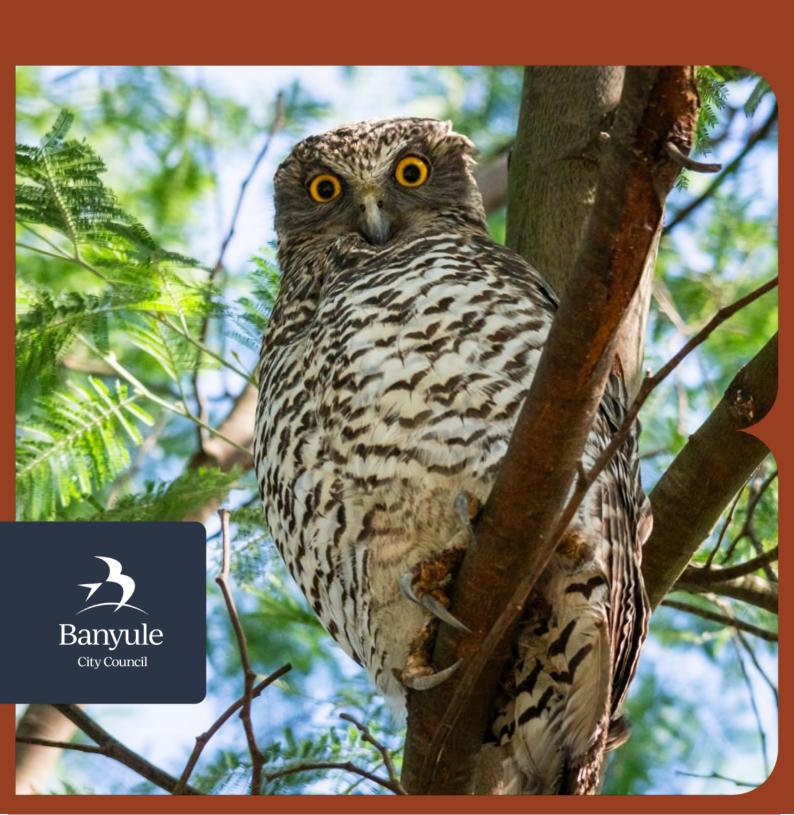
Biodiversity Strategy

Supporting our natural environment

2025-2035



Acknowledgement

Banyule City Council is proud to acknowledge the Wurundjeri Woi-wurrung people as Traditional Custodians of the land and we pay respect to all Aboriginal and Torres Strait Islander Elders, past, present and emerging, who have resided in the area and have been an integral part of the region's history.

The lands of the Wurundjeri Woi-wurrung people encompass the entire local government area of Banyule, which is known as 'big hill' in traditional language. Our First Nations people have a deep connection to the land, waterways and its diverse flora and fauna.

This strategy acknowledges the Wurundjeri Woi-wurrung people as the traditional custodians of this land and respects their vast knowledge in caring for country. It outlines our commitment to working with our First Nations people and supporting them through self-determination of how they care for country and learn together.

Prior to European settlement, our First Nations People were integral in managing the natural land. Since that time, much of the landscape has changed and biodiversity has been in decline. Modern biodiversity management needs to respect and learn from our First Nations people's way of land management.

In partnership with the Wurundjeri Woi-wurrung and all First Nations people residing in Banyule, we strive to protect and enhance our natural environment, so future generations have a healthy place to work, play and learn.

Diversity Statement

Our community is made up of diverse cultures, beliefs, abilities, bodies, sexualities, ages and genders. We are committed to access, equality, participation, and rights for everyone; principles which empower, foster harmony, and increase the wellbeing of an inclusive community.

This strategy stives to provide meaningful opportunities to connect with nature for all who reside in Banyule. Connection to nature provides a number of positive health and wellbeing outcomes which are integral to a connected and inclusive community. We strive to provide safe, healthy, active, and inclusive opportunities for our community to engage with nature in a meaningful way.



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Glossary

Term	Definition	
Biodiversity Monitoring Program	A structured program to track biodiversity indicators and inform adaptive management.	
Biodiversity Sensitive Urban Design (BSUD)	Urban planning and design that incorporates biodiversity considerations into built environments.	
Bioregions	Large areas defined by similar climate, geology, soils, and vegetation. Banyule includes the Gippsland Plain, Highlands Southern Fall, and Victorian Volcanic Plains.	
Citizen Science	Public participation in scientific research and data collection, especially for biodiversity monitoring.	
Conservation Reserves	Areas managed specifically for the protection and enhancement of biodiversity.	
Ecological Connectivity	The degree to which landscapes facilitate or impede movement among habitat patches.	
Ecological Vegetation Classes (EVCs)	Unique combinations of plant species and environmental characteristics that define vegetation communities.	
Environmental Friends Groups	Community volunteer groups that work with Council to protect and enhance local biodiversity.	
Environmental Significance Overlay (ESO)	A planning control used to protect areas of environmental significance.	
Extinction Debt	The concept that species may become extinct in the future due to past habitat loss, even if current conditions improve.	
Flagship Species	Iconic or ambassador species used to raise awareness and support for biodiversity conservation	
Habitat Fragmentation	The breaking up of continuous habitat into smaller, isolated patches, often due to urban development.	
Indigenous Species	Species that are native to a specific geographic area.	
Local Extinction	The disappearance of a species from a particular area, even if it exists elsewhere.	
Local Provenance	Refers to plants grown from seeds collected from the local area, ensuring genetic suitability to local conditions.	
Monotreme	A type of mammal that lays eggs, such as the Platypus.	
Nature-based Solutions	Strategies that use natural processes and ecosystems to address environmental challenges like climate change.	
No Local Extinction Plan	A plan to prevent the local extinction of key species by protecting their habitats and monitoring populations.	
Pest Plants and Animals	Non-native species that threaten local ecosystems by outcompeting or preying on native species.	
Riparian Environments	Ecosystems located along the banks of rivers and streams, important for biodiversity and water quality.	

Significant Landscape Overlay (SLO)	A planning control to protect and manage significant landscapes.
Vegetation Protection Overlay (VPO)	A planning tool to protect significant vegetation on private and public land.
Wildlife Corridors	Strips of natural habitat that connect separate populations of wildlife, allowing for movement and genetic exchange.



With Thanks

The Biodiversity Strategy wouldn't be possible without significant contribution from many people. This truly is a document formed through contribution from community and industry, and we thank all who have played a part in its development.

We would like to thank and acknowledge the contribution of *Tom Crawshaw* in particular who's amazing photography brings this document to life. Tom has been instrumental in advocating for the natural environment for many years as a member of Banyule's Bushland Management Team and taken pride in capturing our amazing local flora and fauna to celebrate and elevate the value of biodiversity locally. All of Tom's photos throughout the Strategy are of species that occur throughout Banyule, and he has been able to capture them so beautifully which helps to lift and celebrate our natural environment.

A special mention to our *Community Biodiversity Working Group* and our *Environmental Friends Groups* who have helped form the bones of this Strategy throughout the consultation phase. The members of these groups are all local environmental advocates who care deeply about proactive and positive biodiversity outcomes for all. We hope this Strategy reflects and pays respect to your generous nature and expertise.

To **Practical Ecology** who provided Council with an independent assessment of best practice biodiversity management through the detailed Biodiversity Benchmarking report. This has enabled us to develop the Strategy, combined with community insights and internal knowledge, setting Council up to be a leader and a biodiversity positive organisation.

To all of our internal colleagues who have provided such constructive and thoughtful feedback. We hope that you can all see parts of your contributions throughout and feel energised to work collaboratively in making biodiversity protection and enhancement a priority for the future of our city. Our goal to be a biodiversity positive municipality will require collective effort and we are thrilled to see how engaged you have all been to work together with our community to achieve this.

"We don't own the planet Earth; we belong to it, and we must share it with our wildlife."

Steve Irwin



Mayors Message

Banyule is well regarded by its community as a green, leafy municipality bounding in nature, bushland areas and iconic wildlife that many of us hold a deep connection to. Our diverse and rich ecosystems support some unique and important flora and fauna, including our **six** flagship faunal species (Eltham Copper Butterfly, Powerful Owl, Krefft's Glider, Swift Parrot, Platypus and the Growling Grass Frog) which we celebrate and work to protect these and all natural systems in Banyule.

Conserving and managing biodiversity is essential for our own health and wellbeing, a moral imperative and crucial for the future of our own livelihoods. Threats to biodiversity are ever-present and climate change brings one of the biggest challenges to our natural environment. It is incumbent on all of us to be good stewards for nature. As such, Council is committed to elevating biodiversity conservation efforts, supporting, and mobilising the community and demonstrating leadership to halt and reverse biodiversity decline.

In addition to setting Council's biodiversity priorities, this strategy provides a useful guide for all residents and visitors to Banyule about what simple actions and steps they can take to support our unique wildlife and ecosystems. There are many incentive programs offered to residents that can provide guidance and support to improve biodiversity in their own backyards. Engaging with existing programs focused on our local natural environment is a major drive for Council to support its residents with active living and mental health benefits by connecting with nature.

The Strategy also recognises the importance of partnerships and collaboration to manage the natural environment, including with residents, community groups, industry bodies, businesses and traditional custodians of the land, the Wurundjeri Woi-wurrung people. As stewards of this land for tens of thousands of years, our First Nations people offer a wealth of knowledge in traditional land management practices that will continue to shape and inform our understanding and management of natural environments in Banyule for years to come. Strong relationships with our partners and collaborators are integral to achieving our vison that:

By 2035, Banyule has preserved all locally significant fauna, enhanced wildlife corridors, maintained diverse and healthy indigenous flora, increased canopy cover and fostered a strong community connection to nature.



Executive Summary

This **ten-year** Biodiversity Strategy (the Strategy) outlines the importance of urban biodiversity for our local flora, fauna, traditional custodians and all who reside in the City of Banyule. Healthy biodiversity underpins a healthy society, ensuring our health and wellbeing is strong and our local natural assets are protected and enhanced. The Strategy has been developed to:

- Define and celebrate our existing natural values and the space available for biodiversity in Banyule.
- Acknowledge the challenges facing biodiversity and highlight a proactive path forward.
- Detail the importance of understanding and monitoring our biodiversity health, so we can make informed decisions about out natural land management practices.
- Recognises that a collective effort is instrumental to achieve positive biodiversity outcomes.
- Designs a call to action for all in making biodiversity a priority.
- Detail how community can connect and engage with nature to be effective environmental stewards, and
- Clearly outline the steps needed to achieve best practice biodiversity management for Council and the community.

Biodiversity globally and locally is in crisis (IUCN Red List of Threatened Species, 2023). The UN Sustainable Guidelines calls upon organisations to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and biodiversity loss" (UN Sustainable Design Guidelines, 2015). To do this effectively we need to monitor our biodiversity to understand its trends. The Strategy sets out this as a critical priority for the next 10 years. This allows Council to better understand natural environmental trends and alter management practices to respond ensuring an agile and informed approach to our natural environmental management.

How to read the Strategy

The Strategy comprises three parts.

Part 1, Introduction – Biodiversity in Banyule.

Introduces why we need a Biodiversity Strategy, what biodiversity is, the national, state, and local context, a vision for biodiversity in Banyule, introduces an ambitious call to action campaign of Planting 250k for Biodiversity and the *five* priority themes for the strategy.

- o Knowledge and Biodiversity
- o Our Healthy Biodiversity
- o Protecting our Biodiversity
- o Wellbeing and our Biodiversity
- Partnerships for Biodiversity

Part 2, A Call to Action for Biodiversity – Next Steps for Biodiversity in Banyule, Years 1 – 5.

Outlines the objectives, call to action statements and 5-year strategic direction of the strategy. It provides detail into the importance of each strategic direction and why it is needed.

Part 3, Action Plan – Actions for a biodiversity positive future.

The Action Plan is the detail of how the five-year strategic direction will be achieved. This is set out under each of the priority themes with the objectives of these being supported by specific actions, measurements, timeframes and costs associated.

The first five years of the Strategy sets out a direction of knowledge building and embedding biodiversity resourcing to then be reviewed and updated at year five with informed decisions from localised, evidence-based biodiversity knowledge at hand.

PART 1

INTRODUCTION

BIODIVERSITY IN BANYULE



Introduction

Banyule is well known for its natural areas, wildlife corridors and diverse flora and fauna. Our natural environment features highly for what our community values in satisfaction surveys and further reflected in our Community Vision 2041 statement.

"We in Banyule are a thriving, sustainable, inclusive, and connected community. We are engaged, we belong, and we value and protect our environment."



Image: Tom Crawshaw

This vision is a strong endorsement of the value we place on biodiversity. The Strategy provides a clear and actionable framework to realise this vision by building upon the community's appreciation for the natural environment and its commitment to its protection. Notably, the 2024 Community Satisfaction Survey, identified Parks and Gardens (natural environment) as the most valued aspect in the municipality. It is essential we prioritise the protection and enhancement of local biodiversity with this Strategy as an essential guiding document to achieve sustained success.

Our local environment is highly diverse due to its distinct landform composition, nestled at the junction of three bio-regions (an area's natural attributes including climate, geomorphology, geology, soils and vegetation). The vegetation is rich in diversity with 32 locally recognised Ecological Vegetation Communities (EVC's) have been identified, which are vegetation communities made up of a unique array of indigenous species. Central to Banyule's natural environment are the three main river corridors of the Darebin Creek, Birrarung (Yarra) River and Plenty River, providing a well-connected network of vegetation and nature. Further supporting our wildlife corridors are numerous parcels of public conservation and private land, which collectively support our recorded 630 indigenous flora and 340 fauna species. Banyule is significantly smaller in overall land size compared to some of its northern neighbours and our diversity of species is high compared to space available for indigenous flora and fauna. Our diversity of species compared to area of land is unique and worth celebrating.

This rich diversity of flora and fauna found within Banyule has been historically supported through passionate community advocacy and stewardship. Council has partnered with our community and other industry agencies to ensure the ongoing care of our local environment remains a priority.

However, this rich diversity of flora and fauna is sadly in decline through threats such as climate change, urbanisation and population growth which are ever present in a metropolitan city like Banyule. The Strategy outlines a plan to combat these threats through biodiversity monitoring, continued maintenance, and restoration, ensuring we retain our green, natural spaces for generations to come.

A Vision for Biodiversity in Banyule

The Banyule Biodiversity Strategy takes inspiration from and aligns with State and Federal government biodiversity objectives, and combined with our own local knowledge, sets out a long-term plan for biodiversity management in our municipality for the next 10 years. This strategy sets out an aspirational **vison** for biodiversity which acknowledges the communities' priorities for ongoing protection and care for our local natural environment.



Image: Sketch Group

This 10-year vision defines our commitment to maintain our existing biodiversity values, celebrating our local flora and fauna and improving our existing natural landscapes. It acknowledges the importance of biodiversity for human health and wellbeing through a commitment to connecting our community to nature. The vision provides a clear and ambitious pathway for Council and the community to progress biodiversity management over the next 10 years.

What is Biodiversity?

