

Maroondah Vegetation Review

Issues & Options Paper



Acknowledgement of Country



Maroondah City Council acknowledges the Wurundjeri people as Traditional Owners of the land that now forms the municipality of Maroondah, and we pay our respect to their Elders past, present and emerging. The Wurundjeri people have lived in and been connected to the land, water, plants, and animals of this area for many thousands of years, and maintain cultural connections to this day.

Maroondah Vegetation Review: Issues & Options Paper – February 2019

Welcome to the Vegetation Review's Issues and Options Paper

Council is undertaking a comprehensive review of Maroondah's vegetation, its values, and what is needed to ensure its benefits can be enjoyed by future generations.

We have heard that a green, leafy Maroondah is what our residents want for the future. Our leafy green neighbourhoods, parks and open spaces are valued by those who live, work and visit our municipality, and it is vegetation that provides us with this unique quality.

We have also heard from the community that it is important for vegetation to be managed to prevent degradation from weeds and pests, to prevent trees dying, to prevent trees causing damage to buildings and paths, to manage safety risks, and to protect waterways.

Purpose

Maroondah City Council is undertaking a comprehensive Vegetation Review to establish its vision and strategy for protecting, enhancing, restoring, and creating vegetation in Maroondah's natural and urbanised areas to provide multiple benefits for the Maroondah community into the future.

As a step towards this end, the Issues and Options Paper is intended to raise awareness of, and invite discussion across the community, of the value of our vegetation, the many benefits and 'ecosystem services' it provides, and the issues facing us.

The Issues and Options Paper does not commit Council to any direction or action. Its purpose is to engage the Maroondah community in the discussion of complex issues, the evidence base, and exploration of potential options, that will then inform the directions and actions that Council will pursue into the future. The directions and actions that Council decides to pursue will be articulated in a draft Council strategy that community will be invited to comment on later in 2019.

This Issues and Options Paper presents options within Council's sphere of influence, and invites community feedback on these options. The scope of this discussion is focussed on Maroondah's vegetation.

Supporting documents

This document has been informed by public consultation, and expert evidence and analysis, to identify the high level issues and the key factors affecting our vegetation. The reports arising from the expert evidence and analysis provide detailed insights into their respective subjects. A series of Vegetation Review Fact Sheets have been produced to provide summaries of this evidence:

Fact Sheets available include:

- Fact sheet 1 ***“What you have told us”*** (community feedback received via Café Consult in 2017)
- Fact Sheet 2 ***“Seeing the woods for the trees”*** (summary of tree canopy cover analysis)
- Fact Sheet 3 ***“Vegetation, what is it good for?”*** (summary of the range of benefits provided by vegetation in an urban setting)
- Fact Sheet 4 ***“Your vegetation and your Council”*** (summary of relevant policies and legal responsibilities for Council)
- Fact Sheet 5 ***“Pink-bells and Blue Stars: Maroondah’s Plants”*** (summary of the importance of Maroondah’s plants)
- Fact Sheet 6 ***“Sugar Gliders and Golden Whistlers: Maroondah’s Animals”*** (summary of the importance of Maroondah’s animals)

These documents are available on the Your Say Maroondah webpage for the Vegetation Review:

<https://yoursay.maroondah.vic.gov.au/maroondah-vegetation-review>

Document structure

This document is structured as follows:

- [Maroondah City Council and its vegetation](#) - outlines the key policies and functions that Council has in relation to vegetation
- [The Big Issues](#) - outlines the high level issues and key factors behind them, identified through consultation and expert analysis
- [Options](#) - outlines broad options available to Council for addressing the causal factors. These are arranged under four key areas of influence that Council has over our vegetation - planning, management, supporting community, and leadership. Options for achieving outcomes to different standard levels are presented, as well as the expected broad benefits and implications of each.

Your feedback

You are invited to provide your feedback on this document - in particular your views on the various options presented for Council to pursue into the future. You can provide your feedback through the Your Say Maroondah webpage for the Maroondah Vegetation Review: <https://yoursay.maroondah.vic.gov.au/maroondah-vegetation-review> or you can use the separate feedback sheet (download a copy from the above website, or request a copy via email to vegetation@maroondah.vic.gov.au)

More information on how to provide feedback is provided on page 38.



Wildflower display, Birts Hills Reserve, Croydon North (photo: Dr Graeme Lorimer)

Maroondah and its vegetation

Maroondah's vegetation includes our street trees, trees and other vegetation in parks, native vegetation in bushland reserves, and trees and gardens in residential and commercial areas.

Our vegetation is diverse, as is the places we find it - bushland reserves, along creeks and drainage lines, in public parks big and small, nature strips, and private gardens. The issues and options vary with different vegetation and different locations.

Maroondah is home to a community of 117,396 residents occupying 44,227 households, and 9,000 businesses that employ 36,000 people. Our population is made up of diverse cultures and is growing at an estimated 500 households per year. Our community, our society, and our economy all benefit from our green and leafy natural environment.

With population growth, changing demographics, ageing housing stock, and changing climate, Maroondah is entering a new phase of urban development.

In 2014, Council released “**2040 Maroondah - Our Future Together**”, a community vision for Maroondah based on 18 months of community consultation.

Maroondah 2040 Community Vision

In 2040, Maroondah will be a vibrant and diverse city with a healthy and active community, living in green leafy neighbourhoods which are connected to thriving and accessible activity centres contributing to a prosperous economy within a safe, inclusive, and sustainable environment

Key directions in Maroondah 2040 under ‘A green community’ include protection and enhancement of Maroondah's parklands, bushlands, gardens and open spaces, biodiversity and native habitat, and canopy vegetation.

The Maroondah Vegetation Review is delivering on a Key Action of the Maroondah Housing Strategy 2016: “Undertake a municipal wide vegetation review and ensure consistency of supporting planning controls”

Maroondah's green leafy character, provided by its vegetation, is cherished by the community, and for many good reasons. If you would like to learn more about why our nature is so important to us, read the series of Fact Sheets found on the Vegetation Review page of the Your Say Maroondah website at:

<https://yoursay.maroondah.vic.gov.au/maroondah-vegetation-review>

Maroondah has responsibilities in four key areas of influence over our vegetation:

- Planning Scheme
- Public Land and Asset Management
- Supporting Community
- Leadership & Good Governance

Planning scheme

Maroondah, like every local government in Victoria, is required to provide, administer, and regularly review its Planning Scheme to ensure its policies and provisions controlling use and development of land support Victoria's economic, social, and environmental plans and are relevant to our local environment and community needs and values.

As an urban municipality within Melbourne's Urban Growth Boundary, Maroondah is obligated to contribute to accommodating metropolitan Melbourne's growing population. Ongoing urban development and renewal is required to meet this obligation, and our Planning Scheme provides the rules and guidance as to how this occurs.

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For an overview of the planning system in Victoria, have a look at “Planning on a Page” available on the Department of Environment, Land, Water, and Planning website under the ‘Planning’ section:

https://www.planning.vic.gov.au/_data/assets/pdf_file/0029/95249/Planning-on-a-Page.pdf

Development can be contentious in any community, and often this is the case when trees, landscapes and biodiversity are concerned. We, nor the next generations, can live without development nor can we live without nature. The idea of ‘*development versus nature*’ must become ‘*development for nature*’ if we are to continue to enjoy quality life in healthy communities.

Maroondah City Council’s Integrated Planning Department is responsible for preparing strategic work for Council such as Neighbourhood Character Study, Climate Change Risk and Adaptation Strategy and updating Maroondah’s planning scheme to ensure we have the right balance of controls to enable sustainable development to occur.

Council’s Statutory Planning Team is responsible for administration of the planning scheme, and with over 1500 planning applications a year, Council’s Statutory Planning team continues to be one of the best performing statutory planning teams in Victoria.

When it comes to vegetation, our community has supported and continues to comply with some of the most expansive tree removal controls in the state. Thoughtful granting of permits has contributed to the growth of canopy cover in Maroondah at a rate equivalent to canopy cover loss, whilst accommodating the growth of our community and the associated development that growth requires. More information about the changes in Maroondah’s tree canopy cover is available on the Vegetation Review page of the Your Say Maroondah website.

Public land and asset management

Maroondah covers an area of 6140ha, of which 650ha is public open space managed by Council on behalf of the community.

Maroondah’s public open space is comprised of 430 public reserves, including parks, playgrounds, bushland, sporting, and recreational facilities that provide a range of vital services for the community.

The way our public open space, and the community assets they contain, is designed, managed and maintained, plays a key role in the amount and nature of vegetation that occurs in Maroondah.

Council’s Operations Department is responsible for (amongst other things) bushland and weed management, roads and drainage maintenance, sports field and playground maintenance, and tree and park maintenance.

Council’s Assets Department is responsible for the community assets on public land that provide services for the community, including buildings and facilities, roads, footpaths, stormwater drainage, and parks infrastructure such as playgrounds, footbridges, sports fields.

Did you know? Maroondah City Council, just like private landowners, must get planning approval to use or develop land, and to remove trees or vegetation. And we must comply with the conditions of their permit in the same way that private landowners must. All permit applications are public, and many need to be advertised. Council must meet special notice requirements to ensure the public’s right to object, before an application is decided.

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Supporting community

Maroondah's residents, businesses, and community organisations play a key role in the management of our vegetation and the security of our biodiversity. As land owners, they are also land managers. As residents, they are familiar with their local environment, they hold Council to account for management of public open space, they influence Council's approach to planning, infrastructure development and asset maintenance, they identify risks and can resist or support changes in the landscape, and they volunteer their time towards management of our vegetation.

Maroondah's community is therefore a significant and influential ally for Council's efforts to protect, enhance, restore, create, and maintain vegetation in Maroondah. Feedback from the community helps Council monitor the health and management needs of existing vegetation.

