

Beyond Bolac Catchment Action Group's Strategic Journey

In 2004 residents of Lake Bolac got together to discuss the drying of the Lake and its future management with Glenelg Hopkins Catchment Management Authority. In 2006, the Glenelg Hopkins CMA commissioned a report titled *H11 & H12 Catchment Health Report*, which reviewed the existing information on assets, current condition, threats, management options and information gaps for Lake Bolac, and provided several recommendations for management of the Lake & catchment. A standing committee of residents and government representatives were appointed by GHCMA to work towards implementing the recommendations from the report. In 2007 the committee, known as the H11 H12 Catchment Action Group, developed a Statement of Purpose, which included a vision and aim for the group. This group has evolved over the years and was officially changed to the Beyond Bolac Catchment Action Group (BBCAG) in 2010.

BBCAG held a planning session facilitated by The Wettenhall Foundation (now known as Wettenhall Environment Trust) to discuss past experiences, challenges, and achievements, and develop long term objectives and actions for the group to implement in 2010. The group received further funding from Wettenhall Environment Trust in 2015 to review the strategic direction of the group. A 5-year strategic plan, known as the *Beyond Bolac Catchment Action Group Strategic Plan 2016 – 2021* was developed, and included eight key objectives for the group to work towards with a number of strategies outlined for each objective to address the issues facing the catchment.

As part of the strategic review in 2015, the Beyond Bolac Biodiversity Blueprint was developed, which outlined a blueprint for BBCAG to follow to achieve large scale landscape restoration of the Fiery Creek, Lake Bolac and Salt Creek catchment. In 2022, BBCAG received further funding from the Glenelg Hopkins Catchment Management Authority to reflect on its achievements, review its current strategic plan and update their Biodiversity Blueprint.

BBCAG decided to engage with its members, stakeholders and the wider community to gain an insight into what the priorities for the group should be. BBCAG appointed RMCG Consulting to assist with its community engagement and to facilitate a workshop with the Committee to review its vision, aim and objectives and assist with development of the new strategic plan for 2023 - 2028.

Strategy Overview

The priority issues the BBCAG have been focusing on across the catchment since its inception include:

- Waterway health, erosion, sedimentation, and pollution
- Sustainable land use and productivity
- Land Use Change
- Reduced flows throughout waterways and into Lake Bolac and surrounding wetlands
- Wetland protection and management
- Protection and enhancement of native vegetation
- Biodiversity conservation
- Ground water extraction
- Pest plant and animal management

These issues are reflected in the Strategic Plan 2023 -2028 for Beyond Bolac Catchment Action Group; however the key objectives have been streamlined to four priority themes for the next 5 years.

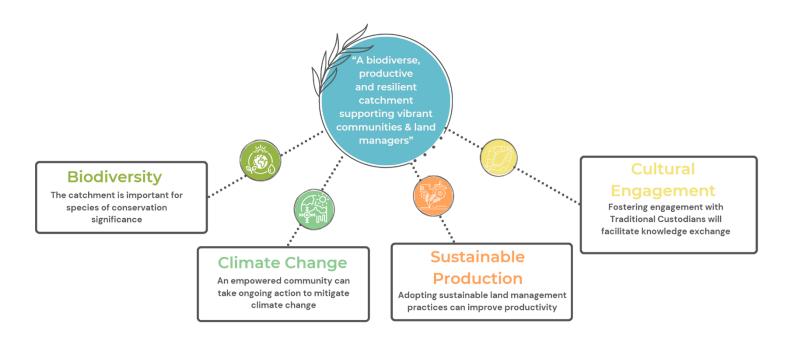
The Beyond Bolac Catchment Action Group vision is for

a biodiverse, productive, resilient catchment supporting vibrant communities and land managers.

The aim of the group is to

engage, enable, and assist land managers to implement projects to improve biodiversity in a productive, healthy landscape.

The committee identified four key focus areas and developed objectives and actions for each theme.



Detailed Strategy - Focus Areas



Biodiversity

The catchment is important for species of conservation significance.

The Lake Bolac, Fiery and Salt Creek Catchments (the catchment) support an array of flora and fauna species as well as several ecological communities of conservation significance. Approximately 60 flora species and 30 fauna species have been listed as vulnerable, threatened, or critically threatened under the Flora and Fauna Guarantee Act 1999¹.

There are three ecological communities listed as critically endangered under the EPBC Act 1999 that occur within the catchment including:

- Natural Temperate Grasslands of the Victorian Volcanic Plains
- Grassy Eucalypt Woodland of the Victorian Volcanic Plains
- Seasonal Herbaceous Wetlands.