Local indigenous plants, animals, and natural spaces, such as our wildlife corridors and conservation reserves are often referred to collectively as an area's **biodiversity**. Through the development of the Strategy, we worked with our community to create a definition of biodiversity that is relatable, creates a better understanding of the term and elevates the importance of our natural environment.

"Biodiversity can be defined as the richness and abundance of indigenous plant, animal, fungal and microorganism communities that make up and support the function of local ecosystems. All these species and organisms work together in an intricate and complex way supporting the health of our soils, natural systems, and wellbeing of all living things".

A definition formed with assistance from Banyule's Community Biodiversity Working Group and community contributions.

Biodiversity is fundamentally important. It is considered to have intrinsic value; each species has a value and a right to exist, whether or not it is known to have a value to humans (Biodiversity Conservation Trust, 2023). It is essential for the processes that support all life, including humans. Without a diverse range of plants, animals and microorganisms, ecosystems cannot function and will not be able to provide us with healthy water, clean air and critical services for the food we eat. Biodiverse, natural spaces also offer significant mental health and wellbeing benefits. Research has shown that improved mental health has been directly related to quality and quantity of time spent in natural spaces (Julie D, Kate v D and Philip W, 2021).

Why do we need a Biodiversity Strategy?

Our community has consistently expressed a deep appreciation for Banyule's natural environment – one of the key reasons people choose to live here. Insights from the Banyule Futures engagement process reveal that 66% of residents consider access to nature a top priority. This sentiment is echoed statewide, with 91% of Victorian parents believing it's important for their children to spend time outdoors. In response Council has embedded this value into its **Municipal Public Health and Wellbeing Plan**, prioritising "Healthy Planet, Healthy People". This Strategy links directly to this commitment through *Theme 4*, Wellbeing and our Biodiversity.

Since European settlement much of the landscape has changed and our natural environment has been severely impacted to accommodate rural and urban development. In Australia, biodiversity is in rapid decline. Over the past 2 centuries, Australia has lost more mammal species than any other continent and continues to have one of the highest rates of species decline (Australia State of Environment Report, 2021). This decline risks our own overall health and wellbeing, due to the proven physical and mental health benefits that nature provides us. We cannot afford to lose more biodiversity without impacting on our own needs.

"Biodiversity plays a critical role for human health and well-being, economic prosperity, and sustainable food production. Healthy ecosystems provide clean air, support food security, grant humans and wildlife access to freshwater, and support all of our livelihoods". IUCN, Biodiversity, and health, 2023.

State and Federal laws require Council and all other land managers to effectively protect and manage biodiversity on their land. The Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the State Flora and Fauna Guarantee Act 1988 (FFG Act) are two key pieces of legislation driving this

requirement. Other legislation (Appendix 3) and local laws further support biodiversity protection It is not only this legal commitment, but a moral obligation we all have to protect our natural environment.

Biodiversity is in rapid decline. This is most evident on private land through tree and vegetation loss to cater for higher density housing associated urban densification. On public land, this loss is evident through an increase in threats such as pest plants and animals, habitat fragmentation due to development major project impacts and climate change.

Urban growth is inevitable and necessary to support a growing population. However, this growth places increasing pressure on our natural environment. That is why it is critical this Strategy strongly influences decision making processes and is a central consideration in all planning and development decisions.

Climate change brings a new and complex challenge for biodiversity. Increase in severe weather events, longer and more severe droughts and increase in fire events from a changing climate are all altering ecosystems, becoming a new driver for habitat change and impact the health and wellbeing of our community. The need to be adaptive with our management approach is more critical than ever to support our natural environment.

It is critical that biodiversity protection does not continue to decline in our pursuit of other community needs. The losses we see now to local biodiversity can have broad human health, wellbeing, and financial impacts if we don't halt and reverse the decline. In partnership with Wurundjeri, our community and industry colleagues the Strategy will guide our response to biodiversity management. Through setting bold goals and targets over the coming decade, we seek to position ourselves as an industry leader in biodiversity protection, enhancement and management.

Extinction Debt

The concept that species we have today may be lost in the future regardless of the measures we take to protect and enhance biodiversity. This is due to habitat alterations (loss of vegetation) that not only impact the local area but create a ripple effect for surrounding ecosystems that are connected in intricate ways.

Planning to protect biodiversity is imperative for all organisations as the concept of accepting loss cannot be accepted. There is not only a moral duty, but a duty of care for all living things (including humans) to protect, enhance and celebrate biodiversity at all levels.

Extinction Debt, Tilman and May, 2019



Image (above and below) - Tom Crawshaw



Our Partnership with Traditional Owners

The Wurundjeri Woi-wurrung people, the Traditional Custodians of the lands of Banyule City, have a deep and profound connection to the environment. Banyule, in partnership with the Wurundjeri people have developed the Marrageil Strategy which embeds a path self-determination and Caring for Country. This Strategy supports this through inviting Wurundjeri to create **Actions for Part 3** that are centred around self-determination.

For tens of thousands of years, the Wurundjeri Woiwurrung managed their environment to sustain its resources using an array of traditional land management techniques. These traditional land management practices, such as cool season burning, digging soils for Yam Daisies, and taking only what was needed from the land ensured a healthy and thriving environment and much can be learned from this approach. Council's Environmental Operations and Bushland Management teams have built a strong



relationship with the Wurundjeri Narrap Ranger team and work collaboratively at Banyule Flats and the Northern Grasslands on many biodiversity programs.

This partnership has enabled shared learning opportunities and a melding of traditional land management and current land management knowledge. This is a critical path forward for natural land management in our urban environment, to respect the knowledge of our First Nations people and build lasting partnerships.



The Narrap Unit – the Natural Resource Management (NRM) department of the Wurundjeri Woi-wurrung Corporation – are committed to restoring and managing the health of Country. The team of dedicated land management professionals deliver high quality environmental services, that blends conventional NRM practices with Wurundjeri cultural approaches.

The Narrap Rangers continue to work alongside Banyule's Bushcrew and Environmental Operations Team to care for Banyule Flats. This area of significance for Wurundjeri people along the Birrarung (Yarra River) will forever be a place where traditional land management practices, learning and collaboration can take please.

This ongoing partnership with the Wurundjeri community through land management and learning opportunities is critical to ensure best practice environmental outcomes and strong relationships with our First Nations people.

Uncle Bill Nicolson Jnr (top right) and Uncle Dave Wandin (bottom left, Wurundjeri Woi-wurrung Elders, at the Cultural Walks along the Birrarung as part of the Spring Outdoors Program. Uncle Dave established the Narrap Ranger unit as a way of embedding First Nations land management knowledge centred around caring for country and create employment pathways into the conservation industry.

Community Consultation

In 2023, Council set out to review and redevelop its Biodiversity Plan 2019-2022. A key part of this process was to engage with the community to understand their priorities and expectations for biodiversity throughout the municipality.

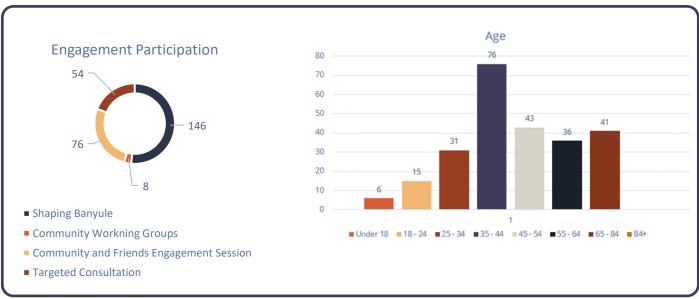


Figure 1: overall engagement participation and age demographics over the community biodiversity plan review and consultation period.

Over an extensive consultation process the community provided Council with invaluable feedback, with an overwhelming sentiment that nature is important to all who reside in Banyule. The key findings from the consultation process included.

- Develop robust monitoring of local biodiversity to provide detailed data on trends, so management can be effective.
- Build knowledge and value of biodiversity throughout the community and with internal Council teams to elevate its importance broadly.
- Ensure biodiversity is better protected in the private realm.
- Continue to support and increase community biodiversity engagement and initiatives leading to ongoing and sustained stewardship for our natural environment.
- Ensure biodiversity remains healthy and resilient to the pressures from urban growth.
- Work with industry partners and the community to enhance, protect, and celebrate biodiversity.

These recommendations from the community have enabled Council to develop an ambitious Biodiversity Strategy and call to action all who reside and work in Banyule to ensure our natural environment is enhanced and protected for future generations to enjoy.

Australia's Biodiversity Approach

Australia generally is considered to be one of the worlds biodiverse 'hot spot' countries for plant and animal life and have many celebrated natural assets. It is one of 17 countries in the world that is described as 'mega diverse' (Australia's Strategy for Nature, 2024).

Sadly, biodiversity is in decline across the country, with Australia holding the unenviable title of leader in mammal extinction (*Wilderness Society, 2024*). All threats facing biodiversity are human created and since the industrial revolution, there has been a noticeable and significant decline in Australia's plant and animal communities.

As of August 2024, 118 species and 103 ecological communities were listed as threatened in Australia under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).



Almost **2000** native plants and animals are considered to be threatened with extinction in Australia.

Invasive Species Council

Image: Tom Crawshaw

Supporting national biodiversity management and recovery is the Federal Government's, <u>Australia's Strategy for Nature 2024-2030</u>, which sets out three overarching goals to support healthy and functioning biological systems:

- Promote a stronger connection between people and nature.
- Improve the way we care for nature, and
- Building and sharing knowledge.

In November 2023, the Federal Government agreed on 6 priority areas for national targets which are.

- 1) Protecting and conserving 30% of Australia's land and 30% of Australia's Oceans by 2030.
- 2) Working towards zero new extinctions.
- 3) Effective restoration of degraded terrestrial, inland water, marine and coastal ecosystems.
- 4) Tackling the impact of invasive feral species.
- 5) Building a circular economy and reducing the impact of plastics on nature.
- 6) Minimise the impact of climate change on nature.

Our natural environment is not just important for flora and fauna, but people too. Healthy biodiverse environments have been proven to boost a community's wellbeing, and economic strength by supporting food production, tourism and health networks.

Victoria's Biodiversity Approach

Victoria is the most intensively settled and cleared state in Australia, with over 50 percent of the state's native vegetation cleared since European settlement. More recently, climate change has brought new and challenging threats to biodiversity (State of Victoria Department of Environment, Land, Water and Planning 2017).

The State Government established its own biodiversity plan, <u>Protecting Victoria's Environment – Biodiversity 2037</u>, to frame a larger landscape scale approach to biodiversity management. Within this plan, there is a recognition of the major challenges facing our natural environment across Victoria and outlines the need for a robust biodiversity monitoring program.

Importantly this plan is informed by five principles.

Sharing and Collaboration

Responsibilities are shared by taking collective responsibility for addressing the historical impacts on biodiversity, collectively investing in conserving biodiversity, regulating to manage risks of further damage and where losses of public benefit occur, holding those responsible to account.

Knowledge

Multiple sources of knowledge are (e.g., science-based, traditional owners, community) are recognised, and knowledge is freely shared and used as a common foundation for decision making.

Living Systems

Biodiversity protection is most efficiently achieved in natural habitats because the needs of species, and their capacity to persist, are most likely to be met in the ecosystems where they have evolved.

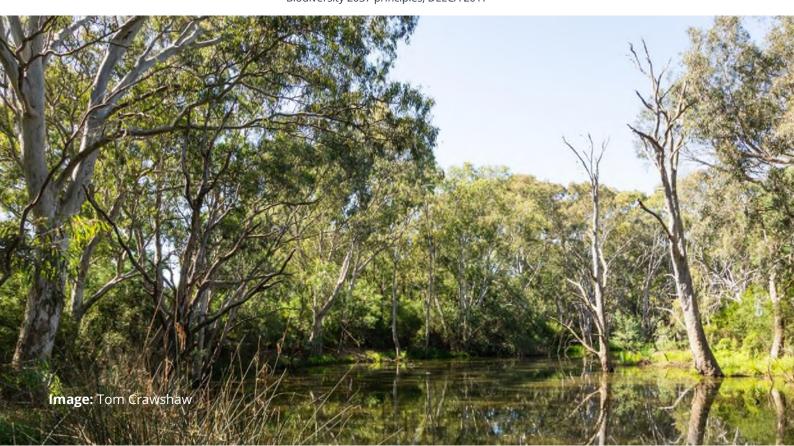
Values

Biodiversity delivers ecosystem services that are fundamental to the economic prosperity and the physical and mental health of all Victorians.

Decision Making

Decision making processes are fair, transparent, efficient, and consistent. They consider risk and are based on the best available scientific evidence and other sources of knowledge.

Biodiversity 2037 principles, DEECA 2017



Banyule's Biodiversity

Historically, Council has collected detailed flora and fauna lists thanks to residents, management plans and skilled conservation staff. Limited resources have not allowed a deep analysis into the trends of biodiversity locally. Council and other land managers have therefore relied on State and Federal data which capture wider landscape trends for biodiversity. Biodiversity monitoring in Banyule has not been captured well to this point. Detailed biodiversity monitoring is complex, expensive and a time-consuming process, which at an industry wide scale has proven a challenge to get right. This Strategy outlines the need for Council to develop a program to monitor biodiversity that is sustainable and provides clear insights into our natural environmental trends. With this in mind, it is important to outline what we already know. The sections below outline what we know of Banyule's biodiversity from current records and data to frame the Strategy and the actions needed to progress improved biodiversity outcomes.

Our Landscape.

Victoria's landscape is made up of 28 different bioregions, to which Banyule has three: Victorian Volcanic Plains, Highland Southern Fall and Gippsland Plain (Table 1). Occurring at the junction of these three distinct bioregions mean Banyule boasts a richer diversity of plant and animal communities than is found in most other municipalities.

What are bioregions?

Bioregions are a landscape scale approach to classifying the environment using a range of attributes such as climate, geomorphology, geology, soils, and vegetation (*DEECA*, 2024). There are 28 bioregions in Victoria. Banyule encompasses three of these.

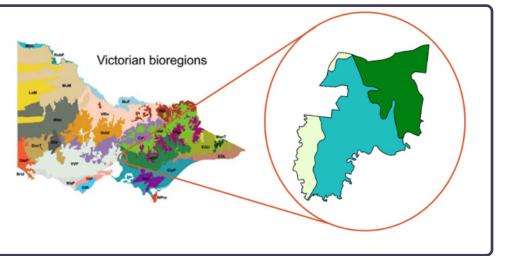


Figure 2 – The Bioregions of Victoria including Banyule local government area

Table 1: Description of Banyule's bioregions

Bioregion	Map key
Gippsland Plain: includes alluvial plains with gently undulating terrain dominated by floodplains and swampy flats. This bioregion typically supports Lowland Forest, Heathy Woodlands, Plains-grassy Woodland, and Herb-rich Woodland ecosystems.	
Highlands Southern Fall: is the southerly aspect of the Great Dividing Range. These regions typically have moderate to steep slopes, high plateaus, and alluvial flats along the main valleys. The dominant vegetation throughout this bioregion in our local area is mainly Shrubby Dry Forest ecosystems.	
Victorian Volcanic Plains: this region is dominated by volcanic deposits which formed an extensive flat and undulating basaltic plain with stony rises. The soils in this region are considered to be highly fertile. The dominant vegetation type in this region are variations on the Pains Grassy Woodland ecosystems.	

