

CONSERVATION VALUES OF THE MIRBOO NORTH STATE FOREST IMMEDIATE PROTECTION AREA

Findings from
Preserve our Forests Mirboo North and District
Community Field Studies and Research
Into the Conservation Values of the Mirboo
North State Forest
September 2017 to February 2020



Preserve Our Forests Steering Committee, September 2021

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Salva Nostra Foresta - Community Auction children's entry, Mirboo North Arty Gras 2019

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TABLE OF CONTENTS

Click the photo portal to enter our Forest Report

ACKNOWLEDGEMENTS.....	2
ABBREVIATIONS.....	7
EXECUTIVE SUMMARY.....	9-18
A COMMUNITY VISION FOR THE FUTURE.....	16
RECOMMENDATIONS.....	15-18
Chapter 1 About Mirboo North’s State Forest and the PoF Study Area	19-26
Chapter 2 The Community Campaign to Preserve our Forests	27-38
Chapter 3 Significant Ecological Values in the Mirboo North State Forest IPA.....	39-64
Chapter 4 Socio-Economic and Environmental Values of the Mirboo North State Forest IPA	65-84
Chapter 5 Protecting Mirboo North’s Special Water Supply Catchment	85-98
Chapter 6 Protecting Mirboo North’s Biodiversity in the Strzelecki Ranges Bioregion	99-118
Chapter 7 Conclusion	119
POSTSCRIPT-WHAT HAS HAPPENED SINCE: 2020-2021	121-123

ATTACHMENTS



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Respect to the Gunaikurnai Community

The Mirboo North State Forest Immediate Protection Area (the IPA) lies in Gunaikurnai country. The Preserve our Forests Steering Committee (PoFSC) pay our respects to Gunaikurnai elders - past, present, and emerging, and acknowledge their living culture and unique role in the life of this region.

Appreciation and thanks to all our volunteers and campaign participants

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PRESERVE OUR FORESTS STEERING COMMITTEE (PoFSC)

PoFSC Members

Marg Thomas, Steering Committee Convener and Chairperson, Coordinator, Strategy and Media Working Group

Susan Koci, Biodiversity Working Group Coordinator, (past) Treasurer.

Viki Sinclair, Socio-economic and Amenity Working Group Coordinator.

Rosemary Cousin, Policy Researcher, (past) Minute-taker. Photographs.

Stephen Koci (present) Minute-taker and Treasurer.

Ian Cornthwaite (member).

Ian Starkey (member).

Richard Lester (member).

Special thanks to former PoFSC Members

Gayle Margaret, Phil Piper, John Nichols, Lisa Vincent, Eric Walters, Ron Brown, Anne Garth, Grant O'Neill, Gary Price.

WORKING GROUP MEMBERS

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Susan Koci - Mirboo North, Wildlife Conservation Biologist and Ecologist.

Viki Sinclair - Mirboo North, Socio-economic Research.

Stephen Koci – Mirboo North, Steering Committee member.

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Phil Piper, Berry's Creek, founding member Mardan-Mirboo North Landcare, founding member PoFSC; Gayle Margaret, Mirboo North, founding member PoFSC.

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Dick Lester - Leongatha, Landcare/environmental horticulturist.

Ian Starkey - Leongatha North, Landcare/environmental horticulturist.

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Bill Blomeley - Mirboo North, environmental advocate, former President of the South Gippsland Conservation Council.

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Viki Sinclair, Socio-economic and Amenity Working Group Coordinator.

Grant O'Neill - former forester, former BWG member.

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Gay Cornthwaite – Field vegetation surveys.

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Phil Rayment - Latrobe Valley Field Naturalists.

Bronwyn Teesdale - South Gippsland Conservation Society, Horticulturist/ Rehabilitation Consultant.

Dallas Wyatt - Inverloch, Ornithologist.

Ken Harris - Latrobe Valley Field Naturalists, Botanical Author.

Margaret Rowe - Latrobe Valley Field Naturalists, Botanist.

Terri Allen - Latrobe Valley Field Naturalists, Botanist.

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DELWP: particularly Ryan Incoll, Manager Environment and Natural Resources.

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[\[Return to Top of Report\]](#)



ABBREVIATIONS



PoF	Preserve our Forests Mirboo North and District.
PoFSC	PoF Steering Committee.
BWG	Biodiversity Working Group of PoF.
EAWG	Economic and Amenity Working Group of PoF.
SMWG	Strategy and Media Working Group of PoF.
MNSF	The Mirboo North State Forest. Its official name is the Strzelecki State Forest Darlimurla Block .
IPA	Immediate Protection Area, declared on 7 November 2019 over the MNSF by the Victorian Minister for Energy, Environment and Climate Change.
DELWP	Department of Environment, Land, Water and Planning, Victoria (current).
DSE	Department of Sustainability and Environment (forerunner to DELWP).
DCFL	Department of Conservation Forests and Lands (forerunner to DSE).
PV	Parks Victoria (current).
VF	VicForests, a Victorian Government Backed Business Enterprise whose principal function is to undertake logging and commercial sale of native forests in Victoria.
EVC	Ecological Vegetation Class, the standard unit for classifying vegetation types, based on flora, structure and ecology.
CS	Conservation Status - an indicator of how likely a species is to stay alive now or in future.
BCS	Bioregional Conservation Status applied to EVCs to manage biodiversity values within the bioregion in which it is found.
EPBC	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwth).
FFG	<i>Flora and Fauna Guarantee Act 1988</i> (Vic).
SGS	South Gippsland Shire.
SGSC	South Gippsland Shire Council.
VNPA	Victorian National Parks Association.
Gliwice	Gunaikurnai Land and Waters Aboriginal Corporation.
SoV	State of Victoria.
CofA	Commonwealth of Australia.
COAG	Council of Australian Governments.
ANZECC	Australian and New Zealand Environment Conservation Council.
IBRA	Interim Biogeographic Regionalisation for Australia) -the system for classifying terrestrial conservation regions endorsed by all governments.
JANIS	Joint ANZECC /Ministerial Council on Forestry Fishing and Agriculture (MCFFA) National forest policy statement Implementation Sub-committee
RFA	Regional Forest Agreements.
GRFA	The Gippsland Regional Forest Agreement 2000, also called Gippsland RFA.
FMPG	Forest Management Plan for Gippsland 2004.

CAR	Comprehensive, Adequate and Representative: the nationally agreed criteria for the Australian-wide system of protected forest areas adopted by ANZECC in 1997. The CAR reserve criteria are also known as JANIS 1997 .
SPZ	Special Protection Zone of the FMPG, as part of the CAR reserve system.
SMZ	Special Management Zone: a FMPG forest management zone.
GMZ	General Management Zone: a FMPG forest management zone.
VEAC	Victorian Environment Assessment Council (current).
LCC	Land Conservation Council (a forerunner of VEAC).
SCA	Soil Conservation Authority (pre-VEAC, partly absorbed into DCFL)
SCA	Land Use Determination for the Mirboo North Water Supply Catchment
CALP Act	<i>Catchment and Land Protection Act 1994</i> (Vic).
SWSCA	Special Water Supply Catchment Area in Mirboo North as listed in Schedule 5 of the CALP Act.
SAP	Special Area Plan – the new form of LUD introduced by the CALP Act.
WGCMA	West Gippsland CMA - duties and responsibilities set out in the CALP Act.

Mirboo North State Forest surveys 2017-2020



Bill Blomeley in the SPZ 2019



Orchids in the Mirboo North State Forest



[\[Return Top of Report\]](#)

EXECUTIVE SUMMARY



This Report to the Victorian Minister for Energy, Environment and Climate Change, the Victorian Government, and the Victorian community, details the results of Preserve our Forests Mirboo North and District's successful community campaign to secure protection of three highly valued native forest blocks within the Mirboo North State Forest from logging, planned by VicForests - the state government's commercial native forest logging agency.

This Report sets out the findings of the actions undertaken in this community-based campaign between 2017 to 2020, including original field surveys and research into forest biodiversity, socio-economic, amenity, other forest values, water catchment and forest governance, and the knowledge gained.

On 7 November 2019, the Victorian Minister for Energy, Environment and Climate Change announced that native forest logging would be phased out in Victoria by 2030. To protect highest conservation value forest areas, several **Immediate Protection Areas** (IPA) were declared across Victoria as part of this forest policy initiative. Amongst the list of IPA locations, was an IPA covering the three State Forest blocks in Mirboo North (Doug, Samson, and Oscine), and included the adjoining Special Protection Zone, Special Management Zone and General Management Zone.

The Campaign to Preserve Mirboo North State Forest 2017 to 2020

On 14 September 2017, a public meeting was urgently held in Mirboo North after the local community learned State Government logging was imminent in the Mirboo North State Forest. Over 350 residents unanimously endorsed a motion to strongly oppose the proposed logging; to set up the Preserve our Forests Steering Committee to run a campaign on behalf of the community; and calling for a meeting with Victorian State Government Ministers to ensure logging did not proceed.

The Preserve our Forests Steering Committee (PoFSC) comprising community volunteers was promptly established, together with three working groups -the Biodiversity Working Group (BWG), the Socio-economic and Amenity Working Group (SAWG), and the Strategy and Media Working Group (SMWG).

Extensive on-ground surveying and research commenced immediately, conducted by Mirboo North and district citizen-scientists into the biodiversity and ecology of our native forests. Community-managed surveys and research

was also initiated, to identify the socio-economic, amenity and other significant values of our native forests, held by residents, businesses, and visitors to Mirboo North.

Every step of the way direction for the campaign was sought and received from the Mirboo North community at well-attended public meetings. The meetings informed people about government logging proposals and reported regularly on findings from the biodiversity studies, economic and amenity surveys, and forest governance research. Further opportunities were provided for the community to learn about the effects of fire on native forests and the habits of owls and other nocturnal forest creatures; and to consider developments in managing habitats for native wildlife.

Presentations were made by Mirboo North business leaders and the PoFSC to the South Gippsland Shire Council. The Council consequently resolved to support the PoF campaign. Regular media activities successfully informed a wide range of people and encouraged their ongoing support for the campaign.

Action on behalf of Mirboo North's State Forest included a community meeting to hear from political party candidates about their policies on native forests before the 2018 Victorian State elections. Discussions also took place with local Nationals MP Danny O'Brien and local ALP Branch members. The Greens took a strong interest in the campaign with Samantha Dunn (former MP); and Janet Rice (Federal Senator), Deb Foskey and Will Hornstra (candidates), walking through the Mirboo North State Forest and advocating for its preservation at state and federal government levels.

In February 2019, PoF provided an extensive briefing to the Minister for Energy, Environment and Climate Change, the Hon Lily D'Ambrosio on the community's research and significant findings. The Minister listened and on 7 November 2019, released an **Action Statement for the Greater Glider** - one of the threatened species found in abundance by citizen-scientists in the Mirboo North State Forest. The Minister also declared an **Immediate Protection Area** (IPA) for the Mirboo North State Forest, to immediately remove the three forest blocks from the threat of logging.

Chapter one introduces the Mirboo North State Forest and the primary area of PoF's research and forest campaign, providing a context for PoF's findings and recommendations.

Chapter two summarizes key elements of the PoF campaign that culminated in the declaration of the Mirboo North IPA and the publication of this Report on the *Conservation Values of the Mirboo North State Forest IPA*.

The Key Findings

It is hard to summarize the enormous amount of valuable work undertaken by PoF volunteers and citizen-scientists on behalf of the Mirboo North community. However, three key findings stand out. They point to three classes of values for our forests that reinforce the decision made by the Minister to declare an IPA over the Mirboo North State Forest:

BIOLOGICAL AND ECOLOGICAL VALUES:

The Mirboo North State Forest has **multiple High Conservation Value fauna and flora species and a rich biodiversity** that provides habitat critical for the survival of many nationally significant species threatened to extinction, together with many regionally significant and iconic species. The Mirboo North State Forest is a **High Conservation Value Forest** which has significant classes of vegetation that are deemed either vulnerable, depleted, or endangered. Within the Strzelecki Ranges bioregion these EVCs are under-represented in the state's reserve system according to the nationally agreed Comprehensive, Adequate and Representative (CAR) protected area reserve criteria (JANIS 1997).

Chapter three sets out the findings from original fieldwork and research undertaken by the PoF BWG, professional environmental organizations, ecologists, and others - findings which prove that the Mirboo North State Forest is a High Conservation Value Forest (HCVF) containing multiple High Conservation Value Species (HCVS) and critical habitats. Detailed studies and ecological surveys revealed that the Mirboo North State Forest consists of small, isolated patches of the once great Strzelecki Ranges native forests. These patches are a critical refuge for many threatened and/or regionally significant native species, together with many regionally important iconic species. Many of these species are highly vulnerable to extinction as they have limited (or no) ability to disperse, recruit new individuals and maintain genetic diversity, further magnifying the importance of protection and conservation of these publicly owned native forests, and the need to connect remnant patches and improve the quality of habitat for the future.

Mirboo North State Forest is of High Conservation Value as it contains:

- Depleted, endangered, and vulnerable EVCs (Ecological Vegetation Classes) for the Strzelecki Ranges Bioregion. Field surveys have detected over 200 plant species in four forest classes (EVCs), demonstrating a diverse, species-rich forest.
- State-listed threatened (Victoria) and nationally listed endangered fauna species were surveyed and detected including the Greater Glider, the Powerful Owl, multiple Burrowing Crayfish species and the Lace Monitor. ***PoF BWG field surveys identified a significant population of Greater Gliders despite the isolation and small size of these forest areas.***
- Iconic and regionally significant fauna species include the Strzelecki (or South Gippsland) Koala, the Superb Lyrebird, and the platypus. The genetic diversity of the Strzelecki Koala has been recognised as distinct from other Victorian koalas. The Mirboo North community have a long-held connection with the Superb Lyrebird (see “Land of the Lyre Bird”¹).

SOCIO-ECONOMIC AND AMENITY VALUES:

Our forests are highly valued by residents and visitors alike for their contribution to personal and community health and wellbeing, passive and active recreation opportunities, biodiversity conservation and general environmental qualities such as clean water, and carbon sequestration. Our native forests and their many assets are fundamental to Mirboo North’s attraction as a tourist destination and make a significant contribution to Mirboo North and the region’s economy. The indigenous cultural heritage values and significance of our forests are only just beginning to be understood and require considerable future research.

Chapter four sets out findings from PoF’s comprehensive surveys of residents, visitors, and local businesses, and the background research conducted in 2018 to identify which aspects of the Mirboo North forests provide value to people’s lives and to the town and district economy. The study involved 595 participants and applied ‘Remplan Economic Modelling’ provided by the South Gippsland Shire’s Economic and Tourism Department. This valuable work demonstrates that Mirboo North’s amenity, the districts economy and community well-being all rely on these native forests remaining intact.

¹ The Committee of the South Gippsland Pioneers Association (1920)

Mirboo North State Forest is of High Socio-Economic and Amenity Value because of:

- **SOCIAL VALUES:** In PoF surveys, locals and visitors alike highly valued well-being, visual amenity, and the connection values provided by the Mirboo North State Forest. Respondents overwhelmingly reflected these values in personal comments they made in the surveys.
- **RECREATIONAL VALUES:** Walking, hiking, horse riding, cross country running, dog walking, drawing, painting, photography, nature studies and bird watching all emerged as highly significant uses for these native forests, for locals and visitors alike. A range of comments underpins these key elements.
- **ENVIRONMENTAL VALUES:** Many respondents were concerned about the conservation and protection of local and regional biodiversity in these forests. Many concerns were also expressed about matters of wider environmental importance such as clean water, clean air, and these forests contributing to climate change mitigation.
- **ECONOMIC VALUES:** The studies identified that local native forests are one of the key economic assets of the district and are central to its tourism success. In 2016/17 tourism brought an estimated \$19.1 million in total to the Mirboo North township and local area, with \$12.2 million going directly to the town and \$6.9 million indirectly to the local area. Apiculture and future native seed collection for conservation purposes are other important economic values.

PoF research confirms the Mirboo North State Forest makes major socio-economic, health and amenity contributions to the local community that are far above and beyond any short-term state government based financial return that might come from these areas being logged. This work has also identified that environmentally focused management will be critical to ensure that any future permitted human activity is consistent with and does not impact negatively upon the IPA's prime biodiversity conservation purpose.

WATER SUPPLY CATCHMENT AND BIODIVERSITY VALUES WITHIN THE STRZELECKI RANGES BIOREGION

Mirboo North's State Forest plays a critical role in protecting water quality and maintaining supply for domestic, commercial, and agricultural uses. While Mirboo North's water catchment includes areas used for agriculture and plantations, most of the catchment lies in the Mirboo North State Forest. This

forested catchment supports Mirboo North's only potable water supply, drawn from a weir and pumping station on the Little Morwell River, 4km from the town.

Chapter five summarizes historic studies and decisions that define Mirboo North's water catchment and currently protect its water supplies. In the 1960s and '70s the Soil Conservation Authority conducted two major investigations that led to the declaration of Mirboo North's water supply catchment area (WSCA) with a Land Use Determination (LUD) to protect it. PoF has identified anomalies in Mirboo North's catchment as it is now managed that need to be considered when transforming the IPA into a vital part of Victoria's reserve system.

- Distinguishing between land suited for forest purposes and permanent forest, the LUD declared much of the Mirboo North State Forest as land to be retained as permanent forests, including much of the areas targeted for logging by VicForests in 2017.
- In the 1980s the Land Conservation Council (LCC) recommended formation of a Mirboo Regional Park consisting of four separate land areas including a large portion of Mirboo North's water catchment. This recommendation, approved by the Victorian State Government at the time, is still to be fully formalized.
- As part of the Regional Forest Agreement (RFA) process, in 2004, the *Forest Management Plan for Gippsland* introduced a Special Protection Zone to protect several important forest values; but the Management Plan also zoned much of the catchment, including areas designated in the LUD to be retained as permanent forest, in a General Management Zone, thus exposing the catchment to logging.
- Definition of the catchment boundary differ amongst several public land managers.

Chapter six shows the biodiversity found in Mirboo North State Forest IPA is significant within the Strzelecki Ranges Bioregion - according to nationally agreed criteria for the protected area reserve system for Australia's forests (known as the CAR reserve criteria, JANIS 1997). Comprehensive studies informed the designation of areas to be protected that were set out in the *Gippsland Regional Forest Agreement 2000*. Since then, several studies by the Victorian Environment Assessment Council (VEAC) have highlighted significant shortfalls in the way the reserve system has it has been implemented, particularly within the Strzelecki Ranges Bioregion.

In 2019 the Victorian Government approved many of VEAC's recommendations and requested VEAC to undertake an assessment (after 2028) of some of the Strzelecki Ranges Bioregion's native forests. The area to be assessed by VEAC excludes the Mirboo North State Forest and other critical native forests in the Mirboo North district. The PoF findings add new evidence to support these assessments and highlight that a VEAC investigation of the Ecological Vegetation Classes in the Strzelecki Ranges Bioregion according to the CAR criteria is essential and should include the Mirboo North State Forest IPA, Mirboo Regional Park plus the surrounding native forest areas. This will improve representation and connectivity in line with the IPA policy.

The Mirboo North State Forest plays a dual role in maintaining both the quality and quantity of water supply for Mirboo North district and providing critical habitat for threatened species and biodiversity conservation. **Despite the declaration of an IPA, while the General Management Zone still applies to the state forests these high value forest areas remain vulnerable to logging in the future. The formal inclusion of the Mirboo North State Forest in a Nature Conservation Reserve and removal of the General Management Zone is urgently needed to underpin the IPA designation.**

[\[Return to Top of Report\]](#)



RECOMMENDATIONS



To manage Mirboo North State Forest High Conservation Value Forest and the High Conservation Values found within them, the PoFSC, with strong community support, makes the following recommendations:

Recommendation 1: That the Minister for Energy, Environment and Climate Change urgently enact the current Mirboo North Immediate Protection Area (IPA) native forests as a Nature Conservation Reserve for permanent protection under the *National Parks Act 1975*.

Recommendation 2: That the Minister for Energy, Environment and Climate Change implement a site-specific Ecological Conservation Management Master Plan for this Nature Conservation Reserve. This Plan is to be based upon the Mirboo North "Community Vision for the Future" which comes from a resolution unanimously endorsed at the Mirboo North Public Meeting 10 October 2019 following the presentation of PoF's BWG research findings (The community resolution is included in full in **Attachment 2.3**).

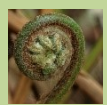
A COMMUNITY VISION FOR MIRBOO NORTH'S STATE FOREST



The permanently conserved **Mirboo North Nature Conservation Reserve** will include the following key characteristics:

- Having nature conservation as the Reserve's primary objective.
- Showing recognition and respect for the Gunaikurnai people as the Traditional Owners enabling their full participation in the Reserve's development, cultural planning, and ongoing management.
- Providing protection of its biodiversity and the Mirboo North water catchment and water supplies.
- Ensuring the active participation of the Mirboo North and district community in all future planning and management
- Continuing the valuing of its amenity and contribution to public health and wellbeing.
- Permitting uses that are consistent with the primary purpose of a Nature Conservation Reserve to ensure continuing enjoyment, recreation, cultural and educational experiences for local people and tourists to the area.
- Continuing to support citizen-based and professional scientific investigation, education and understanding of Mirboo North's native forests and the Strzelecki Ranges bioregion.
- Recognising that this Reserve is a key component of the highly depleted Strzelecki Ranges Bioregion under the Comprehensive, Adequate and Representative (CAR) national reserve system criteria and needs the development and implementation of reparative strategies.
- Developing linkages and vital connections over the medium to longer term to other existing local and regional forests and bushland reserves, local native forest habitats and recreation areas including Lyrebird Forest Walk, Grand Ridge Rail Trail, the Mirboo Regional Park system, and all remaining native-forest areas in the district, with coherent park management to enhance, preserve and manage the region's rich biodiversity, and permitted uses and activities.

[\[Return to Top of Report\]](#)



Recommendation 3: That DELWP actively involve GLaWAC to take a properly resourced role in the development and implementation of a Cultural Heritage

Plan for the Mirboo North State Forest IPA and in ongoing management of the IPA.

Recommendation 4: That the Minister for Energy, Environment and Climate Change request VEAC to now commence an Investigation the Mirboo North State Forest IPA, all components of the Mirboo Regional Park and other native forest areas in the Mirboo North district of the Strzelecki Ranges Bioregion with Terms of Reference including:

- i) Identification of the Bioregional Significance of Ecological Vegetation Classes and flora and fauna in this district and make recommendations in relation to their potential to add to the extent, representativeness and adequacy of the CAR reserve system in the Strzelecki Ranges Bioregion.
- ii) Identification of opportunities to improve the connectivity of the Mirboo North State Forest IPA with other public lands in this district and make recommendations into complementary measures on public and private land to implement the IPA policy.
- iii) Clarification of the boundary of Mirboo North's water supply catchment area as used by relevant land managers; and the relationship between the management of the catchment area, Mirboo North State Forest IPA and the Mirboo Regional Park; and make recommendations in relation to the relevant land management areas, plans and responsibilities.

Note: This recommendation complements and is consistent with the Government's response to VEAC's 2016 Recommendation 20 and the Victorian Biodiversity Plan's Priority 18. This is a request for the Minister to request VEAC to undertake a full Investigation in the Mirboo North district. It is understood that this will take several years to fulfil, will involve a discussion paper, public consultation, a publicly available final report to Government with recommendations and a formal response from the Government to the recommendations.]

Recommendation 5: That the Minister request the Secretary of DELWP to immediately undertake the following:

- i) Transfer the Mirboo North State Forest IPA into a temporary Special Protection Zone as an interim arrangement, to secure the IPA from the threat of future logging while processes are formalized for the IPA to be designated as a permanent Nature Conservation Reserve.
- ii) Commence action to legally formalize the four sites of the Mirboo Regional Park into the state's permanent reserve system with coherent management policy objectives and programs.

Recommendation 6: That DELWP, as part of the ongoing implementation of the Nature Conservation Reserve (IPA) Management Plan, undertake landscape-scale biodiversity and ecological research and surveys in the Mirboo North State Forest (IPA) and contiguous Mirboo Regional Park for the presence, distribution, and abundance of the following species in the following priority order:

Threatened fauna species, including

- Greater Glider
- Powerful Owl
- Crustaceans (i.e. Spiny Crayfish, Narracan Burrowing Crayfish)
- Lace Monitor

And regionally significant and important species:

- Plant species. (Those listed on the Flora and Fauna Guarantee Act 1988 - Threatened List August 2021 and Processes List 2016).
- Strzelecki (South Gippsland) Koala.
- Birds (diversity and abundance).
- Platypus (distribution and abundance).
- Superb Lyrebirds (distribution and abundance).
- Long-nosed and Southern Brown Bandicoots (to detect presence, distribution and abundance).
- Amphibians and fish species.
- Fungi.

[Return to Top of Report]



1

ABOUT MIRBOO NORTH'S STATE FOREST AND THE POF STUDY AREA



Contents

- 1.1 Introduction
- 1.2 Gunaikurnai Country
- 1.3 The Strzelecki Ranges Bioregion
- 1.4 Public Lands and Public Land Managers in Mirboo North and Surrounds
- 1.5 Declaration of the Mirboo North IPA
- 1.6 Victorian Biodiversity Atlas Data
- 1.7 Other Terms used in this Report

Maps

- Map 1.1 Victorian Bioregions showing the Strzelecki Ranges Bioregion location
- Map 1.2 Public Land in Mirboo North and District and the PoF study area
- Map 1.3 State forests in Mirboo North and District
- Map 1.4 Public Lands and Public Land Managers in Mirboo North and Surrounds
- Map 1.5 The Mirboo North State Forest IPA with Forest Management Zones

1.2 Introduction

VicForests announcement in September 2017 that logging was imminent in Mirboo North caught the community unawares. VicForests had conducted no local public consultation in preparation of its Timber Release Plan that was approved by the State Government on 5 January 2017.

Some really important facts needed to be quickly established to understand the threat facing the township's natural landscape and take a stand against the proposed logging. This Chapter sets the framework for PoF's research, field surveys and campaign.

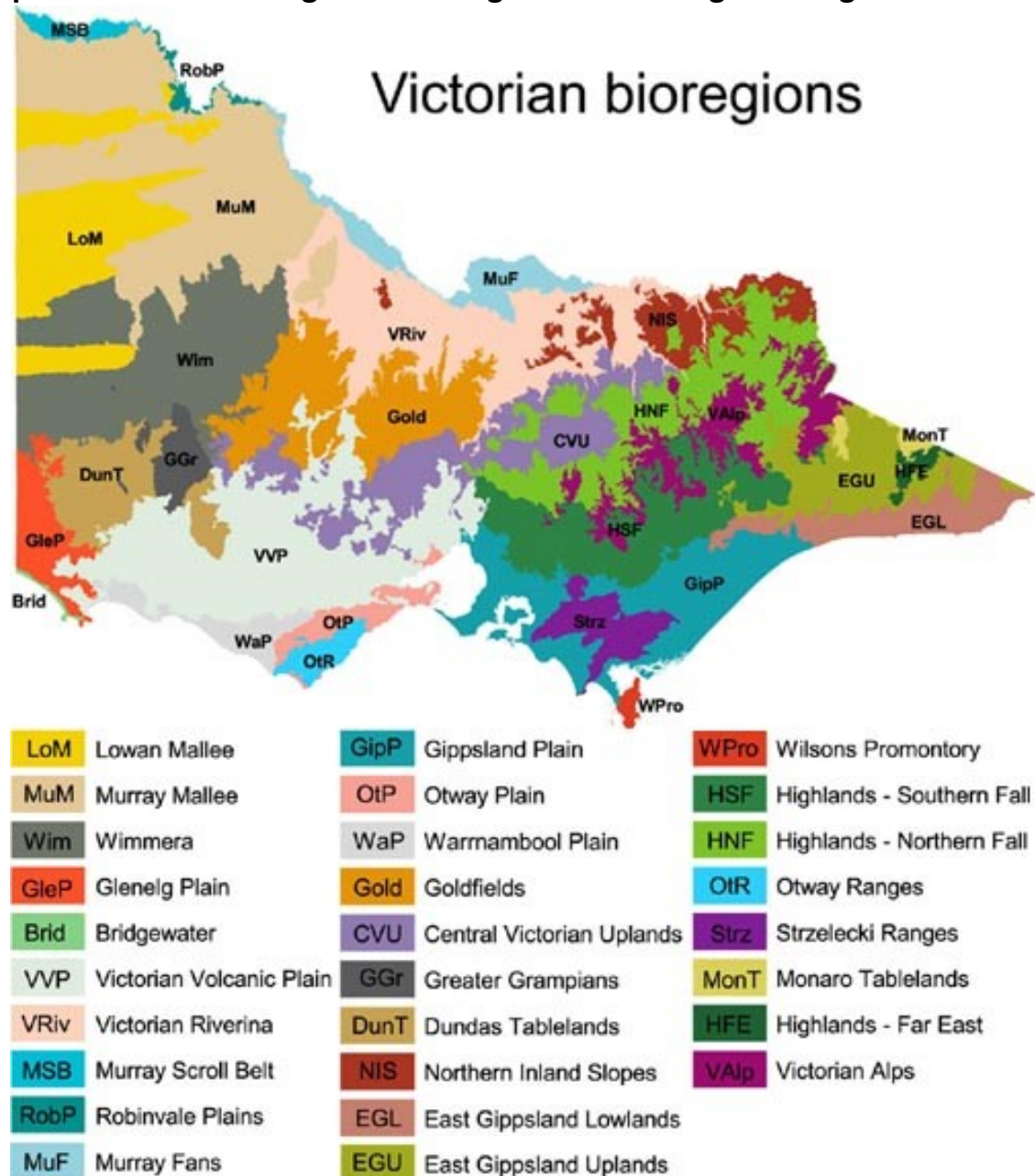
1.2 Gunaikurnai Country

The Mirboo North State Forest IPA lies in Gunaikurnai Country in the territory of the Brataualung Clan. In October 2010, a landmark Native Title determination legally recognised the Gunaikurnai's connection to Country, their culture, and rights as Traditional Owners of over 1.33 million hectares in Gippsland. Gunaikurnai Country extends from West Gippsland near Warragul, east to the Snowy River and north to the Great Dividing Range - including 200 metres of off-shore sea territory.

1.3 The Strzelecki Ranges Bioregion

Mirboo North's State Forest lies in the central-western part of the Strzelecki Ranges Bioregion. Victoria's classification of native vegetation landscapes provides an important framework for analysis of ecological values and conservation significance of native vegetation and forests. **Map 1.1** (overleaf) shows Victoria's 28 bioregional landscape groupings. The Strzelecki Ranges Bioregion is deep purple in the southeast.

