



RURAL HEPBURN:

Agricultural Land Study and Rural Settlement Strategy

> BACKGROUND REPORT

Table of Contents

Ex	ecutive summary	1
1	Introduction	11
2	Hepburn Shire	15
3	Planning scheme performance	32
4	Rural settlement	44
5	Rural living	58
6	Food and Fibre	63
7	Agricultural land	78
8	Rural tourism	92
9	Other rural industries	100
10	Environment	104
11	Water supply catchments and groundwater	116
12	Landscape	121
13	Other considerations	127

Executive summary

THIS REPORT

This Background Report has been prepared to inform the development of the Rural Hepburn: Agricultural Land and Rural Settlement Strategy (the Strategy) report. It includes analysis of policy and strategies, rural land use, rural industries, environmental and natural values and the findings of targeted stakeholder consultation. The study area includes all land currently zoned Farming Zone, Rural Conservation Zone, Rural Living Zone and the Township Zone within small rural settlements. Land use on public land and land zoned for other purposes will be considered where it impacts on the use and development of rural land within the scope of this report.

The report provides a review of the major rural land uses and values with regard to the:

- Strategic context government plans and strategies influencing land use.
- Policy context the relevant planning policies in the Hepburn Planning Scheme.
- Land use description.
- Issues and opportunities.
- Strategic implications.

The land use and values considered in this Background Report include:

- Rural settlements.
- Rural living.
- Food and Fibre.
- Agricultural land.
- Rural tourism.
- Other rural industries (renewable energy, mining and extractive industries).
- Environment.
- Water supply catchments and groundwater.
- Landscape.
- Other considerations cultural heritage, natural hazards.

HEPBURN SHIRE

Hepburn Shire is located in central Victoria on the Great Dividing Range. Its attractive rural landscapes and towns, mineral springs, natural environment, rich cultural heritage and European history makes Hepburn attractive for residents and visitors alike.

The Shire is located around 100km north east of the Melbourne CBD and 50km north of Ballarat between the Western Freeway to Ballarat and the Calder Freeway to Bendigo. The eastern half of the Shire lies within the peri-urban region of metropolitan Melbourne (). There are also strong economic relationships with Ballarat, Bendigo, Castlemaine, Melbourne, Woodend and Gisborne with a growing number of Hepburn residents seeking employment and services from these locations.

The Shire's economy was once largely dependent on agriculture, forestry and mining. Today while agriculture is still significant to the local economy, there has been diversification with construction, health services and tourism emerging as important sectors. Growth in tourism, particularly tourism accommodation, is evident in the strength of real estate services and employment in accommodation and food services. There is also evidence of growth in knowledge services which is consistent with observed trends in in-migration and increased work-from-home during Covid-19.

The Shire's settlement pattern consists of a range of distinct townships and settlements set within a rural landscape. Creswick and Daylesford are regional service hubs and Clunes, Hepburn Springs and Trentham are the other main population centres. Small towns scattered across the municipality include Allendale, Broomfield, Bullarto, Coomoora, Glenlyon, Muskvale, Newlyn and Smeaton.

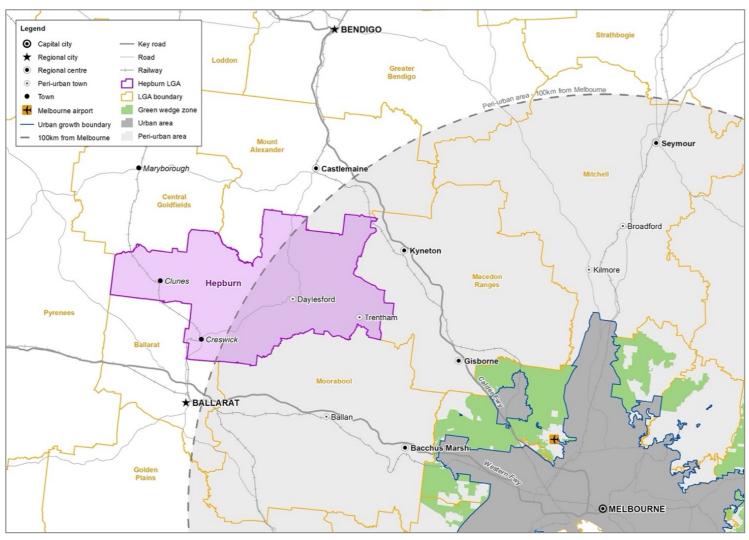
Hepburn has attracted a highly diverse social mix of people, and the community comprises traditional farming communities and long term residents in established townships, a growing commuter population, as well as a large number of part-time residents. In 2021, the population of Hepburn was 16,467, an increase of 1.2% from 2016 and slightly less than the average across regional Victoria of 1.7%. Since the beginning of the COVID-19 pandemic there has been a trend of people moving from metro to regional and rural areas across Victoria. Most chose to settle in rural Victoria (49%) with Hepburn identified as the top choice for internal migrants to rural Victoria (10%).

The municipality's high-quality landscapes, natural environment, township character and proximity to Melbourne attract weekenders and tourists. The attractiveness of Hepburn as a destination for visitors and retirees is reflected in household composition and dwelling tenure. The Shire's resident population comprises a higher proportion of couples with no children and lone person households and a higher proportion of older people and lower proportion of young people relative to the population of regional Victoria and Victoria

as a whole. There are around 1,100 active short-stay rentals, mostly in Daylesford and Hepburn Springs, which represents around 10% of private dwellings.

The Dja Dja Wurrung People are the Traditional Owners of the land and waters of Hepburn Shire and aspire to further strengthen cultural knowledge and practice.

FIGURE 1:LOCATION OF HEPBURN SHIRE IN THE REGION



STRATEGIC CONTEXT

State government strategies that influence land use and development in Hepburn's rural areas include:

- Plan Melbourne 2017-2050 Metropolitan planning strategy (2017)
- Central Highlands Regional Growth Plan (2014)
- Central Highlands Regional Economic Development Strategy (2022)

These plans identify population growth, growth in tourism, the desire to live in a rural area and the Shire's proximity and commutability to Melbourne and regional centres are key drivers of rural land use change in Hepburn. These plans also highlight that accommodating growth should not come at the expense of significant values including the Shire' rural landscapes, agricultural land, water supply catchments, cultural heritage and biodiversity.

Land use planning principles and directions include:

- Population growth should be planned in sustainable locations throughout the region.
- The region's economy should be strengthened so that it is more diversified and resilient.
- The region should capitalise on its close links with other regions and cities.
- The development of sustainable and vibrant communities should be supported by enhancing the level of access to key services.
- Land use patterns, developments and infrastructure should make the region more self-reliant and sustainable.
- Planning for growth should be integrated with the provision of infrastructure.
- The region's land, soil, water and biodiversity should be managed, protected and enhanced.
- Long-term agricultural productivity should be supported.
- The importance of cultural heritage and landscapes as economic and community assets should be recognised.

In 1999, the Hepburn Shire Land Use Strategy identified issues to be considered in planning policy including population growth, reduced commuter times, demand for rural lifestyle and residential development of rural land, protecting natural values and avoiding hazards, particularly bushfire. These issues remain and a key consideration of this study will be to test whether the current suite of planning tools has been effective and appropriate in responding to these issues.

POLICY CONTEXT

This section of the report documents the current policy, zone and overlay controls that apply to rural land throughout Hepburn as well as the findings and recommendations arising from a review of the performance of the planning controls.

PLANNING POLICY FRAMEWORK

Planning for Hepburn's rural areas needs to be consistent with the relevant State policy objectives which include:

- Protect strategically important areas for the environment, landscape, water, cultural heritage and agriculture
- Protect productive farmland of strategic significance in the local or regional context
- Encourage tourism
- Protect and enhance water supply catchments, native vegetation and other biodiversity values and rural landscapes
- Prevent dispersed settlement and maintain separation between settlements by providing non-urban breaks between urban areas
- Minimise risk to life, property and the environment from natural hazards
- Establish town growth boundaries to avoid urban sprawl and protect agricultural land and environmental assets.

