grazing, provision of off-stream stock watering infrastructure and weed and pest

animal management. These activities benefit landholders and the broader community through improved water quality (with significant benefits to public health due to improved drinking-water quality), better stock management and improved waterway condition.

Riparian management and waterway health

To improve overall waterway health, riparian management needs to be undertaken together with other management activities including environmental water management, in-stream habitat restoration, erosion control and river channel works. These other management activities are included in each Regional Waterway Strategy; this action plan focuses on riparian land as a critical component of the overall health of waterways.

1.3 How this action plan was developed

The development of the action plan has been guided by an Advisory Committee with representatives of Environment Victoria, Victorian National Parks Association, Victorian Farmers Federation, Landcare, catchment management authorities and the Department of Environment, Land, Water and Planning (DELWP).

Regional riparian management outcomes and aspirational targets presented in this action plan have been provided by CMAs and reflect priorities in each of the RWSs developed in 2013-14.

1.4 Riparian management outcomes – a statewide summary

The action plan sets out the priority waterways for riparian management activities in each region over the five-year period from 2015-16 to 2019-20 (Refer to Chapter 2). Table 1 details the statewide riparian management outcomes and aspirational targets expected over this period.

DELWP will also report against measures of engagement and involvement of Traditional Owners and other Aboriginal people in waterway and riparian management. These measures will be developed during the first year of the plan (see Section 4).

Table 1 Riparian management outcome measures and aspirational targets 2015-16 to 2019-20

Riparian management outcome measures	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	2,490 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	28,190 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	1,810

Length of riparian land where works have been undertaken



2,490 KM

Area of waterway vegetation works undertaken



28,190 HA

Number of landholders who have worked with the CMA to undertake riparian works



1,810

⁷ DEPI, 2013b

⁸ CSIRO & BoM, 2015

2 REGIONAL ACTIONS

Each of the 10 Victorian catchment management regions has a catchment management authority (CMA) to coordinate integrated management of land, water and biodiversity.

CMAs have specific responsibilities for waterway management (under the *Water Act 1989*), except in the Port Phillip and Westernport region where Melbourne Water has the waterway management responsibilities. The Victorian Government provides funding to the nine regional CMAs for waterway management. In the Port Phillip and Westernport region, a waterways and drainage charge is collected by metropolitan retail water corporations on behalf of Melbourne Water and used to fund their waterway management and drainage activities. This action plan focuses on the nine regional CMAs.

Victoria is home to diverse landscapes, species and communities across the 10 catchment management regions of Victoria. For example, more than 80 per cent of the East Gippsland catchment management region is public land and many waterways are in excellent or good condition. This is quite different to the North Central region, which has about 13 per cent public land and many waterways in moderate to poor condition as a result of large-scale historic land clearing. The people and communities in each catchment management region have diverse perspectives and values regarding the environment. This diversity requires tailored approaches for delivering environmental programs and is reflected in each CMA's regional summary in this chapter.

“Victoria is home to diverse landscapes, species and communities across the 10 catchment management regions of Victoria”

Regional Waterway Strategies

The CMAs' regional Waterway Strategies were developed in partnership with regional communities, regional agencies, authorities and boards involved in natural resource management, Traditional Owners and other key stakeholders. The RWSs provide a single planning document for waterway management in each region, identify priority waterways and outline a regional work program to guide investment over an eight-year period.

The priority waterways and management activities were determined using a consistent and transparent regional priority-setting process, taking into account the environmental, social, cultural and economic values of waterways.

The priorities in this action plan have been guided by the RWSs. The following sections provide a summary of the key community engagement and partnership approaches used by each CMA for riparian management, a case study of a key project (or projects) to be implemented, and the priorities for action over the life of the plan.

Figure 2 Victorian catchment management regions





Gellibrand River nearly ten years after riparian works. Photos courtesy of Corangamite CMA.

The Corangamite region includes



175 KM
of coastline

with a population of more than



370,000

which is expected to grow
to 500,000 by 2026.

2.1 Corangamite

The Corangamite region of south-western Victoria includes 175 kilometres of coastline and encompasses the Barwon, Lake Corangamite, Otway Coast and Moorabool river basins. These river basins have significant environmental value, providing habitat for native fish, invertebrates and water birds and migratory waders.

The region contains two Ramsar wetland sites, recognised for their international significance, as well as numerous priority rivers, wetlands and estuaries identified in the Corangamite Waterway Strategy. The region's waterways, such as the Barwon River through Geelong and the estuaries along the Great Ocean Road, have strong cultural and historic significance and are a focal point for recreation and tourism.



Left: Barwon River at Ceres, near Geelong. Top right: Primary school students working with the CMA planting trees on Dean Creek, Lake Colac catchment. Bottom right: The Geelong Landcare Network on the Moorabool River, just north of Geelong.

Community engagement and partnerships in the Corangamite region

The Corangamite region has a population of more than 370,000, which is expected to grow to 500,000 by 2026. Some 78 per cent of region is private land, reinforcing the importance of engaging the community in natural resource management.

The region has a strong history of community-based natural resource management, particularly through the Landcare movement and programs such as Waterwatch and the more recently established EstuaryWatch. Volunteers undertake activities such as engaging landholders and community members in undertaking onground works, monitoring and sharing knowledge.

Onground riparian works will continue to be delivered in partnership with the region's Landcare networks as well as being promoted more broadly to the region's landholders and other community members and community-based groups. This approach will continue to target works on priority waterways under the Corangamite Waterway Strategy, and projects will continue to be awarded on a value for money basis.

The majority of the region's onground waterway works are delivered through two major programs — Managing Our Great Ocean Road Estuaries and Securing the Health of the Barwon. Barwon Water provides financial support through the CMA for onground works that contribute to water quality outcomes within the corporation's managed water supply catchments.

“The Corangamite region has a strong history of community-based natural resource management.”

Managing Our Great Ocean Road Estuaries



The Managing Our Great Ocean Road Estuaries project targets community engagement, capacity building and the delivery of onground works for priority rivers and estuaries, predominantly along the Great Ocean Road. The project is delivered in partnership with three Landcare Networks — Southern Otway, Heytesbury District, and Surf Coast and Inland Plains.

These networks promote the project to members, support capacity building and coordinate delivery of onground works, especially fencing and revegetation. The Corangamite CMA provides these services in areas not covered by a Landcare network (such as sections of the Gellibrand River) and coordinates large-scale engineering works (rock chutes, removal of fish barriers) and willow removal.

The CMA also coordinates the delivery of the Corangamite EstuaryWatch and Waterwatch programs, which work with community groups and individuals to share knowledge about aquatic ecosystems as well as monitor the state and condition of these assets.

Ongoing works to be undertaken as part of this project over the five-year period of the action plan are anticipated to be the removal of about 30 ha of woody weeds, the establishment of 80 to 90 km of fencing, and revegetation of 110 to 120 ha of riparian land on priority waterways. These works will occur in partnership with about 100 regional landholders. Technical assistance and financial incentives will be provided. Project proposals will be contracted based on best value for money. Some of the waterways to be targeted over the five-year period include the Curdies, Gellibrand, Aire and Barham rivers as well as the Thompson and Hovells creeks.



Lower Curdies River before (2006) and after (2014) revegetation.



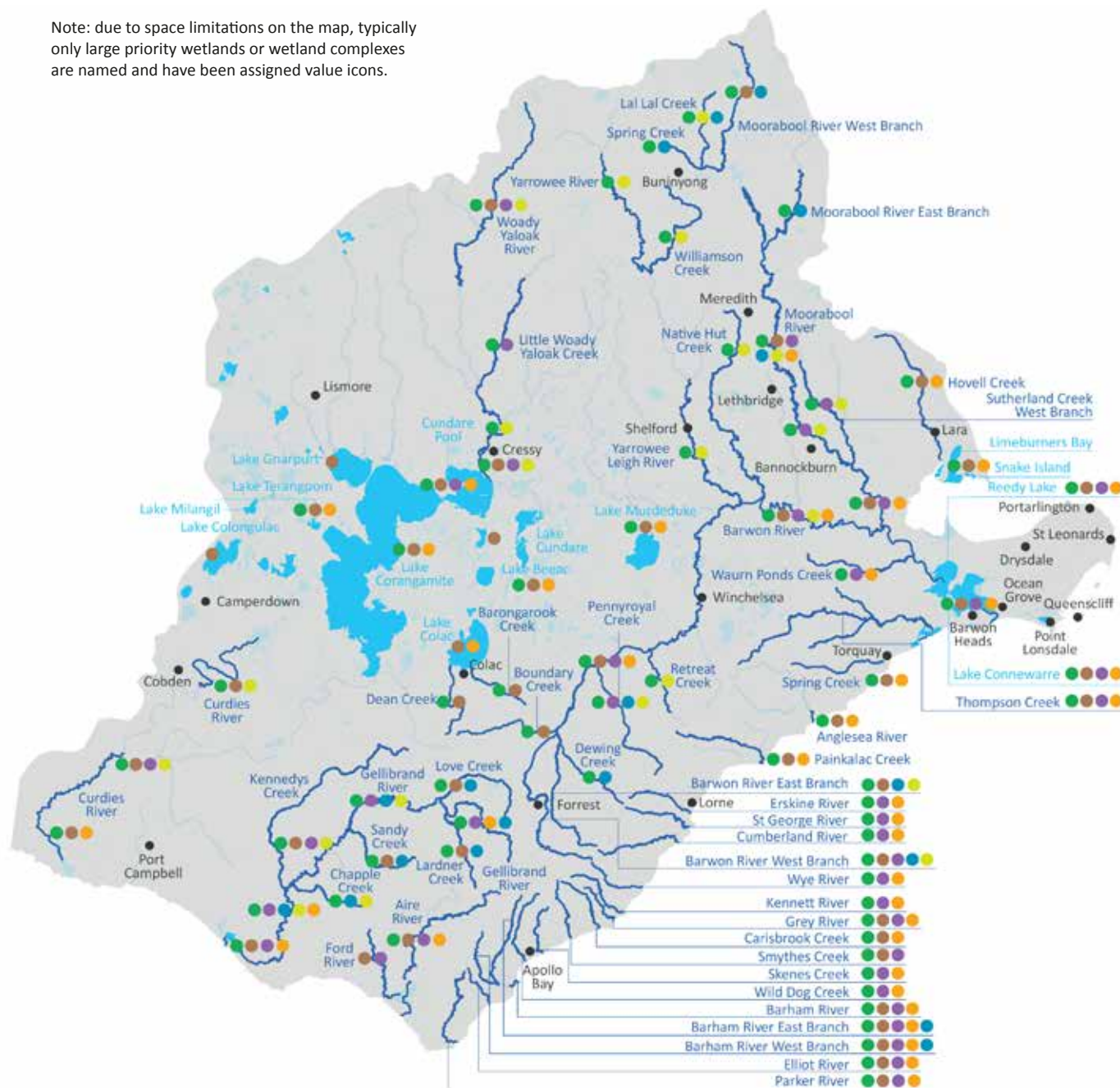
Princetown Landcare Group is involved in the CMA's EstuaryWatch program. Photos courtesy of Corangamite CMA.

Corangamite riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the Corangamite Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 3 Corangamite priority waterways for riparian management

Note: due to space limitations on the map, typically only large priority wetlands or wetland complexes are named and have been assigned value icons.



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

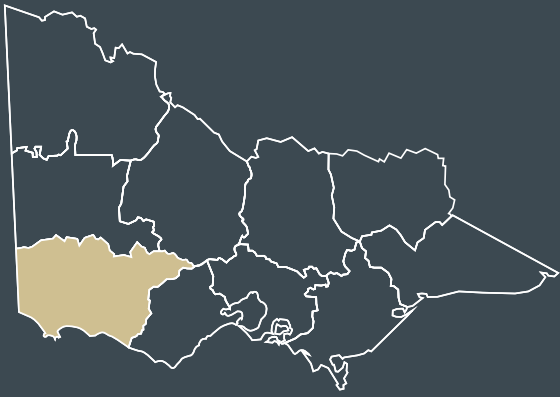
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 2 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	270 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	530 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	200



The Glenelg River estuary is

1 OF 18 heritage rivers
in Victoria



Wannon River. Photos courtesy of Glenelg Hopkins CMA.

2.2 Glenelg Hopkins

The Glenelg Hopkins region encompasses the Hopkins, Glenelg and Portland river basins and includes a small section of the Millicent Coast Basin. The region contains a number of natural waterway features that are of state, national and international significance.

The Budj Bim National Heritage Landscape is culturally significant for the Gunditjmara people and is going through the process for world heritage listing. The Glenelg River estuary is one of 18 heritage rivers in Victoria. The river is considered the 'spine' of the Habitat 141 national wildlife corridor as it enables connectivity throughout the landscape. It is one of many priority waterways described in the Glenelg Hopkins Waterway Strategy that underpin key social, economic, environmental and cultural values within south-west Victoria.