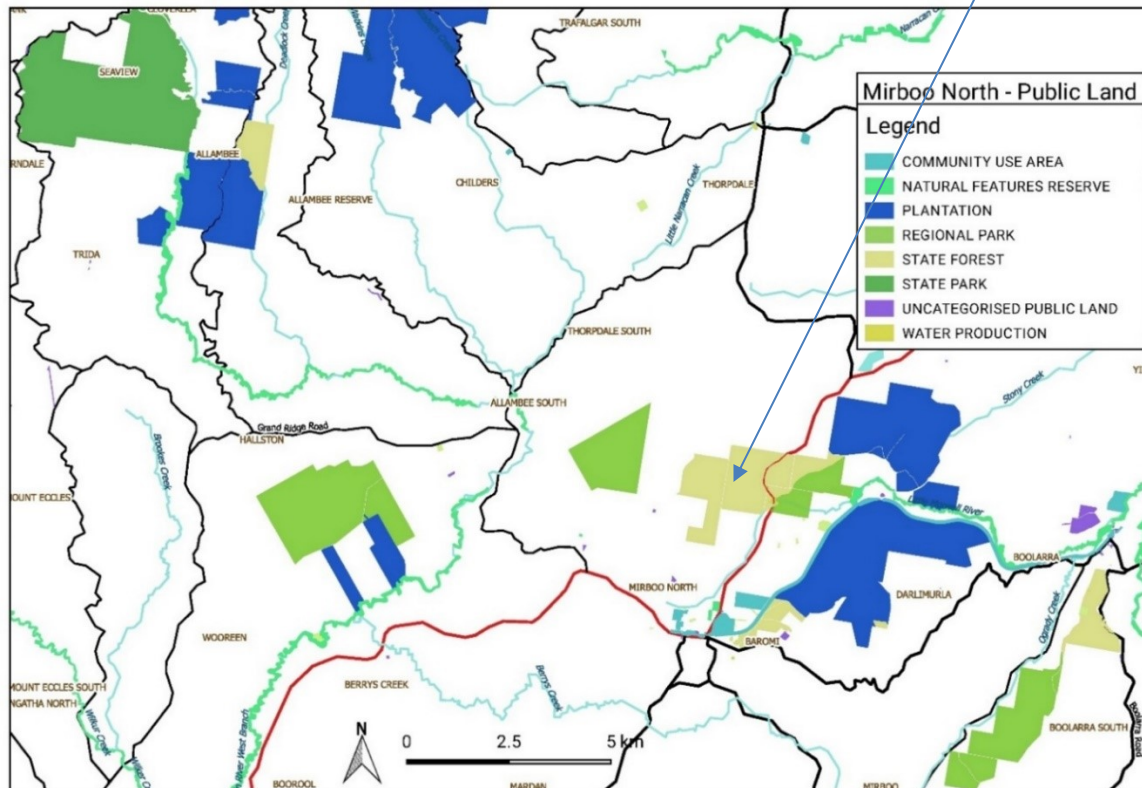
Map 1.1 Victorian Bioregions showing Strzelecki Ranges Bioregion location



Source: DELWP (2004)

Map 1.2 shows public land in the Mirboo North district. The Mirboo North State Forest is colored beige. Located within this state forest are the 3 native forest blocks targeted for logging by VicForests in 2017 which are the focus of PoF's research and surveys 2017-2020.

Map 1.2 Public Land in Mirboo North and PoF's study area

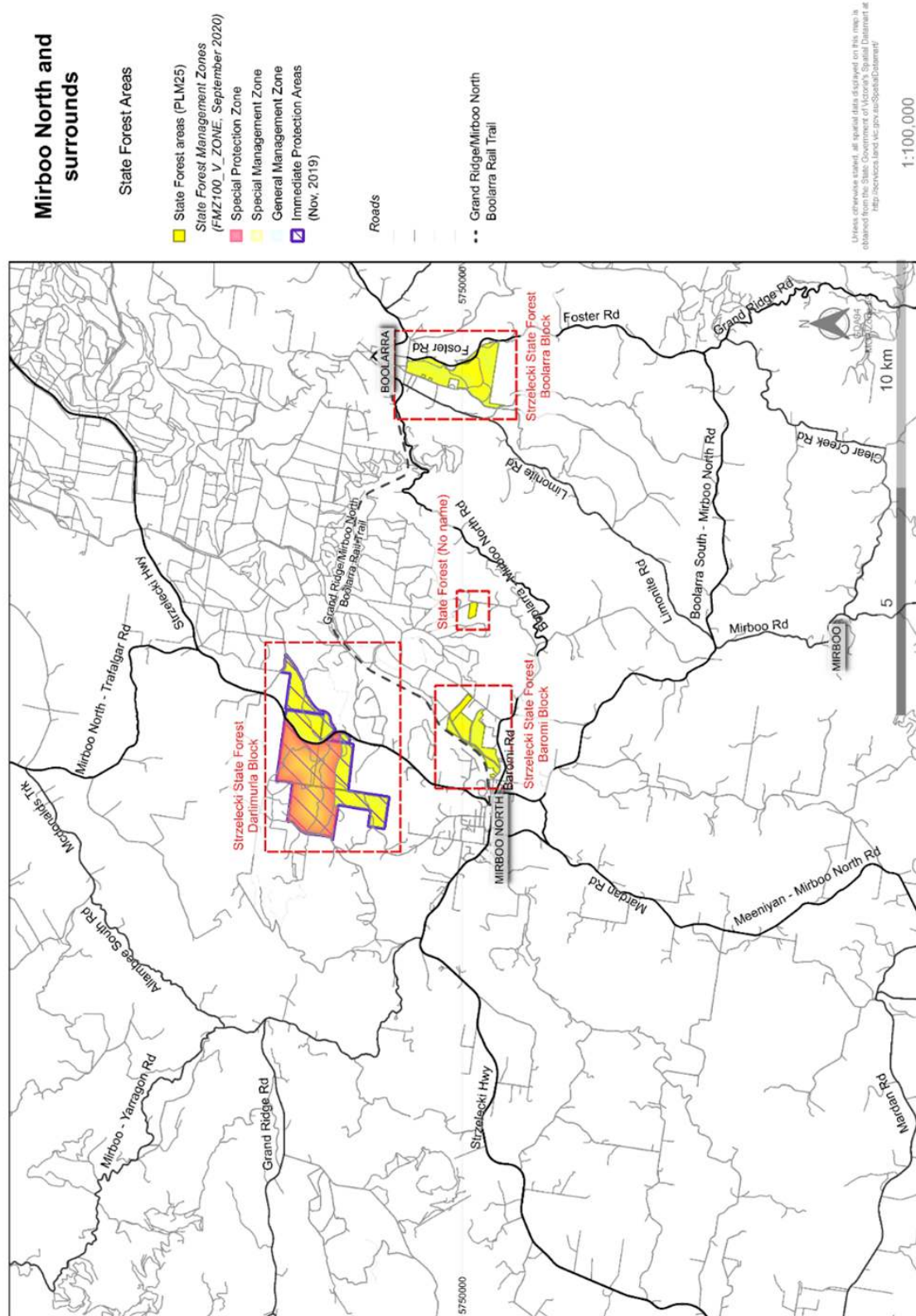


Source: Map prepared by the VNPA Feb 2021 for PoFSC using Victorian Government data

State forests and forest management zones in Mirboo North and Surrounds

The Mirboo North State Forest: Land included in the following forest management zones: SPZ, SMZ and GMZ - that is, a thin strip of Special Management Zone (SMZ) land along Strzelecki Highway, all land in the Special Protection Zone (SPZ) to the west of the highway, and General Management (GMZ) zoned lands: the native forest blocks Doug, Samson and Oscine, targeted for logging in 2017 (**the PoF Study Area**) and two blocks of GMZ land adjoining these to the southeast, and northeast. All these areas lie within the boundary of the IPA. Together these areas are officially known as the **Strzelecki State Forest Darlimurla Block**, as shown in **Map 1.3** (overleaf).

Map 1.3 State forests in Mirboo North and Surrounds



Map compiled by VNPA for the PoFSC August 2021 using Victorian Government data

Other state forests in Mirboo North and district: Three other small areas of state forest are located near the PoF study area and IPA.

- A strip of land zoned GMZ adjoining the south-eastern boundary of the Mirboo North township is officially known as the Strzelecki State Forest Baromi Block.
- An elongated strip of land south of Boolarra also zoned GMZ is officially known as the Strzelecki State Forest Boolarra Block.
- A small parcel of land situated between these two state forest blocks is also classified as State Forest but is not officially named.

State forests that are zoned GMZ and SMZ are managed by DELWP until they are allocated under a State Government approved VicForests Timber Release Plan for VicForests timber extraction. Despite the declaration of the IPA, while the areas retain their current forest management zoning, GMZ and SMZ land remain available for logging in future, subject to State approval of a VicForests Timber Release Plan and Harvesting Plan.

Other public lands in Mirboo North and Surrounds

Map 1.4 (overleaf) shows other relevant public land and public land managers.

Regional Parks: **Mirboo Regional Park** comprises four separate native forest blocks recommended by the Land Conservation Council in 1982 but not yet fully enacted (discussed further in **Chapter 5**). Managed by Parks Victoria, the four blocks of the Mirboo Regional Park, shown in dark green in **Map 1.4** (overleaf) are:

- Mirboo North block including the **Lyrebird Forest Walk** – separated from the IPA by the Strzelecki Highway.
- Boolarra South block - to the east of Lyrebird Forest Walk.
- Allambee East block - to the west of, but relatively close to the IPA; and
- Hallston block - further to the west and some distance from the IPA.

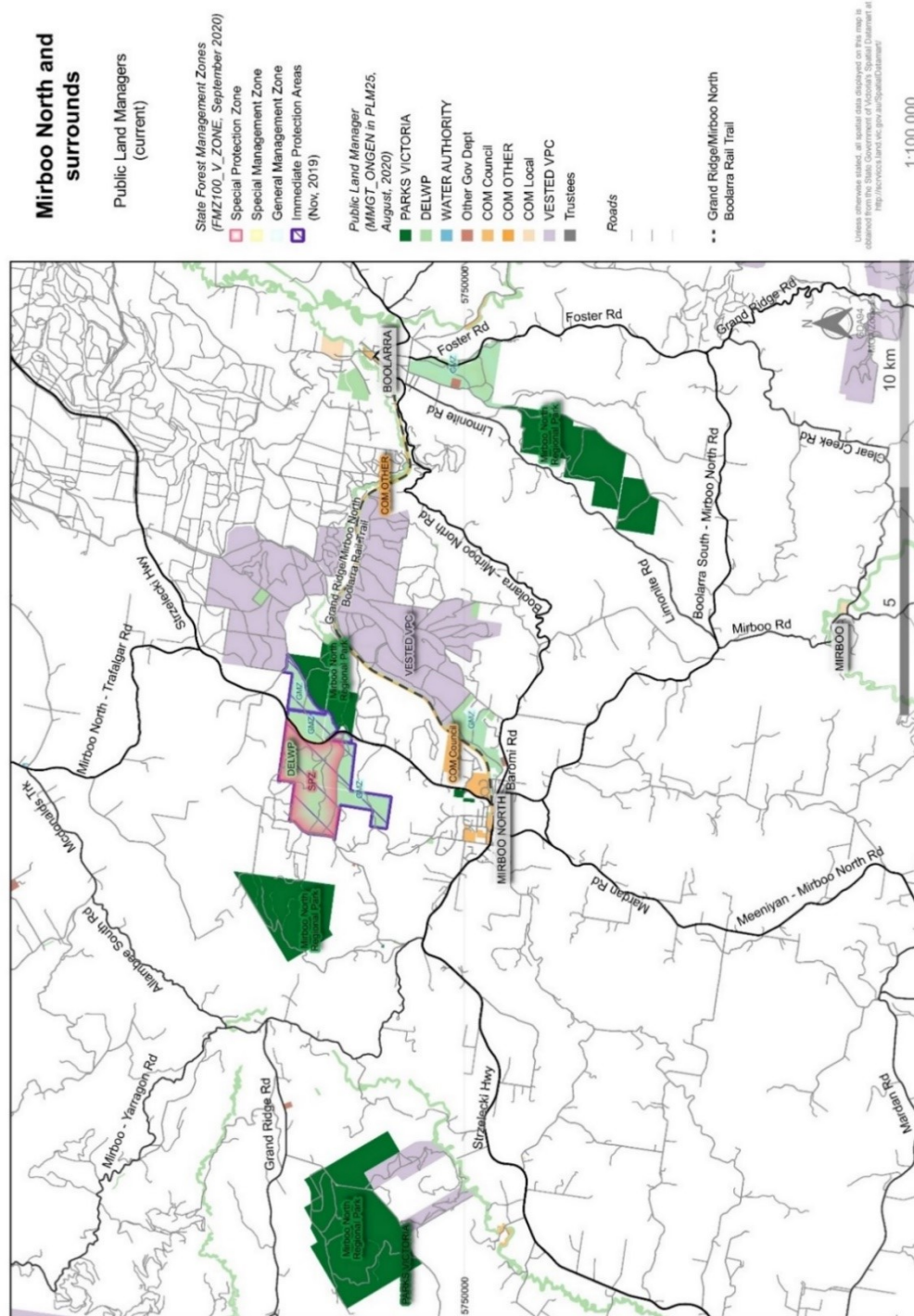
Community Infrastructure:

Mirboo North special water supply pumping station infrastructure -managed by Gippsland Water, with land use and development controls administered under the South Gippsland Planning Scheme (discussed further in **Chapter 5**).

Baths Road Reserve - a 14.4ha 'Land for Wildlife'-within-town Reserve is managed by South Gippsland Shire Council with a community friends' group.

Grand Ridge Rail Trail – a 13 km trail extends between Mirboo North, and Boolarra is jointly managed by South Gippsland Shire and Latrobe City Councils for the trail in their respective local government areas.

Map 1.4 Public Lands and Public Land Managers in Mirboo North and Surrounds (Macro view)

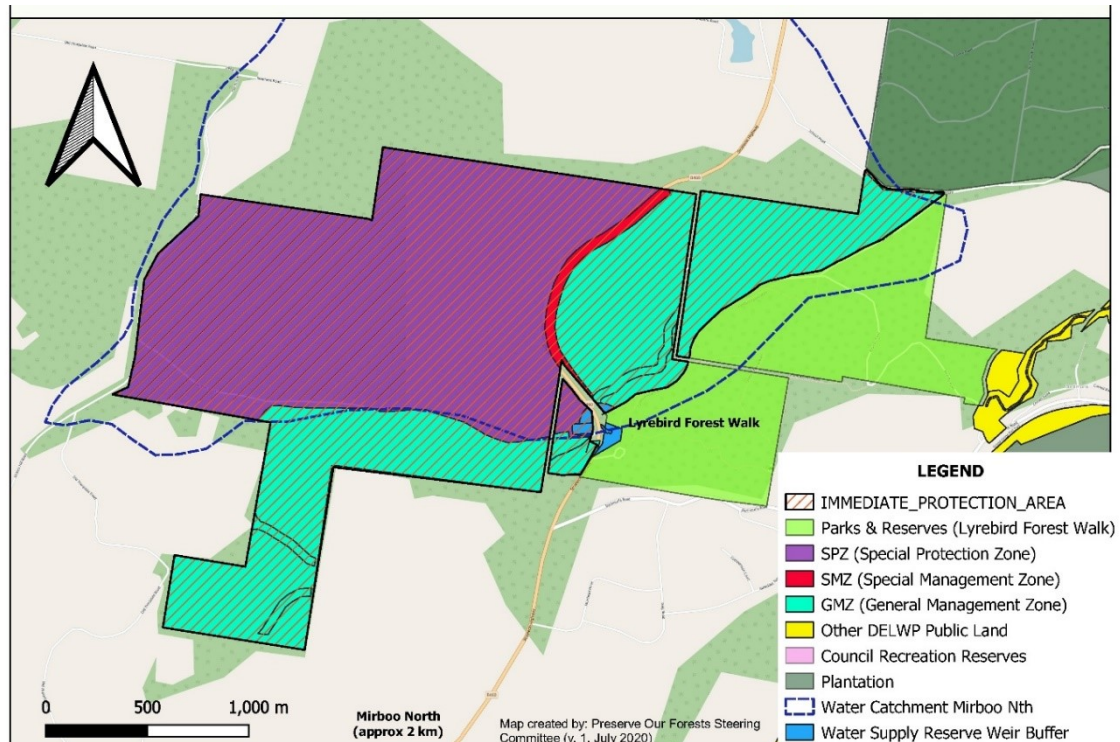


Source: Map prepared by VNPA using Victorian Government Data 2021

1.5 Declaration of the Mirboo North IPA

On 7 November 2019, the Victorian Minister for Energy, Environment and Climate Change announced that native forest logging would be phased out in Victoria by 2030. As part of this forest policy initiative, to protect highest conservation value forest areas, several **Immediate Protection Areas (IPA)** were declared across Victoria. Mirboo North's IPA Boundary is shown in **Map 1.5**.

Map 1.5 Mirboo North State Forest and IPA, with Forest Management Zones



Map prepared by the BWG in 2019 for PoFSC using Victorian Government Data

1.6 Victorian Biodiversity Atlas data

In November 2017 VicForests provided the Mirboo North community with information about threatened species in the Doug, Samson and Oscine forest blocks, drawn from the Victorian Biodiversity Atlas (VBA) (shown in **Map 2.2** in **Chapter 2**). The VBA is an important tool for officially recorded locations of threatened species. It includes a dynamic list of all species found in Victoria, and important information including their conservation status. Key findings made by the BWG were uploaded to the VBA. **Map 1.6**, in **Attachment 1.1** shows the VBA records as at 2021 for the Mirboo North State Forest IPA updated following lodgment of the BWG's research findings.

1.7 Other Terms Used in this Report

Mirboo North native forests - this is a common-use term that generally refers to remnants of the Strzelecki Ranges Bioregion native forests in and around Mirboo North. As such, this term is taken to include all state forest blocks and the roadside landscape along the Strzelecki Highway, the Mirboo Regional Park - particularly the Mirboo North block, which includes the Lyrebird Forest Walk, native forest areas along the Grand Ridge Rail Trail and the adjacent Natural Features Reserve. Within the wider Mirboo North district, native forests include the three other Mirboo Regional Park blocks (Boolarra South, Allambee East and Hallston) and the 3 State Forests adjoining Mirboo North and Boolarra South.

BWG study area - the three GMZ blocks targeted for logging by VicForests. After the declaration of the IPA in 2019 the BWG began to build knowledge about other native forest areas in the Mirboo North District.

Community Vision for the Future - broadly endorsed at the October 2019 public meeting and elaborated on in **PoFSC Recommendations** set out in this Report, focus on the state forest within the designated IPA and envisages strengthening connectivity between other native forest areas in Mirboo North and surrounds in future.



Mirboo North Damp Forest in the General Management. Photo courtesy: Marg Thomas

[\[Return Top of Report\]](#)



2

COMMUNITY CAMPAIGN TO PRESERVE OUR FORESTS



Contents

- 2.1 A Surprise Start to the PoF Campaign
- 2.2 A Snapshot of Community Action to Preserve Mirboo North's State Forest 2017-20

Text Box

- Box 2.1 16 September 2017 - Community Reactions to VicForests logging proposals
- Box 2.2 16 September 2017 Unanimous Community Resolution rejects logging
- Box 2.3 South Gippsland Shire Council Resolution 716
- Box 2.4 Community Unanimous Resolution ceases liaison with VicForests - 19 September 2018 (in Attachment 2.3)
- Box 2.5 Community Unanimous Resolution for a Nature Conservation Reserve - 10 October 2019 (in Attachment 2.3)

Maps

- Map 2.1 VicForests Proposed Plan for Logging in Mirboo North (Draft) Nov. 2017
- Map 2.2 VicForests Logging Coupes Context Map - Data from the Victorian Biodiversity Atlas as at Nov. 2017

Attachments

- Att 2.1 Timeline of the PoF Campaign
- Att 2.2 PoF Public Meeting February 2018 Photo Gallery
- Att 2.3 Further Unanimous Community Resolutions Guiding PoFs Campaign

2.1 A SURPRISE START TO THE POF CAMPAIGN

The Mirboo North community, in an urgently convened public meeting held on 16 September 2017, heard directly from VicForests about their proposals to log three native forest blocks close to the township. Over 350 attended.

Text Box 2.1 captures some of Mirboo North community's reaction to the VicForests logging proposals voiced at the 16 September 2017 urgent public meeting.

Text Box 2.1: 16 September 2017 – Community Reactions to VicForests Logging Proposals

Local business owner of 22 years: *"Mirboo North re-invented itself as a tourist town after privatization of the electricity industry in the Latrobe Valley in 1993. You've only got to look on Trip Advisor and see the comments about the Lyrebird Walk and the Grand Ridge Rail Trail... our jobs will be affected very much if you go and clear all this land because that is what people from Melbourne come down to see."*

Non-Migratory Beekeeper: *“Beekeepers really rely on what’s in this area, If the forest is cut down it would reduce the number of flowers available locally to my bees.”*

Long-time resident and business owner: *“Overwhelmingly the reason for choosing South Gippsland to live in is that it’s just so beautiful, Money can’t buy the peace and serenity of the area around Mirboo North, but logging the forests is a sure way to ruin it.”*

Owner, internationally acclaimed Brewery: *“My business sources water from the water catchment in the proposed logging area and requires pristine water that would be compromised should logging occur. If logging starts in our water source, I will move my business elsewhere.”*

Local Farmer: *“Our forests have many rare and endangered native plants and animals. Its 20 years since the last surveys of these forests. Biodiversity has increased significantly.”*

The community voted overwhelmingly to reject VicForests logging proposal, to commence a campaign to prevent logging and to establish a Steering Committee with an explicit charter.



Mirboo North Shire Hall was filled to capacity on the 14th of September 2017 Urgent Public Meeting



VicForests' Lachlan Spencer explains logging proposals

Text Box 2.2 sets out the community resolution passed **unanimously** by the September 2017 public meeting.

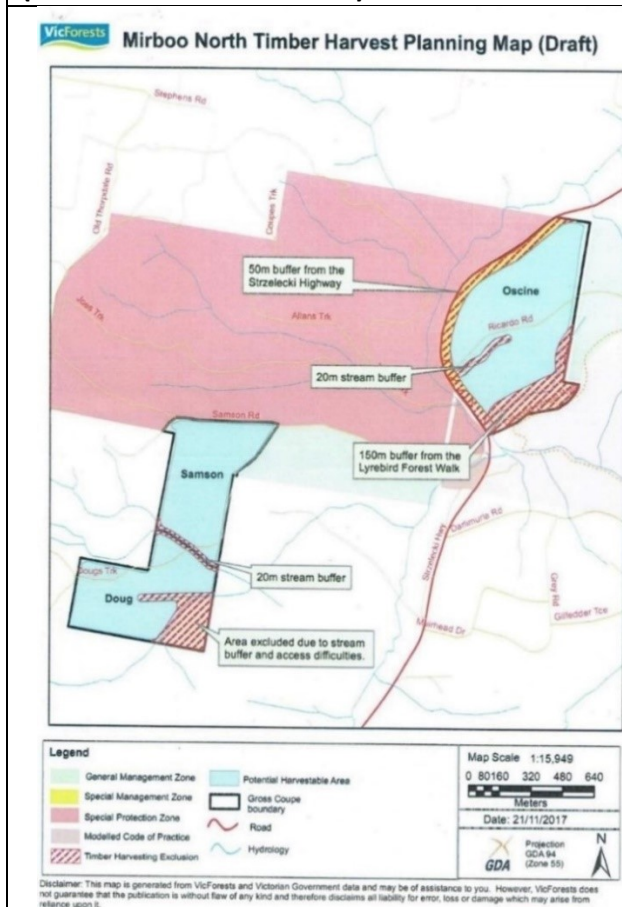
Text Box 2.2 Unanimous Resolution passed at Mirboo North's Urgent Public Meeting with VicForests, 16 September 2017

This urgent public meeting:

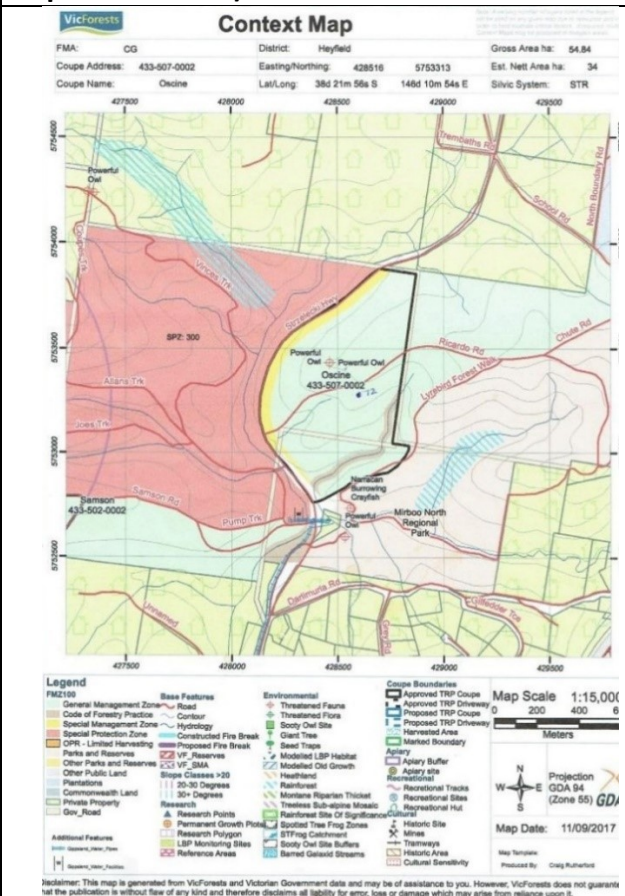
- Strongly opposes** any logging as proposed by Vic Forests (i.e.. the 3 coupes of native forest near Mirboo North identified by VicForests as the Oscine, Doug & Samson Coupes).
- Endorses** the immediate establishment of the **Preserve Our Forests Campaign** to ensure that the logging of the 3 coupes does not proceed.
- Endorses** the immediate establishment of the **Preserve Our Forests Steering Committee** to run this campaign on behalf of the community; and
- As a priority, requires the Preserve Our Forests Steering Committee to call for an **urgent meeting with the Premier, relevant Ministers and VicForests** to ensure this logging does not proceed. Moved: Marg Thomas Seconded: Grant O'Neill Passed Unanimously

Map 2.1 is VicForests draft Timber Harvest Plan that was only made available to the community in November 2017; and Map 2.2 – VicForests Context Map

Map 2.1 VicForests Timber Harvest Plan (draft 21 November 2017)



Map 2.2 VicForests Context Map (11 September 2017)



Apologies for the poor quality, this is how the community received these maps in November 2017. These Maps show the paucity of data about threatened species listed on the Victorian Biodiversity Atlas in 2017 that guided VicForests intended logging plans for the Oscine Block.

2.2 A SNAPSHOT OF COMMUNITY ACTION TO PRESERVE MIRBOO NORTH'S STATE FOREST- SEPTEMBER 2021 TO FEBRUARY 2020

The Preserve our Forests (PoF) Campaign was based on building and communicating scientific knowledge simply.

Following a campaign workshop held at St Mary's Anglican Church Hall, the PoF Steering Committee (PoFSC) and three Working Groups were set up: The Biodiversity Working Group (BWG), the Socio-economic and Amenity (SAWG), and the Strategy and Media Working Group (SMWG). The following section provides a snapshot of the PoF campaign from September 2017 to February 2020.

Attachment 2.1 gives a more detailed Timeline of the PoF campaign.

- After the September 2017 public meeting, over 1000 letters were sent by community members to the Victorian Premier, State Ministers, VicForests and Parliamentarians. An online petition attracted over 3000 signatures. A hard copy petition garnered 734 local signatures.
- Some 55 highly skilled and committed volunteers were directly involved in the campaign across a wide range of activities including forest surveys.



Dick Lester, Ian Cornthwaite and Ian Starkey on the BWG Oscine Survey, March 2018 Photo: Grace Adamo



Susan Koci on the BWG Forest Walk Mirboo Regional Park, Allambee East, July 2018 Photo: Rosemary Cousin

- PoF set out to build wide-spread community awareness and support for the campaign, prepared a range of maps, information sheets and community bulletins and hundreds of information fliers, stickers, and forest animal plaques to build public knowledge and awareness.



Grant O'Neill and Gary Price made plaques which soon appeared on fences and gates everywhere.

- PoF attended many community events including the Mirboo North Idol 2018 (two photos below), gathering many letters of support from community groups including the Mirboo North CWA, regional Landcare groups and environmental groups.



The Mirboo North Community sent messages to VicForests at the Mirboo North Idol 2018

- PoF Working Group Coordinators and Mirboo North business community members made compelling presentations to South Gippsland Shire Council which resulted in Council resolving to support the community campaign in Motion 716. The Mayor split the original motion, which was then voted in two

parts. Motion 716 as passed by Council on 28 March 2018 is included in **Text Box 2.3.**

Box 2.3: South Gippsland Shire Council Motion 417 as adopted on 28 MARCH 2018

Councillors split Motion 417 into two parts. The first part read:
THAT COUNCIL:

1. Acknowledges and supports the Mirboo North Community Campaign to protect their local forests.
4. Includes an Objective in the Community Plan to work collaboratively to advocate with all key agencies and the community for the preservation and enhancement of the Strzelecki bioregion.

CARRIED UNANIMOUSLY

The second part read:

2. Resolves to strongly oppose any logging as proposed by VicForests i.e. the 3 coupes of native forest near Mirboo North identified by VicForests as the Oscine, Doug and Samson coupes; and write to the Premier and Minister advising them of this.
3. Agrees to collaborate with the Preserve our Forests Steering Committee to advocate to stop all VicForests logging in and around Mirboo North and make the transition to sustainable plantation timbers wherever opportunities arise.

CARRIED FOR:

Councillors McEwen, Rich, Hill, Kiel, Brown, Skinner, Argento.

AGAINST: Councillor Brunt ABSTAIN: Councillor Edwards



Mirboo North Business Leaders, PoF Working Group Coordinators and members, and several Councillors after the South Gippsland Shire's voted on 28 March 2018 to support the PoF campaign.

- PoF supporters participated in Mirboo North Arty Gras Parades.