MUNICIPAL PLANNING STRATEGY

Planning for the Shires' rural areas will also need to be consistent with the Municipal Planning Strategy (MPS) which includes Council's mission statement:

'Hepburn Shire will maintain, promote, protect and enhance the district's unique social, cultural, environmental and heritage characteristics. This will be achieved through effective, caring management and responsible governance. We will strive to gain maximum advantage for our community by protecting and enhancing our natural and built environment.'

The key land use and development directions to deliver this mission are derived from the Hepburn Planning Scheme Review 2020 include:

- Protect agricultural land as a valued resource to support jobs and opportunities into the future.
- Carefully manage the development of housing and services for residents in keeping with the heritage and rural feel of those areas.
- Preserve the heritage character and strong sense of place of the townships.

- Protect and manage the municipality's valued landscapes from unsympathetic development or major change.
- Manage the Shire's natural resources sustainably and protect them for future generations.
- Support tourism as an important industry based on the Shire's beautiful townships and countryside.
- Facilitate infrastructure across the Shire to meet the needs of the community.

PLANNING POLICY FRAMEWORK

11.01-1S Settlement

11.01-1R Settlement - Central Highlands

12.01-1S Protection of biodiversity

12.02-1S Protection of the marine and coastal environment

12.03-1S River corridors, waterways, lakes and wetlands

12.05-1S Environmentally sensitive areas

12.05-2S Landscapes

12.05-2R Protection of landscapes between settlements

13.01-1S Natural hazards and climate change

13.02-1S Bushfire planning

13.03-1S Floodplain management

14.01-1S Protection of agricultural land

14.02-1S Catchment planning and management

14.03-1S Resource exploration and extraction

15.01-6S Design for rural areas

15.03-2S Aboriginal cultural heritage

16.01-3S Rural residential development

17.01-1S Strengthen and diversify the economy.

17.04-1S Facilitating tourism

17.04-2S Coastal and maritime tourism and recreation

19.01-2S Renewable energy

The Hepburn Planning Scheme comprising state, regional and local policies, provides the framework for decisions regarding use and development of rural land. The policy framework seeks to support and encourage rural industries and protect important rural values. Overarching objectives for rural land include:

- Direct population growth to key towns and contain residential growth within township boundaries.
- Prevent dispersed settlement and maintain separation between settlements.
- Protect strategically important areas of the environment, landscape, water, cultural heritage and agriculture.
- Prevent fragmentation of agricultural land and protect productive farmland and farmland of strategic significance.
- Encourage rural tourism in appropriate locations.
- Protect and enhance water supply catchments, native vegetation and other biodiversity values and rural landscapes.
- Minimise risk to life, property and the environment from natural hazards.

These objectives broadly align with the aspirations of the Hepburn community, who in a review of the scheme, identified the Shire's rural feel, history and heritage, landscapes, and farming and agricultural heritage as important rural values.

PLANNING SCHEME PERFORMANCE

ZONES

A planning scheme identifies zones to designate land for particular uses, such as agriculture, residential or industrial. Each zone has its own purpose, identifies if a planning permit is required for use and/or development of land and the matters that must be considered before deciding to grant a planning permit.

The **Farming Zone (FZ)** is the main zone for rural land in the Hepburn Planning Scheme and aims to encourage retention of productive agricultural land and discourage uses that may have adverse impacts on agriculture. The FZ covers nearly 100,000ha or 67% of the total Shire area (Table 5). There are two schedules to the FZ. FZ1 requires a minimum subdivision area of 40ha and a minimum area of 40 ha above which no planning permit is required for a dwelling. FZ2 requires a minimum subdivision area of 20ha and a minimum area of 20 ha above which no planning permit is required for a dwelling.

The **Rural Conservation Zone (RCZ)** is primarily concerned with protecting and conserving rural land for its environmental features or attributes. The conservation values of the land must be identified in the schedule to the zone and could be historic.

archaeological, landscape, ecological, cultural or scientific values. The RCZ covers around 2,800ha or 2% of the total Shire area. There are two schedules to the RCZ.

RCZ1 has been applied to conserve areas dominated by Plains Grassy Woodland of the Victoria Volcanic Plains and riparian zones. RCZ2 has been applied to conserve areas that contribute to ecological connectivity across private land and between public land forest blocks.

The **Rural Living Zone (RLZ)** provides for residential use in a rural setting and is designed to provide lots that are large enough to accommodate a dwelling and an agricultural use. The agricultural use is likely to be carried on for reasons other than the need to provide a significant source of household income. The RLZ covers 640ha or 4% of the total Shire area. There are two schedules to the RLZ. RLZ1 requires a minimum subdivision area of 4ha and a minimum area of 4 ha above which no planning permit is required for a dwelling. RLZ2 requires a minimum subdivision area of 8ha above which no planning permit is required for a dwelling.

The **Rural Activity Zone (RAZ)** has not been applied to land in Hepburn Shire. In 2022, the Shire commissioned an assessment of rural land that may be suitable for application of the RAZ. The findings were considered in the development of the Strategy.

TABLE 1: HEPBURN PLANNING SCHEME RURAL ZONES

Zone	Shire wide area of zones (ha)	Proportion of total shire area	Schedules	Minimum lot size above which a planning permit for a dwelling is not required (ha)	Minimum lot size subdivision (ha)
FZ	99,437	67%	FZ1	40	40
			FZ2	20	20
RCZ	2,822	2%	RCZ1	-	40
			RCZ2	-	20
RLZ	5,640	4%	RLZ1	4	4
			RLZ2	8	8

The current suite of rural zones has not been strategically reviewed since 1999. A review of the Hepburn Planning Scheme¹ in 2020 and analysis in this report found

- Since 1999 there has been substantial changes to the rural zones and significant change in rural land use and rural activities. This review provides an opportunity to test whether:
 - the current zones and schedules align with the values and future prospects of the land.
 - the zone and schedules are achieving the desired outcomes and objectives, particularly in relation to agriculture and protection and enhancement of biodiversity values.
 - rural land values are adequately reflected in the current suite of overlays.
- Large number of planning permits approved for dwellings in the FZ.
- Large number of permits for tourism accommodation in the FZ.
- Poor standard and inadequate content of information in support of planning permits in the FZ.
- Potential for a significant number of dwellings to be constructed in the FZ without the need for a planning permit to determine whether the dwelling is genuinely required to support an agricultural enterprise.
- Current FZ schedules are based on out of date information.
- Inconsistency between the FZ2 20ha minimum lot size and the recommendation of 1 dwelling per 40ha in water supply catchments.

Potential strategy responses include:

- Review FZ schedules, including minimum lot size to reflect agricultural qualities of land and agricultural industries.
- Local policy guidance for assessment of planning permits for dwellings in the FZ.
- Local policy guidance on the types of uses appropriate for agricultural areas.
- Prepare a map of productive agricultural land.

¹ Plan2Place (2020) Hepburn Planning Scheme Audit and Review Report

RURAL SETTLEMENT

The Strategic Framework Plan identifies 15 rural settlements or localities in the Hepburn Shire that do not have a clear role and function or direction for future growth. A review of the zones and an analysis of the number of dwellings and average lot sizes within a 400m, 800m and 1200m catchment of each settlement centre was undertaken to understand the potential for infill development. Some settlements have residential zoning, include Glenlyon, Lyonville, Muskvale and Newlyn North and higher number of dwellings compared to other settlements which exist more as clusters of houses in the FZ (Table 2).

Further analysis is required to understand the services within each township to assist in the designation of each settlement's role and function.

The existing defined 15 settlements across the Shire include a mix of locations without a clear profiling of their hierarchy. This includes a lack of residential zones, large parcels of residential zones outside of existing settlements, and a lack of strategic direction for their growth.

Despite some vacant lots existing within proximity of settlements, most of the new housing being permitted outside of existing townships are occurring within the farming zone.

