

Regional Riparian Action Plan 2015-2020

Final achievements report

Accelerating on-ground riparian works across Victoria

The Victorian Government released the five-year *Regional Riparian Action Plan* in 2015 to accelerate the delivery of on-ground riparian works.

This report summarises what has been achieved throughout the five years (2015-2020) of the *Regional Riparian Action Plan* (RRAP). Implementation of the plan met a key action in *Water for Victoria*, the Government's plan for managing our water resources now and into the future.

Why protect and improve riparian land?

Riparian land is land that runs along rivers, creeks and wetlands. Riparian vegetation is critical to the health of our waterways by improving water quality, reducing erosion and improving habitat for animals both on land and in the waterway.

Riparian land and waterways hold important cultural values for Victoria's Traditional Owners and are important for social, recreational and economic activity (e.g. fishing, picnics, walking and agriculture).

How was the Action Plan funded?

To implement the plan, the Victorian Government allocated \$10 million in 2015/16 and a further \$30 million from 2016/17 to 2019/20 to implement additional

riparian works. The \$30 million was part of the \$222 million provided by the government to improve the health of waterways and catchments in regional Victoria during this period.

This funding accelerated the implementation of on-ground riparian works, such as stock management fencing, revegetation, weed management and provision of infrastructure to support off-stream stock watering.

How was the Action Plan implemented?

Catchment management authorities (CMAs) worked collaboratively with Traditional Owners, landholders and community groups, including Landcare, angling and school groups, to undertake the riparian works, typically using incentives and grants.

Key achievements 2015 to 2020

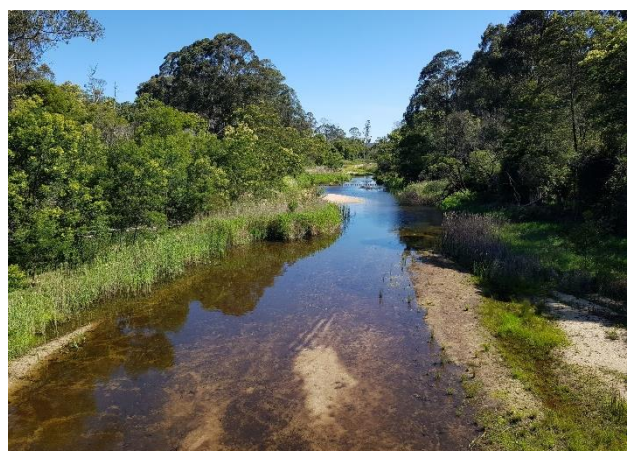
After five years of the action plan's implementation – 2015-2020 – the key outcomes achieved include the protection and improvement of:

- nearly 3,500 kilometres of riparian land (140% of the five-year action plan target), and
- over 53,000 hectares of riparian land (190% of the five-year target).

CMAs worked with over 1500 landholders and about 600 Traditional Owner, Landcare, angling, school and other community groups over the five years to achieve these outcomes.



Revegetation as part of the Upper Ovens flagship waterways project. Image courtesy North East CMA.



Cann River. Image courtesy East Gippsland CMA

Regional Riparian Action Plan 2015-2020

Final achievements report

The plan's outcome measures achieved over the five years of plan implementation in the nine CMA regions are presented in Tables 1 to 3.

Table 1: Length of riparian land where works have been undertaken to protect or improve its condition (km) 2015-2020

	Total	5-year estimate	% of target
Corangamite	278	270	103
East Gippsland	97	80	122
Glenelg Hopkins	572	760	75
Goulburn Broken	223	200	111
Mallee	474	170	279
North Central	233	470	50
North East	231	210	110
West Gippsland	711	160	444
Wimmera	663	170	390
Total	3,481	2,490	140

Glenelg Hopkins and North Central CMAs did not achieve their 5-year estimated target. This was due to comparatively high initial estimates, and efficiencies in delivery which resulted in larger areas of works being undertaken as shown in Table 2.



School planting day on the Campaspe River. Image courtesy North Central CMA.

Examples of regional riparian projects

Caring for the Campaspe – working towards a healthier river



Revegetation on the Campaspe River. Image courtesy North Central CMA.

The Campaspe River – one of Victoria's major Murray River tributaries and home to Murray cod – is the focus of the North Central CMA's Caring for the Campaspe project. From 2012 to 2020, the North Central CMA worked with landholders, Traditional Owners and many local community and school groups, supported by \$6.73 million from the Victorian government.