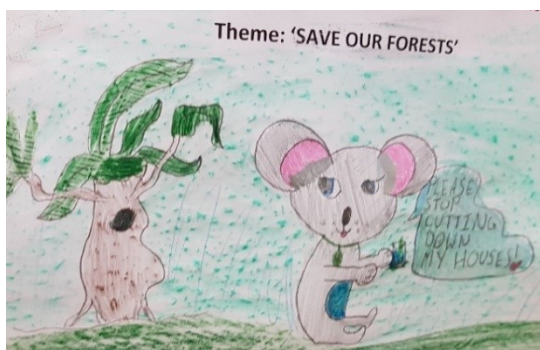


**Mums on Mowers Against Logging our Forests
Mirboo North Arty Gras Parade 2018**



Mirboo North Arty Gras Parade 2018

- Engaging teachers, parents, and children from Mirboo North Primary-Secundary Schools; school children depicted their concern for the pending destruction of the forests. and Mirboo North children sent Christmas messages to forest creatures (see photos below and overleaf).



**(Above and Top) Save our Forests Prep to Level 6
entries from Mirboo North Primary School in the
Mirboo North & District Community Bank**

**(Left) Mirboo North Children's 2018 Christmas Tree
messages for forest animals.**

- Regular community information stalls providing information and signs were held at Mirboo North's monthly community market, and special events including the Meeniyan Garlic Festival, and the 'Boo Christmas Market'.



Community info stall Mirboo North Market 2019

New signs were widely displayed by local businesses and residents

- Community Meetings were regularly held, and well attended, updating the community on the campaign. Each meeting passed unanimous community resolutions directing the campaign. Attachment 2.2 has further unanimous public meeting resolutions that guided the campaign.
- Public information events were frequently held including:
 - 'Forest Talks': Reports on forest biodiversity surveys and presenting research by Dr Faye Wedrowicz on the significance of the Strzelecki (South Gippsland) Koala.
 - Ed McNabb (Owls and nocturnal life relevant to Mirboo North forests);
 - Dr Chris Taylor (forest condition, disturbance, effects of fire and wood supply contractual obligations).
 - 'Saving Mirboo North's Greater Gliders' with Greening Australia research and action for Greater Gliders in the Mirboo North Regional Park system and adjoining private lands); and
 - 'State Election - Forest Forum' which heard from South Gippsland candidates standing in the 2018 State election.
- Regular updates were given in the Mirboo North Times, Great Southern Star, Sentinel Times, and on TV, and radio.
- The local and regional community were further engaged with presentations to community organizations including Mirboo Country Development Inc, Baw Baw Sustainability Network, Senior Citizens Club, amongst many.

- PoF met several times with VicForests, but suspended liaison in September 2018 after VicForests' rebadged their logging as 'conservation' and did not sufficiently act on the community's position that **no logging** of native forest take place in the district.
- On 19 September 2018, an urgent public meeting was convened to inform the community of VicForests' further logging proposals. Reports on stage 1 community surveys and forest research proving the significance of our native forests were presented and a motion **adopted unanimously** to guide the campaign. Marg Thomas and PoFSC members presented new information on the significance of Mirboo North native forests and ask the community to consider VicForests further proposals for logging.



19 September 2018 Marg Thomas and PoF Steering Committee members presented findings to a packed hall.

The full Resolution, passed unanimously at the 19 September 2018 meeting is in **Text Box 2.4** in **Attachment 2.2** along with a photo gallery of the meeting by Gayle Margaret.

- PoF lodged wide ranging submissions to VicForests, and State and Federal Governments Inquiries:
 - VicForests' Timber Release Plan.
 - Regional Forest Agreement review.
 - Forest Stewardship Council re: VicForests membership application.
 - The EPBC Act second 10-yearly review, meeting with Commonwealth officials in 2019; and
 - The Future of our Forests, DELWP's forest policy review.
- Meetings were held with politicians of all persuasions: local member Danny O'Brien (MLA), Samantha Dunn (MLC) and Senator Janet Rice.

- Officials from DELPW met with PoFSC members on many occasions – some meetings also involved Parks Victoria officials.
- PoFSC hosted Forest Walks and received briefings by Environment Justice Australia and Victorian National Parks Association on forest governance and relevant laws.



**Nine News Interviews BWG member
Richard Lester**



**Marg Thomas (centre) Viki Sinclair (right)
on a Forest Walk with Australian Greens:
Deb Foskey, Will Hornstra and Janet Rice.**

- PoF wrote to engage with the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) early in the campaign.
- Local apothecarist Laura A'Belle, facilitated a meeting between PoFSC members and Kurnai elders in 2018.
- POF members attended a weekend Forest Summit at Toolangi with other Victorian forest campaign groups May 2018.
- PoF members participated in the 2018 Forest Summit of community campaigners: the 'Threatened Species Parliament' at Parliament Gardens in 2018, and the 'Nature for Life Rally' outside the Victoria Parliament in 2019.



**Threatened
Species
Parliament
Melbourne
2018**

- In February 2019, after many requests and much correspondence, PoFSC members provided a detailed face to face briefing on all PoF field survey and research findings for the Minister for Energy, Environment and Climate Change, Lily D'Ambrosio.
- During 2019 PoF lent support to other campaigns against native forest logging: the Noojee Mountain Ash forests and the Our Strathbogrie Forests campaign, all of which highlighted the need for immediate protection action.
- Over the campaign, PoF issued over 30 media releases and various articles which were published in local papers and generated television, radio, and press interviews. Strong social media interaction enabled speedy dissemination of information and increased community engagement.
- On 10 October 2019, PoF convened a public meeting to hear from experts on threatened species conservation. A unanimous resolution was passed calling for the Mirboo North State Forest and IPA to be enacted as a permanent **Nature Conservation Reserve**. The full, unanimous resolution and public meeting **Text Box 2.5**.



The PoF Public Meeting held on 10 October 2019. Photo: Rosemary Cousin

- On 7 November 2019 Minister D'Ambrosio announces the State Government's "Future of Our Forests" policy and declaration of the Mirboo North Immediate Protection Area.
- Immediately following the policy announcement, The Age interviewed PoFSC Chairperson Marg Thomas and BWG Coordinator, Susan Koci.

- On 7th February 2020 a **Celebration of Our Forests** dinner was held thanking all campaign volunteers and the local community.



**Celebrating our Forest (Above)
PoFSC member Ian Starkey, and
(Opposite) Acoustic Kitchen.**



Local resident Tilia Lohmus created this stunning 3D artwork depicting the rich biodiversity of the forest floor in Mirboo North's State Forest 2019-20

[[Back to Top of Report](#)]



3

SIGNIFICANT ECOLOGICAL VALUES IN THE MIRBOO NORTH STATE FOREST IPA



Contents

3.1 Introduction

3.1.1 Citizen Science Research and Surveys Conducted by the BWG

3.2 Background

3.3 Key facts about the Strzelecki Ranges Bioregion and Mirboo North State Forest

3.4 BWG research findings that prove the Mirboo North State Forest is a High Conservation Value Forest

3.4.1 Ecological Vegetation Classes and their Bioregional Conservation Status

3.4.2 Technical description of EVCs modelled in the Mirboo North State Forest

3.5 BWG Biodiversity Surveys and Research Findings that prove Mirboo North State Forest has Multiple High Conservation Values

3.5.1 Threatened Fauna Species

3.5.2 Endangered Fauna Species

3.5.3 Regionally Important and Iconic Fauna Species

3.5.4 Other Important Species

3.5.5 Role of the Mirboo North State Forest in Climate Change and Carbon Sequestration

3.6 Implications for Management of these High Conservation Values

3.6.1 Towards a Vision for Nature Conservation

3.7 References

Map 3.1 Public Land and Public Land Managers in the Mirboo North State Forest, IPA and surrounds (Micro View)

Map 3.2 DELWP Aerial Image of Mirboo North State Forest and surrounds
Mirboo North and Surrounds EVC Threatened Flora and Fauna VBA data

Map 3.3 Strzelecki State Forest Darlimurla Block, EVC, Fauna and Flora VBA Records

Map 3.4 Extent of remaining native vegetation by Ecological Vegetation Class in the Mirboo North surrounds (Strzelecki Ranges Bioregion)

Map 3.5 2021 VBA listings of EVC and Rare or Threatened Fauna and Flora in Mirboo North and Surrounds

Table 3.1 The Bioregional Conservation Status (BCS) of each EVC modelled in and adjoining the Mirboo North State Forest IPA

Text Box 3.1 Mirboo North Special Protection Zone Technical Data

Text Box 3.2 Highlights from the IPA Fact Sheet DELWP November 2019

Att. 3.1 Plant species observed in the Mirboo North State Forest BWG Study Area

Att. 3.2 Flowering plant species observed in the Mirboo North State Forest

Att. 3.3 Bird species observed in the Mirboo North State Forest - 1 survey transect

Att. 3.4 Fungi species found Mirboo North State Forest and public land May 2019

3.1 INTRODUCTION

This Chapter details the research findings of the PoF Biodiversity Working Group (BWG). Since 2017, the BWG has voluntarily investigated the biodiversity and conservation values in Mirboo North's three native forest blocks that faced the threat of logging. The extensive research and fieldwork undertaken by the BWG has proven that the Mirboo North State Forest IPA are **High Conservation Value Forests** (HCVFs) containing **multiple High Conservation Values** (HCVs).

3.1.1 Citizen Science Research and Surveys Conducted by the BWG

From September 2017 to late 2019, the BWG focused their intensive research and field surveys upon the three state forest blocks (named Doug, Samson, and Oscine) targeted for logging in 2017 by VicForests. **Map 3.1** (overleaf) shows the three native forest blocks and the declared IPA. Oscine is located on the eastern side of the Strzelecki Highway and adjoins the Lyrebird Forest Walk. Doug and Samson adjoin a 248-hectare SPZ on the western side of the Strzelecki Highway.

The SPZ was established in the *Forest Management Plan for Gippsland* (DSE 2004) to conserve multiple forest values, including threatened EVCs (Lowland Forest, Damp Forest, and Swampy Riparian Complex) together with forest landscapes along the Strzelecki Highway. Importantly, the SPZ is one of several management areas for Victoria's threatened species of Powerful Owl (known as Powerful Owl Management Areas). Technical details of the SPZ are set out in **Text Box 3.1**.

Text Box 3.1 Technical detail of the Mirboo North Special Protection Zone

The *Forest Management Plan for Gippsland* (DSE 2004: p141) says of Mirboo North's Special Protection Zone:

SPZ 300 Mirboo North: Yarram District (248 ha: EVC protection Lowland Forest, Damp Forest, Swampy Riparian Complex, Powerful Owl, Landscape Values (Strzelecki Highway)).

Mirboo North's SPZ forms part of the Powerful Owl Management Plan (POMA) required under the **Powerful Owl Action Statement 92** (DSE 2004a). The aim of the **Powerful Owl Conservation Guideline** set out in the FMPG was to: "Establish and maintain 115 Powerful Owl Management Areas (POMAs) on public land in Gippsland."

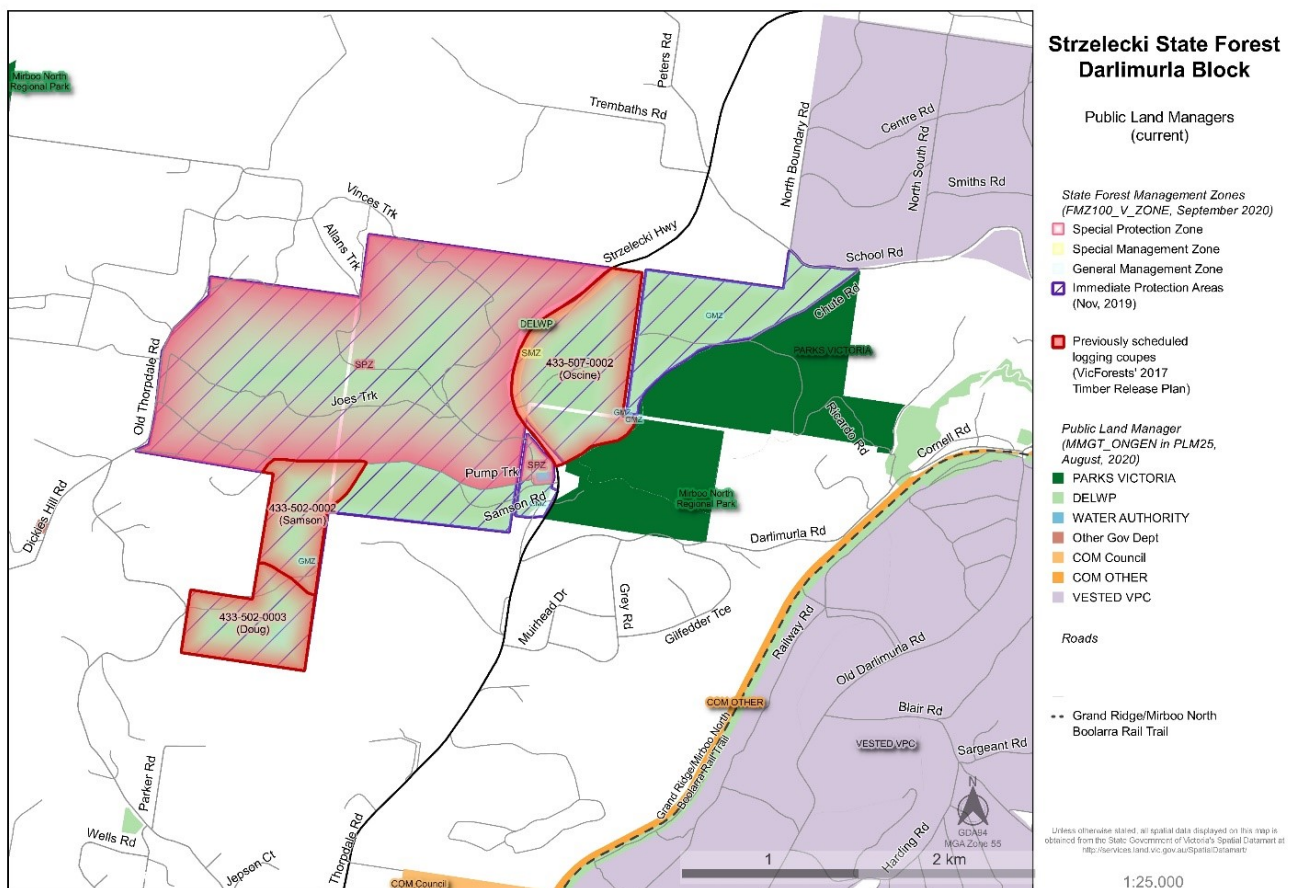
The key criteria for Powerful Owl protection areas include:

1. POMAs may overlap with management areas established for other species.
2. POMAs in State Forest should protect a core area of suitable habitat of at least 500 ha within a circle of 3.5 km radius.

3. Suitable habitat should comprise, where possible, patches greater than 100 ha in area that are contiguous with other forest and preferably protected within conservation reserves.
4. The best quality habitat is to be protected, subject to other forest management objectives.
5. Unless otherwise protected, all confirmed nesting and roosting sites will be protected by a 3 ha Special Protection Zone around the site and a 250–300m radius (or equivalent linear area) Special Management Zone buffer around identified localities.’ (DSE 2004:p31)

In **Map 3.1** Mirboo North’s POMA is the central pink edged area (excluding the three forest blocks targeted for logging that have a bright red border).

Map 3.1 Public Land and Public Land Managers in the Mirboo North State Forest IPA and District (Micro View)



Source: Map compiled by VNPA in 2021 for the PoFSC using Victorian Government data

Results of all PoF research were presented to the Honorable Lily D’Ambrosio on 7th February 2019. In November 2019, Minister D’Ambrosio announced the

introduction of Immediate Protection Areas (IPAs) in significant areas in Victoria as a new measure to protect high conservation value forests from timber harvesting.

The declared boundary of the Mirboo North IPA incorporates the 3 logging coupes that the BWG studied in some detail, the SPZ, together with adjoining land zoned Special Management and General Management.

In the Victorian Government's IPA policy document: *Victorian Forestry Plan: From Timber to Threatened Species Protection* (DELWP (2019), a key part of the IPA policy consideration was the importance of crucial habitat connectivity between the IPA and other existing parks and reserves. **Text Box 3.2** summarizes the Victorian Government's IPA announcement.

Text Box 3.2 Highlights from the IPA Fact Sheet, DELWP November 2019

The Victorian Government is immediately protecting more than 96,000 hectares of high conservation value forest from timber harvesting. The creation of Immediate Protection Areas - in the Strathbogie Ranges, Central Highlands, **Mirboo North** and East Gippsland – is the first step in phasing out harvesting in all native forests on public land by 2030.

Harvesting will be immediately excluded from these areas to preserve important habitat for more than 35 forest dependent species, including the Greater Glider and Leadbeater's Possum. As well as protecting our threatened species, the Immediate Protection Areas will provide connectivity to existing parks and reserves, while delivering a broad range of other benefits, for Melbourne's water supply, our air quality and carbon storage – important to meeting our commitment to net zero emissions by 2050.

In developing the Immediate Protection Areas, we also considered:

- Benefits to other flora and fauna species.
- Presence of old growth forest.
- Connectivity to existing parks and reserves.
- Mitigating the impact of bushfire by protecting habitat across the range of the Greater Glider.
- Water supply catchments.
- Timber supply requirements during the next 10 years. (DELWP 2019)

The importance of connectivity is discussed in more detail in the sections that follow.

3.2 BACKGROUND

The Mirboo North State Forest is part of the Strzelecki Ranges Bioregion as described by the Victorian Environmental Assessment Council (VEAC) in their most recent investigation of remnant native vegetation in Victoria.²

The natural landscapes of these native forest are characterized by slopes and gullies dominated by **Wet Forest** and **Damp Forest** vegetation on the higher slopes, with occasional areas of slopes and hills of drier, open areas classified predominantly as **Lowland Forest**.³

European settlers to the region, heavily cleared native forests across the Ranges, despite difficulty of access due to the hilly landscape with moderate-steep slopes and gullies. Clearing usually involved cutting, ring-barking and burning trees and other vegetation, leaving a predominantly cleared landscape by the early 1900's. Bushfires also wreaked havoc on the forest on several occasions.

The Strzelecki Ranges has a high annual rainfall and relatively mild temperatures, coupled with areas of good quality soil, making this region attractive for the establishment of agriculture on the cleared land. Initially dairying was the predominant farming practice. Land that was unproductive or unprofitable for farming was left to regrow naturally or was used to establish pine and eucalypt plantations. Patches of native forest were designated for timber harvesting, and several mills were established in the region to process harvested saw logs. Today, the region has dairy farms, as well as beef producers, vegetable farms, soft and hardwood plantations, and state forests, interspersed with townships and rural lifestyle properties.

3.3 SOME KEY FACTS ABOUT THE STRZELECKI BIOREGION AND MIRBOO NORTH STATE FOREST

Located in southeast Victoria, the Strzelecki Ranges Bioregion covers 342,179 hectares. Most of its native vegetation has been cleared. This has resulted in the remaining native vegetation cover being 100% fragmented. According to VEAC the bioregion's remaining vegetation is 69.1% - non-native and 30.9% - native. A high proportion of native vegetation occurs on private land and road reserves, with only 1.5% of native vegetation in the conservation reserves system (VEAC 2010:76). VEAC's *Remnant Native Vegetation Investigation Final Report*

² VEAC (2010) 'Remnant Native Vegetation Investigation- Discussion Paper' p76

³ EVCs found in the Mirboo North State Forest and IPA and their bioregional conservation status is discussed further in **section 3.4.1**.

concluded that the Strzelecki Ranges Bioregion's native forests and unique assemblage of native vegetation are underrepresented in protected areas for public land. As a result, there is little or no environmental protection or conservation management of the region's biodiversity (VEAC 2011).

The remaining native forest in the Strzelecki bioregion are small, isolated patches, that act as islands of the region's biodiversity. These fragments contain critical habitat for many species of plants, animals, birds, and fungi. Further magnifying the importance of protection and conservation of these publicly owned native forests and the need to connect remnant patches and improve and increase habitat for the future.

The extensive clearing that the Strzelecki Ranges' native forests have undergone since European settlement, left a heavily modified landscape with small patches of native forests and poor vegetation connectivity.⁴ Connecting corridors of suitable vegetation and habitat allows the movement of species between forest patches and the continuity of natural vegetation and ecological processes. In the Mirboo North context, many species of native flora and fauna are confined to small forest fragments. Therefore, enhanced connectivity is urgently required for many species to remain viable and thrive.

Map 3.2 (Overleaf) is a DELWP aerial photo of the Mirboo North State Forest and surrounds. Taken on 20 December 2017, this image clearly shows the isolated patches of state forest and other native forest areas in and around Mirboo North's IPA in what is a highly fragmented and largely cleared landscape. It clearly shows the potential for improved connectivity (in all its forms) to existing parks - which the IPA policy calls for. To the **west**, the IPA is separated from the Mirboo Regional Park Allambee East block by small area of farmland containing patches of dense native vegetation and plantations. To the **east**, the IPA is separated from the Mirboo North section of the Mirboo Regional Park containing Lyrebird Forest Walk by the Strzelecki Highway. The Grand Ridge Rail Trail can be seen **further to the east**, relatively close to the Lyrebird Forest Walk and separated by farmland containing dense patches of native vegetation and native riparian vegetation along waterways.

⁴ VEAC describe "Connectivity" in three ways: From the perspective of a **single species**, connectivity is connectedness between patches of suitable habitat. From a **human perspective**, connectivity refers to patterns of vegetation...from an **ecological perspective**, connectivity may be considered as being made up of ecological processes at multiple scales. (VEAC 2011: p24).

Map 3.2 Aerial Image of Mirboo North State Forest and surrounds



DELWP Aerial Image 20 December 2017

3.4 BWG RESEARCH FINDINGS THAT PROVE THE MIRBOO NORTH STATE FOREST AND IPA ARE HIGH CONSERVATION VALUE FORESTS

3.4.1 Ecological Vegetation Classes and their Bioregional Conservation Status

Ecological Vegetation Classes (EVCs) are widely used classifications that describe and categorize ecological communities, based on floristic values, ecological characteristics, and other biological indicators⁵. EVCs are models and valuable predictors of potential species occurrence and distribution, due to the provision of habitat for other species reliant on a set of conditions for existence. EVCs are important for measuring and monitoring the conservation status of such ecological communities over time.

The BWG's research and vegetation field surveys for the Mirboo North State Forest, undertaken by the BWG and others over a 3-year period found a diverse, species-rich forest with over 200 plant species identified. Most of the plant diversity (90-98%) occurs in the understory as distinct from the eucalypt-dominant upperstory.

The BWG's research provides evidence of a rich biological and ecological diversity amongst the district's native forest fragments. In particular, the vegetation that varies within these forests.

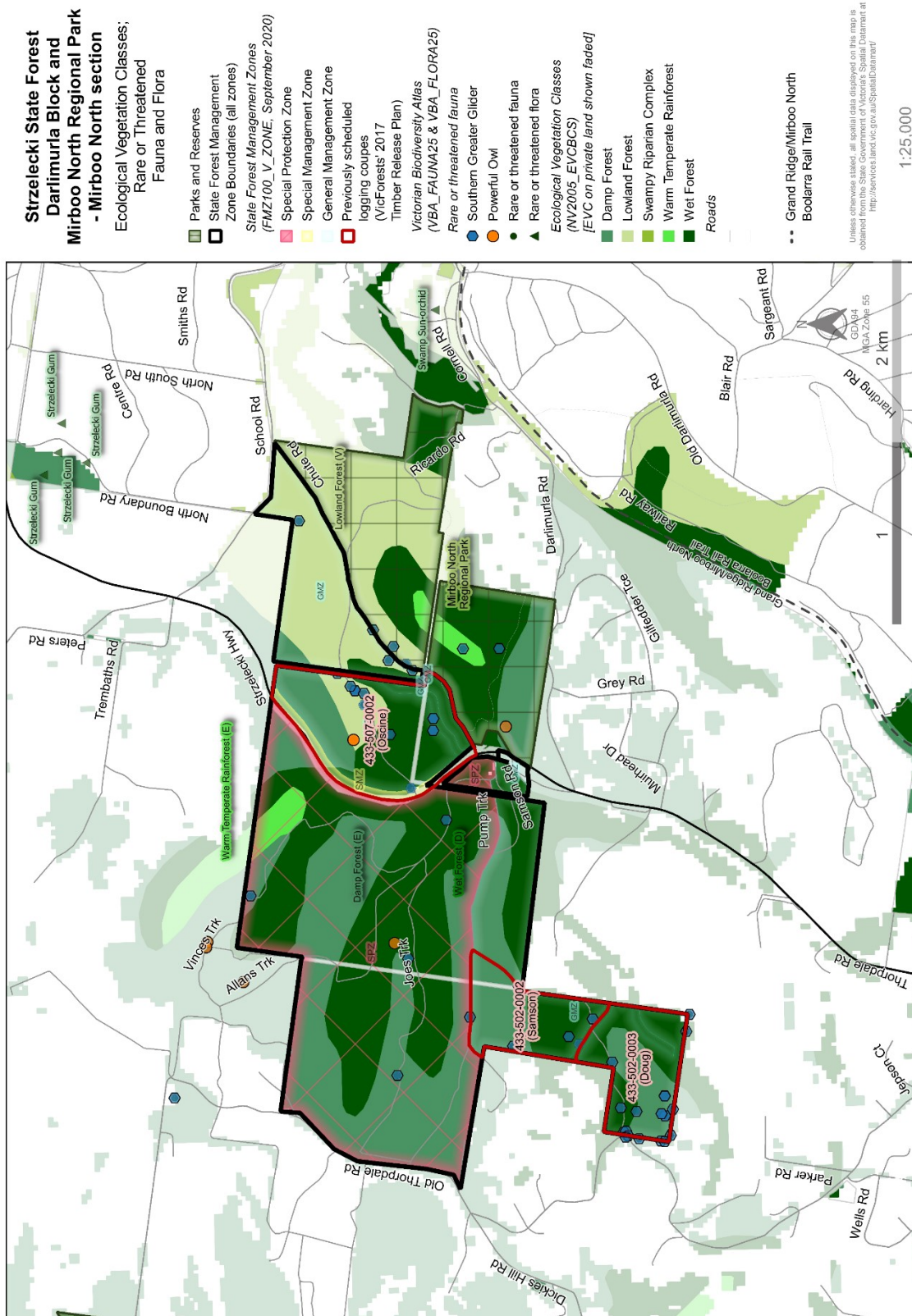
Map 3.3 is the DELWP modelled EVCs that endure in the BWG Study Area and Mirboo North State Forest. In addition to **Wet Forest**, **Damp Forest**, and **Lowland Forest**, DELWP's *State-wide modelling of EVCs* in the Mirboo North State Forest shows small patches of **Warm Temperate Rainforest** in Lyrebird Forest Walk and in the north of the SPZ. **Swampy Riparian Complex** may also be found in small areas.

Further to the northeast, outside the Study Area are areas of **Herb Rich Foothills** (shown in **Map 3.4**).

Table 3.1 summarizes the Bioregional Conservation Status (BCS) of each of the dominant EVCs modelled by DELWP in the Mirboo North State Forest. The meaning of each BCS within the context of the Strzelecki Ranges Bioregion is also explained in this table.

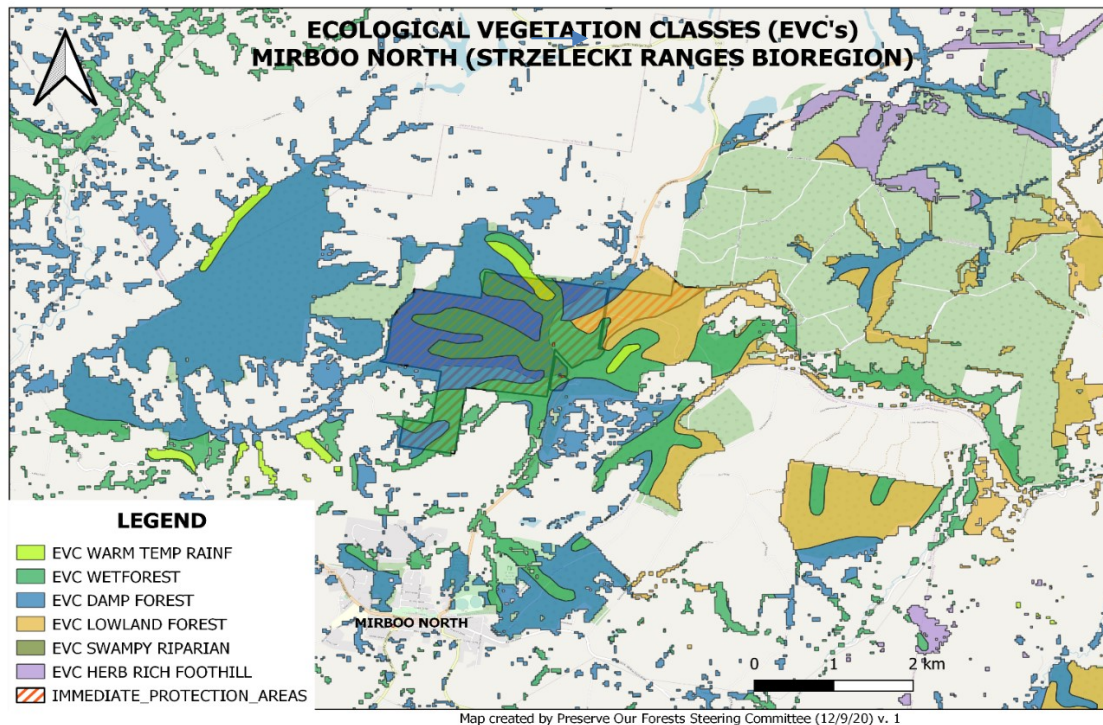
⁵ EVCs are the standard unit for classifying native vegetation types in Victoria, they exist within bioregions. Bioregional EVCs (BioEVC) have a documented benchmark for the characteristics of the vegetation type in its mature, natural (pre-1750) state. Each BioEVC also has a conservation status. DELWP (2017a: p4) *Biodiversity information explanatory document: Measuring value when removing or offsetting native vegetation*.

Map 3.3 Mirboo North State Forest EVC, Fauna and Flora VBA Records



Map compiled by VNPA for PoFSC in August 2021 using Victorian Biodiversity Atlas

Map 3.4 Extent of remaining native vegetation by Ecological Vegetation Classes in Mirboo North and surrounds (Strzelecki Ranges Bioregion)



Map prepared by BWG using DELWP 2005 EVC modelling data retrieved 18 August 2020

Note: Strzelecki Highway runs through the center of the map from Mirboo North to Morwell located beyond the top right corner of the map. White areas are cleared lands.