There is considerable state policy support for better profiling settlements and their role in supporting regional growth objectives. Establishing clear directions for settlements will enable Hepburn Shire to balance the considerations of agriculture, biodiversity, infrastructure, and housing choice.

TABLE 2: NUMBER OF LOTS WITH DWELLINGS BY PLANNING ZONE WITHIN THE 1,200M SETTLEMENT CATCHMENT²⁸

Settlement	FZ	LDRZ	RCZ	RLZ	TZ
Allendale	33	17	4		57
Blampied	30			7	
Bullarto	8			12	49
Drummond	13			11	
Drummond North	21				
Eganstown	79				
Franklinford	54				
Glenlyon	39		1	22	173
Kingston	17		25		62
Lyonville	7			54	80
Muskvale	6	11		97	
Newlyn North	31	24		8	68
Smeaton	18	27			79
Wheatsheaf	20			37	
Yandoit	42				

RURAL LIVING

The **Rural Living Zone (RLZ)** provides for residential use in a rural setting and is designed to provide lots that are large enough to accommodate a dwelling and an agricultural use. The agricultural use is likely to be carried on for reasons other than the need to provide a significant source of household income. The RLZ covers 640ha or 4% of the total Shire area. There are two schedules to the RLZ. RLZ1 requires a minimum subdivision area of 4ha and a minimum area of 4 ha above which no planning permit is required for a dwelling. RLZ2 requires a minimum subdivision area of 8ha and a minimum area of 8ha above which no planning permit is required for a dwelling.

There is broad strategic and policy support for providing rural residential opportunities. It is noted that there are distinct advantages for residents in rural settlements, and they play a key growth as part of a wider network of townships in the peri-urban hinterland of Melbourne. Supply of Rural Living zoned land needs to be considered in the context of the Shire's overall housing supply.

An analysis of housing development within and outside townships found that from 2016 to 2021, Hepburn Shire increased by around 800 dwellings, an increase of 9% or around 160 dwellings per year. Fifty one per cent of these changes occurred outside of township boundaries. Over a 20 year period, assuming past trends continue, this would mean that Hepburn Shire would need around 3,244 dwellings by 2043. 51% of those dwellings,

assuming the same geographic split, would need to be provided outside of existing townships under a "business as usual" scenario. While there is technically enough theoretical capacity in zones outside of townships to support this projected growth, there are implications for agriculture, natural values and infrastructure that must be considered

FOOD AND FIBRE

There is strong strategic and policy support for food and fire industries and protection of agricultural land and the ongoing operation of agricultural enterprises. Strategies for support and protection of agriculture include:

- Minimise further subdivision that would create more lots or smaller lots that currently provided for in the planning scheme in the FZ.
- Minimise subdivision in the FZ that results in creation of a lot for an existing dwelling that is smaller than the minimum lot size.
- Minimise new dwellings in the FZ.
- Delineate areas with potential for future growth in irrigated agriculture.
- Identify and protect areas with secure water resources for agricultural uses.
- Provide certainty that these areas will continue as key agricultural areas into the future.
- Limit non-farming and incompatible uses that would restrict ongoing productive use of land for agricultural purposes.
- Protect buffers of identified areas from encroaching sensitive uses such as dwellings to ensure agricultural activities continue without restrictions.

Agriculture in Hepburn makes a significant contribution to the local, regional economy and state and experienced strong growth between 2016 and 2021, driven by buoyant livestock prices. By value of production, the top commodities in 2021 were potatoes, lamb and beef. In the last five years, production of grains and ornamental horticulture have shown positive growth.

There is a diversity of farm enterprises in Hepburn with respect to the management practices and the scale of production. Management practices include traditional production methods as well as farming operated using regenerative, organic or biodynamic principles. Artisan agriculture, which includes small farm businesses that sell primary produce and secondary products through local networks, direct to customers and online has a strong presence in Hepburn and is important attraction for visitors to the shire.

Agricultural tourism and value adding to agricultural produce is well established in Hepburn particularly for smaller scale farm enterprises. Agricultural tourism such as farm

stays value adding such as direct sales of fresh and processed foods, enables producers to increase farm productivity and attract premium farm prices.

Most broadacre livestock and potato enterprises and between 100ha and 500ha in size, noting that potato production is generally grown in rotation with other enterprises such as livestock grazing or grain production. There are clear trends in increasing scale, both in terms of property size and business size across agricultural industries and concentration of farm output with most value of production generated by large scale enterprises.

Hepburn's potato industry is part of a regional industry producing potatoes for the fresh and processing markets, including McCain Foods in Ballarat, one of the largest potato processing businesses in Australia. In 2020/21 Hepburn produced around \$22million in gross value of potatoes, representing 55% of regional potato production and 15% of state potato production. The Ballarat region produced 42% of the state's potatoes in 2020/21. The rich volcanic soils and reliable groundwater supply found in Hepburn enable the production of potatoes.

Consultation with operators of agricultural enterprises in Hepburn noted the following considerations for planning and the rural strategy:

- Artisan agricultural businesses and being conducted in the RLZ and FZ producing a diverse range of products with strong linkages to local food networks and the tourism industry.
- Large farm holdings are being sold and 'broken-up' with a lot of land not being used productively
- Increase in rural lifestyle is leading to land use conflict with operators of agricultural businesses. Conflict is also occurring at the urban/rural interface.
- Farms are increasing in scale driven by adaptation to markets and efficiencies and economies of scale.
- Need for clarification as to the types and scale of rural tourism developments in farming areas.
- Farmland should be retained for agricultural purposes.

Issues

- Increasing diversity of farm operations and farm scales.
- Adoption of new technology for efficiency or productivity gains e.g. aerial spray, controlled traffic cropping
- Potential for land use conflict between farm enterprises and between farm enterprises and non-agricultural land uses.
- Proliferation of non-agricultural development.

Opportunities

- High quality agricultural soils with access to irrigation water.
- Value adding to primary produce and linking to the tourism industry.
- On-farm tourism experiences.

Potential strategy response

- Tailor policy to reflect the trends and diversity of farm scales, agricultural operations and land capability.
- Policy guidance on the types of value adding and tourism uses appropriate for the FZ.
- Consider the analysis of agricultural industries in identification of farmland of strategic significance.
- Review RLZ areas where agriculture is a widespread activity and assess need for further policy guidance or alternative zoning.

AGRICULTURAL LAND

Extensive areas of Hepburn Shire are productive agricultural land based on the combination of soils, climate and land holdings. Farmland of state and local significance has been identified based on the biophysical attributes and the economic contribution of agricultural production.

Issues

Pressure to rezone land on the edges of townships described as 'poor agricultural land'. Pressure for dwelling development.

Opportunities

A strong and economically significant agricultural sector

Potential strategy response

Use mapping of productive agricultural land and farmland of strategic significance to:

- Inform preparation of township structure plans.
- Include mapping of productive agricultural land and farmland of strategic significance in the MPF.
- Review the current application of the FZ and zone schedules.

RURAL TOURISM

There is strong strategic and policy support for rural based tourism that leverages existing strengths, including mineral springs, food and wine experiences, goldfields heritage,

attractive rural landscapes and heritage towns. There are strong connections to regional tourism hubs and key tourism routes have been identified. There is a considerable supply of tourism accommodation in the rural areas, including existing dwellings converted to short term rental accommodation and purpose built accommodation. Rural tourism opportunities include nature based tourism that capitalises on environmental assets and paddock to plate experiences. There is a strong connection between the Shire's agricultural industry, particularly artisan agriculture, and tourism.

Issues

Proliferation of dwellings for tourism accommodation.

Range of tourism uses provided for in the rural zones.

Risk that too much tourism development will impact the qualities that underpin Hepburn's tourism industry – landscape, environment, heritage and rural produce.

Opportunities

There are opportunities for further rural tourism development, but this requires careful consideration as to the types, scale and location.

Potential strategy response

Identify tourism uses that are compatible with agriculture and introduce local policy to guide tourism development in the FZ.