Left: A landholder and CMA staff member at a fenced riparian site on the Glenelg River. Top right: Newly revegetated riparian land on a Glenelg River tributary. Bottom right: Revegetated tributary of the Wannon River 13 years after planting.

Community engagement and partnerships in the Glenelg Hopkins region

Waterways in the Glenelg Hopkins region have benefited from strong community involvement in waterway management. Community members from a variety of industry, recreational, Traditional Owner and environment groups make a valuable contribution to waterway management in the region by volunteering their time, local knowledge and expertise.

Since 2002, the Gunditjmara community and the Glenelg Hopkins CMA have collaborated on more than 15 natural and cultural resource management projects. In 2015, the Gunditj Mirring Traditional Owners Aboriginal Corporation and the CMA developed a formal partnership, which articulates each organisation's role, describes how they will work together and identifies goals of the partnership and measures of success. It includes collaborating on the planning of riparian projects through the Glenelg Hopkins Advisory Group, particularly when waterway action plans are developed.

The Fiery Creek Project is an example of a coordinated cross-tenure delivery approach which involves landholders, DELWP (Good Neighbour Program) and local government (Pyrenees Shire) in riparian fencing and weed management on private land, Crown land and roadsides. The project supports priorities of the Beyond Bolac Community Action Group and Upper Hopkins Landcare Group.

The CMA develops a waterway action plan when it begins work in a particular catchment or river reach. It is an effective engagement and delivery approach to target all landholders within a priority waterway area. In 2013, the CMA won the Australian Riverprize for excellence for its long-term Glenelg River Restoration Project that uses this approach. The project has engaged more than 650 landholders and fenced over 1600 km of the Glenelg River and its tributaries.

“Waterways in the Glenelg Hopkins region have benefited from strong community involvement in waterway management.”

Budj Bim Restoration project



Top: Budj Bim rangers at work at Tyrendarra Indigenous Protected Area. Bottom: Fitzroy River estuary. Photos courtesy of Glenelg Hopkins CMA.

The Budj Bim National Heritage Landscape is a section of volcanic plain that encompasses the area from Mt Eccles to the sea. The basalt lava flow created a series of wetlands and rivers including Lake Condah, Darlots Creek and Fitzroy River and estuary. In 2010, Lake Condah was restored and the Gunditj Mirring Traditional Owners are now focussing on protecting and restoring other waterways in the landscape.

The landscape is rich in Gunditjmara cultural heritage places, including stone huts and engineered wetlands and channels used to hold and harvest eels. This site contains the oldest known record of aquaculture in the world. The area also supports many rare and threatened aquatic fauna including grayling, Yarra pygmy perch, dwarf galaxias, Australasian bitterns, growling grass frogs and Glenelg spiny crays.

The Glenelg Hopkins CMA is supporting the Gunditjmara community to improve the health of Country. Projects have included developing a land management toolkit based on Indigenous ecological knowledge, running ‘Yarns on Farms’ and

providing training opportunities and grants for onground works. This partnership has enabled the Gunditjmara people to share traditional land management practices with landholders in the region.

The project implements priorities of the Gunditj Mirring Traditional Owners Aboriginal Corporation and Windamara Aboriginal Corporation by working with Budj Bim rangers in restoration works along Darlots Creek and the Fitzroy River and estuary. The rangers are working to incorporate Indigenous ecological knowledge into land management on Gunditjmara owned and managed properties. In recent years, the CMA has been working with the rangers to share knowledge and support the development of the rangers’ skills in fire management, pest plant control, revegetation, fencing and wildlife monitoring. This project will build on these skills to restore waterways in the Budj Bim Landscape, strengthen the partnership with the CMA and provide employment opportunities for the Budj Bim rangers.

Glenelg Hopkins riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the Glenelg Hopkins Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 4 Glenelg Hopkins priority waterways for riparian management

Note: due to space limitations on the map, typically only large priority wetlands or wetland complexes are named and have been assigned value icons.



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

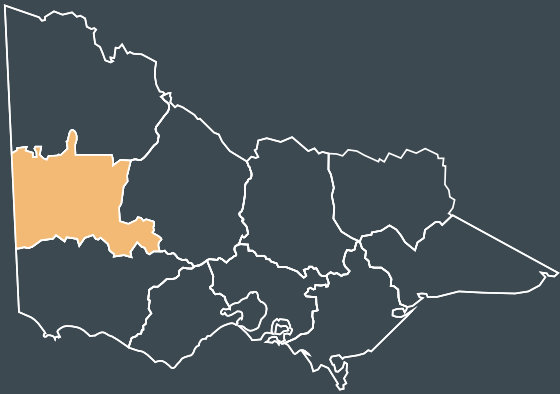
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 3 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	760 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	1260 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	320



Wimmera River at Greens Creek near Stawell. Photo courtesy of Wimmera CMA.

The Wimmera contains



25%

of Victoria's wetlands.



84%

of the region is private land.

2.3 Wimmera

The Wimmera region includes the Wimmera River basin, which is part of the Murray-Darling Basin, and the eastern part of the Millicent Coast Basin. Eighty-four per cent of the region is private land. The Wimmera River is the largest Victorian river that does not flow to the sea, but instead flows into a series of terminal lakes: Lake Hindmarsh and Lake Albacutya. The latter is listed as a wetland of international importance under the Ramsar convention. The lower Wimmera River, from north-west of Horsham, through to the Wirrengren Plain in the Mallee (including the terminal lakes and Outlet Creek) is listed as a heritage river.

The Wimmera also contains 25 per cent of Victoria's wetlands, which are predominantly in the south-west of the region.

There remains a strong link between the region's Traditional Owners and their waterways. This was reinforced by a successful Native Title claim by the Wotjobaluk people in 2005 - the first positive determination of Native Title in south-eastern Australia – which includes parts of the Wimmera River. The relationship between Traditional Owners and waterways is demonstrated by the creation stories about the formation and importance of the Wimmera River and other waterways in the region.

In a highly modified landscape dominated by agriculture, these waterways and riparian areas are the lifeblood of the region. They provide vital habitat to threatened species and supply water to the whole community as well as a wealth of recreational opportunities such as fishing, rowing, water skiing, camping and bushwalking.



Left: Farmers and local contractors working with the CMA on riparian management. Right: Riparian fencing in the Upper Wimmera catchment. Photographer: David Fletcher.

Community engagement and partnerships in the Wimmera region

The Wimmera CMA's enhanced engagement framework ensures landholders, resource managers, partners and the local community are engaged and supported to undertake appropriate land management practices that protect and enhance the region's natural assets, including riparian areas.

Social media is an important tool used by the CMA to engage with the community to improve knowledge of the benefits of good riparian management.

Wotjobaluk engagement and collaboration in many aspects of the management of the Wimmera River are governed by a cooperative management agreement which forms part of their Native Title determination.

An example of local community engagement relates to concerns held by Moyston residents and CFA members that riparian revegetation projects close to town could affect local fire management objectives. The CMA facilitated meetings and workshops so stakeholders could understand the issues and work towards developing mutually beneficial solutions. With the support of the CFA and local Landcare, the CMA has developed and implemented protocols for planning revegetation practices in identified fire-risk areas. The protocols ensure relevant parties are communicating with each other and implementing practices that can improve the management of riparian areas while ensuring local fire management objectives are not compromised.

“In a highly modified landscape dominated by agriculture, the Wimmera’s waterways and riparian areas are the lifeblood of the region.”

Enhancing priority reaches in the Wimmera River system by improving management of riparian areas



The Wimmera contains more than 1,300 kilometres of rivers and streams that are highly valued for their social and economic benefits. They supply water for towns, farms and businesses as well as a wealth of recreational opportunities.

The riparian protection and enhancement project will work with the community and land managers to improve the management of riparian areas on their properties. Community workshops and field days will improve the community’s knowledge of the importance of riparian areas and build their capacity to undertake appropriate land management actions. This, coupled with media campaigns — including social media — will also encourage landholders to participate in incentive programs designed to protect and enhance riparian areas.

The project will work in priority areas identified in the Wimmera Waterway Strategy and Wimmera Regional Catchment Strategy. The project will provide financial and technical support to willing landholders and active community groups and members to assist them to protect and enhance riparian areas to:

- stabilise waterway and gully erosion
- prevent productive soils from moving off paddocks into waterways
- minimise stock damage to waterways
- re-establish and protect vegetation and habitat
- prevent the impact of pest plant and animals.



Before and after riparian works on a tributary of the Wimmera River. Photos courtesy of Wimmera CMA.

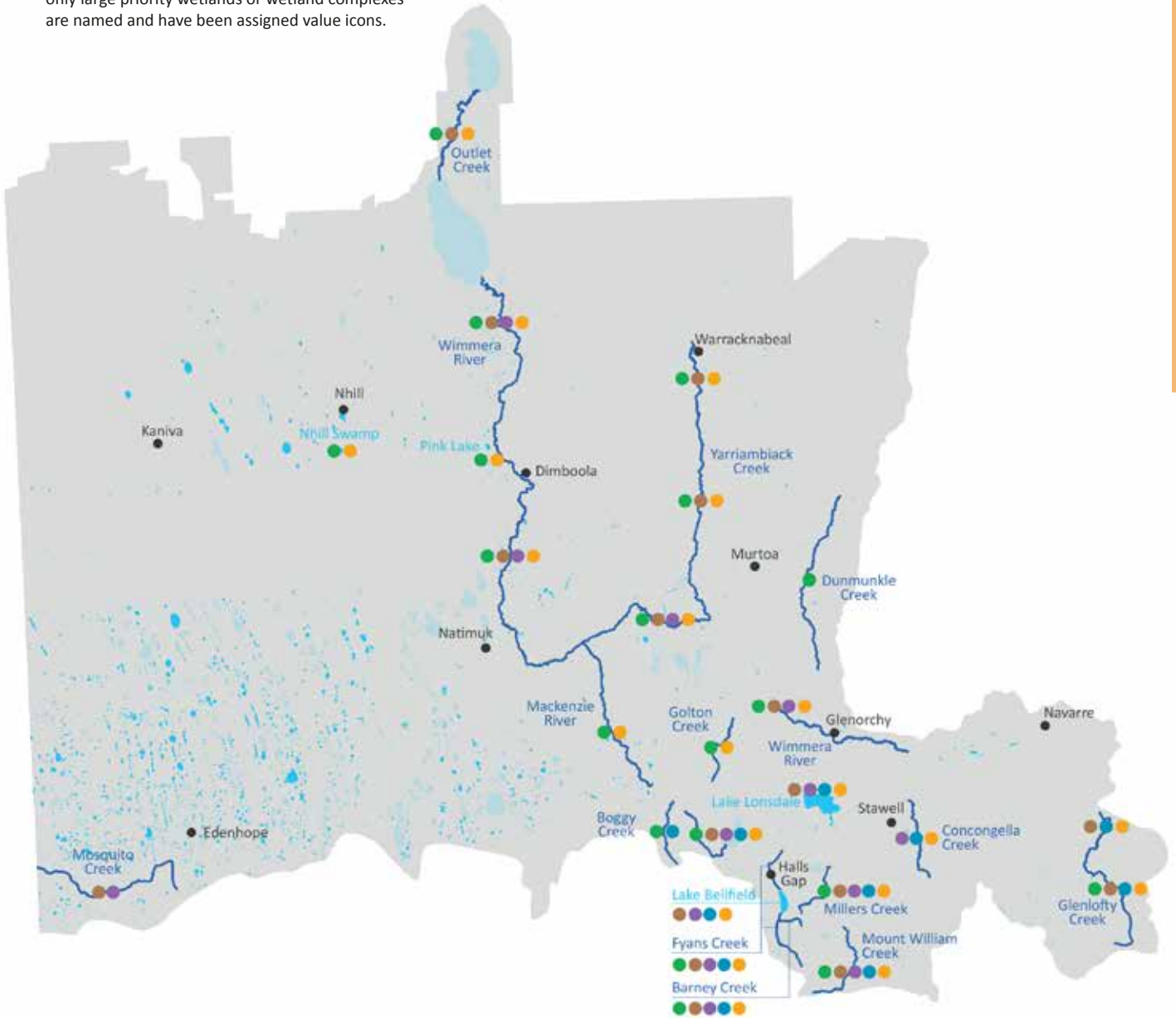
The delivery of aspects of many new riparian projects on the Wimmera River is likely to be by the Barengi Gadjin Land Council (BGLC). In particular, the BGLC work crews may deliver onground pest plant and animal management works in priority areas, including areas where BGLC has their cooperative management agreement in place with Parks Victoria.

Wimmera riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the Wimmera Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 5 Wimmera priority waterways for riparian management

Note: due to space limitations on the map, typically only large priority wetlands or wetland complexes are named and have been assigned value icons.