Table 3.1 The Bioregional Conservation Status (BCS) of Modelled Ecological Vegetation Classes (EVCs) in and near the Mirboo North State Forest IPA

Ecological Vegetation Class (EVC) Name	EVC Number	Bioregional Conservation Status (BCS)	What this status means
Damp Forest*	EVC 29*	Endangered	Severely depleted to less than 10% of former range. The condition of the remains needs to be determined.
Warm Temperate Rainforest	EVC 32	Endangered	
Swampy Riparian Complex	EVC 83	Endangered	
Herb Rich Foothills	EVC 23	Endangered	
Lowland Forest*	EVC 16*	Vulnerable	Diminished to 10 to 30% pre-European extent. The condition of the remains needs to be determined
Wet Forest*	EVC 30*	Depleted	Depleted by more than 30% to 50% of the pre-European extent. The condition of the remains needs to be determined

Source: VEAC (2017), DELWP (2017) and DELWP Nature Kit (2020)

DELWP periodically measure the conservation values and current conditions of EVCs in each bioregion. Known as a **Bioregional Conservation Status** (BCS), each EVC is assessed on “the current extent and condition for each EVC compared to its pre-1750 extent and condition in that specific bioregion. As different bioregions have more, or less, native vegetation remaining, an EVC may have a different BCS in different bioregions.” (VEAC 2016: p66)

In Table 3.1, the highlighted EVCs (EVC*): Damp Forest, Lowland Forest, and Wet Forest. are modelled to occur in the BWG surveyed state forest blocks and are described in detail in the following section.

3.4.2 Technical description of EVCs in the Mirboo North State Forest that lie in the BWG Study Area

In this section each EVC modelled to be found in the BWG Study Area is described. Information is drawn from VEAC (2011), Bull (2014), DELWP (2017), and BWG research.

EVC29 Damp Forest (Bioregional Conservation Status - Endangered)

- **DELWP Modelling shows this EVC in the native forest blocks targeted by VicForests for logging.**

Damp forests occur in areas with an average rainfall of 1000 to 1300mm per annum.⁶ They are established on slopes of differing aspects at elevations of 200 to 500m above sea level. Damp forests are dominated by a tall eucalypt tree layer +30m in height, with a midstory of medium to tall dense shrubs of broad-leafed species typical of wet forest mixed with small prickly-leafed shrubs (typical of dry forest types). The ground-story of herbs, grasses, and a variety of ferns is attributed to the moderate to high level of humus and moisture in the soil.⁷

Vegetation: Typified by a dominant stratum of Eucalyptus spp. including any, or all of: *E. obliqua* (Messmate), *E. viminalis* (Manna Gum), *E. globulus* (Blue Gum), *E. cypellocarpa* (Mountain Grey Gum), *E. radiata* (Narrow-leaf Peppermint). The under-story overlaps with Wet Forest EVC, with the possible inclusion of *Acacia verticillata*, *Acacia mucronata*, *Leptospermum continentale*, *Ziera arborescens*, *Gahnia sieberiana* and *Lomandra longifolia*.

⁶ Bull, Marilyn (2014) *Flora of Melbourne: A Guide to the Indigenous Plants of the Greater Melbourne Area*.

⁷ DSE (2004b) 'EVC/Bioregion Benchmark for Vegetation Quality Assessment Strzelecki Ranges bioregion' all EVCs.



Doug forest block Damp Forest. Photo: Grace Adamo

EVC16 Lowland Forest (Bioregional Conservation Status - Vulnerable)

- **DELWP Modelling shows this EVC in the native forest blocks targeted by VicForests for logging.**

The more-sparsely treed Lowland Forest occurs predominantly in the foothills of the Strzelecki Ranges. This forest tends to be dryer with sandy soils that are moderately fertile, yet low in organic matter. The canopy of Lowland Forests is relatively open, allowing these forests to have a particularly rich under-story containing several species not encountered in the wet and damp forests.

Vegetation: The over-story is typified by a range of Eucalypt species, including: *E. radiata*, *E. obliqua*, *E. consideniana* (Prickly Stringybark) and *E. dives* (Broad-leaved Peppermint). The understory is generally shorter with a heathy appearance. It may include Hakea spp. such as *H. ulicina* and *H. decurrens*, heaths such as *Epacris impressa* and *Actrotriche prostrata*, *Lomandras*, *Xanthorrhoea minor*, *Kunzea ericoides*, *Leptospermum continentale*, *Leptospermum myrsinoides*, *Allocasuarina paludosa*, *Diplarrena moraea* and *Banksia marginata*.

Species found by the BWG Biodiversity flora survey team occurring exclusively in Lowland Forest under-story include: the Wrinkled Daisy Bush (*Olearia rugosa* *affin. ssp. allenderae*), Furze Hakea, Needlewood Hakea, Silver Banksia, Shrub Sheoak, Fringe Lily, Tall Lobelia, Heath Milkwort and Silky Tea Tree.



Above: Lowland Forest EVC, Mirboo North State Forest. Photo: Marg Thomas.
Opposite: Wet Forest in Oscine coupe (North of Lyrebird Walk) - BWG Survey March 2018. Photo: Grace Adamo



EVC30 Wet Forest (Bioregional Conservation Status: Depleted)

- **DELWP Modelling shows this EVC in the native forest blocks threatened with logging.**

Wet Forests usually occur on the fertile, well-drained soils of the Strzelecki Ranges – at different elevations. These forests often establish on shaded, southerly slopes where the rainfall is high. The characteristics of a Wet Forest include a shade-tolerant lower-story dominated by moisture loving ferns, underneath a mid-story of relatively broad-leaved shrubs and a canopy of tall eucalypts (up to 70m or more.)

Vegetation: Wet Forests are typified by a dominant stratum of eucalypts, including any or all of *E. regnans* (Mountain Ash), *E. globulus spp* (Blue Gum), *E. cypellocarpa* (Mountain Grey Gum), *E. obliqua* (Messmate), *E. viminalis* (Manna Gum). The understory is typically dominated by: *Acacia melanoxylon* (Blackwood), *Acacia dealbata* (Silver Wattle), *Olearia argophylla* (Musk Daisy), *Bedfordia arborescens* (Blanket-leaf), *Pittosporum bicolor* (Banyalla), *Lomatia fraseri* (Tree Lomatia), *Pomaderris aspera* (Hazel Pomaderris), *Prostanthera lasianthos* (Vic. Christmas Bush), *Hedycarya angustifolium* (Austral Mulberry), *Cassinia trinerva* (Three-veined Dogwood) and Tree ferns.

EVC32 Warm Temperate Rainforest (Bioregional Conservation Status-Endangered)

- **DELWP Modelling shows small patches of this EVC in Lyrebird Forest Walk and to the north of the Special Protection Zone (SPZ). Not surveyed by the BWG.**

The Strzelecki Ranges Warm Temperate rainforests are in sheltered gullies and adjacent to streams. These rainforests are characterized by a dense (non-eucalypt) canopy allowing a rich under-story of large-leafed shrubs and smaller trees (<25m tall). The closed canopy provides a moisture-rich environment for wet dependent ferns, large-leafed shrubs, climbers, and small herbs. Rainforests are home to 30% of Victoria's rare or threatened plant species.⁸ Unfortunately, land clearing has depleted this unique forest type to 3% of its original pre-European extent.

Vegetation: The Strzelecki Ranges Warm Temperate Rainforests are typified by a dominant stratum of *Acacia melanoxylon* (Blackwood) with an under-story that can include *Pittosporum undulatum* (Native Daphne), *Myrsine howittiana* (Muttonwood), *Hedycarya angustifolia* (Austral Mulberry), *Olearia argophylla* (Musk Daisy), *Polyscias sambucifolia* (Elderberry Panax), *Pomaderris aspera* (Hazel pomaderris), *Cyathea australis* (Rough Tree-fern), *Dicksonia antarctica* (Soft Tree-fern). [Unfortunately, no photo of this endangered EVC in the Mirboo North State Forest IPA is available]

3.5 BWG BIODIVERSITY SURVEY AND RESEARCH FINDINGS THAT PROVE MIRBOO NORTH STATE FOREST HAS MULTIPLE HIGH CONSERVATION VALUES

The results of the BWG's field studies indicate the native (State) forest of Mirboo North are functioning, viable yet vulnerable ecosystems that support a high diversity of birds, mammals, reptiles, and invertebrates. This is enabled through the provision of habitat resources, including:

- Hollow-bearing trees for denning and nesting.
- Multiple vegetation species for seasonal dietary requirements.
- Ranging age-classes/maturity of vegetation.
- Canopy and vegetation connectivity for movement, protection, and foraging.
- Sustainable supply of prey and other food sources.
- Resources to allow successful breeding and reproduction of healthy individuals.
- Water and wet habitats; and
- Protection against natural disasters and predators.

As previously described, the BWG's ecological studies of Mirboo North's native forest have revealed that these small, isolated patches of the once great

⁸ DELWP (2019f) 'Fact Sheet 2: Mapping Victoria's Rainforests.'

Strzelecki Ranges native forests are an important and possibly final refuge for many regionally important and/or threatened native species. Many of these species are highly vulnerable to extinction as they have limited (or no) ability to disperse, recruit new individuals and maintain genetic diversity.

The native forests of Mirboo North contain critical habitat for High Conservation Values (HCVs). With a severe lack of government field survey data, particularly for high conservation value species, our team has been conducting field surveys in the coupes. The BWG detected multiple regionally significant species, including national and/or state-listed species threatened to extinction, some of which is described in the following section.

3.5.1 THREATENED SPECIES

Greater Glider (*Petauroides volans ssp. volans*)

Conservation Status: Threatened (Victoria) and Vulnerable (Federal)

Photo 3a: Greater Glider



Photo: Courtesy of David Stickney

Australia's largest gliding possum, the Greater Glider, is also the world's largest gliding marsupial. The Greater Glider has a long body (35-46cm) and a longer tail of 45-60cm. It is covered in dark, thick fur (including the ears), except for the chest which is white. These animals require large, old trees with hollows (dens) for shelter and protection. Greater Gliders have a low dispersal ability and form attachments to denning trees. They have small territories and glide between trees for food, dispersal, and mates. Eucalypt diversity is required for a glider's specialized diet of eucalypt leaves and flowers to maintain health.

The listing of Greater Gliders as threatened species by both the Federal and Victorian governments is in response to the species' increasing population decline. The Threatened Species Scientific Committee report a 30% decline in Greater Glider populations over the last 20 years is due to "catastrophic" habitat loss.⁹ The impact of key threats faced by this species are also acknowledged by

⁹ Australian Government (2016) *Conservation Advice- Petauroides volans- greater glider*

DELWP as the main cause of population decline (Greater Glider Facts Sheet, DELWP 2020c).

The BWG surveyed areas of Mirboo North's native forest and found these forests to contain surprisingly significant numbers of the Greater Glider. Results indicate that these gliders are part of a regionally significant, locally abundant and, possibly, viable population. The native forests of Mirboo North are diverse and contain multiple eucalypt species - perfect habitat for Greater Gliders. However, local key threats including land clearing, plantation establishment, bushfires and historic harvesting have led to the Greater Glider contracting (and becoming restricted) to Mirboo North State Forest areas and nearby native forest areas. As arboreal mammals, Greater Gliders need connecting forest canopy and habitat trees to aid the species' long-term persistence and maintenance of genetic diversity. Therefore, the isolation of these forests, coupled with the Greater Glider's life history traits and specialized habitat requirements makes them extremely vulnerable to local extinction. It is unknown how viable this population is. Population studies would assist in determining if these gliders are genetically distinct from other populations of Greater Glider.

Powerful Owl (*Ninox strenua*)

Conservation Status: Threatened (Victoria)
Photo 3b Powerful Owl



Powerful Owls are from the Hawk owl family. They are Australia's largest owl, measuring 60-65cm in length (from head to tail).¹⁰ Characteristically, they have large, vivid yellow eyes with feathered legs and yellow feet. Their grey-brown feathers are mottled, with distinct dark grey and brown chevrons and white underneath. **Opposite: Powerful Owls in the Mirboo North SPZ, April 2019 Photo: Susan Koci**

These large owls occur along the east coast of Australia and the bordering ranges, from Queensland to the South Australian/Victorian border. In Victoria, Powerful Owls prefer dense gullies where they roost and utilize tree hollows for breeding.

¹⁰DSE (2004a) *Action Statement No. 92 (Powerful Owl)*

Tree hollows, large enough for Powerful Owls, usually only occur in older forests, forming in eucalypts aged between 150-200 years old. These forests also contain arboreal prey animals, such as possums and gliders, that also rely on tree hollows. Unfortunately, forest clearing has led to habitat loss for the Powerful Owl and their prey species. This results in unsuccessful breeding, limits dispersal opportunities, and reduces prey availability.

Mirboo Regional Park and Mirboo North's Special Protection Zone (now incorporated in the IPA) form part of the designated Powerful Owl Management Area (POMA), which was determined as sufficient to contain suitable habitat for a breeding pair of Powerful Owls. BWG surveys conducted in April 2018 detected one regionally significant breeding pair of Powerful Owls (shown in photo above). Other surveyors have more recently detected potentially multiple breeding pairs of Powerful Owls and their young in the Mirboo North area. The Powerful Owl Action Statement identifies that the parks and reserve system at the time of publication (2004) may not provide enough suitable habitat to meet management objectives for this species.¹¹

3.5.2 ENDANGERED SPECIES

Invertebrates

In the Damp and Wet Forests of Mirboo North, there is evidence of holes along streams, drainage lines, fern areas and in drier forest that may have been made by Narracan Burrowing, Gippsland Burrowing Crayfish or Strzelecki Burrowing Crayfish and/or possibly Spiny Crayfish. The Victorian Biodiversity Atlas has records of Narracan Burrowing Crayfish within a section of the IPA.

Narracan Burrowing Crayfish (*Engaeus phyllocercus*), Gippsland Burrowing Crayfish (*Engaeus hemicirratulus*)

Photo 3c: Narracan Burrowing Crayfish



The Narracan Burrowing Crayfish (NBC) is a brightly coloured burrowing crayfish with a leaf-shaped tail. It inhabits boggy seepages, flood beds and the banks of waterways in ferny gullies within a small area of the Western Strzelecki Ranges.¹²

Opposite: Photo: Dr B Van Praagh, Invert Eco 2021

¹¹ DSE (2004a) *Action Statement No. 92*: p 3

¹² Van Praagh, B. (2018) Narracan Burrowing Crayfish Fact Sheet 2 May 2018

“Due to the limited size of the area where NBC are known to occur, and the range of threats faced by the species, the NBC is at ‘very high risk of extinction in the wild in the near future.’ (DELWP 2009). The long-term survival of the NBC is likely to be dependent on careful management and improved protection of existing and potential habitat areas throughout its range.” (As quoted in Van Praagh, B. (2018) Narracan Burrowing Crayfish Fact Sheet 2 May 2018).

Gippsland Spiny Crayfish (*Euastacus kershawi*) and/or South Gippsland Spiny Crayfish (*Euastacus neodiversus*)

Photo 3d: South Gippsland Spiny Crayfish



Photo courtesy of Australian Aquatic Biological Pty Ltd accessed 11 April 2021

The South Gippsland Spiny Crayfish *Euastacus neodiversus* (Riek 1969) is a small freshwater crayfish. Members of the genus *Euastacus* are distinguished by heavy claws (or chelae) and a spiny appearance. The South Gippsland Spiny Crayfish is distinguished from other *Euastacus* by the arrangement, number, and location of various spines on the exoskeleton.¹³

“The species occur in streams in sclerophyll forest where the streamside vegetation is dominated by *Eucalyptus regnans* (Mountain Ash), *Cyathea spp* (tree ferns) and *Acmena smithii* (Lilly Pilly).” (Morgan, 1986 as quoted in Van Praagh, 2003).

¹³ Morgan (1986) as quoted in Van Praagh (2003) op cit.

Lace Monitor (*Varanus varius*)

Photo 3e: Lace Monitor



Lace Monitors live in the drier forest areas, they use trees and logs for refuge and hunting prey. Termite mounds (constructed from fallen timber) are fundamental for the reproduction of the Lace Monitor, as these mounds are where they lay and incubate their eggs. This elusive reptile has been sighted along the Grand Ridge Rail Trail and in Lyrebird Forest Walk, particularly during spring and summer months.

Opposite: Lace Monitor near Mirboo North. Photo: Grace Adamo 2019

3.5.3 REGIONALLY IMPORTANT SPECIES

South Gippsland koalas (or Strzelecki koalas) (*Phascolarctos cinereus*)

Photo 3f: South Gippsland koala (or Strzelecki koala)



**Strzelecki Koala in Doug's Block, Mirboo North
2019 Photo: Susan Koci**

Recently research has found the koalas of the Strzelecki Ranges are part of a cohort of koalas with a high genetic diversity. This is compared to today's Victorian and South Australian koalas (descendants of a koalas placed onto Phillip and French Islands in the late 1800's) which have low genetic diversity. The South Gippsland koalas' genetics are close to the original genetic sequence of pre-European koalas, making them an important remnant population that could help

with the long-term persistence of koalas in Victoria.¹⁴ Land clearing and habitat fragmentation has led to a high level of dispersal of the South Gippsland Koala. Currently, the range of the South Gippsland Koala population spans the Baw Baw,

¹⁴ Dr Faye Wedrowicz, 22 October 2017, personal letter to Minister D'Ambrosio, Department of Environment and Energy, Victorian State Government, documenting her PhD research findings.

Bass Coast, South Gippsland, Latrobe and Wellington local government areas and the Strzelecki Ranges and Gippsland Plain bioregions.

Numerous eucalypt species are important to koalas, with old, large trees within the landscape being preferred. However, a paucity of koala habitat in the South Gippsland region is of concern for the conservation of the South Gippsland koala population. There is a real need to increase habitat availability, patch size and connectivity in the South Gippsland region for the future conservation of Victoria's only remnant koala population.

Superb Lyrebird (*Menura novaehollandiae*)

Photo 3g: Superb Lyrebird



Photo courtesy of Tessie Amesreiter ABC Open Contributor
Taken in the Strzelecki Forests, South Gippsland

The community in and around Mirboo North has a strong connection with the Superb Lyrebird. South Gippsland is long-known as the "Land of the Lyre bird" - a publication by The Committee of the South Gippsland Pioneers' Association (1920).

The Lyrebird Forest Walk in Mirboo North is one of the region's premier tourist attractions and integral to the town's identity.

Platypus (*Ornithorhynchus anatinus*)

Photo 3h: Platypus



Photo courtesy of Australian Platypus
Conservancy

The platypus is semi-aquatic and has a streamlined, dorso-ventrally flattened body and a broad, flat tail, all covered in dense waterproof fur. It has short limbs with webbed feet and is easily distinguished by a rubbery bill. The platypus is semiaquatic and entirely dependent on aquatic ecosystems. The Platypus occurs in a variety of water bodies including rivers, creeks, lakes, as well as man-made dams and reservoirs.

Accordingly, it occupies diverse habitats with reliable surface water.¹⁵ Occasionally seen swimming in the Little Morwell River where it runs through Lyrebird Forest Walk, there is little knowledge about the platypus in this area. Further work is needed to survey waterways to determine the size and health of the population.

Other Flora and Fauna Species found by the BWG

Attachment 3.1 lists Plant species observed by the BWG in the Mirboo North State Forest.

Attachment 3.2 is a Selection of Flowering Plant species found by the BWG in the Mirboo North State Forest.

Attachment 3.3 lists Bird species observed along one survey transect of the Mirboo North State Forest by a Latrobe Valley Field Naturalist in 2017.

Attachment 3.4 is a Photographic record of Fungi species found in the Mirboo North native forests in May 2019.

3.5.4 Role of the Mirboo North Native Forests in Climate Change and Carbon Sequestration

The Strzelecki Ranges bioregion has already lost extensive amounts of habitat and numerous native species. Climate change is predicted to result in decline and extinction of populations, with the effects of climate change being worst for populations in fragmented habitats.

Not only will climate change impact animal and bird species' abilities to cope with fluctuations in temperature. It is believed that changes to climate will alter the nutrient composition of plants (as food),¹⁶ whilst also having wider impacts on vegetation communities and plant assemblages adapted to specific climatic conditions. Thus, there is an unquestionable need to increase habitats, connectivity, and habitat quality to conserve and increase the resilience of our region's native forests and species for the future.

Research conducted by Professor David Lindenmayer and the co-authors of *Mountain Ash- Fire, Logging and the Future of Victoria's Giant Forests*¹⁷ indicates old-growth, mature ash forests hold more carbon than any other forest types. Mature age eucalypts, given their relatively large boles and small tops, in conjunction with fallen timber, have a greater carbon storage capacity per unit

¹⁵ Scientific Advisory Committee (2020) 'Final Recommendation on a Nomination for Listing' *Ornithorhynchus anatinus* Shaw 1799 - Platypus (Threatened species listing).

¹⁶ Dr Faye Wedrowicz, 22 October 2017 (op cit).

¹⁷ Lindenmeyer et al (2015) *Mountain Ash- Fire, Logging and the Future of Victoria's Giant Forests*

area. It is reasonable to equate this finding to carbon storage in Mirboo North's Wet and Damp Forest types - as we allow our forest to age its carbon storage is likely to increase.

Removal of forest vegetation through timber harvesting, land-clearing and other degrading processes significantly reduces the carbon-sink potential in the affected area for future decades.

Global warming, expanding urban areas and the demand for forest products is causing increased deforestation, resulting in habitat loss and increased species vulnerability to extinction. Mirboo North's native forests are a precious refuge for nature and, therefore, us.

3.6 IMPLICATIONS FOR MANAGEMENT OF THESE HIGH CONSERVATION VALUES

3.6.1 Towards a Vision for Nature Conservation

The Preserve our Forests Steering Committee thanks the Minister for Energy, Environment and Climate Change, as the primary custodian of Victoria's biodiversity, for her support for the permanent protection from logging of Mirboo North's threatened State native forest, through the establishment of an Immediate Protection Area (IPA) over a significant portion of these forests.

This is a clear acknowledgment of the findings made by PoF 'citizen science-based' research and surveys that have irrefutably demonstrated that these are high conservation value forests with multiple high conservation values.

The IPA fact sheet, *"Victorian Forestry Plan: from timber to threatened species protection"* (State of Victoria – DELWP, 2019) accompanying the Minister's announcement of the IPA, states that the purposes for which the IPAs were declared, is that the Victorian Government recognizes the specific areas as "high conservation value forests."

The IPA declaration demonstrates the Victorian Government's commitment to conserving and protecting these forests containing threatened species and critical habitat. Acting quickly to enact a formally legislated Nature Conservation Reserve for the Mirboo North IPA, with a strong site specific ecological, conservation-based management plan is of the utmost importance. This is due to the significant presence of threatened species, critical habitat and EVCs that are regionally significant and severely depleted.

As detailed in this Chapter, threatened species include the Greater Glider, Powerful Owl, Lace Monitor, and multiple crayfish species, as well as regionally

significant and iconic species like the South Gippsland Koala, Superb Lyrebird and Platypus. Any government action to grant the Mirboo North IPA legally binding Nature Conservation Reserve status, with nature conservation as the primary focus, would align with the Greater Glider and Powerful Owl Action Statements, whilst also protecting the remains of four depleted to endangered Ecological Vegetation Classes (EVCs) of the Strzelecki Ranges Bioregion that lie in the IPA.

There is significant under-representation of formalized nature parks and reserves in the Strzelecki Ranges Bioregion further amplifying the importance of urgent action. PoF applaud the Victorian Government's intention of providing crucial habitat connectivity between the IPA and other existing parks and reserves - a commitment also detailed in the *Victorian Forestry Plan: from timber to threatened species protection* policy document.

After the decision to designate the Mirboo North IPA, PoFSC members met with DELWP officials in August 2020. PoFSC believes that it is time for further decision-making on the Mirboo North IPA. The community and visitors value these forests for many reasons, so a balance between public uses appropriate for this IPA that supports threatened species and forest protection and conservation needs to be achieved. Some uses could be for passive recreation (i.e. bushwalking, bird watching, picnicking) and could include other activities (i.e. horse and mountain bike riding on roads, walking dogs on leads) as are permitted in some Nature Conservation Reserves.

PoFSC respectfully requested of the Minister and Victorian Government, timely and well-considered action to preserve and enhance Mirboo North's State Forest IPA and their high ecological and conservation values into the future. Responding to PoFSC's requests, the creation of these IPA's was for the protection of high conservation forests and high conservation value species (and their habitat).

It is imperative that the Mirboo North State Forest IPA be formalized into a Nature Conservation Reserve with a conservation-based management plan for the future of our forests, threatened species and our community.



[\[Back to Top of Report\]](#)

3.7 REFERENCES

Australian Aquatic Biological Pty Ltd (2021) 'Eustacus neodiversus' 'Crayfish List – Freshwater Crayfish of Australia 2021' last updated 11 April 2014 at URL = [Crayfish List - Freshwater Crayfish of Australia | Australian Aquatic Biological \(aabis.com.au\)](https://aabis.com.au/Crayfish-List-Freshwater-Crayfish-of-Australia)

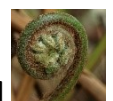
- Bull, Marilyn (2014) *Flora of Melbourne: A Guide to the Indigenous Plants of the Greater Melbourne Area* 4th edition Hyland House Publishing and Manna Trading
- DELWP (2007) EVC/Bioregion Benchmarks for Vegetation Quality Assessment – Strzelecki Bioregion,’ “Biodiversity : Bioregions and EVC Benchmarks” page last updated 29/5/20 viewed online at URL = [Bioregions and EVC benchmarks \(environment.vic.gov.au\)](http://environment.vic.gov.au/bioregions-and-evc-benchmarks)
- _____ (2017) *Biodiversity information explanatory document Measuring value when removing or offsetting native vegetation* The State of Victoria Department of Environment, Land, Water and Planning 2017 viewed online 5/12/20 at URL = [Title \(environment.vic.gov.au\)](http://environment.vic.gov.au/biodiversity/bioregions-and-evc-benchmarks)
- _____ (2017a) *Biodiversity information explanatory document Measuring value when removing or offsetting native vegetation*, p4.
- _____ (2017b) ‘Criteria for Bioregional Conservation Status of Ecological Vegetation Classes (EVCs)’ “Bioregions and EVC Benchmarks” Department of Environment, Land, Water and Planning, retrieved 2/10/17 at URL = www.environment.vic.gov.au/biodiversity/bioregions-and-evc-benchmarks
- _____ (2019) *Victorian Forestry Plan: from timber to threatened species protection* IPA Policy Document, Department of Environment, Land Water and Planning, November 2019, viewed online at URL = www.forestsandreserves.vic.gov.au › IPA-fact-sheet
- _____ (2019f) ‘Fact Sheet 2: Mapping Victoria’s Rainforests’ viewed online at URL = [https://www.delwp.vic.gov.au/ data/assets/pdf file/0022/413095/2-Rainforest-factsheet-FINAL.pdf](https://www.delwp.vic.gov.au/data/assets/pdf_file/0022/413095/2-Rainforest-factsheet-FINAL.pdf)
- _____ (2020a) “Biodiversity: Bioregions and EVC Benchmarks” Page last updated: 29/05/20, reviewed online 5/12/20 at URL = [Bioregions and EVC benchmarks \(environment.vic.gov.au\)](http://environment.vic.gov.au/bioregions-and-evc-benchmarks)
- _____ (2020b) Nature Kit data retrieved on 10/8/20 at URL = <http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit>
- _____ (2020c) ‘Greater Glider Facts Sheet’ page last updated: 03/06/20 URL = <https://www.environment.vic.gov.au/conserving-threatened-species/threatened-species-fact-sheets/greater-glider>
- DEPI (2014) ‘Advisory Lists of rare or threatened plants in Victoria’. Department of Environment Land Water and Planning, viewed at URL = [Threatened Species Advisory Lists \(environment.vic.gov.au\)](http://environment.vic.gov.au/threatened-species-advisory-lists) Page last updated: 10/07/20
- DSE/Van Praagh (2003) ‘Flora and Fauna Guarantee Act Action Statement No 176 South Gippsland Spiny Crayfish’
- DSE (2004) *Forest Management Plan for Gippsland Appendix D: Zoning Scheme Register (p141)*. The Victorian Government Department of Sustainability and Environment Melbourne, June 2004
- _____ (2004a) *Action Statement No. 92* (Flora and Fauna Guarantee Act 1988), The Victorian State Government, Department of Sustainability and Environment, East Melbourne
- _____ (2004b) ‘EVC/Bioregion Benchmark for Vegetation Quality Assessment Strzelecki Ranges bioregion’ all EVCs viewed online at URL = [https://www.environment.vic.gov.au/ data/assets/pdf file/0032/48749/Strz EVCs c ombined.pdf](https://www.environment.vic.gov.au/data/assets/pdf_file/0032/48749/Strz_EVCs_combined.pdf)

- ____ (2012) *Improving survey methods and understanding the effects of fire on burrowing and spiny crayfish in the Bunyip and South Gippsland catchments Black Saturday Victoria 2009*. Natural values fire recovery program project conducted by David Bryant, Di Crowther and Phil Papas, Arthur Rylah Institute for Environmental Research, Department of Sustainability and Environment viewed online at URL = [VBRRA-P17-revised-web.pdf \(ari.vic.gov.au\)](http://vbrra-p17-revised-web.pdf(ari.vic.gov.au))
- Lindenmeyer, D., Blair, D., McBurney, L., and Banks, S. (2015) *Mountain Ash- Fire, Logging and the Future of Victoria's Giant Forests* CSIRO Publishing Royal Botanic Gardens
- (2021) 'Mycology' Science and Collections Projects, viewed online 2/2/21 at URL = www.rbg.vic.gov.au/science/projects/mycology
- Scientific Advisory Committee (2020) 'Final Recommendation on a Nomination for (Threatened Species) Listing' *Ornithorhynchus anatinus* Shaw 1799 – Platypus, DELWP 16 October 2020
- The Committee of the South Gippsland Pioneers Association (1920) *The Land of the Lyre bird; a story of early settlement in the great forest of South Gippsland*. Gordon and Gotch, Melbourne
- Threatened Species Scientific Committee (2016) *Conservation Advice- Petauroides volans-greater glider* Australian Government, retrieved 10/02/18 at URL = <http://www.environment.gov.au/biodiversity/threatened/species/pubs/254-conservation-advice-05052016.pdf>
- Van Praagh, B. (2018) 'Narracan Burrowing Crayfish: Recognising and Protecting Crayfish Habitat Fact Sheet No. 2, May 2018' prepared by Invert Eco, State of Victoria, Trust for Wildlife viewed online at URL = [PowerPoint Presentation \(burrowingcrayfish.com.au\)](http://PowerPoint Presentation (burrowingcrayfish.com.au))
- VEAC (2010) 'Remnant Native Vegetation Investigation- Discussion Paper For Public Comment' Victorian Environmental Assessment Council 8 Nicholson Street, East Melbourne June 2010: Chapter 5: p76
- ____ (2011) *Remnant Native Vegetation Investigation Final Report* Victorian Environmental Assessment Council 8 Nicholson Street, East Melbourne, March 2011
- ____ (2016) *Statewide Assessment of Public Land Discussion Paper* Extract Table 5.5 'The 40 Victorian bioregional Ecological Vegetation Classes (EVCs) that require the greatest additional areas to meet the target of 17 per cent reservation in the protected area system' The State of Victoria, Victorian Environment Assessment Council, 2016: p67
- ____ (2017) 'Statewide Assessment of Public Lands Final Report' Victorian Environmental Assessment Council, State of Victoria

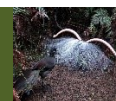


Collage of PoF's photos of Flora species (various) and Eukaryota species in the Mirboo North's state forests presented at the PoF Public Meeting, 4 March 2018

[\[Back to the Top of the Report\]](#)



4 SOCIO-ECONOMIC AND ENVIRONMENTAL VALUES OF MIRBOO NORTH'S NATIVE FORESTS AND IPA



Contents

- 4.1 Introduction to Forest Values
- 4.2 Key Social Values
 - 4.2.1 Social Values of Mirboo North Residents
 - 4.2.2 Social Forest Values of Visitors to Mirboo North
- 4.3 Key Environmental Values
 - 4.3.1 Forest Values of Mirboo North Residents
 - 4.3.2 Forest Values of Visitors to Mirboo North
- 4.4 Key Economic Values
 - 4.4.1 Local Tourism Research Findings
 - 4.4.2 Local Marketing Research Findings
- 4.5 Conclusion – The Importance of Forest Values for Managing Mirboo North's IPA
- 4.6 References

Tables

- Table 4.1 Forest Values of Importance to Residents
- Table 4.2 Forest Values of Importance to Visitors to Mirboo North
- Table 4.3 Combined Values Analysis of Written Comments to Survey Questions

Text Boxes

- Box 4.1 Written responses reflecting Social Values expressed by Residents
- Box 4.2 Written responses reflecting Social Values expressed by Visitors
- Box 4.3 Written responses reflecting Local Biodiversity Values of Residents
- Box 4.4 Written responses reflecting Broader Environmental Values of Residents
- Box 4.5 Written responses reflecting Biodiversity Values of Visitors
- Box 4.6 Written responses reflecting General Environmental Values of Visitors
- Box 4.7 Written responses reflecting the Value of Native Forests for the Success of Mirboo North's Tourism expressed by Residents
- Box 4.8 Written responses reflecting the Value of Native Forests for Mirboo North Tourism expressed by Visitors
- Box 4.9 Survey respondents' views about other Forest Values – Potable Water and Air Quality
- Box 4.10 Survey respondents' views about other Forest Values – Seed Collection and Native Plant Propagation
- Figure 4.1 Mirboo North Business and Industry Participants in the PoF 2018 Survey
- Figure 4.2 Activities of Visitors Staying in Mirboo North Short Stay Accommodation
- Figure 4.3 Forest Management Concepts

4.1 INTRODUCTION TO FOREST VALUES

In 2018 the Preserve our Forests' Economic and Amenity Working Group (EAWG) undertook research and surveys to identify the key aspects of Mirboo North's native forests which provided value to people's lives and to the local economy. This work also aimed to identify the potential impacts of the loss of such forest values if logging were to occur as planned by the Victorian Government.