Local policy to guide large scale tourism development in rural areas of the Shire.

Undertake further fine-grained analysis of candidate RAZ areas.

OTHER RURAL INDUSTRIES

There is strong strategic and policy support for development of renewable energy as part of achieving the State government's goal of zero emissions by 2050 and for 50% of state electricity to come from renewable sources by 2030. Hepburn Shire has an ambitious target of zero emission by 2029. While the target of net zero emissions is shared by both State Government and Hepburn Shire, there is concern in the Hepburn community regarding the impacts of renewable energy infrastructure, such as the Western Victoria Transmission Network.

Mining was historically an important industry in Hepburn, however currently there are no active mines in the Shire. There are a number of current of exploration licences. Similar to renewable energy, approval of planning permits for mineral exploration and extractive industry licences are largely the responsibility of State government.

While the Minister for Planning is the responsible authority for planning permit applications for all energy generation facilities and mining approvals, it is important that

the Hepburn Planning Scheme identifies significant values so that these will be considered in the assessment of planning permits.

Issues

Renewable energy development and mining can have impacts on landscape, environmental, agricultural, rural tourism and community values.

Permits for renewable energy development, including transmission and mining are determined by the Minister for Planning, not Council.

Opportunities

Potential for Hepburn community to access to renewable energy via the regional transmission grid.

Potential for further local renewable energy generation.

Potential to access community benefit programs for investment in locally important projects.

Potential strategy response

Update the MPF and strategic framework plans with important agricultural, biodiversity, landscape and community values.

Identify opportunities for Council to assist community to participate in the Environmental Effects Statement Process.

Identify opportunities for Council to assist the community to access community benefit programs.

ENVIRONMENT

Hepburn's biodiversity includes Federal and State listed flora and fauna species. While most biodiversity values are concentrated in public reserves, there are extensive biodiversity values, including EPBC listed species on private land and roadsides. There is strong strategic and policy support for protection and enhancement of the Shire's biodiversity.

There is scope for introduction of additional planning controls to protect and enhance existing biodiversity values. Increasing ecological connectivity and creating connections between remnant vegetation, in particular will benefit existing fauna and flora and fauna and support species to adapt to the changing climate. However, more detailed mapping and description of biodiversity values is required.

Issues

Limited application of planning controls to protect and enhance biodiversity values.

Lack of shire-wide description and appropriately scale mapping of biodiversity values to support introduction of additional planning controls.

Threats to biodiversity including further fragmentation of nat8ive vegetation remnants, climate change, poor land management.

Potential strategy response

Recommend further strategic work to provide appropriately scaled mapping as the basis for planning controls to identify, protect and enhance these environmental assets.

WATER SUPPLY CATCHMENTS AND GROUNDWATER

Hepburn sits entirely within declared water supply catchments of the Central Highlands. These catchments provide water to Bendigo, Ballarat and western Melbourne, support irrigation and production of high value crops and underpin mineral springs and spas, a major tourism attraction in Hepburn. Development poses a threat to the sustainability of water resources and the quality of waterways and wetlands.

The Environmental Significance Overlay (ESO) contains two schedules:

- Schedule 1- Special Water Supply Catchment Protection seeks to protect the quality and security of water supply by limiting the siting and form of development to minimise impacts on ground and surface water quality.
- Schedule 2 Mineral Springs and Groundwater Protection seeks to protect the mineral springs and town water supply groundwater aquifers from the impacts of effluent and drainage by limiting the siting and form of development to minimise impacts on ground water quality.

ESO1 was updated in February 2022 via amendment C80 to comply with Ministerial Directions. The update of ESO1 included consideration of strategic work completed by Coliban Water to improve operation of the ESO. Central Highlands Water and Coliban Water were consulted during the development of the draft Strategy and indicated that no further review of ESO1 is currently required.

The draft Victoria Mineral Springs Master Plan highlights the importance of accessible mineral springs to the Hepburn economy. Mineral spring water is untreated, so ensuring mineral water is safe for consumption is a baseline requirement, and water quality monitoring is undertaken fortnightly. The Plan found that *The Hepburn Council Planning Scheme affords the springs strong protection via Schedule 2 to Clause 42.01 Environmental Significance Overlay "Mineral Springs and Groundwater Protection"*. No additional policy measures were recommended.

Groundwater is the main source of water for irrigation in the Shire. The Shire falls within two groundwater management areas Loddon Highlands WSPA and Central Victoria

Mineral Springs GMA. Groundwater in both areas is highly valued and is shared between the environment, domestic and stock users, irrigated agriculture, commercial users and urban communities. Groundwater resources are managed under local management plans with a cap on the total amount or entitlement that can be used for consumptive purposes. The community has expressed some concern regarding the proliferation of stock and domestic bores and extraction of groundwater for bottling. However, Goulburn Murray Water, the groundwater manager noted that groundwater usage is currently well below the total licensed volume.

Hepburn Shire is within the traditional lands of the Dja Dja Wurrung. Caring for Country is vital for maintaining their culture. There will be opportunities to support the Dja Dja Wurrung to protect land and water as set out in Dhelkunya Dja, the Dja Dja Wurrung Country Plan.

Issues

Increasing intensity of septic tanks impacting water quality.

Potential strategy response

Consider water supply catchments in assessment of rural settlements and rural living zone.

LANDSCAPE

The landscape character of Hepburn is a significant contributor to its amenity and an attractor for residents and tourists. The rural landscapes include natural landscapes such as Wombat State Forest, Hepburn Regional Park, Castlemaine Diggings National Heritage Park, the volcanic plains and features such as Mount Franklin, Mount Beckworth, Mount Moorookyle, Mount Kooroocheang The rural farmed landscape is also an important feature.

The Central Highlands Regional Growth Plan noted that given the expected growth of western Melbourne, the proximity of the high quality rural and natural character of the Central Highlands will be an important drawcard. As such, the protection of the region's key rural and natural landscapes will have important economic and social benefits.

The South West Landscape Assessment Study² provides a landscape assessment of South West Victoria and identifies the most significant landscape character types and the most significant landscapes of the region. The Study identifies the Hepburn Gold Mines and Volcanic District and the Island Uplands (Mount Beckworth) as State significant and worthy of protection through the Hepburn Planning Scheme. The Study provides the basis

for introduction or expansion of the Significant Landscape Overlay (SLO) over areas in the west of the Shire to protect the landscape character of each type.

Council sought to introduce the proposed suite of SLOs via Amendment C80 in 2021, however this component of the amendment was abandoned, primarily due to concerns expressed by farmers on the impacts on agricultural operations and lack of consultation. Council acknowledged that engagement on the Amendment was hampered by restrictions on face to face discussions imposed during the COVID-19 lockdown period. During exhibition of Amendment C80, the community identified additional landscape features that were not considered in the proposed suite of Overlays. Council therefore resolved to undertake further strategic work and consultation.

Large scale infrastructure development can have impacts on landscape qualities. The Hepburn Planning Scheme Review report recommended Council undertake further work to understand the local impacts of initiatives for more renewable energy facilities (e.g. wind farms and associated infrastructure) on the local landscape character.

Issues

Impact of large scale renewable energy infrastructure on local character

Opportunities

Reconsider introduction of SLOs proposed by Amendment C80.

CULTURAL HERITAGE

The Dja Dja Wurrung people are the Traditional Owners of the majority of the Hepburn Shire area and the original inhabitants of the region. The Dhelkunya Dja Dja Wurrung Country Plan 2014-2034 sets a vision for the health and well-being of the Dja Dja Wurrung people to be strong and underpinned by their living culture, for their lands and waters to be in good condition and actively managed to promote the laws, culture and rights of all Dja Dja Wurrung people and being politically empowered with an established place in society, and being capable of managing their own affairs from a strong and diverse economic base. The Plan includes objectives to:

- Strengthen understanding of what significant sites and artefacts exist on Dja Dja Wurrung Country.
- Secure the right and means to effectively protect and manage cultural landscapes and sites.

