



We respectfully acknowledge the traditional owners, the Wurundjeri People, as the custodians of this land. We also pay respects to all community elders, past and present.

Yarra Ranges Council Environment Strategy 2015–2025







MAYOR'S MESSAGE

As Mayor of Yarra Ranges Council, I am delighted to present the Environment Strategy 2015–2025.

The Yarra Ranges is renowned for its natural environment, boasting areas of significant native vegetation, valued township and urban streetscapes, forested mountains, rural valleys and waterways that make up a critical part of Melbourne's water catchment.

This strategy has been built on consultation. In preparing it, we have had lots of opportunities to talk to people in our community about what they like about the Yarra Ranges. Again and again they talk about the importance of our natural environment. They talk about our beautiful scenery, the wildlife, the bushland, and our rivers. They also talk about being able to get out into nature, whether it is camping with the family, fishing with friends or walking the dog. One of my own fondest childhood memories is of playing along the banks of the Olinda Creek.

Yarra Ranges Council recognises the role we play in maintaining our significant and valued natural areas for the current community and for future generations. Much of the work undertaken by Council and other land owners focuses on the threats to Yarra Ranges Council's environmental assets. These include weed invasion, declining water quality, urban development, urban stormwater, climate change and bushfire.

At its heart this strategy recognises the value our community places on the environment, and it responds by setting a direction and providing a framework to support Council's decisions. Council acknowledges the complexity of working in a sector where we have limited direct control yet must respond to local issues and community expectations. This strategy will direct a range of work already set out in existing policies, management plans, strategies and action plans related to the environment, including our Adapting to a Changing Climate and Energy Future plan.

Many people – residents, community groups and organisations – have been generous with their time, talking to us about what they value, where their concerns lie, and their hopes for our environment in the future. They have contributed to the development of this important strategy, and I thank them all.

It is through the Environment Strategy 2015–2025 that Council will not only demonstrate leadership on environmental issues but will also work closely with other agencies and the community to foster environmental stewardship across the municipality.

Cr Maria McCarthy Mayor







OUR VISION

Council has developed a vision that clearly describes the aim of this Environment Strategy.

We are dedicated to making Yarra Ranges a place of thriving communities, at home in healthy landscapes.

This vision for our environment has three elements: our place in healthy landscapes; thriving communities; and a sense of home.



Our place, our healthy landscapes

This element includes our place within our community and our environmental assets such as the diversity of landscapes, waterways, plants and animals.



Thriving communities

This element represents the choices and opportunities we have in relation to these assets and resources, and includes the way local economies and communities respond to, and work with, our environment.



My home

This element is about the way each one of us lives with, and belongs and responds to, our environment.



The elements of the Environment Strategy's vision support each other and are mutually beneficial.





This broad vision has been translated into six specific goals for the Environment Strategy:

Goal 1: Our iconic places and their natural character are actively protected.

Goal 2: Our water resource is improved and preserved.

Goal 3: Our native plants and animals are protected and their habitat is enhanced.

Goal 4: Our local economies are strengthened by environmentally sustainable activities.

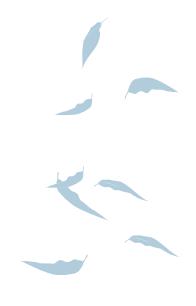
Goal 5: Our communities are resilient in the face of a changing climate and more extreme events.

Goal 6: All who live and work in the Yarra Ranges see themselves as stewards of our environment.

These goals, along with our set of principles, provide a framework for Council's environmental program planning and decision making for the next ten years. They are explored in more detail from page 22.







CONTEXT



What environmental assets do we have in Yarra Ranges?

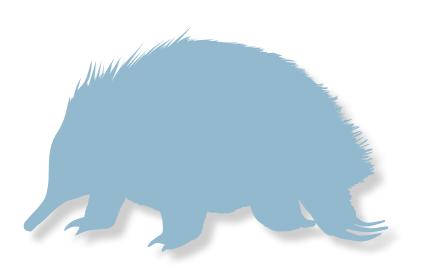
The Yarra Ranges natural environment is made up of the landforms and ecological services that provide the air we breathe, the water we drink, the soils that grow our food, and the habitats that are home to indigenous wildlife and make up our scenic landscapes.