Faunal species of particular importance within the catchment include the Corangamite Water Skink (*Eulamprus tympanum marnieae*), Stiped Legless Lizard (*Delma impar*) and Growling Grass Frog (*Litoria raniformis*) all protected under the EPBC Act 1999 and the Brolga (*Antigone rubicunda*) and Platypus (*Ornithorhynchus anatinus*) protected under the FFG Act 1988. There are also several threatened flora species across the catchment, such as Button Wrinklewort (*Rutidosis leptorhynchoides*) listed as endangered, and the Spiny Rice Flower (*Pimelea spinescens subsp. Spinescens*) listed as critically endangered under the EPBC Act 1999.

 $1\ Based\ on\ records\ extracted\ from\ the\ Victorian\ Biodiversity\ Atlas\ between\ 1970-2021.$

Fragmentation and loss of connectivity between patches of habitat are an increasing issue for biodiversity. Habitat loss due to land use change, competition from weeds and predation by animal species also pose a significant threat to native flora and fauna across the catchment. In addition, some agricultural practices impact biodiversity including removal of volcanic plains rocks (rocks provide habitat), vegetation clearing, cropping of wetlands, inappropriate grazing, and inappropriate management of water resources.

An outline of the key objectives for the biodiversity focus area, actions to achieve the objectives and the monitoring indicators are provided in Table 1-1.

Table 1-1: Objectives, actions and monitoring indicators for the biodiversity focus area

Objectives	Actions	Monitoring Indicators
Improved water Quality	 Education and engagement Research & Knowledge sharing Fencing to protect waterways and wetlands 	 Average of 10 people per planned event Number of research projects undertaken Total investment in research projects (\$) Improved knowledge and awareness of
Increased habitat and connectivity for native flora and fauna	 Education and engagement Research & knowledge sharing Protecting remnant vegetation Habitat mapping across catchment (gap analysis) Revegetation 	 participants at planned events² Number of landholders with improved knowledge and awareness of key issues (annual community survey) Total length of fenced waterways across the catchment (km)
Improved soil Health	 Education and engagement Research & Knowledge sharing Revegetation Deliver incentives to landholders to improve soil health 	 Total area of fenced wetlands across the catchment (ha) Area of remnant vegetation protected (ha) Area of revegetation (ha)

² Data collected using simple forms such as 'happy sheets' – only to be collected at major events.



Climate Change

An empowered community can take ongoing action to mitigate climate change.

Based on climate change projections for the Glenelg Hopkins region the catchment is likely to experience hotter, drier conditions. Overall, the number of hot days is set to increase and there will be fewer cold days.

Rainfall is predicted to decrease overall with an increased frequency in intense and extreme rainfall events. Under these conditions soil moisture levels will be reduced, erosion will be exacerbated by intense rainfall events, reductions in rainfall and runoff will impact flows to rivers, creeks and wetlands. The natural cycles of the catchment's flora and fauna will be disrupted, and the location, distribution and extent of species and ecological communities will shift

An outline of the key objectives for the climate change focus area, actions to achieve the objectives and potential monitoring indicators is provided next in Table 2-1.

Table 2.1: Objectives, actions and monitoring indicators for the climate change focus area

Objectives	Actions	Monitoring Indicators
Increased community awareness about climate change	 Education and engagement³ Research & Knowledge sharing Communications⁴ 	 Average of 10 people per planned event Number of research projects undertaken Total investment in research projects (\$) Number of communication channels ^{4.1} where information has been distributed.
Increased community action to mitigate climate change.	 Training (e.g. the use of tools to track and reduce carbon footprint) Landholder adoption of tools to mitigate the impacts of climate change 	 Reach across catchment (number of people communication material has reached) Number of communication pieces ^{4,2} written and distributed. Number of landholders that have adopted actions to mitigate climate change (annual community survey)

³ For example, paddock walks, field days, forums, educational events.

⁴ Through a regular column in the local paper, across social media platforms and within existing township groups.

^{4.1} Communication channels such as a newsletter, a newspaper, or Facebook

^{4.2} Communication piece such as a newsletter article, newspaper column or Facebook post.



Sustainable Production

Adopting sustainable land management practices can improve productivity.

Land use within the catchment is predominantly mixed agriculture, cropping including some livestock, with an emerging trend towards larger corporate operations investing only in broad acre cropping. Some wool production is still occurring, however meat-sheep enterprises i.e., prime lamb production, remains the main livestock enterprise across the catchment. There is a continuing trend towards increasing farm sizes and the number of individual farmers is decreasing throughout the district.

