

Prepared for Nillumbik Shire Council

Nillumbik Shire Council

Draft Biodiversity Strategy

November 2023

Project Number: 220657



Document verification

Project Title:	Draft Biodiversity Strategy
Project Number:	220657
Project File Name:	220657 Nillumbik Shire Council Draft Biodiversity Strategy DR4

Revision	Date	Prepared by	Reviewed by	Approved by
Draft V4	29/09/2023	Emily Hatfield	Jonathan Lamb	Emily Hatfield
Draft V2	20/10/2023	Emily Hatfield	Jonathan Lamb	Emily Hatfield
Draft V3	30/10/2023	Kirsten Reedy Nillumbik Shire Council Warren Tomlinson Nillumbik Shire Council		
Draft 3.1	2/11/2023	Emily Hatfield	Jonathan Lamb	Emily Hatfield
Draft 4	27/11/2023	Kirsten Reedy Nillumbik Shire Council Warren Tomlinson Nillumbik Shire Council	Emily Hatfield	Jonathan Lamb

Front Cover Photo: Long-tailed Pea-blue *Lampides boeticus* at Annes Wetlan, Hurstbridge (Credit: Michael Smith)

Acknowledgement of Country

Nillumbik Shire Council respectfully acknowledges the Wurundjeri Woi-Wurrung people as the Traditional Owners and Custodians of the Country on which Nillumbik is located. We pay respect to Elders past, present and emerging and extend that respect to all First Nations People. We respect the enduring strength of the Wurundjeri Woi-Wurrung and acknowledge that sovereignty was never ceded.

Wurundjeri Woi-Wurrung people hold a deep and ongoing connection to this place. We value the contribution their Care for Country makes to the lands, waterways, plants, wildlife and people of the Shire of Nillumbik; acknowledge their beliefs, customs and values; and are committed to collaborating around how we think, work and act in relation to climate change and caring for our environment.

DRAFT

Table of Contents

Acknowledgement of Country	i
Acronyms, abbreviations and glossary of terms	3
1. Introduction	5
1.1. Why Council has a Biodiversity Strategy	6
1.2. The steps taken to develop the Strategy.....	6
2. Nillumbik’s biodiversity & threats	7
2.1. Our Biodiversity	7
2.2. Threats to the health of biodiversity in Nillumbik.....	11
3. Previous biodiversity action that we’re building upon	13
4. What we will do	15
4.1. Guiding principles	15
4.2. Our overarching goals, targets and indicators	15
5. Key Focus Areas	17
5.1. Focus Area 1 - Leadership and Advocacy	17
5.1.1. Objectives and supporting strategies.....	17
5.2. Focus Area 2 - People and Partnerships	19
5.2.1. Objectives and supporting strategies.....	19
5.3. Focus Area 3 - Species and Habitat Enhancement.....	22
5.3.1. Objectives and supporting strategies.....	22
5.4. Focus Area 4 - Mitigating Threatening Processes and Impacts	24
5.4.1. Objectives and supporting strategies.....	24
6. Implementation	27
6.1. Progress reporting	27
7. References	28
Appendix A Nillumbik’s Ecological Vegetation Classes	29
Appendix B Nillumbik’s Tree canopy extent	31
Appendix C Threatened species	C-I
Appendix D Strategic Habitat Links across Nillumbik	D-VI
Appendix E Legislative & Policy Framework	E-VII

Figures

Figure 1-1 Extent of ecological vegetation classes (in hectares) in Nillumbik (Source: DEWLP 2017).....	29
Figure 1-2 Ecological vegetation classes in Nillumbik.....	30

Figure 1-3 Tree canopy extent that is 2m plus in height (Source: DELWP 2021, based on Vic Map 2019/20 vegetation extent mapping) 31

Figure 1-4 Nillumbik’s strategic habitat corridors/links D-VI

Figure 2-1 Biodiversity values shown using Vic government’s NatureKit tool (Source: DEECA, 2023c) .. E-VIII

Table

Table 1-1 Native vegetation and tree canopy extent by land tenure 8

Table 1-2 Species records across the Shire..... 9

Table 1-3 Number of threatened flora and fauna in Nillumbik, listed under federal and state legislation..... 9

DRAFT

Acronyms, abbreviations and glossary of terms

ASN	Australia's Strategy for Nature 2019-2030
biodiversity	the variety of all life forms on earth - the different plants, animals and micro-organisms and the ecosystems of which they are a part
Biodiversity 2037	Protecting Victoria's Environment – Biodiversity 2037
Bushland reserves	Council owned or managed land which are primarily managed for their biodiversity values or function
CaLP	<i>Catchment and Land Protection Act 1994 (Vic)</i>
CAP	Nillumbik Climate Action Plan 2022-2032
CEO	Chief Executive Officer
Council	Nillumbik Shire Council
Cwth	Commonwealth
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Cwth)
DEECA	Department of Energy, Environment and Climate Action (Vic) (formed 1/01/23)
DELWP	Department of Environment, Land, Water and Planning (Vic) (2015-2022)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwth)</i>
EVC	ecological vegetation classes
ESO	environmental significance overlay
FFG	<i>Flora and Fauna Guarantee Act 1988 (Vic)</i>
GBF	global biodiversity framework
green infrastructure	the network of green spaces, trees and water systems that connect and provide vital life support for all of us and the other species within our urban environments
ha	hectares
indicators	measures that will help to track the progress and outcomes of the Biodiversity Strategy's goals and targets
km	kilometres
LGA	local government area
LMIP	Land Management Incentive Program
MPS	Municipal Planning Strategy
natural capital	is the elements of nature that directly or indirectly produce value for people, including ecosystems, freshwater, land, minerals, air and oceans, as well as natural processes and functions

natural environment	encompasses climate, atmosphere, natural resources, water, land, ecosystems and biodiversity.
objective	an approach that will contribute to achieving the goals of the strategy.
Reserves	Council owned or managed land, including those managed by Parks, Open Space or Bushland Reserves
SBV	strategic biodiversity values
SHL	strategic habitat links
stepping stones	relatively small patches of native vegetation in the landscape that contribute to connectivity for a variety of species
supporting strategies	the types of actions that will be implemented in order to achieve the Biodiversity Strategy's goals and objectives.
the Strategy	Nillumbik Biodiversity Strategy
UGB	urban growth boundary

DRAFT

1. Introduction

The Shire of Nillumbik, also known as The Green Wedge Shire, is located on the lands of the Wurundjeri Woi-wurrung people.

Our biodiversity and its character are strongly valued by Council and by the community:

- Our native flora and fauna are precious and are in our safekeeping.
- Our natural environment is at the very heart of our lifestyle and is fundamental to the beauty of our landscape, our neighbourhood character, our economy, culture and our health and wellbeing.

Supporting a diverse array of flora and fauna, Nillumbik is around 43,000 hectares (ha) in size, 91 per cent of which is outside of Melbourne's urban growth boundary.

Most land is privately owned (61 per cent), and majority of the rest is managed by Parks Victoria, DEECA, Melbourne Water and Council (39 per cent):

- 61 per cent is private land
- 24 per cent is national parks/reserves
- 8 per cent is other crown land
- 5 per cent is Melbourne Water
- 2 per cent is Council owned

As such, this Biodiversity Strategy considers biodiversity action in urban and rural contexts; and it provides the strategic direction to support Council's work in helping to protect and enhance biodiversity across public and private land over the next ten years.

Its goals are that:

Goal 1 - The biodiversity of Nillumbik is healthy

Goal 2 - Nillumbik's community values and cares for nature.

Ambitious targets are proposed, including:

- Achieve a net gain in the extent, connectivity and condition of habitat by 2034
- 70 per cent of Nillumbik's residents are acting to protect our natural environment by 2034.

The Strategy:

- Considers threats and opportunities, setting objectives that seek to protect our current biodiversity; improve its condition; and help restore and enhance connectivity where it's fragmented, over time.
- Seeks to connect people with nature – so that they can enjoy the outdoors and thrive from its intrinsic health and wellbeing benefits; and to help build their appreciation of biodiversity and interest in taking action to care for it.
- Seeks to enable action that will guide conservation where it is needed the most; and improve the resilience of our natural environment to cope with climate change.
- Recognises that harnessing a collective effort is instrumental - Council, private landholders, environmental volunteer groups, the general community, Traditional Owners and entities such as Parks Victoria and Melbourne Water all have an important role to play in sustaining a healthy biodiversity and a community that values nature.

A detailed implementation plan will be prepared annually which will list the specific actions that will be undertaken that year.

Our four focus areas for action are: Leadership and advocacy; People and partnerships; Species and habitat enhancement; and Mitigating threatening processes and impacts.

Biodiversity encompasses all components of the living world: the number and variety of plants, animals and other living things, including fungi and micro-organisms, across our land, rivers, coast and ocean. It includes the diversity of their genetic information, the habitats and ecosystems within which they live, and their connections with other life forms and the natural world (DELWP, 2017a)

1.1. Why Council has a Biodiversity Strategy

Biodiversity is fundamentally important; it is essential for the processes that support all life. It creates balance, with every lifeform playing a part in maintaining that balance; and it provides environmental, social, wellbeing and economic benefits.

Globally however, biodiversity is declining. Climate change is bringing new and challenging threats to biodiversity which need to be addressed; and in Australia - over the last 200 years - human activity, weeds and pest animals have greatly impacted biodiversity, resulting in the loss of many native species and habitats. This needs to be halted.

The importance of biodiversity and the factors that are contributing to its decline are why Council has a Biodiversity Strategy.

Recognising that it is complex, we need to do our best to help protect and enhance biodiversity locally in Nillumbik; and to contribute to state, national and global strategic action.

1.2. The steps taken to develop the Strategy

In developing this Strategy, we were guided by international conventions, the objectives of the Victorian State Government's *Protecting Victoria's Environment, Biodiversity 2037* (Biodiversity 2037) strategy, and other national, state, regional and local policy considerations.

- **Phase 1** - We reviewed the outcomes of our *Biodiversity Strategy 2012* and *Invasive Species Action Plan 2015*.
- **Phase 2** - We researched legislative requirements, policy, publicly available biodiversity data, and best practice management. This included specific consideration of matters such as baseline data, wildlife protection options, and native vegetation offset site and management options.
- **Phase 3** - We asked the community what their priorities are. We received feedback from 350 people, which included 184 survey respondents plus people who attended workshops and pop-up consultations.
- **Phase 4** - We consulted with Councillors, Council advisory committees, Traditional Owners and partners.
- **Phase 5** - The draft strategy is currently on public exhibition so that the community and other stakeholders can provide further feedback.

Considering community views

Amongst many relevant findings, community survey respondents indicated that:

- Biodiversity is very important or important (98 per cent of survey respondents).

They perceive that the five biggest threats to biodiversity in Nillumbik include:

1. Habitat / vegetation loss
2. Subdivision and development of land

3. Climate change impacts
4. Pest animals such as foxes, deer, rabbits and feral cats
5. Tree canopy loss in urban areas.

They believe that the five most important actions for Council to take to protect and enhance biodiversity in Nillumbik are:

1. "Greater use and enforcement of planning rules and other regulatory tools to protect trees/native vegetation and other biodiversity on private land"
2. "Embed consideration of nature and biodiversity into all Council decision making"
3. "Advocate to state and federal governments to take biodiversity supportive action"
4. "Community education and awareness raising about protecting and enhancing biodiversity"
5. "Manage pest animals on Council land".