Council is well-placed to provide information to the community on the benefits of nature and the value of biodiversity and vegetation in Maroondah, and to support community action to protect and enhance Maroondah's vegetation.

The Maroondah Environment Advisory Committee is a collaborative partnership between Council and key community stakeholders to advise Council on environmental issues.

Council's Operations Department actively supports volunteers working to improve our bushland reserves.

Leadership and good governance

Maroondah City Council provides a range of services: from administering the Maroondah planning scheme and local laws; managing open space; designing and maintaining assets and infrastructure; to educating and supporting community action. Each makes important contributions to protecting and managing our vegetated landscapes and biodiversity.

The efficiency and effectiveness of these services is enhanced by Council's leadership and governance arrangements, such as the use of quality data, provision of skilled human resources, coordination and collaboration across Council departments, and a willingness to innovate and optimise. Council can also extend its influence through strategic partnerships that leverage access to land owned by others (eg Melbourne Water), access to funding (eg Department of Environment, Land, Water and Planning), and access to skills and expertise (eg Swinburne University)

The big issues

Declining space for tree canopy

(For more information on Maroondah's tree canopy cover, see Fact Sheet 2 *Seeing the woods for the trees*)



To grow a tree that contributes to canopy cover, it needs:

- Soil to grow in – with organic matter and natural water infiltration and drainage
- Space to grow into – at least the area of the outer extent of its canopy at maturity
- Access to light

Once land has been converted to an impervious surface (eg road, footpath, house, driveway, shed, pool, etc) the potential to grow canopy cover is effectively lost.

A recent study¹ provides a statistical analysis of tree canopy cover changes from 2011 to 2016 to compare the different planning controls that apply to tree removal in Maroondah.

The analysis categorised sample point locations as either one of tree canopy (height > 3m), shrub (height <3m), grass or bare earth, or hard surface (such as buildings, roads, footpaths, etc.), based on where they landed on 2011 aerial photography and again on 2016 aerial photography.

Tree Canopy Cover analysis - the method

The Maroondah municipality was divided into 11 areas based on the different planning controls in effect:

- Vegetation Protection Overlays (VPOs)
- Significant Landscape Overlays (SLOs)
- Design and Development Overlays (DDOs)
- No controls

For each of these areas, 2000 random sample points were generated. Each sample point was applied to 2011 aerial imagery, and 2016 aerial imagery, and each point was categorised as one of:

- Tree canopy (trees > 3m high)
- Shrub (trees/shrubs < 3m high)
- Grass/bare earth
- Hard surface (eg roof, road, footpath, etc.)

Where a sample point location changed from any of hard surface, grass/bare earth or shrub (<3m) in 2011, to a tree (>3m) in 2016, the point was assumed to have experienced canopy growth (either a small tree got bigger or a tree canopy extended laterally to cover one of the other categories).

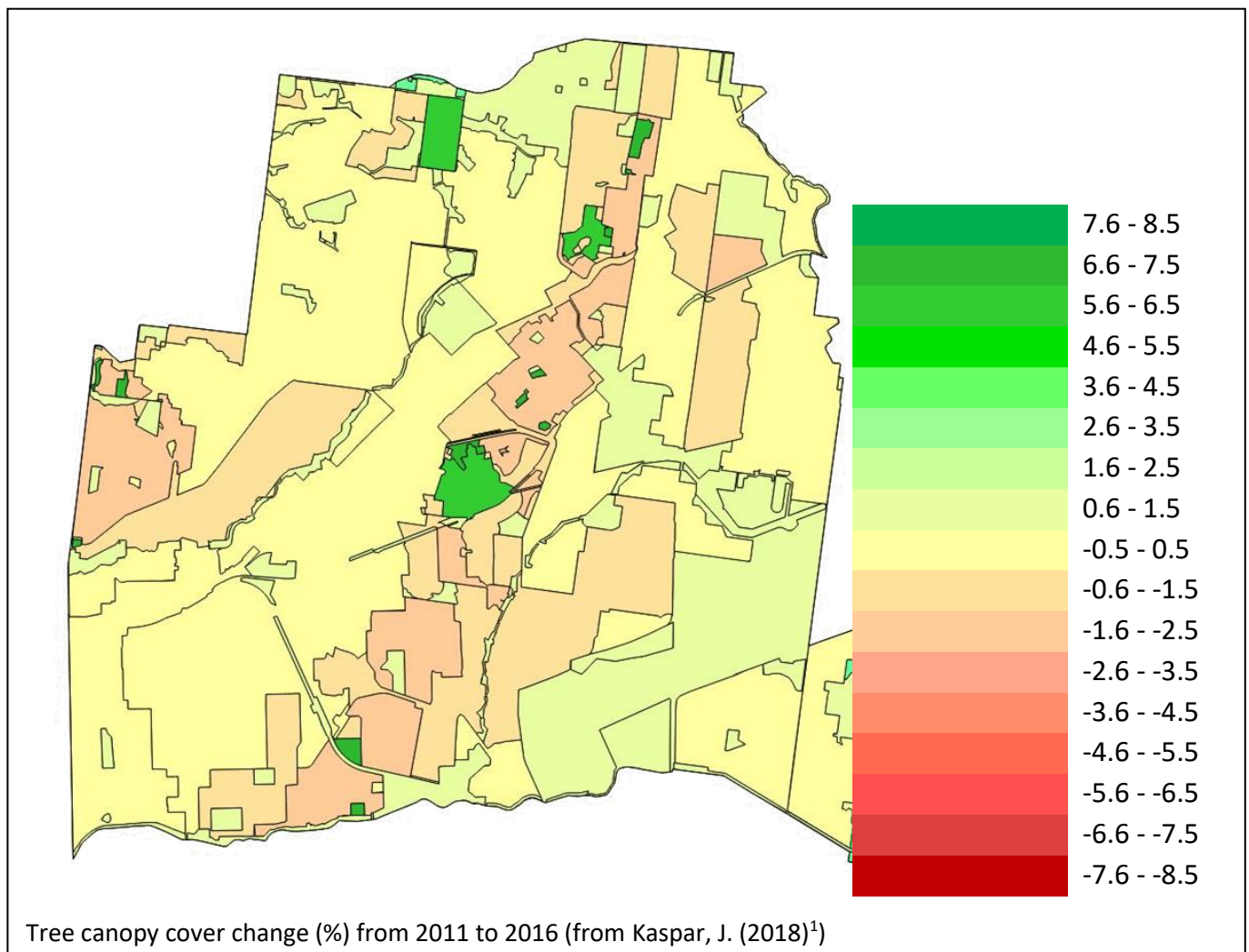
Where a sample point changed from a tree to one of the other categories, canopy loss is assumed to have occurred.

Cover gains and losses for each area were then calculated as the proportion of sample points affected.

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The findings are summarised here.

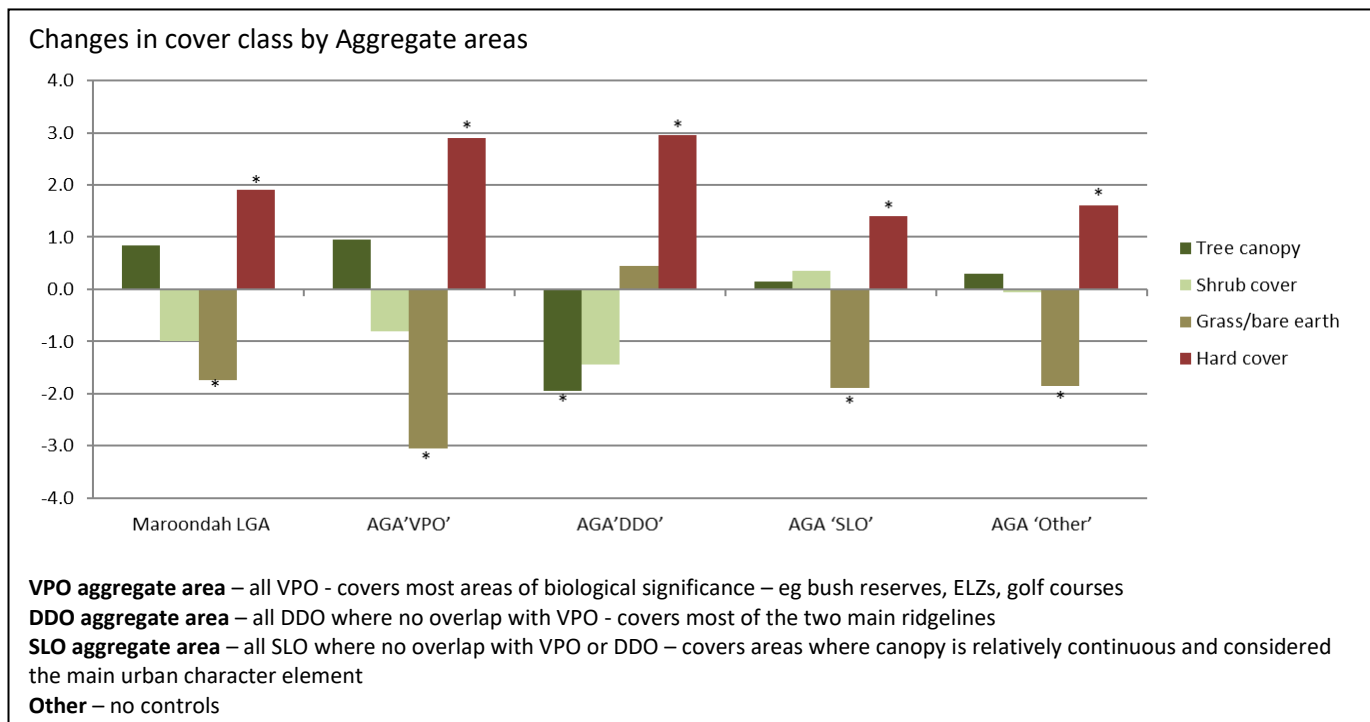
- Maroondah has relatively high canopy cover – 27.1%. This is the highest for a Melbourne metropolitan municipality within the Urban Growth Boundary.
- Slight (0.8%) increase in overall tree canopy cover from 2011 to 2016 (ie gains slightly exceed losses)
- Those areas covered by a Vegetation Protection Overlay (VPO) - 728 hectares or 11.9% of Maroondah - had the highest proportion of canopy growth (+1.0%).
- Those areas covered by a Design and Development Overlay (but not a VPO) - 618 hectares or 10.1% of Maroondah - had the highest proportion of canopy loss (-2.0%).
- Canopy cover gains are largely matched by similar losses in shrub cover.
- Greatest losses occurred in grass/bare earth, converting mainly to hard surface and not shrub cover



The analysis also categorised canopy losses as caused by one of:

- Construction - if there was evident building activity in the surrounding area, or
- Removal - if there was no direct identifiable cause (eg pruning, death or tree removal).