Key land use challenges include habitat loss (Land use change) managing run-off (nutrients and sediments), salinity, acidification, demand on water resources and erosion. In addition, cropping of wetland remnants and removal of volcanic plains rocks (habitat) for cropping are emerging issues. Livestock production, overwhelmingly sheep-meat breeds will remain a large component of businesses in the catchment and their sustainability and contribution to the carbon footprint will be a key challenge for producers in the future.

An outline of the key objectives for the sustainable production focus area, actions to achieve the objectives and potential monitoring indicators is provided next in Table 3-1.

Table 3-1: Objectives, actions and potential monitoring indicators for the sustainable production focus area

Objectives	Actions	Monitoring Indicators
Improved landholder awareness and knowledge of best practice sustainable land management	 Education and engagement Training Research & knowledge sharing 	 Average of 10 people per planned event Number of research projects undertaken Total investment in research projects (\$) Improved knowledge and awareness of targeted audience at planned events Number of training events Number of landholders with awareness of and improved knowledge of best practice sustainable land management (annual community survey)
Landholders have adopted sustainable land management practices	 Fencing to protect waterways and wetlands Deliver incentives for landholders to implement regenerative farming practices⁵ Deliver incentives for landholders to implement integrated pest management practices⁶ Deliver incentives to landholders to account for carbon and natural assets 	 Length of fencing along waterways across the catchment (km) Number of wetlands fenced across the catchment (ha) Value of incentives delivered (\$) Value of in-kind contribution (\$) Number of landholders that have adopted regenerative farming practices (annual community survey). Number of landholders that have adopted integrated pest management practices (annual community survey) Number of landholders that have undertaken carbon and natural asset accounting (annual community survey)

⁵ For example, cover crops, reduced tillage, mulching, rotational grazing, mixed crop rotation, reduced chemical inputs, feed selection to reduce Green House Gas Emissions application of compost and manure.

⁶ Long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, change of cultural practices, and uses resistant plant varieties.



Cultural Heritage

Fostering engagement with Traditional Custodians will facilitate knowledge exchange

The original custodians of the catchment were the Djab Wurrung people, who occupied the areas west of Fiery Creek, the Watha Wurrung people, who occupied the northeast side of Fiery Creek and the Girai Wurrung people who occupied the south east side of Fiery Creek. The Fiery Creek formed the boundary between the Djab Wurrung to the west and the Watha Wurrong and Girai Wurrung people to the east.

The Girai Wurrung people used the corridors along Fiery Creek to harvest eels and hunt emus and other game. Lake Buloke (Lake Bolac) is especially important for all three groups who would gather along the shores to harvest an abundance of eels during their annual migration in early autumn. Much of the land was claimed by European settlers in the 1800's and converted to agriculture. Many sites of archaeological and cultural significance remain across the catchment today.

An outline of the key objectives for the cultural engagement focus area, actions to achieve the objectives and potential monitoring indicators is provided next in Table 4-4.

Table 4-4: Objectives, actions and potential monitoring indicators for the cultural engagement focus Area

Objectives	Actions	Monitoring Indicators
Increased partnerships with Traditional Custodians	 Maintain existing partnerships⁷ Take up opportunities to engage with Traditional Custodians (e.g. through the GHCMA) 	 Number of engagement opportunities undertaken Number of partnerships maintained. Number of Traditional Custodian groups engaged across the catchment
Increased knowledge exchange between landholders and Traditional Custodians	 Facilitate opportunities to exchange knowledge between landholders and Traditional Custodians (e.g. organise events, meetings on country) 	 Number of opportunities to exchange knowledge undertaken. Number of landholders from across the catchment with increased awareness of Traditional Custodian knowledge and values (annual community survey)

⁷ For example, BBCAG sponsorship of Environmental Forum at the Lake Bolac Eel Festival - Kuyang Lapakira (Plenty Eels)

Context & Drivers

There are numerous drivers that will influence the delivery of the renewed BBCAG strategic plan. It is important to acknowledge and where possible, address how BBCAG will consider such drivers to support successful implementation of actions and achievement of stated objectives. During the strategic planning workshop, the BBCAG committee identified the key drivers described in the following sections.

Capacity to engage target landholders across the catchment

The catchment area that BBCAG works across is predominantly private land used for agriculture. The actions that the group plan to implement will be mostly on private land and will therefore require coordination and collaboration with private landholders.

Agriculture in the region is transitioning from smaller farms to larger and corporate farms and land use is changing from wool production/ mixed farming to larger scale cropping. The implication is that there are fewer people involved in farming across the region, and therefore fewer farmers to engage in catchment management.

Current engagement methods used by Landcare and other conservation groups to connect with larger commercial operators have not been as successful as the group would like. Committee members also said that farmers appear to have less time to engage in volunteer and conservation activities.