South Gippsland Shire Council's Economic Development and Tourism Department assisted with the survey development and subsequent data analysis using Remplan Economic Modelling (SGS/PoF2018).¹⁸ A total of 393 people from Mirboo North and vicinity together with 169 visitors to the Mirboo North area completed PoF's anonymous survey to gather information about the Social Values each group held in relation to these forests. To determine the economic values of the forests, PoF also surveyed 33 people with businesses in Mirboo North and 9 local short stay accommodation providers. These businesses provided non-identifying information about the nature and value of their businesses to the local economy together with their degree of reliance on tourism.

People's written, additional comments were often multi-dimensional and interrelated, showing that such a simple survey approach could only ever hope to touch the surface of the varied meanings and ways in which people value the natural world of the native forests. Their comments clearly demonstrated that not only do people hold strong socio-economic values about native forests, but that our forests also hold enormous biodiversity and wider environmental values for the local community and visitors to Mirboo North.

Mirboo North's findings set out in this Chapter, mirror much in DELWP's "Future of the Forests Feedback Report" (DELWP 2019) which summarised results of a State-wide community consultation process that took place during much of 2019, which aimed to identify key forest values held generally by all Victorians.

4.2 KEY SOCIAL VALUES

Survey findings reflecting social values about native forests expressed by both residents and visitors to Mirboo North are summarised in this section. Clearly, the Mirboo North native forests are essential places which are highly valued and much used by both residents, and visitors to the area to maintain their health

¹⁸ SGS/PoF (2018) "This is my home - A Socio-Economic analysis of logging in Mirboo North."

and wellbeing. Many people also utilise the varied outdoor passive and active recreation opportunities these local forests currently provide. The native forests certainly provide the township and local area with a much-loved general and visual identity and amenity which strongly connects people to this area.

Dr Ken Henry, the former head of the Australian Treasury, expressed the wellbeing effects of natural areas most clearly in 2010: “The environment sustains life, supports our physical and mental health and provides psychic enjoyment.” ¹⁹

4.2.1 Social Values of Mirboo North Residents

A total of 393 people living in the town and local environs completed the forest surveys in 2018. Resident and visitor surveying was primarily aimed at identifying the major social values related to native forests that people considered important.

The survey form included four “tick-a-box” options to identify key forest values. Four of the five categories made available, related specifically to social values identification, namely wellbeing, visual amenity, passive recreation, and active recreation. Multiple scoring was permitted; consequently, people could choose to designate one or all five nominated value categories equally. The 5th category, “Other” enabled people to record any other important values they attributed to Mirboo North’s native forests. Residents’ survey responses are summarised in **Table 4.1**.

Table 4.1: Forest Values of Importance to Residents

Total Local Respondents	Passive Recreation	Active Recreation	Visual Amenity	Wellbeing	Other
393	279	339	312	340	123
	71.0%	86.3%	79.4%	86.5%	31.3%

The results set out in **Table 4.1** demonstrate that all four listed social values: wellbeing, active recreation, passive recreation, and visual amenity had extremely high support from the Mirboo North community.

Written responses reflecting the range of wellbeing, amenity and connection values held by residents are included in **Text Box 4.1**.

¹⁹ Dr. Ken Henry (2010) “The Value of the Environment”

Text Box 4.1 Written responses reflecting the range of Wellbeing, Amenity and Connection Values of Mirboo North residents

Wellbeing, amenity, and connections	Active and passive recreation
<p><i>"I go to reflect and pray. I am awed by the richness and diversity of our natural flora and fauna. It is an essential element of my being."</i></p> <p><i>"The trees within/surrounding the township is the heart and soul of Mirboo North."</i></p> <p><i>"Cleaner air, cooler air in summer, clean water, sense of happiness coming home from a long day at work in the Latrobe Valley."</i></p> <p><i>"It is the reason our family moved to Mirboo North."</i></p> <p><i>"Sense of belonging and peace when out on the trails and in the bush."</i></p> <p><i>"This is very important, if things look good, people feel good."</i></p> <p><i>"Walking in the local forests keeps me connected to the community via our environs."</i></p> <p><i>"Stress relief." "Need a place for peace and quiet." "This is my home!"</i></p> <p><i>"We moved and built here because of the native forests. That's what attracted us."</i></p>	<p><i>"I like riding my horse along the tracks as well."</i></p> <p><i>"I belong to a bush walking group – we all enjoy the peace of the great outdoors. We are of the older generation."</i></p> <p><i>"The area has great amenity for locals and tourists for all types of outdoors activities."</i></p> <p><i>"I love to walk in the forest - it's beautiful."</i></p> <p><i>"I love to walk my dog here."</i></p> <p><i>"Our family enjoys the natural environment, and it is part of our recreational time together."</i></p>

4.2.2 Social Values of Visitors to Mirboo North and District

A total of 169 visitors completed the forest surveys which also included four "tick a box" options - multiple scoring was permitted. The results, set out in full in **Table 4.2**, demonstrate that visitors also gave high priority to all four listed social values, with wellbeing receiving almost total support (94%). These native forests clearly play a critical role in our visitor's lives and influence their choice of Mirboo North as a preferred tourism location.

Table 4.2: Forest Values of Importance to Visitors

Place of Residence	Total No. of Respondents	Passive Recreation	Active Recreation	Visual Amenity	Wellbeing	Other
Victoria - Regional	88	72 81.9%	75 85.2%	69 78.4%	86 97.7%	8 9.1%
Melbourne & suburbs	64	47 73.4%	51 79.7%	46 71.9%	58 90.6%	13 20.3%
Interstate	17	13 76.5%	17 100%	12 70.6%	15 88.2%	5 29.4%
TOTAL VISITORS SURVEYED	169	133 78.7%	143 84.6%	127 75.1%	159 94.1%	26 15.4%

Many visitors made written comments that explain what these values meant to them individually. Comments that reflect the range of sentiments expressed are shown in **Text Box 4.2**.

Text Box 4.2 Written responses reflecting the range of Social Values expressed by Visitors

Wellbeing, Amenity and Connection

"The fact that time could be forgotten when sitting in forests is a very special feeling."
"The region is so important for people's wellbeing and health."
"Spending time in forests areas with birds in their natural habitat is so important for my mental health. Birds give so much joy."
"Such a beautiful tranquil place for walking, bird watching, photography and recharging my batteries."
"I have cancer and these places are special."
"I visit this place for camping, passive recreation – important for wellbeing."
"Not many places left for people and wildlife, flora and fauna."
"We love driving through the forest between Mirboo North and Morwell."

Recreational Opportunities

"I am very pro ecotourism and enjoy trails/walks/hikes."
"I regularly visit the Mirboo North forest areas for walking and sightseeing."
"As an avid birdwatcher, it is so important for forestry areas to be preserved for the diversity of birdlife."
"The forest around Mirboo North provides a significant amount of leisure activities."
"I travel out this way to enjoy riding bikes on the local trails with my family."

4.3 KEY ENVIRONMENTAL VALUES

While PoF's formal surveying did not include specific options to identify the environmental values people held, many people also identified the environment as being highly valued by them in their additional written comments and/or specifically noted them in the "Other" tick a box category available in the survey forms. **Table 4.3** details the key themes identified in people's written comments.

Table 4.3 Combined Values Analysis of Written Comments to Survey Questions

Forest Value	Mirboo North	Regional Victoria	Melbourne	Interstate	Total
Wellbeing/Amenity/Connection	123	16	5	4	148
Biodiversity	70	14	4	3	91
Tourism/Economy	23	8	6	4	41
Wider Environmental Issues	11	5	2	2	20
Recreation	71	7	1	1	80
Protect for Future Generations	4		3	3	10
Conditional Logging	2			1	3
No Logging	13	7	3	2	25
Supportive of Firewood Collection	5		1		6
Not Supportive of Firewood Collection			1		1
Fire Issues	4				4
Indigenous Culture		1			1
Culture/Heritage		1			1
Miscellaneous	4	4		4	12
TOTAL	330	63	26	24	443

Two major themes emerge from **Table 4.3** relating to environmental values: local forest biodiversity values and broader environmental values. Residents' and visitor views on each of these themes are explored in the following two sections.

4.3.1 Forest values of people living in and around Mirboo North

Local Biodiversity Values

People from the local community overwhelmingly identified that conservation of local native flora and fauna habitat was the most significant additional value of importance to them about these forests. Some residents also noted the severe negative impact the 2009 bushfires had recently on these forests, emphasising this has greatly accelerated the need for their conservation and protection.

Text Box 4.3 reflects the range of written comments expressing the Biodiversity Values of Mirboo North residents.

Text Box 4.3 Written responses reflecting the range of Local Biodiversity Values of Residents

"We are blessed to have native flora and fauna on our doorstep."

"Balance of Mother Earth, ecosystems and all the beings that inhabit the forest."

"Conserving and valuing the worth of the forest for the wildlife that lives in it – not just human usage."

"Preservation of local flora and fauna including fungi and the Greater Glider."

"Fresh air, active animal and bird life in a complete ecosystem."

"Protecting the homes of many animals and birds. Lyrebirds, koalas, wallabies, kangaroos, wombats, snakes, eagles and many species of birds and flowers."

"Increasing lack native forest to sustain viability of wildlife, especially unburnt forest from 2009." *"Mirboo North is a wildlife haven."* *"Sustainability of Species."*

"Animal and birds protected." *"Animals, habitat and bee keeping."*

Broader Environmental Values

Forests provide wider environmental values well beyond the immediate conservation importance of a local area's flora and fauna. This was clearly seen in residents' concerns about aspects of the environment which have a far broader impact, as shown in **Text Box 4.4**.

Text Box 4.4 Written responses reflecting Broader Environmental Values of Residents

"We have to address climate change and start by keeping tree/habitat and protecting what is left."

"Air quality is important to me – too many areas of our earth have been degraded already and it is imperative to keep the small amounts of forests left safe."

"The forest is important to the whole of the Australian people and people living in Mirboo North. It brings lots of good for the environment."

"There are too few forested areas remaining in this region, more broadly throughout Victoria."

"Thinking of a sustainable future." *"Hedge against further impacts of climate change."*

"Possible water contamination if logging goes ahead." *"Impact on water and air quality."*

4.3.2 Forest values of Visitors to Mirboo North

Like residents, visitors to the town and local area identified in their additional written comments that biodiversity and broader environmental values associated with these local forests were of high importance to them.

Visitor Biodiversity Values

Visitors focussed on general environmental concerns in their additional written comments as shown in **Text Box 4.5**.

Text Box 4.5 Written responses reflecting the range of Biodiversity Values of Visitors to Mirboo

"We value our endangered wildlife and believe this area should be preserved."

"The remaining habitat for birds, flora and fauna is of paramount importance."

"This is the most beautiful forests area I have seen so far."

"Without the forests, where will what's left of our native animals live?"

"I also have concerns about the animals in the local area."

"I enjoy the diversity of the area. The Greater Gliders have been observed in these coupes. They are threatened species and their habitats will be severely affected."

"I'm devastated to think we will lose old forest and trees and wildlife."

"Destruction of habitat and environmental services including retention of soils and water and loss of biodiversity and species (Elimination possible)."

"Habitat for birds and mammals."

"Importance for maintenance of species."

Visitor Broader Environment Values

The range of broader environmental values raised by visitors in their written survey responses are shown in **Text Box 4.6**.

Text Box 4.6 Written responses reflecting the range of Broader Environmental Values held by Visitors to Mirboo North

"I visit the area on a regular basis and enjoy the forest environment. The world needs more mature forests not less. There are not many remnants of the Great Strzelecki forest left now. And it is an important part of our heritage."

"We need all the forest possible for the health of this country – air, animals, water."

"This is too precious a resource to squander. Climate change – man-made is here. When are we going to learn that the survival of the species is dependent on how we manage our environment right now? There is no time to lose."

"This is the most beautiful tree forest area I have seen so far."

"Without the forest, where will what's left of our native animals live?"

"Forests are the lungs of the world. They provide habitat for many creatures and plants. I haven't had the pleasure of walking in them yet. But please leave them intact for me and future generations."

"Preserve nature." "Trees absorb CO2 and ameliorate greenhouse."

"We need to plant trees, not cut them." "Climate change mitigation."

4.4 KEY ECONOMIC FOREST VALUES

4.4.1 Local Tourism Research

Tourism is a major emerging industry in South Gippsland Shire, with an estimated total tourist expenditure of \$123m in South Gipps in a year and with tourism generating an estimated 646 direct jobs in 2012/3. In 2012/3 it was also identified that "The direct contribution from tourism to gross regional product is \$45m; however, the flow-on effect of this supports a total of \$101m in gross regional product" (2012/3 data). Further, tourism operators reported "strong local support in sourcing food produce and other products and employ local tradespeople" at this time. (SGSC 2013)²⁰

- The region offers world recognised nature-based attractions including beaches, rainforests, and spectacular mountain ranges. The following nature-based assets, all located within a 5km radius of the township, make Mirboo North a centre for outdoor recreational and nature-based tourism in the western Strzelecki Ranges:
 - The **Mirboo North State Forest IPA including the SPZ.**
 - The **Mirboo Regional Park.**
 - The **Lyrebird Forest Walk.**
 - The highly popular 13 km **Grand Ridge Rail Trail**; and
 - The 14.4ha within-town **Baths Rd 'Land for Wildlife' Reserve.**
- SGSC identified Mirboo North town centre has two main retail functions:
 - as "a small neighbourhood centre providing food, groceries and convenience items for residents of the township and surrounds; and

²⁰ South Gippsland Shire Council (2013) *Prom Country – Economic Impact and Visitor Profile 2012/13.*

- as “a visitor centre catering for significant numbers of visitors who come to the town from the surrounding region and from further afield”. (SGSC 2016)
- SGSC also identified that “visitors support a level of retail provision that is somewhat higher than would otherwise be found in a town of this size” providing both the town and local trade area residents with increased access to, “for example, a range of cafes and dining options that they would otherwise have to travel further afield for”. This was later identified to provide a 30% increase to town income rather than the anticipated 20% increase expected for a town this size. (SGSC 2016)
- Most Mirboo North tourist accommodation providers are located on the outskirts of Mirboo North adjacent to the State native forests or are in nearby rural locations all of which take advantage of the area’s beautiful natural environment.

4.4.2 Local Marketing Research

Promotion of Mirboo North’s tourism assets relies a great deal on its natural bushland surrounds:

- ‘Prom Country’ describes Mirboo North as: “...nestling amongst towering gums and fertile farmland;” and “Mirboo North is the highest township found on The Grand Ridge Road, which spans 132km along the ridge of the picturesque Strzelecki Ranges.”
- ‘Travel Vic’ states: “Looking down from its high ridge, this traditional country town is surrounded by some of the most scenic views in the area.”
- ‘aussietowns.com.au’ recommends Mirboo North as: “...a destination for people wanting to explore the beautiful Strzelecki Ranges which are known for their tall eucalypts, cool temperate rainforest and fern gullies.”
- Mirboo North promotes itself as an attractive historic township with excellent shops, food outlets and park/recreation/family facilities for stopover traffic and for longer stay tourism.

4.4.3 PoF Survey Findings about the Value of Tourism to the Mirboo North Economy

In 2018, PoF undertook business community survey research to better understand the role of tourism in the economy of Mirboo North and its relationship with the natural environment. PoF consequently surveyed many Mirboo North local tourist accommodation and town general businesses. South Gippsland Shire helped POE develop these business surveys to ensure that

appropriate data was obtained to enable it to undertake subsequent Remplan economic modelling analysis of the total business survey responses.

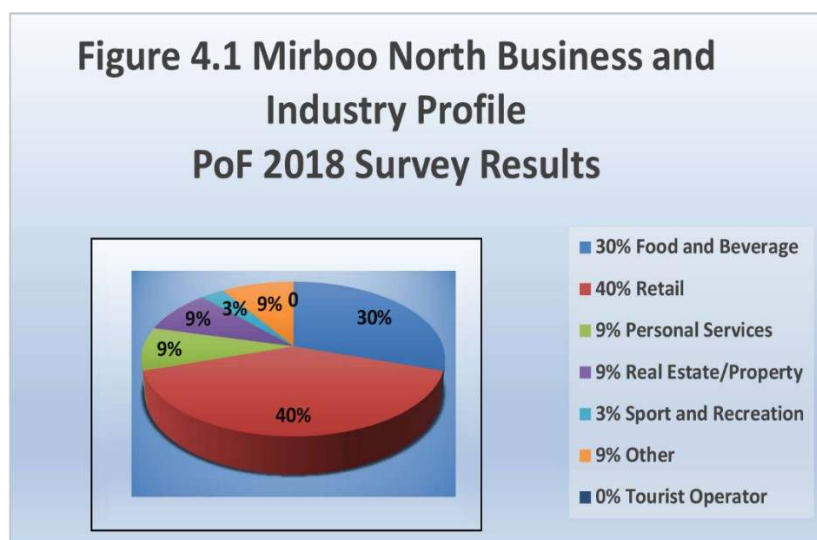
It is evident from this extensive Mirboo North economic analysis that tourism is a key part of the Mirboo North economy. PoF's research also demonstrates that Mirboo North's forested natural environment plays a large part in attracting its visitors to the town and local area. As such these native forest areas have been identified as critically important natural assets for the town's economy. Ralf Buckley in his examination of protected area tourism (2002, 2008) notes "a significant proportion of tourism developments are focused in and around national parks and other protected areas, which provide attractions for scenic and nature-based tourism." (Buckley, 2008).

Tourism Data Collection in Australia

Tourism data is not gathered as such in ABS statistics but rather is determined nationally by an analysis of industries, particularly accommodation, retail, and food services. It is assumed in any Australian tourism analysis that accommodation providers are 100% tourism-related industries.

The Value of Tourism to Mirboo North General Businesses

Thirty-nine (39) general town businesses were approached to take part in the business surveying as distinct from the local area short-stay accommodation providers; 33 businesses completed the survey. **Figure 4.1** below categorises the 33 general business and industry respondents into the Shire's designated industry categories used in their Remplan modelling.



The 33 general businesses were estimated to have worked 281,933 EFT (Equivalent Full Time) hours in total based on 2016-2017 full financial year data.

- Most Mirboo North's businesses identified themselves as being highly reliant on local tourism for their economic survival and success with 7 general businesses relying on tourist income for 76-100% of their business; 7 businesses for 50 to 74%; 8 for 25 to 49%; and 11 businesses relied on tourism from 0 to 24%.
- This town and its nearby trade areas clearly gain significant flow-on financial benefits from the Mirboo North tourism industry. 14 general businesses primarily obtained their "indirect" goods and services from the Mirboo North area, 1 from South Gippsland Shire, and 1 from the Latrobe Valley and 15 from other locations.

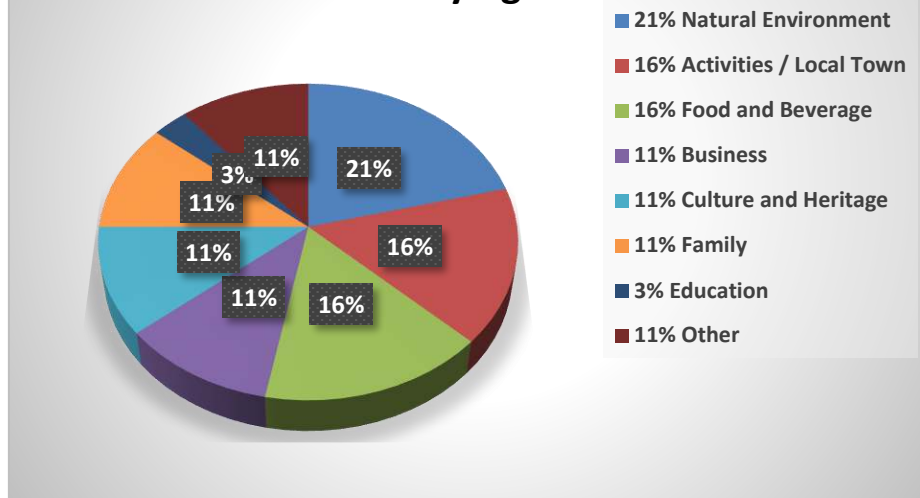
The Value of Tourism to Mirboo North's Accommodation Providers

Fourteen accommodation providers were contacted; 9 completed their surveys. In the 2016-2017 financial year, these nine Mirboo North providers accommodated 5579 visitors in total. While the number of accommodation providers surveyed is not large, it was clear that local and nearby regional trade gained considerable downstream benefit from the Mirboo North tourism industry. The participating accommodation providers reported that their goods and services were obtained from the following areas: Mirboo North (6 businesses); South Gippsland Shire (1 business); Latrobe Valley Shire (1 business) and Other Locations (1 business).

Accommodation providers were found to have a closer relationship with the visitors using their services than other local tourism-related businesses. Consequently, they were generally able to provide information about the types of local activities in which their visitors typically, or actually, engaged. The results are shown in **Figure 4.2**.²¹

²¹The Shire included Accommodation Provider \$Dollar contributions as part of its total Mirboo North Tourist \$Dollar final statistics discussed in this section. It is assumed that the income of Accommodation Providers' is 100% tourism-related unlike all other retail.

Figure 4.2 Activities of Visitors Staying in



South Gippsland Shire Economic Analysis of the Value of Tourism to the total Mirboo North Business Community - Financial Year 2016/17

- The Tourism component alone of the 41 local businesses surveyed, brought an estimated \$19.1m to Mirboo North and its local area, with \$12.2m going directly to the town and \$6.9m indirectly to the local area.
- The 41 businesses provided 64 EFT jobs which were involved in tourism in the town plus 24 indirect jobs- a total of 88 tourism related jobs were provided. It is noted that these businesses were largely family-run and were a significant local employer of young people.
- The tourism industry is widely recognised as a major young person employer which contributes significantly to the town's wellbeing.
- Wages and salaries of the 41 businesses were estimated to be worth \$2.5m directly and \$1.5m indirectly, creating a total \$4.0m in wages/salaries from just these 42 local industry businesses.
- Mirboo North's tourism industry success provides significant flow-on financial benefits to local and regional economies, namely an additional \$6.9m tourism income and 24 jobs worth \$1.5m to these economies.

Mirboo North Residents' Comments regarding the Tourism Value of Mirboo North's Native Forests

In PoF's surveys many locals provided additional comments that reflected the value tourism in the Mirboo North district gained specifically from its proximity to its native forested areas. This is clearly seen in peoples' additional written comments, as shown in **Text Box 4.7**.

Text Box 4.7 Written comments reflecting the range of Residents' views about the value of native forests for the success of Mirboo North's Tourism

"The forests are important for tourism which provides income for the area."

"Logging will make a big impact on my tourist accommodation as my guests love Mirboo North and its beautiful forests."

"We like to tell people about what there is to see in the district and take visitors to see it."

"The bush is the main part of our cottage's attraction."

"The proposed bush²² backs onto my accommodation property. Guests come and stay for the beautiful bush and the wildlife that live in it, also for exercise."

"Tourists now need nature not, shops and concrete. They need peace, and beauty and tranquillity. Forests are important for... employment as well – employed in local tourism."

"Many of our guests visit to experience the stories in their family history i.e. where Nan and Pa lived or did things in their youth. Visitors hear about what our area has to offer, and the bush encompasses a big part of their vision. We get plenty of bike riders wanting to experience the trails through the bush."

Visitor Comments regarding the Tourism Value of Mirboo North's native forests

Many visitors also provided highly informative comments about the value of these forests for tourism and their consequent economic worth. A range of these comments are included in **Text Box 4.8**.

Text Box 4.8 The Value of native forests for Mirboo North Tourism expressed in Visitor survey responses

"People travel to this area for the beautiful scenery."

"Surely in this era, environmental value and ecotourism would be a much beneficial industry to foster than old fashioned, destructive practices such as logging."

"The State government needs to come visit for a while to understand the precious ecosystem that exists here. Why? Trees without forests, habitat, clean air, visitors and residents are all extremely affected. Result = negative economy = anger."

"It is a magnificent area. Business is so important for the local area. Please do not make hasty decisions - too much is at stake."

"The bush is what makes it for residents and tourists." "It brings in tourism and improves the economy of the region."

²² This respondent is referring to the bush blocks proposed to be logged.

4.4.2 Other Economic Forest Values

There are many aspects of the Mirboo North native forests which contribute to the local and broader economy that were identified through this survey period, including. Key among these were potable water and clean air, firewood collection, apiculture, and as a future seed bank for conservation purposes.

Potable water and clean air for Mirboo North

Several PoF survey respondents pointed out these native forests lie in Mirboo North's water catchment and expressed concern for the immediate and ongoing impacts on the town's water and air quality if the native forests were logged. Mirboo North solely depends on the water taken from the Little Morwell River which runs within this water catchment area where it is removed, treated, and pumped to provide the town's domestic and business usage. [Discussed further in **Chapter 5.**] DELWP's Fact Sheet: "Forests and Water – Valuing the ecosystem service of clean water supply purification by forests" states:

"Forests provide clean water for consumers, agriculture, and the environment" and further, "conserved park areas contain catchments that filter, purify and supply water for drinking, food production, industries, recreation, as well as environmental health and the nutrient cycle".

The range of POF survey respondents referring to water and air quality, set out in **Text Box 4.9** demonstrate they value the local forests as having a vital role in ensuring this ongoing access to clean, potable water.

Text Box 4.9 Survey respondents' views about other forest values – potable water and air quality

"Impact on water and air quality"

"Possible water contamination" (if logging goes ahead.)

"Destruction of habitat and environmental services including retention of soils and water and loss of biodiversity and species (elimination potential)."

"We need all the forest possible for the health of this country – air, animals, water etc."

Potential Source of Firewood

Eleven residents identified via the survey's "tick a box" "Other" category that they valued the collection of firewood from these forests for heating. Five residents provided more detail in their written comments regarding this aspect.

Two visitors from Melbourne also identified the role of forests as possibly providing for firewood collection. However, only one of these people identified the forest as valued for local firewood collection, while the other respondent was not supportive of forest firewood collection due to its “impact on nature.”

Seed collection and native plant propagation

The Strzelecki bioregion has been identified as the most depleted of Victoria’s 28 bioregions. The Strzelecki bioregion has seen an extremely high rate of major environmental degradation and native vegetation removal. In less than 200 years, the ranges have experienced major environmental degradation, largely due to excessively high rates of native vegetation clearing for agriculture and native timber logging supply. The Strzelecki Ranges has also had a long history of destructive bushfires. Most recently, the area suffered a significant bushfire in 2009.

Consequently, the rich biodiversity found by PoF in the Mirboo North native forests and IPA has a critical role in maintaining and enhancing the genetic diversity of local flora and fauna. It has the potential to be an important source of local native seed for indigenous plant propagation, bushland regeneration, Landcare, and commercial seed banking. Seed banks and commercial propagation of native flora is therefore a prospective industry for this local area and bioregion. The views of a resident are shown in **Text Box 4.10**:

Text Box 4.10 Comments made by survey respondents about other forest values – seed collection and native plant propagation

“Seed collection is an important potential industry here.”

“These forests are a source of seed for revegetation – knowledge of genetic diversity in an over-cleared landscape.”