2. Nillumbik's biodiversity and threats

2.1. Our biodiversity

Across Australia, more than 1.75 million species of plants, animals and other organisms have been identified so far, and there are likely to be many more. Our biodiversity is unlike any other in the world, with nearly half of our birds and more than half of our mammals unique to Australia.

Nillumbik alone supports a wonderfully diverse array of species and their habitats, spanning the riparian forests along the Yarra River and woodlands along the Plenty River, to the gullies and hills leading up to the Kinglake Plateau of the Great Dividing Range.

In comparison with Victoria's other metropolitan and peri urban areas, we have a very diverse and relatively healthy biodiversity, and a large extent of remnant vegetation. In the last 30 years, 44% of Melbourne's indigenous terrestrial flora species and 33% of terrestrial fauna species have been observed in Nillumbik (ALA, 2023).

Our landscape includes a mix of urban, peri-urban and rural areas across various land tenures; with national and state parks, dry forests and woodlands, wet and damp forests, waterways and wetlands, and rural land.

We are one of the 12 green wedges of metropolitan Melbourne.

Nillumbik's Bioregions and Ecological Vegetation Classes

Bioregions are a landscape-scale approach to classifying the environment using a range of attributes such as climate, geomorphology, geology, soils and vegetation (DEECA 2023). There are 28 bioregions within Victoria, and Nillumbik is primarily located in the *Highlands - Southern Fall bioregion* on the southerly aspect of the Great Dividing Range. There is also a small area of the *Victorian Volcanic Plain bioregion* in the west of the Shire.

Ecological Vegetation Classes (EVCs) are a term that classifies different native vegetation types across Victoria. Each EVC has a Bioregional Conservation Status (BCS) rating that is based on the level of depletion in each bioregion. Different EVCs will typically support or provide habitat to different plants (flora) and animals (fauna).

A total of 20 EVCs are found in Nillumbik, covering 29,438 ha (DELWP 2017). The most commonly occurring EVCs in the Shire and their bioregional conservation status, in order of extent, are:

- Grassy Dry Forest (Least Concern) (8,249 ha)
- Valley Grassy Forest (Vulnerable) (5,603 ha)
- Herb-rich Foothill Forest (Least Concern) (4,475 ha)
- Heathy Dry Forest (Least Concern) (2,185 ha)
- Riparian Forest (Least Concern) (1,652 ha)

- Box-Ironbark Forest (Vulnerable) (1,141 ha).

EVCs that occur widely within the Shire’s parks and other public land reserves are provided a high level of security and protection into the future.

However, there are also locally present EVCs which have little representation in these protected areas. These include: Plains Grassy Woodland (Endangered) (225ha); Creekline Herb-rich Woodland (Vulnerable) (1,802ha); and Valley Grassy Forest (Vulnerable) (5,603 ha). For example, 83 per cent of vulnerable Valley Grassy Forest extent within the Shire is located on private land.

Over the past decade, native vegetation removal within the Shire has most severely impacted upon Grassy Dry Forest (Least Concern), Valley Grassy Forest (Vulnerable) and Swampy Riparian Complex (Endangered).

The extent of Nillumbik’s EVCs are depicted in a pie graph in Figure 7-1 and mapped in Figure 7-2 in Appendix A.

Nillumbik’s vegetation extent

Nillumbik is fortunate to retain a high cover of native vegetation across the Shire. While indigenous native vegetation is preferable and offers greater habitat value, most vegetation can be of some biodiversity value.

Table 2-1 Native vegetation and tree canopy extent by land tenure

Cover	Council managed (ha)	Govt/ Public controlled (ha)	Private land (ha)	Total (ha)	% of cover on Council land	% of cover on Public controlled	% of cover on Private land	Total % cover of Shire
Native vegetation¹	479	8,551	20,256	29,296	2%	29%	69%	68%
Tree canopy 2m+ (native & exotic)²	437	7,909	13,615	21,962	2%	36%	62%	51%

1 – Native vegetation extent is derived from Landsat data mapped at 30 meter spatial resolution, includes native grasses, herbs, shrubs and trees. Source: DELWP 2017, based on the 2017 Native Vegetation Regulation Extent mapping.

2 – Tree canopy extent includes native and exotic species, trees and shrubs 2 meters + in height, Lidar data mapped at 21cm spatial resolution. Source: DELWP 2021, based on Vic Map 2019/20 vegetation tree extent mapping.

Native vegetation extent (totalling 29,296 ha in Nillumbik) includes all native vegetation shrublands, grasslands and herblands. This Strategy includes a target of achieving a net gain in native vegetation extent over the coming decade.

Table 1-1 above provides a breakdown of the native vegetation extent as it occurs on tenure type. It highlights that over two-thirds of Nillumbik’s native vegetation is located on private land. The largest areas of native vegetation on public land include:

- Kinglake National Park in the northeast of the Shire, managed by Parks Victoria
- Warrandyte - Kinglake Nature Conservation Reserve, managed by Parks Victoria
- Plenty Gorge Parklands, managed by Parks Victoria
- Over 100 bushland reserves (totalling around 500 ha) which are located across the Shire, managed by Council.

Tree canopy, defined as woody vegetation (both native and exotic species) greater than approximately two metres in height, is estimated to cover 21,962 ha or 51 per cent of the Shire.

Figure 7-3 in Appendix B maps the presence and absence of tree canopy cover in Nillumbik, derived from statewide aerial photography.

A relatively small percentage of Nillumbik’s tree extent is exotic (not native) including pine plantations, ornamental trees and even environmental weeds (objectives to reduce weed presence are covered in this Strategy).

This Strategy includes a target to maintain this tree canopy extent at 51 percent. There are many challenges to this, which are discussed under ‘threats’ and responded to within the objectives of this Strategy.

Nillumbik’s plant and animal species

The Shire supports a large array of native plants, animals, fungi, and microorganisms. Over 990 indigenous flora (plant species), including 54 species that are considered threatened at a national or state level have been recorded. There are also around 400 native fauna (animal species), including 83 species that are classified as threatened.

Table 2-2 and

Table 2-3 provide a summary of species records and threatened species data.

Table 2-2 Species records across the Shire

Taxon Group	Total number of species	Number of records
Plants (native)	992	52,943
Fungi (may include some exotic species)	381	6,430
Birds (native)	307	529,683
Mammals (native)	41	5,533
Frogs (native)	18	170,464
Reptiles (native)	33	1,653
Insects (native)	1,831	12,635
Fish (native)	18	913

Source: (ALA, 2023; VBA 2023)

Table 2-3 Number of threatened flora and fauna in Nillumbik, listed under federal and state legislation

Status:	EPBC-listed species (Federal)		FFG-listed species (State)	
	Flora	Fauna	Flora	Fauna
Critically endangered	1	4	11	12
Endangered	4	8	31	28
Vulnerable	5	14	7	26
Total*	10	27	49	67

Source: Environment Protection & Biodiversity Conservation Act (EPBC Act) and Flora & Fauna Guarantee Act (FFG Act)

*Some species are listed at both a federal and state level (i.e. in both the EPBC and FFG Acts).

The recent *Australia State of the Environment Report* identified that between 2017 and 2021 there was an 8 per cent increase in the number of species listed as threatened, or reassessed as meeting criteria for a

higher level of risk of extinction (e.g. moved from Vulnerable to Endangered to Critically Endangered), across Australia.

A list of the threatened species that are present in Nillumbik (as per the Federal EPBC Act and the Victorian FFG Act), is provided in Appendix C. Absence of monitoring and data collection for most threatened species at the state and local level means that it is difficult to determine species-specific improvement or decline for most species occurring in Nillumbik.

Nillumbik's habitat corridors

Habitat corridors seek to connect areas of habitat to allow movement for both flora and fauna species. A habitat corridor can vary in size, connecting regions, down to corridors on properties. There are a number of regional and district habitat corridors across public and private land in Nillumbik. A map depicting the links/corridors is provided in Appendix D.

- Regional habitat corridors include the Yarra River and the catchments of its major tributaries (Plenty River, Arthurs Creek, Diamond Creek and Watsons Creek). They are considered critical to the maintenance of faunal/habitat significance at the regional level. Native vegetation corridors along waterways, or often along roadsides, support the passage of wildlife between natural areas.
- Local habitat corridors and 'stepping stones', including those in urban areas, provide essential connectivity where fragmentation of important populations of species, such as the Eltham Copper Butterfly (*Paralucia pyrodiscus lucida*), are at risk from genetic isolation.
- Shelterbelts and windbreaks act as local habitat corridors in rural areas, provided they are wide enough.

Action to protect, enhance and further connect these corridors, particularly in strategically important locations, is a desired outcome to help support the goals of this strategy.

Case Study – Phascogales and habitat corridors

The benefits of wildlife corridors can be evidenced in examples such as the Brush-tailed Phascogale (*Phascogale tapoatafa*). The Nillumbik area remains an important stronghold for phascogales, which forage over great distances in their home range: 30-60 ha for females and 100 ha for males, nesting in about 30 different sites each year. For such species, habitat corridors that link core habitat areas (which have native vegetation, large hollow bearing trees, logs, stumps for shelter etc) are vital as they enable animals to move from one area of bushland to another.

2.2. Threats to the health of biodiversity in Nillumbik

The threatening processes impacting biodiversity within the Shire, and the challenges associated with achieving a community that values nature and acts to care for it, are many and varied. This Strategy seeks to provide strategic direction to better understand and respond to these threats and challenges.

Some of the threats to biodiversity within Nillumbik are:

- climate change
- habitat loss and fragmentation
- urbanisation and associated impacts
- land use changes
- weeds, pest animals and pathogens
- poisons such as rodenticides and pesticides
- loss of soil health, such as erosion and compaction
- bushfire and altered fire regimes
- declining waterway quality and catchment condition
- habitat degradation, for example from over-grazing; riding of bikes or horses off formal tracks in reserves; etc
- lack of understanding of ecological processes, and lack of comprehensive, robust biodiversity data to help inform and direct targeted action
- insufficient resourcing.

Case studies - The causes and consequences of threats to biodiversity vary, for example:

- Climate change in south-eastern Australia is creating warmer days and more heatwaves, as well as declining cool season rainfall, exacerbating drought and fire conditions. In the Nillumbik region, by 2050, it is predicted that days over 35°C will double, while annual rainfall will concurrently decline by 8 per cent (DEWLP, 2019). This poses a threat to the health and persistence of biodiversity.
- Land-use changes within the Shire have led to habitat loss and fragmentation, causing reduced connectivity of animal and plant populations. Reduced connectivity impairs essential ecological processes and functions such as pollination, natural regeneration, and the distribution, migration, breeding and re-colonisation of fauna in response to environmental changes. If species are restricted to small, isolated islands of habitat, biodiversity becomes less resilient and is vulnerable to threats such as invasive species, inappropriate fire regimes and the effects of climate change. Reduced populations and genetics ultimately lead to declining biodiversity.
- Infrastructure including roads and rail, can form barriers to wildlife movement, severing habitat connectivity and isolating populations. Wildlife vehicle collisions cause serious injury and death to numerous species; over 3,500 animals were recorded by Wildlife Victoria as 'hit by vehicle' within and immediately surrounding Nillumbik between 2012 and 2022 (the majority of which were Eastern Grey Kangaroos). Higher levels of road vehicle collisions are associated with vehicle speed, traffic volume and presence of roadside vegetation cover.
- There are a variety of habitat / vegetation loss causes that are threats to biodiversity. Permitted and non-permitted native vegetation removal is an obvious contributor, which requires ongoing education and enforcement responses.
- The quality of vegetation and habitats on public and private land is under sustained pressure from herbivores. Their movement through the landscape and over grazing can contribute to changes in the structure, diversity and composition of native vegetation communities; erosion and compaction of soil; damage to waterways and water quality; spread of diseases, pathogens and weed seeds; and has led to a gradual decline in the presence and abundance of a number of flora and fauna species.