In every spatial area assessed, tree removal/death was the most common cause of loss of canopy cover.



So what does this tell us?

Although the Maroondah-wide net retention of canopy cover result is good news, these results also suggest that we may be drawing down on the stock of next generation canopy trees (assuming some of the 'shrub' cover includes young canopy trees), and therefore eroding our ability to maintain canopy cover levels into the future.

The apparent conversion of grass/bare earth to hard surface and not shrub cover suggests that development has been directed to open areas (and away from areas with trees and shrubs), but the space available for future trees and shrubs has been reduced. Thus as land is capped with impermeable surfaces, the capacity to keep matching canopy cover losses with gains into the future is diminished.

Much of the canopy gains that have contributed to maintaining our current cover levels are likely to be existing canopy trees growing older and increasing the size of their crowns (as opposed to more canopy trees). However, at some point in the future they will reach the end of their safe, useful life. Without a sufficient supply of next generation canopy trees, their replacement in a timely manner will be compromised. Combine this with the increasing area of 'Hard cover', the corresponding reduction in area of 'permeable' land surface is compromising our ability to supply these next generation trees as the soil and space they need to grow in and into, is being lost.

The canopy cover results that indicate an increase in tree canopy cover in the VPO aggregate area (which covers most of the bushland reserves) appears to conflict with the observed, but as yet unexplained, decline and death of eucalypt trees (mainly indigenous stringybark species) in our bushland reserves. A possible explanation is that in places where smaller trees that still qualify as canopy occur beneath the dead/dying eucalypt, the eucalypt deaths may not translate to a loss in canopy cover.

Expert planning advice² suggests that a combination of 'protection' and 'proactive requirements' are required to successfully manage Maroondah's tree canopy cover, landscape character and biodiversity into the future, and that recent changes to the Victorian Planning Provisions (Amendment VC148) provide opportunity to strengthen and streamline vegetation protection and management in Maroondah's planning scheme.

Declining biodiversity

(For more information on Maroondah's biodiversity, see Fact Sheets 5 *Pink-bells and Blue Stars - Maroondah's Plants* and fact Sheet 6 *Sugar Gliders and Golden Whistlers - Maroondah's Animals*)

Declines in biodiversity occur through the disappearance of species, communities, or genetic variants. Loss of species has been happening at varying rates in Maroondah ever since European settlers began clearing the land. It has also been happening on a more localised scale in each of Maroondah's patches of natural and semi-natural habitat.

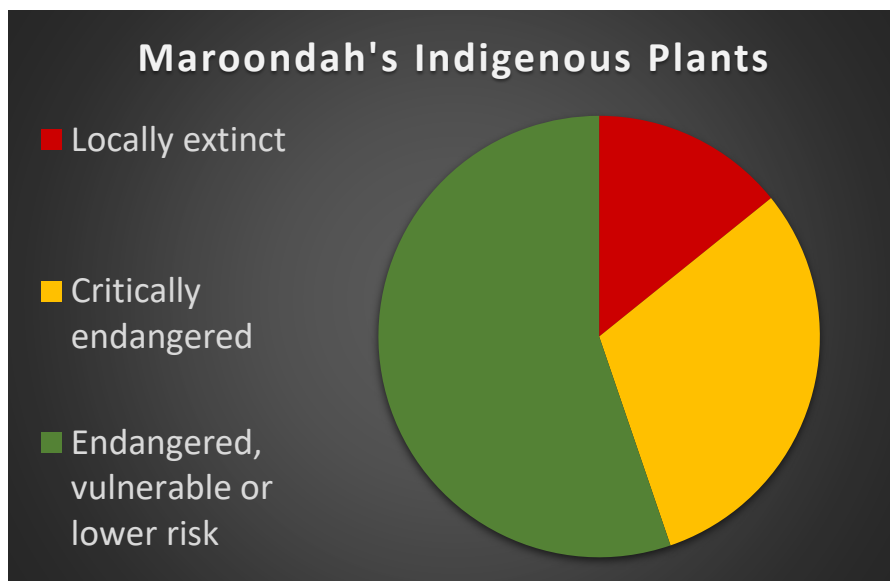
The recent study by Dr Graeme Lorimer³ describes the changes in biodiversity in Maroondah since his previous study from 1997³. The findings are summarised here.

Plant diversity in Maroondah

Of the 563 indigenous plant species (including named hybrids and sub species) recorded for Maroondah, 80 species are now presumed to be locally extinct, with another 172 species considered to be critically endangered in Maroondah.

Forty species (out of 92) of orchid have been lost within Maroondah, with another 32 species considered critically endangered.

Within Maroondah, eleven species (out of 45) that are specially adapted to winter-sodden/summer-dry floodplains have also been lost, with the remaining 34 species all considered critically endangered.

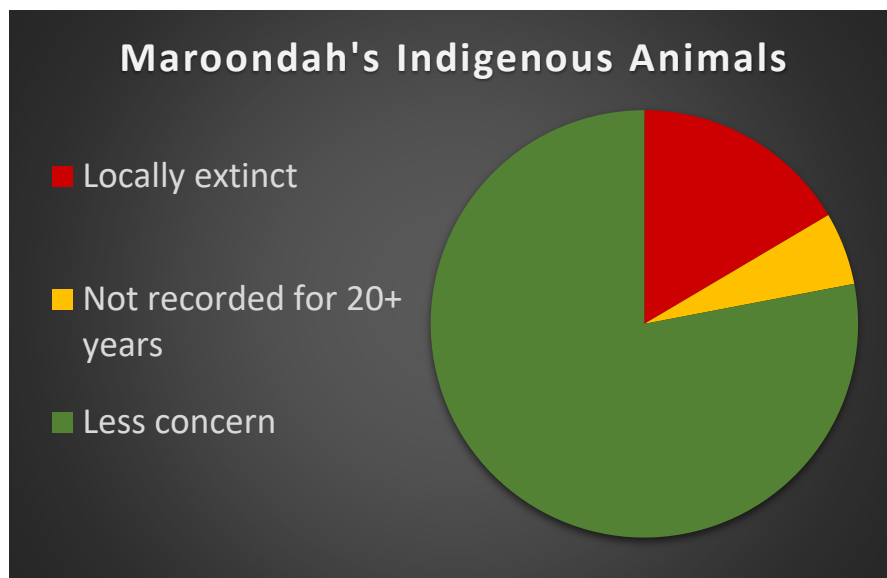


Animal diversity in Maroondah

Of the 200 indigenous vertebrate animal (mammals, birds, reptiles, amphibians, and fish) species recorded for Maroondah, 33 species are not expected to return in the foreseeable future (in effect, locally extinct), with another 12 species not recorded for at least 20 years.

An additional 13 indigenous bird species have seen a major decline in records since 1997. Conversely seven indigenous bird species have seen a major increase in records since 1997.

Of 22 butterfly species recorded, all but two are in decline.



Habitat in Maroondah

Although all of Maroondah provides habitat in some form or another, the 132 Sites of Biological Significance identified in the 1997 work by Dr Graeme Lorimer⁴ are assumed to represent Maroondah's natural and semi-natural habitat.

Sites of Biological Significance (SoBS)

Changes in number of SoBS since 1997:

1997 132 sites recognised

1997 to 2019:

- 12 sites lost - due to loss of nearly all habitat
- One site gained - due to improved habitat condition
- Four sites gained - due to elevated significance, but unchanged habitat condition
- Three sites gained - due to amalgamation and splitting of 6 sites to become 9 sites
- Five sites lost - due to downgraded significance as result of habitat deterioration
- 14 sites not retained - due to SoBS criteria change

2019 - 109 sites currently recognised

Changes in habitat extent since 1997 (of the original 132 sites, and the five new sites)

- 11 sites - practically all extent lost
- 31 sites - noticeable loss of extent
- 41 sites - noticeable gain in extent
- 53 sites - no noticeable net change in extent
- One site - unknown (insufficient data from 1997)

Changes in ecological condition since 1997 (of the original 132 sites, and the five new sites)

- 11 sites - effectively all condition lost due to clearing
- 26 sites - noticeably deteriorated in condition
- 26 sites - noticeably improved in condition
- 10 sites - mix of improvement and deterioration
- 37 sites - no clear change in condition
- 27 sites - unknown (no access or insufficient data)

Notes:

1. The criteria for recognising a site as having biological significance changed, particularly in 2004.
2. The magnitude of changes in both habitat extent and ecological condition are not quantified, the above figures simply reflect the observed direction of change at individual sites.

Since 1997, 54.5 hectares of natural or semi-natural habitat on sites of biological significance have been lost, with some small gains. Most of this loss resulted from the development of 'The Range' housing estate (30 ha).

Most of Maroondah's nature reserves have improved in condition, whereas natural/semi-natural vegetation along creeks and sites of significance within school grounds have deteriorated in condition.