During this time, achievements of the project included:

- 271 hectares of land revegetated with native plants
- 87 kilometres of riparian fencing
- 398 hectares of weeds controlled
- 60 off-stream watering troughs installed
- 146 participating landholders
- 3629 people attended 34 community events

"Seeing all the trees planted by the North Central CMA grow up has also been very enjoyable. We also enjoyed feeling that we were supported by the CMA in the work we were doing to restore and revegetate the land."

Karen Coffield & David Feith, Redesdale landholders

The project sought to work more closely with the three Traditional Owner groups along the river, Dja Wurrung, Taungurung and Yorta Yorta. Between 2017 to 2019 100 Traditional Owners came together with project staff and guest speaker scientists for the annual River Tour event. This was an opportunity to spend time together on Country, sharing and understanding perspectives and traditional ecological knowledge around waterway management. Participants described being on Country as *"deadly good time, fun, inspiring, an honour, strengthening...manamith-gotj-gotj (nice)."*

Regional Riparian Action Plan 2015-2020

Final achievements report

Table 2: Area of waterway vegetation works undertaken to improve the health and resilience of waterways (ha) 2015-2020

	Total	5-year estimate	% of target
Corangamite	1,954	530	369
East Gippsland	5,194	3,600	144
Glenelg Hopkins	3,172	1,260	252
Goulburn Broken	1,493	1,650	91
Mallee	21,000	11,450	183
North Central	2,867	850	337
North East	2,941	1,010	291
West Gippsland	2,634	240	1,098
Wimmera	12,120	7,600	159
Total	53,375	28,190	189

Merri River Restoration

The Merri River through Warrnambool is a significant natural asset and a popular fishing location. It supports a range of native species including black bream and estuary perch, platypus, rakali and the threatened hairy burrowing crayfish.

As part of restoration of the river, Glenelg Hopkins CMA has worked with landholders and community groups to improve riparian and instream habitat.

Since 2016, with support from the RRAP alongside other grants and in-kind support, works focused on improvements such as willow removal, stock exclusion fencing, instream habitat installations and native revegetation. Overall achievements of the project include:

- 9.2 kilometres of riverbank improved
- 9.86 hectares of woody weed removal
- 24,375 native trees and shrubs planted across 16.1 hectares
- 4.28 km of stock exclusion fencing installed
- 129 new fish habitats installed
- 10 local community groups engaged

Instream monitoring over the life of the project has demonstrated positive outcomes including an increase in black bream populations by 89%. Fish survey data has also shown increases in species diversity and richness adjacent to improved riparian sites, with one 30 metre stretch having 13 different fish species near the site versus only 2 species recorded near an unimproved willow lined site.

“This really is a great example of where a whole package project was being delivered, giving outcomes that benefited so many user groups, with strategic planning at a high level. So often waterways are not in an urban area, but the Merri Alliance is improving a waterway which allows recreational fishers to access a healthy waterway with healthy fish populations right on their doorstep.”

Shane Lowrey - OzFish South West Chapter



Merri River before and after riparian improvement works. Image courtesy Glenelg Hopkins CMA.

Regional Riparian Action Plan 2015-2020

Final achievements report

Productive partnerships

Throughout the five years of the RRAP, West Gippsland CMA partnered with many Landcare groups supporting field days, workshops and events, and on-ground projects like tree planting and weed control.

The following are examples of projects completed through a strong connection with Landcare.

Black Spur Wetlands

Local landholders and members of the Nerrena Landcare Group were keen to save the Strzelecki gums and swamp paperbark and provide a habitat for native species including koalas, platypus and the sword grass butterfly at the Black Spur Wetlands near Meeniyah in South Gippsland.

The group developed a twenty-year plan for the future of the wetlands aimed at improving water quality, weed control and restoring native vegetation and biodiversity.

Restoration works completed as part of the project includes 2.4 hectares of willow removal and 1.8 kilometres of fencing.

Archies Creek restoration

In Ryanston, South Gippsland, a partnership between the West Gippsland CMA and the Bass Coast Landcare Network has helped restore a section of Archies Creek that runs through Brent and Amy Richardson's property. The partnership saw more than 1.5 kilometres of fencing, five hectares of weed removal, and more than 10,000 trees planted.