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

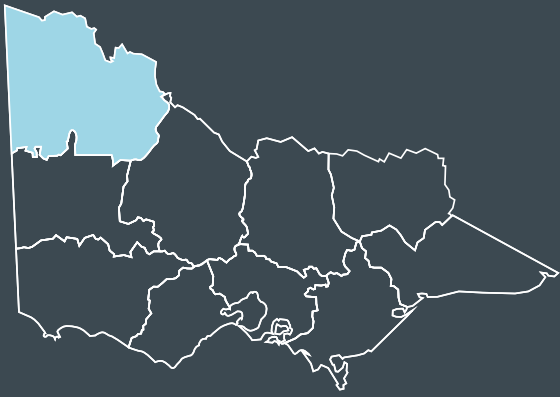
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 4 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	170 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	7,600 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	180



The mallee region includes more than



730 KM
of Murray River frontage



and is home to numerous
threatened plants and
animals including Murray
cod and regent parrots



*Murray River at the junction of Mullaroo Creek, Lindsay Island, far north west Victoria.
Photos courtesy of Mallee CMA.*

2.4 Mallee

The Mallee CMA region includes more than 730 kilometres of Murray River frontage and about 555 kilometres of Murray River anabranches and tributaries.

The region is home to the internationally recognised, Ramsar-listed Hattah Lakes, one of the six icon sites identified for restoration under the Living Murray program. The Victorian component of the Chowilla Floodplain – Lindsay Wallpolla Islands Icon Site also lies within the region.

The waterways and riparian areas of the region are home to numerous threatened plants and animals including Murray cod, regent parrots, growling grass frog and Murray hardyhead. The rivers, creeks, lakes, wetlands and surrounding riparian land are defining features of the landscape and are fundamental to the region's environmental, social, cultural and economic future.



Top: Fishing is an important recreational activity on the Murray River. Bottom: Lower Murray Water and the CMA in partnership revegetating 'Pump Hill' on the Murray River, near Merbein.

Community engagement and partnerships in the Mallee region

Communities across the Mallee region are at the heart of the current and future management of natural, productive and cultural landscapes. Effective and meaningful community engagement underpins the successful delivery of the Mallee Regional Catchment Strategy. This is supported through the high value placed on community engagement within the Mallee Waterway Strategy and the strong focus on working closely with the community on project delivery. The Mallee CMA recognises the value of formal engagement – through structures such as community advisory committees – and informal engagement opportunities (e.g. one-on-one discussions). These approaches maximise opportunities for working with the community and achieving community-driven outcomes in every planning stage of natural resource management. The CMA's approach to community engagement and partnerships involves:

- Using multiple levels of engagement to directly engage community members, Landcare and local friends of groups to ensure local knowledge and advice is incorporated into the planning and delivery of natural resource management projects.
- Working directly with Aboriginal stakeholders in the planning and delivery of environmental watering and other natural resource management projects through activities such as one-on-one and small group discussions, on Country visits and through the CMA's Aboriginal Reference Group. For example, Aboriginal stakeholders worked together to develop long-term goals for the management of Murray River riparian and floodplain landscapes.

- Partnering with agencies such as DELWP, Parks Victoria and the Commonwealth and Victorian Environmental Water Holders to plan and deliver priority watering actions to improve critically-important wetlands and riparian habitat for the protection of threatened species. For example, all agencies have worked together to facilitate inundation of riparian vegetation at Nyah Vinifera Park to support swamp wallabies that inhabit the riparian landscape.

“The Mallee CMA recognises the value of formal engagement – through structures such as community advisory committees – and informal engagement opportunities.”

Growing Merbein Common



Friends of Merbein Common sampling macroinvertebrates at Merbein Common. Photos courtesy of Mallee CMA.

Merbein Common is a Murray River floodplain system with a diversity of rivers and wetlands fringed by important riparian habitat. It is rich in biodiversity, supporting 14 listed species that need riparian habitat that is in good condition.

The Common is treasured by the local community for its natural values and recreational opportunities. The Friends of Merbein Common is an active community group, helping sustain the health of Merbein Common through small onground works projects, and helping plan and implement programs that aim to raise awareness of the Common within the community.

The group has been involved in riparian management activities, including the removal of rubbish and weeds, installation of walking tracks and a viewing platform and monthly collection of environmental condition data. This data led to bollards being installed to protect a significant stand of riparian vegetation from vehicle disturbance.

In addition, the Mallee CMA and agency partners have delivered riparian management activities over 10 years. The works have protected remnant riparian vegetation and facilitated revegetation through the construction of fences, installation of bollards, track rationalisation, and pest plant and animal control. Recreational values have been improved through the establishment of camping sites, informative signs and walking tracks.

The Merbein community - including the Friends of Merbein Common, Merbein Rotary Club, Yelta Landcare Group, Merbein Lions Club, Merbein Development Association, Merbein Historical Association and Parks Victoria - were involved in identifying long-term management goals and activities to improve the Common's environmental and recreational values.

This process identified that the Common's rivers, wetlands and riparian habitats would benefit from environmental



Mallee CMA engaging landholders at Brickworks and Cowanna Billabong.

water management works to facilitate reinstatement of an appropriate water regime. The watering will improve the riparian habitat as it promotes recruitment of under- and over-storey vegetation and improves habitat quality and diversity for native fauna. Stage one of the works is complete and the Victorian and Commonwealth Environmental Water Holders have supplied environmental water, contributing to improved riparian health.

The process also identified that wider benefits to the riparian habitat will be realised by enhancing riparian management activities. This will protect newly emerged riparian vegetation from disturbance by vehicles, campers and pest plant and animals.

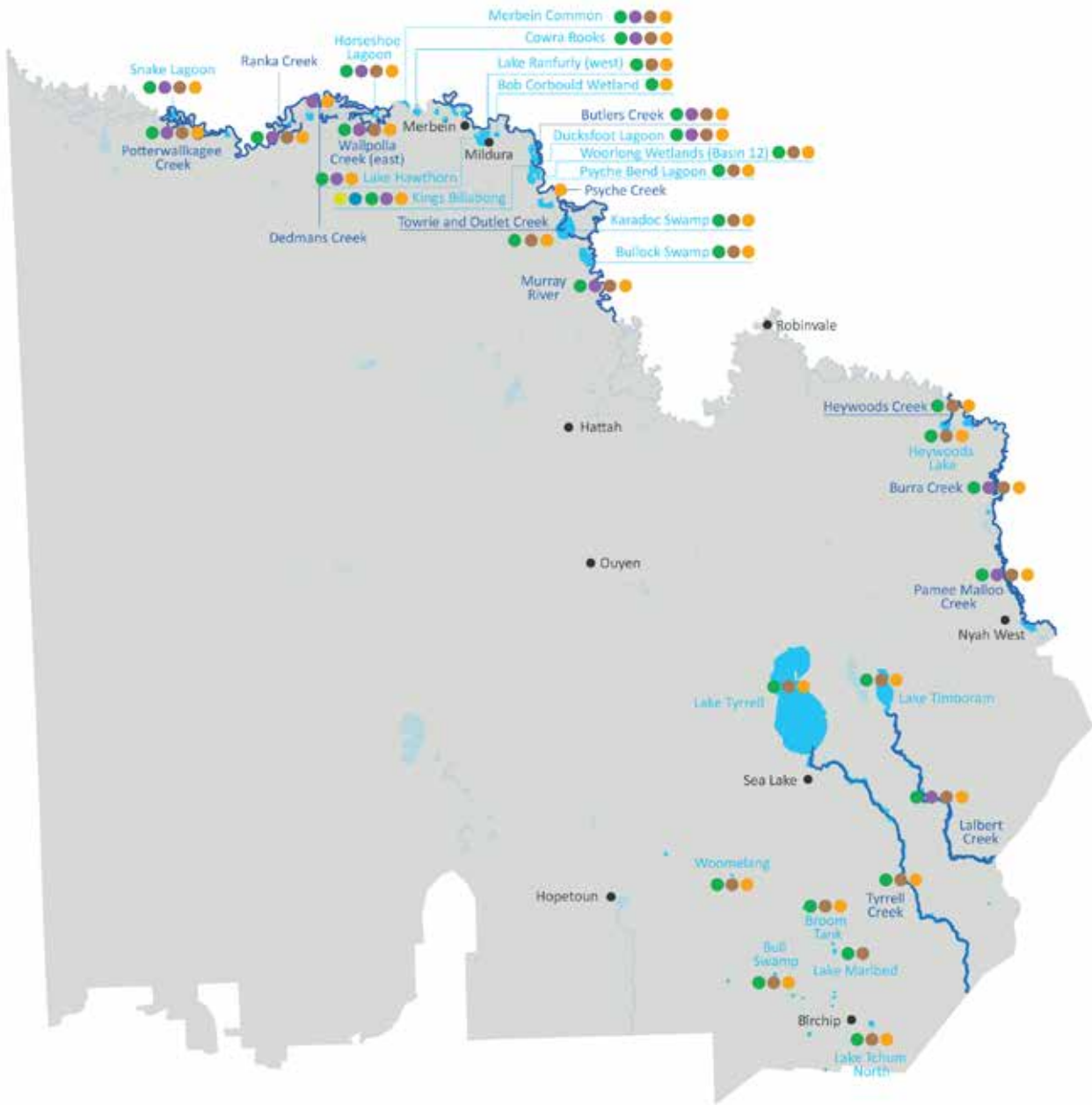
The project will install 4 km of fencing, revegetate one hectare and control over 250 ha of weeds and 460 ha of pest animals. The CMA will engage with the community in planning and implementing the activities.

Mallee riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the Mallee Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 6 Mallee priority waterways for riparian management

Note: Due to space limitations on the map, not all priority wetlands are shown.



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

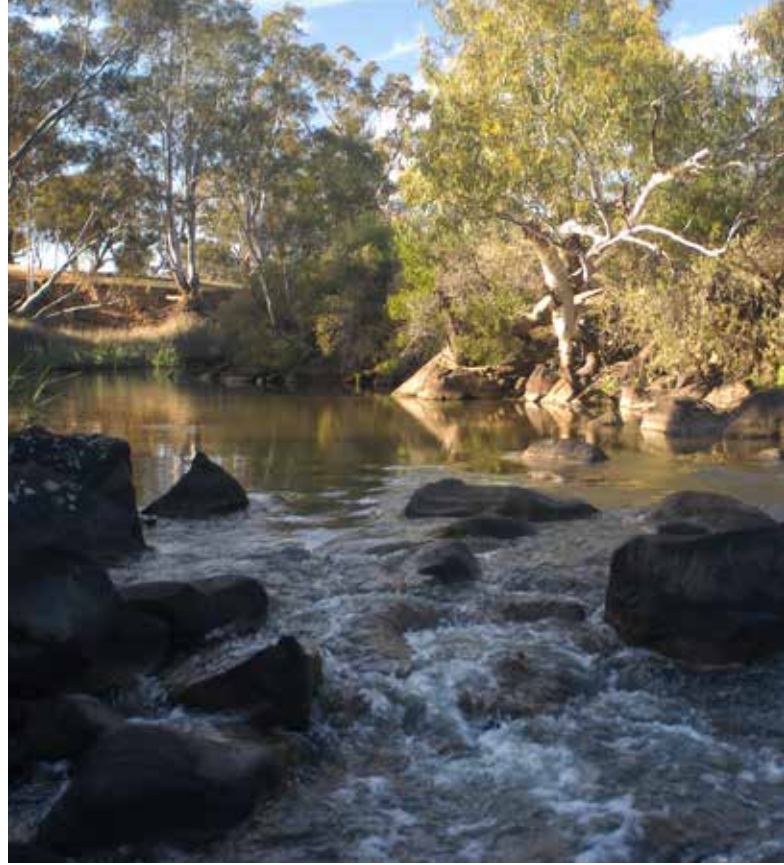
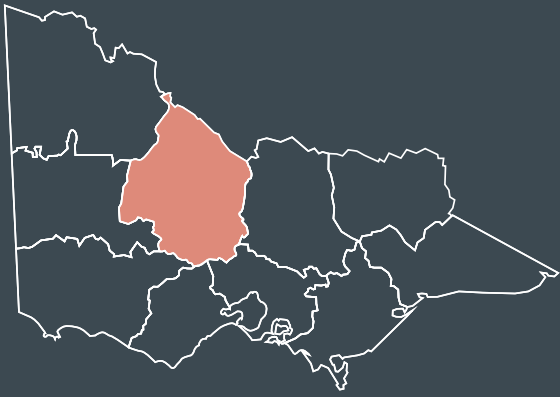
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 5 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	170 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	11,450 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	90



Loddon River near Newbridge. Photographer: Stephen Malone.

The North Central region includes



TWO internationally significant wetland complexes



and is home to many threatened species, such as the Murray cod, Murray hardyhead and Australasian bittern

2.5 North Central

The North Central region is part of the Murray-Darling Basin and contains the Campaspe, Loddon, Avoca and Avon-Richardson river basins. The waterways of north central Victoria are remarkable natural assets and include two internationally significant wetland complexes – Gunbower Forest and the Kerang Wetlands Ramsar sites. They are home to many rare and threatened species, such as the Murray cod, Murray hardyhead and Australasian bittern. The region’s waterways provide important recreational opportunities including fishing, swimming, camping, boating and bushwalking.