- Predatory pest animals have led to the extinction of a wide variety of native animals across Australia and significantly impact on populations of many local fauna species.
- Weeds can include woody, grasses or bulbous plants. Weeds impact on our native plants and animals by reducing habitat quality, out competing native flora species, harbouring pest animals, changing ecosystem composition, structure and function and hybridising with locally indigenous plants.
- Invasive pathogens can include diseases, fungi and parasites which can, for example, spread through natural bushland affecting the health and resilience of native vegetation or impact specific species such as frogs. They include Cinnamon Fungus (*Phytophthora cinnamomi*), Myrtle Rust (*Uredo rangelii*) and Chytrid fungus.
- A widespread under-appreciation of biodiversity and disconnection from nature may prevent action to protect and enhance it.

Successful mitigation of such threats requires targeted action with consistent and ongoing resourcing.

DRAFT

3. Previous biodiversity action that we're building upon

Council and our partners have implemented a wide variety of programs and actions which have contributed to protecting and enhancing biodiversity across the Shire.

These projects and programs have been (and continue to be) undertaken collaboratively where possible; with other levels of government, agencies and neighbouring councils, landholders and community groups.

Biodiversity action by Council

This Strategy builds upon decades of action that Council has undertaken.

There are many ways that Council invests in biodiversity and invasive species action, these broadly include:

- Managing Council owned land, including 100 bushland and wetland conservation reserves and 1,200km of roadsides. (Allocation of biodiversity and invasive species resources is managed to achieve best possible outcomes, but there are gaps).
- Raising awareness and educating our community about biodiversity and sustainable land management. Including through advice, events, publications and awards.
- Providing incentives for positive land management and conservation (grants and rate rebates).
- Edendale's Community Environment Farm's education program and indigenous plant nursery.
- Advocacy for change that will support biodiversity outcomes, including through legislative reviews, parliamentary inquiries, and policy and budget submissions.
- Implementing Council's regulatory system via our planning scheme and local laws which guide permissible land use, and which include a focus on achieving positive biodiversity outcomes.
- Supporting Landcare, Friends of and other community groups and volunteers to act for the local environment.
- Facilitating partnership projects to enable more effective projects across multiple land tenures, often at a landscape scale, including obtaining grants to leverage and provide more cost-effective results.

Some examples of specific Council projects delivered collaboratively include:

- The Nillumbik Gardens for Wildlife program, established in partnership with the community
- Land Management Incentive grant Program
- Nillumbik Forest Health Monitoring Program, which monitors over 21 indicator species associated with wet and dry forest communities
- Nillumbik Deer Control Project
- The Collaborative Community Deer Action Project
- Eltham Copper Butterfly monitoring
- Involvement in the development of the Eastern Region Pest Animal Strategy 2020 – 2030 which seeks to “work together to minimise the impacts of pest animals across the region”, focusing on controlling deer, fox, rabbits, Indian mynas and cats.
- Sugarloaf Link Project (deer, foxes and weeds)
- Rivers to Ranges Project (peri-urban landscape scale weed control)
- Conservation Futures Project, focusing on threatened flora and fauna species
- Southern Toadlets and other frogs in Nillumbik
- Operation and high standard of management of several native vegetation offset sites, including Chase Reserve in North Warrandyte.

Whilst much has been done, there is more to focus on over the coming years.

Biodiversity action in the community

We are very fortunate that so many people in the Nillumbik community value and care for biodiversity in all its forms. Council values these people who are making significant contributions to protecting and improving biodiversity, both in formal volunteer capacities and in their day-to-day lives.

A highly motivated network of individuals and community groups focus on the environment, undertaking on-ground works, advocacy, lobbying and communication to encourage and support positive and collaborative action. For example:

- Twelve Landcare groups operate across the Shire, supported by many in their local communities, the Nillumbik Landcare Network, and a state funded Landcare Facilitator.
- 20 Friends of Groups undertake important habitat restoration and revegetation works, largely in Council's bushland reserves; and additional Friends of Groups support the biodiversity of local Parks Victoria reserves.
- Land for Wildlife is voluntary conservation program supporting landholders to protect native plants and animals on their property.
- Several volunteer-based wildlife rescue groups and shelters operate locally, supporting injured wildlife.
- Various community groups who want to support biodiversity to thrive actively engage with others to inspire, encourage and support action.
- Though Citizen Science our community is supporting initiatives such as BirdLife Australia's 'Birds in Backyards', iNaturalist BioBlitzes, DeerScan, Frog census and PlatypuSpot.
- Individuals are planting wildlife gardens at home and managing their properties sustainably (including some who, through Trust for Nature covenants, are protecting properties for biodiversity in perpetuity).

The action that individual people and community groups are undertaking is incredibly important. Council hopes that over the life of this strategy that even more people in our community value and help to act for nature.

Biodiversity action by agencies and Government

State and federal government provide a variety of legislative and policy tools to protect biodiversity. These are discussed in Appendix E.

They have invested in various programs that support on-ground action to achieve biodiversity improvements across Nillumbik, many of which have been listed. In addition, this includes work delivered by Melbourne Water along waterways on private and public land, and Parks Victoria in Kinglake National Park, Plenty Gorge and the numerous reserves that form the Warrandyte-Kinglake Nature Reserve. These agencies partner with each other and with Council.

4. What we will do

4.1. Guiding principles

Nillumbik Shire Council is committed to working actively and collaboratively to undertake biodiversity action.

This Strategy has been developed under the guidance of the following principles and in alignment with the state government's *Biodiversity 2037* priorities:

1. Council values the Shire's biodiversity and appreciates its intrinsic importance and its interconnections with the health and wellbeing of our community.
2. We acknowledge that Wurundjeri Woi-wurrung have an ongoing connection to the lands, water, plants and animals of Nillumbik; they have knowledge of Country and cultural obligations that their traditional lands and waters are managed to keep Country healthy.
3. Protecting biodiversity is an essential tool in fighting the climate emergency.
4. We seek to protect, maintain and improve the quality and extent of native vegetation cover, terrestrial and aquatic wildlife habitats.
5. We take a biosecurity approach to pest plants, animals, diseases and pathogens which threaten environment and economic values in Nillumbik.
6. We apply adaptive management practices using the best available information. Spatially explicit data and information about biodiversity values and threats is needed to make evidence-based decisions about where resources and investment should be directed.
7. Partners and community volunteers are valued, supported and celebrated, to galvanize transformative action through broad participation, enabling actions and capacity building.
8. We take a collaborative and landscape-scale approach to biodiversity management so that all knowledge systems, including Indigenous knowledge, are included in decision making.
9. Key implementation actions and indicators to track progress will be reported on annually and will help inform Council planning and resourcing considerations, subject to annual Council Plan and budget processes.

These principles underpin and guide the implementation of the Strategy.

4.2. Our overarching goals, targets and indicators

We have two overarching goals and ambitious associated targets guiding Council's investment and focus:

Goal 1 – Biodiversity in Nillumbik is healthy

Nillumbik has functioning plant and animal populations, improved habitats and resilient ecosystems.

Target: Achieve a net gain in the overall extent, connectivity and condition of habitat by 2034

Indicators include:

- Extent of tree canopy cover (2 metres+ in height) - Baseline extent is 51%. Measured every 5 years. Target: No net loss.
- Extent of native vegetation (based on EVCs) – Baseline extent is 67%. Measured by DEECA approximately every 10 years. Target: net gain.
- Number of new local extinctions. Target: zero (i.e. safeguard the persistence of threatened species such as Eltham Copper Butterfly, Southern Toadlet and Rosella Spider Orchid).
- Scored condition of habitat in Council bushland reserves. Target: Improved condition.
- Number of trees planted and removed on Council land. Target: Net gain.
- Number of partners working collaboratively to support biodiversity gain.

- Other indicators are being developed.

Goal 2 – Nillumbik's community values and cares for nature

Nillumbik's community understand the importance of biodiversity and value nature, and as a result are more likely to help care for it. Caring (and acting to protect) refers to activities that directly protect or enhance biodiversity such as environmental volunteering, planting native gardens, protecting local waterways, placing a conservation covenant on their land, controlling pest species, revegetating, purchasing green products, and/or getting involved in citizen science monitoring.

Target: That 70% of Nillumbik residents care for nature by 2034

Indicators include:

- Number of people acting to protect Nillumbik's natural environment. (Source: new question in council's Annual community survey)
- Number of nature/biodiversity/environment programs delivered and number of attendees.
- Number of properties supported by Council to undertake biodiversity actions.
- Number and size of permanently protected areas of private land (Trust for Nature covenants)
- Number of indigenous plants sold by Edendale Indigenous Plant Nursery.
- Other indicators are being developed.

Indicators

We've included indicators to help track our progress towards achieving our overarching goals and targets.

Some are listed above, and other key performance indicators are being developed.

Over the life of the Strategy, we may need to review and update our indicators, if or when improved and more cost-effective data options emerge.

Key focus areas

This Strategy aims to achieve the overarching goals over a ten-year period - through numerous objectives under four key focus areas:

1. Leadership and Advocacy (LA)
2. People and Partnerships (PP)
3. Species and Habitat Enhancement (SH)
4. Mitigating Threatening Processes and Impacts (MI)

Each focus area includes objectives and associated supporting strategies to help achieve them.

Some objectives within this Strategy will inevitably overlap each of the focus areas, delivering multiple benefits.

5. Key Focus Areas

5.1. Focus Area 1 - Leadership and Advocacy

Council is committed to taking decisive action that protects and enhances the biodiversity of Nillumbik.

We lead by example, and advocate for action by:

- Requiring our staff to consider biodiversity in their day-to-day roles and as part of decision making.
- Adopting a low-risk appetite for any activities which may impact on the environment or the achievement of Council's environmental objectives.
- Caring for and improving condition of biodiversity on land and assets owned or managed by Council, e.g. our bushland reserves and roadsides.
- Administering a planning system that has core objectives around protecting biodiversity across all land tenures.
- Seeking opportunities to enhance our natural capital (i.e. the elements of nature that directly or indirectly produce value for people).
- Taking a leadership role in coordinating cross-tenure landscape scale approaches that help to manage invasive species and protect indigenous flora and fauna.
- Partnering and collaborating.
- Advocating strongly to state and federal government for action and support to protect and enhance biodiversity.
- Actively pursuing funding opportunities.

Council recognises that achieving our environmental objectives may involve a degree of risk and has a high-risk appetite for strategies that respond to our sense of urgency and current climate emergency.

With often limited available resources, our actions need to be strategic, collaborative, evidence based, prioritised and cost-effective.