² DELWP and Planisphere (2013) South West Landscape Assessment Study,

Make use of our cultural heritage to promote healing and reconciliation, teach
Djaara people about their Country and laws, and raise cultural awareness among
the broader community.

Council is currently working with Djaara (Dja Dja Wurrung Clans Aboriginal Corporation) to identify key areas and sites and recommendations for their protection, focusing on land around key townships to inform town structure planning. The mapping of cultural heritage sensitivity suggests that there are sites of cultural significance in the Shire's rural areas and further strategic work is required to identify significant sites and update the planning policy framework accordingly.

BUSHFIRE, FLOOD, EROSION

The planning controls relevant to bushfire, flood and erosion were recently considered in via the 2020 Hepburn Planning Scheme Review did not make any recommendations regard updates or additional strategic work. Natural hazards will be an important consideration in rural development strategies and local policy.

1 Introduction

1.1 PURPOSE

Hepburn Shire is undertaking an agricultural land study and rural settlement strategy that aims to safeguard agricultural productivity and biodiversity of rural land from inappropriate development and provide for the future planning of small rural settlements to 2043. Specifically, the strategy will seek to:

- Recognise Traditional Owners' connection and stewardship of rural land.
- Limit further fragmentation and inappropriate uses of rural land.
- Identify if and where residential growth should be provided on the edge of key townships.
- Plan for the managed growth of rural settlements
- Understand the impacts of climate change, the risks to rural land use and how planning can respond to these risks.
- Identify and protect important rural values including cultural heritage, significant landscapes and environmental features.
- Identify and protect land important for agriculture and recognise its role in the food production.
- Strengthen the Hepburn Planning Scheme and maintain the integrity of the Shire's rural zones.

The project will culminate in the preparation of **Rural Hepburn: Agricultural Land and Rural Settlement Strategy**. The Strategy will provide directions for use and development in the Farming Zone and Rural Conservation Zone and consider the application of the Rural Activity Zone in appropriate locations as well as articulating a role and function for small rural towns and settlements and future directions for use and development in the Rural Living Zone.

1.2 APPROACH

The project approach responds to the following deliverables specified in the project brief:

Part A: Background review and emerging options paper

- Project inception.
- Background review, research and analysis.
- Progress meetings and councillor briefing.
- Stakeholder engagement.
- Preparation of Background review and emerging options paper and Stakeholder engagement findings report.

Part B: Rural Hepburn: Agricultural Land and Rural Settlement Strategy

- Community engagement on the Background review and emerging options paper
- Progress meetings and councillor briefing.
- Prepare draft Rural Hepburn: Agricultural Land and Rural Settlement Strategy report.
- Community engagement on the draft Agricultural Land and Rural Settlement Strategy report.
- Prepare final Agricultural Land and Rural Settlement Strategy report.

The scope and content are also informed by Planning Practice Note No 42: Planning³ Applying the rural zones.

There is no prescribed content or format for a rural strategy or study, however it should:

- develop a vision, role and purpose for the rural area.
- identify the values and features within the rural area.
- identify the key opportunities and constraints.
- establish a strategic direction for land use and development within the rural area.
- articulate how the strategic vision for the rural area is to be implemented through the planning scheme.

³ DELWP (2022) Applying the rural zones Planning Practice Note 42

The information used to develop the strategy should be tailored to suit the area. In general, it should include an assessment of:

- the state, regional and local strategic planning policies and objectives for the area, including relevant regional growth plans or strategies.
- the housing needs of the municipality and likely future trends which is particularly relevant if one of the aims of the strategy is to provide for rural living development.
- the physical attributes of the land and its capacity to support productive agricultural uses including soil type, climate, vegetation cover, access to water, slope and drainage.
- agricultural trends in the area, including agricultural productivity, changes in farming practices and processes, and farm investment patterns.
- the natural resources and environmental features in the area and their importance including flora and fauna, significant habitats, wetlands, scenic landscapes and sites of archaeological or cultural significance.
- environmental hazards that could affect how the land is used and developed, such as erosion, salinity, flooding and wildfire risk.
- the existing lot size and land use patterns.
 infrastructure available for agriculture and other relevant land uses.
- settlement patterns in the area.

1.3 BACKGROUND

In November 2021, the Minister for Planning approved Amendment C80 to the Hepburn Planning Scheme. The amendment translated the Municipal Strategic Statement and Local Planning Policy Framework (MSS and LPPF) to the Planning Policy Framework (PPF) and implemented recent reforms to the Victoria Planning Provisions (VPP) regarding the form and content of planning schemes. Council is now embarking on a significant program of strategic studies to address the recommendations of the Hepburn Planning Scheme Review⁴ and respond to policy gaps, outdated policies and issues raised by the community and stakeholders. The Planning Scheme Review recommended that council undertake further strategic work to identify and protect agricultural land, biodiversity values, township character and the rural landscape.

Council has previously undertaken rural land reviews including in 1999, the Hepburn Shire Land Use Strategy Review⁵ and in 2007, a review of Agricultural Land and Rural Land Use⁶. A number of more recent studies provide contemporary insights into the land use and development circumstances of the Shire's rural areas. These studies suggest there is an opportunity for further refinement of the Hepburn Planning Scheme to respond to competing land uses and provide a policy framework that will assist Council in the assessment and determination of planning permit applications and for landholders to make optimal use of rural land. The studies include:

- Rural Activity Zone (RAZ) supply demand assessment which identified candidate areas for application of the RAZ to support agri-tourism and small-scale rural industries and the need for additional rural dwelling policy guidance.
- Hepburn Land Capacity and Demand Assessment to understand the current capacity and demand for Residential, Commercial and Industrial zoned land in Clunes, Creswick Daylesford-Hepburn, Glenlyon and Trentham. The study findings will inform townships structure plans, rural living demand and supply and the role and of small towns.
- Sustainable Hepburn 2022-2026 sets out principles for a more sustainable Hepburn and specific goals to improve protection and enhancement of biodiversity.

Structure plans for the Shire's six main towns are a key outcome of the current strategic planning program. The structure plans will guide the development of each township over time. Parallel studies to identify heritage, biodiversity and bushfire risk, and the findings of this project, will inform the development of each structure plan.

Figure 2 provides a summary of Hepburn Shire Council's integrated strategic planning framework, including current strategies, and strategies and studies that are under development or proposed.

⁴ Plan 2 Place (2020) Hepburn Planning Scheme Audit and Review Report

⁵ TBA Planners (1999) Hepburn Shire Land Use Strategy Review

⁶ EnPlan (2007) Agricultural Land and Rural Land Use in Hepburn Shire

COMMUNITY VISION 2021-2031									
	COUNCIL PLAN 2021-2025								
	FOCUS AREA	AS							
RESILIENT, SUSTAINABLE AND PROTECTED ENVIRONMENT	HEALTHY, SUPPORTED AND EMPOWERED COMMUNITY	EMBRACING OUR PAST AND PLANNING FOR THE FUTURE	DIVERSE ECONOMY AND OPPORTUNITIES						
Municipal Emergency Management Plan Domestic Wastewater Management Plan 2014 Domestic Animal Management Plan 2014 Toward Zero Emissions Road Map 2017 Biodiversity Strategy 2018-2021 Sustainable Hepburn 2022-2026	Disability and Inclusion Plan 2018-2022 Reconciliation Action Plan 2018 Active Women and Girls Strategy	HS Planning Scheme Township Structure Plans Heritage Strategy	HSC Economic Development Strategy 2016- 2021 HSC Events Strategy 2020-2025 HSC Youth Strategy HSC Arts and Culture Strategy*						
Bushfire risk on the edge of Creswick Shire wide separation distances and buffer study Shire wide biodiversity study Shire wide bush fire risk study		Creswick Structure plan Creswick Heritage Review Structure plans for Daylesford, Hepburn Springs, Glenlyon, Clunes and Trentham Township heritage review Aboriginal Cultural Heritage Strategy Agriculture and Rural Settlement Strategy	Shire wide Infrastructure Services Study						

1.4 THIS REPORT

This Background Report has been prepared to inform the development of the Agricultural Land and Rural Settlement Strategy report. It includes analysis of policy and strategies, rural land use, rural industries, environmental and natural values and the findings of targeted stakeholder consultation. The study area includes all land currently zoned Farming Zone, Rural Conservation Zone, Rural Living Zone and the Township Zone within small rural settlements. Land use on public land and land zoned for other purposes will be considered where it impacts on the use and development of rural land within the scope of this report.