Top: Reedy Lagoon, Gunbower Creek. Bottom: Caring for the Campaspe Reference Group inspecting riparian works undertaken by Dja Dja Wurrung Enterprises, Campaspe River, Redesdale. Photos courtesy of North Central CMA.

Community engagement and partnerships in the North Central region

Effective community engagement, and growing and strengthening partnerships, are critical for delivery of key priorities outlined in the North Central Waterway Strategy. Community engagement and partnership activities undertaken in the North Central region include:

- The Dja Dja Wurrung Traditional Owners reached a landmark recognition and settlement agreement with the Victorian Government in 2013 - through the *Traditional Owner Settlement Act 2010* - covering 260,000 hectares of Crown land. Dja Dja Wurrung has now produced its first Country Plan (Dhelkunya Dja). Many of Dja Dja Wurrung's aspirations and goals identified in the Country Plan align closely with the objectives and vision within the North Central CMA's Regional Catchment Strategy. The Dja Dja Wurrung's Recognition and Settlement Area covers much high value riparian land including those of the Loddon and Campaspe systems. The CMA will be working in partnership with Dja Dja Wurrung to plan, develop and deliver projects that meet both Dja Dja Wurrung's and the CMA's aspirations for natural resource management in the region.
- The CMA is working with the Barapa Barapa Traditional Owners to gather and document rigorous and defensible knowledge of Aboriginal uses and values of stream and wetlands within Gunbower Forest. The information collected through the project will enable the development of a set of principles and a framework to guide the cultural flow objectives for Gunbower Forest.
- The CMA's Caring for the Campaspe project supports the river-related aspirations of the eight Landcare groups along its length. Collaboration between the CMA and the Ashbourne Landcare Group secured \$58,000 over

two years through a Communities for Nature grant. The grant involved two community planting events, providing just over seven kilometres of fencing materials and 13,800 plants to 23 landholders along the river from the Wombat State Forest headwaters to the Tylden-Woodend Road. The Caring for the Campaspe project contributed the fencing, revegetation and weed control contractors to complement the materials provided by the grants.

- The CMA continues to work closely with the region's water corporations. It signed a Memorandum of Understanding with Coliban Water to work collaboratively in an effort to provide an integrated approach to catchment management in drinking water catchment areas. The initial focus is to improve riparian land management leading to improved water quality in the Upper Coliban in conjunction with the community.
- A regional survey by Charles Sturt University on behalf of the CMA gathered data about landholders' views on natural resource management including rivers and wetlands. This information will help the CMA and partners understand landholder perspectives, tailor engagement and measure change in landholder views over time.

“The waterways of north central Victoria are remarkable natural assets and include two internationally significant wetlands.”

Caring for the Campaspe



The North Central CMA worked in partnership with dairy cooperative Murray Goulburn to fence and revegetate several kilometres on the Campaspe River near Rochester. Photographer: David Kleinert

The Campaspe River extends more than 220 kilometres from the Great Dividing Range near Ashbourne to Echuca on the Murray River. The river contains many threatened plants and animals, and is highly valued for the social and economic benefits it provides to adjacent landholders, towns and surrounding communities. Lake Eppalock, located midway along the river, provides domestic and irrigation water for north central Victoria and is a popular tourist destination.

The Campaspe provides a source of food and shelter for both terrestrial and aquatic fauna, including Murray cod, platypus and threatened terrestrial species such as swift parrots and squirrel gliders.

The Caring for the Campaspe project, established in 2012, works with the community to improve the riparian land of the Campaspe River. The project is guided by a project reference group and offers incentives on both public and private land for fencing, woody weed and willow control, off-stream watering and revegetation. Works completed up to 2014 include 24 km of fencing, 29 ha of revegetation, 23 ha of willow control, 82 ha of woody weed control and two off-stream watering systems. In total, 142 ha of riparian land along the river has been maintained and improved to 2014.

A strong and active community engagement program has produced a number of events and publications that have been well-received with the project actively promoted in all forms of media to a broad cross-section of the community. As a direct result of the project, the Waterwatch River Detectives program expanded from two to eight schools along the Campaspe River. They actively collect and share water quality and habitat monitoring data with the CMA and between schools.



A community workshop on the Campaspe River at Elmore, April 2015. Photo courtesy of North Central CMA

Active partnerships have been fostered with the three Traditional Owner groups along the river (Dja Dja Wurrung, Taungurung and Yorta Yorta), including delivery of onground works and communication events and materials. The Dja Dja Wurrung's Recognition and Settlement Agreement covers the length of the river from Kyneton to Rochester.

Several Landcare groups have also received grants to undertake riparian works along the river.

North Central riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the North Central Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

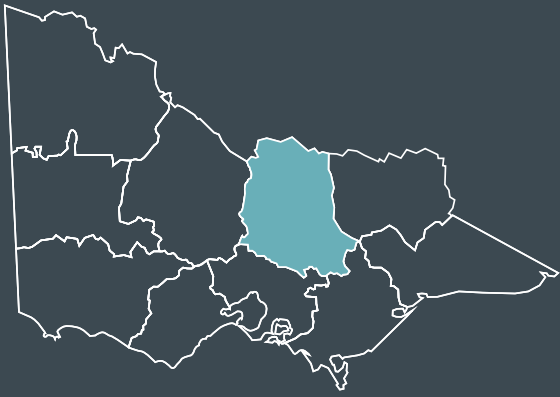
Figure 7 North Central priority waterways for riparian management



- Priorities**
- Wetland priorities
 - River and creek priorities
- Environmental values**
- Native vegetation
 - Native fauna
 - Native fish
- Economic values**
- Town water supply
 - Irrigation supply
- Social values**
- Recreation

Table 6 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	470 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	850 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	310



The Goulburn Broken region is home to diverse landscapes and includes



SNOW-COVERED ALPS



FORESTS



GRANITIC OUTCROPS



RED GUM FLOOD PLAINS



GENTLE SLOPING PLAINS



BOX WOODLANDS



Goulburn River near Acheron. Photos courtesy of Goulburn Broken CMA.

2.6 Goulburn Broken

The Goulburn Broken region extends north from near the outskirts of Melbourne to the Murray River. The catchment boasts a diversity of landscapes, including seasonally snow-covered alps, forests, granitic outcrops, gentle sloping plains, box woodlands and red gum floodplains.

The Goulburn River basin is Victoria's largest, covering 16,000 square kilometres, or just over seven per cent of Victoria. The Goulburn River is 570 kilometres long, flowing from the Great Dividing Range upstream of Woods Point to the Murray River east of Echuca. Stream flow along the Goulburn River has been modified by two major features — Lake Eildon and the Goulburn Weir — that regulate river flow and supply water for irrigation, urban demand and the environment.



Top left: A farmer discussing recently completed riparian work with the CMA, Sugarloaf Creek, Goulburn River catchment. Top right: Revegetation of Hughes Creek, downstream of Avenel. Goulburn River catchment. Bottom: Community planting trees on Wattle Creek, Lurg, near Benalla. Broken River catchment.

Community engagement and partnerships in the Goulburn Broken Region

The 2014-15 Goulburn Broken Community Engagement Strategy and action plan builds on the Goulburn Broken Regional Catchment Strategy and Waterway Strategy and identifies four strategic community engagement priorities:

- ongoing stakeholder analysis
- continuous investigation and development of appropriate community engagement tools and approaches
- inclusion of a community engagement component in all project planning and development
- increased staff capability in community engagement.

The Goulburn Broken CMA has a range of forums that bring partners together to drive integrated catchment management, including riparian management. Examples include:

- The CMA's annual expression of interest process, which has been run since 2002, is used by community and agency groups to submit riparian project ideas in response to regional priorities. About 100 project ideas are received and assessed each year by a panel including technical and community representatives.
- A project involving the CMA, DELWP, the Department of Economic Development, Jobs, Transport and Resources (Fisheries) and anglers is looking at the relationship between riparian vegetation and macroinvertebrates (as a food source for fish).

“The Goulburn River basin is Victoria’s largest, covering 16,000 square kilometres, or just over seven per cent of Victoria.”

Enhancing Strathbogie Ranges Waterways



Turnip Creek, a tributary of the Broken River, Baddaginnie. Before and after riparian works. Photos courtesy of Goulburn Broken CMA.

A key project for the Goulburn Broken region will focus on improving the condition of riparian land along streams flowing from the Strathbogie Ranges. The project will target priority streams in the Goulburn Broken Waterway Strategy, such as the Honeysuckle Creek, Sevens Creek, Merton Creek, Hughes Creek and Brankeet Creek.

The onground works program will be delivered through partnerships with community groups including Landcare and Conservation Management Networks. Some work will be delivered directly by community groups. The program will be delivered using established approaches, and will require further engagement to implement sub-projects, including working with individual landholders.

Engagement with land managers will initially involve traditional methods such as mail outs, advertisements, media campaigns and connections through established networks such as Landcare groups and Conservation Management Networks. Other market-based approaches that have not been used in riparian management in the Goulburn Broken region will also be considered.

Goulburn Broken riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the Goulburn Broken Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 8 Goulburn Broken priority waterways for riparian management



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

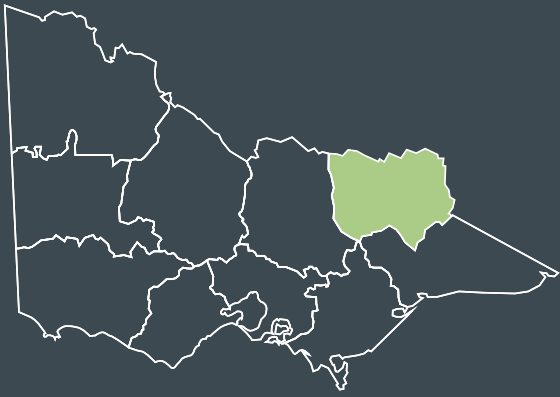
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 7 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	200 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	1,650 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	100



Lower Ovens floodplain billabong, Bundalong. Photos courtesy of North East CMA.

The North East region is bounded by



**THE MURRAY RIVER
IN THE NORTH**



**THE VICTORIAN ALPS
IN THE SOUTH**



**THE NSW BORDER
IN THE EAST**



**THE WARBY RANGES
IN THE WEST**

2.7 North East

The North East region is part of the Murray-Darling Basin and contains the Ovens, Kiewa and Upper Murray and Mitta Mitta river basins. The region is bounded by the Murray River in the north, the Victorian Alps in the south, the NSW border in the east and the Warby Ranges in the west.



Top: Riparian works, Ovens River, Myrtleford. Bottom: The landholder sharing his knowledge on the Lower Ovens floodplain, Boorhaman.

Community engagement and partnerships in the North East region

The North East CMA engages with its community and stakeholders in a way that builds collaboration, partnerships and ownership of the management of shared natural resources. Effective relationships with individuals and communities are vital to the CMA's ability to provide effective support for day-to-day catchment management and especially during emergency events such as floods or fires.

Engaging with communities enables informed decision-making leading to better outcomes. Tapping into and building on existing social capital enables the CMA to get greater value from its time, effort and funding.

The CMA will continue to build on a large range of onground works to provide social, cultural, economic and environmental benefits for north east community. Co-investment in riparian areas along priority waterways will be maximised where possible with local government, landholders and other agencies, such as the Department of Economic Development, Jobs, Transport and Resources (Fisheries), DELWP and urban and rural water corporations, who all have an interest in a healthier catchment.

As a specific example, the CMA is building on the existing capacity of the Mitta Valley community to maintain and adapt their management practices through improving the in-stream and riparian habitat along the Mitta Mitta River to support the population of Murray cod. This collaboration uniquely combines the recreational fishing community with water and land managers to improve the values and uses of the Mitta Mitta River. Those involved in delivery include riparian land managers, Mitta Fishing Club, Eskdale Fishing Club, Arthur Rylah Research Institute, Department of Economic Development, Jobs, Transport and Resources, Towong Shire Council and Murray-Darling Basin Authority.

“North East Victoria faces a number of catchment-wide challenges that cannot be met by any one organisation or person.”

Upper Ovens River



Top: The community planting riparian vegetation along the Upper Ovens River, near Harrietville. Bottom: Erosion control works and associated revegetation on the Upper Ovens River, Harrietville. Photos courtesy of North East CMA.

A key project for the North East region will focus on the upper Ovens River. The project will target one of the priority reaches of the upper Ovens identified in the North East Waterway Strategy and will involve the North East CMA supporting the community and community groups to build on existing efforts to improve the environmental and recreational values of this iconic waterway.