5.1.1. Objectives and supporting strategies

Objective	Goal 1	Goal 2	Supporting strategies
1.1 Consider biodiversity impacts and opportunities in day-to-day operations and when making Council decisions	✓	✓	<p>A. Embed delivery of the Biodiversity Strategy within the CEO's contract / performance plan.</p> <p>B. Embed consideration of biodiversity protection and enhancement within Council's decision-making processes, and into new Council policies, strategies and plans.</p> <p>C. Support all Council staff and contractors to be adequately informed on biodiversity matters, including biodiversity targets and legislative obligations.</p> <p>D. Implement and enforce Council's regulatory tools that support biodiversity protection.</p> <p>E. Allocate time, resources and training to staff charged with delivering biodiversity programs and other works that help achieve the goals and targets of this Strategy.</p>

Objective	Goal 1	Goal 2	Supporting strategies
1.2 Demonstrate leadership by improving the biodiversity values of Council-owned and managed land	✓		<p>A. Actively avoid and minimise the impact of Council operations (such as capital works projects and maintenance activity) on native vegetation and biodiversity.</p> <p>B. Increase the conservation values (e.g. restoration and improved connectivity) of Council’s reserves, wetlands and roadsides.</p> <p>C. Consider opportunities to apply ‘nature-based solutions’ such as green infrastructure, biodiversity sensitive urban design (BSUD), water sensitive urban design (WSUD), carbon sequestration etc.</p> <p>D. Determine where there are opportunities for new or replacement planting in parks, reserves, activity centres and along urban streets; and implement a long-term planting program.</p>
1.3 Advocate for action by state and federal government that will facilitate positive biodiversity outcomes	✓		<p>A. Advocate for broad and urgent biodiversity action by state and federal government to protect and enhance biodiversity, including legislation, policy, enforcement mechanisms, programs, environmental impact assessments on infrastructure projects, and resourcing.</p> <p>B. Advocate for the state government to continue to coordinate, and further improve, an accessible and regularly updated biodiversity data ‘decision support tool’ to inform evidence-based decision making at the state and local scale.</p>
1.4 Pursue external funding for biodiversity management.	✓	✓	<p>A. Seek investment and commitment from all levels of government and other funding bodies to help protect and enhance the Shire’s biodiversity.</p> <p>B. Investigate opportunities for co-investment in restoration and revegetation from businesses seeking to meet environment and social governance objectives such as the nature repair market, natural capital and net-zero commitments.</p>

5.2. Focus Area 2 - People and Partnerships

Safeguarding biodiversity values across a vast landscape with various land uses and land tenures is challenging. We all share a responsibility in improving and enhancing the region's biodiversity and finding ways to reduce our impacts on the environment.

Council plays an important role in helping to facilitate partnerships and build community awareness, willingness and ability for positive biodiversity action to be undertaken. We continuously explore opportunities to encourage and support people and organisations to get involved.

We also help to collaboratively deliver on a range of policy such as the Burndap Birrarung Burndap Umarkoo Yarra Strategic Plan 2022-2032 for the Yarra River corridor.

Sharing biodiversity values and knowledge learned through collaboration benefits our environment and the health and wellbeing of our community.

Our partners regularly evolve and diversify, and include Traditional Owners, all levels of government, land and water management agencies, businesses, research institutions, environmental volunteer groups and our broader community – including residents, landholders, farmers, businesses, youth, community groups and others.

Council gratefully acknowledges the many individuals, volunteers and organisations contributing to positive biodiversity outcomes in our Shire.

5.2.1. Objectives and supporting strategies

Objective	Goal 1	Goal 2	Supporting strategies
2.1 Incorporate Traditional Owner knowledge within biodiversity management	✓	✓	<p>A. Traditional Owners help inform Caring for Country and recovery activities for threatened species and ecological communities.</p> <p>B. Identify opportunities for Council and the community to participate in training, programs and initiatives that Care for Country and build cultural awareness with Traditional Owners.</p> <p>C. Work with Traditional Owners and partners to explore options for cultural burning or ecological burning.</p>
2.2 Foster partnerships to achieve landscape-scale biodiversity outcomes	✓	✓	<p>A. Connect and collaborate with private landholders, community groups, Traditional Owners, researchers, and organisations such as Parks Victoria, Melbourne Water and neighbouring councils.</p> <p>B. Expand partner types to incorporate a variety of industry, businesses and academic institutions that seek to deliver on natural capital projects or Environmental and Social Governance obligations.</p> <p>C. Support and help to further build the capacity of Nillumbik environmental volunteer groups such as Landcare, Friends of Groups, wildlife volunteers and others; and celebrate these environmental volunteers.</p> <p>D. Participate in opportunities to contribute to/ comment on plans and policies that may have environmental impacts and/or gains.</p>

Objective	Goal 1	Goal 2	Supporting strategies
			<p>E. Work collaboratively to support the persistence of threatened species across all land tenures in Nillumbik.</p> <p>F. Upload data (including spatial data) on Council’s management actions towards threatened species and invasive species into the state government’s Victorian Biodiversity Atlas (VBA) to help inform collaborative decision making by all partners.</p> <p>G. Identify opportunities to support and encourage individuals and volunteer groups to upload biodiversity data into the VBA, or similar, so that a comprehensive range of data informs our knowledge and decision making.</p> <p>H. Network, share knowledge and learn about latest research and decision support tools available.</p>
<p>2.3 Increase people’s understanding of the environment and support them to protect and enhance biodiversity</p>	<p>✓</p>	<p>✓</p>	<p>A. Provide targeted education and communication to help people understand, appreciate, value and care for our environment.</p> <p>B. Launch and operate a <i>Nillumbik Environment and Climate Action Hub</i> (NECAH) at our Edendale Community Environment Farm.</p> <p>C. Support young people to learn about biodiversity and sustainability, including via the <i>Edendale Schools Environmental Education Program</i>.</p> <p>D. Deliver and support programs that promote and encourage habitat gardening in home gardens, properties and schools.</p> <p>E. Propagate and sell indigenous plants, and provide planting guidance, through the Edendale Indigenous Plant Nursery.</p> <p>F. Provide sustainable land management advice.</p> <p>G. Support and promote citizen science projects and platforms, and the associated monitoring of ecological values.</p> <p>H. Identify less engaged demographics/groups and the barriers to them taking action.</p>
<p>2.4 Provide opportunities for residents to regularly connect with nature</p>	<p>✓</p>	<p>✓</p>	<p>A. Promote and encourage people to visit Nillumbik’s reserves, parks and trails.</p> <p>B. Provide safe and welcoming access for visitors to Council’s reserves and Edendale, including through maintained trails, wayfinding and interpretive signage.</p> <p>C. Support people to view their backyards as places where they can appreciate nature.</p> <p>D. Host and support events/activities that provide opportunities for a diverse range of people to experience nature.</p> <p>E. Encourage and educate people to treat nature/biodiversity with respect and to avoid causing damage.</p>

Objective	Goal 1	Goal 2	Supporting strategies
			F. Establish reliable baseline information about Nillumbik resident's current connection with the natural environment.

Case Study – Working collaboratively to save threatened orchids

Nillumbik is home to a wonderfully diverse array of native Orchids, over 90 species have been observed.

Many of these orchids have unique relationships with fungi, pollinating insects and habitat types - making them more susceptible to local extinctions and being threatened across their range.

Over the past 10 years, to protect and increase the numbers of threatened orchids in Nillumbik, Council staff have been working with partners including Parks Victoria, DEECA, Royal Botanic Gardens Melbourne (RBG), Australian Native Orchid Society, research institutions, and volunteers, community groups and private landholders. Together, we comprise the 'Nillumbik Threatened Orchid Recovery Team'.

This partnership, focused on Nillumbik's most threatened orchids, has worked to increase the numbers of species such as the Charming Spider-orchid *Caladenia amoena*, which is only known to exist in three locations, all in Nillumbik; is below 100 plants in the wild; and is considered by the Federal government to be one of Australia's most endangered plants.

Through our collaborative action, there has been a small increase in numbers over the past several years. More are being grown by experts at the Royal Botanical Gardens, funded through a grant from DEECA, which – if they thrive - will be planted to bolster existing populations and also to create new locations, to help guard against potential catastrophic events.



5.3. Focus Area 3 - Species and Habitat Enhancement

Nillumbik is home to a rich and varied natural environment which we seek to protect and enhance.

All native plants and animals need suitable and high-quality habitat. We can protect these species by supporting healthy ecosystems through restoration of areas and mitigating the impacts of invasive species and other threatening processes and connecting fragmented habitat via wildlife corridors.

Species that are listed as threatened often require additional protections to support them to persist.

Objectives specific to addressing invasive species and other threatening processes are provided in Focus Area 4.

5.3.1. Objectives and supporting strategies

Objective	Goal 1	Goal 2	Supporting strategies
3.1 Protect and improve the condition and extent of habitat	✓		<p>A. Manage Council’s 100+ bushland reserves and wetlands, and vegetation along Council roadsides, with available funds targeted in a strategic manner.</p> <p>B. Identify opportunities to enhance the condition and extent of native vegetation across the Shire.</p> <p>C. Support people to protect and enhance biodiversity on private land, including through targeted outreach, advice and grant programs, encouraging the use of land management plans, and by supporting voluntary covenants or on-title agreements.</p> <p>D. Protect the condition of Council’s Native Vegetation Offset Sites, in perpetuity, and consider feasibility of any new site(s).</p> <p>E. Consider opportunities for the strategic acquisition of land to add to Council’s bushland reserve system - using a decision-matrix framework that comprehensively considers all aspects of such a decision.</p>
3.2 Protect and improve ecosystems and the ecological function of terrestrial and aquatic connectivity and genetic diversity	✓		<p>A. Maintain and improve biodiversity connectivity across the Shire, including through collaborations, investigations and targeted projects.</p> <p>B. Collaborate with Melbourne Water and other stakeholders to protect and improve the environmental values and significant ecological processes of waterways.</p>
3.3 Reduce the risk of extinction for all Nillumbik species	✓	✓	<p>A. Implement this Strategy in collaboration with partners and the community to provide a resilient and healthy natural environment for all species.</p> <p>B. Work collaboratively to support the implementation of recovery plans for threatened species and ecological communities.</p>

Objective	Goal 1	Goal 2	Supporting strategies
			<p>C. Ensure public and private land managers are aware of the presence and location of threatened flora species (i.e. orchids) on their land to effectively manage access or exclusion to sensitive sites.</p> <p>D. Build and maintain a seed library of priority Nillumbik plants, to protect genetic diversity and aid climate adaptation.</p> <p>E. Undertake and seek opportunities to monitor the distribution, abundance data and ecological information of Nillumbik’s species and communities to help inform priority actions to prevent local extinctions.</p>

DRAFT

5.4. Focus Area 4 - Mitigating Threatening Processes and Impacts

There are numerous threatening processes operating within Nillumbik that may impact on the condition of biodiversity values (refer to section 2.2).

Key risks and impacts arise from temperature increase, altered rainfall, extreme weather frequency, changing fire regimes, and invasive and pest species; combined with anthropogenic activities such as clearing, traffic, use of rodenticides and other harmful chemicals, fencing entanglement, attacks on wildlife by domestic cats and dogs, and incremental degradation.

The cumulative impact of such threats is concerning.

The scale of threatening processes is often so large that they are often very difficult to manage.