All natural wetlands were lost long ago and many existing artificial wetlands are in poor ecological condition with excessive nutrients.

So what does this tell us?

Despite the improvement in condition of many of our bushland reserves in terms of reduced weediness, they are still losing species and therefore biodiversity. The future loss of many of the critically endangered plant species may not be preventable as the delayed effects of past actions continue to have an impact.

The currently unexplained decline and death of eucalypt trees (mainly indigenous stringybark species) in our bushland reserves is also contributing to structural changes to habitat that may compound these losses for both plant and animal species. Speculated causes of the eucalypt decline include fungal disease, possum browsing, competition for light, space, nutrients, and moisture, and drought.

“Business as usual” will not prevent continued loss of biodiversity in Maroondah.

Climate Change

With the predictions of higher temperatures, lower rainfall, and more intense storms, climate change is expected to be an ongoing and increasing threat to tree canopy cover and biodiversity.

Adaptive measures will be required, as will building the resilience of our canopy cover and biodiversity to the impacts of climate change. (refer Maroondah’s [“Climate Change Risk and Adaptation Strategy 2018/19 - 2021/22”](#))



A story of interdependence:

The caterpillars of the Imperial Hairstreak butterfly feed on plants of the genus *Acacia*. Their caterpillars are protected from predators and parasites by ants of the genus *Iridomyrmex*. In return, the caterpillars reward the ants with food secretions. The ants greatly enhance the survival and reproductive success of the butterflies, so butterfly populations are localised to areas with preferred species of both host plants and ants. (photo: Graeme Lorimer)

Key factors identified for the declines in tree canopy and biodiversity include:

- Removal of trees/vegetation for new construction
- Removal of trees/vegetation to manage risk (eg fire, safety, building and infrastructure damage)
- Specialist species losing critical dependencies – eg pollinators, fungi, hollows
- Drying of naturally wet soils, and lowering of water table, due to changes in drainage and less rain
- Competition and displacement by key non-indigenous species (environmental weeds)
- Death and decline of stringybark eucalypt species - leading to spread of introduced species and/or loss of important habitat structural elements
- Cut and fill of land for developments on slopes resulting in much wider impact than the building footprint
- Offsite impacts of development – runoff, erosion, pollution, domestic pets, increased people traffic impacting on adjacent habitat
- Fragmentation of habitat – leading to reduced area, increased isolation
- Changed fire regime – restricting habitat/population renewal

¹Kaspar, J. (2018) Maroondah Canopy and Landscape Analysis 2011 to 2016 (Greenspace Consultant)

²Scott, C. (2018) Maroondah City Council: Vegetation Planning Policy Review (Claire Scott Planning)

³Lorimer, G. (2018) Biodiversity in Maroondah - Volume 1 (Biosphere P/L)

⁴Lorimer, G. et al, (1997) Sites of Biological Significance in Maroondah (Biosphere P/L)

Options

A range of options designed to address the factors causing the issues are now presented here for discussion.

They are grouped under four themes based on key areas of influence over our vegetation that Maroondah City Council has responsibilities for:

- 1 **Planning scheme (page 16)**
- 2 **Public Land and Asset Management (page 23)**
- 3 **Supporting Community (page 29)**
- 4 **Leadership and Good Governance (page 34)**

Options for addressing the key factors are presented in terms of achieving outcomes to different ‘standards’ (‘Current level’, ‘Improved level’, ‘Optimum level’).

For each option the presumed benefits (for biodiversity and canopy cover directly and overall) and implications (cost and time to implement) compared to current arrangements have been depicted as follows:

Biodiversity	Canopy cover	Cost	Time
Bio	Can	\$	
No change in benefit for biodiversity with likely continued rate of loss	No change in benefit for tree canopy cover with likely decline in future	Significant increase in cost to implement	Long time to implement
Small increase in benefit for biodiversity with likely reduced rate of loss	Small increase in benefit for tree canopy cover with likely minimal decline in future	Moderate increase in cost to implement	Moderate time to implement
Moderate increase in benefit for biodiversity with likely minimal losses	Moderate increase in benefit for tree canopy cover with likely small increase in future	Minimal change in cost to implement	Short time to implement
Significant increase in benefit for biodiversity with possible increases	Significant increase in benefit for tree canopy cover with likely significant increase in future	Reduced cost to implement	Can be implemented immediately

1. Planning Scheme

Our current situation

The role of the planning scheme is to manage ongoing urban development and renewal to meet the needs of current and future generations. Taking an approach of ‘development for nature’ will optimise the opportunities for our current and future communities to continue to enjoy quality life in healthy environments.

The planning scheme provides mechanisms for protecting existing trees and other vegetation, as well as ‘proactive requirements’ that will support the planting and sustenance of canopy tree cover and biodiversity into the future (namely space to grow into, ‘surface permeability’ for soil hydration, landscaping prescriptions where relevant, and avoidance of impacts on nearby vegetation). To successfully protect and manage Maroondah’s tree canopy cover, other vegetation and biodiversity, a combination of these mechanisms is required¹.

Mainly through mechanisms that are protective only, Maroondah’s current planning scheme has been largely successful to date in ensuring that development protects our valued landscapes, tree canopy and biodiversity.

Planning overlays

The use of the Significant Landscape Overlay (SLO), Vegetation Protection Overlay (VPO) and Design and Development Overlay (DDO) have ensured canopy trees are only removed for good reason, and detrimental impacts on our landscape and biodiversity are considered and mitigated through appropriate permit conditions (including replacement plantings). These overlays also allow Council to issue fines and compel restorative actions when trees are removed, lopped, or destroyed unlawfully.

VPOs are a protective mechanism only, applied to sites of significant biodiversity and their controls protect not only canopy trees, but all native vegetation, and fallen trees and dead trees for their habitat values.

SLOs are also a protective mechanism that apply to landscape, but do serve to protect canopy trees.

With respect to tree canopy cover and other vegetation, the DDOs main role is to set minimum subdivision lot sizes to encourage lower density development.



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Recent changes

In July 2018, changes to the Victoria Planning Provisions (VPP) and planning schemes were introduced through Amendment VC148. The changes present Maroondah with new planning control opportunities for the benefit of tree canopy cover, landscape character and biodiversity.

In October 2018, Amendment VC154 came into effect to enable the planning system to better manage water, stormwater and drainage in urban development. It introduces requirements to treat and manage stormwater for developments such as all new commercial and industrial subdivisions and buildings, all new residential subdivisions and developments (except single dwellings and extensions), and all new developments on public land. This amendment presents Maroondah with new opportunities to manage stormwater for the benefit of street trees and native vegetation (eg swampy vegetation)

Also in October 2018, the Department of Environment, Land, Water, and Planning advised the Country Fire Authority (CFA) that a review of the Bushfire Management Overlay was open for areas where development has occurred and the bushfire hazard has been removed. This review presents Council with the opportunity to work with the CFA to remove the BMO where it is no longer required, and thereby removing the risk of vegetation being removed unnecessarily.

Council is currently undertaking a Neighbourhood Character Review to update previous work and ensure the planning scheme is affording protection to valued landscapes and neighbourhood character. Given the role of vegetation and trees to landscape and neighbourhood character, there is the opportunity to ensure the planning scheme achieves integrated objectives for vegetation and neighbourhood character.

Different parts of Maroondah offer different opportunities for vegetation to contribute to either or both biodiversity and neighbourhood character objectives. Currently Maroondah takes a municipal-wide, issues based approach to planning, as opposed to a place-based approach that could ascribe separate vegetation objectives to different places within Maroondah, defined by environmental factors.

Compliance and enforcement

Non-compliance with planning provisions or permit conditions compromises the objectives set out by the planning scheme. Non-compliance can be deliberate, or can result from misunderstanding complex or ambiguous requirements. Maroondah's Statutory Planning Team have specialist staff dedicated to helping applicants understand and comply with vegetation-related requirements.

Although it may seem an imposition, a condition that triggers a permit, also initiates dialogue between an applicant and Council. When both parties view this dialogue as a partnership seeking an outcome that meets the needs of both, compliant solutions can be negotiated. With the expectation that increasingly creative design solutions will be required to achieve compliance, such dialogue is invaluable.

If compliance is not monitored and enforced, non-compliance will proliferate. Appropriate levels of human resourcing, supported by good data on pre-existing conditions, are critical to the monitoring of aspects such as tree damage, replacement plantings and ongoing maintenance.

Addressable factors

The planning scheme can address the following key causal factors:

- Removal of trees/vegetation for new construction
- Removal of trees/vegetation to manage risk (eg fire, building and infrastructure damage)
- Drying of naturally wet soils due to changes in drainage
- Cut and fill of land for developments on slopes resulting in much wider impact than the building footprint
- Offsite impacts of development – runoff, erosion, pollution, impacting on adjacent habitat
- Fragmentation of habitat – leading to reduced area, increased isolation

Opportunities

The three main areas the planning scheme can help with are:

- **Protect existing vegetation** from both direct removal and other impacts (eg runoff, erosion, pollution from earthworks or adjacent land uses)
- **Preserve ‘permeability’** - land that allows rainfall to infiltrate the soil - to allow soil hydration and groundwater recharge, and to provide for future vegetation (eg tree canopy, gardens, habitat)
- **Optimise effectiveness** - the effectiveness of the planning provisions in these areas is optimised when the regulations are logical and easy to navigate, deliver the desired outcomes, and accepted and supported by community

The Victorian Government’s guidance note, *Planning for biodiversity*, makes it clear that the Environmental Significance Overlay (ESO) has broader applicability than the VPO and is the preferred overlay for achieving biodiversity outcomes. It can be used to control impacts on biodiversity other than the removal of native vegetation, and can be used to create protective buffers around important vegetation assets. The ESO is not currently applied in the Maroondah planning scheme.