The onground works between Bright and Harrietville will specifically lead to improved riparian condition along about 2½ km of river at Smoko, improving the quality of and linkages between areas of high quality remnant vegetation. Activities to be delivered on the ground to improve the condition will include riparian fencing, revegetation and weed management.

This project builds on the strong partnership between the upper Ovens Valley community – including the Upper Ovens Landcare Group, Harrietville Community Forum, the Alpine Fly Fishers and the Harrietville Angling Club – and the CMA.

For example, the Upper Ovens Landcare Group and the CMA have carried out extensive programs along the upper Ovens in nearby reaches over the past 10 years and this project will be a another major stepping stone along the way of linking up these past work sites. The CMA has also been working closely with the Harrietville Community Forum and the Alpine Fly Fishers (and the Council of Victorian Fly Fishing Clubs) on several recreational fishing initiatives to improve the health and resilience of recreational fishing in the upper Ovens.

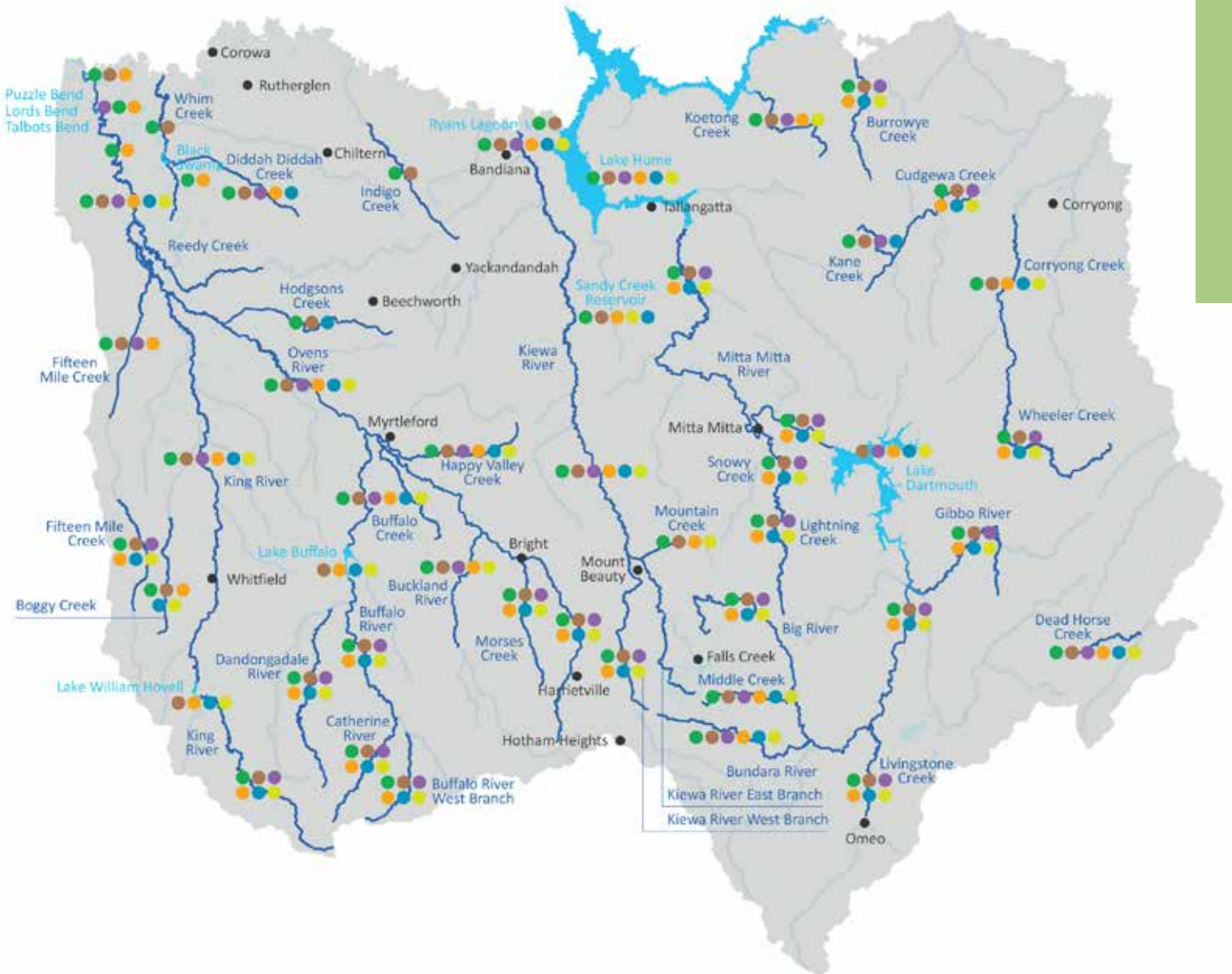
This project also has linkages to other waterway projects underway in the area that aim to improve in-stream habitat and fish passage and improve recreational values and access to the river.

North East riparian priorities and outcomes

The majority of priority waterways for riparian management are shown in the map below. They are based on priorities contained in the North East Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 9 North East priority waterways for riparian management

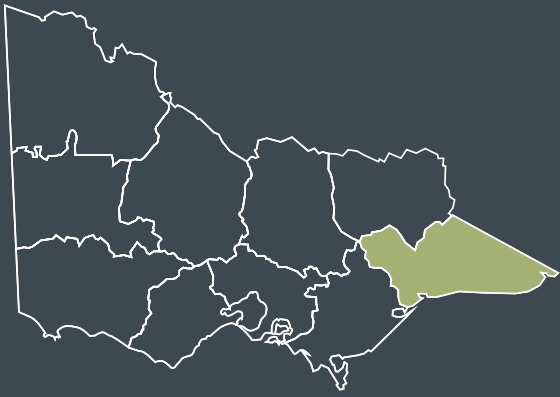
Note: due to space limitations on the map, typically only large priority wetlands are named and have been assigned value icons.



- Priorities**
- Wetland priorities
 - River and creek priorities
- Environmental values**
- Native vegetation
 - Native fauna
 - Native fish
- Economic values**
- Town water supply
 - Irrigation supply
- Social values**
- Recreation

Table 8 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	210 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	1,010 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	390



Paddling the iconic Snowy River. Photos courtesy of East Gippsland CMA.

The East Gippsland region is about



80% public land



mainly as state forests and national parks.

2.8 East Gippsland

The East Gippsland region contains the Mitchell, Nicholson and Tambo rivers that flow into the Gippsland Lakes, and the Snowy, Bemm, Cann, Thurra, Wingan and Genoa river basins. About 80 per cent of the region is public land, mainly as state forests and national parks.

Important regional features include:

- the Gippsland Lakes, the largest coastal lagoon system in Australia and Ramsar listed as wetlands of international significance
- six heritage-listed rivers, including the iconic Snowy River and Victoria's largest unregulated stream, the Mitchell River
- the long coastal reach with undeveloped estuaries, ocean beaches and spectacular headlands
- the region's extensive mountains and forests
- scenic and productive farmland, especially in the river valleys
- an array of native plants and animals, some of which only occur in East Gippsland.

The waterways of East Gippsland, described in the East Gippsland Waterway Strategy, are known for their recreational opportunities, including rafting the wild Mitchell and Snowy rivers, fishing for black bream in the Tambo, seeing Burrunan dolphins in the Gippsland Lakes, bushwalking through littoral rainforest on the Errinundra Plateau, strolling along the 90-mile beach or boating in Mallacoota Inlet.



Top: Nicholson Landcare Group members planting the banks of the Nicholson River. Bottom left: Genoa River, Far East Gippsland, many years after revegetation. Bottom right: Moogji Aboriginal Council crew with the CMA spraying weeds on the Buchan River.

Community engagement and partnerships in the East Gippsland region

The East Gippsland CMA recognises the importance of establishing strong partnerships with the community, government, business and stakeholders, which help build a sustainable economic, social, cultural and environmental future for the region.

An important role of the CMA is to coordinate the management of natural resource projects across East Gippsland. The focus is to foster project delivery through partnerships with regional stakeholders. This principle reflects the Regional Catchment Strategy objectives of strengthening relationships with, and the capacity of, landowners and land managers.

Community engagement and partnership activities in the region include:

- Working with the Gunaikurnai Land and Waters Aboriginal Corporation to deliver onground natural resource management outcomes. The Corporation's works crew has provided services for weed control, growing seedlings, revegetation and cultural awareness training.
- Working with landholders along waterways to fence off riparian land. In the past five years, more than 200 landholder agreements have been signed to protect riparian land. Works have primarily been undertaken on the Cann, Combiobar, Snowy, Buchan, Nicholson, Mitchell, Dargo and Wonnangatta rivers.

“The waterways of East Gippsland are known for their recreational opportunities, including rafting the wild Mitchell and Snowy rivers.”

- Working with the region's 31 Landcare groups to deliver projects that align with community values and the priorities of the East Gippsland Waterway Strategy. Landcare groups are encouraged to undertake works on riparian areas to rehabilitate rainforest gullies and waterways. For example, the Lower Tambo Landcare Group has made significant contributions to restoring and maintaining the health of the Tambo River, improving recreational fishing amenities and re-establishing biodiversity in the estuary reach.

Buchan River Rehabilitation



A reach of the Buchan River. Top: In 2010 before willow removal. Bottom: In 2015, several years after willow removal, revegetation and fencing. (Note: photos show the same site but the before photo is slightly further downstream). Photos courtesy of East Gippsland CMA.

The Buchan River starts in the Alpine National Park and flows through the Buchan township into the Snowy River. The Buchan River is a heritage-listed river, from the headwaters to the confluence of Campbell’s Creek. The river is a declared water supply catchment, providing water for the Buchan township.

In 2007, the East Gippsland CMA controlled and removed willows along 32 kilometres of the river. Once the willow control works were completed, the CMA worked with DELWP and adjoining landholders to fence riparian land. This also included a major revegetation and weed control program that began in 2008. The Moogji Aboriginal works crew has controlled weeds and revegetated more than 90 ha of riparian land.

The clean-up after a major flood in 2012 provided an opportunity to secure all Buchan River frontages and expand the rehabilitation program, strengthening the banks by establishing native vegetation.

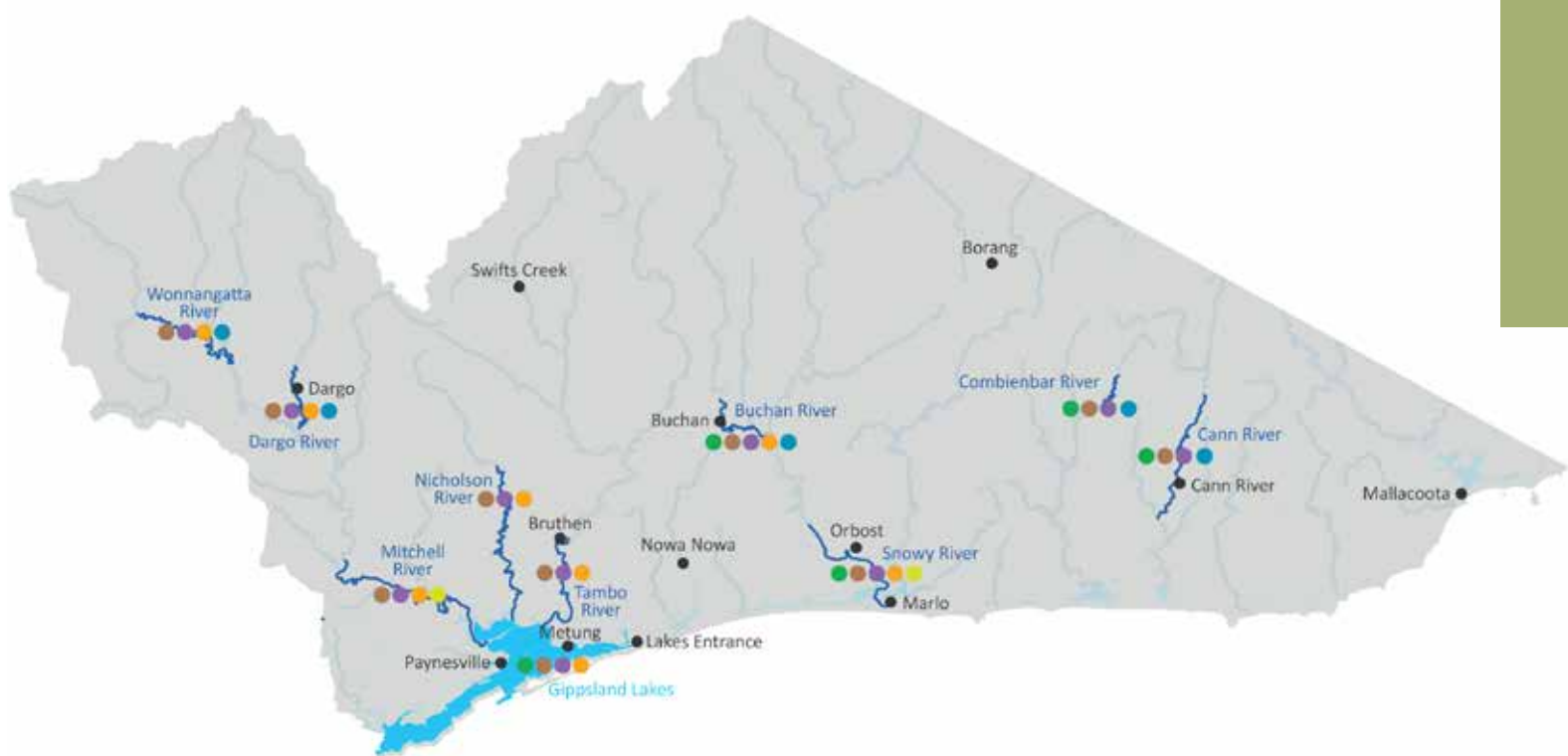
The next five years for the Buchan is about recovery and growth. The works will include more native revegetation and weed control to continue to provide diversity and maturity in the riparian corridor. This will strengthen the banks of the river and reduce the likelihood of erosion in future floods.