The Yarra Ranges contain some of the most environmentally important areas in Victoria. These precious areas include the Mountain Ash forests of the Dandenong Ranges and Central Victorian Highlands. Remnant native vegetation is home to iconic species such as the Powerful Owl, the Helmeted Honeyeater and Leadbeater's Possum.

The upper half of the Yarra River and its tributaries support a diverse range of plants and animals including significant populations of platypus, frogs and fish. These waterways and key dams and reservoirs such as O'Shannassy, Upper Yarra, Maroondah and Silvan provide about 70% of Melbourne's drinking water.

Some of our environmental assets lie within areas modified by humans, such as areas converted to agriculture, urban and rural settlements, transport infrastructure, parks, gardens and sports fields. Agriculture is a significant component of the Yarra Ranges landscape and the richness of the municipality's agriculture has made it an important food production area for Victoria.

This natural environment has always attracted people, many of whom have chosen to live here, enticed by the diverse and attractive scenery offered by the rural valleys and forested mountains. This scenery continues to attract tourists, including day trippers from Melbourne, and our landscapes have become embedded in the cultural history of residents and Melburnians alike. S Wild-River, 'The role of local government in environmental and heritage management', Australian National Centre for Public Awareness of Science, The Australian National University (2006)



What is Yarra Ranges Council's role in environmental management?

The Yarra Ranges covers a total area of 244,700 ha: 2% is owned by Council, 30% is in private ownership and the remaining 68% is Crown land. Council's own land management practices are limited to this 2%, which includes management of roadsides and Council-owned bushland reserves. However, in its role as responsible planning authority, and through partnerships with Crown land managers such as Parks Victoria, Melbourne Water and Department of Environment, Land, Water and Planning, Council can advocate for and have influence over flora and fauna protection, habitat management, restoration and enhancement. Local volunteer groups are also important partners for Council. Landcare, environmental groups and friends of specific reserves significantly broaden the amount and variety of environmental work being undertaken across the municipality. These groups, along with Council, promote environmental responsibility and provide opportunities for residents to be involved in local initiatives.

Council promotes interaction with the natural environment and provides residents with support, resources and education through a range of projects and programs. These can include school-focused programs, networking with environmental volunteer groups, and sustainability demonstrations that respond to climate change. Council also works to build community and business capacity to prepare for and respond to emergencies such as fire, storms, and the impacts of a changing climate.

What are the benefits of a healthy environment?

A healthy natural environment is essential. It provides the key components for life – fresh air, clean water, healthy soil, and the plants and animals that depend on them. The quality of the environment within the Yarra Ranges provides a range of biological, economic, social and cultural benefits and it is in the community's interest to care for our environment. "local government environmental spending far outweighs that of the others [tiers of government]. Local governments set many strategic, long-term environmental policies, especially in the realm of land use planning."





"In terms of Health, parks and other natural environments have been viewed almost exclusively as venues for leisure and sport. Yet recent research shows that 'green nature' such as parks can reduce crime, foster psychological wellbeing, reduce stress, boost immunity, enhance productivity and promote healing. In fact, the positive effects on human health, particularly in urban environments, cannot be over-stated."

A healthy environment also has a positive effect on human health. Positive influences and wellbeing are measurable in terms of both mental and physical health. The natural environment provides recreational opportunities that promote physical activity, mental stimulation and also allows for formal and informal social interaction.

Along with health and wellbeing, cultural identity is also supported by our environment. This includes elements such as spirituality, cultural heritage and natural aesthetics, all of which help to define who we are and create a sense of connection to place. This connection may be reflected in specific places, artefacts, community traditions, celebrations or events. Our shared -C Maller et al, 'Healthy Parks, Healthy People, A Review of Relevant Literature' (2008)

values help to support social networks and build community identity.

The tourism and agribusiness economies in the Yarra Ranges also rely on the health of the natural environment.

Tourism benefits from the area's natural assets, culture and history. An increasing number of businesses such as bed and breakfasts, wildlife tours and art classes are capitalising on these natural assets, and use them as a promotional tool. As an example the Dandenong Ranges attracts over 200,000 visitors annually, who are drawn to the local townships, landscapes, forests and gardens.