Our Vegetation

Vegetation communities can be categorised into what are known as <u>Ecological Vegetation Classes (EVCs)</u>, which are unique combinations of plants, other lifeforms and environmental characteristics. These EVCs determine the indigenous flora species that naturally occur and are suited to a local area based on its natural attributes. Banyule has a highly diverse number (32) of distinct vegetation communities which host a many significant species.

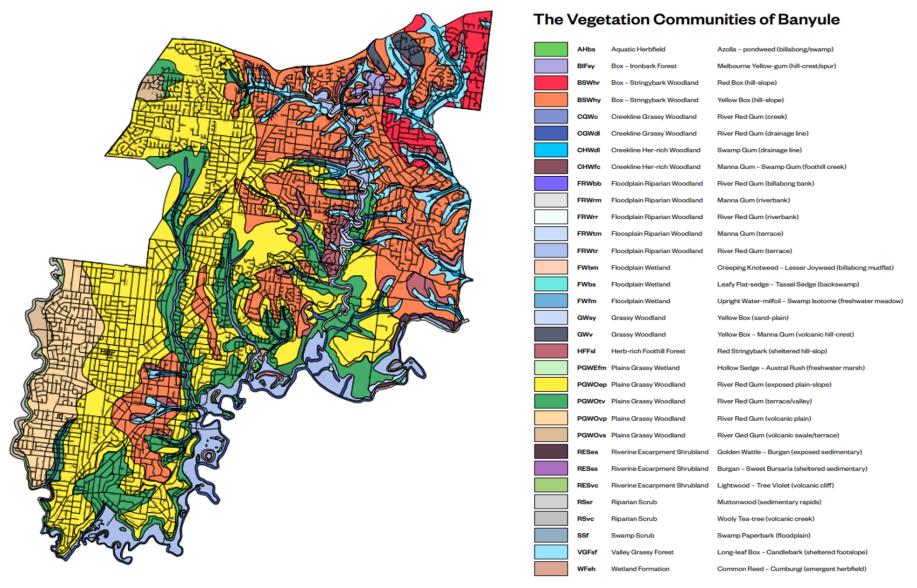


Figure 2 – The Ecological Vegetation Classes of Banyule map, highlighting the 32 distinct vegetation communities within the local area.

Our Vegetation

Found within Banyule's 32 vegetation communities are a high diversity of recorded indigenous, trees, shrubs, herbs, grasses, and ground covers (Table 2). Council's 36 areas managed for conservation are critical locations for our local indigenous species. Within these conservation areas Banyule has 22 recognised 'Biosites', which are sites of regional, state or national environmental significance. A full list of these sites is covered in **Appendix 1**.

Flora types	Number of species recorded in Banyule	Number of species considered Threatened under the EPBC Act and FFG Act
Trees	17	2
Mistletoes	4	0
Tall Shrubs	33	2
Low Shrubs	67	2
Climbers	13	1
Herbs & Groundcovers	182	12
Daisies	56	6
Grasses	65	4
Lilies & Irises	30	3
Sedges & Rushes	78	3
Orchids	65	10
Ferns & Fern Allies	23	0
TOTAL	633	45

Table 2: Number of recorded flora species in Banyule (full list found in Appendix 1). This list does not include records of fungus or moss species in Banyule as no comprehensive records exist. Some smaller records are available, but this is a gap in knowledge currently.

Table 1 provides a snapshot of the diversity of indigenous species recorded in Banyule. Historic records of indigenous plants have been kept before amalgamation in 1994. More recent surveys outline the current extent of indigenous flora present and detailed records and surveys have occurred from 2011 to the present day. A full list of local indigenous species recorded in Banyule can be found in **Appendix 1**.



Image: Tom Crawshaw

St Helena Bush Reserve

This <u>reserve</u> is one of Banyule's important conservation reserves and a listed site of significance with a rich diversity of indigenous flora. This reserve is home to 146 vascular plant species, subspecies, and recognised hybrids – including 33 of Banyule's 65 recorded species of orchids. This includes a number of threatened species such as the Emerald-lip Greenhood, *Pterostylis smaragdyna*.

Our Wildlife

Relying on this rich diversity of vegetation are the wildlife species local to our area. Banyule hosts common urban species such as Brush-tailed Possums and Rainbow Lorikeets to more sensitive species such as Spotted Pardalotes and Krefft's Gliders and threatened species like the Eltham Copper Butterfly and Powerful Owl.

Fauna Type	Number Recorded in Banyule	Number Considered Threatened (According to the Federal EPBC Act and State FFG Act)
Amphibians	14	2
Birds	198	25
Invertebrates*	56*	1
Mammals	12	1
Reptiles	22	4
Bats	11	2
Fish	14	4
Aquatic Invertebrates*	13	0
TOTAL	340	39

Table 3: Numbers of recorded fauna in Banyule. *Invertebrates and aquatic invertebrates are highly underrepresented in our current data knowledge. They are typically hard to identify and need specialist knowledge. Currently Banyule's official invertebrate records are limited, but data sources are from a combination of official records, citizen science and management plan knowledge.



Image: Tom Crawshaw

Montmorency Sugar Gliders

The Montmorency Sugar (Krefft's) Glider Project has been observing and supporting this species since 2016, with the group expanding monitoring under the Banyule Sugar Glider Project in 2019. Around 40 members and census volunteers monitor over 400 nest boxes in Montmorency and surrounding

*Recent genetic studies have identified that Gliders in Southeastern Australia are actually two different species. Sugar Gliders are now known to be found in forests east of the Great Dividing Range and Krefft's Gliders found in southern parts of Victoria.

Our Flagship Species

A flagship species is one considered to be an ambassador, icon or symbol for a region's habitat or even an environmental cause. Banyule's *No Local Extinction Plan* has identified 6 faunal species, who are charismatic, culturally significant and used to raise awareness. The habitats and ecosystems these species rely on cover all of Banyule vegetation types, meaning their protection supports all other species. It is critical to note that all species are crucial to preserve, and our flagship species are designed to engage the public and put a face to the cause of biodiversity protection and enhancement. Through this strategy Council is committed to see '*No Local Extinctions*' of any species with our flagship species leading the way. This vision aligns with the Federal Government's commitment for 'no new local extinctions by 2030'. Our flagship species include the Eltham Copper Butterfly, Powerful Owl, Krefft's Glider, Swift Parrot, Platypus and Growling Grass Frog.



1. The Eltham Copper Butterfly, Paralucia pyrodiscus lucidia

This highly endemic (known to be found in highly specific areas) invertebrate is unique to Banyule and Nillumbik. It is also known to exist further north in the Victoria goldfields near Castlemaine and Kiata. The Eltham Copper Butterfly shares a unique symbiotic relationship with a species of ant and the Sweet Bursaria (*Bursaria spinosa*) bush. The larve produce a sugary secretion that the ants feed on and in return, protect the larve from predators. The butterflies can be seen emerging and flying in late summer and sometimes again in early autumn.

2. Powerful Owl, Ninox strenua.

Australia's largest Owl and key predatory species for local ecosystems. They rely on large old growth trees that can form large enough hollows for nesting and breeding. They are carnivorous feeding on arboreal mammals (possums) and roosting birds. The Powerful Owl is and iconic species to Banyule and an example for the need to protect current old growth trees and future ones for its survival.





3. Krefft's Glider (Sugar Glider), Petaurus notatus.

An arboreal dwelling species (live predominately in trees) which has the ability to glide large distances between trees. They feed on invertebrates, nectar, pollen, and acacia sap (gum). Although fairly common in our urban environment, they are susceptible to canopy loss, and their presence is an indication of overall biodiversity health from their reliance on sap producing *Acacia's* and insect diversity.

4. Swift Parrot, Lathamus discolor.

Australia's fastest-flying parrot and only one of three migratory parrot species occurring in the world. Swift Parrots migrate from their breeding grounds in Tasmania across the Bass Strait to the mainland in autumn and winter. The species is highly nomadic on the mainland in search of nectar from autumn and winter flowering Eucalypt trees. This species is an indicator of tree connectivity and health within a local area.





5. **Platypus**, *Ornithorhynchus anatinus*.

One of Australia's most unique mammals, which is actually considered to be a monotreme, meaning they lay eggs instead of giving birth to live young like other mammals. The Platypus is often found at the confluences of the Plenty River and along the Yarra and has also been seen in the Darebin Creek. They are important indicators of stream health as they rely heavily on the presence of aquatic invertebrates and specific in-stream habitat structures.

6. Growling Grass Frog, Litoria raniformis

The Growling Grass Frog is a semi-aquatic, ground dwelling species, active during the day and night. It is a highly charismatic frog with a distinctive growling call. These frogs are associated with a diversity of aquatic vegetation including fully submerged, emerging, and floating wetland plants. This species is highly indicative of healthy wetland ecosystems and a symbol of wetland protection and restoration.



Images: Eltham Copper Butterfly, Powerful Owl, Krefft's Glider and Platypus, **Tom Crawshaw**. Swift Parrot, **eBird images**. Growling Grass Frog, **SWIFT**.

Land Use History

The Wurundjeri Woi-wurrung People are the traditional custodians of all land within Banyule. The Wurundjeri people have cared for Country for thousands of years through sophisticated land management techniques, supporting their people through hunting, gathering and locally adapted agriculture. Prior to European settlement, the area of Banyule was heavily vegetated with undulating hills and creeks with a mosaic of forest and woodland vegetation communities in the north-east. This would have been contrasted by vast plains of grassy woodlands with abundant River Red Gums to the south-east (Practical Ecology, Biodiversity Benchmarking Report, 2024).

Since European settlement, the land has undergone significant modification. Banyule was one of the areas of Melbourne established as a farming district in the late 1830's due to its waterways, rich river flats and plains. The area was initially used for cropping and orchards, but shifted to dairy farming through the 1880's. Gold mining, quarrying and timber harvesting also occurred in the area in the late 1800's. All of this meant significant change to the natural landscape with large areas cleared of vegetation and waterways modifications.

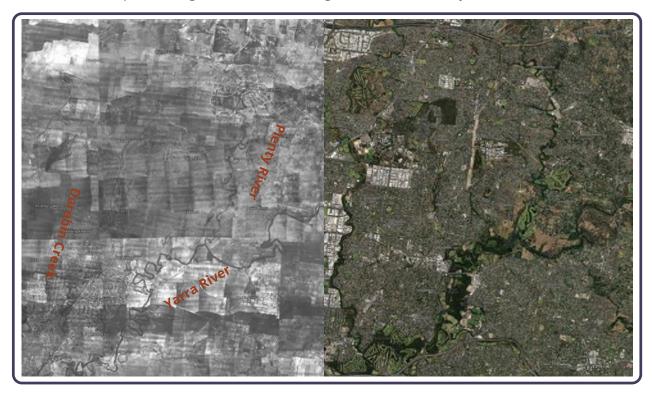


Figure 4: A comparison of Banyule from 1945 to current day, showing a change in land use from farming to predominately housing and development.

In more recent history land use in Banyule transitioned from rural to urban as part of the broader urbanisation of Melbourne. The landscape today is consistent with this trend with increase in population, and pressure on more housing and urban densification to accommodate Melbourne's population growth. One of the significant impacts to our natural environment today is fragmentation of habitats, which places outward pressure on existing areas of environmental significance. In Banyule this typically occurs via incremental loss of tree and other vegetation in multi-unit developments.

Habitat for Biodiversity in Banyule

Public Realm

Banyule's total area of land is approximately **6,280** hectares. Of this, roughly **10%** (**612** hectares) is Council managed public open space (Figure 4). These spaces support many different, community interests such as active sport and recreation, playgrounds and informal or passive open areas. Nested within this is a network of conservation reserves managed by Council, which occupy only 5% of the total land area in Banyule. It is important in an urban area like Banyule to have space for all types of use, but biodiversity needs to be

prioritised and integrated with other land uses wherever possible. The Strategy acknowledges the challenges and complexity of open space management in an urban environment, and details actions needed to prioritise biodiversity in which land use planning to support our conservation and wildlife corridor areas.

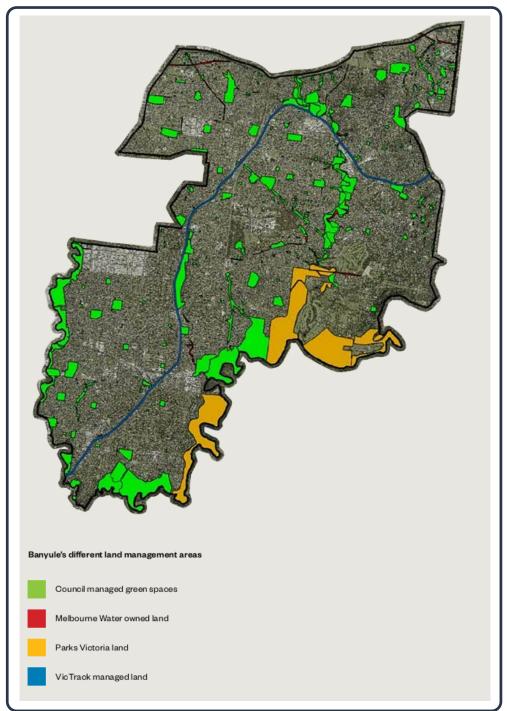


Figure 5: The different areas of land management in Banyule that have biodiversity values within them.

Type of managed land	Area in hectares	Percentage of total land	Key to map
Banyule Council Total Land Area	6,280		
Public Open Space	612	10%	
Conservation Land Managed	336	5%	
Parks Victoria	181	3%	
Vic Track	4.7	0.3%	
Melbourne Water	1.2	0.1%	

Table 4: The total land area of Banyule and areas where biodiversity is currently managed. This accounts for all council managed public open space which includes Ivanhoe Public Golf Course and wildlife corridor areas outside of conservation managed spaces. It encompasses all of Vic Track land of which a smaller percentage is realistically usable biodiversity space.

Other public land contributing to Banyule's conservation estate include Parks Victoria, Vic Track and Melbourne Water managed land. While much is known about these open spaces, reserves and associated wildlife corridors, further knowledge on their function and connection potential is needed to aid in our understanding of how effective public land support species and ecosystems to remain viable and sustainable into the future. Maps of Banyule's wildlife corridors, conservations reserves, areas of biodiversity significance and key fauna species can be found in Appendix 2.



Image: CRC for Water Sensitive Cities

Biodiversity outside the norm.

The Banyule Public Realm Framework acknowledges the role of facilitating wildlife corridor connections for flora and fauna within the local ecosystem. This is an important framework that recognises biodiversity can be enhanced in areas outside of conservation reserves and wildlife corridors and outlines ways in which biodiversity can be supported in soft and hard landscape spaces.