The CMA will continue to work with adjoining landholders to maintain areas under agreement. The Buchan Landcare Group, the local school, Parks Victoria and the broader community will be involved in the program with regular tree planting and clean up days. The CMA also plans to hold a community event in Buchan to raise awareness to the community about the importance of the river and how they can continue to look after it.

East Gippsland riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the East Gippsland Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 10 East Gippsland priority waterways for riparian management



Priorities

- Wetland priorities
- River and creek priorities

Environmental values

- Native vegetation
- Native fauna
- Native fish

Economic values

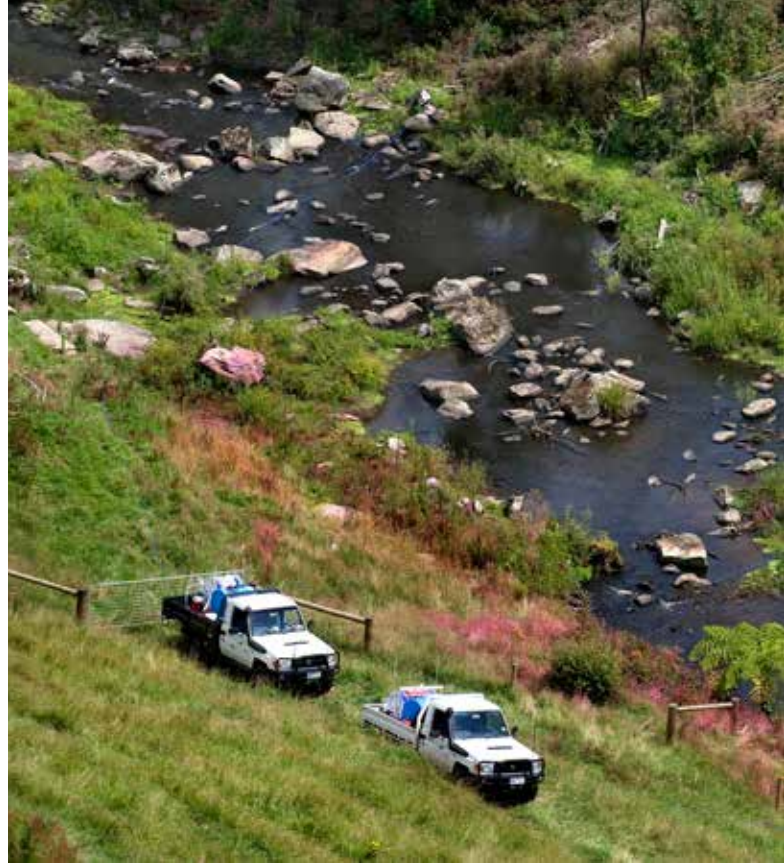
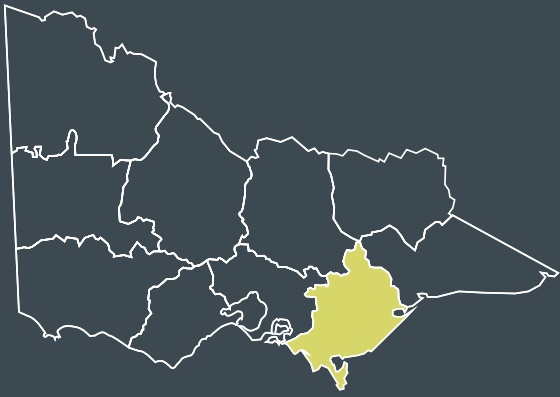
- Town water supply
- Irrigation supply

Social values

- Recreation

Table 9 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	80 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	3,600 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	70



Weed control on the banks of the Agnes River, South Gippsland. Photos courtesy of West Gippsland CMA.

The West Gippsland region is about



59% public land
and includes



40,000
kilometres of waterways

2.9 West Gippsland

The West Gippsland region extends across west, south and central Gippsland, from Warragul and San Remo in the west to the Gippsland Lakes in the east, and from the Great Dividing Range in the north to Wilsons Promontory in the south. About 59 per cent of the region is public land.

The West Gippsland CMA is responsible for more than 40,000 kilometres of waterways, including major rivers and creeks and the tributaries that flow into them. These waterways flow to the Victorian coast, discharging either through the Gippsland Lakes, to coastal inlets and embayments (Anderson Inlet, Shallow Inlet, Corner Inlet) or directly to Bass Strait and the Southern Ocean.

The waterways of West Gippsland are highly valued recreationally, socially, economically and culturally. They include two internationally important wetlands listed under the Ramsar Convention on Wetlands – Gippsland Lakes and Corner Inlet. Many of the region’s natural assets including waterways are of particular importance to Traditional Owners and other Aboriginal people. For example, the Gunaikurnai people’s creation story of Borun the pelican and Tuk the musk duck originates from the areas around Wilsons Promontory.



Top left: A newly fenced and revegetated section of the Thomson River. Top right: CMA staff inspecting riparian revegetation on the Coalition Creek. Bottom: The wetlands of the Heart Morass, on the lower Latrobe River, inundated with water after a period of high rainfall.

Community engagement and partnerships in the West Gippsland region

The development and implementation of the West Gippsland Waterway Strategy is underpinned by a partnership approach and community involvement. Active and engaged communities are critical to the success of the Strategy. In addition to direct landholder engagement, strong partnerships with Landcare, Traditional Owners, industry, agencies and other community groups are central to the CMA's approach. Recent examples of this include:

- Heart Morass: the Heart Morass is a large wetland at the confluence of the Thomson and Latrobe rivers. The wetland has a history of excessive drainage, grazing, increasing salinisation and acidification. In 2006 it was purchased by the Wetlands Environmental Taskforce Trust, a not-for-profit community organisation. A permanent Trust for Nature covenant was established over 1121 ha of the morass making it one of the largest wetland restoration projects in Australia on private land. Rehabilitation of the morass is undertaken through a formal partnership between the CMA, Field and Game Australia, Hugh Williamson Foundation, BugBlitz and Watermark (a local community-based environmental group).
- A memorandum of understanding has been established with Gunaikurnai Land and Waters Aboriginal Corporation as a commitment to work together for mutual outcomes. One of the key elements is to support work on Country opportunities for the Gunaikurnai. An example of this is the surveying, protection works and community education of a cultural heritage site at McLoughlins Beach, which is part of the Corner Inlet Ramsar site.

- Regional Landcare Forum and Partnership: the CMA and Landcare have a strong partnership in West Gippsland. At a regional level the WGCMA and the five Landcare Networks (Bass Coast, South Gippsland, Yarram Yarram, Latrobe Catchment, and Maffra and District) work collaboratively through the Regional Landcare Forum, which meets bi-monthly to share knowledge and identify opportunities to work together. For example, in the Powlett River Catchment, collaborative work between the CMA and Bass Coast Landcare involved working with private landholders to fence off waterways, remove willows and other weeds and undertake revegetation.

“The waterways of West Gippsland are highly valued recreationally, socially, economically and culturally.”

Corner Inlet Connections



Franklin River meandering to Corner Inlet. Photos courtesy of West Gippsland CMA.

From Woodside to Wilsons Promontory, the marine and coastal parks of Corner Inlet and Nooramunga provide vital habitat for more than 30,000 resident, and tens of thousands of migratory, wading birds. The wetlands in this area were designated a Ramsar site in 1982. The site is internationally important for its tidal mudflat system and as a wetland enclosed by barrier island formations. The inlet has the most southerly occurrence of white mangrove in the world, and supports Victoria’s largest area of the rare broad-leaved seagrass.

The Corner Inlet Steering Committee was established in 2007 to provide an integrated and collaborative approach to address issues affecting the Corner Inlet Ramsar Site. The CISC is an active partnership between West Gippsland CMA, Parks Victoria, Yarram Yarram Landcare Network, South Gippsland Landcare Network, Gunaikurnai Land and Waters Aboriginal Corporation, DELWP, the Department of Economic Development, Jobs, Transport and Resources (Fisheries), industry (e.g. GippsDairy, commercial fishers and foresters), University of Melbourne and the Australian Government.

Since 2007, the Corner Inlet Steering Committee has been instrumental in coordinating a number of initiatives including the development and delivery of the Corner Inlet Connections Project (2010-13). The Connections project provides focus and direction for natural resources management in the Corner Inlet catchment. Some of the key achievements include over 280 ha of riparian restoration and protection, erosion control and weed management, 3,500 ha controlled for blackberry, nearly 60 effluent and nutrient management plans and 12 management agreements established for works on dairy properties and more than 20 community education events and field days.



A landholder on the Franklin River with riparian works undertaken in partnership with the CMA.

Since 2013, the Corner Inlet Connections Project has continued to expand, guided by targets identified in the West Gippsland Waterway Strategy and the Corner Inlet Water Quality Improvement Plan. Over the next five years, onground riparian works and erosion control work will be accelerated in priority areas to improve water quality entering Corner Inlet. Using a partnership approach, work will include:

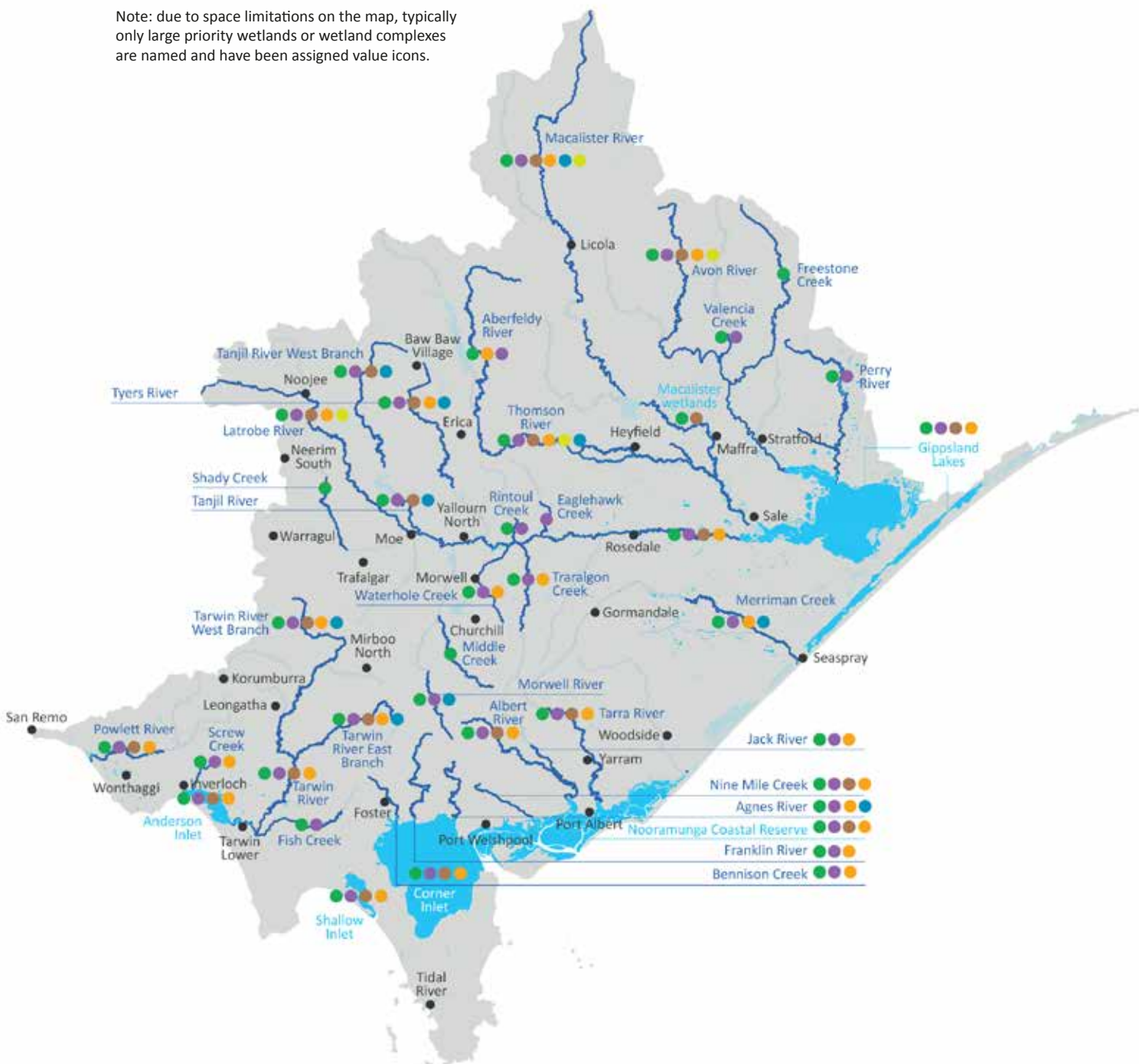
- fencing, revegetation and weed control along gullies and tributaries
- protection of wetland vegetation such as coastal saltmarsh and mangroves
- maintenance of important fauna habitat through spartina control
- associated monitoring and community engagement.