The report provides a review of the major rural land uses and values with regard to the:

- Strategic context government plans and strategies influencing land use.
- Policy context the relevant planning policies in the Hepburn Planning Scheme.
- Land use description.
- Issues and opportunities.
- Strategic implications.

The land use and values considered in this Background Report include:

- Rural settlements.
- Rural living.
- Food and Fibre.
- Agricultural land.
- Rural tourism.
- Other rural industries (renewable energy, mining and extractive industries).
- Environment.
- Water supply catchments and groundwater.
- Landscape.
- Other considerations cultural heritage, natural hazards.

1.5 REFERENCES

The following documents were reviewed during the preparation of this report:

Plan Melbourne 2017-2050 Metropolitan planning strategy (2017)

Central Highlands Regional Growth Plan (2014)

Central Highlands Regional Economic Development Strategy (2022)

Hepburn Shire Community Vision and Council Plan 2021-2031

Hepburn Shire Land Use Strategy (1999) TBA Planners

Hepburn Shire Planning Scheme Review. Stakeholder and Community Engagement Report (2020)

Agricultural Land and Rural Land Use in Hepburn Shire (2007) EnPlan

Hepburn Planning Scheme Audit and Review Report (2020) Plan2PLace

Hepburn Planning Scheme

Hepburn Shire Community Transition Plan (2019)

Climate Cognisant Hepburn: Rural Land Use Review (2016) Centre for Regional and Rural Futures

Planning for Melbourne's Green Wedges and Agricultural Land (2020) DELWP Domestic Wastewater Management Plan (2014) Hepburn Shire Council

2 Hepburn Shire

2.1 HISTORY

The Dja Dja Wurrung People are the Traditional Owners of the land on which the Shire is predominantly located. Dja Dja Wurrung country extends north from the Great Dividing Range including Mount Franklin and the towns of Creswick and Daylesford in the southeast and covers the catchments of the Avoca, Loddon and Coliban Rivers. The rich volcanic grasslands in the north of the Shire supported one of the highest densities of Aboriginal people in Australia.

Contact with colonists in Dja Dja Wurrung country began in the 1830s, soon after the survey of the region by Major Mitchell. This was soon followed by the arrival of squatters and settlers resulting in displacement and dispossession of the Dja Dja Wurrung from their traditional lands.

Gold was discovered in the early 1850s and mining would eventually spread across vast tracts of land resulting in removal of native vegetation and loss of topsoil, mounding of spoil and degradation of waterways. Rapid population growth led to the survey and establishment of townships throughout the 1850s and further take up of pastoral holdings. The gold rush saw many cultures settle in the region and construction of grand institutional, commercial and private buildings. A network of railway lines linked the small towns and provided a connection with Ballarat.

In the early 20th century, other industries such as agriculture and forestry grew in economic importance as gold became more difficult and expensive to extract. Tourism in the Shire can be traced back to the 1860s, when Swiss and Italian settlers fought for the preservation of the mineral springs from destruction by gold mining and by the 1870s, Hepburn Springs had become a fashionable spa resort. The arrival of the railway saw visitor accommodation grow rapidly with guest houses, luxury hotels, ballrooms, theatres, pavilions and baths being built. The State Government established the Hepburn Mineral Springs Bath House in 1895. The 1930s depression resulted in a decline in tourism.

Through the second half of the 20th century, agriculture and forestry were the economic mainstays of the Shire and population growth slowed. Creswick and Daylesford emerged as the main population and service centres while some small towns lost population and services. The 1980s began to see a renewed interest in tourism with visitors drawn to the landscapes, heritage buildings, history and mineral springs.

2.2 OVERVIEW

Hepburn Shire is located around 100km north east of the Melbourne CBD and 50km north of Ballarat between the Western Freeway to Ballarat and the Calder Freeway to Bendigo. The eastern half of the Shire lies within the peri-urban region of metropolitan Melbourne (Figure 3).

The Shire's settlement pattern consists of a range of distinct townships and settlements set within a rural landscape. Creswick and Daylesford are regional service hubs and Clunes, Hepburn Springs and Trentham are the other main population centres. Small towns scattered across the municipality include Allendale, Bullarto, Glenlyon, Muskvale, Newlyn and Smeaton.

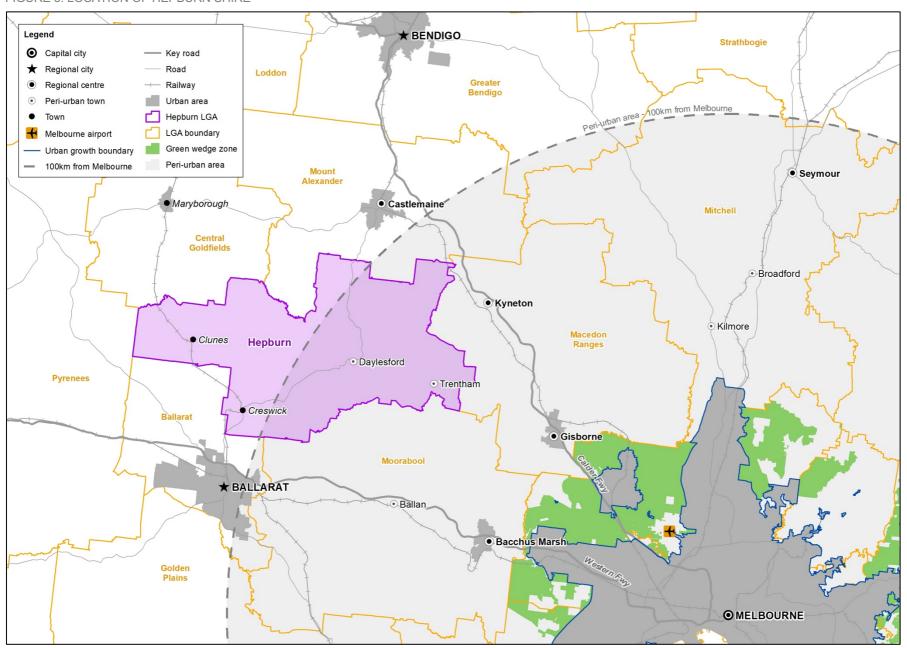
The Shire has strong economic relationships with Ballarat, Bendigo, Castlemaine, Melbourne, Woodend and Gisborne with a growing number of residents seeking employment and services from these locations. While agriculture continues to be an important economic sector, the Shire's economy has diversified and tourism, construction and health care are also Important industries. Access to rail services and freeways are increasingly positioning Creswick and Clunes as commuter townships. The municipality's high-quality landscapes, natural environment, township character and proximity to Melbourne attract weekenders and tourists.

Hepburn has attracted a highly diverse social mix of people, and the community comprises traditional farming communities and long term residents in established townships, a growing commuter population, as well as a large number of part-time residents.

Hepburn is located within a number of water supply catchments, including the Loddon and Coliban Rivers, designated by the State Government to provide drinking water, and in some cases irrigation water for central and northern Victoria. Hepburn is renowned for its mineral springs which are a major attraction and economic asset within the Shire and wider region. Bushfire is a significant risk and a number of towns, including the regional service hubs of Creswick and Daylesford identified as high bushfire risk townships.

Despite the impacts of settlement, the Dja Dja Wurrung have endured and are formally recognised as the Traditional Owners of their Country and aspire to further strengthen cultural knowledge and practice.