Private Realm

Most of the land in Banyule is privately owned and comprised of residential, commercial, and industrial uses. Loss of vegetation on private land is a major driver in biodiversity loss. The private realm has a significant role to play in improving biodiversity. Programs, such as the Gardens for Wildlife and Schools for Wildlife are critical in providing support to private land managers in protecting and enhancing ecosystems, urban canopy cover and biodiversity habitat characteristics. Stronger protection for vegetation and Biodiversity Sensitive Urban Design are critical tools Council needs to invest in to ensure developments are prioritising biodiversity in their planning.



Strategy Hierarchy

The Biodiversity Strategy outlines Councils commitment to protecting our local environment through the Community Vision and Council Plan priority theme 'Our Sustainable Environment'. In particular, it responds to the strategic objective:

"A progressive and innovative leader in protecting and increasing the health and diversity of our natural environment, where we all commit to playing an active role in achieving environmental sustainability, waste, and carbon emissions reduction".

The Council Plan outlines eight key strategies to strengthen our sustainable environment, to which the Biodiversity Strategy directly responds to two of these:



Protect and enhance our natural environment, providing connected habitat for diverse flora and fauna.

and...

Engage and work with the community and partners to protect, enhance and experience the environment.

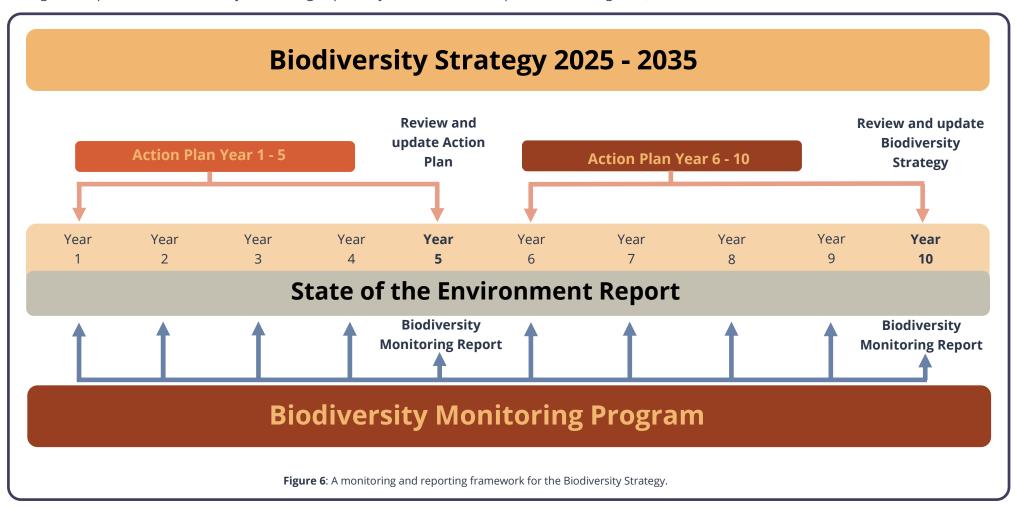
The Biodiversity Strategy leads in achieving these key strategies and is supported by other Council strategic documents that recognise and support positive biodiversity outcomes (Figure 6). Each of these documents acknowledges the diverse and complex nature of managing local biodiversity.



Figure 6: Council's strategic documents that play an integral play an integral role in supporting our natural environment.

Strategy Lifecycle

The Biodiversity Strategy sets out a holistic approach to natural environmental management. The Strategy outlines a long-term plan for biodiversity management over the next **10 years** and is supported by a **5-year** Action Plan. The Action Plan will be reviewed and redeveloped after 5 years, ensuring our biodiversity management response is current, and remains on track. Underpinning the Strategy and Action Plan is a Biodiversity Monitoring Program, which will measure Council's performance against key objectives and indicators. These will be tracked and reported on annually through the State of Environment (SoE) Report and through a comprehensive Biodiversity Monitoring Report at years 5 and 10 of implementation (Figure 7).



Technical Documents Supporting the Strategy

Biodiversity management is complex and requires specific, technical knowledge. The Strategy is further supported by detailed technical documents, each of which provide technical guidance and prescribed management actions around a specific area of biodiversity management. These areas include pest plant and animal management, threatened species management and wildlife corridor restoration and management (Figure 8). This technical guidance, along with associated actions will help Council, other land managers and the community to understand and execute technical elements of biodiversity conservation and monitoring.

No Local Extinction Plan (existing document): Details Banyule's Flagship species, their habitat requirements and the steps recommended to protect them. The habitat requirements for the species within this plan are symbolic of the majority of Banyule's EVC's.

Wildlife Corridor Plan (document to be reviewed and updated): Gives a detailed account of the wildlife corridors throughout Banyule and prescribes where connections can be made between important ecosystems.

Weed Management Plan (existing document): Provides guidance to Council and the community on priority weeds and how to manage them effectively on both public and private land.

Pest Animal Management Plan (document under development): Details how Council manages pest animals and supports community mobilisation to help achieve positive outcomes to control local pest animal species.



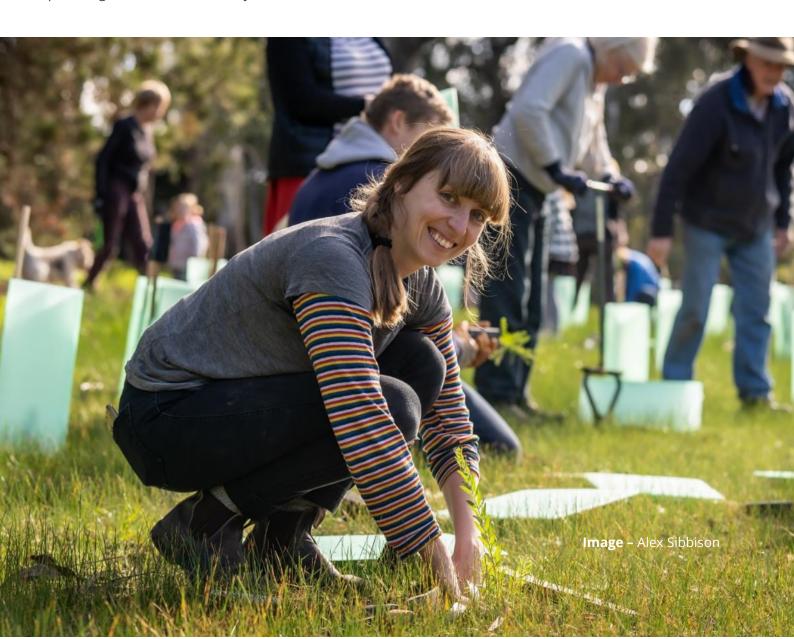
Figure 8: The technical documents supporting biodiversity management and knowledge in Banyule.

Biodiverse Banyule

The strategy sets an ambitious 'call to action' target for Council, other land managers and the Banyule community to restore and enhance our local biodiversity. The Biodiverse Banyule campaign aims to see 250,000 local indigenous plants, planted throughout our municipality by 2035. This will require collective effort from Council, its partners, and the community. It supports existing work being achieved through the Bushland Management, Urban Forest, and Parks Presentation teams. It further supports the Urban Forest Strategy canopy cover targets across all suburbs by 2050 and builds in a focus on ecosystem enhancement and overall biodiversity improvements.

This target has been realised through assessing the average vegetation cover required for healthy EVC's in Banyule and aligning this with an accepted amount of revegetation required to consider healthy ecosystems improve and build resilience throughout the municipality (DELWP Output Delivery Standards, 2015). Council currently plants **65%** of this target through a business as normal approach. It therefore requires collective efforts from our community, industry partners and all who work and play in Banyule to achieve a further **35%** to build ecosystem resilience and health by 2035.

It is important to note that simply reaching this target does not equal success. Our species we plant need to be maintained and with that our resources increase to ensure this maintenance is upheld. Incentivising the private realm to contribute to this target also needs to be supported and existing programs like Gardens for Wildlife will provide guidance for community.



Themes

Framing this strategy are **five** themes, which encompass the key biodiversity priorities for Council and the community to focus on over the coming decade.

Theme 1

Knowledge and Biodiversity

Upskilling knowledge and increasing awareness of local biodiversity and providing effective resources to make more informed decisions.



Theme 2

Enhancing our Biodiversity

Focusing on our Biodiverse Banyule goal ensuring local biodiversity is enhanced and our wildlife corridors and natural spaces are well connected, leading to increased ecosystem health.



Theme 3

Protecting our Biodiversity

Ensuring we are proactive in the protection of what we still have and supporting our flagship species to thrive.



Theme 4

Wellbeing and our Biodiversity

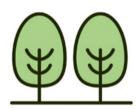
Providing our community an opportunity to connect with nature, supporting good health and wellbeing outcomes and empowering people to be proactive biodiversity advocates.



Theme 5

Partnerships for our Biodiversity

Engaging and working collaboratively with industry partners to ensure we are proactive in the management of local biodiversity.



PART 2

A CALL TO ACTION FOR BIODIVERSITY

NEXT STEPS FOR BIODIVERSITY IN BANYULE



A 10-year approach to biodiversity management.

Understanding biodiversity, it's health and managing for the future is complex and requires a detailed understanding of localised trends to plan accordingly. Banyule's community expects our natural spaces are managed effectively, and therefore setting a strategic direction that everyone can buy into is critical.

This **ten-year** strategy aims to elevate our biodiversity response to meet the challenges of the biodiversity crisis and is designed to be delivered in two parts. Firstly, building a sound localised knowledge base to inform our biodiversity approach then assessing the effectiveness of early intervention and resetting with localised evidence-based information for the next 5 years and beyond (outlined through a refreshed Action Plan for years 5-10). Reviewing and recalibrating at the halfway point will provide for informed planning and continuous improvement in the delivery of our biodiversity response.

Review and update of Part 2, A call to action for biodiversity and Part 3, The Action Plan provides for informed planning and continuous improvement in the delivery of our biodiversity response.

By 2030 we aim to:

- Develop a Biodiversity Monitoring Program to establish key biodiversity indicators and monitor trends allowing for informed future management.
- Establish and communicate our call-to-action target for biodiversity such as the Planting 250k for Biodiversity (Target 250k) campaign.
- Deliver and expand on key biodiversity programs for the community to engage with nature and build the value of biodiversity broadly.
- Build our knowledge base on specific biodiversity related issues within Banyule so we can develop a localised response.



Figure 9: Timeline for the Biodiversity Strategy over 10-years.

By 2035, we aim to have:

- Achieved our Biodiverse Banyule target, resulting in an overall net gain in our habitat and connection between wildlife corridors and conservation reserves.
- Healthy and resilient indigenous flora and fauna.
- No loss in our locally significant flagship species.
- Our canopy cover targets on track to being met by 2050.
- A community that expresses feeling more connected to nature.

The following section sets out Council's strategic direction centred around the priority Themes. It includes our overarching goals, measurable objectives and an action snapshot to frame the direction of biodiversity management. A detailed Action Plan (Part 3) provides detailed actions, timeframes and costs which will be reviewed in 2030 to evaluate progress and ensure we are on track to meet our overall 2035 target.

THEME 1 - KNOWLEDGE AND BIODIVERSITY

Our natural spaces are dynamic and ongoing research and information gains are essential to ensure Banyule remains at the forefront of biodiversity management.

Collection of robust biodiversity is essential to ensure future natural environmental management is agile and informed with current and accurate information.

Our community has a long history of environmental advocacy and ensuring this remains strong Council must ensure biodiversity information is celebrated to build on existing community passion for our natural environment.



Goal 1

Improve our knowledge of biodiversity.

WHAT COUNCIL CAN DO

- Develop resources to inform all on key biodiversity knowledge.
- Collate existing biodiversity data into areas where others can easily access information.
- Develop systems to capture biodiversity data.

WHAT COMMUNITY CAN DO

- Subscribe to Greenwrap to remain informed on environmental initiatives.
- Get involved in Citizen science programs supporting Councils biodiversity data knowledge.
- Provide Council with biodiversity data whenever possible.



Goal 2

Increase the value and stewardship of biodiversity for all.

WHAT COUNCIL CAN DO

- Develop resources with biodiversity knowledge to inform wider audiences.
- Inform and celebrate our biodiversity achievements to elevate its value.
- Build engagement resources for others to contribute to our biodiversity knowledge.

WHAT COMMUNITY CAN DO

- Engage with resources Council produces to become informed on biodiversity values.
- Input biodiversity information into available platforms to assist Council's knowledge.
- Educate your neighbours to assist Council in spreading biodiversity knowledge and value.

Strategic Direction – Knowledge and Biodiversity

Goal 1: Improve our knowledge of biodiversity.

Biodiversity conservation and management is complex with many interacting components, and **so** in identifying knowledge gaps it is important to take an integrated whole-of-ecosystem approach.

Biodiversity Knowledge Framework, DELWP, 2019.



Objective 1: Develop and implement data driven biodiversity management focused on monitoring local biodiversity, informing planning and operations and enhances our capacity to respond to ecological changes.

capacity to respond to ecological changes.		
Action Snapshot		
	Develop a Biodiversity Monitoring Program	
	Better understand our ecosystem structure	
	Continue to develop Conservation Management Plans	
	Monitor our local fauna populations.	

Biodiversity monitoring is complex and requires ongoing efforts to show change. Changes in the natural environment are often slow and difficult to detect, with some natural systems not showing change for many years. This can be problematic for land management agencies to grapple with when considering shorter term planning and budgeting cycles.

Developing a monitoring program for key biodiversity indicators will allow for environmental trends and changes to be more easily identified, enabling adaptable management decision in the short-term and better-informed planning and budgeting for biodiversity conservation in the long-term. Collection of data should have some specific rigour, though without being expensive or cumbersome to collect, and consider how staff and the broader community can contribute through citizen science.

Collecting local data on environmental condition and trends aids in reporting on state and federal government targets around biodiversity management on a broader scale.



Citizen science supporting biodiversity knowledge.

The community play an integral part in helping Council and other land managers understand local flora and fauna populations.

Citizen science programs operate throughout Banyule, which support conservation work and strategic understanding of biodiversity.

Engagement opportunities such as the Great Southern Bioblitz and City Nature Challenge are targeted biodiversity observation periods, where natural observations are captured, and the data is used to inform land managers.

Other community driven programs like the Sugar Glider Project and the Powerful Owl audio monitoring program directly feed into Council No Local Extinction Plan and wider biodiversity knowledge.

Objective 2: Understand how our indigenous flora species are performing through monitoring population health and implementing restoration programs.

Review Bushland Site Ranking Program. Monitor local flora populations in conservation reserves.

As a public land manage Council has a legislative responsibility to manage known populations of listed species under both the Federal EBPC Act and State FFG Act.

Banyule's Bushland Management team in partnership with local Environmental Friends Groups are proactively protecting and enhancing **45** recorded threatened flora and **39** threatened fauna species within our conservation reserves and wildlife corridors. Understanding these and other species population trends is critical

to planning future conservation works. This should not be the responsibility of one organisation, but a collective effort by Council, the community and other industry stakeholders.