West Gippsland riparian priorities and outcomes

The priority waterways for riparian management are shown in the map below. They are based on priorities contained in the West Gippsland Waterway Strategy and provide guidance about the location of riparian management activities planned for the five-year period 2015-16 to 2019-20. The riparian outcome measures and their aspirational targets are provided in the table below.

Figure 11 West Gippsland priority waterways for riparian management

Note: due to space limitations on the map, typically only large priority wetlands or wetland complexes are named and have been assigned value icons.



- Priorities**
- Wetland priorities
 - River and creek priorities
- Environmental values**
- Native vegetation
 - Native fauna
 - Native fish
- Economic values**
- Town water supply
 - Irrigation supply
- Social values**
- Recreation

Table 10 Riparian outcome measures and aspirational targets 2015-16 to 2019-20

Riparian outcome measure	Aspirational target
1. Length of riparian land where works have been undertaken to protect or improve its condition	160 km
2. Area of waterway vegetation works undertaken to improve the health and resilience of waterways	240 ha
3. Number of landholders who have worked with the CMA to undertake riparian works	150

3 STRENGTHENING RIPARIAN MANAGEMENT

Acceleration of riparian land improvement in Victoria needs to build on the strengths of the existing partnership approach and the actions and initiatives outlined in the Victorian Waterway Management Strategy (VWMS).

A number of initiatives have been identified that will strengthen riparian management across Victoria under the following key themes:

- improving onground delivery
- strengthening partnerships
- improved monitoring, evaluation and reporting
- Crown frontage management.

The actions identified in this chapter will be implemented in conjunction with the actions identified in the VWMS.

3.1 Improving onground delivery

The policy outlined in the VWMS is implemented through the Victorian Waterway Management Program. This program is largely funded by the Victorian Government, overseen by DELWP and delivered through the CMAs (and Melbourne Water in the Port Phillip and Westernport region).

Across the state there are many varied and innovative delivery models that combine effective delivery with strong community involvement. Current and new delivery approaches need to be encouraged to enable improved delivery of onground riparian works across the state.

To effectively deliver the action plan, CMAs and partner agencies need many different skills, ranging from expert scientific knowledge through to community engagement experience. Capacity-building programs will be explored to support CMAs and partner agencies to build on existing skills.

Supporting new research and development (R&D) approaches that assist riparian land protection is important. One such R&D opportunity is the concept of using virtual fencing technology to control stock location without the need for physical fencing. This concept involves stock wearing a collar with a GPS sensor that provides stimuli resulting in automated control of animal location and movement. Use of virtual fencing in riparian areas could potentially avoid millions of dollars in damage to riparian fences caused by flooding and bushfire.

Ongoing riparian site inspections are important to maintain landholder relationships, ensure landholder agreements are met and improve confidence in the long-term response of riparian land to works such as fencing and revegetation.

Riparian management intersects with many other government environmental programs such as those involving Landcare, terrestrial biodiversity, environmental water management and threatened species protection. Programs and strategies such as the state biodiversity strategy, floodplain strategy and environmental water constraints projects all have linkages to riparian land management. These other environmental programs and projects have the potential to improve riparian land management. CMAs need to continue to work with other government agencies and non-government environmental organisations to maximise integration to achieve effective and efficient environmental outcomes.

Table 2 identifies a number of initiatives that will help improve the way we work with the community to deliver onground riparian works.



Ongoing riparian works including fencing, revegetation and off-stream stock watering. Photo courtesy of West Gippsland CMA.

Table 2 Improving onground delivery actions.

No	Action	Who	Timeframe
1	Provide funding to accelerate delivery of onground riparian works outlined in this action plan	DELWP, CMAs	2015 - 2020
2	Encourage the use of innovative delivery models in the implementation of onground riparian works	DELWP, CMAs	2015 - 2020
3	Explore the development of programs that would build additional capacity within CMAs and partner agencies to implement this action plan including exchange, mentoring and graduate and other training programs	CMAs, DELWP	2016
4	Encourage further integration of riparian management with other government, non-government and community environmental projects and programs	CMAs, DELWP NGOs, others	Ongoing
5	Investigate current tax implications/benefits for landholders undertaking riparian management works and raise awareness in the community	DELWP	2016
6	6.1 Develop statewide site inspection minimum standards in conjunction with CMAs 6.2 Implement site inspection process across CMAs 6.3 Undertake an audit of riparian works and the site inspection process	DELWP, CMAs CMAs DELWP	2016 2016-2020 2020
7	Support an onground trial of the use of virtual fencing to manage stock access to riparian land	DELWP, CMAs, Industry partners	2016

Note: these actions are not presented in priority order.

3.2 Strengthening partnerships

The Victorian Waterway Management Program relies on ongoing commitment and input from landholders, Traditional Owners, the community, government agencies, non-government organisations, industry and research institutions.

Although partnerships in riparian management across the state are strong and build on more than a decade of collaboration, more can be done to strengthen and broaden them. Continued and improved partnerships are required with various organisations to achieve the outcomes of this action plan. These include creating stronger partnerships with industry and water corporations for key areas of common interest. For example, Dairy Australia's Sustainability Framework has set a target that 90 per cent of dairy cattle be excluded from waterways by 2020.

The Victorian Waterway Management Strategy commits state government and CMAs to develop stronger partnerships with Traditional Owners and other Aboriginal people in waterway management. For example, Traditional Owners and other Aboriginal people participated in the development of regional Waterway Strategies. With the release of the strategies in 2014, it is critical that government and CMAs develop further mechanisms to ensure an ongoing partnership with Traditional Owners and other Aboriginal people in the planning and delivery of waterway, and especially riparian, management programs. This will lead to improved onground delivery of riparian programs and will support Traditional Owners and other Aboriginal people in achieving their aspirational goals, which include looking after Country.

Landcare groups play a key role in protecting and improving riparian land across the state. Additional funding will be provided for Landcare groups to specifically deliver more works on riparian land.

Protection of riparian land offers many benefits, including improved water quality. It is important that CMAs and water corporations continue to manage riparian and water quality issues in an integrated and collaborative way.

Improved understanding of the social and economic benefits of riparian works will help tailor engagement activities and support CMAs in implementing this action plan. In particular, the many potential benefits of riparian management for landholders are not well understood or communicated to landholders. These include benefits such as increased property value, easier stock management and fewer stock losses, better water quality from off-stream water leading to increased production, less disease, benefits of riparian vegetation as a shelter belt for wind protection, and reduced erosion resulting in reduced loss of farm land.

Effective communication and engagement is important in building strong partnerships with landholders, Traditional Owners, community and partner agencies. Technological advances with internet, mobile devices and social media provide opportunities for innovative approaches to capture information, communicate and engage a broader audience.

Table 3 identifies a number of actions to support CMAs capacity to continue to strengthen partnerships over the next five years.



Strath Creek Landcare Group at a community planting day on the King Parrot Creek. Photographer: Ron Litjens.

Table 3 Strengthening partnership actions

No	Action	Who	Timeframe
8	Encourage and strengthen links with relevant industries that have a shared interest in improved riparian management	DELWP, CMAs, Industry	2015 - 2020
9	Work with Dairy Australia and other key stakeholders to encourage improved management of riparian land on dairy farms	DELWP, CMAs, Dairy Australia, dairy companies	2016
10	Develop a framework for partnership arrangements between the Victorian Waterway Management Program and Traditional Owners in the planning, implementation and monitoring of waterway management programs (including riparian management): 10.1 At a statewide program level 10.2 At a regional level (then building the outcomes into the interim progress review of regional Waterway Strategies)	10.1 - DELWP, Traditional Owners 10.2 - CMAs, Traditional Owners	2016 2016
11	Continue to build and improve partnerships with Landcare by increasing funding to Landcare groups for riparian management projects	DELWP, CMAs, Landcare	2015 - 2020
12	CMAs to seek further opportunities to work with water corporations in an integrated and collaborative way to manage water quality, particularly in water supply catchment areas	CMAs, water corporations, DELWP	2015-2020
13	Undertake research to better understand the social and economic benefits of riparian management works and to apply this learning to implement this action plan	CMAs, DELWP	2016
14	Investigate and communicate the benefits of riparian management to landholders	DELWP	2016
15	Scope and undertake a pilot riparian management project using a mobile phone application to capture information from the community to enable improved communication and monitoring	CMAs, DELWP	2017
16	Scope the use of web-based planning tools to support Landcare and other environmental community groups to better plan, implement and engage on local riparian land projects	DELWP	2017



CMAs will work with the dairy industry to help achieve Dairy Australia's target of 90 per cent of dairy cattle being excluded from waterways by 2020. Photo courtesy West Gippsland CMA.

3.3 Improved monitoring, evaluation and reporting

Effective management of riparian land requires access to reliable information to enable informed decision-making. The adaptive management approach outlined in the VWMS requires information to be collected and to be regularly evaluated and reviewed to provide confidence in environmental outcome achievements, i.e. improved riparian land condition.

The Riparian Intervention Monitoring Program, recently commenced by DELWP in conjunction with CMAs, will demonstrate the impact and effectiveness of riparian investments across the state, and test and update our understanding of the relationships between management activities and environmental responses.

Reporting on the riparian works across the state is important to understand the effectiveness of investment. Waterway and riparian land improvements are achieved over long time frames and require communication and reporting frameworks that acknowledge this. Therefore, CMAs and DELWP will scope improved approaches to communication and reporting that better reflect the long time frames required in riparian management.

Many landholders, community groups such as Landcare, CMAs and other government agencies undertake riparian land management activities across the state. To enable improved monitoring, evaluation and reporting it is important minimum data standards are applied to ensure data can be shared and a better overall picture of works and long-term environmental outcomes can be presented. It is important to encourage a consistent set of data standards to be used with all stakeholders involved in riparian management.

Table 4 Improved monitoring, evaluation and reporting actions

No	Action	Who	Timeframe
17	17.1 Implement the current Riparian Intervention Monitoring (RIM) Program 17.2 Evaluate the RIM Program 17.3 Continue the RIM Program (subject to successful evaluation)	DELWP, CMAs	2015-2017 2018 2018-2020
18	Scope improved communication and reporting of onground riparian works	DELWP, CMAs	2016
19	Work with partners and Landcare groups to enable more consistent data standards to be used for all onground riparian works	DELWP, CMAs	2016