FIGURE 3: LOCATION OF HEPBURN SHIRE

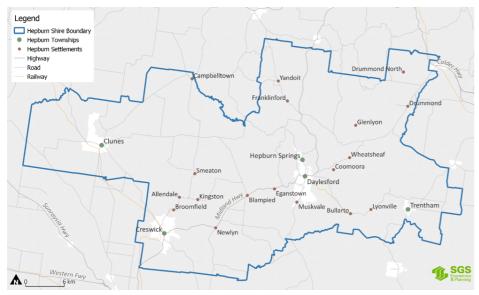


RURAL HEPBURN | BACKGROUND REPORT

2.3 POPULATION AND DEMOGRAPHIC TRENDS

Creswick, Daylesford, Clunes, Hepburn Springs and Trentham are the main population centres in Hepburn. There are also a cluster of small towns in the east of the Shire associated with the now disused railway line (Figure 4).

FIGURE 4: HEPBURN SHIRE SETTLEMENTS & TOWNSHIPS



The population of Hepburn has risen over the past five years, with 16,467 residents in 2021 compared to 15,698 in 2017 (Table 3). However, Hepburn's population has been growing at a slower pace than the average across regional Victoria. The increase of 778 people between 2016 and 2021 represents an annual average growth rate (AAGR) of 1.2% compared to 1.7% across regional Victoria over the same period. By contrast, the rate of population growth across all of Victoria has been slowing over time, and the state had an AAGR of 1.19% over this 5-year period. Hepburn's rate of population growth has also slowed slightly since 2020.

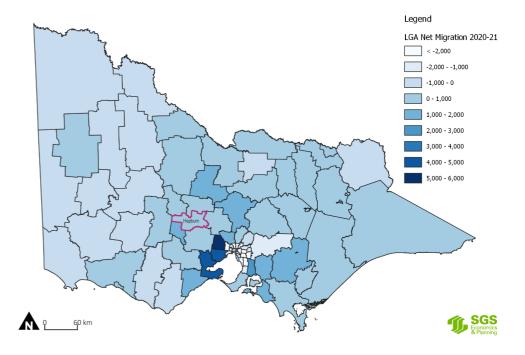
Since the beginning of the COVID-19 pandemic there has been a trend of people moving from metro to regional and rural areas across Victoria. Most chose to settle in rural Victoria (49%), followed by regional cities (34%), and the peri-urban regions (17%). Hepburn was identified as the top choice for internal migrants to rural Victoria (10%).

Figure 5 illustrates net internal migration to each Victorian local government area.

TABLE 3: POPULATION CHANGE IN HEPBURN SHIRE VERSUS VICTORIA8

	2016-17	2017-18	2018-19	2019-20	2020-21	AAGR 2016-21
Hepburn Shire	1.11%	1.19%	1.24%	1.42%	1.02%	1.20%
Regional Victoria	1.65%	1.72%	1.82%	1.82%	1.70%	1.74%
Victoria	2.05%	1.88%	1.76%	1.15%	-0.88%	1.19%

FIGURE 5: INTERNAL MIGRATION IN VICTORIA BY LGA, 2020-218



⁸ https://www.abs.gov.au/statistics/people/population/regional-population/latest-release

⁷ Ghin, P. Ainsworth, S. (2021). Regional Migration Survey Part 1: Internal migration patterns, motivations and experiences. University of Melbourne.

In 2021, about one-third of households in Hepburn were couples with no children. This is a somewhat higher than the corresponding percentages in Regional Victoria and Victoria (Figure 6). Meanwhile, the share of couple families with children was lower in Hepburn at 19% compared to 30% in Victoria and 25% in regional Victoria.

The population in Hepburn has begun to show signs of aging, indicated by the top-heavy population pyramid. As compared to Victoria's average, Hepburn has a higher proportion of older generation with 28% of its population aged 65 and above in 2021. It also has a lower proportion of people aged 19 and under, suggesting a sign of 'premature ageing' in the region, during which young people may migrate away for job opportunities elsewhere.

FIGURE 6: HOUSEHOLD COMPOSITION, HEPBURN VERSUS VICTORIA, 20219

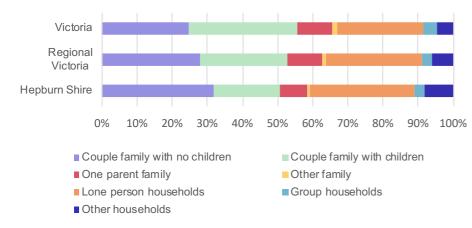


FIGURE 7: HEPBURN POPULATION PYRAMID. 2021¹⁰

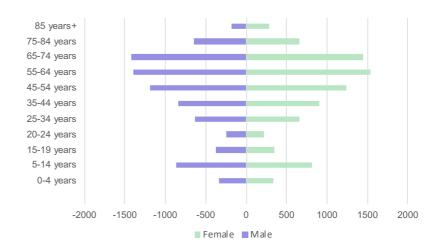
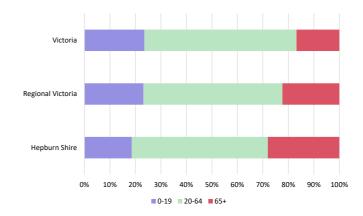


FIGURE 8: POPULATION AGE PROFILE, HEPBURN VERSUS VICTORIA, 2021



 $^{^{9}}$ ABS Census (2021), HCFMD Family Household Composition, excluding 'not applicable'. Other households include Visitors only household and Other non-classifiable household.

¹⁰ ABS Census (2021), AGE5P Age in Five year Groups

There were 8,855 dwellings in Hepburn Shire in 2021. A breakdown of these dwellings by type is provided in Table 4. Separate house dwellings are the most common dwelling type with a share of 93.5%, which is higher than the Victoria's proportion of separate houses (65%) Figure 9).

Dwelling tenure refers to whether a dwelling is owned, mortgaged or rented. Nearly half of separate houses in Shire ARE owned outright, whereas a higher proportion of medium-density and high-density dwellings were rented (54.7% and 55.3% respectively). Medium-density dwellings are often targeted to investors rather than to owner occupiers, so the high proportion of people renting suggests high rates of development of this dwelling type (Figure 10).

There are currently 1,011 active short-stay rentals in Hepburn, of which 96% are entire homes. Whilst this has fallen since 2021, short-term rental accommodation makes up more than 10% of all private dwellings. Most of short-term rental dwellings are located in the Daylesford and Hepburn Springs areas, which are the main tourist attraction locations (Figure 11. The number of short-term rental dwellings in Hepburn Shire in 2023 is significantly larger than the number of private rentals operated through a real estate agent in 2021 (Figure 12).

TABLE 4: NUMBER OF DWELLINGS BY TYPE IN HEPBURN SHIRE. 2021¹¹

DWELLING TYPE	SEPARATE HOUSE	MEDIUM DENSITY	HIGH DENSITY	OTHER	NOT STATED	TOTAL
Number of dwellings	8,884	295	129	133	58	9,499
% of total dwellings	93.5%	3.1%	1.4%	1.4%	0.6%	100%

FIGURE 9: DWELLING TYPE IN HEPBURN SHIRE. 202111

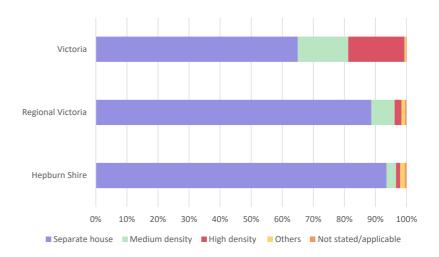
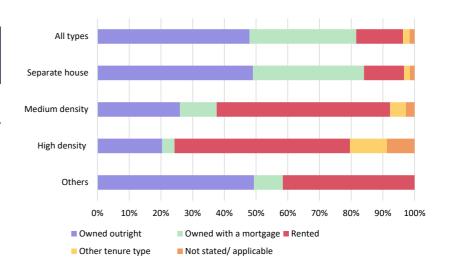


FIGURE 10: TENURE TYPE BY DWELLING TYPE IN HEPBURN SHIRE, 202111



¹¹ ABS Census in 2021, STRD Dwelling Structure.