The Emerald-lip Greenhood, Pterostylis smaragdyna

The Emerald-lip Greenhood, listed as Endangered under the Flora and Fauna Guarantee Act, is known to survive in small, isolated conservation reserves in Banyule's north-east.

This orchid flowers from June to August each year. They require diligent conservation work to protect and maintain their populations from local volunteers and the Bushland Management.

Their survival is at threat from urban pressures, and the decline in pollinator species that are critical to the pollination of all orchid species.

The complex relationship between flora, ecosystem make up and management of these systems is evidence of the critical and technical work undertaken by conservation professionals.

Objective 3: Assess and report on the impacts of climate change on biodiversity by 2028

Action Snapshot



Gather information on climate resilient indigenous vegetation.



Understand the impacts of climate change on local ecosystems.

Climate change is arguably the biggest modern challenge facing biodiversity today. There is much research underway to understand the impacts on our natural environment and it is critical for land managers to be informed. Anticipated impacts include damage to ecosystems as a result of more severe weather events and changes in species composition; however much is still unknown and requires further scientific investigation.

Localised knowledge about climate impacts on biodiversity would allow Council, the community and other land managers in Banyule to be more effective in their management, resourcing, and response, so to provide an evidence-based approach to future biodiversity management. This includes forecasting future change and understanding how management needs respond to this change over time.

It is a key direction of the Strategy to partner with other agencies to better understand managing biodiversity in a changing climate.

Objective 4: Embed nature-based solutions into future practices for the public and private realm developments.

Action Snapshot



Develop Biodiversity Sensitive Urban Design principles

In an urban environment that is growing rapidly, there are fewer and fewer places for biodiversity to be present. With the need to cater for more housing to accommodate a growing population, how we also incorporate biodiversity into these spaces is more important than ever if we wish to retain biodiversity and ecosystem services in our neighbourhoods for current and future generations.

Concepts like Biodiversity Sensitive Urban Design (BSUD) are integral in providing frameworks for understanding around how nature can be incorporated into urban design. The Strategy provides greater impetus for BSUD to be considered in development planning and Council infrastructure projects so that biodiversity continues to be a strong theme in Banyule's neighbourhood character.



Nature-based solutions for climate change and biodiversity.

The impacts of climate change pose unique risks to densely populated urban areas.

Through urban nature-based adaptation, cities can protect, restore, and manage local ecosystems and biodiversity in ways that help them adapt to the adverse effects of climate change (IUCN, 2021)

Seeking creative opportunities to incorporate biodiversity into urban, built environments, further builds on connection to existing wildlife corridors and conservation spaces.

Objective 5: Increase our understanding of fauna populations.

Monitor all faunal Flagship species Understand kangaroo populations in Banyule Understand local Growling Grass Frog populations

Fauna movement through Banyule is not well known. There are many anecdotal pieces of knowledge that help to inform decisions, but these need to be based in fact.

Gathering robust data on faunal movement would support better decision in biodiversity management leading to better outcomes for people and the environment. While we maintain accurate flora records through vegetation and conservation management plans in biodiversity hotspots, our understanding of their habitat, pollination and dispersal are less known.

Building our knowledge base on flora and fauna is critical to the ongoing success of future biodiversity management throughout Banyule.



Image - Tom Crawshaw

Large and iconic fauna

The Eastern Grey Kangaroo, *Macropus giganteus*, is likely to be one of the most recognisable Australian animals and we are fortunate to have many local resident populations within Banyule.

These larger marsupials exist in areas of remnant vegetation along our wildlife corridors.

Supporting populations of kangaroos in an area does provide challenges to biodiversity land managers. This species can reduce an areas ecological value through over grazing and tramping if populations get too large.

Understanding local population dynamics of kangaroos and other fauna is an important land management consideration for overall biodiversity health and to ensure iconic species are protected and supported.

Goal 2: Increase the value and stewardship of biodiversity for all.

Evidence based resources inform and motivate the Australian community to take steps to halt biodiversity loss, through their own advocacy, action, and daily decision making.

J. Dielenberg., S. Bekessy., G.S. Cumming..., 2024



Objective 6: Increase community awareness and value of biodiversity.

Action Snapshot



Develop 'living with nature' information.



Promote and celebrate conservation works.



Elevate biodiversity through imagery in wayfinding and public facing design.



Inform community living in critical biodiversity areas of local environmental significance.



Develop a digital platform for biodiversity planting options.

A key driver in future biodiversity success and stewardship is elevating the value we all see in our local natural environment. One of the ways this is achieved is through provision of educational material for the community to connect with.

Having native species in our urban environments is special and should be celebrated. Some native animals have adapted to urban development while others are being displaced. Embedding a value for local wildlife into our community will increase our care for nature and build an understanding how we cohabit with our iconic native wildlife.

Elevating the value of local plant and animal populations and building overall biodiversity stewardship within the community extends Council's biodiversity management, ensuring we are all working towards a biodiversity positive future.



Environmental education material

Banyule has developed a series of biodiversity <u>educational</u> <u>brochures</u> which are free for community and schools.

These beautifully illustrated pieces of work by Jan Smith are a proactive way for Council to demonstrate our areas natural beauty and build environmental value amongst the community.

These series of brochures highlight the Native Faun, Flora and our Wetlands, Waterways and Wildlife Corridors.

Objective 7: Embed biodiversity into Council strategies, plans and reporting processes.

Action Snapshot



Develop a conservation management framework



Have biodiversity considerations as part of Council reporting processes.



Embed 'value for nature' into census surveys

Council provides many services to the community and being able to embed biodiversity considerations into decision making processes would ensure Council is holistically considering biodiversity conservation health and enhance our overall biodiversity management and identify new opportunities.

Ensuring meaningful biodiversity actions are embedded into key strategic document will ensure natural environmental consideration is central to future Council directions. Further embedding these into reporting processes will enable a level of accountability to remove tokenism and require reportable biodiversity out

THEME 2 – ENHANCING OUR BIODIVERSITY

Healthy and thriving biodiversity is a key priority for Council to focus on. Simply protecting what remains will not be enough to address the biodiversity crisis.

Much of the historic loss of biodiversity needs to be reversed. It is imperative that we strive for ambitious restoration projects to build on existing biodiversity and strengthen its resilience to outward influences such as climate change.

Banyule is fortunate to have established wildlife corridors and conservation reserves ensuring there is a strong foundation for targeted biodiversity restoration.



Goal 3

Plant 250,000 indigenous plants across the landscape by 2035.

WHAT COUNCIL CAN DO

- Seek opportunities to plant indigenous vegetation where possible.
- Support other to achieve positive indigenous planting outcomes.
- Develop processes and systems to enable wider indigenous planting opportunities.

 Undertake connectivity study to identify potential improvements to wildlife corridors.

Goal 4

By 2035 natural spaces are better connected

for species movement between conservation

areas and wildlife corridors

WHAT COUNCIL CAN DO

 Strategically revegetate areas between our conservation reserves and wildlife corridors with indigenous vegetation.

WHAT COMMUNTY CAN DO

- Plant indigenous vegetation on your property and get involved in tree planting events in your local park.
- Provide Council with information about the indigenous vegetation you have planted.

WHAT COMMUNTY CAN DO

- Engage with programs like Gardens for Wildlife to plant more habitat in your garden.
- Become informed of your local area to understand how you can support local connections between wildlife corridors.

Strategic Direction – Enhancing our Biodiversity.

Goal 3: Plant an additional 250,000 indigenous plants across the landscape by 2035.

The most effective way to protect Victoria's biodiversity is to maintain native vegetation in a healthy condition. Ensuring our natural areas are revegetated and restored by incorporating genetic and species diversity will enhance habitat resilience to the uncertain and unpredictable effects of climate change.

Jellinek, S., and Bailey., T. G. 2020



Objective 8: Encourage private properties and other land managers to plant indigenous vegetation and contribute to Target 250k.

	Action Snapshot					
	Plant 25,000 indigenous plant annually across the landscape.					
	Create marketing campaign to promote Biodiverse Banyule					
	Plant aquatic species in local wetlands and waterways.					

Banyule as a predominantly urban environment, has an opportunity to use different landscaping opportunities and private gardens as a way of connecting our natural systems.

Our naturestrips, backyards and green open spaces afford numerous opportunities to include indigenous plantings that are rich in diversity. Taking these opportunities to revegetate outside of conservation spaces opens pathways and stepping stones for our local fauna and increase genetic movement for plants, leading to increased resilience to outside influences and threats.

Objective 9: Create systems to track our revegetation success.

Action Snapshot Create indigenous planting database



Develop an online resource for community to maintain species supporting the Biodiverse Banyule target.

Tracking our indigenous planting efforts is a critical step to achieving our Biodiverse Banyule target. Putting systems in place to support and record output is a clear objective where Council and the community can see progress and celebrate our gains.

Creating platforms and systems for Council, community, and other industry partners to input their revegetation efforts builds a collective approach and helps each stakeholders understand the contribution they are making our Biodiverse Banyule target. It also fosters collaboration and ensures we are united on the journey to restore our natural landscapes.

These opportunities for data collecting further adds a accountability and commitment to ensure we reach our ambitious targets.



Image: Alex Sibbison

Conservation Management Professionals

Council has a Bushland Management Team, that works within our local conservation areas to protect and enhance local flora and fauna. As highly skilled practitioners, this team performs a critical function for Council in managing the 36 identified biodiversity hotspots throughout the municipality.

They are also an important connection to the community, working closely with our local Environmental Friends Groups to undertake planting and other conservation management activities.

The Bushland Management team are an ongoing source of environmental stewardship and will drive many of the actions within this strategy.

Goal 4: By 2035 natural spaces are better connected for species movement between conservation areas and wildlife corridors.

Revegetation efforts should focus on the creation of patches and linkages between remnant and well-structured patches that are structurally complex to allow for faunal movement and genetic diversity exchange.

D. Salt and D. Lindenmayer, 2008.



Objective 10: Enhance the connection between our wildlife corridors and conservation reserves.

Action Snapshot Update the Banyule Wildlife Corridor Plan Create naturestrip planting guidelines Upscale the Gardens for Wildlife program. Install artificial hollows for local fauna through identified biodiversity hotspots.

Banyule is fortunate to have three main wildlife corridors and other creeks that hold significant biodiversity value. In conjunction with other conservation reserves and vegetation on private land they form an interconnected web of habitat for species. How connected these corridors, reserves and other vegetation patches are across the landscape can either support or inhibit the movement of species and their genetics.

Having a detailed understanding of our wildlife corridors and how they function to support connectivity for species provides a strategic direction to inform our biodiversity management. This can be achieved through the Strategy by undertaking modelling of species movement across the landscape, investigating how existing corridors and habitat patches function for these species, and identifying opportunities to enhance this function, through revegetation and other activities. This will also show the community how their own green spaces can support this objective.



Artwork- Felicity Gordan

Gardening for our Wildlife

Banyule's <u>Gardens for Wildlife</u> program supports private residents and businesses to create habitat in their own backyards and green spaces to support our local fauna.

This is a co-designed and facilitated program between Council and community. Volunteers known as 'Garden Guides' offer other residents free habitat gardening advice while Council supports the program through resourcing and administrative measures.

Over a 2-year period the Gardens for Wildlife program saw a **65%** increase in registered gardens and a **73%** increase in volunteer 'Garden Guide' involvement.

The growth of this program since 2021 demonstrates the community's willingness to support our natural environment and the ability to connect people with each other and nature.

Objective 11: Achieve strong biodiversity outcomes in the pursuit of our Urban Forest Strategy canopy cover targets by 2050.

Action Snapshot



Enhance our wildlife corridors and conservation areas.



Support Swift Parrot by planting habitat tress in known locations

Urban canopy connection across an urban municipality is critical on helping to connect habitats and mitigate against the impacts of climate change.

The Urban Forest Strategy sets the following targets by 2050:

- 30% canopy cover across all suburbs,
- 45% across the footpath and road networks, and
- 50% across our open space shared path network and surrounding playgrounds.

For biodiversity, this is critical as a healthy urban canopy will ensure healthy biodiversity for generations to come. In line with the Urban Forest Strategy Council will pursue opportunities to increase the diversity of the urban forest for biodiversity and habitat with ground cover and shrub layer plantings.



Mature trees have many benefits.

A mature tree can absorb up to 150kg of carbon dioxide every year. Planting 12 trees can offset one year's worth of a person's entire carbon dioxide emissions (Adapt NSW, 2024).

Tree planting and retention is a simple nature-based solution to cooling cities. Well established trees and vegetation are known to reduce air temperature, glare, and UV radiation. They are also critical in reducing surface temperatures and mitigating against heat island effect (Greening Australia, 2020).

Trees that are adequately maintained on private safe and natural benefits to humans and even reduce power costs.

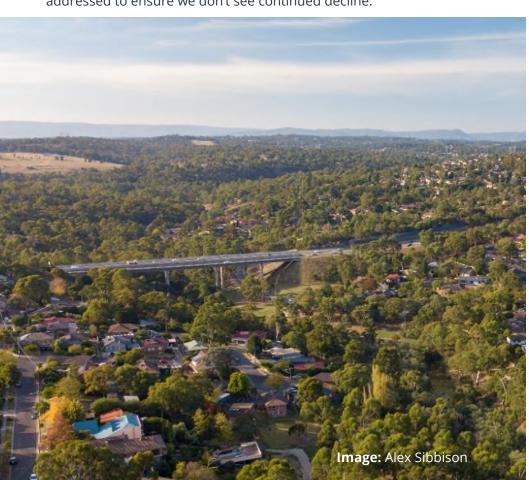
THEME 3 - PROTECTING OUR BIODIVERSITY



Protecting what biodiversity remains is critical. Much of the physical loss of biodiversity is seen within the private realm through vegetation removal from developments and major projects such as North-East Link and it is critical Council has a role in preventing further loss.

Protection from other risks to biodiversity like pest and domestic animals, weeds and climate change are just as important to manage.

The outward pressures on biodiversity are numerous and need to be addressed to ensure we don't see continued decline.



Goal 5

Strengthen planning scheme protections for biodiversity to retain more vegetation.

WHAT COUNCIL CAN DO

- Ensure environmental planning scheme measures are adhered to.
- Increase the knowledge of biodiversity in town planning practices.
- Ensure there is provision of expert biodiversity advice for town planners.

WHAT COMMUNITY CAN DO

- Retain as much vegetation on your own land as possible to align with Council vegetation, climate, and canopy cover targets.
- Advocate to your wider networks on the importance of vegetation retention on your land.

Goal 6

We see no extinctions of significant species.

WHAT COUNCIL CAN DO

- Celebrate our flagship species to build value and create advocacy.
- Actively protect our areas where our flagship species are known to exist.
- Develop systems to understand our flagship species better.