"Ecosystem services are the services that nature provides which benefit human health and wellbeing, support our economy as well as supporting nature itself. They include regulation of the atmosphere and climate, protection from the effects of extreme weather, provision and storage of water, production and protection of soils and associated nutrients, treatment of wastes, provision of systems that support biodiversity, food and fibre production, provision of natural medicines, opportunities for outdoor recreation and a range of cultural values [including spiritual, religious and aesthetic values]"

> ecosystem services in Victoria, Australia' (2008) While tourism benefits more from natural attractions and scenery, agricultural businesses within Yarra Ranges rely on the region's climate, soils, rainfall and proximity to markets to remain viable. The quality of these attributes and the area's reputation for having a clean environment help to market agricultural products, especially when food-producers add value to local products

-J P Tovey, 'Whose rights and who's right? Valuing

This wide variety of benefits creates a powerful positive impression. These are the things people care about, and are often the reason they choose to make their home in our municipality.

and sell them direct to consumers.

"The proposed Melbourne Ranges Walk would travel through the Dandenong Ranges and surrounds, before joining up to the Lilydale to Warburton Rail trail. Modelling predicts this proposal could bring in a 10 year economic output of \$10.4 million."

> Yarra Ranges Council, Submission 59 to the Inquiry on Heritage Tourism and Ecotourism in Victoria (2013)



What are the threats to our natural environment?

Human settlement has always had an impact on the natural environment. That pressure continues today through urban development, pollution, introduction of weeds and pest animals, bushfires, and climate change.

Urban development and land use changes, which have supported the development of our vibrant local communities and productive agricultural sector, have had significant environmental impacts across the municipality. Since European settlement, 70% of the original vegetation has been lost from privately owned land. The remaining vegetation is threatened by incremental reduction in extent and quality, primarily due to urban development, weed invasion and management practices that degrade the land. Tree hollows are a critical component of habitat that is being lost from our ecosystems, and the hardest to replace. Hollows in large old trees provide the homes needed by 21% of local birds and mammals.

Urban development also presents specific threats to our water resources. The hard surfaces created by buildings, roads and footpaths cause rainwater to flow quickly over the landscape rather than soaking naturally into the soil and being absorbed by plants. This causes unnaturally high flows of water when it rains, eroding stream banks and channels and damaging fish and platypus habitat. Stormwater runoff also carries pollution in the form of oil, heavy metals, bacteria, sediment, and chemicals into streams and rivers, significantly lowering the water quality.



Rural areas are significantly impacted by weeds and pest animals. On agricultural land, weeds and pest animals can compete with production and contaminate produce. Weeds can also poison livestock. In bushland settings, weeds and pest animals compete with native plants and animals and degrade their habitat.

Fire is a natural part of the Australian environment and is necessary for the renewal of many ecosystems. However patterns of fires that occur outside of the normal frequencies, intensity, seasons and scales of what our plants and animals can tolerate are a considerable risk. The Yarra Ranges landscape is prone to fire; we have homes and townships dotted throughout our mountains and valleys and they have a high bushfire risk. While people live in these areas and are attracted to these landscapes, this threat will continue. This is a permanent tension that we as a community need to manage.

For Melbourne's Eastern region, the mediumto long-term impacts of climate change will include temperatures rising and a reduction in rainfall. While it is likely that the municipality will experience drier and hotter conditions, the scale of change will differ across the year, giving us higher maximums in summer but similar winter temperatures. Rainfall averages will decrease across the year, especially in spring. Extreme winds are likely to increase in winter and decrease over autumn, spring and summer.

"The Commission views protection of human life and the safety of communities as the highest priority for bushfire policy and directed its efforts accordingly. This priority guided the Commission in its analysis, the collection of evidence, its reports and the formulation of its recommendations. The recommendations further reflect the Commission's recognition that individuals, fire agencies and Commonwealth, State and local governments share responsibility for preparing for fire and improving people's safety. While placing the preservation of human life at the heart of its deliberations, the Commission also sought to ensure that due consideration was given to Victoria's environmental sustainability."