<u>Opportunity:</u> Profile the target demographic and design engagement approaches that are fit for purpose for this audience. Review volunteerism data and information to understand the motivations behind involvement in volunteer activities, and how other groups have dealt with the issue.

Water quality in Lake Bolac

Lake Bolac is a key community asset with high environmental, social and economic value to the region. Water quality decline has been an ongoing issue due to historical catchment wide erosion events combined with greater nutrient inputs and a drying climate. Blue green algal blooms are becoming more frequent, impacting the environmental health and recreational use of the Lake Bolac system. Tourism and recreational use of the lake are important to the economy at a local scale.

<u>Opportunity:</u> Develop a coordinated approach with key stakeholders to monitor and determine the key causes of water quality decline (this may include partnerships with local citizen science groups, schools, universities, the Glenelg Hopkins CMA, Parks Victoria, tourism staff at council and the Department of Environment, Land, Water and Planning).

Regulatory change (carbon markets)

There is increasing demand on agricultural producers to demonstrate how they meet Environmental, Social and Governance (ESG) requirements. This includes the development of policies and processes that encourage operators to act responsibly with respect to their environmental footprint, how they consider the welfare and working conditions of employees and their social licence to operate. Examples of such policies include zero emissions and the move towards a circular economy.

<u>Opportunity:</u> Many of the land management practices that BBCAG advocate for (e.g. regenerative agriculture, integrated pest management) are in alignment with the ESG requirements and may support agricultural producers to move their businesses in a direction that is more environmentally sustainable without loss of productive capacity. BBCAG can play a role in providing information about what training and tools are available to landholders to make this transition.

Policy – Protecting Victoria's Biodiversity 2037 (Department of Environment, Land, Water and Planning)

Protecting Victoria's Biodiversity 2037 is a key state policy that will drive investment in on-ground biodiversity actions. The core aim of the policy is to stop the decline of biodiversity and achieve overall biodiversity improvement over the next 20 years.

<u>Opportunity:</u> Alignment of BBCAG objectives and actions for biodiversity with the goals and targets outlined in the Protecting Victoria's Biodiversity 2037 will support the group to attract funding and investment in the catchment (e.g. for on-ground works such as fencing and revegetation).

Strategy - the Glenelg Hopkins CMA Regional Catchment Strategy (Glenelg Hopkins Catchment Management Authority)

The Glenelg Hopkins Regional Catchment Strategy sets out the overarching plan for integrated catchment management across the region. It outlines the vision, priority directions, challenges, opportunities and the framework for investment and partnership implementation.

<u>Opportunity:</u> Alignment of BBCAG objectives and actions across all focus areas with the themes and outcomes outlined in the Glenelg Hopkins Regional Catchment Strategy will support the group to attract funding and investment in the catchment. For example, revegetation to increase the extent of native vegetation in the region or incentives for landholders to implement regenerative land management practices contributing to the increase in area of land managed for improved soil health.

MONITORING, EVALUATION, REPORTING, AND IMPROVEMENT (MERI)

To assess the effectiveness and impact of the BBCAG strategy and determine if the objectives are being achieved it is important to track the delivery of key actions and put measures in place to collect evidence of these achievements. One way to do this is through a program logic. Using the proposed focus areas, objectives and actions a working version of a program logic including measures is provided for consideration in Appendix 2.

Examples of the medium and long -term outcomes of the strategy have been provided as guidance. When developing monitoring indicators, it is important to consider the collection of baseline data to compare monitoring data with. This will allow measurement of the effectiveness and impact of actions rather than just the amount delivered. For example, when measuring landholder adoption of sustainable land management practices, you could use two measures:

- 1. The number of landholders that have adopted sustainable land management
- 2. The proportion of all landholders across the catchment that have adopted sustainable land management practices (requires a baseline number of all landholders in the catchment to be known)

The first indicators simply tell us how many landholders have adopted sustainable land management practices. The second indicator provides an indication of the extent of adoption across the whole catchment and allows targets to be set as well as tracking of progress towards outcomes overtime (i.e. an outcome may be 'X per cent of landholders across the BBCAG catchment have adopted sustainable land management practices').

RESOURCES TO IMPLEMENT THE STRATEGY

Finally, it is important to consider how the actions in the strategy will be funded and identification of key sources of investment will be critical to success. Based on discussions the primary sources of investment may include but not be limited to:

- Department of Environment, Land, Water and Planning Protecting Victoria's Biodiversity 2037
- Australian Government Regional Land Partnerships Program
- Glenelg Hopkins CMA Environmental Contribution Fund
- Wettenhall Environment Trust.

The development of this strategic plan was supported by Glenelg Hopkins Catchment Management Authority, through the OCOC Landcare Strategy Grants 2022.