WHAT COMMUNITY CAN DO

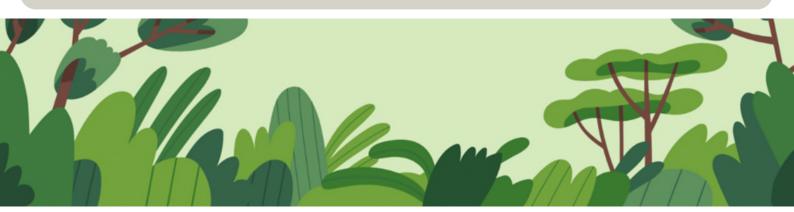
- Join community programs or create one that support our flagship species.
- Provide Council with information on local flagship species to support their objectives.
- Become informed about our local flagship species to help protect them.

Strategic Direction – Protecting our Biodiversity.

Goal 5: We are proactive in the protection of our remaining biodiversity on all land and plan how to safeguard against the impacts of climate change.

To protect biodiversity and mitigate threatening processes, we must use science to inform management. Management should involve collaboration and engagement from all sectors, public and private, in partnership. We must manage threats to biodiversity at the landscape level in an adaptive management approach.

Australia's Strategy for Nature 2019-2030, Commonwealth of Australia



Objective 12: Ensure our natural spaces are protected by providing expert advice and build knowledge of the importance of vegetation retention on all land.

Action Snapshot



Embed expert biodiversity advice into development planning applications.

Loss of biodiversity is seen most in an urban municipality like Banyule, through incremental loss of vegetation in multi-unit housing developments.

As the Responsible Authority under the Banyule Planning Scheme, Council has an important role to play in applying planning scheme controls to retain as much vegetation as possible and offset any unavoidable vegetation loss through these developments. An offset is a form of compensation for the vegetation loss, usually resulting in additional vegetation being planted elsewhere.

Opportunities to strengthen our approach to vegetation and biodiversity protection in planning include:

• Increasing biodiversity knowledge of town planners to identify and implement solutions to biodiversity protection and enhancement through the planning process.

- Increasing the provision of expert biodiversity advice to ensure we have more informed decisions around biodiversity retention.
- Seeking opportunities to secure direct offsets from unavoidable vegetation loss in Banyule back into the local environment instead of further abroad



Developments and loss of biodiversity

Private land development is responsible for the majority of loss of vegetation throughout Banyule meaning increased advocacy is a priority.

The North-East Link Project is the biggest infrastructure project that Banyule will ever see, and it has had a major impact on our local canopy cover and biodiversity.

The projects footprint has meant an estimated >30,000 trees have been lost to the local ecosystem, leaving a devastating and lasting impact on local biodiversity.

Plans to reinstate local indigenous vegetation to the North-East Link site are a welcome outcome, but loss at this scale may never see ecosystems fully recover.

Objective 13: Strengthen biodiversity considerations into future planning of our city.

Action Snapshot



Review Environmental Significance (ESO), Vegetation Protection (VPO) and Significant Landscape (SLO) Overlays.



Advocate for improved biodiversity outcomes in all major projects.



Investigate feasibility of localised offset opportunities.

Banyule's population is projected to increase by 18% by the year 2041. This will place a huge burden on our natural systems with an increase in housing and less space for biodiversity in the private realm.

The Public Realm Framework, Neighbourhood Character, and Housing Strategies outline areas of biodiversity importance, detail how to minimise the loss of vegetation and habitat in these spaces and plan how to reinstate biodiversity wherever possible.

Ensuring biodiversity is considered in these important strategic documents is a critical measure for future biodiversity outcomes.

Objective 14: Understand, plan, and manage the threats of pest animals (foreign and domestic) on our local biodiversity.

Action Snapshot



Develop a Pest Animal Management Plan.



Introduce a 2-year cat curfew trial.



Protect critical conservation areas from domestic dogs and other pets.



Undertake a review of the Common Myna trapping program

The impact of pest animals on local wildlife can be devastating. Introduced species such as foxes, rabbits and deer populations are increasing. Domestic animals such as cats have a significant impact on local wildlife wiping out local areas of native animals and altering local biodiversity significantly.

Deer are an emerging threat, and more sightings are being seen through our connected wildlife corridors. As an emerging issue we need to stay at the forefront of knowledge and partner with industry experts to understand and manage these populations.

Banyule actively manage pest animals (foxes and rabbits) on public land in areas of high biodiversity value. Resources don't allow for management of pest animals on private land, but Council actively encourages its residents to inform us of local sightings so we can monitor and strategically plan our efforts.



Impacts of Pest Animals

Introduced species can have a devastating impact on the local environment. Domestic cats alone can kill 546 million animals each year in Australia (Invasive Species Council, 2023).

Deer are an emerging threat to Banyule, having been sighted along our wildlife corridors in recent years. Their impact to the natural environment has the potential to be devastating through large scale trampling and compaction activity, causing indigenous vegetation to be lost and biodiversity decline in local areas.

Other pest species such as foxes are becoming more abundant in our urban environment. The state government has outlined foxes are a direct threat to 14 different species of birds, 48 mammals, 12 reptiles and 2 amphibians (Agriculture Victoria, 2023)

Objective 15: Actively manage pest plants on public land and promote the importance of controlling pest plants on private land.

Action Snapshot



Reduce Berry and Stormwater weeds from Conservation
Reserves and Wildlife Corridors



Reduce priority weeds in Conservation Reserves



Inform residents abutting biodiversity areas of priority weeds to control



Map new and emerging weeds and eradicate where known.

Pest plants pose a significant threat to our local indigenous flora populations and overall ecosystem health. Introduced species for horticultural and aesthetic landscaping and gardening can easily escape into our local conservation areas and wildlife corridors outcompeting our more desired species.

Hybridised or cultivate varieties of native plants pose a similar risk as once introduced into the landscape, can alter the genetic makeup of local indigenous species. Native species play an important role in creating biodiverse ecosystems in more built-up harsher landscapes, however care needs to be taken with species selection to ensure we don't adversely impact on indigenous species.



The problem with Gorse, Ulex europaeus

Gorse is a rapidly growing shrub that produces thousands of hard coated seeds, last in the soil for up to 30 years and spared into native bush rapidly.

It is highly problematic as it becomes incredible flammable when drying off from either natural attrition or control treatment (spraying) making it a highly combustible plant and increasing the risk of bash fire intensity.

Control of this species is difficult as large plants are very spikey, meaning manual labour is slow, cumbersome and poses an injury risk to the operator.

Its dense prickly form is also well known for harbouring pest animal species like rabbits and fixes.

Goal 6: We see no extinctions of local species.

Focal or 'flagship' species are critical to maintaining functional ecosystems. They further galvanise the community to embed a totem that champions environmental advocacy.

Rolf S., Flavia S, Barry G and Hedley. T, 2018



Objective 16: Be proactive in the management of our flagship species, enhancing their habitat in locations they are known to exist.

Action Snapshot



Identify priority aquatic habitat locations for Platypus, Growling Grass Frog and native fish.



Enhance habitat for local terrestrial faunal Flagship species, protecting all local ecosystems.

Using the recommendations outlined in the No Local Extinction Plan; to guide habitat restoration efforts, we will be proactive in the management of our identified Flagship species.

These species have been selected as a collective representation of Banyule's vegetation communities, so by enhancing the habitat of our identified iconic fauna, we will be contributing to overall biodiversity restoration across the municipality.



Migratory species - The Swift Parrot, Lathamus discolor.

The Swift Parrot is Australia's fastest-flying parrot and one of only three migratory parrot species occurring in the world (Juniper and Parr, 2001).

This species migrates from its breading grounds in Tasmania, over the Bass Strait to the mainland in autumn and winter, where is forages in the more temperate climate of south-eastern Australia.

Banyule and its habitats are a key foraging location, in particular the suburbs of Macleod and Greensborough, through existing canopy trees that provide its fruit in autumn and winter flowering *Eucalypt* trees.

Objective 17: Effectively monitor and understand the health of our Flagship species so we can better manage them.

Action Snapshot



Support our community to continue citizen science programs.



Undertake assessments of key habitats for endemic species.

Understanding the population dynamics and health of our flagship species is critical to ongoing biodiversity management.

Monitoring our Flagship species requires collective efforts from Council, the community and industry partners through existing citizen science and council facilitated programs.

The monitoring of our Falgship faunal species by community will align with a Biodiversity Monitoring Program and help inform overall environmental trends. It further allows the community to become champions of these species and developing citizen science projects such as the Montmorency Sugar (Krefft's) Glider project and the Powerful Owl Audio Monitoring program.

THEME 4 - WELLBEING AND OUR BIODIVERSITY

Banyule's community is heavily invested in the natural environment. It is a major reason people choose to live here.

Council has a commitment to provide opportunities for its residents to meaningfully engage with nature. Council also has a responsibility to educate our community about our local flora and fauna, leading to expanded knowledge and stewardship for our natural environment.

Banyule's Municipal Public Health and Wellbeing Plan that has a key focus on active living and improved mental health. Numerous studies have shown that connection to nature provides real and tangible opportunities for people to become more active and improves both physical and mental health.



Goal 7

We provide meaningful opportunities for people to connect with nature.

WHAT COUNCIL CAN DO

- Provide nature themed engagement opportunities for the community.
- Upscale our current programs to endure they meet our community's needs.
- Collaborate with industry partners to provide nature-based engagement opportunities.

WHAT COMMUNITY CAN DO

- Engage with the nature-based programs provided by Council.
- Allow yourself time to meaningful engage with nature at any opportunity.
- Use Banyule's open spaces and conservation areas to engage in mental wellbeing.

Goal 8

We empower people to become effective biodiversity stewards, extending our biodiversity support.

WHAT COUNCIL CAN DO

- Provide local environment information to build community value and stewardship.
- Support community environmental initiatives through provision of grants.
- Enable community contribution to biodiversity knowledge to support Council.

WHAT COMMUNITY CAN DO

- Engage with the environmental material provided by Council.
- Spread the environmental message by informing your wider community.
- Contribute to biodiversity knowledge by engaging with local environmental groups.

Strategic Direction – Connecting with Biodiversity.

Goal 7: We provide meaningful opportunities for people to connect with nature.

By promoting activities that enhance people's connection with nature we aim to increase the frequency with which people act to protect the environment and therefore improve the future of Victoria's unique biodiversity.

DELWP, Biodiversity 2037, Victorians Value Nature – Foundation Survey Summary, 2019



Objective 18: Increase community support for biodiversity enhancement and volunteering opportunities allowing people to meaningfully connect with nature.

Action Snapshot



Increase our support for environmental education



Deliver annual biodiversity upskilling workshops



Develop accessibility information for nature engagement

Banyule has a rich history of environmental volunteering and community engagement with nature. There are 12 Environmental Friends groups operating in partnership with Council currently.

Council has a role to play in supporting these volunteer groups and our broader community to thrive by providing opportunities to upskill and expand environmental knowledge, further supporting group activities within conservation reserves.

Environmental volunteering is critical for increasing Councils environmental reach. In 2024, over **3000** hours of environmental work was provided by our community. Overall, volunteering throughout Victoria is facing barriers such as recruitment and retention, ageing demographics and adequate opportunities being provided. Council therefore plays a critical role in increasing the support to our Environmental Friends groups and further extend of environmental stewardship.

Objective 19: Continue to deliver ongoing biodiversity engagement programs for the community to connect with nature.

Action Snapshot



Deliver our annual Spring Outdoors Program.



Develop an assessment of community program to evaluate their effectiveness.

Council has an important role to play in supporting programs that allow people to engage with nature and our natural spaces.

Engagement programs throughout Banyule include Breakfast with the Birds, forest therapy sessions, cultural heritage engagement sessions and many more environmental events. These programs are directly funded through Council, their partners and community groups, affording people many opportunities to meaningfully engage with nature, to learn upskill, connect with other people, and enjoy the mental physical health benefits of immersing in nature.



Banyule's Spring Outdoors Festival

The <u>Spring Outdoors Festival</u> is Banyule's marquee environmental engagement opportunity for the community to connect with nature.

This is a partnership program between Banyule, Manningham and Nillumbik councils and has been running for over 25 years.

Annually this program provides over 20 environmental programs in Banyule for the community to connect with nature, learn from industry experts in nature and sustainability and connect with each other, the environment, and our cultural heritage.

Goal 8: We empower people to become effective biodiversity stewards, extending our biodiversity support.

Victorians with higher levels of connection to nature are more likely to take up environmental action and have pro-environmental values.

DELWP, Biodiversity 2037, Victorians Value Nature – Foundation Survey Summary, 2019



Objective 20: Continue support of our community to attract funding for environmental projects and participate in upskilling programs.

Action Snapshot



Support our community to apply for environmental grants.

Community groups rely on government and philanthropic funding to remain viable and undertake many of their activities that benefit the environment. Council has a role to play in offering opportunities for our passionate community to continue to be environmental champions in Banyule. Existing funding opportunities that Council offers include:

- Banyule's Environment Grants program through an annual application process local community groups and members can apply for grants up to \$10,000 to undertake biodiversity programs on public land throughout Banyule.
- Gardens for Wildlife program supporting the community with free advice on how to improve habitat in their own gardens and green spaces and providing participants with free indigenous plants as an incentive and kick start to their wildlife gardening journey.
- Schools for Wildlife program a Council committed program, allowing Banyule Schools to apply for support to build fauna habitat within their school grounds. This provides additional educational session to teachers and students through a serios of incursions themed around habitat improvements.
- Indigenous Plant Voucher program Banyule residents are entitled to one indigenous plant voucher annually and redeemable through the two supporting indigenous nurseries, the Victorian Indigenous Nursery Cooperative (VINC) and Nangak Tamboree Wildlife Sanctuary Nursery. This program allows the community to plant indigenous species in their gardens adding to Banyule's overall biodiversity and will assist Council in achieving its Target 250k objective.



Banyule's Environmental Grant Program

Banyule's community is an integral part of the environment, and together we are its custodians.

Each year, the Environment Grants program offers to fund community driven environmental programs that benefit our local environment, connect people with nature and each other.

Each year, biodiversity grants are a core component of the Environmental Grants program, leading to amazing educational material, habitat restoration and nature connection programs.

Objective 21: Increase opportunities for the community to help record and monitor our local flora and fauna.

Action Snapshot



Foramalise a Citizen Science program for community to assist in building our biodiversity knowledge.

A key direction of this strategy is to effectively monitor our local biodiversity to better understand the condition of the environment and its species and inform effective management. One means through which this can be achieved is citizen science which is a collection of data through observations made by the community (general public) and are typically part of a collective project led by government, agency, or community themselves.

Banyule is fortunate to have an environmentally engaged community, willing to take part in monitoring and observing our local environmental assets.

The development of Council led citizen science programs engages the community through a collective goal to monitor local flora and fauna and deliver organised, broader biodiversity monitoring programs.

Citizen science is a growing interest for community that Council must embrace and support.

Objective 22: Elevate our biodiversity programs for the community to engage with

Action Snapshot



Elevate our community biodiversity engagement programs

Community participation and engagement to people forming an important connection to nature, developing environmental values and an appetite to take actions to protect these values. But to participate, the community first needs to be aware of local biodiversity programs, issues, and natural places of interest. Council can play a key role in embedding natural environmental awareness across the community through its communications, information resources and programs. This is a key direction of the Connecting with Biodiversity theme of the Strategy.