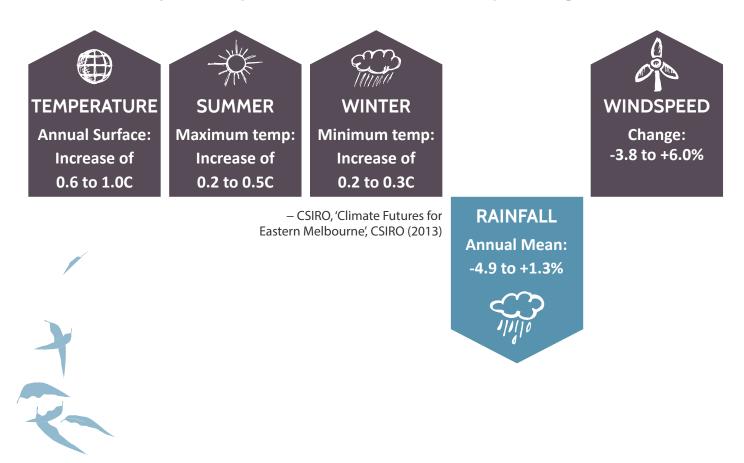
-Victorian Bushfires Royal Commission (2009) Final Report Summary

The Yarra Ranges municipality is vulnerable to the impacts of climate change across our natural and built environments. Decreases in rainfall result in less water flowing into our waterways, reducing water quality and the quality of habitat for freshwater plants and animals. On land, biodiversity will be impacted through changes within ecosystems, affecting their function and viability.

There will be impacts due to the frequency of extreme events. More storms, with higher wind speeds, will put more pressure on Council's infrastructure and maintenance programs. Bushfire risk will also increase, because extreme weather conditions favour forest fires. Fire seasons will start earlier and ending later each year.

Climate change will also impact on our living conditions across the municipality. Currently only 6% of the houses in the municipality have a 5 star rating as set by the Building Code of Australia. This means most people live in homes where increased amounts of water and energy will be required, leaving them vulnerable to increased costs for these services.

2030-Most likely climate future: warmer with little rainfall change



Environment Strategy 2015–2025

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COMMUNITY VALUES AND THE NATURAL ENVIRONMENT

Our community has had a long history with this place. The first people to call this land home were the Wurundjeri, who have a unique view of our natural environment. Early European settlers brought their own perspectives on the value of our environment, and as our community has grown and changed so have the values we place on our natural environment.

"I believe connection to land only comes from learning about the history, the people, the culture, the environment and the needs of country, I believe this creates a closer connection for everybody."

- Bill Nicholson, Wurundjeri Elder

İndigenous values

Indigenous Australians belong to one of the world's oldest continuous living cultures. The Wurundjeri people have lived for thousands of years in the area that has become the greater Melbourne region. As traditional owners the Wurundjeri provide a unique perspective on how people value the environment in our municipality.



"We are part of country as country is part of us."

– Bill Nicholson, Wurundjeri Elder



Aboriginal people experience a deep connection to Country at both a spiritual and physical level. This physical interdependence reflects the reality of Country traditionally providing everything required for life. For Wurundjeri people this spiritual connection is reflected in the belief in Bunjil, the creator spirit, who created the land and gave the Wurundjeri their life and lore.

Connection to Country is part of all Aboriginal people's heritage, and it comes with an obligation to respect and care for Country. Country provides the benefits of food and shelter and in turn imposes a responsibility to look after the land and the water, and to help maintain the balance that allows life to flourish. Respect for Country is a fundamental part of Wurundjeri culture.

Wurundjeri people are required to act as custodians of Country and nurture the connection between people and Country. This creates a legacy that passes from previous generations through to future generations.

Early colonial perspectives

Early settlers who came to the Yarra Ranges Council in the 1800s saw an area abundant in raw materials, with rich agricultural potential. Cropping industries soon started up around Silvan, and pastoralists established themselves in areas such as Yering, Chirnside and Mooroolbark. The Upper Yarra hosted a mining industry and then a timber industry. Melbourne's water supply was secured through aqueducts and dams along various local waterways including the Yarra River and its tributaries.

Settlers and their descendants were also drawn to the area's natural beauty and serenity. The municipality has been home to people regarded as cultural treasures such as Tom Roberts (1856–1931), Arthur Streeton (1867–1943) Edna Walling (1895–1973) and Fred Williams 1927–1982).



A shared view

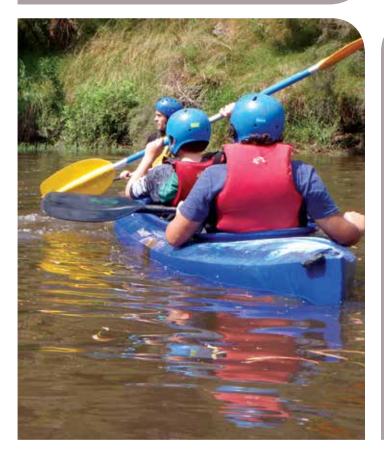
During the 1960s the western world witnessed an emerging recognition of the intrinsic value of the environment and a growing concern about human impacts on it. For many this movement went further still and focussed on how people connect with nature, even rediscovering a spiritual reverence for the natural world.