"We had a motivated family keen and willing to get in and improve the creek, Landcare was involved and supported them and local students helped plant more than 10,000 trees."

Rich Allen, West Gippsland CMA Project Coordinator

West Creek

West Gippsland CMA and Bass Coast Landcare Network teamed up with Bass Coast Shire Council at a site in West Creek, South Gippsland, on the property of Brad and Dani Carr. Issues included soil erosion and poor water quality and damage to the remaining trees by their cattle. Blackberry and ragwort were managed, and a 4.63 hectare site of swampy riparian woodland was fenced off and revegetated with 14,000 plants.

"Since the planting, the bird life has been returning and water has flowed down the creek. It looks amazing and it's better for the cattle as well. They get shelter and we're supporting native flora and fauna."

Dani Carr, landholder on West Creek

Table 3: Number of landholders who have worked with the CMA to undertake riparian works 2015-2020

	Total to date	5-year estimate	% of target
Corangamite	133	200	67
East Gippsland	106	70	151
Glenelg Hopkins	226	320	71
Goulburn Broken	136	100	136
Mallee	54	90	60
North Central	203	310	65
North East	221	390	57
West Gippsland	128	150	85
Wimmera	309	180	172
Total	1,516	1,810	84

Some regions did not achieve their 5-year estimated target. This was due to working on larger properties thus working with fewer landholders. This is reflected in the large area of works achieved as shown in Table 2.



Black Spur Wetlands, South Gippsland. Image Courtesy Kate Walsh.

Regional Riparian Action Plan 2015-2020

Final achievements report

Statewide action delivery highlights

As well as the implementation of on-ground riparian management works, the Plan identified a number of actions to strengthen riparian management across Victoria under several key themes. This section provides a summary of some of these actions.

Theme 1: Improving on-ground delivery

Action 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.*

The Waterway Management Twinning Program is a structured mentoring program, focusing on improving the on-ground delivery of Victorian river and riparian management projects. The program uses mentoring to enable the most effective approaches to be shared and adopted between all those working in waterway management across Victoria. A real strength of the program is the pairing between newer, less experienced staff in the waterway management sector with mentors that have significant experience in the industry.



Twinning program workshop. Image courtesy Glenelg Hopkins CMA.

First conducted in 2016 by the Glenelg Hopkins CMA with external funding, it has then run from 2017 to 2020 with funding through the plan. In this time, it has run 16 workshops in a variety of locations, enabled 35 mentoring partnerships with 75 individuals participating and created a vibrant alumnus.

Action 4: *Investigate current tax implications/benefits for landholders undertaking riparian management works and raise awareness in the community.*

What could and couldn't be claimed as a tax deduction for riparian works was very confusing, especially interpreting the Australian Tax Office (ATO) Landcare provisions. The Department of Environment, Land,

Water and Planning (DELWP) worked with the ATO to publish a fact sheet in 2018 explaining the tax implications of Landcare and riparian management works for landholders. It provides definitive ATO rulings on what tax deductions can be claimed. For example, fencing, weed management and stock watering infrastructure can all be claimed.



Riparian fencing and revegetation on the Tambo River. Riparian fencing can be claimed as a tax deduction. Image courtesy East Gippsland CMA.

Action 7: *Support an on-ground trial of the use of virtual fencing to manage stock access to riparian land.*

Funded through the plan, Goulburn Broken CMA in partnership with Murray Local Land Services in NSW and agritech company Agersens, successfully undertook a trial of virtual fencing along riparian land on a working cattle farm in Tumberumba in 2017. Virtual fencing involves the cattle being fitted with collars which deliver audible cues as the animal moves closer to the virtual fence and small electric pulses if the cow crosses the fence. The animals learn from the cues not to go near the 'fence' to avoid the shock. Much like



Riparian virtual fencing trial site at Tumberumba showing cow with collar. Image courtesy Goulburn Broken CMA.

Regional Riparian Action Plan 2015-2020

Final achievements report

an electric fence but not susceptible to flood or fire and easier to move.

When switched on, the cows were trained by the audio cues and spent nearly 100% of time in the area 'fenced-off' by the virtual fence. Use of this technology may be a viable alternative to traditional fencing in future. Currently, only welfare trials using the technology can be conducted in Victoria.