Greening the Greyfields is an innovative redevelopment concept being piloted in Maroondah. In an area of ageing housing stock, rather than a series of adhoc subdivisions, development objectives are set at a precinct scale with individual landowners supported to collaborate in achieving them. This can result in the area occupied by driveways being reduced, and the area for gardens, canopy trees, open space, and thoroughfares being increased.



Water Sensitive Urban Design (WSUD) is a government priority carried into planning schemes aimed at improving stormwater quality and restoring natural creek flows. By maximising on-site infiltration where rain falls, before it enters the drainage system, WSUD enables natural filtration of water, reduction in flooding, and mitigation of the impacts of high intensity flows. Creek ‘daylighting’ projects (converting drainage lines from underground pipes into more natural surface channels) such as the Tarralla Creek project in Heathmont, apply this principle at larger scales.

Vegetation supports infiltration, and in turn benefits from soil hydration - in fact the future of several of Maroondah’s critically endangered plants are dependent on it.

Biodiversity Sensitive Urban Design is an emerging protocol for urban design that aims to create suburbs that are a net benefit to native species and ecosystems through the provision of essential habitat and food resources. It represents a new approach to urban biodiversity conservation by seeking to achieve biodiversity benefits on site, in contrast to the standard offsetting approach, which reduces the opportunity for urban residents to engage with nature.



The Living Building Challenge, administered by the International Living Future Institute, is a green building certification program and sustainable design framework that visualises the ideal for the built environment. It includes a ‘biophilia’ element to ensure elements that nurture the innate human-nature connection are deliberately designed in. The Burwood Brickworks project in Burwood East is a relatively local example of a mixed commercial and residential development pursuing these standards.

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Defining ‘places’ within Maroondah, based on ecological profile and/or neighbourhood character, enables a place-based strategic planning approach with separate objectives (eg for vegetation, housing, social, cultural heritage, etc) for each place. Such a place-based approach enables a more tailored approach to setting and achieving vegetation objectives.

Further to this, adopting a **green infrastructure** approach to creating an inter-connected network of green open spaces that provide a range of ecosystem services — such as clean air and water, shade and cooling, pedestrian and cycling connectivity, wildlife habitat and interaction with nature, and carbon sinks, could provide strategic direction and context for place-based planning and design of public open space.

¹Scott, C. (2018) Maroondah City Council: Vegetation Planning Policy Review (Claire Scott Planning)

1 Options for Planning Scheme

1.1 Protecting existing vegetation

1.1.1 Maintain existing protective provisions (Current level)

Reflect current provisions in updated Planning Scheme: Maintain existing provisions in reformatted Local Planning Policy.

Remove Bushfire Management Overlay where no longer needed: Work with Country Fire Authority to determine where Bushfire Management Overlay is no longer needed, and amend planning scheme accordingly

Apply stormwater management requirements to new developments (VC154): Use VC154 (Implementation of the Integrated Water Management reforms) to enable works to capture water to support vegetation growth, including to support street tree plantings and swampy vegetation.



1.1.2 Improve protective provisions and proactive requirements (Improved level)

Replace Vegetation Protection Overlay with Environmental Significance Overlay: where appropriate, over sites of biological significance.

Remove Bushfire Management Overlay where no longer needed: Work with Country Fire Authority to determine where Bushfire Management Overlay is no longer needed, and amend planning scheme accordingly

Amend Vegetation Protection Overlays and Significant Landscape Overlays in other areas: clarify objectives, ensure exemptions are relevant to local environment/landscape, and integrate with new Residential Zone schedules. Introduce landscaping requirements that provide benefits for canopy (ie large, long-lived species) and biodiversity (ie indigenous species).



1.1.3 Optimise protective provisions and proactive requirements (Optimum level)

Place-based: define distinctive places in Maroondah based on vegetation values for biodiversity and community. Set objectives tailored to each place for such things as biodiversity, canopy and other vegetation cover, housing, and other social needs. Apply place-based schedules to residential zones that set standards for vegetation protection and landscaping needed to achieve the place-specific objectives. Encourage the incorporation of green walls, green roofs and roof top gardens into building design. Direct vegetation offsets to sites of high biological significance as appropriate.

Replace Vegetation Protection Overlay with Environmental Significance Overlays over biologically significant sites and protective buffer areas reflecting vulnerability of sites to adjacent physical and hydrological threats.

Amend Vegetation Protection Overlays and Significant Landscape Overlays in other areas: tailor any exemptions to the place-specific objectives for vegetation, and integrate with new Residential Zone Schedules.

Remove BMO where no longer needed: Work with CFA to determine where BMO is no longer needed, and amend planning scheme accordingly

Apply Public Acquisition Overlay to known sites of high biodiversity value on private land



1.2 Preserving permeability

1.2.1 Maintain existing permeability standards (Current level)

Reflect current provisions in updated Planning Scheme: Maintain existing site coverage and setback standards in new schedules to Residential Zones and reformat Local Planning Policy. Ensure no loss of current levels of protection provided by the Sites of Biological Significance Policy (LPP 22.04)

Bio	Can	\$	
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1.2.2 Improve permeability (Improved level)

New schedules to Residential Zones: introduce minimum permeability proportions, and improve site coverage, setback, and landscape standards in generalised schedules to respective residential zones.

Bio	Can	\$	
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1.2.3 Optimise permeability ('Optimum level)

Place-based: define distinctive places within Maroondah, based on ecological profile. Set biodiversity/vegetation, housing, social and other objectives tailored to each place.

Apply place-based schedules to residential zones that require retention of high proportion (eg 40%) of permeability, and ambitious site coverage, setback, and landscape standards, needed to achieve the place-specific objectives (eg vegetation retention, soil hydration, habitat creation and connectivity, shade in areas of high urban heat island effect, public open space, and walking/cycling routes)

Incentivise: development benefits such as greater building height where permeability and other standards are exceeded.

Bio	Can	\$	
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1.3 Optimising effectiveness

1.3.1 Maintain existing provisions (Current level)

Minor wording and functional changes in updated Planning Scheme: Maintain existing provisions, with minor edits, in reformatted Local Planning Policy.

Bio	Can	\$	
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1.3.2 Improve effectiveness of provisions (Improved level)

Clear and unambiguous language: that sets out clear objectives, clear direction in how to achieve objectives and, where appropriate, simple, logical, and easily understood exemptions.

Reduce complexity: reduce the number of controls that might apply in any one place by ensuring that zoning and zone schedules, and any overlays, are place-based and complementary without duplicating function.

Bio	Can	\$	
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1.3.3 Optimise effectiveness of provisions (Optimum level)

Simplified wording and function as per 1.3.2.

Easily understood and pursued: *provide permit* conditions that makes clear to the permit holder what they must do or not do, the standards to which they must adhere, and guidance on how to meet them.

Supported and enforced: pro-actively support applicants by offering pre-development site meetings with developers. Ensure trees and other vegetation are accurately mapped and recorded as ‘assets’ as part of planning assessment. Pro-actively monitor and support permit compliance - risk-based program for compliance inspections, provide compliance support when needed, pursue appropriate penalties and restorative action for non-compliance.

Bio	Can	\$	
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2. Public land and asset management

Our current situation

A significant proportion of Maroondah's tree canopy cover, and most of Maroondah's indigenous biodiversity values, exist on publicly owned and managed land.

Other public land managed by agencies such as Melbourne Water, Parks Victoria, VicTrack and VicRoads also support vegetation in Maroondah.

Council manages 430 public open space reserves covering 650 hectares (11% of Maroondah). It includes parks, playgrounds, bushland, sporting, and recreational facilities that serve a wide range of public services and activities. These public open spaces support an estimated 750,000 trees, along with an estimated 72,000 trees in nature strips across the municipality. Council plants around 5000 new trees, and around 20,000 other indigenous plants, each year.



For the purpose of this discussion, the key elements of public land are sorted into:

- **Biodiversity assets** such as bushland reserves and patches of indigenous vegetation that are important to biodiversity;
- **Other natural assets** such as street and park trees that are important to tree canopy cover;
- **Built assets** such as community centres, club rooms, pavilions, picnic spaces, toilets, and carparks, as well as vital infrastructure in service easements

Managing our public open space and streetscapes requires a range of specialist skills and relies as much on good practices of staff on the ground as on good planning and management.

Council's Operations Service Area has teams dedicated to bushland, tree, and parks maintenance.

Council's Leisure Service Area has a team dedicated to managing golf courses and sports fields.

Council's Assets Service Area has teams dedicated to built asset planning, construction, and maintenance.

Council's *Environmentally Sustainable Design Policy for Council Buildings (2017)* cites a number of vegetation-related sustainability objectives, including "*Protect, enhance and restore open space, native vegetation and biodiversity and habitat values*" and the associated policy guidelines provide the steps for achieving these objectives.