Locally residents provided support to a growing number of environmentally focused community groups. Similarly, there has been greater interest in more sustainable agricultural systems such as low tillage and integrated pest management

The Upper Yarra Valley and Dandenong Ranges Regional Strategy Plan, which was approved in 1982 by the Victorian Government, laid the foundation in this region to protect local environmental, landscape and cultural values. The legacy of the Regional Strategy Plan can be seen in a range of subsequent state and local government documents including the current Yarra Ranges Council Municipal Strategic Statement (MSS).

The MSS aims to protect the values of:

- Natural beauty and scenic values
- Open space and recreational values
- Rural productivity and agricultural values
- Healthy ecosystems, water resources and biodiversity values





As part of the development of this draft Environment Strategy Yarra Ranges Council asked local residents what it is that they value about their environment.

The most common responses were:

- © trees, bushland, forest
- Swildlife, birds, animals
- Scenery and landscape quality
- experiencing natural places
- recreation opportunities
- © clean air and waterways.

The similarity of these values reinforces the importance and enduring nature of these elements in defining the Yarra Ranges.

"We all need to look after country – Indigenous and Non-indigenous."

- Alice Kolasa, Wurundjeri Elder

Q. What do you value about your natural environment? A. Being able to walk with the kids through the bushland and show them nature in its original form.

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- Respondent from Monbulk



PRINCIPLES FOR COUNCIL'S APPROACH

The objectives of this strategy are supported by a number of principles that help inform a planned approach to choices made around environmental actions, programs and projects. These principles help to improve Yarra Ranges Council's strategic decision making.

Principles

Make evidence based decisions.

Learn from the successes and failures of previous actions and programs as well as improving our understanding of what is best practice. Data collection and ongoing monitoring help us to understand the effectiveness of our decisions.

Take a whole of landscape approach.

This is a scale at which land management planning and actions can be targeted for ecologically functional outcomes. This approach allows issues to be viewed across ownership boundaries.

• Apply a risk management framework.

Monitor and review risks to consider long- and short-term impacts and promote a culture where risks are considered in decision making.

Practise 'Avoid, Minimise, Offset'.

This hierarchy of actions protects our resources. Initially avoid using the resource where possible. Then reduce the amount of resource required to achieve the same outcome, or replace nonrenewable resources with renewable alternatives. Finally, offset what is used with projects that deliver a net benefit.

Think long-term rather than short-term.

Focus on enduring results, values and outcomes.

S Engage with our community.

Understand what the community values and encourage people to respond to their environment.

• Work effectively with other land managers, key agencies and alliances.

Council can be more efficient by building strong relationships with key partners.

Lead by example.

Yarra Ranges Council demonstrates best practice and innovation.

The 2013 Victorian State of the Environment Report is designed to inform the Victorian community about the health of the natural environment and influence government to achieve environmental, social, cultural and economic sustainability.

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One of the key themes from the 2013 State of the Environment Report is Strategic Adaptive Management. A systematic approach that identifies desired outcomes, establishes progress measurement and includes communities and stakeholders in the decision making.

–Commissioner for Environmental Sustainability, State of the Environment Report Victoria (2013)

GOALS – WHAT WE WANT TO ACHIEVE

We have developed six interrelated goals to support our vision for our environment, which has three elements: our place in healthy landscapes, thriving communities, and a sense of home.



Our place, our healthy landscapes

Goal 1: Our iconic places and their natural character are actively protected.

This goal aims to protect landscapes across the municipality. These places are found in our rural landscapes, gardens, townships, mountain ranges and forests, all of which deliver ecological services and contribute to our cultural heritage. This goal also recognises the value of non-native plants in urban and rural areas.

Goal 2: Our water resource is improved and preserved.

This goal aims to protect the quality and quantity of water moving through our municipality. Water is needed for our aquatic ecosystems, human consumption, recreational uses and agricultural activity. Waterway corridors provide a network that connects communities, plants and animals.