Theme 2: Strengthening partnerships

Action 14: *Investigate and communicate the benefits of riparian management to landholders.*

Environmental and social riparian management benefits are reasonably well understood and documented (such as benefits for native animals in the waterway and downstream potable water quality). However, the direct benefits to landholders were less well documented. An investigation into these benefits, resulted in the production of several fact sheets in 2019 which show tangible and evidence-based benefits for the landholder undertaking the works. Separate sheets have been created for sheep graziers, dairy farmers, beef cattle farmers and croppers as well as a general version.

Benefits include reduced time mustering stock, increased property valuation, better crop productivity, increased weight gain (sheep and beef), increased milk production, reduced risk factors for stock disease and improved landholder wellbeing.



Riparian fencing can improve mustering and minimise stock lost. A dead cow that fell from the bank of a tributary of the Wando River, South West Victoria. Image courtesy Glenelg Hopkins CMA.

Action 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.*

Funded by the plan, Victoria University launched the Fluker Post App in 2018. The app allows anyone to

contribute to the ongoing monitoring of natural environments by taking repeat photographs from fixed vantage-points – called Fluker posts. The app includes an archive of historical photos and allows users to see what the site looked like over time and under different weather and management conditions.

The app will help track the progress of large-scale waterway management projects being undertaken by CMAs by encouraging community members to take photos at Fluker posts at important waterways across the state.

Theme 3: Improved monitoring, evaluation and reporting



Fluker post at Gooram Falls, Seven Creeks, Strathbogge Ranges. Image Courtesy Goulburn Broken CMA.

Action 17: *Implement the current Riparian Intervention Monitoring Program.*

The Riparian Intervention Monitoring Program (RIMP) is a statewide, long-term program that aims to evaluate the impact and effectiveness of riparian management.



Undertaking RIMP monitoring on the Curdies River.

Regional Riparian Action Plan 2015-2020

Final achievements report

RIMP examines three common management interventions: weed control, replanting of native vegetation and fencing to restrict livestock access.

Surveys have been carried out on a total of 81 individual sites across nine CMA regions between 2014 and 2020. These individual sites make up a total of 29 standard paired sites and 10 past intervention paired sites (i.e. where a managed site is paired with a similar non-managed site to enable comparisons of the impacts that riparian management works have on a range of riparian condition indicators such as vegetation cover, bare ground, native plant recruitment and the amount of vegetative litter).

Even at this early stage, there is evidence of positive changes in most of these indicators at sites where management has occurred compared to those where it hasn't. Examples include an increase in vegetation cover and a decrease in bare ground.

The RIMP is funded and implemented by DELWP in collaboration with landholders and CMAs.

Theme 4: Crown frontage management

Action 24: *Establish a trial Crown frontage compliance team to process, investigate and analyse information reports, establish compliance priorities and procedures and lead compliance operations.*

Dedicated Crown water frontage compliance staff were employed within DELWP, now within the Office of Conservation Regulator, since early 2016. In this time staff were involved in many and very varied compliance issues, ranging from major operations along whole reaches of waterway to individual property and site scale issues (including vegetation clearing, stockpiling rubbish, unauthorised buildings being constructed, inappropriate vehicle use and illegal camping).

For example, an operation involving many properties along the Gunbower Creek, north west Victoria, led to properties clearing rubbish, realigning fences, removing inappropriate irrigation infrastructure, stopping inappropriate stock access to the frontage and removing or relocating buildings.

Assistance has also been provided to CMAs, Parks Victoria and local councils with taking appropriate compliance action.



Inappropriate use of the Crown water frontage as a stock laneway.

The next phase of river and riparian land management

The Victorian Government continues to invest in rivers and riparian land management. While the targets in this plan for area and length of improved riparian land have been achieved, the next phase of riparian work is underway as part of the *Rivers and Riparian Action Plan* that will run until 2024. It follows on from the *Regional Riparian Action Plan* but is broader and encapsulates a range of waterway programs to improve the health of waterways in Victoria.

Further information

Regional Riparian Action Plan

<http://www.delwp.vic.gov.au/water/rivers,-estuaries-and-wetlands/regional-riparian-action-plan>.

Although the plan has now been completed, CMAs are still undertaking riparian management programs. More information about riparian management and how you can get involved can be obtained from your CMA.

© The State of Victoria Department of Environment, Land, Water and Planning 2021



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>

ISBN 978-1-76105-607-9 (pdf/online/MS word)

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DELWP Customer Contact Centre on 136186, email customer.service@delwp.vic.gov.au, or via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au.