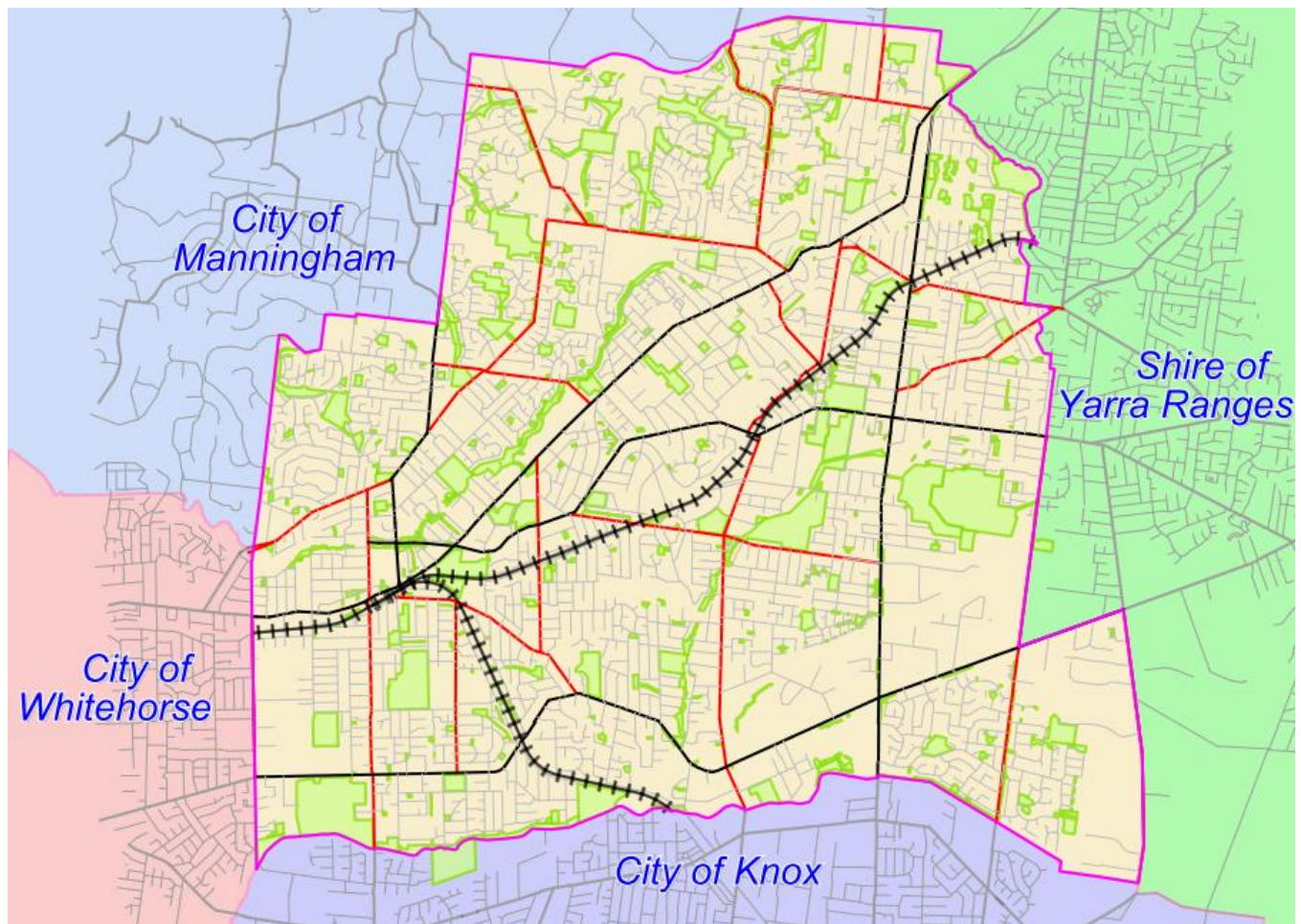
The Tree Maintenance team has successfully increased tree canopy cover in our streets and parks by planting new trees at a rate higher than the rate of tree loss, and through a maintenance program to keep trees alive and healthy. Under current resourcing levels, the program of street tree infill planting (planting of replacement street trees where gaps exist) returns to the same location approximately every 10 years.

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The Bushland Management team directly manages 36 of the higher quality bushland reserves and has been successful in improving the condition of most of these bushland areas. Council also engages contractors to manage another 26 areas of public land with lower quality bushland, and this has helped minimise any decline in condition of these areas.

Golf courses, sports grounds and other recreation spaces may not be able to accommodate many trees however they often sit within or very near to treed park areas and bushland so still provide opportunity to provide benefits for biodiversity.

Existing built assets require ongoing maintenance, and new built assets are designed and constructed as part of a planned program of asset renewal.



Map showing council reserves

In affirming its partnership with the Port Phillip and Westernport Catchment Management Authority, Council has committed to, by 2040:

- No net loss (area and quality) of 171 hectares of native vegetation
- Improved quality on additional 19.8 hectares of native vegetation

Addressable factors

Management of public biodiversity assets can address the following causal factors:

- Competition and displacement by key non-indigenous species (environmental weeds)
- Removal of trees/vegetation to manage risk (eg fire, safety)
- Specialist species losing critical dependencies – eg pollinators, fungi, hollows
- Death and decline of stringybark eucalypt species - leading to spread of introduced species and/or loss of important habitat structural elements
- Changed fire regime – restricting habitat/population renewal

Management of other public natural assets can address the following causal factors:

- Removal of trees/vegetation to manage risk (eg fire, safety, building and infrastructure damage)
- Competition and displacement by key non-indigenous species (environmental weeds)
- Offsite impacts of development – increased people traffic impacting on adjacent habitat
- Fragmentation of habitat – leading to reduced area, increased isolation

Management of public built assets can address the following causal factors:

- Removal of trees/vegetation for new construction
- Removal of trees/vegetation to manage risk (eg fire, safety, building and infrastructure damage)
- Drying of naturally wet soils, and lowering of water table, due to changes in drainage and less rain
- Offsite impacts of development – runoff, erosion, pollution, increased people traffic impacting on adjacent habitat

Opportunities

Public land and asset management can help with:

- **Vegetation and canopy cover extent and connectivity** through retention of existing vegetation and ‘permeability’, restoration and creation of new areas of indigenous vegetation, street and park tree planting, land purchase (for biodiversity or open space), design and siting of new built assets (minimising impacts on, optimising benefits for, vegetation)
- **Vegetation and canopy cover quality and resilience** through weed control, habitat enhancement planting, artificial habitat, tree maintenance and watering, species selection (park landscaping, street trees), design and maintenance of built assets (minimising impacts on, optimising benefits for, vegetation)

Public open space is often where many different objectives expressed in various Council strategies and plans, come together, eg:

- Maroondah Housing Strategy (2016)
- Open Space Strategy (2016)
- Maroondah Water Sensitive City Strategy (2015-2025)
- Sustainability Strategy (2016 - 2020)
- Climate Change Risk and Adaptation Strategy (2018/19 - 2021/22)
- Maroondah Health and Wellbeing Plan (2017 - 2021)
- And many others.

Achievement of these objectives in a balanced and coordinated manner is required at both local and municipal-wide scales.

This can be optimised through an integrated, place-based approach to planning and designing public open space to serve multiple objectives (eg for biodiversity, recreational, social, cultural heritage), tailored to the needs and circumstances of each place.

Setting measurable targets for municipal-wide and these place-based objectives, and monitoring progress towards them, provides transparency and drives action to achieve them. Monitoring canopy cover change in a consistent manner can be a challenge, however emerging methods such as the i-Tree Canopy software (utilised in the canopy cover analyses for Maroondah), and CSIRO's Urban Monitor project that extracts information from digital aerial photography, offer methods for establishing reliable indicators for setting canopy cover targets.

Monitoring biodiversity change is even more challenging in terms of establishing indicators that can be reliably, consistently, and cost-effectively monitored and that are responsive to change at the municipal scale. The 1997 and 2019 studies of biodiversity in Maroondah provide a sound base of data from which suitable indicators could be derived.

Further to this, adopting a 'green infrastructure' approach to creating an inter-connected network of green open spaces that provide a range of ecosystem services — such as clean air and water, shade and cooling, pedestrian and cycling connectivity, wildlife habitat and interaction with nature, and carbon sinks, could provide strategic direction and context for place-based planning and design of public open space.

2 Options for Public Land and Asset management

2.1 Vegetation and canopy cover extent and connectivity (on public land)

2.1.1 Maintain current extent and connectivity (Current level)

Retain extent of current bushland reserves: by continuing to use and manage bushland reserves for biodiversity conservation purposes. Establish basic native vegetation extent measurement method to enable monitoring of targets committed to in Maroondah's partnership with the PPWCMA.

Maintain connectivity of bushland reserves: by continuing to manage other patches of indigenous vegetation that occur on public land for biodiversity purposes. Avoid siting new built assets where these occur.

Maintain current level of tree canopy cover growth: by continuing to plant trees in nature strips and parks at a rate greater than they are being removed or lost. Site new built assets in a manner than avoids the need to remove trees. Consider setting canopy cover targets using the recent canopy cover analyses as a baseline. Maintain current requirement for Council to get planning approval to remove vegetation. Opportunistically pursue funding to enable increased tree planting in areas of localised canopy cover loss.

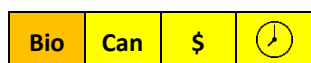


2.1.2 Increase extent and connectivity (Improved level)

Retain extent of current bushland reserves: by continuing to use and manage bushland reserves for biodiversity conservation purposes

Improve extent of indigenous vegetation and connectivity of bushland reserves: through revegetation that expands other patches of indigenous vegetation managed for biodiversity purposes in strategic locations on public land. Avoid siting new built assets where these occur.

Increase level of tree canopy cover growth: by increasing the rate of tree planting in nature strips and parks to meet canopy cover targets and match the planting rates to the life expectancies of existing tree stock. Site new built assets in a manner than avoids the need to remove trees.



2.1.3 Optimise extent and connectivity (Optimum level)

Increase extent of current bushland reserves: by purchase of private land parcels with high strategic biodiversity value to add to the existing bushland reserve system for use and management for biodiversity conservation purposes. Design and implement a monitoring program that can reliably measure changes in habitat and biodiversity extent and condition, and track progress towards habitat and biodiversity targets.

Improve extent of indigenous vegetation and connectivity of bushland reserves: prioritise the creation of new and expansion of existing patches of indigenous vegetation managed for biodiversity purposes in strategic locations on public land to create habitat corridors through the landscape (based on importance of connection to key species, and opportunities in landscape to create). Direct vegetation offsets to strategically important locations. Avoid siting new built assets where these occur, and optimise the biodiversity benefits of any associated landscaping. Select species for street and park tree planting that optimise biodiversity benefits.