Goal 3: Our native plants and animals are protected and their habitat is enhanced.

This goal aims to preserve unique and indigenous ecosystems, remnant vegetation, and threatened species and communities. By protecting our natural environment and promoting a range of self-sustaining ecosystems, we enhance the quality and long-term sustainability of Yarra Ranges biodiversity.



Goal 4: Our local economies are strengthened by environmentally sustainable activities.

This goal aims to support environmentally sustainable business activities and business models across a range of sectors in the Yarra Ranges. Economies that are able to use resources wisely by reducing waste and conserving or using less water and energy are more efficient and financially more robust.

Goal 5: Our communities are resilient in the face of a changing climate and more extreme events.

This goal aims at preparing our communities for a changing climate, fires, floods and drought. This preparation helps to minimise financial, social and environmental impacts on Council's infrastructure and services.



Goal 6: All who live and work in the Yarra Ranges see themselves as stewards of our environment.

This goal aims to improve environmental understanding and increase people's ability to respond to the natural world. By encouraging people to experience the natural environment their sense of belonging to and responsibility towards our place, is strengthened.



Our place, our healthy landscapes

Goal 1: Our iconic places and their natural character are actively protected.

This goal aims to protect landscapes across the municipality. These places are found in our rural landscapes, gardens, townships, mountain ranges and forests, all of which deliver ecological services and contribute to our cultural heritage. This goal also recognises the value of non-native plants in urban and rural areas.

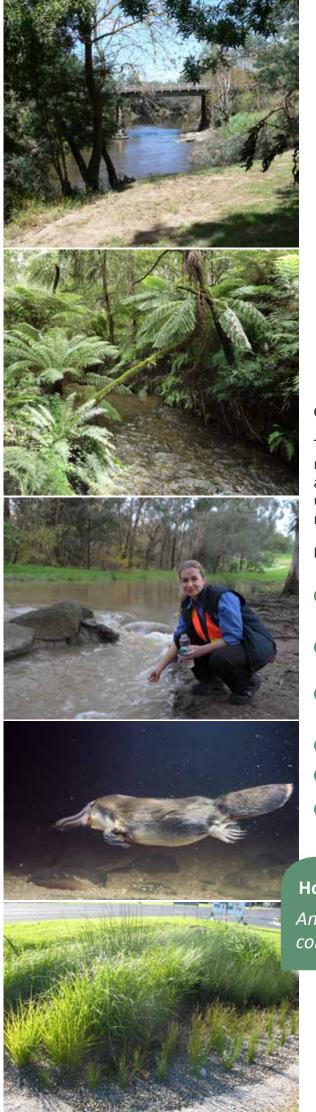
How do we actively protect the natural character of our iconic places?

- Utilise the Yarra Ranges Planning Scheme to conserve the community's places of value and significant landscapes.
- Foster the amenity value of parks, streetscapes, and the greening of our urban and township spaces.
- Preserve agricultural land.
- Work with agencies and communities to improve weed management outcomes.
- Develop a strategic approach to pest animals.

How do we measure progress?

An example: Area protected under Trust for Nature conservation covenants.







Goal 2: Our water resource is improved and preserved.

This goal aims to protect the quality and quantity of water moving through our municipality. Water is needed for our aquatic ecosystems, human consumption, recreational uses and agricultural activity. Waterway corridors provide a network that connects communities, plants and animals.

How do we preserve and improve our water resource?

- Protect water quality for human consumption, agricultural use and healthy aquatic ecosystems.
- Apply best practice stormwater management to protect waterways.
- Improve management of wastewater discharges to the environment.
- Protect and restore riparian zones and aquatic biodiversity.
- Minimise Yarra Ranges Council's potable water use.
- Promote the sustainable use of groundwater and surface water.

How do we measure progress?

An example: Track changes in stream conditions and the health of our waterways.



Goal 3: Our native plants and animals are protected and their habitat is enhanced.

This goal aims to preserve unique and indigenous ecosystems, remnant vegetation, and threatened species and communities. By protecting our natural environment and promoting a range of self-sustaining ecosystems, we enhance the quality and long-term sustainability of Yarra Ranges biodiversity.

How do we protect our native plants and animals and enhance their habitat?