Apiculture

Two Mirboo North residents identified beekeeping as an important local economic activity. DELWP currently permits at least one local apiarist to keep beehives within the IPA. Apiculture relies on a very wide variety of flowering trees and shrubs in native forests to provide many of its distinctive range of honeys. Conversely, the very many varieties of native bees found in native forests, as well as European bees, help pollination essential for seed propagation and successful forest regeneration.

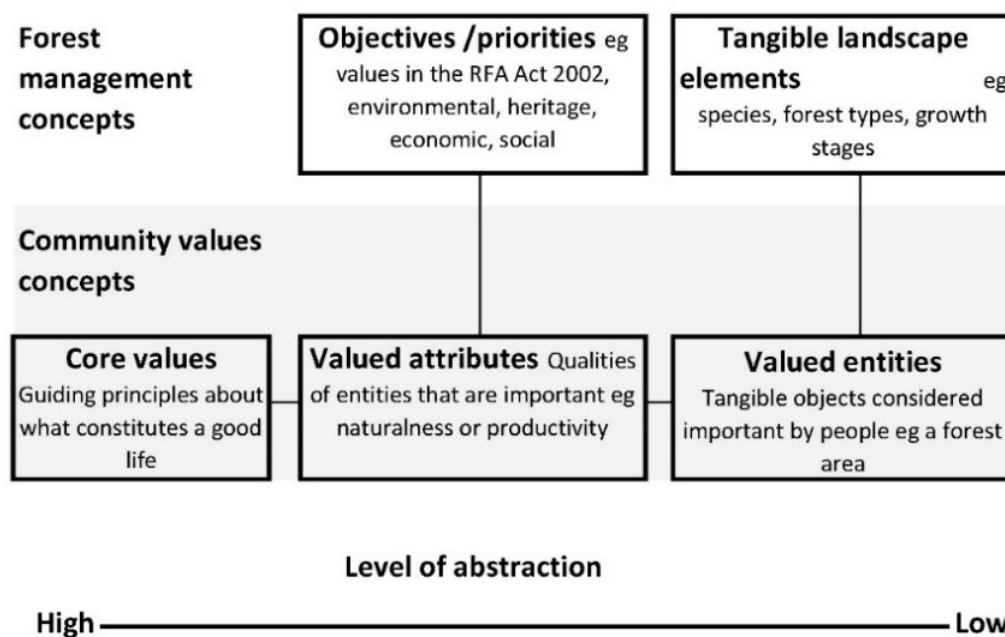
4.5 THE IMPORTANCE OF FOREST VALUES FOR MANAGING THE IPA

Community values about native forests play a key role in native forest management across Australia. Victoria's *Future of our Forests* program (DELWP 2019) sought to identify the forest values of all Victorians to set the policy framework for the future management of Victoria's native forests. DELWP explain about the importance of forest values:

"What the public sees as important (their values) plays an important role in terms of forests and forest management...Public acceptability of forest management is based on values." (DELWP 2019c)

Figure 4.3 sets out DELWP's Forest Management Concepts from DELWP (2019c) *Future of our Forests Fact Sheet 12*, showing conceptually, how community values may be incorporated into and influence forest management, planning, and regional forest agreements.

Figure 4.3 Forest Management Concepts



Aligned concepts of values in forest management and the community

Source: DELWP (2019f) Fact sheet 12: Incorporating community values into forest management planning and Regional Forest Agreements

PoF's forest values research has demonstrated that the Mirboo North's native forests:

- 1. Play a crucial role in providing a healthy sense of wellbeing for both residents and visitors from all areas.**
- 2. Are central to the Mirboo North township and local area's visual & general amenity and as such, are fundamental to Mirboo North's identity and its residents' feelings of connection.**
- 3. Provide a rich range of both active and passive recreation opportunities not only for townspeople but which also attract and engage its many visitors.**
- 4. Contain high value biodiversity conservation values which maintain and protect the areas indigenous flora and fauna and that are greatly valued by the local community and visitors to the area.**
- 5. Provide valuable ecosystem services especially via potable water provision, that is essential for the MN township.**
- 6. Are a rich local asset which is vital to Mirboo North's tourism industry and local economy, as well as to the growing regional tourism industry.**

Protection of the Mirboo North IPA forests in a formally designated nature conservation reserve will further enhance these valued human opportunities. However, environmentally focused management will be critical to ensure that any future permitted human activity is consistent with and does not impact negatively upon the IPA's prime biodiversity conservation purpose.

[Back to the Top of Report]



REFERENCES

- Buckley, R. (2002) 'Research Note: Draft Principles for Tourism in Protected Areas' *Journal of Ecotourism* Vol. 1, No. 1, 2002 pp75-80. Ralf Buckley, International Centre for Ecotourism Research, Griffith University
- Buckley, R. (2008) 'Thresholds and Standards for Tourism Environmental Impact Assessment' Chapter 16, pp 205-215 in Schmidt et al 2008
- COAG (1995) 'National Forest Policy Statement' Council of Australian Governments. Commonwealth of Australia, Department of Agriculture, viewed online on 10/12/20 at URL =[National Forest Policy Statement - Department of Agriculture](#)
- DELWP (2019a) *Future of our Forests Feedback Report - Phase 1 Engagement December 2018 - March 2019* State of Victoria, Department of Environment, Land, Water and Planning

- _____ (2019b) Fact sheet 11: An economic assessment of ecosystem services provided by forests. Viewed online on 10.12.20 at URL = www.delwp.vic.gov.au/_data/assets/pdf_file/0027/414099/11-Ecosystem-services-FINAL.pdf
- _____ (2019c) Fact sheet 12: Incorporating community values into forest management planning and Regional Forest Agreements. Viewed online on 10.12.20 at URL = [www.delwp.vic.gov.au/_data/assets/pdf_file/0024/413079/12-Community-values-factsheet-FINAL .pdf](http://www.delwp.vic.gov.au/_data/assets/pdf_file/0024/413079/12-Community-values-factsheet-FINAL.pdf)
- _____ (2019d) Fact sheet 9: “Forests and Water: Valuing the ecosystem service of clean water supply and purification by forests” Viewed online on 10.12.20 at URL = www.delwp.vic.gov.au/_data/assets/pdf_file/0023/413096/9-Water-fact-sheet-FINAL.pdf
- _____ (2019e) Fact sheet 8: Valuing forest carbon: Assessing the current and future value of forests in storing carbon. Viewed online on 10.12.20 at URL = www.delwp.vic.gov.au/_data/assets/pdf_file/0023/416408/8-Carbon-factsheet-FINAL.pdf
- Henry, Ken/Australian Treasury (2010) ‘The Value of the Environment.’ Address to the Environment Business Australia Forum by Dr Ken Henry, Secretary to the Treasury, 4 March 2010, Government of Australia 2010. Viewed online at URL = [treasury.gov.au/sites/default/files/2019-03/Value of the Environment.pdf](http://treasury.gov.au/sites/default/files/2019-03/Value_of_the_Environment.pdf)
- South Gippsland Shire Council (2019) “Mirboo North Structure Plan Economic Inputs” December 2016, prepared by Tim Nott for South Gippsland Shire Council Attachment 2.2.3 Agenda - 28 August 2019 South Gippsland Shire Council Ordinary Meeting of Council No. 437 - 28 August 2019
- SGS/PoF (2018) “This is my home: A Socio-Economic analysis of logging in Mirboo North.” Remplan modelling of data gathered in Preserve our Forests Community Surveys during 2018 prepared by South Gippsland Shire Council’s Economic Development and Tourism Department for the Preserve our Forests Steering Committee
- Schmidt, Michael, Glasson, John Emmelin, Lars and Helbron, Hendrike (Eds) (2008) *Standards and Thresholds for Tourism Environmental Impact Assessment*. Springer. Viewed as uploaded by Ralf Christopher Buckley on 29 March 2014, online at URL = [PDF Thresholds and Standards for Tourism Environmental Impact Assessment \(researchgate.net\)](http://researchgate.net/publication/312511111_Standards_and_Thresholds_for_Tourism_Environmental_Impact_Assessment)



Mirboo North Children's Save our Forests Artwork 2018. Photo Viki Sinclair

[\[Back to Top of Report\]](#)



5

PROTECTING MIRBOO NORTH'S SPECIAL WATER SUPPLY CATCHMENT



Contents

5.1 Introduction

5.2 Mirboo North's Water Supply Catchment and the Mirboo North State Forest IPA

5.2.1 A short history of the Mirboo North Water Supply Catchment

5.2.2 Land Conservation Council 1982 recommendations for Mirboo North's water catchment and surrounds

5.2.3 Unresolved issues in managing Mirboo North's Water Catchment

5.3 Significance of the IPA for Protecting Mirboo North's Water Catchment

5.4 References

Map 5.1 Mirboo North Water Supply Catchment and Land Use Determination

Map 5.2 Mirboo North related recommendations - Extract from the LCC South Gippsland Area District 2 Final Recommendations Map 1982

Map 5.3 Mirboo North Catchment in the South Gippsland Planning Scheme and Map accompanying Schedule 5 of the CALP Act

Map 5.4 Extract from VEAC Statewide Assessment of Public Lands Map C confirming the unimplemented status of the Mirboo Regional Park

Attachment 5.1 Proclamations of the Mirboo North Water Supply Catchment Area and Land Use Determination

Attachment 5.2 Current references to the Victorian Special Water Supply Catchment Areas and Special Area Plans (former SCA Land Use Determinations)

Attachment 6.7 LCC South Gippsland District 2 Recommendations relating to Protection of Mirboo North's Water Catchment

5.1 INTRODUCTION

Concern about the security of Mirboo North township's water supply in the face of proposals to log in the catchment area was frequently raised in public meetings, public submissions and at PoF's regular community information stalls. At the heart of this issue is the role the Mirboo North State Forest plays in protecting water quality and maintaining supply for domestic, commercial, and agricultural uses. The protection of water catchments and the conservation of areas rich in biological diversity are closely interlinked.

Over the last 70 years, successive State governments have studied, modelled, and directly and indirectly referred to many of the conservation values of the Mirboo North State Forest. Actions arising from these studies including Commonwealth-State policies and agreements have shaped the way our forests are valued, how public lands and water are now used and managed; and how

water catchments, biodiversity and native forests are protected. Some important recommendations for action in Mirboo North and surrounds that have been accepted by State Governments remain still to be implemented. Considering the findings and recommendations from key Government studies relating to the protection of Mirboo North's water catchment and biodiversity in the Strzelecki Ranges Bioregion provides an opportunity to learn from the past to improve the future management of Mirboo North's IPA and protection of the many forest values held close to the heart of our community.

5.2 MIRBOO NORTH'S WATER SUPPLY CATCHMENT, THE STATE FOREST AND IPA

5.2.1 A short history of Mirboo North's water catchment and its protection

Proclamation of Mirboo North's Water Supply Catchment and Land Use Determination

From the 1850s Mirboo North was amongst many Victorian communities concerned about poor quality water and threats to water supplies.

1950 Victoria's Soil Conservation Authority (SCA)²³ introduced 'progressive new scientific concepts of "units of land husbandry" and "principles of conservation ecology", building knowledge of soils, climate, vegetation, topography, land use and other allied aspects through a program of regional land use surveys.'

1960s-1970s The SCA established boundaries for Victorian water catchments and investigated land uses to protect water quality and supplies. SCA reports informed decisions made by a government advisory body, the Land Utilization Advisory Council (LUAC) which approved both **water supply catchments** and controls over land uses within many of them (via **land use determinations**) (Agriculture Victoria 2018).

1963-1966 The Waterworks Trust²⁴ sought formal protection of Mirboo North's water quality and supply when it requested the "... proclamation of their catchment as a Water Supply Catchment."²⁵ Following detailed investigations of the catchment area by the SCA, the **Mirboo North Water Supply Catchment**

²³ The SCA and LUAC operated from 1950 and 1983. Mirboo North's water supply catchment was managed by a Waterworks Trust from 1945 and 1984 (Public Records Office, 2002).

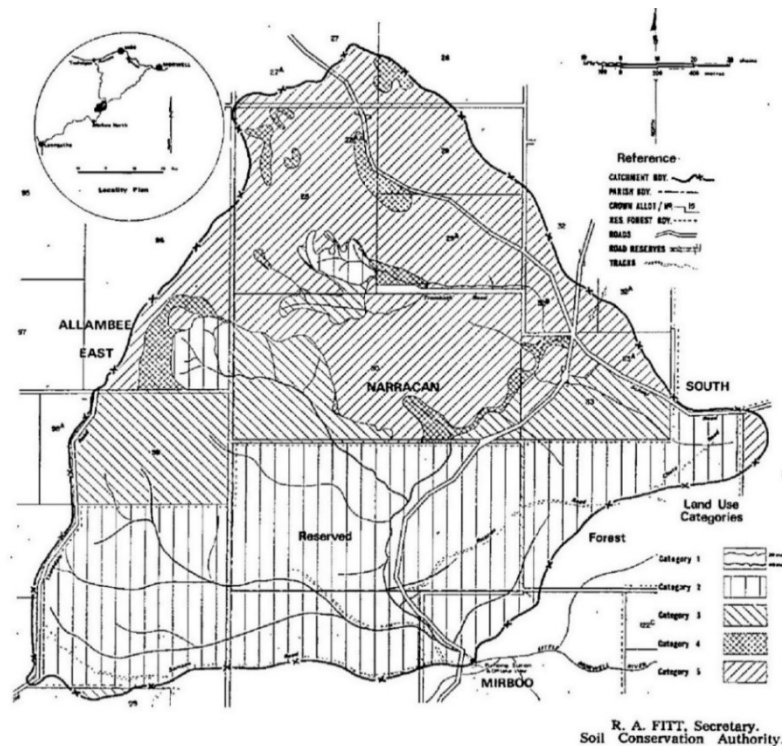
²⁴ The Mirboo North Waterworks Trust managed Mirboo North's water supply catchment from 1945 and 1984 (Public Records Office, 2002).

²⁵ W.R. Rothols investigated the catchment "...to inform LUAC consideration of the Mirboo North's Waterworks Trust's request." (SCA/Rothols undated).

(WSC) was officially proclaimed on 3 March 1965.²⁶ On 23 February 1966 the Mirboo North Water Trust boundary was extended.²⁷

1974 Further SCA studies of “the environment and land use” in the catchment recommended a land use determination restrict the range of land uses in the catchment. **Mirboo North’s Land Use Determination (LUD)** was gazetted on 4 December 1974.²⁸ The LUD consisted of a map of the catchment area divided into five categories of allowable public and private land uses, shown in **Map 5.1**.

Map 5.1 Map of the Proclaimed Mirboo North Land Use Determination



Note: The southern (lowermost) boundary of the LUD is Samson Road. Strzelecki Highway runs through the middle of the map from Mirboo North (bottom center) to Morwell (top right, off map). Old Thorpdale Road (left) serves as part of the western boundary. School Road, Chute Road and Ricardo Roads also feature as landmarks in the catchment’s east (mid right).

²⁶ Published in the **Victoria Gazette No 14, 3 March 1965** (p455) the LUD included a map that legally defined the physical boundary and dimensions of the catchment and required that all land uses within it to be approved by the SCA. The WSC is shown in full in **Attachment 5.1.1**.

²⁷ Mirboo North’s Waterworks Trust district was expanded by a written description (no map) published in the **Victoria Gazette No 13, February 23, 1966** (p675) see **Attachment 5.1.2**.

²⁸ SCA field officer D. McKinnon undertook this further investigation, The LUD was published in the **Victoria Gazette No 117, 4 December 1974** (pp4162-3). The LUD as proclaimed is included in full in **Attachment 5.1.3**.

In the five categories of permitted land use, Mirboo North's LUD clearly distinguished between areas to be retained as permanent forest (Category 2) and land suited for forestry purposes (Category 3). Category 2 land included the Mirboo North State Forest block now known as Oscine targeted for logging by VicForests in 2017. Category 2 also included a large area adjoining Oscine in the northeast (today zoned General Management, suitable for logging) plus at the centre of the catchment, to the north of Samson Road, a large area of State Forest (much of which today is included in the SPZ).

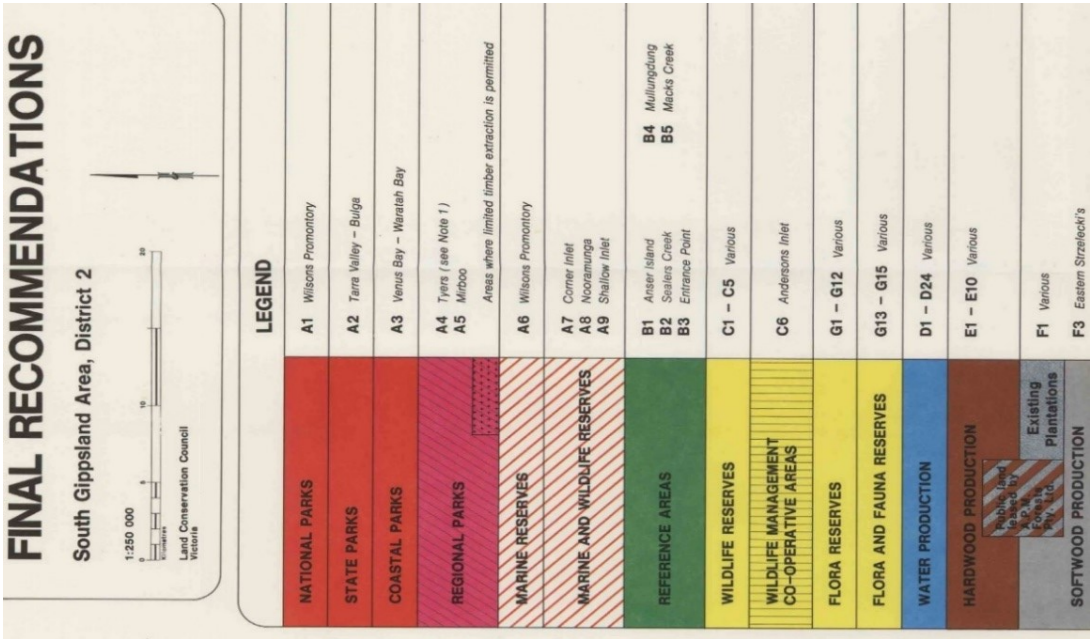
Land Conservation Council recommendations for Mirboo North's water supply catchment and formation of the Mirboo Regional Park

1988 The Land Conservation Council (LCC) recommended changes to public land including parks and reserves, water catchments and hardwood timber production in its *South Gippsland Area District 2 Final Recommendations Report* (LCC 1982). **Map 5.2** (overleaf) shows the changes to public lands adopted by the Minister for Planning and Environment, the Hon Evan Walker MLC as recorded in an Order in Council dated 29 June 1984. This Order imposed a duty on government agencies to implement the Order. In the Mirboo North district, LCC recommendations included:

- Protecting water quality with buffers around Mirboo North's water related diversion works, infrastructure, springs, streams, and waterways.
- The formation of the Mirboo Regional Park (discussed in **section 5.2.2**).
- The LCC's recommendations for Hardwood Timber Production merged Mirboo North's LUD Category 2 (land to be retained as permanent forests) into Category 3 (land suitable for forestry purposes) as can be seen in the area marked E2 in **Map 5.2**. While the LCC allowed some hardwood timber production in areas of the catchment, it explicitly stated priority in the catchment must be given to protecting significant water-production, along with landscape or conservation values [including native plants and animals [providing opportunities for the development of wildlife conservation techniques], honey and other forest produce.]²⁹

²⁹ "The hardwood-production area also includes some areas of productive forests with significant water-production, landscape, or conservation values. Constraints are therefore imposed ... and the Council has defined areas where particular non-timber values must be protected." (LCC 1982, Section E Timber Production).

Map 5.2 Mirboo North-related Land Conservation Council Recommendations adopted by the Victorian Government.



Source: Map Extract - South Gippsland Area District 2 Final Recommendations (LCC 1982)

Attachment 6.7 provides extracts from the LCC report and recommendations relevant for Mirboo North's water catchment.

1980s- 1990s Victoria's focus on land conservation shifted towards "integrated catchment management"³⁰ led by Catchment Management Authorities (CMAs). The role of local government in catchment management also increased. Water resource management reforms included the commercial supply and distribution of water via water boards and corporations.³¹

1998 New provisions were added to the CALP Act enabling the Minister to make a declaration of a water catchment as a **Special Water Supply Catchment Area (or SWSCA)**. Mirboo North's catchment was subsequently listed as a SWSCA covering an area of 8 km² in Schedule 5 to the CALP Act (refer **Attachment 5.2**).

Mirboo North's Catchment in the Gippsland Regional Forest Agreement 2000 (Gippsland RFA) and Forest Management Plan for Gippsland 2004 (FMPG)

2000 The Gippsland Regional Forest Agreement commenced. The Gippsland RFA aimed to: (i) protect water quality and yield; (ii) protect threatened flora and fauna; and (iii) implement a national protected area reserve system.³² The Gippsland RFA required Victoria to prepare a regional forest management plan for the region by 2001.

2004 The *Forest Management Plan for Gippsland* directly impacted the management of Mirboo North's water catchment and acknowledged its LUD:

- Details of Mirboo North's "Special Area Plan" (referring to "the former LUD") carried over to the new forest management system. Buffers protecting stream, watercourses, spring areas, the off-take weir, and steep slope areas, consistent with LUD's Category 1 and LCC recommendations.
- "Additional protection measures" were included in the *Code of Practice for Timber Production and Management Standards and Procedures*; and Appendix O lists Mirboo North town water supply as having a protection area of 8km².³³

³⁰ Integrated Catchment Management is the coordinated management of land, water and biodiversity resources based on catchment areas. DELWP 2018)

³¹ Principally introduced by the *Water Act 1989* and *CALP Act 1994* and the many amendments to these central Acts that followed.

³² This is discussed further in Chapter 6, **See also Text Box 6.1**.

³³ DSE (2004) *Forest Management Plan for Gippsland*, Table 5.1. and p199.

The Forest Management Plan introduced the forest management zonings that apply today which allow logging in much of Mirboo North's water catchment. The forest management zones applied to Mirboo North forested areas were:

- **A Special Protection Zone** This informal reserve set aside land to protect some of the landscape and forest values identified in the catchment by the LCC's 1982 in hardwood timber production areas and prevented logging in the catchment's mid-northwestern wooded area (largely consistent with lands identified in LUD Category 2).³⁴
- **A Special Management Zone** This created a 50m forested buffer strip along the Strzelecki Highway's western alignment. This protected native forest landscapes viewed from the Strzelecki Highway (also consistent with the LUD Category 2).
- **General Management Zones** This confirmed where logging could occur:
 - Doug and Samson and an adjoining forest-blocks (consistent with both the LUD, and LCC's Hardwood Timber recommendations).
 - A forest block adjoining the Mirboo North township (consistent with the LCC's recommendations for E2 lands); and
 - Oscine and the adjacent forest block (contrary to both the LUD and LCC's Mirboo Regional Park recommendations).

2020 Mirboo North's offtake on the northern arm of the Little Morwell River lies in the Morwell River Catchment in the Latrobe Valley Basin. The West Gippsland CMA is now responsible for preparing a regional catchment strategy and co-ordinates and monitors its implementation. Southern Rural Water manages bulk water entitlements and is responsible for administering and enforcing the Latrobe River Basin Local Management Plan. Gippsland Water manage town water and sewerage. For the land that lies in South Gippsland, the Shire is responsible for urban stormwater. South Gippsland's planning scheme regulates septic tanks and environmentally significant areas.³⁵

5.2.2 Unresolved Issues in Managing Mirboo North's Water Catchment

From PoF's catchment research, three major issues require clarification in relation to the ongoing protection of the quality and supply of Mirboo North's water and management of the water catchment:

³⁴ The functions of the SPZ are explained in **Chapter 3** and **Text Box 3.2**.

³⁵ West Gippsland CMA (2021) 'Who does what in water in Gippsland' has a simplified summary of the current roles of various bodies in management of water resources. It does not however detail catchment management functions.

1. Clarifying the status of Mirboo North's LUD.
2. Clarifying the boundary of Mirboo North's water catchment; and
3. Implementation of the LCC's Mirboo Regional Park recommendations.

Issue 1: Clarifying the status of Mirboo North's LUD

Amongst the water and catchment Acts and amendments to them in the 1980s and 1990s, it is unclear what transitional provisions were made to ensure the ongoing status of LUDs as Special Area Plans under the CALP Act.³⁶

- Differing opinions about whether Mirboo North's LUD applies to this day are found on the websites of the Victorian Departments of Agriculture, and Environment, Land, Water and Planning (DELWP) and across key public land managers.³⁷
- In 2004 Table 5.1 in the *Forest Management Plan for Gippsland*, considered the effect of Special Area Plans on State Forest management and catchment harvesting. Mirboo North is listed as having a SAP.
- In 2017 Gippsland Water (2017) state: "The Little Morwell River (north arm) catchment is a Declared Water Supply Catchment under the *Catchment and Land Protection Act 1994* but is not covered by a Special Area Plan."
- In 2020, the WGCMA, commenced a review of its regional catchment strategy (RCS) which covers all catchments in the CMA region.³⁸ The CALP Act provides for special catchments such as in Mirboo North to have a **Special Water Supply Catchment Area Plan**.³⁹ However, scoping documents for the RCS review appear to make no discernible reference to Special Water Supply Catchment Areas within the CMA region, or to special catchments with LUDs/SAPs such as Mirboo North.

Issue 2: Clarifying the boundary of Mirboo North's special water supply catchment area

Unnecessarily complicating water, soil, forest and land use management, anomalies appear in Mirboo North's catchment boundaries used by current land

³⁶ The specific query is whether LUDs have any legal status in relation to Part 4, Division 2 of the CALP Act as Special Area Plans for catchments now listed in Schedule 5 of that CALP Act.

³⁷ **Attachment 5.2** shows Department of Agriculture maps (**Map 5.4, Map 5.5**) and data shown in **Table 5.2** that confer an ongoing status for LUDs in managing water quality Mirboo North's SWSCA - confirmation which is contradicted on DELWP's West Gippsland Catchment website which states there are no SAPs in place.

³⁸ WGCMA aim to release a final draft Regional Catchment Strategy for comment in July 2021.

³⁹ WGCMA/RMCG (2020)

use planning, catchment, and water supply authorities; and maps for the catchment appear poorly aligned. Examples of these anomalies are listed below.

- Mirboo North's water catchment area was defined in the map gazetted in 1965. The Mirboo North Waterworks Trust boundary was amended without a map in 1966 and the LUD included an apparently different map in 1974.
- The CALP Act Schedule 5 lists the catchment area as 8km². Schedule 5 refers only to the 1965 gazetted map.⁴⁰
- The *Forest Management Plan for Gippsland* specifies the Mirboo North catchment area is 8km² but included no map.
- In *Gippsland Water* (2017) stated "The approximate total catchment area for the Little Morwell River (northern arm), upstream from the Mirboo North off-take is 7km²." (GW 2017: pp53-54).
- Agriculture Victoria (2018) stated "the Special Area Plan for Mirboo North catchment in the Latrobe River Basin (known as PWSC 26) covers an area of 895 ha (or 8.95km²)."⁴¹
- **Map 5.5** shows the lack of alignment in the catchment map referred to Schedule 5 of the CALP Act and the mapped extent of the Mirboo North catchment boundary in the Environmental Significance Overlay (ESO2) Overlay Map of the South Gippsland Planning Scheme.

Map 5.5 Mirboo North Catchment Area as shown in South Gippsland's Planning Scheme and Map accompanying Schedule 5 of the CALP Act



Source: South Gippsland Shire Planning Department (2018) [See Footnote 42]

⁴⁰ CALP Act No. 52 of 1994, Authorized version with amendments to 6 April 2020, p171.

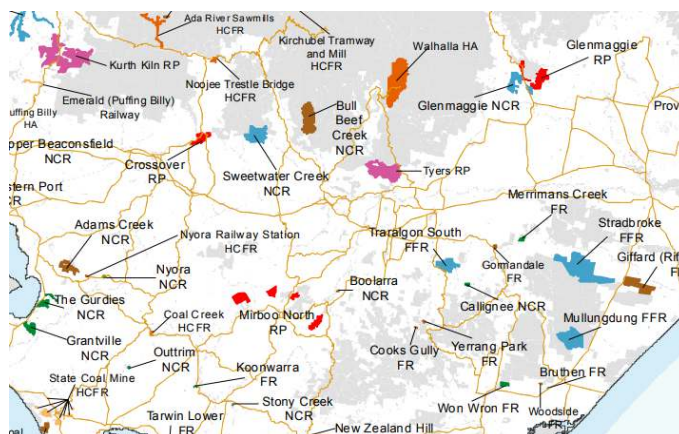
⁴¹ Agriculture Victoria (2018b) 'West Gippsland SWSCs Special Area Plans.'

Issue 3: Implementation of the LCC's Mirboo Regional Park recommendations.

The Mirboo North and Lyrebird Walk, one of four sections of the Mirboo Regional Park recommended by the LCC in 1982, lies in the Mirboo North Special Water Supply Catchment Area. The Allambee East section lies in proximity to the catchment. All four sections of the Mirboo Regional Park provide important opportunities to enhance not only water quality and supply, but also connectivity between the rich biodiversity found in the Mirboo North State Forest IPA and parks and reserves in the surrounding areas. Improved connectivity is a fundamental principle and objective of the IPA policy.

In 2016 VEAC released a Discussion Paper as part of the second Statewide Assessment of Public Lands following the LCC's first assessment in the 1980's. One of the tasks of this most recent public lands assessment, as requested by the Minister, was to confirm the status of implementation of all government approved public land recommendations such as those made by the LCC for South Gippsland in 1982 discussed in this chapter. **Map 5.4** is an extract from Map C, accompanying the VEAC Discussion Paper. Mirboo Regional Park's four sections are coloured red (center of the map). The LCC recommendations appear to remain unimplemented. VEAC confirm that the Mirboo Regional Park is not formally reserved as a regional park; it remains as reserved forest under the Forests Act, but it is managed according to the accepted recommendation.

Map 5.4 Current Status of Mirboo Regional Park LCC 1982 Recommendations



Source: Extract from Map C accompanying the VEAC (2016) *Statewide Assessment of Public Lands Discussion Paper*. Areas marked red are “unimplemented”

⁴² In August 2021, SGS Planning Department advised PoF the area-coloured turquoise in this map is the CALP Schedule 5 catchment area; the grey shaded area is the ESO2 boundary area. This confusion highlights the need to clarify and make consistent, the boundary of Mirboo North's SWSCA across all authorities with roles and responsibilities for the catchment.