Increase level of tree canopy cover growth: by significantly increasing the rate of tree planting in nature strips, parks, and bike paths/walkways to meet ambitious place-based canopy cover targets based on rates of tree loss and tree life expectancies. Design planting to provide multiple 'services' such as biodiversity and shade for path users. Site new built assets in a manner than avoids the need to remove trees and enables nearby trees to grow old and large.



2.2 Vegetation and canopy cover quality and resilience (on public land)

2.2.1 Maintain current quality and resilience (Current level)

Maintain quality of bushland reserves: by continuing to maintain the existing condition of the highest quality reserves through direct management, and prevent condition decline in the lower quality reserves using contractors. Establish basic native vegetation quality measurement method to enable monitoring of targets committed to in Maroondah's partnership with the PPWCMA.

Maintain health of current tree canopy: by continuing the current programs of bushland management, and tree planting and maintenance, and determining and addressing the cause of eucalypt deaths.

Minimise impacts of built assets: by addressing any negative impacts on trees and other natural assets, as and when discovered or reported. Follow Council ESD guidelines when designing new built assets. Avoid the use of environmental weed species in associated landscaping.

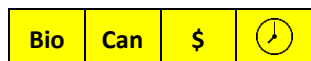


2.2.2 Increase quality and resilience (Improved level)

Increase quality of bushland reserves: by increasing the area of bushland managed directly by Council to improve condition of more bushland, and continue to use contractors to prevent condition decline in the remaining lower quality areas.

Increase the health of current tree canopy: by matching the levels of bushland management, and tree planting and maintenance, to increased bushland area and increased tree planting rates. Determine and address the cause of eucalypt deaths. Increase the resilience of our tree canopy cover by developing a species mix based on suitability for future climate, local biodiversity, and local growing conditions.

Minimise impacts of built assets: by addressing any negative impacts on trees and other natural assets, as and when discovered or reported. Follow Council ESD guidelines when designing new built assets., and incorporate new design elements that are found to have benefits for biodiversity and other natural assets as and when they are identified. Avoid the use of environmental weed species in associated landscaping



2.2.3 Optimise quality and resilience (Optimum level)

Optimise quality of bushland reserves: by maximising the area of bushland managed directly by Council to improve condition of most bushland, including planted indigenous vegetation forming important habitat corridors, and continue to use contractors to prevent condition decline in the remaining lower quality areas. Design and implement a monitoring program that can reliably measure changes in habitat and biodiversity extent and condition, and track progress towards habitat and biodiversity targets.

Optimise the health of current tree canopy: by matching the levels of bushland management, and tree planting and maintenance, to increased bushland area and increased tree planting rates. Determine and address the cause of eucalypt deaths. Optimise the resilience of our tree canopy cover by developing a species mix based on suitability for future climate, local biodiversity, and local growing conditions.

Optimise synergies with built assets: by regular programmed inspection of built assets for any negative impacts on trees and other natural assets, and addressing as and when discovered or reported. Follow Council ESD guidelines when designing new built assets, and as they are identified incorporate new design criteria that avoid negative impacts on, and maximise benefits for, biodiversity and other natural assets. Asset renewal planning explicitly seeks to contribute to localised and landscape-wide objectives for biodiversity and other natural assets in meeting its objectives.



- End Section -

3. Supporting Community

Our Current Situation

With a population numbering 117,396 occupying 44,227 households, and 9,000 businesses employing 36,000 people, Maroondah's community is significant.

In 2016, 22.2% of the population was aged between 0 and 17, and 21.5% were aged 60 years and over.

Maroondah people place a high value on our vegetation and tree canopy cover - as evidenced by consultation feedback, advocacy, and volunteering.

Maroondah's residents, businesses, and community organisations play a key role in the management of our vegetated landscape and the security of our biodiversity. As land owners, they are also land managers. As residents, they are familiar with, and keen observers of, their local environment.

Council's efforts to protect and manage our vegetation and tree canopy cover have received community support over time, and many seek to participate in actions that are aligned and complementary. This is underpinned by the community's ability to access to useful knowledge, and their capacity to take action.

Knowledge of the natural environment is found in many different places and people, but not all of it is relevant or 'useable' in the Maroondah context. Much of this knowledge is also difficult to access for many in Maroondah's community - people may not be aware it exists, it may difficult for them to find, or hard for them to understand or interpret in a way that is useful to them.

Council's Bushland Management Team provide support to several volunteer groups made up of community members who volunteer their time to work in bushland reserves, extending the capacity of the team to manage these biodiversity assets, and building practical knowledge in the volunteers. They also purchase plants from two local, community-run indigenous plant nurseries - Community of Ringwood Indigenous Species Plant Nursery (CRISP), and Candlebark Nursery.

Other community groups and individuals that have access to natural environment knowledge provide a strong voice on behalf of Maroondah's natural environment. Prominent examples of this are the Croydon Conservation Society and Maroondah Bushlinks.

In 2014, Council established the Maroondah Environment Advisory Committee as a collaborative partnership between Council and key community stakeholders to inform and advise Council on environmental sustainability issues.

Addressable factors

Supporting community can address the following causal factors:

- Removal of trees/vegetation for new construction
- Removal of trees/vegetation to manage risk (eg fire, safety, building and infrastructure damage)
- Competition and displacement by key non-indigenous species (environmental weeds)
- Offsite impacts of development – runoff, erosion, pollution, domestic pets, increased people traffic impacting on adjacent habitat
- Fragmentation of habitat – leading to reduced area, increased isolation

Opportunities

Supporting community can help by building:

An informed community through building a sense of community pride in Maroondah's vegetation and biodiversity, achieved by providing knowledge that is tailored to Maroondah using multiple communication channels accessed by a wide Maroondah audience. This will strengthen the effectiveness of Council's efforts through support and acceptance, and motivate community action.

A participating community through mobilising complementary community action, achieved by provision of clear guidance, provision of engaging, effective, and accessible support programs (either directly providing, or facilitating others to provide), and provision of incentives and rewards for taking action. This will enable community to take complementary action through informed self-initiative and/or through coordinated action in community programs.

There are numerous examples of existing community support programs aimed at biodiversity and other environmental objectives.

One such example is the Gardens for Wildlife program initiated by Knox City Council. The program encourages residents and businesses to create an area in their garden to support local wildlife. This is done by providing habitat planted with locally indigenous, Australian native or suitable introduced species.

The program is free to join and includes a garden visit to provide advice and answer questions, a garden report, a Gardens for Wildlife booklet, a letterbox sticker, and regular newsletters.

Community 'Bioblitzes' are an example of engaging community in collecting data on biodiversity ('citizen science') that create a biodiversity snapshot of an area, help connect community to nature, and motivate them to take local action.

Programs and Apps such as Melbourne Water's Frog Census, Birdlife Australia's Aussie Backyard Bird Count, and the Department of Environment, Land, Water, and Planning's VBA Go provide practical opportunities for community members to collect data on local plants and animals and add to important biological databases.



3 Options for Supporting Community

3.1 An informed community

3.1.1 Maintain current levels of community knowledge (Current level)

Provide readily available information: by continuing to share information when it presents, without actively seeking Maroondah-specific information or tailoring the information to the circumstances of Maroondah.

Provide information through existing channels: by continuing to place information on the Maroondah website.



3.1.2 Improve levels of community knowledge (Improved level)

Provide tailored information: by actively seeking out relevant information that will build understanding of vegetation, habitat, and biodiversity, and tailoring it to the Maroondah context. Regularly review and update the information to ensure it reflects current knowledge and best practice. Consider use of local ‘icon species’ to focus communications.

Improve accessibility of information: by preparing and supplying Maroondah-focused information in a range of formats, and providing links to other information sources, suitable for a wide range of our community, including web-based, social media, printed, and community knowledge-sharing events. Facilitate access to information about tree health and maintenance (eg contact information for qualified arborists on how to maintain tree health and safety).



3.1.3 Optimise levels of community knowledge (Optimum level)

Provide tailored information: by actively seeking out relevant information, based on localised market research, that will build community understanding of vegetation, habitat, and biodiversity, and tailoring it to the Maroondah context, and places within Maroondah. Build Council’s understanding of the concerns that some people have with vegetation such as real and perceived fear of limb fall, root damage and fires, and provide information on how Council is assessing and managing the risks associated with vegetation. Regularly review and update the information to ensure it reflects current knowledge and best practice, and if needed, collect new knowledge. Investigate use of a suite of local ‘iconic species’ to focus communications.

Optimise accessibility if information: by preparing and supplying Maroondah-focused information in a range of formats, and providing links to other information sources, suitable for a wide range of our community. Targeted use of different communication channels, based on market research and Maroondah demographics, and including web-based, social media, printed, community knowledge-sharing and training events. Information is further tailored to individuals through face-to-face dialogue with Council staff who have regular community contact, and dedicated community environment education staff. Provide free arborist assessments to residents with new and existing canopy trees for advice on how to retain and maintain trees to keep them healthy and safe.



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3.2 A participating community

3.2.1 Maintain current levels of community participation (Current level)

Provide current provision of community guidance: by continuing to provide basic bushland management guidance to volunteer groups working in Council bushland. Continue to provide web-based guidance information (eg “Indigenous Gardens: Creating habitat for people and wildlife in Maroondah”) and links to external organisations that provide information to guide action.

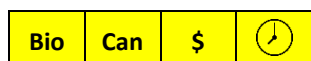
Maintain current provision of support programs: by continuing to post local community environment group contact information on Council’s website. Opportunistically provide occasional short-term programs, based on external funding when it becomes available.



3.2.2 Improve levels of community participation (Improved level)

Improve provision of community guidance: by researching and preparing a series of ‘How to’ guides, and community training events, that provide the rationale and clear methodology for taking a range of local community actions that benefit vegetation and biodiversity in Maroondah, including local businesses wanting to fulfil their Corporate Social Responsibility obligations. Continue to provide bushland management guidance to volunteer groups working in Council bushland.