5.4.1. Objectives and supporting strategies

Objective	Goal 1	Goal 2	Supporting strategies
<p>4.1 Minimise risk to biodiversity from climate change</p>	✓	✓	<p>A. Improve the climate resilience of ecosystems and species by reducing the impact of invasive species and other threats.</p> <p>B. Encourage revegetation and restoration projects that maximise carbon sequestration, ecosystem function and improved bio-links.</p> <p>C. Encourage development that implements green infrastructure and nature-based solutions which will assist in mitigating or adapting to the impacts of climate change.</p> <p>D. Apply latest research and climate change projections to help guide Council's biodiversity management actions.</p>
<p>4.2 Reduce the presence and impact of invasive species across public and private land</p> <p><i>(For example, deer, rabbits, foxes, cats, pigs, goats; and a wide variety of woody, bulb and grassy weeds).</i></p>	✓		<p>A. Implement a biosecurity approach to guide the prioritisation and management of invasive species on Council land and seek opportunities to increase budget.</p> <p>B. Apply a landscape scale approach to reducing the presence of invasive species across all land tenures.</p> <p>C. Collaborate with government agencies, private landholders and adjacent Council's to prioritise pest animal and weed control strategies.</p> <p>D. Keep abreast of new and emerging, and established, invasive species, and options to prevent, eradicate, contain and manage them.</p> <p>E. Support landholders in managing invasive species, through assisted coordination, capacity building and land management grants.</p> <p>F. Apply Section 37 of the <i>Nillumbik General Local Law 1</i> when necessary to reduce noxious and environmental weed presence on private land.</p> <p>G. Seek government funding to deliver cross-tenure invasive species management programs.</p>

Objective	Goal 1	Goal 2	Supporting strategies
			H. Encourage the collation of invasive species data and management works from all partners into biological databases such as the VBA to enhance evidence-based decision making.
4.3 Reduce degradation to waterways	✓		A. Encourage best practice riparian management across urban and rural areas to reduce erosion, optimise infiltration of water into soils, and to trap silt and nutrients before flowing into waterways or wetlands.
4.4 Use Nillumbik's planning system effectively to protect and enhance biodiversity values	✓		A. Consolidate development within the urban growth boundary and seek to incorporate nature-based solutions in urban development and planning. B. Protect and enhance the natural environment in our rural areas by continuing to enforce the planning scheme, to avoid fragmentation and loss of the Green Wedge. C. Review the environmental framework within the planning scheme, with a focus on optimising and tailoring the strategic basis, application and content of planning controls designed to protect biodiversity outcomes in the Shire.
4.5 Reduce and eliminate the illegal clearing of vegetation	✓	✓	A. Provide education on the benefits and legalities of vegetation retention to help prevent illegal removal of trees and other native vegetation. B. Enforce Council regulation, planning and development controls that protect trees, native vegetation and threatened species. C. Monitor vegetation loss and regeneration over time, through analysis of aerial photography.
4.6 Balance the needs of bushfire mitigation and biodiversity protection	✓	✓	A. Work collaboratively with partners involved in bushfire mitigation to share knowledge that supports the delivery of collaborative and integrated biodiversity and fire management outcomes. B. Keep abreast of industry research into the design and maintenance of ecologically sustainable fire regimes. C. Include ecological requirements that consider fire dependent (i.e. wildflower and grasses) and sensitive species (i.e. orchids, hollow bearing trees etc) and communities in burn plans. D. Support landholders to understand how to consider biodiversity protection when preparing their property for bushfire season.

Objective	Goal 1	Goal 2	Supporting strategies
4.7 Protect native fauna from harm	✓	✓	<p>A. Target management actions to be specific for the species that they are seeking to protect, and the associated threats.</p> <p>B. Preserve high-quality fauna habitats and improve connectivity of habitat through restoration and invasive species management.</p> <p>C. Provide information and education for our community on how they can manage their property to help to protect native fauna, including from poisons, light spill, barbwire fencing or entanglement, containment of domestic cats and dogs, feeding of birds, lack of water etc.</p> <p>D. Collaborate with the Department of Transport to identify driver-behaviour education campaigns that might be feasible and useful to help mitigate wildlife vehicle collisions e.g. wildlife signage, road markings, speed reduction etc.</p> <p>E. Keep abreast of virtual fencing and other fauna protection and management trials, in terms of their efficacy and potential suitability for trial or implementation in Nillumbik.</p>

Case study - Climate change and other impacts on Southern Toadlets

Some of Nillumbik’s flora and fauna species are already feeling the effects of a warming and changing climate. Other threats exacerbate the effects of this climate change. Some species may be able to adapt and move to cope with the different conditions; while others may need assistance or interventions for them to survive.

Southern Toadlet *Pseudophryne semimarmorata* was once widespread across Nillumbik, being present in many smaller waterways and headwaters. However, a study initiated by the Nillumbik Landcare Network of former known sites found a significant decline across its range to only a handful of sites. Threats such as fragmentation of populations and habitat loss, changed rainfall patterns with climate change, altered hydrology, pest animal’s (in particular Deer) and disease have had a significant effect.

Partnerships between Council, Melbourne Water and Parks Victoria are attempting to improve habitat and this species from the impacts of Deer and disease. While raising awareness and getting schools and other groups interested to act for Southern Toadlet are important steps to protect the species in the region in the longer term. The threat of climate change however means that the species may need further assistance to cope with changes and could still be unable to persist.

6. Implementation

The 10-year timeframe of this Strategy means that Council's approach to supporting biodiversity protection and enhancement is likely to be adapted over time.

An Implementation Plan that specifies key biodiversity and land management actions will be developed every year and will be considered in Council's annual budget process.

Having an annual monitoring and review process will enable the progress of implementing the Strategy to be measured and evaluated in the context of changing conditions, policy, resourcing, knowledge and science, and to respond accordingly.

6.1. Progress reporting

Council will track progress and the outcomes of the Strategy. The indicators and targets allocated against each of the key focus areas are intended to illustrate whether Council and other land managers are progressing successfully towards them. This data will then assist in reporting back on the on-ground and monitoring actions achieved and provide a link as to whether Council goals are being met or falling short.

Evaluation will consider:

- To what extent have the goals and targets been reached?
- To what extent have the outcomes contributed to Biodiversity 2037?
- How sustainable are established funding mechanisms?
- What has helped and what has hindered effective implementation and outcomes?

An annual update will be provided to Councillors and a summary developed for Council's Annual Report and placed on our website. It will track progress and outcomes within each of our focus areas, and against indicators and targets.

7. References

- ALA, 2023. Nillumbik occurrence records [WWW Document]. Atlas of Living Australia. URL https://regions.ala.org.au/feature/8837585#group=ALL_SPECIES&subgroup=&guid=&from=1850&to=2023&tab=speciesTab&fq=
- Commonwealth of Australia, 2020. Australia's Strategy for Nature 2019-2030.
- Cooke, B., Davison, A., Kirkpatrick, J., Pearce, L., 2022. Protecting 30% of Australia's land and sea by 2030 sounds great - but is not what it seems [WWW Document]. The Conversation. URL <https://theconversation.com/protecting-30-of-australias-land-and-sea-by-2030-sounds-great-but-its-not-what-it-seems-187435> (accessed 4.6.23).
- DEECA, 2023a. Strategic Biodiversity Values Layer.
- DEECA, 2023b. NatureKit [WWW Document]. NatureKit 2.0 with SMP V4. URL <https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit>
- DELWP, 2021. Vicmap Vegetation Tree Extent.
- DELWP, 2017. Native Vegetation Regulation Extent.
- DSE, 2004. Vegetation Quality Assessment Manual - Guidelines for applying the habitat hectares scoring method.
- Nillumbik Shire Council, 2021. Nillumbik Shire Council Plan 2021-2025.
- Nillumbik Shire Council, 2018a. Nillumbik Tree Management Policy.
- Nillumbik Shire Council, 2018b. Nillumbik Tree Management Guideline.
- Nillumbik Shire Council, 2015. Invasive Species Action Plan 2015. Greensborough, Victoria.
- Nillumbik Shire Council, 2012a. Nillumbik Biodiversity Strategy 2012. Greensborough, Victoria.
- Nillumbik Shire Council, 2012b. Roadside Management Plan 2012 Part 1 Background and Policy.
- United Nations Environment Programme, 2022. Kunming-Montreal Global Biodiversity Framework, in: DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY. Presented at the Convention on Biological Diversity, United Nations, Montreal, Canada.

Appendix A Nillumbik’s Ecological Vegetation Classes

Nillumbik’s bioregions

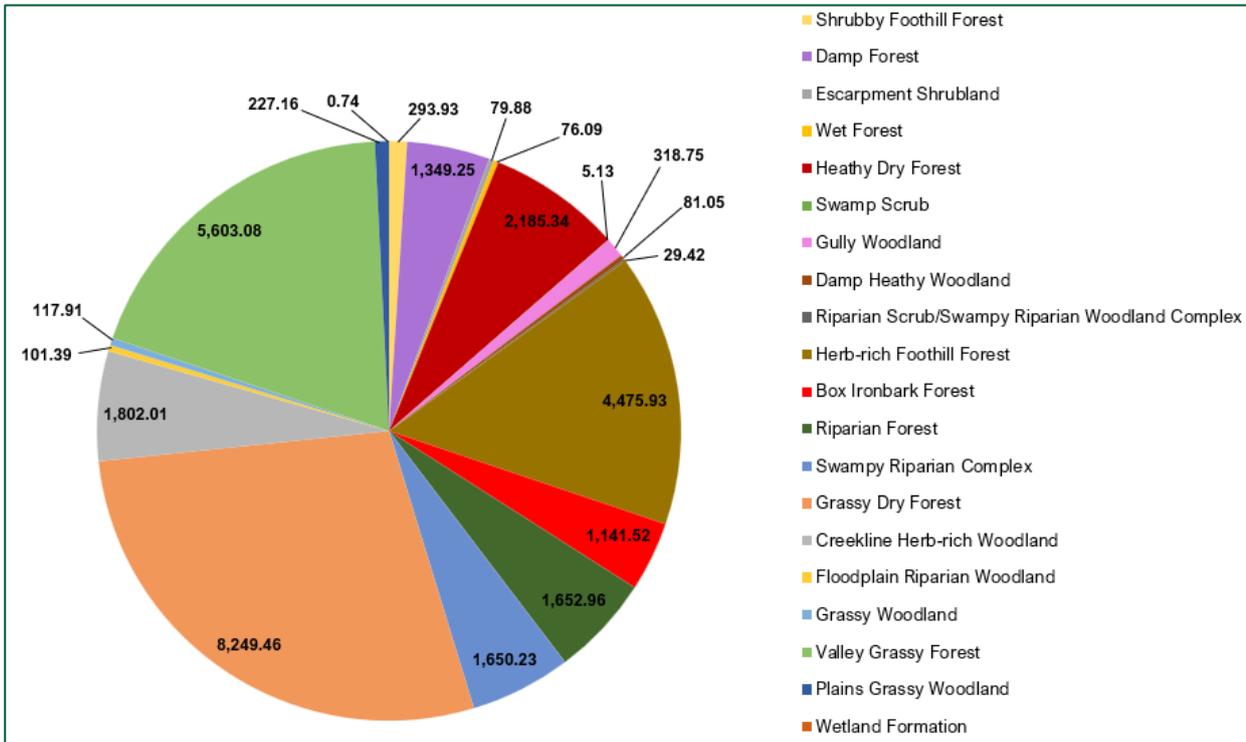


Figure 7-1 Extent of ecological vegetation classes (in hectares) in Nillumbik (Source: DEWLP 2017)