Council already has many resources and engagement opportunities for the community to be well informed. There are also biodiversity related programs run by community groups and other organisations in Banyule that offer opportunities for local residents. Through effective communication these programs can be made more accessible to our community.

Objective 23: Increase Council and community connection to our flagship species, making them an icon for building biodiversity stewardship.

Action Snapshot



Celebrate our flagship species throughout Banyule



Develop a campaign to celebrate the environment

Creating a connection to nature is important for building a sense of ownership and pride in the areas in which we all reside. Our local flagship species can provide a hook for people to link to the natural environment and become broader environmental advocates.

Developing effective community education and communications focusing on our flagship species will provide guidance and awareness for community and Council to be effective environmental stewards.



Image - Tom Crawshaw

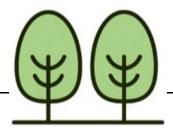
A Monotreme with a Big Role for Biodiversity.

The Platypus, (*Ornithorhynchus anatinus*) is a uniquely Australian species. We are fortunate to have populations throughout stretches of the Birrarung (Yarra) River and Plenty River to this day.

Platypi play an integral role in ecosystem and river health by providing a flagship species to educate on the importance of the litter cycle in our natural systems. It's common to see a platypus stencil on drains, informing community of the importance of disposing of their rubbish correctly.

A monotreme is a mammal that that lays eggs as opposed to other mammals that give birth to live young.

THEME 5 - PARTNERSHIPS FOR BIODIVERSITY



Managing biodiversity is not the responsibility of one agency. Having effective partnerships with other industry land managers and the community is critical to progressing biodiversity management.

Nature doesn't recognise land and property boundaries and the efforts of one agency to manage biodiversity on their land are often not effective unless complementary management occurs on adjacent land. This could include collaboratively addressing threats such as weeds or pursuing collaborative restoration opportunities.

Wildlife corridors are an example where cross agency collaboration is critical as they often extend through multiple local or state government boundaries. What is or isnt managed in one jurisdiction can have a flow on effect for another area.



Goal 9

Enhance partnerships with our community and industry partners for the benefit of our local natural environment.

WHAT COUNCIL CAN DO

- Maintain our partnership with Wurundjeri to work on country together, achieving positive biodiversity outcomes.
- Continue to collaborate with industry partners, achieving positive biodiversity outreach.
- Seek joint funding opportunities to enhance and protect biodiversity in Banyule.

WHAT COMMUNITY CAN DO

- Join a local Environmental Friends group to support Council in in protecting and enhancing our local natural environment.
- Partner with Council in joint initiatives, working collaboratively on biodiversity programs on Council land.
- Seek support and funding from Local, State and Federal agencies to increase biodiversity support throughout Banyule.

Strategic Direction – Partnerships for Biodiversity.

Goal 9: Enhance partnerships with our community and industry partners for the benefit of our local natural environment.

Nature provides the raw materials that support all life on this planet. If we are the beneficiaries of these resources, we must respect nature and support it wherever we can. Doing this alone is not enough, there needs to be collaboration and partnerships between private business, government, and the community.

Holcim and IUCN – Partnerships for Biodiversity, 2010



Objective 24: Maintain our partnership with Wurundjeri, continuing to work on country, protecting and enhancing our local environment.

Action Snapshot



Support Wurundjeri Narrap Rangers through selfdetermination centred around ecological practices.



Deliver annual cultural walks on Country.

Council have forged a strong partnership with the Wurundjeri Narrap Ranger team in the pursuit of biodiversity conservation and land management outcomes.

This partnership allows both Narrap rangers and Council staff to learn from each other, exchanging and melding traditional and contemporary management practices work biodiversity conservation areas and pursue opportunities to work in and connect to land with high Aboriginal cultural heritage significance.

This partnership is a critical one for Council, it's conservation teams and Wurundjeri, offering opportunities for First Nations people to work on country and develop a shared vision for ongoing management of the natural environment. Building lasting relationships with our First Nations people in the pursuit of biodiversity and cultural heritage aims also contributes to Council's *Marrageil Strategy*, supporting Aboriginal self-determination and reconciliation.



Water for conservation and culture

In 2016, Banyule partnered with Wurundjeri, Melbourne Water, Parks Victoria, and the Victorian Environmental Water Holder in a joint program to restore water back to Banyule Billabong.

62 million litres of water was granted to trial an environmental watering process to restore water to Banyule Billabong, which no longer received regular flooding.

This was an important ecological and cultural water management project, demonstrating the collective effort of effective partnerships.

Objective 25: Collaborate with industry partners to deliver environmental school-based programs.

Action Snapshot



Partner with CERES and DCMC to deliver environmental education programs.



Maintain partnership with Nillumbik to deliver the Teachers Environment Network (TEN).



Investigate opportunities with local partners to reintroduce Pygmy Perch and other native fish to Banyule waterways.

Banyule has forged partnerships with other organisations to deliver meaningful natural environment opportunities for local schools. Current programs include:

- Teachers Environment Network This initiative is a partnership with Nillumbik Shire Council to deliver professional development opportunities to Banyule and Nillumbik educators in environmental awareness and has been running for many years.
- Environmental and Climate Action for Kids Conference formerly known as the Kids Teaching Kids Conference, this partnered program with Nillumbik Shire Council supports local school students to

- present and learn from their peers on environmental and sustainability initiatives their school is achieving.
- *Schools for Wildlife program* Banyule has recently partnered with CERES to deliver the Schools for Wildlife Program, which provides education and habitat improvements within school grounds.

These programs are essential for local school education and stewardship and should be continued and expanded where possible to involve other partners and supporters.

Objective 26: Work with other land management agencies to deliver proactive natural environment enhancement and protection programs on land in Banyule.

Action Snapshot



Maintain riparian environments through collaboration with Melbourne Water and Community Groups.



Continue partnerships with indigenous nurseries to secure local provenance species.



Obtain environmental grants to extend our environmental funding for priority projects.

Partnerships with other land management agencies are critical in successful biodiversity management.

Banyule has had proactive ongoing partnerships with industry partners like neighbouring Councils, Parks Victoria, Melbourne Water and Metro Trans to enhance and protect critical conservation areas.

These partnerships have led to collective funding arrangements for biodiversity projects through the Banyule region, that further lead to co-investment opportunities with other state and federal agencies.

This strategy recognises the importance of these ongoing relationships and the collaboration and co-investment that can ensue.



Shining a light – The Eltham Copper Butterfly Habitat Restoration Project

In 2022, Banyule partnered with Melbourne Water, Nillumbik Shire Council, Parks Victoria, Yarra Valley Water, Wetland Revival Trust and the Friends of the Eltham Copper Butterfly (ECB) to obtain a Federal Government grant to support the protection of habitat for the Eltham Copper Butterfly across Victoria.

The funding led to significant weed management across both of Banyule's known ECB sites, habitat protection fencing at Andrew Yandell's Habitat reserve, a year's monitoring at Mayona Conservation reserve and the creation of an Interpretive sign for the new colony of ECBs at Mayona Conservation Reserve.

This multi organisation partnership demonstrates collaboration between agencies is critical in continued efforts to protect and enhance the habitat of our local significant species.

Objective 27: Support our Environmental Friends Groups to be effective biodiversity champions and further extend Council's natural environmental management response.

Action Snapshot



Partner with local Friends Groups, maintaining conservation reserves.

There is a rich history of environmental volunteering throughout Banyule. Some Friends Groups were formed over 50 years ago and have been partnering with governmental agencies for many years.

Banyule currently supports 12 Environmental Friends groups that volunteer their time within local conservation reserves in partnership with the Council.

Ongoing support from Council to these groups includes upskilling workshops, provision of tools to undertake works and general environmental guidance. This support is critical to the ongoing relationship and partnership between these community volunteers and Council and achieving shared goals for biodiversity.

S

Image - WCS Website

One of Victoria's Oldest Friends Groups

Warringal Conservation Society was founded in 1970 out of the need to save Banyule Flats and Warringal Parklands from the pressures of development. To this day, their core aims remain to restore and enhance indigenous vegetation providing habitat and carbon control, share knowledge about conservation and natural history, promote sustainable living, encourage local community participation in conservation and advocate to all levels of government, maintaining a high level of accountability for environmental decision making.

This group is one of Banyule's oldest <u>Environmental Friends</u> groups and an example of the dedication, passion and value the other 11 groups collectively demonstrate and help protect and enhance our natural environment in partnership with Council.

PART 3

ACTION PLAN

ACTIONS FOR A BIODIVERSITY POSITIVE FUTURE.



The Action Plan

The Biodiversity Strategy outlines a 10-year vision to proactively protect, enhance and monitor biodiversity in partnership with the community and other industry stakeholders.

As outlined in Part 2 the Strategy will be delivered through two 5-year Action Plans.

Part 2 also introduced the five themes that frame the Strategy, including overarching goals and objectives for each:

- 1. Knowledge and Biodiversity
- 2. Our Healthy Biodiversity
- 3. Protecting our Biodiversity
- 4. Connecting with Biodiversity
- 5. Partnerships for Biodiversity

Part 3, the Action Plan, outlines the specific actions that Council commits to undertake to achieve the goals and objectives, measures to track our success and associated timelines and costs. The Action Plan also provides guidance to the community and other land managers in Banyule on how they can support Council to achieve the Strategy vision.

Specific actions relate to monitoring biodiversity and our Target 250k campaign, but collectively outline opportunities to make overall biodiversity improvements and create value adding opportunities.

The below Action table is separated into the 5 themes, with projected costs and timelines for each action identified in the table as follows.

Costing

Existing Resources – will achieve action under current resourcing.

Externally Funded – funding through an external organisation.

\$ = additional funding required <\$15,000k.

\$\$ = additional funding required \$15,000 - \$80,000k.

\$\$\$ = additional funding required > \$100,000k.

Timelines

Ongoing = actions that are already being implemented and are important to continue.

Short Term = action to be implemented in year 1 of the Action plan.

Medium Term = actions to be implemented in year 2 – 3 of the Action Plan.

Long Term = actions to be implemented in years 4-5 of the Action plan.



KNOWLEDGE AND BIODIVERSITY



Objective	Action #	Action	Measurement	Lead Team (Support Team)	Timeframe	Cost
Goal 1: Improve our	knowledge	of biodiversity.				
Objective 1: Develop and implement data driven biodiversity management focused on monitoring local biodiversity, informing planning and operations and enhances our capacity to respond to	1.1	Develop a Biodiversity Monitoring Program (BMP) which features key biodiversity indicators which are reported annually through the State of the Environment report and provide long term data for Council to make informed biodiversity management decisions.	Development of a Biodiversity Monitoring Program which includes robust data sets on local ecology. Conservation Plans outline site specific management informed through monitoring program. Review of management effectiveness through percentage increase in biodiversity indicators.	Environment (Bushland Management)	Short Term	\$\$\$
	1.2	Deliver conservation management plans or vegetation surveys annually to inform and monitor conservation work. Priority will be determined through Bushland Site Ranking Program.		Bushland Management	Ongoing	\$
ecological changes.	1.3	Engage local universities to undertake an assessment of the understory vegetation layer including parks, naturestrips to understand locations where biodiversity improvements can be achieved.		Environment	Medium Term	Externally Funded
	1.4	Continue to record existing significant flora and fauna in Council managed conservation reserves and upload to data to the Victorian Biodiversity Atlas (VBA), thereby supporting State and Federal Government biodiversity targets.		Bushland Management	Ongoing	Existing Resources
Objective 2: Understand how our indigenous flora species are performing	1.5	Continue to review the Bushland Site Ranking Program ensuring our conservation sites biodiversity assets are correctly funded and key biodiversity sites are managed effectively.	<u> </u>	Bushland Management	Ongoing	Existing Resources

through monitoring population health and implementing restoration programs.	1.6	Continue monitoring flora identified in the Significant Flora Program and form a reintroduction program for these species where needed.		Bushland Management	Ongoing	Existing Resources
Objective 3: Assess and report on the impacts of climate change on	1.7	Partner with industry experts or local universities to undertake a localised investigation paper into climate resilient vegetation, outlining how we plan to support local indigenous vegetation.	Biodiversity Climate impact knowledge is embedded in	Environment (Urban Forestry, Bushland Management)	Medium Term	\$\$\$
biodiversity by 2028	1.8	Commission a study that provides evidence into the impacts of climate change on local ecosystems and our key flagship species with recommendations on how to build resilience.	Council practices by Year 3.	Environment (Bushland Management)	Medium Term	\$\$\$
Objective 4: Embed nature-based solutions into future practices for the public and private realm developments.	1.9	Undertake and investigation into strengthening Biodiversity Sensitive Urban Design (BSUD) principles in Banyule's Planning Scheme	BSUD principles are embedded into the Planning Scheme by year 3. (Action depends on timing of Planning Scheme amendment cycle)	Strategic Planning and Development Planning. (Environment)	Medium Term	\$\$
Objective 5: Increase our understanding of local fauna	1.10	Monitor installed nestboxes for key flagship species which will feed directly into the Biodiversity Monitoring Program.	- The number of species and	Bushland Management	Ongoing	Existing Resources
populations.	1.11	Undertake a feasibility study into the potential to have Growling Grass Frog (GGF) populations reintroduced in Banyule wetlands.	detailed knowledge of their habitats is obtained by year 5 (species monitoring is	Environment (Environmental Operations)	Long Term	\$\$
	1.12	Undertake an investigation into Kangaroo movement through Banyule, to understand population dynamics and provide recommendations to support and manage kangaroos on public land and in developments.	captured annually through the BMB and State of Environment Report).	Environment	Long Term	\$\$
		Goal 2: Increase the va	lue and stewardship of b	iodiversity for all.		
Objective 6: Increase community awareness	2.1	Create information on living with wildlife to build community understanding and value of local biodiversity value and increase community stewardship.	Value for the natural environment has increased and captured through liveability and community	Environment (Development Planning)	Medium Term	Existing Resources

and value of biodiversity.	2.2	Develop an online portal for community and developers to access information on biodiversity appropriate vegetation to plant in gardens and landscaping designs that supports biodiversity enhancement opportunities.	satisfaction surveys. Target of 75% of residents value nature.	Strategic Planning and Urban Design and Environment	Short Term	\$\$\$
	2.3	Promote and celebrate conservation work and achievements through Council's publications and media channels.		Bushland Management (Environment)	Ongoing	Existing Resources
	2.4	Develop biodiversity resident packs for community living in key biodiversity locations on the importance of vegetation retention within ESO, VPO and SLO sites across the municipality.		Environment (Development Planning)	Medium Term	Existing Resources
	2.5	Embed biodiversity themes into Council's wayfinding though the Wayfinding Management Plan.		Environment Strategic Planning and Urban design, (Development Planning)	Long Term	\$\$\$
Objective 7: Embed biodiversity into Council strategies, plans and reporting.	2.6	Develop Conservation Management Framework for managing Banyule's conservation reserves to ensure work undertaken by contractors and others operating within these spaces aligns with the Bushland Management Teams ecological objectives.	Framework and reporting processes are complete by Year 1 of the Strategy. Number of projects embedding positive	Bushland Management (Environment)	Short Term	Existing Resources
	2.7	Embed biodiversity considerations into Council reporting processes so the natural environment is considered for all projects.	biodiversity values is tracked and reported on annually.	Environment	Short Term	Existing Resources
	2.8	Seek to have a 'value for the natural environment' questions embedded into future liveability and community value surveys to monitor the communities value for our local biodiversity.	Value for the natural environment for all residents is 75% (aligned with Objective 6).	Environment	Short Terms	Existing Resources.