Improve provision of support programs: by designing and delivering one or more short-term programs that engage and support community to undertake actions that benefit Maroondah’s vegetation and biodiversity.



3.2.3 Optimise levels of community participation (Optimum level)

Optimise provision of community guidance: by preparing guidance information, and community training events, tailored to Maroondah’s community capacity needs (based on market research and Maroondah demographics), and tailored to priority objectives for Maroondah’s vegetation and biodiversity, that provide the rationale and clear methodology for taking a range of local actions. Provide bushland management skill-building to volunteer groups working in Council bushland.

Optimise provision of support programs: by working in partnership with, and building capacity of, external organisations (community and/or government) to design and deliver one or more comprehensive, long-term programs that engage, actively support and equip the Maroondah community to undertake actions on their own that benefit Maroondah’s vegetation and biodiversity. Provide incentives, acknowledgement and rewards for community groups and individuals whose actions provide significant benefit for Maroondah’s vegetation and biodiversity.





Local resident, Dr Graeme Lorimer, was awarded the 2018 Citizen of the Year for his volunteer contributions to the natural environment for over 30 years.

4. Good Governance & Leadership

Our Current Situation

Maroondah City Council provides a range of services such as planning controls, local laws, open space management, asset and infrastructure design and maintenance, and community education and engagement, that all make important contributions to protecting and improving our vegetation, biodiversity, and landscapes.

To deliver these services, Council:

- establishes departments and teams to focus on delivery of different services,
- allocates funding and appropriately-skilled human resources, and
- collects, stores, and utilises a wide range of data

In addition, Council can also help achieve its desired vegetation and biodiversity outcomes through:

- pursuit of new and innovative ways of doing things, and
- forming partnerships with external organisations for mutual benefit

The Integrated Planning Department established a cross-department project advisory committee for the Maroondah Vegetation Review that enabled different departments to understand the constraints they faced with respect to protecting and improving vegetation and biodiversity. This committee now provides a platform for cooperatively seeking solutions that provide multiple outcomes across departments.

The Assets Department recently brought together representatives from various departments involved in managing public open space to workshop ways to improve coordination and collaboration.

Given Council alone cannot address all the issues and their causes, Council regards the formation of partnerships as key to extending its influence and impact. Council is currently involved in several innovative approaches in partnership with others:

- with Melbourne Water in the creek daylighting projects for Tarralla Creek and Dandenong Creek (enabling access to land and funding)
- with the Department of Environment, Land, Water, and Planning for the 20-minute Neighbourhood Project (enabling access to funding and policy-makers)
- with Swinburne University for the Greening the Greyfields project (enabling access to skills and expertise)
- with the Eastern Alliance for Greenhouse Action for the Biodiversity Monitoring in Melbourne's East project (enabling access to skills and networks)

Addressable Factors

Good governance and leadership can address the following causal factors:

- Removal of trees/vegetation for new construction
- Removal of trees/vegetation to manage risk (eg fire, safety, building and infrastructure damage)
- Specialist species losing critical dependencies – eg pollinators, fungi, hollows
- Drying of naturally wet soils, and lowering of water table, due to changes in drainage and less rain
- Competition and displacement by key non-indigenous species (environmental weeds)
- Cut and fill of land for developments on slopes resulting in much wider impact than the building footprint
- Offsite impacts of development – runoff, erosion, pollution, domestic pets, increased people traffic impacting on adjacent habitat
- Fragmentation of habitat – leading to reduced area, increased isolation
- Changed fire regime – restricting habitat/population renewal

Opportunities

Good Governance and Leadership can help by ensuring Council is:

An efficient and focussed organisation through data management, resourcing and organisational structures that facilitate cooperation and collaboration in achieving multiple strategic objectives.

An innovative organisation through monitoring for and evaluating new ideas and methods, and establishing relationships and partnerships to take advantage of new initiatives and funding opportunities.

A 'one-council' model that adopts a place-based, 'green infrastructure/ecosystem services' approach to setting strategic direction, offers a means for tailoring objectives to different places within Maroondah. These places can be defined by factors such as ecological profile, landscape character, social needs, cultural heritage, and community desires.

This approach provides shared objectives that can be pivotal in unifying departments and teams for a common purpose, that in turn encourages collaboration in determining data needs and resource allocation.

State of the Environment Reporting, and the use of Environmental Accounting, offer the means for assessing the collective impact of council and community, as well as setting aspirational shared goals. Emerging remote sensing tools such as 'Urban Monitor' being developed by CSIRO and others offer potential for monitoring changes in environment such as vegetation cover and type.

4 Options: Good Governance & Leadership

4.1 An efficient and focussed organisation

4.1.1 Maintain current governance arrangements (Current level)

Maintain current level of collaboration: by maintaining current organisational structure and continuing with informal cross-team/inter-departmental arrangements as the need arises.

Maintain current arrangements for allocating resources: by maintaining current budgeting and human resourcing mechanisms, and continuing with informal cross-team/inter-departmental resource-sharing arrangements (eg staff secondments) as the need arises.

Maintain current arrangements for managing data: by maintaining current data acquisition, storage, and deployment arrangements, largely determined by each department, and continuing with informal inter-departmental data sharing as the need arises.



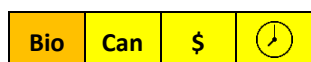
Maroondah Vegetation Review: Issues & Options Paper – February 2019

4.1.2 Improve governance for multiple strategic objectives (Improved level)

Improve collaboration: by maintaining current organisational structure and establishing formal cross-team/inter-departmental arrangements, with senior representation and recognised responsibilities.

Improve arrangements for allocating resources: by determining financial resourcing needs from the perspective of meeting multiple strategic objectives, and maintain current mechanisms for human resourcing needs (skills and time)

Improve arrangements for managing data: by determining data requirements based on service delivery and evaluation needs, sharing these across departments/teams, and sharing existing data where it matches needs.



4.1.3 Optimise governance for multiple strategic objectives (Optimum level)

Optimise collaboration: by adopting an integrated, place-based approach to service provision, using an ‘ecosystem services’ approach based on shared (all of council) strategy. Create organisational structure to serve this approach.

Optimise arrangements for allocating resources: by determining financial and human resourcing needs from the perspective of meeting multiple strategic ‘ecosystem services’ objectives. Ensure appropriate human resource (skills and time) are available through training, reform, and/or recruitment.

Optimise arrangements for managing data: by determining data requirements based on meeting multiple strategic ‘ecosystem services’ objectives, collaboratively designing standardised data collection and storage methods, and deploying data in formats that are accessible and useable by all that need it. Regularly monitor data use, accessibility, and currency, and adapt and update to ensure it continues to meet needs. Utilise data to prepare State of the Environment reporting for Maroondah.



4.2 An innovative organisation

4.2.1 Maintain current level of innovation (Current level)

Maintain current approach to innovation: by continuing to volunteer to pilot new concepts being trialled and funded by Victorian and Australian governments (eg Plan Melbourne 2017-2050)

Maintain current approach to partnerships: by continuing to collaborate with organisations that can provide Council with access to funding, expertise and/or land, and that are seeking partners to meet their specific project or concept needs.



4.2.2 Improve level of innovation (Improved level)

Improve approach to innovation: by identifying innovation needs from the perspective of meeting strategic objectives. Seek out co-investment funding from Victorian and Australian governments to trial new concepts that meet Maroondah’s innovation needs.

Improve approach to partnerships: by identifying leverage needs (eg funds, expertise, land) from the perspective of meeting strategic objectives. Identify potential partner organisations and negotiate mutually-beneficial partnership arrangements that can provide Council with access to funding, expertise, and/or land.

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4.2.3 Optimise level of innovation (Optimum level)

Optimise approach to innovation: by designing and investing in new/novel/untested/emerging initiatives that contribute to meeting multiple strategic ‘green infrastructure/ecosystem services’ objectives. Allocate funding, and seek out co-investment funding from other sources to offset costs.

Optimise approach to partnerships: by identifying prospective partner organisations and negotiate arrangements for co-design, co-investment and co-delivery of initiatives that further Maroondah’s and other local governments’ capacity to implement a whole-of-council ‘ecosystem services’ approach.

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Providing Feedback

Council is keen to understand your views on the information presented in this Issues and Options Paper as part of the Maroondah Vegetation Review. **Please submit your feedback to Council by 5pm Friday 15th March, 2019.**

Your feedback will help guide the development of the next main phase of the review, development of a draft strategy for vegetation and biodiversity that is planned to be available for public comment by July 2019.

You can provide your feedback online via the Your Say Maroondah website at:

www.yoursay.maroondah.vic.gov.au/maroondah-vegetation-review.

Alternatively, you can send your written submissions to:

The Chief Executive Officer
Maroondah City Council
PO Box 156 Ringwood 3134

Or by email to vegetation@maroondah.vic.gov.au

Submissions can also be delivered in person to Customer Service at a Council Service Centre in Ringwood, Croydon or at Realm.

For any further information on the Issues and Options paper, or how to make a submission please call our Strategic Planning Department on 1300 88 22 33 or (03) 9298 4598 Monday to Friday, 8.30am to 5pm.

Take our challenge

By visiting www.yoursay.maroondah.vic.gov.au/maroondah-vegetation-review you can also take part in our prioritisation challenge.

Mission imaginable, should you choose to accept, requires you to allocate limited Green Leafy Dollars to reflect the options you feel most strongly about and would like to see Council increase its focus on.

To contact Council

- phone 1300 88 22 33 or (03) 9298 4598
- visit our website at www.maroondah.vic.gov.au
- email maroondah@maroondah.vic.gov.au

Translating and Interpreter Service

13 14 50

National Relay Service (NRS)

13 36 77

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