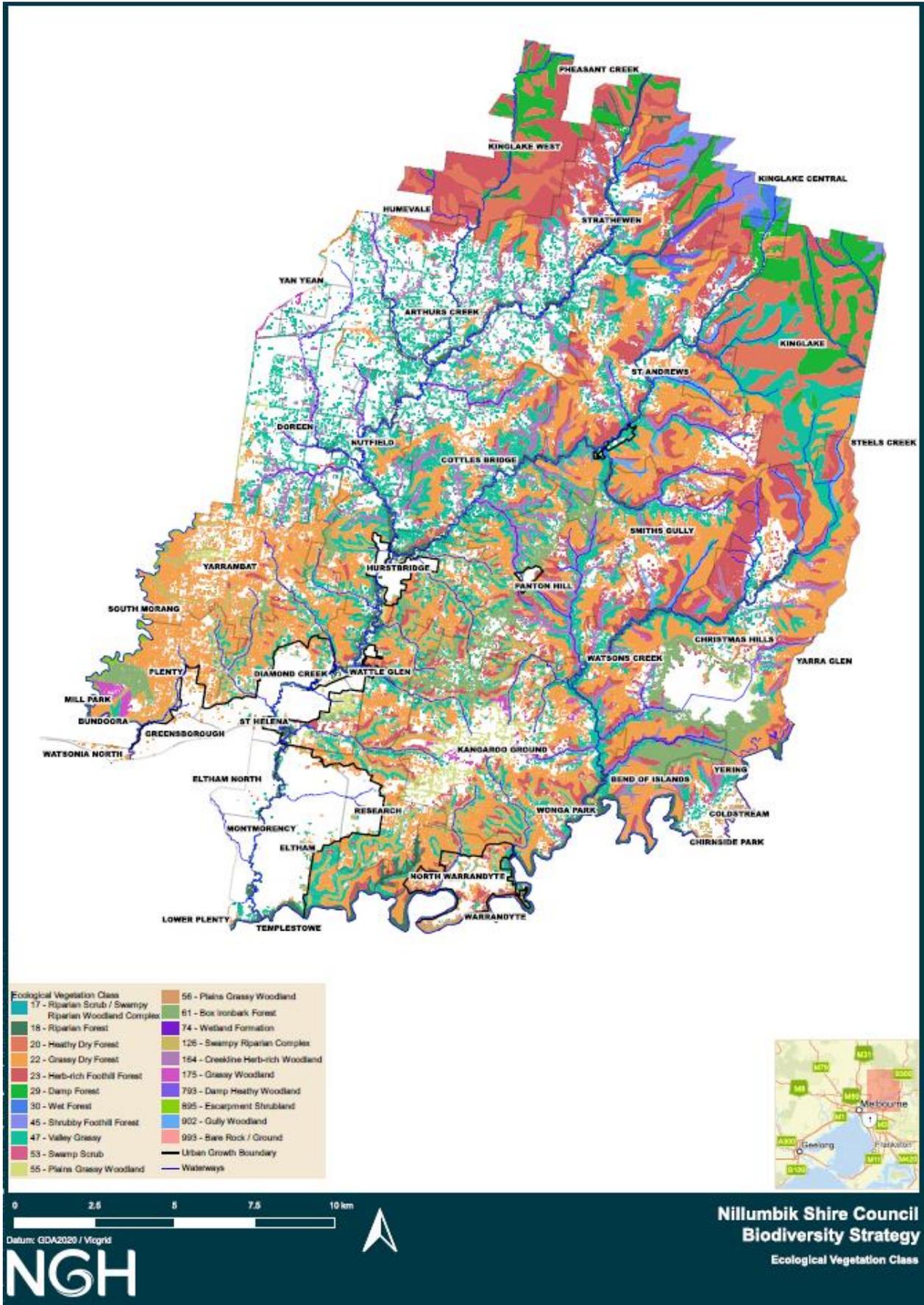


Figure 7-2 Ecological vegetation classes in Nillumbik

Appendix B Nillumbik's tree canopy extent

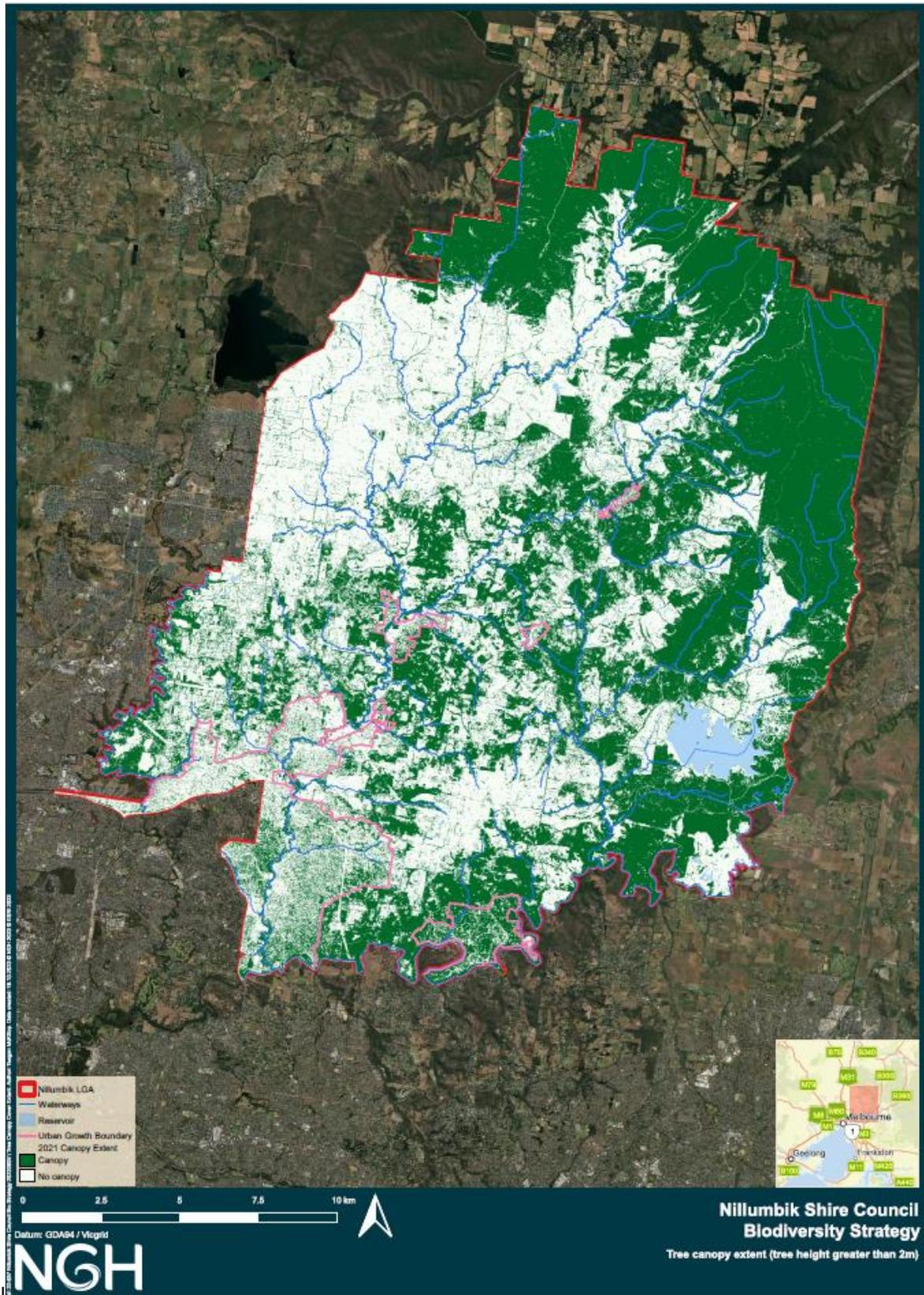


Figure 7-3 Tree canopy extent that is 2m plus in height (Source: DELWP 2021, based on Vic Map 2019/20 vegetation extent mapping)

Appendix C Threatened species

C.1 Threatened fauna

Source: Victorian Biodiversity Atlas 2023, Atlas of Living Australia 2023 and Matters of National Significance search tool 2023

Taxon Group	Scientific Name	Common Name	EPBC	FFG Status
Amphibian	<i>Litoria raniformis</i>	Growling Grass Frog	Vulnerable	Vulnerable
Amphibian	<i>Pseudophryne bibronii</i>	Brown Toadlet	Not listed	Endangered
Amphibian	<i>Pseudophryne semimarmorata</i>	Southern Toadlet	Not listed	Endangered
Aves	<i>Anseranas semipalmata</i>	Magpie Goose	Marine	Vulnerable
Aves	<i>Aphelocephala leucopsis</i>	Western Whiteface	Vulnerable	Not listed
Aves	<i>Geopelia cuneata</i>	Diamond Dove	Not listed	Vulnerable
Aves	<i>Polytelis swainsonii</i>	Superb Parrot	Vulnerable	Endangered
Aves	<i>Stictonetta naevos</i>	Freckled Duck	Not listed	Endangered
Aves	<i>Turnix pyrrhorthora</i>	Red-chested Buttonquail	Not listed	Endangered
Aves	<i>Accipiter novaehollandiae</i>	Grey Goshawk	Not listed	Endangered
Aves	<i>Acrodipsas brisbanensis</i>	Large Ant Blue Butterfly	Not listed	Endangered
Aves	<i>Actitis hypoleucos</i>	Common Sandpiper	Migratory, Marine	Vulnerable
Aves	<i>Anthochaera phrygia</i>	Regent Honeyeater	Critically Endangered	Critically Endangered
Aves	<i>Apus pacificus</i>	Fork-tailed Swift	Migratory, Marine	Not listed
Aves	<i>Ardea alba</i>	Great Egret	Marine	Not listed
Aves	<i>Ardea intermedia plumifera</i>	Plumed Egret	Not listed	Critically Endangered
Aves	<i>Aythya australis</i>	Hardhead	Not listed	Vulnerable
Aves	<i>Biziura lobata</i>	Musk Duck	Marine	Vulnerable
Aves	<i>Botaurus poiciloptilus</i>	Australasian Bittern	Endangered	Critically Endangered
Aves	<i>Burhinus grallarius</i>	Bush Stone-curlew	Not listed	Critically Endangered
Aves	<i>Calamanthus pyrrhopygius</i>	Chestnut-rumped Heathwren	Not listed	Vulnerable
Aves	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Migratory, Marine	Not listed
Aves	<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered, Migratory, Marine	Critically Endangered
Aves	<i>Calidris melanotos</i>	Pectoral Sandpiper	Migratory, Marine	Not listed
Aves	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	Endangered	Endangered
Aves	<i>Climacteris picumnus</i>	Brown Treecreeper	Vulnerable	Not listed
Aves	<i>Egretta garzetta</i>	Little Egret	Marine	Endangered
Aves	<i>Falco subniger</i>	Black Falcon	Not listed	Critically Endangered