- Protect existing vegetation and ecosystems.
- Rehabilitate and restore, degraded flora and fauna habitat.
- Protect threatened species and vegetation communities.
- Monitor vegetation loss and removal to ensure habitat levels do not diminish.
- Further develop knowledge about flora and fauna assets and best practices.
- Strengthen strategic priorities for biodiversity improvements.

How do we measure progress?

An example: Track changes in the conservation values of key Council reserves.















Thriving communities

Goal 4: Our local economies are strengthened by environmentally sustainable activities.

This goal aims to support environmentally sustainable business activities and business models across a range of sectors in the Yarra Ranges. Economies that are able to use resources wisely by reducing waste and conserving or using less water and energy are more efficient and financially more robust.

How do we support environmentally sustainable activities in our local economies?

- Connect support mechanisms to local businesses that want to adopt environmentally sustainable business practices.
- Work to attract assistance to create new industry initiatives that reduce carbon dependency and encourage the adoption of renewable energy sources.
- Support nature-based and farm-based tourism opportunities in the region.
- Work with the agricultural sector to transition to environmentally sustainable practices.

How do we measure progress?

An example: Track support provided to local businesses and the resulting environmental outcomes.





Goal 5: Our communities are resilient in the face of a changing climate and more extreme more events.

This goal aims at preparing our communities for a changing climate, fires, floods and drought. This preparation helps to minimise financial, social and environmental impacts on Council's infrastructure and services.

How do we develop resilient and protected communities?

- Build and maintain community infrastructure that is adaptable and can withstand extreme climate events.
- Promote the adoption of sustainable building design and construction techniques across the municipality.
- Reduce Council's energy consumption in line with Council's 'Adapting to a changing climate and energy future' plan and support the community to reduce theirs.
- Protect and mitigate against risk across the municipality through effective bushfire preparedness and emergency management activities.
- Support community food production systems and local food supply chains and distribution networks.
- **Mathebox** Advocate for sustainable transport options.
- Promote regional independence and self-sustaining communities.

How do we measure progress?

An example: Track GHG emissions for Council towards the target of a 30% reduction on 2000 levels by 2020.





My home

Goal 6: All who live and work in the Yarra Ranges see themselves as stewards of our environment.

This goal aims to improve environmental understanding and increase people's ability to respond to the natural world. By encouraging people to experience the natural environment their sense of belonging to and responsibility towards our place, is strengthened.

How do we foster environmental stewardship across the municipality?

- Engage with the community and provide environmentally focused education, support, resources and events.
- Support local environmentally focused groups, by promoting and supporting good governance and capacity building.
- Encourage environmentally sustainable choices for people's homes, properties and businesses.
- Support and promote the development and use of nature based recreation activities.
- Work with the community to share indigenous knowledge of land management.

How do we measure progress?

An example: Measure the importance of environmental sustainability for Yarra Ranges residents.



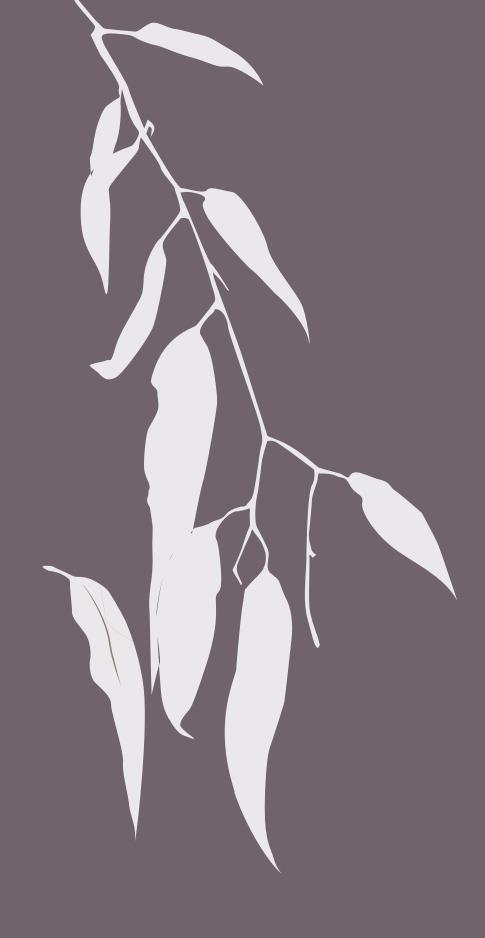


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