3.4 Crown frontage management

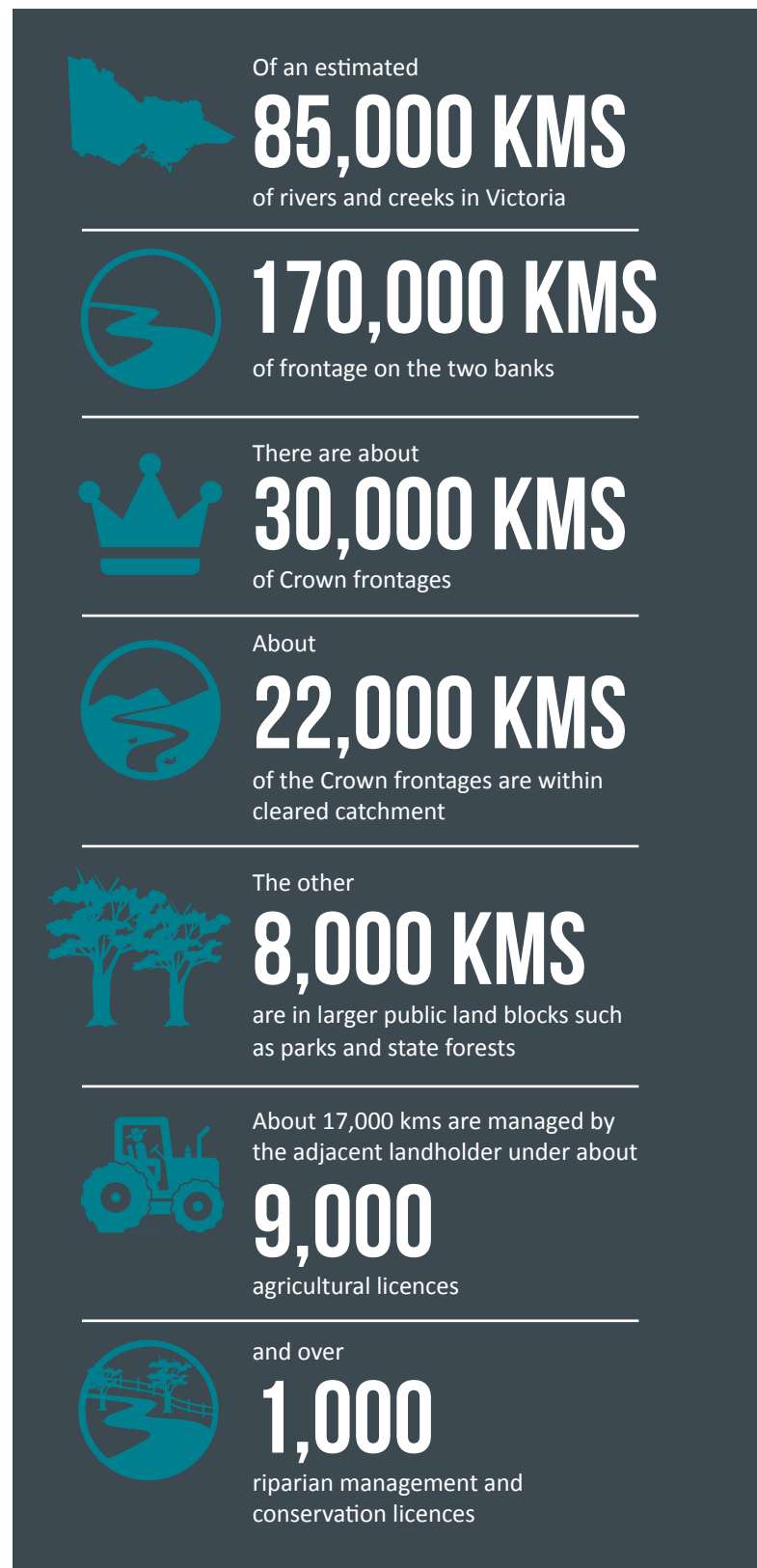
Victoria has a unique network of public riparian land known as Crown frontages (owned by the state), which were mostly established between the 1850s and the 1880s in recognition of their value as a public resource. Crown frontages occur mostly on larger waterways. On smaller waterways in agricultural landscapes, riparian land is usually privately owned.

Of an estimated 85,000 kilometres of rivers and creeks in Victoria (about 170,000 kilometres of frontage on the two banks), there are about 30,000 kilometres of Crown frontages. About 22,000 kilometres of the Crown frontages are within cleared catchments; the other 8,000 kilometres are in larger public land blocks such as parks and state forests. At present, about 17,000 kilometres of the 22,000 kilometres of Crown frontages within cleared catchments are managed by the adjacent landholder under about 10,000 licences. These licences include just over 9000 agricultural licences (mostly grazing but some cropping), nearly 900 riparian management licences and over 100 conservation licences.

Traditional Owner groups with Native Title rights and recognition and settlement agreements under the *Traditional Owner Settlement Act 2010* have rights to access Crown land and use natural resources for traditional purposes including hunting, fishing, camping and gathering in accordance with existing laws. A natural resource agreement under this Act can also authorise the take of natural resources for some commercial purposes. Where these agreements exist, it is vital that the relevant Traditional Owner groups are engaged as partners in the planning for any proposed onground works on their Country.

Parks Victoria plays a significant role in the management of Crown water frontages, particularly those with highly significant public values. For example, Parks Victoria manages much riparian Crown land along the Murray River for its environmental and recreational values. Parks Victoria also manages the Broken Boosey State Park which is a unique riparian linear park featuring one of the few remaining remnants of high quality Grey Box Woodland on Victoria's northern plains. In this way, conservation reserves and parks play an important role in the management of riparian land. Any future additions of Crown riparian land to the reserve system, such as the Murray River Park, would also contribute towards improving the protection and management of riparian values.

In 2010, the Victorian Government introduced 'riparian management licences', which recognise all or part of a frontage is being managed by a licensee to protect and improve the riparian environment. The current government policy, as outlined in the VWMS, is for a transfer from a traditional grazing licence to a riparian management licence (where a licence exists) when CMAs are entering into agreement with landholders to undertake riparian works. A riparian management licence will also be issued where the Crown frontage is unlicensed when CMAs are entering into an agreement to undertake works with a landholder. The





Landholders and their family involved in riparian revegetation on the Glenelg River. Photo courtesy of Glenelg Hopkins CMA.

implementation of the onground actions outlined in this action plan will accelerate the transfer of grazing licences to riparian management licences.

A report investigating the costs and benefits of managing Crown frontage under licence⁹, indicated there are significant environmental and public benefits in undertaking the riparian management works that lead to the transfer of Crown frontage grazing licences to riparian management licences.

The sale of land, with the consequent transferring of the frontage licence to the new licensee, may also provide another opportunity to convert a grazing licence to a riparian management licence. This approach should be explored further to determine how this may be undertaken within the current framework of voluntary landholder participation.

Prior to the establishment of riparian management licences in 2010, when CMAs entered into agreements with Crown frontage licensees, typically no formal change was made to the grazing licence to reflect the nature of the works. At most, the location of the fence may have been noted so that licence fees were reduced to reflect the reduction in the area of Crown frontage grazed. But the purpose of the licence was not changed nor any additional conditions placed on the licence.

As included as policy in the VWMS, landholders will need to convert their existing licences into riparian management licences when entering agreements with CMAs involving currently licensed Crown frontages. Riparian management licences:

- specify the landholder's long-term management responsibilities in the licence conditions
- waive the licence fee (for the managed area)
- provide for controlled grazing in certain circumstances
- provide for the issue of a take and use licence to water stock

- ensure long-term management responsibilities will pass to a new licensee when properties adjoining Crown frontages are sold and licences are transferred.

Also, where Crown frontages are in unauthorised occupation on a priority reach, and it is deemed appropriate to issue a licence by the public land manager (for example, DELWP or Parks Victoria), the landholder will be given the choice of:

- taking up a riparian management licence (which provides for the issue of a licence to take and use water for stock) and typically being eligible for fencing and offstream stock watering incentives or
- not taking up a licence which will require fencing the frontage off at the landholder's cost.

Where Crown frontages are in unauthorised occupation on a non-priority waterway, the landholder may be offered a standard agricultural licence. However, in circumstances where the unauthorised occupation is on a low priority waterway but the site-specific riparian values are high, a riparian management licence may be offered.

In future, when private land abutting a frontage is sold or transferred, frontages with pre-existing riparian works should also have their licences converted to riparian management licences.

As recognised in the VWMS, while collaboration and partnerships between landholders and agencies are the cornerstone of the riparian management program, compliance action may sometimes be required on Crown frontages, particularly for riparian management licences. Several actions in the VWMS focus on improved standards for Crown frontage management, improved compliance approaches by DELWP with assistance from CMAs, and improved communication with licensees about their obligations for managing frontages.



Revegetated Crown water frontage on the Mitchell River. Photo courtesy of East Gippsland CMA.

Over the last few years, work has been underway to deliver these actions. For example, information better describing to licensees what their licence conditions require of them and what they ‘can and can’t do’ on frontages will be available in 2016. Compliance Support Group within DELWP has been working to improve the management of Crown frontage compliance procedures and processes and in 2016 will trial the establishment a frontage compliance team. Compliance Support Group will continue to process, investigate and analyse information reports, establish compliance priorities and procedures, lead compliance operations (if required) and engage with CMAs and other parts of DELWP about these activities. The focus of compliance activities will continue to be

on education and negotiation with landholders and licensees. Enforcement will only be used when necessary as a ‘last resort’.

A number of actions have been identified in Table 5 to support improved Crown frontage management over the next five years. These actions should be considered in conjunction with Policies 9.2 and 9.3 of the VWMS, which provide more details about the current government policy about riparian management and Crown water frontages. Further actions which streamline and improve the administrative, institutional and legislative arrangements relating to the management of Crown frontages will also be pursued by DELWP over the life of this plan.

Table 5 Crown frontage management actions

No	Action	Who	Timeframe
20	Traditional Owner groups that have recognised native title rights or formal agreements with the state must be engaged as partners in the planning for any proposed onground works on their Country. Any additional specific procedural requirements outlined in these agreements must be followed	CMAs	Ongoing
21	Issue a riparian management licence to landholders when they enter into agreements with CMAs to undertake riparian works on currently licensed or unlicensed Crown frontages	DELWP, CMAs	Ongoing
22	Investigate the feasibility of converting existing grazing licences to riparian management licences on Crown frontage within priority riparian management works areas when the abutting private land is transferred or sold	DELWP	2017
23	Crown frontages with existing riparian works but not riparian management licences should have their licence converted to a riparian management licence upon sale or transfer of the abutting private land	DELWP	Ongoing
24	Establish a trial Crown frontage compliance team to process, investigate and analyse information reports, establish compliance priorities and procedures and lead compliance operations (if required)	DELWP	2016

Note: a number of administrative and procedural elements must be followed when processing Crown frontage licences, including Native Title assessments and any requirements under Traditional Owner recognition and settlement agreements.

4 IMPLEMENTATION

This action plan outlines riparian management outcomes and aspirational targets to be achieved across regional Victoria over the five-year period 2015-16 to 2019-20. The action plan also identifies additional statewide initiatives required to accelerate the current rate of riparian management and improvement in Victoria.

Over the five-year life of the action plan, the Victorian Government will work in partnership with landholders, the community, Landcare, Traditional Owners, environmental groups, DELWP, CMAs and other stakeholders to achieve the riparian outcomes.

The implementation of the statewide initiatives will be led by DELWP working in conjunction with a number of partners, particularly CMAs.

4.1 Adaptive management

The Victorian Waterway Management Strategy outlines an eight-year adaptive management cycle, where learning occurs at all stages and is used to update and improve in subsequent cycles. This adaptive management cycle will be used throughout the implementation of the action plan. The following components are used as part of this adaptive management framework:

- **Strategy and planning** – statewide policy framework and targets, planning for waterway management through regional waterway strategies with priorities and regional targets. This action plan has articulated the priorities for riparian investment over the five-year period 2015-16 to 2019-20.
- **Implementation and monitoring** – government and other investment in regional priorities, implementation of priority management activities, monitoring of management activities and long-term resource condition assessment.
- **Evaluation and reporting** – management reporting, resources conditions reporting, program evaluation and improvement.

Table 6 Evaluation and reporting actions

No	Action	Who	Timeframe
25	Evaluate implementation of this action plan	DELWP, CMAs	2019/20
26	Develop reporting measures for engagement and involvement of Traditional Owners and other Aboriginal people in waterway management	DELWP, CMAs, TOs	2016
27	Report annually on progress against: <ul style="list-style-type: none"> 26.1 The aspirational targets in this action plan and 26.2 New measures for engagement and involvement of Traditional Owners and other Aboriginal people 	DELWP	Annually
28	Develop and publish a final action plan achievements report	DELWP, CMAs	2020/21

4.3. Governance

Implementation of the action plan will be overseen in line with the governance arrangements of the broader Victorian Waterway Management Program, as outlined in the Victorian Waterway Management Strategy (VWMS).

As with the riparian actions of the VWMS, the Riparian Forum will monitor progress of the implementation of the 27 riparian management actions in sections 3 and 4. The Riparian Forum provides for stakeholders to consult and collaborate regarding the development and implementation of riparian management policies, programs and actions in accordance with Government objectives to protect, improve and maintain riparian land. It was established in 2008 and consists of members from representative bodies (Victorian Farmers Federation, Victorian Landcare Council, VRFish), regional agencies (CMAs and rural water corporations), the University of Melbourne and relevant government agencies (DELWP, the Department of Economic Development, Jobs, Transport and Resources and the Department of Health and Human Services).



Many Traditional Owner and Aboriginal groups partner with CMAs to undertake riparian works. Gunaikurnai Land and Waters Aboriginal Corporation crew planting seedlings on the lower Mitchell River. Photo courtesy of East Gippsland CMA.

4.2 Evaluation and reporting

Implementation of this action plan will be evaluated to enable lessons learnt to guide future strategy, planning and implementation for riparian management in Victoria. A public report will also be produced outlining progress against the aspirational targets, engagement with Traditional Owners and other achievements. A number of actions have been identified that will ensure appropriate evaluation and reporting on the RRAP implementation.

Achievement of onground aspirational targets using the current partnership approach is desirable. If progress in implementing this approach is insufficient, then the government will look at alternative tools to achieve higher rates of uptake of onground riparian management activities.

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