ENHANCING OUR BIODIVERSITY



Objective	Action #	Action	Measurement	Lead Team (Support Team)	Timeframe	Cost	
Goal 3: Plant 250,000	indigenous	plants across the landscape by 2035 to	achieve Biodiverse Bar	nyule - Target 250k.			
Objective 8: Encourage the planting of indigenous vegetation on all land and contribute to Biodiverse Banyule -	3.1	Plant 25,000 indigenous plants annually through local planting, community projects, landscaping opportunities and incentive programs to meet our Biodiverse Banyule – Target 250k objective.	25,000 indigenous plants	Environment (Bushland Management, Urban Forest, Parks Presentation)	Ongoing	Existing Resources	
Target 250k.	3.2	Develop a marketing campaign to inform Council and the wider community of the Biodiverse Banyule – Target 250k target.	planted (including aquatic species) annually in identified biodiversity enhancement areas outlined in the Wildlife Corridor Plan. Private realm supports this initiative through existing engagement program and tracked through existing engagement systems. Target to identify private realm connection opportunities through the Wildlife Corridor Plan.	species) annually in identified biodiversity enhancement areas outlined in the Wildlife	Environment	Short Term	Existing Resources
	3.3	Increase the amount of aquatic based biodiversity plantings, supporting aquatic fauna species in waterway and wetland locations throughout Banyule.		Private realm supports this initiative through existing engagement program and	Environmental Operations (Bushland Management)	Ongoing	Existing Resources
Objective 9: Create systems to track our revegetation success	3.4	Create a database to record all indigenous plantings that are undertaken throughout Banyule, which Council are made aware of to record against Biodiverse Banyule – Target 250k target.		engagement systems. Target to identify private realm connection opportunities through the	Environment	Short Term	Existing Resources
	3.5	Develop resources to support community and others in maintaining the investment of planting indigenous species back into the landscape, ensuring we are a biodiversity positive city.		Environment	Short Term	Existing Resources	

Goal 4: By 2035 natu	ral spaces a	are better connected for species movem	ent between conservat	ion areas and wildli	ife corridors.	
Objective 10: Enhance the connection between our wildlife corridors and conservation reserves.	species to inform a review and update Banyule's Wildlife Corridor Report, including 4.1 updated ecological information, identification of priority biodiversity sites and habitat	Environment (Urban Forestry, Bushland Management, Open Space Planning, Spatial and Property)	Short Term	\$\$		
		including advice on biodiversity enhancement to create pathways for flora and fauna	Wildlife Corridor Plan) including public and	Open Space Planning (Environment, Bushland Management, Waste, Urban Forestry)	Medium Term	\$
	4.3	Develop a prospectus linked to open space masterplans to attract future investment in biodiversity returns.				
	4.4	Upscale Gardens for Wildlife Program to support more residents and businesses to implement habitat improvements through their properties creating stepping stones for local fauna.	Increase in participation to 3% of Banyule households of registered gardens and volunteer 'garden guides' into the program.	Environment	Long Term	Existing Resources
	4.5	Continue Fauna Nest Box program through key conservation reserves, providing additional homes for fauna.	Number of boxes recorded.	Bushland Management	Ongoing	\$
Objective 11: Achieve strong biodiversity outcomes in the pursuit of our Urban Forest Strategy canopy cover targets by 2050.	4.6	Increase indigenous tree, shrub and ground layer cover in key biodiversity locations and wildlife corridor connection sites, highlighted through the Wildlife Corridor Plan throughout Banyule.	Number of indigenous trees planted on public land recorded through indigenous plant tracking database.	Urban Forestry (Bushland Management, Environment)	Ongoing	\$
	4.7	Plant key habitat tree species in locations where Swift Parrots are known to visit and informed through the Wildlife Corridor Plan ensuring there is succession planning for tree species to support feeding sites into the future.	Key tree species that are planted are recorded in known roosting locations.	Urban Forestry (Environment)	Ongoing	Existing Resources

PROTECTING OUR BIODIVERSITY



Objective	Action #	Action	Measurement	Lead Team (Support Team)	Timeframe	Cost
Goal 5: Strengthen p	lanning sch	eme protections for biodiversity to reta	ain more vegetation.			
Objective 12: Ensure our natural spaces are protected by providing expert advice and build knowledge of the importance of vegetation retention on all land.	5.1	Embed the function of expert biodiversity advice in Council's development planning processes.	Assessed against the number of vegetation retentions captured through planning referrals.	Development Planning (Environment)	Short Term	\$\$\$
Objective 13: Strengthen biodiversity considerations into future planning of our city.	5.2	Undertake a review of the effectiveness of landscape outcomes and the level of biodiversity protection afforded within ESO, VPO and SLO areas.	There is an increase in indigenous vegetation within the public and private realm as the result of strengthened intervention from actions.	Development Planning (Environment)	Long Term	Existing Resources
	5.3	Undertake an investigation into the feasibility of localised offset sites being established within Banyule to ensure development offsets are retained within the municipality.		Development Planning (Environment)	Medium Term	\$\$
	5.4	Continue to advocate for stronger biodiversity outcomes from the North East Link project including the use of indigenous species in landscape plans, fauna crossing and additional habitat wherever possible.		Environment (Transport Advocacy)	Ongoing	Existing Resources

Objective 14: Understand, plan, and manage the threats of pest animals (foreign and domestic) on our local biodiversity.	5.5	Develop a Pest Animal Management Plan to outline how Council strategically manages invasive fauna on public land and our key biodiversity sites throughout Banyule.		Environment (Bushland Management)	Short Terms	Existing Resources
	5.6	Protect critical conservation areas from domestic dogs.	Increase in wildlife records recorded by 2035.	Bushland Management (Environment)	Ongoing	Existing Resources
	5.7	Introduce a two-year cat curfew trial from 7pm to 7am commencing 1 February 2025, with a 6-month enforcement amnesty, to support cat owner to transition to the new curfew.		Local Laws (Environment)	Medium Term	Existing Resources
	5.8	Undertake a review of the Common Myna trapping program	Review complete by 2026.	Environment (Environment)	Ongoing	Existing Resources
Objective 15: Actively manage pest plants on public land and promote the	5.9	See and overall reduction of Berry and Storm Water weeds (identified in the Weed Management Strategy (WMS)) in conservation reserves and wildlife corridors	An overall reduction on weed cover through monitored sites by 10% annually (allowing for follow up maintenance from re-emerging pest plants).	Bushland Management	Ongoing	Existing Resources
importance of controlling pest plants	5.10	See an overall reduction of priority weeds (identified in the WMS) in conservation reserves		Bushland Management	Ongoing	Existing Resources
on private land	5.11	Inform residents abutting conservation reserves and wildlife corridors of priority weeds to control who are identified through the Bushland Neighbours data base.		Bushland Management	Ongoing	Existing Resources
	5.12	Locate and map new and emerging weeds (identified in the WMS) and seek to eradicate these at mapped locations by 2035.		Bushland Management	Ongoing	Existing Resources
Goal 6: We see no ex	tinction of	local species.				
Objective 16: Be proactive in the management of our flagship species, enhancing their habitat	6.1	Identify priority aquatic habitat locations for Platypus, Growling Grass Frog and native fish.	Have no loss of local	Environment	Long Term	Externally Funded
	6.2	Undertake community engagement activities centred around the Flagship species building value and stewardship in all local biodiversity.	species throughout Banyule.	Environment	Ongoing	Existing Resources.

on locations they are known to exist.	6.3	Enhance habitat for local terrestrial faunal Flagship species (Powerful Owl, Eltham Copper Butterfly, Krefft's Glider and Swift Parrot), thereby supporting all local ecosystems.	Bushland Management	Ongoing	Existing Resources.
Objective 17: Effectively monitor and understand the health of our flagship species so we can better manage them.	6.4	Support the community citizen science programs such as the Montmorency Sugar Glider and Powerful Owls Audio Recording programs to ensure these groups are supported and assisted with critical conservation efforts.	Environment	Ongoing	Existing Resources
manage them.	6.5	Undertake an assessment of local reserves around known Eltham Copper Butterfly populations to understand other potential habitat sites, to ensure all key habitat areas are known.	Environment (Bushland Management)	Medium Term	\$\$

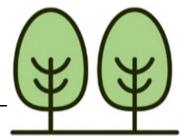
WELLBEING AND OUR BIODIVERSITY



Objective	Action #	Action	Measurement	Lead Team (Support Team)	Timeframe	Cost
Goal 7: We provide n	neaningful o	pportunities for people to connect with n	ature.			
Objective 18: Increase community support for biodiversity enhancement and	7.1	Embed the function of environmental education and environmental volunteer support into existing teams' operations to ensure ongoing support in these areas.	Engagement and	Bushland Management	Long Term	\$\$\$
volunteering opportunities allowing people to meaningfully engage with nature.	7.2	Deliver annual upskilling workshops for environmental groups and the community featuring biodiversity and other environmental topics.		Environment	Ongoing	Existing Resources
Objective 19: Continue to deliver ongoing biodiversity engagement programs	7.3	Continue to deliver the Spring Outdoors Program annually in partnership with Manningham and Nillumbik councils, providing free environmental engagement programs for community to connect with nature and the environment.	connection to nature measured through assessment surveys themed around biodiversity engagement.	Environment	Ongoing	Existing Resources
for the community to connect with nature.	7.4	Develop an assessment survey of the biodiversity engagement programs we deliver to ensure we are meeting the community expectations.		Environment	Ongoing	Existing Resources
	7.5	Create a publicly accessible information outlining accessibility levels for Banyule's conservation, enabling all genders and abilities to have transparent information about access to nature		Bushland Management	Short Term	Existing Resources
Goal 8: We empower	people to b	ecome effective biodiversity stewards, ex	tending our biodiversi	ty support.		
Objective 20: Continue the support our community to attract	8.1	Support the community to apply for environmental grants through Council, State and Federal funding	Measured on the number of environmental grants	Environment	Ongoing	Existing Resources

funding for environmental projects and participate in upskilling programs.		opportunities to develop biodiversity programs and projects throughout our municipality.	obtained and upskilling programs attended.			
Objective 21: Increase opportunities for the community to help record and monitor our local flora and fauna.	8.2	Develop a Citizen Science program, including a communications campaign, where existing community citizen science programs and community flora and fauna observations can feed into Banyule's broader Biodiversity Monitoring Program.	Increase in the number of people engaged in citizen science programs.	Environment	Medium Term	Existing Resources
Objective 22: Elevate our biodiversity conservation programs for the community to engage with.	8.3	Embed the function of community biodiversity programs initiatives to elevate programs like Gardens for Wildlife and meet the increasing community need for this and other engagement programs.	Engagement and connection to nature measured through assessment surveys themed around biodiversity engagement.	Environment	Short Term	\$\$\$
Objective 23: Increase Council and community connection	8.4	Celebrate the flagship species identified in the <i>No Local Extinction Plan</i> through themed engagement opportunities for the community to connect with.	_ Increase in the number of	Open Space Planning.	Long Term	Existing Resources
to our flagship species, making them an icon for building biodiversity stewardship.	8.5	Develop a communications campaign celebrating our natural environment and our flagship species to build community and other stakeholder value in biodiversity.	flagship species themed marketing and engagement.	Environment	Medium Term	Existing Resources

PARTNERSHIPS FOR BIODIVERSITY



Objective	Action #	Action	Measurement	Lead Team (Support Team)	Timeframe	Cost
Goal 9: Enhance part	nerships wi	th our community and industry partne	rs for the benefit of ou	local natural envir	onment.	
Objective 24: Maintain our partnership with Wurundjeri, continuing to work on country, protecting and enhancing our local environment.	9.1	Continue to support the Wurundjeri Narrap Ranger team to assist in self-determination for ecological and cultural work on Country in Banyule.	Increase our relationship with Wurundjeri through	Environmental Operations (Bushland Management)	Ongoing	Existing Resources
	9.2	Deliver annual Culture Walks on Country events in partnership with Wurundjeri, Manningham and Nillumbik councils and internal teams, providing opportunities for Council staff and the community to learn from First Nations leaders on land management history and connect with culture.	maintaining cultural events and increasing connection to country through ecological work by the Narrap Ranger team.	Environment (Inclusive and Creative Communities)	Ongoing	Existing Resources
Objective 25: Collaborate with industry partners to	9.3	Continue to partner with DCMC and CERES to Schools based education programs for four Banyule schools annually.		Environment	Ongoing	Existing Resources
deliver environmental school-based programs.	9.4	Partner with Bundoora Secondary College, Native Fish Australia, and other partners to re- introduce Southern Pygmy Perch and other native fish species into waterbodies throughout Banyule	Number of school-based education and attendance to educational sessions increased and success of school-based projects monitored.	Environmental Operations	Ongoing	Existing Resources
	9.5	Continue partnership with Nillumbik Shire Council to deliver the Teachers Environment Network (TEN) and Environment and Climate Action for Kids Conference annually, providing professional development opportunities for Banyule and Nillumbik teachers and knowledge		Environment	Ongoing	Existing Resources

		sharing opportunities, centred around environmental education.				
Objective 26: Work with other land management agencies and industry partners to deliver proactive natural environment enhancement and protection programs on land in Banyule.	9.6	Maintain riparian and wetland environments under Council's management and partner with Melbourne Water and Parks Victoria in relation to their areas of management.	Joint ecological programs on land in Banyule has increased leading to higher quality ecosystem outcomes.	Environmental Operations (Bushland Management)	Ongoing	Existing Resources
	9.7	Continue to work with local indigenous nurseries to identify seed harvesting sites, ensuring local province is supplied for propagation, leading to increased genetic resilience, and helping to safeguard against climate change impacts.		Bushland Management	Short Term	Existing Resources
	9.8	Partner with neighbouring councils and other industry partners to obtain Federal and State government grants catered around the protection and enhancement of our flagship species and significant local flora.		Environment	Long Term	Externally Funded
Objective 27: Support our Environmental Friends Groups to be effective biodiversity champions and further extend Council's natural environmental management response.	9.9	Partner with local Environmental Friends Groups to maintain and revegetate conservation reserves and wildlife corridors throughout Banyule.	Attendance to working bees and number of Environmental Friends participants increase by 2035.	Bushland Management	Ongoing	Existing Resources

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