Taxon Group	Scientific Name	Common Name	EPBC	FFG Status
Aves	<i>Gallinago hardwickii</i>	Latham's Snipe	Migratory	Not listed
Aves	<i>Grantiella picta</i>	Painted Honeyeater	Vulnerable	Vulnerable
Aves	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	Marine	Endangered
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	Not listed	Vulnerable
Aves	<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable, Migratory, Marine	Vulnerable
Aves	<i>Hydroprogne caspia</i>	Caspian Tern	Migratory, marine	Vulnerable
Aves	<i>Ixobrychus dubius</i>	Australian Little Bittern	Not listed	Endangered
Aves	<i>Lathamus discolor</i>	Swift Parrot	Critically Endangered, Marine	Critically Endangered
Aves	<i>Lewinia pectoralis</i>	Lewin's Rail	Not listed	Vulnerable
Aves	<i>Limosa lapponica</i>	Bar-tailed Godwit	Migratory, Marine	Vulnerable
Aves	<i>Lophochroa leadbeateri</i>	Major Mitchell's Cockatoo	Endangered	Critically Endangered
Aves	<i>Melanodryas cucullata</i>	Hooded Robin	Endangered	Vulnerable
Aves	<i>Monarcha melanopsis</i>	Black-faced Monarch	Migratory, Marine	Not listed
Aves	<i>Motacilla flava</i>	Yellow Wagtail	Migratory, Marine	Not listed
Aves	<i>Myiagra cyanoleuca</i>	Satin Flycatcher	Migratory, Marine	Not listed
Aves	<i>Neophema chrysostoma</i>	Blue-winged Parrot	Vulnerable, Marine	Not listed
Aves	<i>Neophema pulchella</i>	Turquoise Parrot	Not listed	Vulnerable
Aves	<i>Neophema splendida</i>	Scarlet-chested Parrot	Not listed	Endangered
Aves	<i>Ninox connivens</i>	Barking Owl	Not listed	Critically Endangered
Aves	<i>Ninox strenua</i>	Powerful Owl	Not listed	Vulnerable
Aves	<i>Oxyura australis</i>	Blue-billed Duck	Not listed	Vulnerable
Aves	<i>Pandion haliaetus</i>	Osprey	Migratory, Marine	Not listed
Aves	<i>Pedionomus torquatus</i>	Plains-wanderer	Critically Endangered	Critically Endangered
Aves	<i>Plegadis falcinellus</i>	Glossy Ibis	Migratory, Marine	Not listed
Aves	<i>Porzana pusilla</i>	Baillon's Crake	Marine	Not listed
Aves	<i>Pycnoptilus floccosus</i>	Pilotbird	Vulnerable	Vulnerable
Aves	<i>Pyrrholaemus sagittatus</i>	Speckled Warbler	Not listed	Endangered
Aves	<i>Rhipidura rufifrons</i>	Rufous Fantail	Migratory, Marine	Not listed
Aves	<i>Spatula rhynchotis</i>	Australasian Shoveler	Not listed	Vulnerable
Aves	<i>Stagonopleura guttata</i>	Diamond Firetail	Vulnerable	Vulnerable
Aves	<i>Tringa nebularia</i>	Common Greenshank	Migratory, Marine	Endangered
Aves	<i>Tyto novaehollandiae</i>	Masked Owl	Not listed	Critically Endangered
Aves	<i>Tyto tenebricosa</i>	Sooty Owl	Not listed	Endangered
Fish	<i>Galaxiella pusilla</i>	Striped Galaxias	Vulnerable	Endangered
Fish	<i>Nannoperca australis</i>	Southern Pygmy Perch (Murray-Darling Basin lineage)	Vulnerable	Vulnerable
Fish	<i>Prototroctes maraena</i>	Australian Grayling	Vulnerable	Endangered

Taxon Group	Scientific Name	Common Name	EPBC	FFG Status
Fish	<i>Tandanus tandanus</i>	Freshwater Catfish	Not listed	Endangered
Invertebrate	<i>Paralucia pyrodiscus lucida</i>	Eltham Copper Butterfly	Endangered	Endangered
Invertebrate	<i>Temognatha sanguinipennis</i>	Jewel Beetle	Not listed	Endangered
Invertebrate	<i>Thaumatoperla robusta</i>	Stonefly	Not listed	Endangered
Invertebrate	<i>Trapezites luteus luteus</i>	Yellow Ochre Butterfly	Not listed	Endangered
Mammal	<i>Dasyurus maculatus maculatus</i>	Spot-tailed Quoll	Endangered	Endangered
Mammal	<i>Miniopterus orianae oceanensis</i>	Eastern Bent-winged Bat	Not listed	Critically Endangered
Mammal	<i>Ornithorhynchus anatinus</i>	Platypus	Not listed	Vulnerable
Mammal	<i>Petauroides volans</i>	Southern Greater Glider	Endangered	Endangered
Mammal	<i>Petaurus australis australis</i>	Yellow-bellied Glider	Vulnerable	Vulnerable
Mammal	<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	Not listed	Vulnerable
Mammal	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Vulnerable	Vulnerable
Mammal	<i>Rhinolophus megaphyllus megaphyllus</i>	Eastern Horseshoe Bat	Not listed	Endangered
Mammal	<i>Sminthopsis leucopus</i>	White-footed Dunnart	Not listed	Vulnerable
Mammal	<i>Sminthopsis murina murina</i>	Common Dunnart	Not listed	Vulnerable
Reptile	<i>Chelodina expansa</i>	Broad-shelled Turtle	Not listed	Endangered
Reptile	<i>Eulamprus tympanum</i>	Southern Water-skink	Endangered (Eulamprus tympanum marnieae)	Not listed
Reptile	<i>Pseudemoia rawlinsoni</i>	Glossy Grass Skink	Not listed	Endangered
Reptile	<i>Varanus varius</i>	Lace Monitor	Not listed	Endangered

C.2 Threatened flora

Source: Victorian Biodiversity Atlas 2023, Atlas of Living Australia 2023 and Matters of National Significance search tool 2023

Scientific name	Common name	EPBC status	FFG status
<i>Acacia leprosa</i> var. <i>uninervia</i>	Large-leaf Cinnamon-wattle	Not listed	Endangered
<i>Acacia stictophylla</i>	Dandenong Wattle	Not listed	Endangered
<i>Amphibromus fluitans</i>	River Swamp Wallaby-grass	Vulnerable	Not listed
<i>Austrostipa rudis</i> subsp. <i>australis</i>	Veined Spear-grass	Not listed	Endangered
<i>Billardiera scandens</i> s.s.	Velvet Apple-berry	Not listed	Endangered
<i>Caladenia amoena</i>	Charming Spider-orchid	Endangered	Critically Endangered
<i>Caladenia concolor</i>	Crimson Spider-orchid	Vulnerable	Endangered
<i>Caladenia oenochila</i>	Wine-lipped Spider-orchid	Not listed	Critically Endangered
<i>Caladenia rosella</i>	Little Pink Spider-orchid	Endangered	Critically Endangered
<i>Caladenia vulgaris</i>	Slender Pink-fingers	Not listed	Vulnerable

Scientific name	Common name	EPBC status	FFG status
<i>Calochilus imberbis</i>	Naked Beard-orchid	Not listed	Critically Endangered
<i>Cardamine papillata</i>	Forest Bitter cress	Not listed	Endangered
<i>Coronidium gunnianum</i>	Pale Swamp Everlasting	Not listed	Critically Endangered
<i>Corybas fimbriatus</i>	Fringed Helmet-orchid	Not listed	Endangered
<i>Dianella amoena</i>	Matted Flax-lily	Endangered	Critically Endangered
<i>Dianella longifolia var. grandis</i>	Glaucous Flax-lily	Not listed	Critically Endangered
<i>Dianella sp. aff. longifolia (Benambra)</i>	Arching Flax-lily	Not listed	Not listed
<i>Dipodium pardalinum</i>	Spotted Hyacinth-orchid	Not listed	Endangered
<i>Eucalyptus fulgens</i>	Green Scentbark	Not listed	Endangered
<i>Eucalyptus leucoxylon subsp. connata</i>	Melbourne Yellow-gum	Not listed	Endangered
<i>Eucalyptus yarraensis</i>	Yarra Gum	Not listed	Critically Endangered
<i>Euchiton umbricola</i>	Cliff Cudweed	Not listed	Endangered
<i>Euphrasia collina subsp. trichocalycina</i>	Purple Eyebright	Not listed	Vulnerable
<i>Gentianella polysperes</i>	Early Forest-gentian	Not listed	Endangered
<i>Geranium solanderi var. solanderi</i>	Austral Crane's-bill	Not listed	Endangered
<i>Glycine latrobeana</i>	Clover Glycine	Vulnerable	Vulnerable
<i>Goodia pubescens</i>	Silky Golden tip	Not listed	Endangered
<i>Grevillea repens</i>	Creeping Grevillea	Not listed	Endangered
<i>Hibbertia porcata</i>	Christmas Guinea-flower	Not listed	Not listed
<i>Isolepis wakefieldiana</i>	Tufted Club-sedge	Not listed	Endangered
<i>Levenhookia sonderi</i>	Slender Stylewort	Not listed	Endangered
<i>Olearia ramulosa var. tomentosa</i>	Downy Daisy-bush	Not listed	Not listed
<i>Pomaderris vacciniifolia</i>	Round-leaf Pomaderris	Critically Endangered	Critically Endangered
<i>Prasophyllum lindleyanum</i>	Green Leek-orchid	Not listed	Endangered
<i>Pterostylis chlorogramma</i>	Green-striped Greenhood	Vulnerable	Endangered
<i>Pterostylis clivosa</i>	Red-tip Greenhood	Not listed	Endangered
<i>Pterostylis cucullata</i>	Leafy Greenhood	Vulnerable	Endangered
<i>Pterostylis planulata</i>	(blank)	Not listed	Endangered
<i>Pterostylis smaragdina</i>	Emerald-lip Greenhood	Not listed	Endangered
<i>Pterostylis X ingens</i>	Sharp Greenhood	Not listed	Vulnerable
<i>Pultenaea glabra</i>	Smooth Bush-pea	Vulnerable	Not listed
<i>Pultenaea juniperina</i>	Prickly Bush-pea	Not listed	Vulnerable
<i>Pultenaea weindorferi</i>	Swamp Bush-pea	Not listed	Endangered
<i>Ranunculus amplus</i>	Lacey River Buttercup	Not listed	Critically Endangered
<i>Rhagodia parabolica</i>	Fragrant Saltbush	Not listed	Vulnerable
<i>Rutidosis leptorhynchoides</i>	Button Wrinklewort	Endangered	Endangered
<i>Scaevola calendulacea</i>	Dune Fan-flower	Not listed	Endangered
<i>Senecio campylocarpus</i>	Bulging Fireweed	Not listed	Endangered
<i>Sticherus tener</i>	Silky Fan Fern	Not listed	Endangered

Scientific name	Common name	EPBC status	FFG status
<i>Syntrichia anderssonii</i>	Screw Moss	Not listed	Endangered
<i>Tetratheca stenocarpa</i>	Long Pink-bells	Not listed	Endangered
<i>Thelymitra X irregularis</i>	Crested Sun-orchid	Not listed	Endangered
<i>Thryptomene calycina</i>	Grampians Thryptomene	Not listed	Endangered
<i>Utricularia gibba</i>	Bladderwort	Not listed	Endangered
<i>Wurmbea uniflora</i>	One-flower Early Nancy	Not listed	Vulnerable