5.3 SIGNIFICANCE OF THE IPA FOR THE PROTECTION OF MIRBOO NORTH'S WATER CATCHMENT

The IPA covers a substantial part of Mirboo North's special water supply catchment area. The immediate exclusion of logging in the catchment introduced by the IPA policy provides a direct and significant benefit to the protection of Mirboo North's water quality and supply.

The community's vision for an ecological conservation management and master plan for the IPA, provides an opportunity to further improve management of the catchment and is in line with the CALP provisions for management plans to protect special water supply catchment areas.

PoF's research has highlighted 3 important issues affecting the present-day management of the catchment management. Resolving the status of Mirboo North's LUD and the apparent inconsistencies in Mirboo North's catchment boundary as applied by various public land managers; together with implementation of the Mirboo Regional Park recommendations made by the LCC in 1982 are important considerations in the implementation of Mirboo North's IPA. The West Gippsland CMA may also want to consider PoF's findings set out in this Chapter, and government actions to implement the IPA, in the preparation of the new Regional Catchment Strategy.

[Back to Top of Report]



5.4 REFERENCES

- Agriculture Victoria (2018a) 'History of Soil Conservation Land Studies' written by Ken Rowe, Jim Rowan and David Rees. Agriculture Victoria, Victorian Resources Online (1996-2018), documented accessed 9 Oct 2018 URL = http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_studies_1975 .
- ____ (2018b) 'West Gippsland Special Water Supply Catchments' Viewed online 23.9.2018.
- ____ (2018c) 'West Gippsland Special Water Supply Catchments with Special Area Plans' Viewed online 23.9.2018.
- ____ (2020) 'Map of Declared Water Supply Catchment Areas in West Gippsland' Agriculture Victoria, Victorian Resources Online (2020) URL = [Map of Declared Special Water Supply Catchment Areas in West Gippsland | VRO | Agriculture Victoria](#)
- ____ (2020a) Declared Water Supply Catchment Areas, Victorian Resources Online, last updated 23.3.20 viewed online at: URL = [Declared Special Water Supply Catchment Areas | VRO | Agriculture Victoria](#)

- DELWP (2018) 'Catchment Management Framework' last updated 25/9/18, viewed online at URL= [Catchment Management Framework \(water.vic.gov.au\)](http://water.vic.gov.au))
- DELWP (2019d) Fact sheet 9: "Forests and Water: Valuing the ecosystem service of clean water supply and purification by forests" Viewed online on 10.12.20 at URL = [www.delwp.vic.gov.au/ data/assets/pdf file/0023/413096/9-Water-fact-sheet-FINAL.pdf](http://www.delwp.vic.gov.au/data/assets/pdf_file/0023/413096/9-Water-fact-sheet-FINAL.pdf)
- DELWP (2019g) 'Email communication from DELWP Manager Forest Regulation, Jeremy Allen to Rosemary Cousin, 7 Feb 2019'
- Encyclopedia of Australian Science (2019) 'The Land Conservation Council (1971-1997)'. 'The LCC operated under the Land Conservation Council Act 1970.' The LCC was responsible for systematically investigating and recommending the balanced use of public land across Victoria and made recommendations to government amongst including reference areas or wilderness areas for biodiversity conservation. 'In July 1997, the *Environment Conservation Council Act 1997* came into operation establishing the ECC.' The LCC, and ECC were both forerunners of the present day Victorian Environment Assessment Council (VEAC).
- Gippsland Water (2017) *Urban Water Strategy*, pp53-54 viewed online at URL= gippslandwater.com.au
- Gippsland Water/Fiona Pfeil (2018) Email from Gippsland Water's Catchment Scientific Officer, Fiona Pfeil to Rosemary Cousin on 21.9.18 and 3.10.2018 and telephone communication between same parties 8.10.2018 confirming "there are boundary errors in the planning scheme maps."
- LCC (1982) *South Gippsland Area District 2 Final Recommendations*. Land Conservation Council of Victoria, November 1982. Viewed online at URL = veac@vic.gov.au
- _____ (1982a) Extract from 'Map A Final Recommendations' accompanying LCC (1982) *South Gippsland Area District 2 Final Recommendations* LCC (1982) op cit
- _____ (1988) *Statewide Assessment of Public Land Use* Land Conservation Council, State of Victoria
- _____ (1988a) Extract from 'Table 3: Distribution of Public Land by Land Conservation Council Study Areas' *Statewide Assessment of Public Land Use* Land Conservation Council, Victoria, November 1982: p9
- _____ (1991) *Rivers and Streams Special Investigation Final Recommendations* State of Victoria, Land Conservation Council, June 1991, edited to incorporate Government decisions on the recommendations made by Order in Council dated 7 July 1992, and subsequent formal amendments.
- Public Records Office (2002) 'VA 1056 Soil Conservation Authority (previously known as Soil Conservation Board 1940-1947; Land Conservation Authority (1947-1950), in *Public Record Office Victoria online catalogue*, Public Record Office Victoria, 2002, <http://www.prov.vic.gov.au/>
- SCA (undated) *Report on Mirboo North Water Supply Catchment* Investigation conducted by W.R. Rothels, viewed online at URL = [SC/C/92 \(agriculture.vic.gov.au\)](http://SC/C/92/agriculture.vic.gov.au)
- SCA/LCC (1974) *Report on the Proposed Land Use Determination for the Proclaimed Mirboo North Water Supply Catchment* Investigation conducted by D. McKinnon, prepared for

consideration by the Soil Conservation Authority and Land Conservation Council,
viewed online at URL = [SC/C/92 \(agriculture.vic.gov.au\)](http://SC/C/92/agriculture.vic.gov.au)
State of Victoria *Catchment and Land Protection Act 1994* (CALP Act) No. 52 of 1994
Authorised Version No. 064 incorporating amendments up to 6 April 2020
South Gippsland Shire (2018) Email from South Gippsland Shire’s Strategic Planning Officer,
Ken Griffiths to Rosemary Cousin 3.10.18 providing **Map 5.3** and confirming “the maps
do not align very well.”
VEAC/Danielle Clode (2006) ‘As if for a thousand years: A history of the Land Conservation
and Environment Conservation Councils’ viewed online
VEAC (2016) Statewide Assessment of Public Lands Discussion Paper, Map C viewed online at
URL = veac@vic.gov.au
WGCMA/RMCG (2020) *West Gippsland Regional Catchment Strategy Review and Preparation
for Renewal Final Report Part A: Key Findings* viewed online at URL = wgcm.vic.gov.au



Mirboo North viewed from Dickies hill, looking towards the northern extent of the town’s water supply catchment area. Photo: Viki Sinclair



Strzelecki Highway eastern entrance to Mirboo North through the State Forest – the heart of Mirboo North’s special water supply catchment area.

To the left is the Special Protection Zone. To the right is Oscine forest block.

[[Back to Top of Report](#)]



6

PROTECTING BIODIVERSITY WITHIN THE STRZELECKI RANGES BIOREGION



6.1 Introduction

6.2 National Forest Policy 1992 and Protected Areas (the CAR reserve system)

6.3 What the Gippsland Regional Forest Agreement (Gippsland RFA) and related Reports say about Mirboo North State Forest biodiversity indicators

6.3.1 The Gippsland Comprehensive Regional Assessment 1997-1999

6.3.2 The Gippsland RFA 2000

6.3.3 The Forest Management Plan for Gippsland (FMPG) 2004

6.4 Gaps in the Protected Area System and Recommendations made to fill them made by the Victorian Environment Assessment Council (VEAC)

Remnant Native Vegetation Investigation VEAC 2011

Conservation Values of State Forests VEAC 2017

Statewide Assessment of Public Lands VEAC 2014-2017

6.5 Significance of the IPA for the Strzelecki Ranges CAR Reserve System

6.6 References

- Map 6.1** EVCs in the Mirboo North State Forest, Mirboo Regional Park and other native forest areas in the Mirboo North District
- Map 6.2** Forest areas used to calculate CAR Reserves in the Mirboo North District
- Table 6.1** Biodiversity Indicators of Ecological Values in the Mirboo North State Forest
- Table 6.3** CAR Reserves in the Strzelecki Bioregion relevant to Mirboo North State Forest EVCs 2009
- Text Box 6.1** JANIS (1997) Biodiversity Criteria for biodiversity protection in the CAR Reserve System
- Text Box 6.2** Knowledge Gaps in the Gippsland National Estate Identification and Assessment Report
- Attachment 6.1** Further details of Biodiversity criteria for the CAR Reserve System
- Attachment 6.2** Knowledge Gaps in the Gippsland CRA and National Estate Reports
- Attachment 6.3** Gippsland RFA 2000 and related data relevant to EVCs found in the Mirboo North State Forest IPA Tables 6.2a and 6.2b
- Attachment 6.4** VEAC assessments of CAR Reserve System deficiencies relative to the Strzelecki Ranges Bioregion Tables 6.3, 6.4a and 6.4b
- Attachment 6.5** VEAC 2017 Recommendation 20: Endangered EVCs in the Strzelecki Ranges Bioregion and Government response
- Attachment 6.6** Summary of findings in Official Reports (discussed in Chapter 6) relevant to Mirboo North State Forest EVCs
- Attachment 6.7** LCC 1982 recommendations relevant to the Mirboo North State Forest IPA Text Box 6.4 Mirboo Regional Park; Text Box 6.5 Water Catchment

6.1 INTRODUCTION

This Chapter takes as its starting point, findings from the original citizen scientist field investigations conducted by PoF's BWG between 2017 and 2020 in the three State Forest blocks targeted for logging. The BWG's findings, set out in Chapter 3, confirm the Mirboo North State Forest is a high conservation value forest containing multiple high conservation value EVCs (Ecological Vegetation Classes) which are a key measure of ecosystem biodiversity. The BWG also identified other key biodiversity indicators: Australian, Victorian, regionally significant, and iconic species. Despite the relatively small areas of State Forest and fragmentation of the native forest landscapes remaining in the Mirboo North district, the BWG's findings document a functioning forest ecosystem both complex and biodiversity-rich. Mirboo North's **biodiversity indicators** are summarized in **Table 5.3**. **Map 6.1** shows EVC indicators in this District.

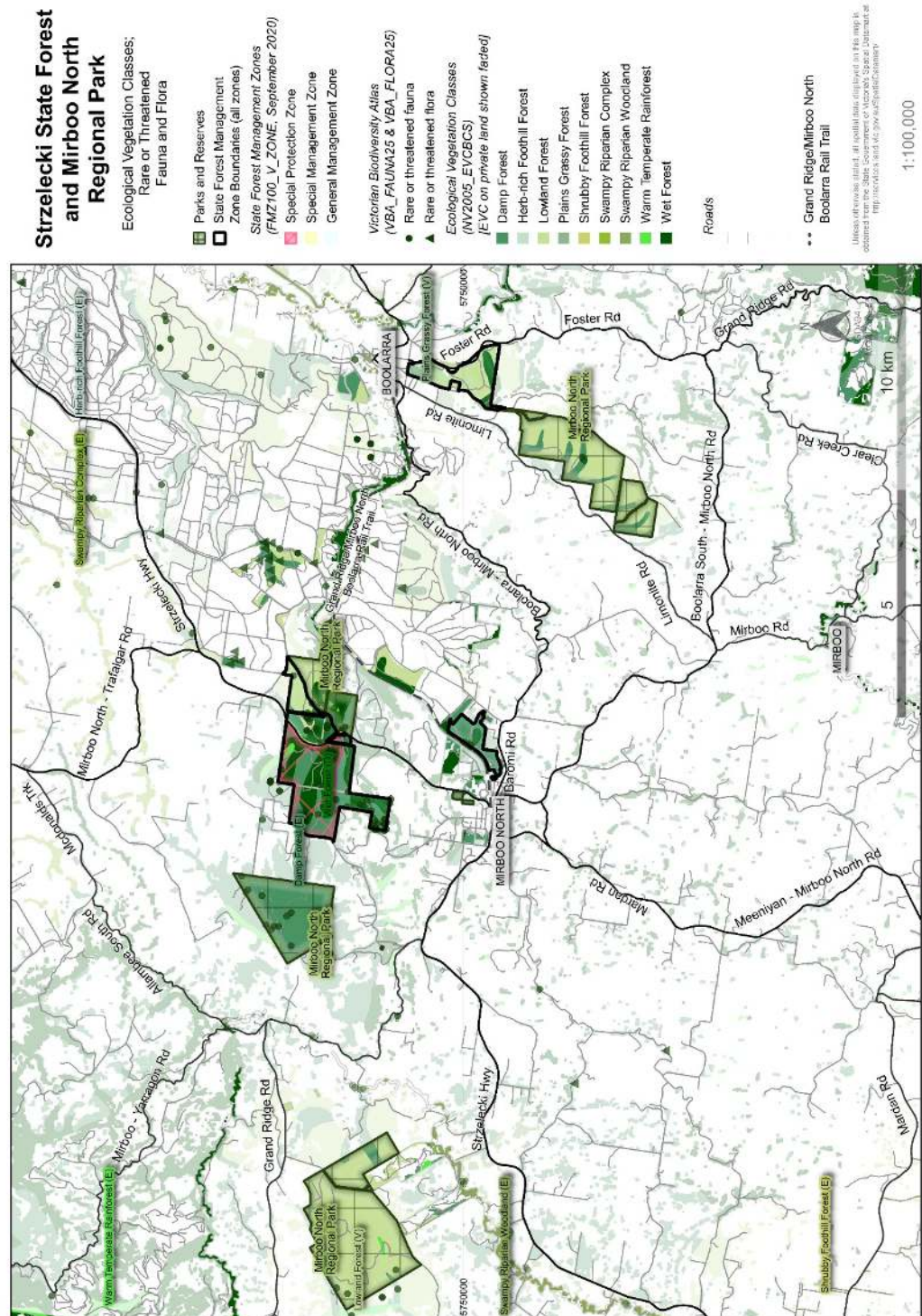
Looking at how these **biodiversity indicators** are considered in key parts of Victoria's Forest Management System reinforces how significant the IPA is for biodiversity protection here and across the Strzelecki Ranges Bioregion. It also confirms the importance of action to secure the IPA in Victoria's reserve system.

Table 5.3 Biodiversity Indicators of Ecological Values in Mirboo North State Forest

EVCs in the areas studied by the BWG		EVCs modelled in Mirboo North State Forest		Significant Fauna found in the Mirboo North State Forests IPA	
EVC Name and No.	Bioregional Conservation Status	EVC Name and No.	Bioregional Conservation Status	Species common name	Conservation Status
Lowland Forest EVC 16	Vulnerable Diminished to 10% to 30% of the pre-European extent.	Warm Temperate Rainforest EVC 32	Endangered	Powerful Owl Greater Glider	Threatened (Vic) Threatened (Vic) and Vulnerable (Aust)
Damp Forest EVC 29	Endangered Severely depleted to less than 10% of the pre-European extent.	Swampy Riparian Complex EVC 83	Endangered	Lace Monitor. Narracan Burrowing Crayfish. Gippsland Spiny Crayfish.	All Endangered (Victoria)
Wet Forest EVC 30	Depleted by more than 30% to 50% of the pre-European extent.			South Gippsland Koala. Superb Lyrebird. Platypus.	Regionally Significant and Iconic

Source: Chapter 3 of this Report and Maps 3.3 and 3.4

Map 6.1 EVCs in the Mirboo North State Forest, Mirboo Regional Park and other native forest areas in the Mirboo North District



Source: Map compiled by VNPA for the PoFSC August 2021 using VBA and Victorian Government data

6.2 VICTORIA'S FOREST MANAGEMENT SYSTEM, THE NATIONAL FOREST POLICY AND PROTECTED AREA (CAR) RESERVE SYSTEM

Victoria's Forest Management System is complex, comprising Australian⁴³ and Victorian Government policy, and a legal framework of Acts, codes, regulations, prescriptions, guidelines, and management plans;⁴⁴ The 3 high level instruments for protection of Mirboo North's biodiversity considered in this Chapter are:

- The *National Forest Policy Statement 1992*, and *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative (CAR) Reserve System for Forests in Australia* (JANIS 1997).
- The *Gippsland Regional Forest Agreement 2000* (or Gippsland RFA) established "... the framework for the management of the forests of the Gippsland region of Victoria"⁴⁵ and the CAR reserve system in the Gippsland RFA Region; and
- The *Forest Management Plan for Gippsland 2004* applied forest management zones to implement the CAR Reserve System, manage forest land uses, with Prescriptions and Guidelines for water and biodiversity conservation.

VEAC Assessments that reflect on the adequacy of the CAR Reserve System as it has been implemented in the Strzelecki Ranges Bioregion - one of 8 bioregions in the Gippsland RFA Region, are also considered.

National Forest Policy 1992 and Protected Areas (CAR) Reserve System

1992-1995 COAG's *National Forest Policy Statement* committed all Australian Governments to the "ecologically sustainable management of forest values" and set in place a regionally based planning framework that "...integrated environmental and commercial objectives" for forest management and informed the preparation of RFAs across regions of Australia. A prerequisite to signing a RFA was the completion of a comprehensive regional assessment of natural, cultural, economic, and social values, and establishment of a forest reserve system: "...a network of dedicated and secure nature conservation reserves for forests and reserves and protection of wilderness...[and] nature conservation values of forests...[This Reserve System would apply]... principles of Comprehensiveness, Adequacy, and Representativeness" (CAR).(CoA 1992-95: p8)

⁴³ International obligations and policies also impact on Victoria's Forest Management System as Australia is a signatory of the **UN Convention on Biological Diversity**.

⁴⁴ Victoria's Forest Management System is explained in its complexity in DELWP (2019h).

⁴⁵ Gippsland RFA 2000 Recitals: Purpose of the Agreement, A.

The key element of the CAR Reserve System is summarized in the *Strategy for Australia's National Reserve System 2009 to 2030* (CofA/NRMMC (2010): p10).

Comprehensiveness ... is the aim of including samples of the full range of regional ecosystems, recognizable at an appropriate scale within and across *biogeographic regions*, known as IBRA.

Adequacy ... is how much of each ecosystem should be sampled to provide ecological viability and integrity of populations, species, and ecological communities at a bioregional scale...adequacy incorporates *ecological viability and resilience* for ecosystems, for individual protected areas, and for the entire protected area system.

Representativeness ... is comprehensiveness considered at a finer (IBRA subregion) scale and recognizes that the regional variability within ecosystems is sampled within the reserve system. One way of achieving this is to aim to *represent each regional ecosystem within each IBRA subregion*.

To establish the CAR reserve system, Commonwealth and State officials jointly developed a set of national criteria, known as JANIS 1997 which set out both specific measurable, and qualitative criteria for biodiversity conservation. Measurable CAR criteria are in **Text Box 6.1**.

Text Box 6.1 JANIS 1997 Quantitative criteria for biodiversity protection and the CAR Reserve System

1. As a general criterion, **at least 15% of the pre-1750 distribution of each forest ecosystem should be protected in the CAR reserve system.**
2. Where Forest ecosystems are recognized as **vulnerable**, then **at least 60% of their remaining extent should be reserved.**
3. All remaining occurrences of **rare and endangered forest ecosystems should be reserved or protected by other means** as far as is practicable.

Underlying Principle: In applying the criteria... scientific requirements for the protection of biodiversity (e.g., sites of high biodiversity, complementarity, rarity), should first be identified together with the other values to be addressed [in] the establishment of the CAR reserve system. **The priority for reservation of a forest ecosystem is related to how much remains relative to its initial distribution and its vulnerability to threatening processes.**

Source: Extracts from JANIS (1997) 5.1 Applying the Reserve Criteria⁴⁶

⁴⁶ **Attachment 6.1** has further, qualitative criteria for biodiversity protection.

Bioregions, and EVCs and threatened native species within them, are central to the protection of biodiversity in the CAR reserve system.⁴⁷

6.3 WHAT THE GIPPSLAND REGIONAL FOREST AGREEMENT (Gippsland RFA) AND ASSOCIATED REPORTS SAY ABOUT MIRBOO NORTH STATE FOREST BIODIVERSITY INDICATORS

Management of native forests in Mirboo North, the Strzelecki Ranges Bioregion, and across Gippsland came under the Gippsland RFA when it was signed jointly by Victorian and Commonwealth Governments, 31 March 2000. A principal purpose of the Gippsland RFA was to set out details of the CAR Reserve System within its 8 bioregions.

To apply the CAR criteria for the sustainable management of all forests and associated woodlands in each RFA region, comprehensive regional studies of forest values informed negotiations of RFAs across Australia. These assessments identified elements of biodiversity at the species and ecosystem levels as well as processes that threatened them,⁴⁸ and identified and assessed National estate values.⁴⁹ The *Gippsland Comprehensive Regional Assessment* (Gippsland CRA), a *Biodiversity Assessment Report* and a *National Estate Identification and Assessment Report* were completed in 1999. The Gippsland RFA specifically cited both the *Biodiversity* and *National Estate* reports.⁵⁰

What follows is a summary of the Comprehensive Regional Assessment reports together with Gippsland RFA data that relates to the biodiversity indicators found in the Mirboo North State Forest.⁵¹

⁴⁷ 'The CAR criteria set targets at the ecosystem level. Ecological Vegetation Classes (EVCs) are used as ecosystem surrogates.' (VEAC 2016: p68).

⁴⁸ CoA and SoV (1996) Scoping Agreement for Victorian RFAs.

⁴⁹ In the *Australian Heritage Commission Act 1975* "National Estate" are "places...components of the natural environment ... or the cultural environment of Australia, that have aesthetic, historic, scientific or social significance or other special value for future generations [and] the present community."

⁵⁰ Gippsland RFA 2000 Clause 94.1. Signatories committed to protection of water, rare and threatened flora and fauna and ecological communities in the Gippsland RFA Region. Three key attachments in the GRFA, are Att. 1 implemented the CAR Reserves System across the RFA Region; Att. 2 provided for protection of threatened flora and fauna species and ecological communities; Att. 3 addressed National Estate. Part 3 created limited legally binding obligations.

⁵¹ **Table 6.5 in Attachment 6.6** provides a simple summary of the key points relevant to each EVC found in the Mirboo North State Forest.

6.3.1 Gippsland's Comprehensive Regional Assessment

The Biodiversity Assessment 1999: The Strzelecki Ranges bioregion was divided into the Strzelecki Foothills and West Gippsland Foothills where Mirboo North is located. Unfortunately, key data about these two areas is not publicly available.⁵² The CAR reserve criteria require at least 15% of the pre-1750 extent of forest ecosystems to be protected. By 1999, all five Mirboo North State Forest and IPA EVCs had significantly declined from their pre-colonisation (1750 extent). Rates of decline from each EVC's pre 1750 extent ranged from 41.3% of Warm Temperate Rainforest up to 45.1% of Lowland Forest; 58% of Damp Forest; 61% of Wet Forest; and 99.4% of Swampy Riparian Woodland.

Gippsland Comprehensive Regional Assessment 1999: The extent to which each EVC was included within a conservation reserve in 1999 was assessed to evaluate how the CAR criteria were met. Overall, protection of the pre-1750 extent of EVCs within dedicated conservation reserves was exceptionally low across the Gippsland RFA Region for four out of the five EVCs found in the Mirboo North State Forest. The Gippsland CRA concluded:

- **Protection of Lowland Forest, Damp Forest and Wet Forest did not meet JANIS Criteria.**⁵³ For these EVCs, levels of protection ranged from 5% to 7% of their original extent, well below the 15% minimum target.
- **Warm Temperate Rainforest and Swampy Riparian Woodland were high priority for CAR inclusion as their conservation status was Endangered, Vulnerable and Rare EVCs respectively.** Warm Temperate Rainforest had the highest level of protection (21.8%); the rarest, Swampy Riparian Complex had the lowest level of protection with only **0.10%** of the pre 1750 extent protected in conservation reserves.
- **Powerful Owl: were recorded as endangered.**⁵⁴ The South Gippsland Spiny Crayfish, Narracan Crayfish and Strzelecki Burrowing Crayfish were recorded as **Rare**.⁵⁵

⁵² Data in Table 3.5 'Representative conservation (per cent reservation status) of EVCs in the Gippsland region by Geographic Representation Unit' is unreadable in the Gippsland CRA *Biodiversity Assessment* online version.

⁵³ *Gippsland CRA 1999* op cit P156.

⁵⁴ *Gippsland CRA* (1999): Table 12.13. Powerful Owl Action Statement was released in 2004.

⁵⁵ *Gippsland CRA* (1999): pp180-181 Table 12.16a.

- Insufficient data was available to determine the conservation status of Lace Monitors; “Koala”, Superb Lyrebirds and Greater Gliders.⁵⁶

National Estate Identification and Assessment Report 1999: Mirboo North State Forest’s EVCs had **four significant *national estate values***:

- Warm Temperate Rainforest and Wet Forest ***contain a high incidence of relictual flora***.⁵⁷
- Damp Forest, Swampy Riparian (both complex and woodland areas), Temperate Rainforest and Wet Forest ***provide refuges from short term climate change and environmental disturbances e.g. fire and drought***.⁵⁸
- Warm Temperate Rainforest and Wet Forest, Swampy and Riparian Woodland ***provide refuges for long term climate change***.
- The Narracan Burrowing Crayfish, South Gippsland Spiny Crayfish, and Strzelecki Burrowing Crayfish ***exhibit high degrees of endemism***.⁵⁹

6.3.2 The Gippsland RFA 2000’s response to CAR Reserve System Criteria

Bioregional EVCs ecological communities:

The JANIS criteria for the CAR Reserve System required consideration of the Conservation Status of EVCs on an IBRA regional, and bioregional basis, with high priority for protection for all EVCs classified as ***endangered*** and ***vulnerable***.⁶⁰ Unfortunately, the Gippsland RFA provided only region-wide data. The region wide-data relative to Mirboo North State Forest EVC biodiversity indicators is included in **Table 6.1** in **Attachment 6.3**. The first publicly available data for the CAR Reserve System implemented in the Strzelecki Ranges Bioregion is found in a 2009 Victorian Government draft report to the Commonwealth Government on progress in implementing Victoria’s RFAs.

Table 6.2 below shows how the EVCs found in Mirboo North are protected in the CAR Reserve System within the Strzelecki Ranges Bioregion.

⁵⁶ *Biodiversity Assessment* (1999) Table 5.11:’

⁵⁷ Relictual EVCs are those whose floristic composition has a high proportion of primitive and genetically distinct species. (National Estate Report 2000, ‘Natural Values’: p41).

⁵⁸ *National Estate Report* (2000) ‘Natural Values’: p41-61.

⁵⁹ Endemism: species are wholly or mostly confined to a specific region. ‘Natural Values’.

⁶⁰ *Gippsland RFA* (2000) Attachment 1 P42.

Table 6.2 2009 CAR Reserves in the Strzelecki Bioregion for EVCs modelled in the Mirboo North State Forest

Mirboo North State Forests EVC Biodiversity Indicators	Bioregion Conservation Status	CAR Reserve System Criteria								Car Reserve System (ha)			EVC representation in each land category (ha)						
		Pre 1750 extent (ha)	Current (ha)	pre 1750 loss (ha)	% Loss	pre 1750 extent remaining %	Area of EVC in the CAR reserve system (ha)	Level of protection currently in the CAR Reserve System %	Level of protection of pre 1750 extent in the CAR reserve system %	Dedicated Reserves (ha)	Informal Reserve (SPZ) (ha)	Code Prescription (ha)	SMZ (ha)	GMZ (ha)	Other public land	Other parks & reserve (ha)	C'wth Land (ha)	Private Land (ha)	Water Bodies (ha)
Lowlands Forest (EVC 16)	V	14,350	5,810	8,540	59.51%	40.49%	400	7%	3%	70	310	20	10	760	120	740	0	3,780	0
Damp Forest (EVC 29)	E	123,680	23,790	99,890	80.76%	19.24%	1,090	5%	1%	890	170	30	20	260	510	120	0	21,790	0
Wet Forest (EVC 30)	D	119,970	58,760	61,210	51.02%	48.98%	3,980	7%	3%	3,350	410	20	0	120	1,200	0	0	53,420	40
Warm Temperate Forest (EVC 32)	E	3,120	1,120	2,000	64.10%	35.90%	100	9%	3%	50	40	10	0	10	110	0	0	900	0
Swampy Riparian Woodland (EVC 83)	E	2,640	550	2,090	79.17%	20.83%	0	0	0	0	0	0	0	0	330	0	0	220	0
2009 Strzelecki Ranges Bioregion Total for this EVC		263,760	90,030	173,730	65.87%		5570			4,360	930	80	30	1,150	2,270	860	0	80,110	40

Source: DSE/SofV-CoFA (2009) Extracts from Table 16: Current Representation of Ecological Vegetation Classes in the Gippsland RFA Region

DSE/SofV-CoFA (2009) "A Draft Report on Progress with Implementation of the Victorian Regional Forest Agreements (RFAs) East Gippsland RFA, Central Highlands RFA, North East RFA, West Victoria RFA and Gippsland RFA, Forests and Parks Division, Department of Sustainability and Environment, Table 16.

Table 6.2 shows Mirboo North's EVCs fared very badly according to CAR Reserve System criteria within the Strzelecki Ranges Bioregion:

- Lowland Forest: (BCS: **vulnerable**) had **7%** of its current extent protection in the CAR System and **3%** pre-1750 extent in reserve protection.
- Damp Forest: (BCS: **endangered**) had **5%** of the current extent protected in CAR Reserves and **1%** pre-1750% extent in reserve protection.
- Wet Forest: (BCS: **depleted**) had **7%** of the current extent protected in the CAR Reserve System and **3%** pre-1750 extent in reserve protection.
- Warm Temperate Rainforest: (BCS: **endangered**) had **9%** of the current extent in the CAR Reserve System and **3%** pre-1750 extent in reserve protection.
- Swampy Riparian Woodland: (BCS: **endangered**) had **0%** of both its current and **0%** pre-1750 extent in CAR reserve system protection.

This Victorian Government report provides a key insight into serious gaps in the CAR Reserve System for EVCs within the Strzelecki Ranges Bioregion; and demonstrates the importance of presenting data on a bioregional as well as RFA regional basis. When the protection of Mirboo North State Forest's biodiversity is considered on a bioregional basis, the IPA clearly helps to fill critical gaps in the CAR Reserve System in the Gippsland RFA Region.

Threatened flora and fauna and communities:

The Gippsland RFA's Attachment 2 contained priorities for threatened flora, fauna and communities across the RFA region. **Unfortunately, a full list of threatened species found in the Gippsland RFA region was not included in RFA Attachment 2. "Species that were also identified in already-signed RFAs in East Gippsland, Central Highlands and North-East RFA regions were not listed in the Gippsland RFA."**⁶¹ Consequently, only 2 of Mirboo North State Forest's fauna species biodiversity indicators were listed: The South Gippsland Spiny Crayfish was a priority species for nomination under the *Flora and Fauna Guarantee Act 1988*. The Strzelecki Burrowing Crayfish was a priority for preparation of an Action Statement/Recovery Plan.

National Estate Values:

Attachment 3 to the Gippsland RFA addressed the listing, management, and protection of National Estate values.⁶² The preferred methods of management and protection of National Estate Values on public land relied heavily upon Protection by Prescription to be set out in the Gippsland Forest Management Plan and the provisions of Victorian and Commonwealth flora and fauna legislation.⁶³ **It is unclear what protection these methods afforded for the National Estate Values of Mirboo North-significant EVCs given the protection gaps for them in the CAR reserve system.**

6.3.3 Biodiversity protection in the Forest Management Plan for Gippsland 2004

To implement the Gippsland RFA, the *Forest Management Plan for Gippsland 2004* set in place forest management zones across the region. Special Protection Zones were designed to play a key role in meeting the CAR criteria. The Management Plan gave the CAR targets the following emphasis:

"... to ensure Conservation Targets for EVCs *as far as practicable* meet the following criteria:

- **All areas of rare and endangered EVCs** in State forests are in a Special Protection Zones (SPZ). SPZs have been designed to contribute to conservation targets for EVCs in accordance with national reserve criteria.
- At least **60%** of the remaining extent of **vulnerable EVCs**; and

⁶¹ The Gippsland RFA was the last of Victoria's RFAs to be signed.

⁶² In Clause 63 of the Gippsland RFA the parties confirmed these satisfied the JANIS Criteria.

⁶³ Gippsland RFA p51.

- At least **15%** of the pre 1750 extent of **other EVCs** are to be protected in the CAR reserve system in conservation reserves and State Forest Reserves.”⁶⁴

The forest management zones applied in the Mirboo North State Forest set in place the SPZ to protect five forest values: the Powerful Owl, and Lowland Forest, Damp Forest and Swampy Riparian Complex EVCs; and landscape values. A small strip of SMZ land located on the eastern side of the Strzelecki Highway was also introduced to protect landscape values opposite the SPZ.

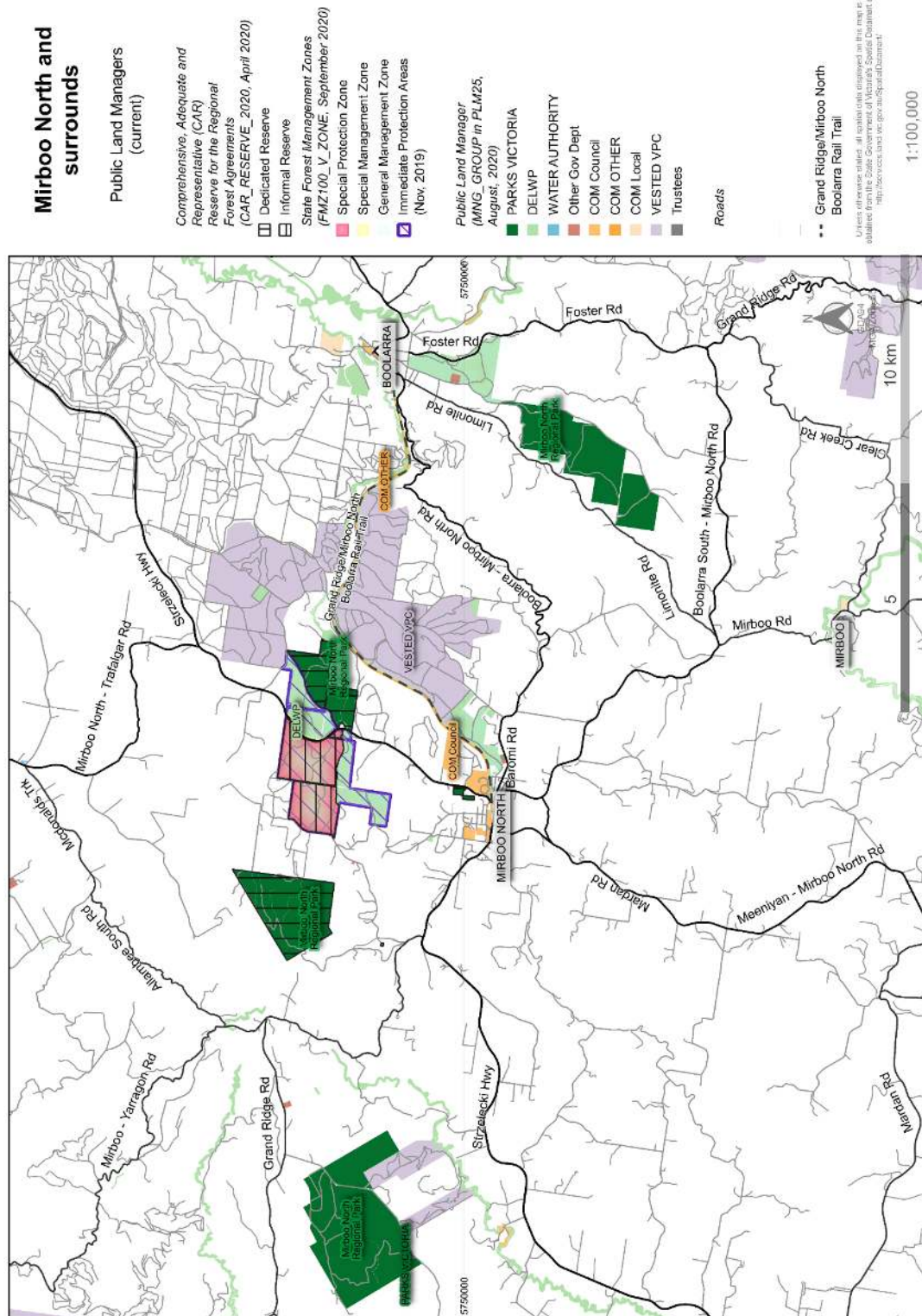
Informal reserves including Special Protection Zones and other areas of public land are created under other legislation including the Forests Act and Wildlife Act.⁶⁵ Special Protection Zones and informal reserve may be easily changed by the Secretary of the Department. **Formal or dedicated reserves** are created under the National Parks Act, the Forests Act, and the Crown Lands Act. The formal processes involved in establishing or changing dedicated reserves is far more complex. Dedicated reserves therefore offer far greater protection than informal reserves.

Map 6.2 shows the forest management zones applied in the Mirboo North State Forest and District. This map shows two sections of the Mirboo Regional Park (Allambee East, and the Mirboo North including Lyrebird Forest Walk section) was considered a dedicated reserve; and, together with the SPZ (considered an informal reserve) were used to calculate both the CAR protection reserve areas *and* the forest area available to meet the Powerful Owl Management Area requirements.

⁶⁴ *Forest Management Plan for Gippsland* 2004: p9

⁶⁵ DELWP (2019h) *op cit* Sections 6.1 Formal (Dedicated) Reserves; and 6.2 Informal Reserves, pp15-18.

Map 6.2 Forest areas used to calculate CAR Reserves in the Mirboo North District



Source: Map prepared by the VNPA using Victorian Government data as at July 2021

The Gippsland Forest Management Plan only partially fulfilled its objective of placing all rare and endangered EVCs into Special Protection Zones or Conservation Reserves for their protection within the CAR Reserve System. Despite their Conservation Status, the GMZ was applied to Damp Forest (endangered), Lowland Forest (vulnerable) and Wet Forest (depleted) in Doug, Samson, and Oscine coupes, thus opening them to the prospect of logging.⁶⁶ Warm Temperate Rainforest (endangered) found in pockets across each component of the Mirboo Regional Park was afforded no special protection.

6.4 GAPS IN THE CAR RESERVE SYSTEM IDENTIFIED BY THE VICTORIAN ENVIRONMENT ASSESSMENT COUNCIL (VEAC) AND RECOMMENDATIONS MADE TO FILL THEM

Chapter 5 discussed the 1982 Land Conservation Council (a precursor to VEAC) recommendations for the protection of ecological and landscape values in Mirboo North's water catchment and a recommendation to establish the Mirboo Regional Park.⁶⁷ Since its formation in 2001, the Victorian Environment Assessment Council has undertaken further studies that have reported on the significant ecological conservation values of State Forests and identified significant gaps in the CAR Reserve System. Relevant findings from VEAC studies are summarized below.

Remnant Native Vegetation Investigation Report VEAC 2010-2011:

Significant gaps in Victoria's protected areas system were identified in VEAC's investigation of remnant native vegetation. VEAC divided the Strzelecki Ranges Bioregion into western, central, and eastern sections. The central section, where Mirboo North lies, was "... notable in that it had a few patches of native vegetation, principally in "...Mount Worth State Park, Mt Eccles and the Mirboo area including the Mirboo North Regional Park (sic)." Across the whole Strzelecki Ranges Bioregion:

- **Less than 40% of pre-European vegetation cover remained in a 100% fragmented landscape.**
- **Only 1.5% of native vegetation was included in the CAR Reserve System making it the smallest public reserved protection areas of a bioregion in Victoria.** Of this, only **12%** was on public land which had little or no

⁶⁶ Forest zones are significant for BWG findings (see Ch. 3) and water supplies (see Ch 5).

⁶⁷ **Attachment 6.7** is extracts from the LCC's 1982 Government-approved Recommendations.

protection requirements for biodiversity; with the balance, 17.4%, occurring on private land.’⁶⁸

In the *Remnant Native Vegetation Final Report*, VEAC concluded the Strzelecki Ranges Bioregion was second highest priority bioregion in Victoria warranting urgent attention. ⁶⁹ VEAC recommended the Government initiate specific investigations of endangered native vegetation in bioregional clusters to:

“...assess them against the need to provide for the creation and preservation of a comprehensive, adequate and representative system of protected areas.”⁷⁰

In its response to VEAC, the Government acknowledged “... the importance of a [CAR] reserve system in achieving conservation outcomes and the need to ensure protected areas and other public land is sustainably managed...” Despite this, Recommendation 12 was not accepted, in favor of determining future investigations of public land use by “...the consideration of existing programs, strategic priorities and management needs.”⁷¹

Conservation Values of State Forests VEAC 2014-2017:

VEAC at the Minister’s request conducted a descriptive assessment of the conservation values of State Forests in Gippsland and three other RFA Regions.⁷² Completing its report in 2017, amongst VEAC’s findings of relevance to Mirboo North State Forest IPA were the following:

- **State Forests in South Gippsland ... almost completely comprise land in the highest category of contribution to forest biodiversity conservation.**
- **The largest blocks of land that make the highest relative contribution to forest biodiversity conservation are in South Gippsland.**
- **“There has been an historical tendency for the boundaries of [protected] areas to be the result of compromises balancing biodiversity conservation with timber production.”⁷³**

⁶⁸ VEAC (2010) *RMNI Discussion Paper* Chapter 5, p21.

⁶⁹ The Strzelecki Ranges was grouped with the Gippsland Plains as a bioregional cluster.

⁷⁰ VEAC 2011: *RMNI Final Report* p55.

⁷¹ DSE (2011) p 8.

⁷² The Minister did not require VEAC to make recommendations arising from the Conservation Values of State Forests Assessment. The terms of reference provided to VEAC were general in nature and were not targeted to answer specific questions (VEAC, 7 Feb 2017).

⁷³ VEAC (2017) *Conservation Values of State Forests Assessment Report*, pp16-19.

Statewide Assessment of Public Land VEAC 2016-2017:

In Victoria's second Statewide Assessment of Public Land (SAPL), VEAC again identified Victorian bioregions having EVCs that were under-represented in the CAR Reserve System.

- **Comparing Victoria's 28 Bioregions, VEAC ranked the Strzelecki Ranges Bioregion as having Victoria's highest level of shortfall of Public Land that should be added to the protected area system. VEAC noted that Protected Areas represent only 1.65% of the total area of the Strzelecki Ranges Bioregion. The Strzelecki Ranges and three other bioregions have the highest priority to increase protection according to the CAR Reserve System criteria.**
- **Of the Ecological Vegetation Classes (EVCs) found in the Mirboo North State Forest IPA, Damp Forest and Wet Forest are amongst the top 40 Victorian bioregional EVCs that require the greatest additional areas.**

Like the Remnant Native Investigation, in the *Statewide Assessment of Public Land Final Report (2017)*, VEAC recommended the Victorian Government 'prioritize an investigation into critical gaps in the formal conservation reserve system in the Strzelecki Ranges Bioregion and Gippsland Plains together.' (VEAC 2016, Recommendation 20). In this recommendation, VEAC referred to the idea of a single investigation into two adjoining bioregions together, a "bioregional cluster" investigation. The Government qualified its acceptance of VEAC's Recommendation 20 in several important ways:

- Further assessment of shortfalls in the CAR reserve system in the Strzelecki Ranges was delayed until 2028; and
- The investigation was to be focused on the eastern section of the Strzelecki Ranges Bioregion.⁷⁴

VEAC's Recommendation 20 and the Victorian Government's response in full is in **Text Box 5.3 in Attachment 6.5.**

⁷⁴ The focus of this VEAC investigation was specifically targeted to the future of the Cores and Links area located in the eastern section of the Strzelecki Ranges Bioregion. The Mirboo North State Forest IPA lies in the long neglected central-western section of the Strzelecki Ranges Bioregion.

6.5 SIGNIFICANCE OF THE MIRBOO NORTH STATE FOREST IPA FOR THE STRZELECKI BIOREGION CAR RESERVE SYSTEM

The findings set out in this Chapter and in this Forest Report overall, demonstrate that the biodiversity found in the remaining native forests in and around Mirboo North deserve deep respect and close consideration for inclusion in the CAR Reserves System within the Strzelecki Ranges Bioregion.

The Strzelecki Ranges Bioregion is a 100% fragmented landscape. As the CAR Reserve System Biodiversity Criteria 8 (**Text Box 5.3**), states:

“In fragmented landscapes, remnants that contribute to sampling the full range of biodiversity are vital parts of a forest reserve system.”

This is the irrefutable value that the Mirboo North State Forest IPA hold for current and future generations.

The BWG’s research is groundbreaking, identifying species and communities not well covered in these historic assessments, as exemplified by the BWG’s discovery of a significant population of threatened Greater Gliders and confirmation of a wide range of flora and fauna in the Mirboo North State Forest and IPA. In addition, research conducted by highly knowledgeable people who were also engaged with the BWG is also groundbreaking. The PhD research of Dr Faye Wedrowicz on the Gippsland (Strzelecki) Koala warrants close consideration for listing of this species. While some historic research has been conducted into threatened crustacean species, and their Action Plan is referred to in the Timber Harvesting Code, little is really known about these species’ behavior, persistence, and forest ecosystems niche-role. Even less well considered in these historic reports are the threatened Lace Monitor, and Superb Lyrebird and the Platypus, all of which must be included in future biodiversity research in the Strzelecki Ranges.

The western and central areas of the Strzelecki bioregion have had little detailed on-ground investigation until the Mirboo North community stepped in to document the rich biodiversity here as it did between September 2017 and February 2020. Some knowledge gaps have been filled by the community’s research and many more have been exposed. Gaps that were clearly acknowledged in the Gippsland Comprehensive Regional Assessment and National Heritage Report in 1999. Gaps which, in turn, led to gaps in the attachments to the Gippsland RFA 2000. VEAC too identified specific gaps in relation to the conservation values of State Forests in South Gippsland.

All these gaps show blind spots generally in relation to the Strzelecki Ranges Bioregion and particularly in relation to the protection applied to the biodiversity indicators found in the Mirboo North State Forest IPA. When assessed by these independent studies, according to nationally agreed CAR Reserve System criteria, it is critical for biodiversity found in the Mirboo North district to be protected in the CAR Reserve System.

In the Government's response to VEAC's 2016 Recommendation 20, DELWP acknowledged that Victoria's Biodiversity Plan included a commitment to "review the extent, representativeness and adequacy of the CAR reserve system to identify key gaps and additional complementary measures required to improve the reserve system on public land" (Priority 18). The Victorian Government's response to VEAC's Recommendation 20 was made prior to the designation of the Mirboo North State Forest IPA. Despite the IPA, the General Management Zone remains over much of the IPA and logging may still occur future until the area is properly designated as a Nature Conservation Reserve and the GMZ is removed across the Mirboo North State Forest. Mirboo North's EVCs here have no definitive protection despite their proven bioregional significance, and the inadequate representation in the CAR Reserve System according to the JANIS – a fact acknowledged in DSE's 2009 RFA Implementation Report and confirmed in 3 subsequent VEAC reports.

Mirboo North district are unlikely to be *automatically* included in a VEAC combined Strzelecki Ranges/Gippsland Plains Bioregional cluster investigation into gaps in the CAR Reserve System. The Government's current narrow focus and timing for commencement of this investigation, in 2028, is too late to protect the Mirboo North State Forest IPA, particularly while the GMZ zoning remains unchanged, and the Mirboo North State Forest IPA lies outside of a formal conservation reserve.

A VEAC investigation is urgently needed into the CAR Reserve System shortfalls across the Strzelecki Ranges Bioregion, specifically including the western-central section of the bioregion. The Terms of Reference for a VEAC investigation in the Bioregion should include the Mirboo North State Forest IPA, other State Forests in and around Mirboo North, all components of the Mirboo Regional Park and other relevant public land in the central-western district where Mirboo North is located.

PoF's research has confirmed the Mirboo North State Forest and Mirboo Regional Park both play a dual role supporting water supplies and quality and (in Chapter 5) and biodiversity conservation (this Chapter) which cannot be ignored

and critically needs to be reinforced. **The LCC's Mirboo Regional Park recommendations, while accepted by the Victorian Government, remain unimplemented to this day.** The native forests to be included in the Mirboo Regional Park have not yet been formally translated into the State's parks system or formally reserved as a Regional Park. While it is generally managed in accordance with the accepted LCC recommendations, these four components of the Mirboo Regional Park remain as reserved forest under the *Forests Act 1958*. Both the Mirboo North and Allambee East components of the Mirboo Regional Park, together with the SPZ are pivotal in meeting the habitat requirements for the endangered Powerful Owl Management. Following the BWG's original research, they are clearly critical habitats for the endangered Greater Glider. All four components of the Mirboo Regional Park are modelled to contain EVCs that warrant closer investigation for inclusion in the CAR Reserve System. The EVCs to be found here have forest ecological values and biodiversity that carry National Estate, Australian, Victorian, as well as regional and iconic significance.

A key element of the Victorian Government's IPA policy was that it would deliver greater connectivity between existing parks and public land for species protection: **"As well as protecting our threatened species, the Immediate Protection Areas will provide connectivity to existing parks and reserves, while delivering a broad range of other benefits..."**⁷⁵ But connectivity is not automatically delivered because land areas are relatively contiguous. It requires considerable effort, including:

1. Action to formally establish the Mirboo Regional Park; and
2. Coherent management of all the public lands across both the State Forest IPA and the Mirboo Regional Park. This is not currently the case.
3. It also requires negotiation with both public and private landowners to establish and maintain wildlife corridors, including revegetation, in areas between the fragmented landscape elements.

It is evident from this Report that Mirboo North and district is a vitally important component of the Strzelecki Ranges Bioregion, and as such is part of the most depleted bioregion – a bioregion that VEAC confirms has the highest level of shortfall of Public Land that should be added to the protected area system in Victoria. A VEAC investigation is urgently needed to determine the means of significantly increasing the bioregion's CAR component and creating far greater connectivity opportunities between existing native forest areas.

⁷⁵ DELWP 2019 'Victorian Forestry Plan: From Timber to Threatened Species Protection'

Only then will Mirboo North and district as part of the Bioregion achieve the necessary biodiversity and ecological augmentation, conservation, and protection it so urgently requires and deserves.

[Back to Top of Report]



6.6 REFERENCES

- CofA (1975) *Australian Heritage Commission Act 1975*
- _____ (1992-1995) *National Forest Policy Statement: A New Focus on Australian Forests* second edition 1995
- CofA/NRMMC (2010) *Australia's Strategy for the National Reserve System 2009-2030* Endorsed by the Natural Resource Management Ministerial Council May 2009.
- CofA and SofV (1997) *Scoping Agreement for Victorian Regional Forest Agreements* between the Commonwealth of Australia and the State of Victoria
- _____ (2000) Gippsland Regional Forest Agreement. Viewed online at URL = <https://www.agriculture.gov.au/forestry/policies/rfa/regions/victoria/gippsland>
- _____ (2020) Deed of Variation in Relation to the Gippsland Regional Forest Agreement Amendment No 1, 30 March 2020 URL = [Victorian Regional Forest Agreements \(delwp.vic.gov.au\)](https://www.delwp.vic.gov.au/Victorian-Regional-Forest-Agreements)
- Commonwealth and Victorian RFA Steering Committee (1999) *Gippsland Comprehensive Regional Assessment* Commonwealth of Australia, September 1999
- _____ (1999/2000) *National Estate Identification and Assessment in the Gippsland Region of Victoria* Prepared by officials to support the Gippsland Regional Forest Agreement Process, Commonwealth of Australia, January 2000
- Davey, S. M. (2018) 'Regional forest agreements: origins, development and contributions, *Australian Forestry* 81:2, 64-88, published online 26 April 2018.
- DELWP/Sov CofA (2017) *Report on Progress with Implementation of the Victorian Regional Forest Agreements (RFAs) Period 3: 2009-2014* East Gippsland RFA, Central Highlands RFA, North East RFA, West Victoria RFA and Gippsland RFA, November 2017, Victorian Regional Forest Agreements (RFAs)
- DELWP (2016) *Victorian Government Response to the Victorian Environmental Assessment Council's Statewide Assessment of Public Land Final Report*, The State of Victoria, Department of Environment, Land, Water and Planning 2016:p18
- _____ (2019h) *Overview of Victoria's Forest Management System* State of Victoria Department of Environment, Land, Water and Planning 2019
- _____ (2020) 'Modernized Victorian RFAs -What's Changed' Victorian Gippsland Regional Forest Agreement last updated 2 December 2020 viewed online 12 Jan 2021 at URL = [Victorian Gippsland Regional Forest Agreement - Department of Agriculture](https://www.delwp.vic.gov.au/Victorian-Gippsland-Regional-Forest-Agreement-Department-of-Agriculture)
- _____ (2021) 'Australia's bioregions (IBRA)' Department of Agriculture, Water and the Environment, Australia viewed online on 4.7.2021 at URL = [Australia's bioregions \(IBRA\) - The National Reserve System \(NRS\) | Department of Agriculture, Water and the Environment](https://www.delwp.vic.gov.au/Australia's-bioregions-IBRA-The-National-Reserve-System-NRS-Department-of-Agriculture-Water-and-the-Environment)

- DJPR (2020) 'Mineral Licences' Earth Resources' Department of Jobs, Precincts and Regions viewed online 20.8.20 at URL = earthresources.vic.gov.au/licensing-approvals/mineral-licences
- DNRE (1996) Code of Forest Practices for Timber Production Revision No 2 1996
- DSE/SoV CofA (2009) "A Draft Report on Progress with Implementation of the Victorian Regional Forest Agreements (RFAs) East Gippsland RFA, Central Highlands RFA, North East RFA, West Victoria RFA and Gippsland RFA, Forests and Parks Division, Department of Sustainability and Environment, Table 16;
- DSE (2011) *Victorian Government Response to Victorian Environmental Assessment Council's Remnant Native Vegetation Investigation Final Report* Victorian Government Department of Sustainability and Environment Melbourne, November 2011: p 8.
- JANIS (1997) *Nationally agreed criteria for the establishment of a comprehensive, adequate and representative reserve system for forests in Australia*, Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee, Commonwealth of Australia, 1997
- NRMMC (2010) *Australia's Strategy for the National Reserve System 2009-2030* The Natural Resource Management Ministerial Council (NRMMC) consists of the Australian Commonwealth, state, territory and New Zealand government ministers responsible for primary industries, natural resources, environment and water policy. Commonwealth of Australia and each of its States and Territories 2010
- VEAC (2010) *Remnant Native Vegetation Investigation Discussion Paper for Public Comment* Victorian Environment Assessment Council, June 2010
- ____ (2011) *Remnant Native Vegetation Investigation Final Report* Victorian Environment Assessment Council, March 2011
- ____ (2016) *Statewide Assessment of Public Lands Discussion Paper*, The Victorian Government, Department of Environment, Land, Water and Planning 2016: p72-73
- Wallace, Leanne (2010) Independent Review on Progress with Implementation of the Victorian Regional Forest Agreements (RFAs) *FINAL REPORT* prepared for the Victorian and Australian Governments by Leanne Wallace, Independent Reviewer, 21 May 2010

[\[Back to Top of Report\]](#)



7 CONCLUSION



This Report presents findings from extensive fieldwork and studies conducted by community volunteers and citizen scientists which provide compelling, factual evidence of the dire importance of preserving these remaining pockets of native forests in Mirboo North for their high conservation, biodiversity and ecological values, contribution to a quality, sustainable town water supply and for their critical role in ensuring the ongoing wellbeing, amenity and economic worth of the town and district.

The designation of the Mirboo North IPA clearly and appropriately acknowledges and responds to the community's findings of multiple High Conservation Value species and important ecological vegetation classes that together mark these forests as High Conservation Value Forests.

This Report concludes that the Mirboo North IPA forests deserve to be urgently elevated to higher protection under law. Consequently, the primary recommendation from this campaign voiced by the Mirboo North and district community is that the Victorian State Government takes urgent legal action to permanently conserve these forests as a **Nature Conservation Reserve** under the *National Parks Act 1975*.

Accordingly, the PoF Steering Committee commends this Report to the Minister, the Victorian State Government, land and water managers, and the Victorian community, to guide the future management of these important community assets.

Preserve Our Forests Steering Committee
September 2021

[\[Back to Top of Report\]](#)





Rufous Fantail nesting in the Mirboo North State Forest 2019. Photo by Grace Adamo

POSTSCRIPT



A great deal of change has occurred in Victoria's Forest Management System (FMS) since the Ministerial announcement of the IPA in November 2019. **Some of these changes have implications for the future management of native forest areas and native timber harvesting in Victoria. These changes do not alter the significant findings, conclusions or recommendations set out in this Report drawn from PoF's research undertaken by the Mirboo North community's citizen scientists 2017-2020.**

Since February 2020 PoF's biodiversity findings have been included in the Victorian Biodiversity Atlas. PoF have written to the Minister and advised DELWP about the community vision for the Mirboo North State Forest IPA.

March 2020 All Victorian RFAs have been "Refreshed" and extended to 30 June 2030. New clauses were introduced amongst other things, to allow for a review of RFAs following a Major Event. The "Refreshed" Gippsland RFA includes new data about the extent of EVCs in the RFA Region and appears to change the Conservation Status of some EVCs found in our Forests.

June 2020 the *Flora and Fauna Guarantee (Amendment) Act 2019* came into effect. Environment Victoria say: the FFG Act amendments clarify existing powers to determine critical habitat and improves their protection by encouraging cooperative management; and requires consideration of biodiversity across government to ensure decisions and policies. DELWP say about the Amendment Act:

- the Act's objective to 'guarantee' the survival of all of Victoria's flora and fauna is retained.
- action that prevents species from becoming threatened are emphasised.
- the Common Assessment Method or CAM - a consistent national approach to the assessment and listing of threatened species has been adopted [Victoria agreed to the CAM in **April 2018**].
- independent reporting is required on the implementation of the state-wide Biodiversity Strategy – *Protecting Victoria's Environment – Biodiversity 2037*.
- enforcement powers have been improved; and penalties increased for all offences.
- To implement the FFG Act amendments, the conservation status of all plant and animal species currently considered to be rare or threatened in

Victoria has been re-assessed and a new **Threatened List** has been prepared via DELWP's Conservation Status Assessment Project. Any species that are assessed under the CAM as Extinct, Critically Endangered, Endangered or Vulnerable (EX, CR, EN, VU) at the state level, and any Victorian species listed under the EPBC Act, will be eligible for consideration on the new FFG **Threatened List**.

July 2020 Following an Independent Review of Timber Harvesting Regulation in Victoria's public native forests in 2018, DELWP's response led to the formation of an Office of the Conservation Regulator in 2019. The Conservation Regulator was established to be accountable for timber harvesting, biodiversity, fire prevention and land-use regulation.

December 2020 Changes to VicForests Timber Release Plan were approved by the VicForests Board and gazetted on 14 December 2020. Doug, Samson and Oscine coupes do not appear on the gazette list of logging coupes.⁷⁶

Also in December 2020 The Victorian Government announced a Major Event Review of Victoria's RFAs following the 2019-20 bushfires. The Premier says of the Major Event Review: it will assess the significant impacts of the 2019-20 bushfires and what remedial action needs to be taken to ensure our forests continue to be managed appropriately. Engage Victoria opened public consultation on the Major Review on 11 June 2021.

June 2021 DELWP via Engage Victoria opened for public comment, an updated *Code of Practice for Timber Production 2014* along with its incorporated document, the *Management Standards and Procedures for timber harvesting operations in Victoria's State forests*. A comprehensive review the Code can be expected by the end of 2023. DELWP say of the amendments to these documents:

- the definition of the precautionary principle is amended...improving clarity in its application.
- The creation of Special Management Zones and Special Protection Zones is clarified as DELWP's responsibility, not VicForests.
- DELWP's forest and land management fixed zoning objectives will move into a new draft *Forest Management Zoning Accountability Framework*. DELWP say of this framework: The DELWP Secretary can apply **fixed forest zonings** (such as a Special Protection Zone to protect a threatened flora or

⁷⁶ VicForests' Coupe Code for Oscine is: 433 507 002; for Doug is 433 502 0003; and for Samson is 433 502 0002.

fauna species introduced via a forest management plan or zoning amendment process) **or detection-based actions** (introduced for example where there is a verified sighting of a threatened flora or fauna species during timber harvesting operations).

July 2021 VicForests opened consultation on a new Timber Release Plan. VicForests Interactive Map, on public exhibition as at 22.7.21:

- Shows Doug, Samson and Oscine coupes still lie in the General Management Zone, and thus remain available for logging in future.
- Does not show the IPA.
- Does not show that logging is planned within Mirboo North's State Forest during the life of this proposed new TPA.
- Shows the Allambee East and Mirboo North/Lyrebird Walk components are classified as Other Parks and Reserves; and
- Shows Hallston and Boolarra South components of the Mirboo Regional Park as available for limited timber harvesting.

[Back to the Top of the Report]





Greater Glider in the Mirboo North State Forest
Preserve our Forests Biodiversity Working Group Surveys September 2017- February 2020



[Back Top of Report]