DRAFT

Appendix D Strategic habitat links across Nillumbik

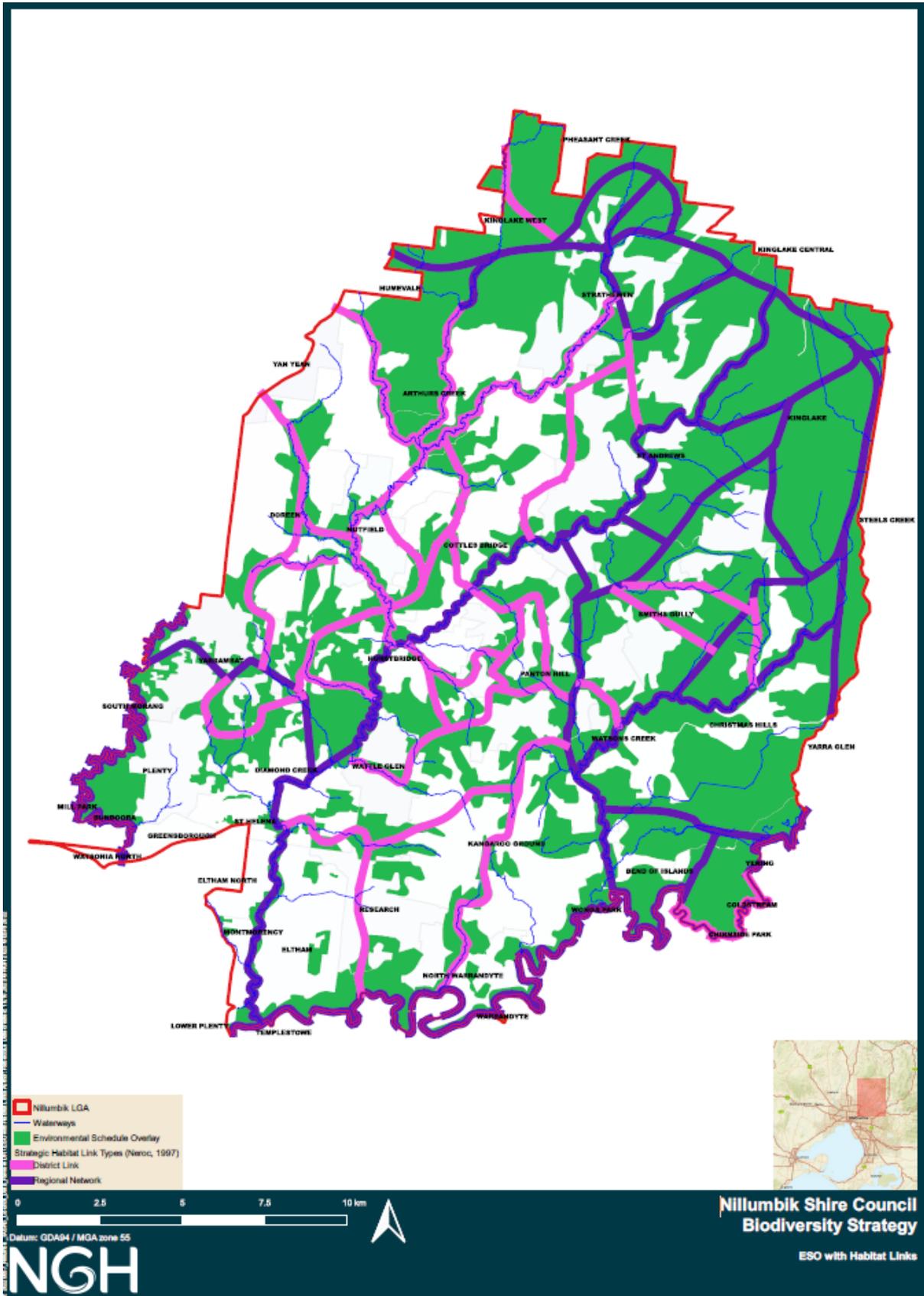


Figure 7-4 Nillumbik’s strategic habitat corridors/links

Appendix E Legislative and policy framework

This Strategy aligns with Australia's hierarchy of legislation and biodiversity policy. Legislation at the Federal, State Victorian (Vic) government and local level contribute to the retention of biodiversity within private and public lands. Key legislation includes:

- *Environment Protection and Biodiversity Conservation Act 1999* (Federal)
- *Biosecurity Act 2015* (Federal)
- *Flora and Fauna Guarantee Act 1988* (Vic)
- *Catchment and Land Protection Act 1994* (CaLP) (Vic)
- *Planning and Environment Act 1987* (P&E Act) (Vic).

The protection of the Shire's flora, fauna and ecosystems also aligns with global, Commonwealth and State biodiversity strategies and frameworks including:

- Kunming-Montreal Global Biodiversity Framework (International)
- Australia's Strategy for Nature 2019-2030 and Threatened Species Strategy 2021 – 2031 (Federal)
- Protecting Victoria's Environment Biodiversity 2037 (Vic).

These frameworks stipulate measurable, quantitative targets for environmental areas of protection such as vegetation cover and promote the means for implementing and achieving goals and targets which the Nillumbik Strategy also seeks to demonstrate and achieve.

E.1 International biodiversity convention

The international Kunming-Montreal Global Biodiversity Framework (GBF) (United Nations Environment Programme, 2022), of which Australia is a signatory, was adopted in December 2022. The GBF sets numerous global biodiversity actions for the next decade; notably, specifying quantitative measures including *net gains of at least 5 per cent in the area, connectivity and integrity of natural systems, and to ensure at least 30 per cent of terrestrial, inland water, and of coastal and marine areas are effectively conserved and managed*. The GBF aims to galvanize urgent and transformative action by governments and indeed, all of society (including indigenous peoples and local communities, civil society, and businesses), to achieve the outcomes it sets out in its vision, mission, goals and targets. The GBF measurable targets enable quantitative assessment of progress to be more easily monitored and measured.

E.2 Federal government

The EPBC Act provides a legal framework to protect and manage matters of national environmental significance (MNES) and internationally important flora, fauna, ecological communities and heritage places. The Australian Government has set a national goal to protect and conserve 30 per cent of land and 30 per cent of oceans by 2030 ('30 by 30') (Cooke et al., 2022). Australia's Strategy for Nature 2019-2030 (ASN) (Commonwealth of Australia, 2020) coordinates national delivery of Australia's international commitments. The Federal Threatened Species Strategy 2021-2031 contributes to the objectives and related progress measures to maximise species secured in nature. Australia's Pest Animal Strategy 2017-2027 provides national guidance on preventing and responding to new pest animal incursions and how manage the negative impacts of established pest animals.

All levels of government must commit to a coordinated effort to achieve the national goal, and the Nillumbik Biodiversity Strategy seeks to incorporate a locally relevant refinement of this 30 per cent conservation goal. Nillumbik's location in the peri-urban Green Wedge means the Shire's current vegetation coverage sits well above most national and regional goals, making it well-placed to lead the region in preserving biodiversity.

E.3 State government

The State Planning Policy Framework provides specific direction regarding the protection and management of biodiversity and native vegetation including that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.

Biodiversity 2037’s primary goals focus on maintaining environmental health and advocates moving away from focussing on the most endangered species, to how ecosystems and ecological processes can be managed for the benefit of all species, particularly given the impacts of climate change.

The Victorian Public Health and Wellbeing Plan 2019-2023 includes strategic direction aimed at increasing active living, particularly in the natural environment, to improve Victorian’s health, reduce environmental impacts and increase peoples connection with nature.

State-developed spatial analytical tools set strategic biodiversity value scores (SBV) (0–100) that provide a score of relative biodiversity importance to all parts of the Victorian landscape (DEECA, 2023a). These SBV scores are derived from a combination of data for important areas for threatened flora and fauna, levels of depletion, connectivity, vegetation types and condition to . The figure below illustrates Nillumbik’s comparatively high biodiversity values compared with other Greater Melbourne local government areas.

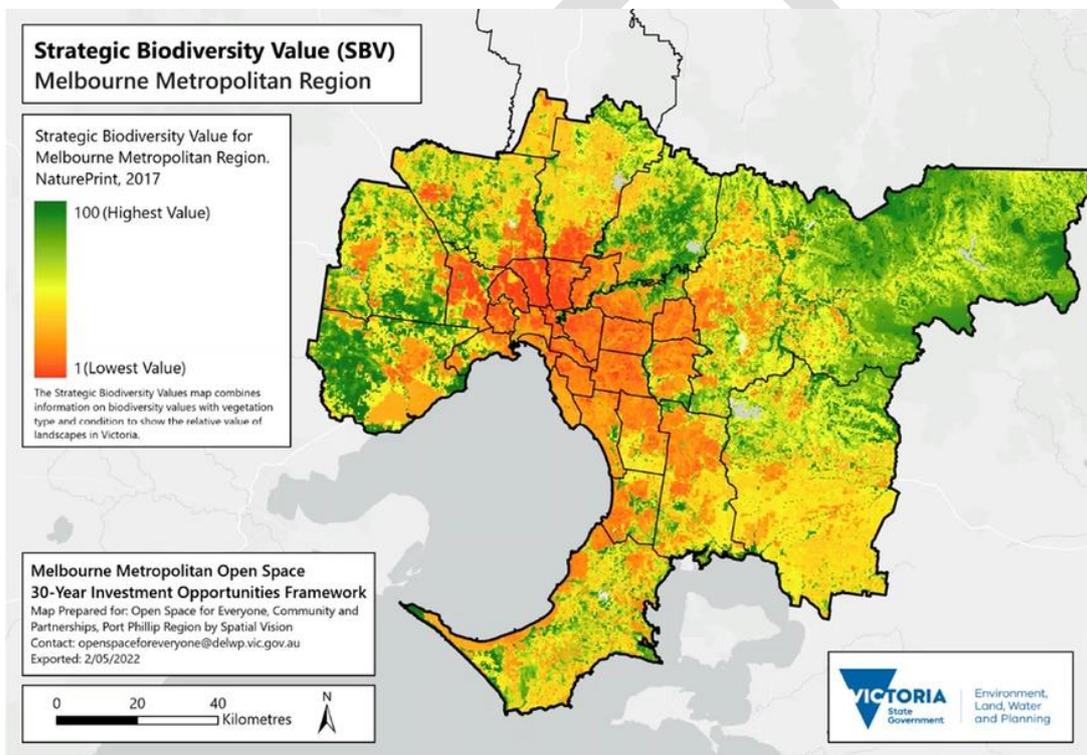


Figure 7-5 Biodiversity values shown using Vic government’s NatureKit tool (Source: DEECA, 2023c)

E.4 Council

This Strategy supports the delivery of our Community Vision – Nillumbik 2040 and our Council Plan, which place high importance on caring for our environment.

It is delivered in tandem with a range of Council strategies and plans that operate together to help manage biodiversity values in Nillumbik.

Many have overlapping objectives and targets for the environment, biodiversity and nature. They include the Municipal Planning Strategy and our planning scheme, Local Laws, Municipal Health and Wellbeing Strategy, Green Wedge Management Plan 2019, Neighbourhood Character Strategy 2023, Climate Action Plan 2022–2032, Tree Management Policy, Roadside Management Plan 2012, and our Access, Equity and Inclusion Policy.

It builds on the achievements of various previous iterations of Council's Biodiversity Strategy, Invasive Species Action Plan, Weed Action Plan, Rabbit Action Plan, Environmental Education Strategy and Bushland Reserve prioritisation.

DRAFT

NGH Pty Ltd

NSW • ACT • QLD • VIC

ABN 31 124 444 622 ACN 124 444 622

E: ng@nghconsulting.com.au

GOLD COAST

2B 34 Tallebudgera Creek Road
Burleigh Heads QLD 4220
(PO Box 424 West Burleigh QLD 4219)

T. (07) 3129 7633

SYDNEY REGION

Unit 17, 21 Mary Street
Surry Hills NSW 2010

T. (02) 8202 8333

BEGA

Suite 11, 89-91 Auckland Street
(PO Box 470)
Bega NSW 2550

T. (02) 6492 8333

MELBOURNE

Level 14, 10-16 Queen Street
Melbourne VIC 3000

T: (03) 7031 9123

TOWNSVILLE

Level 4, 67-75 Denham Street
Townsville QLD 4810

T. (07) 4410 9000

BRISBANE

T3, Level 7, 348 Edward Street
Brisbane QLD 4000

T. (07) 3129 7633

NEWCASTLE - HUNTER & NORTH COAST

Level 1, 31-33 Beaumont Street
Hamilton NSW 2303

T. (02) 4929 2301

WAGGA WAGGA - RIVERINA & WESTERN NSW

35 Kincaid Street (PO Box 5464)
Wagga Wagga NSW 2650

T. (02) 6971 9696

CANBERRA

Unit 8, 27 Yallourn Street
(PO Box 62)

Fyshwick ACT 2609

T. (02) 6280 5053

SUNSHINE COAST

Level 2 Aerodrome Road
Maroochydore QLD 4558

(07) 4410 9000

WODONGA

Unit 2, 83 Hume Street
(PO Box 506)

Wodonga VIC 3690

T. (02) 6067 2533