FIGURE 11: NUMBER OF SHORT-TERM RENTALS HEPBURN, 2023¹²

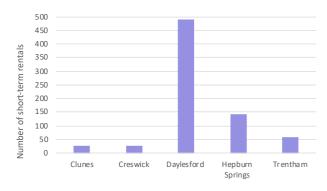


FIGURE 12: NUMBER OF DWELLINGS IN THE PRIVATE RENTAL MARKET HEPBURN 2023¹³



2.4 ECONOMY AND EMPLOYMENT

In 2021, the top three industries by output were Construction (17%), Agriculture, Forestry and Fishing (13%) and Rental, Hiring and Real Estate Services (12%) (Figure 13) overall output increased by around 6% between 2016 and 2021 and the top industries by output have remained unchanged. The industries that experienced the most growth in output were Information Media & Telecommunications, Professional, Scientific & Technical Services and Construction. In 2021, the top three industries with the largest share of local employment were Health Care and Social Assistance (14%), Construction (9%), and

Accommodation and Food Services (9%). Job numbers increased by 135 between 2016 and 2021, with most increase in the Professional, Scientific and Technical Services, Construction and Health Care and Social Assistance industries (Figure 14). Growth in the Professional, Scientific and Technical Services industry suggests growth in knowledge services in Hepburn Shire.

FIGURE 13: INDUSTRY OUTPUT 2021, AND % CHANGE SINCE 2016, HEPBURN

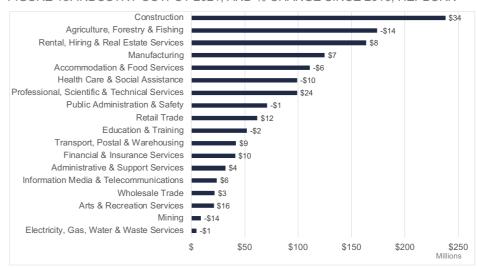
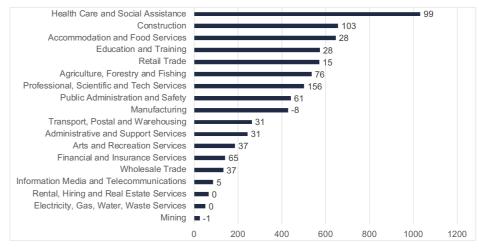


FIGURE 14: JOBS BY INDUSTRY, 2021, AND CHANGE SINCE 2016, HEPBURN



¹³ ABS Census (2021), G37 Tenure and Landlord Type; AirDNA (2023); Hepburn Council Website

¹² AirDNA (2023)

Input-output (I-O) analysis quantifies the economic linkages between industry sectors across the economy. SGS has developed and used an I-O model developed specifically for the Hepburn local economy to assess the economic impacts of the agricultural sector. Multipliers derived from the model estimate the impact of the agriculture sector on three key measures:

- Output: the value of goods or services produced by agricultural businesses and related industries.
- Value added: the output minus intermediate inputs from suppliers in the production process, also known as Gross Regional Product (GRP); and
- Full time equivalent (FTE) employment: the labour required to produce the output above.

For each of the three measures above, the model further separates the impacts into:

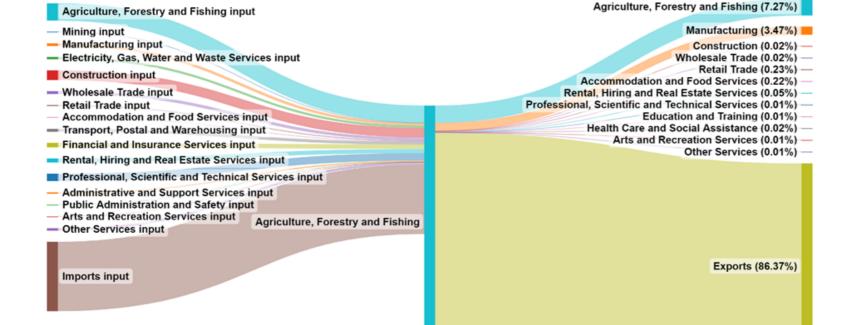
Direct effects: the direct production of goods and services in the agriculture sector;
 and

FIGURE 15: I-O MODEL OUTPUTS FOR HEPBURN'S AGRICULTURAL SECTOR¹⁴

 Indirect effects: the flow on impacts from the industry, including upstream and downstream linkages in the supply chain, and consumption-induced impacts through wages and salaries earned by workers in the production process.

Hepburn's agriculture industry supports economic prosperity through direct contributions to output and employment (Figure 15). Approximately 45 per cent of Hepburn's agriculture inputs are sourced from local businesses in the region, particularly from within the agriculture industry, as well as construction and professional services.

Agriculture inputs have positive multiplier effects throughout the regional economy, generating \$75 million in gross value-added (outputs minus inputs). Over 86 per cent of agriculture outputs generated in the Hepburn region are exports, which contribute directly towards economic growth.



RURAL HEPBURN | BACKGROUND REPORT

Location Quotient (LQ) analysis is a measure of how similar or different an economy is compared to a reference economy. It can be used to identify relative specialisation of the region by selected industries and underrepresented industries which might present opportunities or market gaps/failures.

- An LQ equal to 1.0 indicates a local employment share equal to that of the broader region for that industry.
- Less than 1.0 indicates the industry is less represented at a local level, compared to the broader region.
- Greater than 1.0 indicates the local industry is more represented at a local level compared to the broader region.

Figure 16 shows the LQ for the Hepburn LGA compared to Victoria, according to ABS 2021 data. The size of the bubble indicates the number of people employed in the industry. The agriculture industry has a LQ of 4.7, indicating that the sector is significantly more concentrated in Hepburn than in Victoria. Employment in the agriculture sector grew by 2.6 per cent on average between 2016-2021, compared to the state average of 2 per cent.

FIGURE 16: HEPBURN LGA INDUSTRY EMPLOYMENT LOCATION QUOTIENT AND GROWTH RELATIVE TO

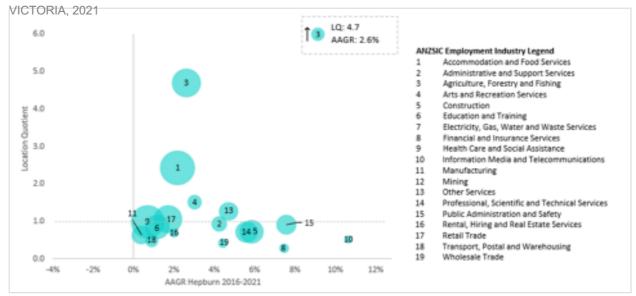
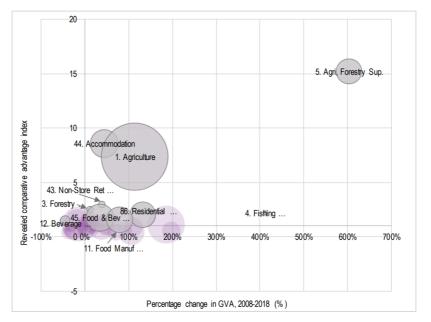


FIGURE 17: COMPARATIVE ADVANTAGE INDEX FOR HEPBURN, 2017-18¹⁵



RURAL HEPBURN | BACKGROUND REPORT 22

¹⁵ ACIL Allen 2019

2.5 STRATEGIC CONTEXT

Land use and development in Hepburn is influenced by state government strategies and plans and planning for the Shire's rural areas will need to be consistent State and regional strategies.

The regional strategic context for use and development of the Shire's rural land is set by Plan Melbourne, the Central Highlands Regional Growth Plan and the Central Highlands Regional Economic Development Strategy. Objectives and strategies relevant to this study are summarised here. Issue specific state and regional plans are considered in the theme chapters.

Plan Melbourne Strategy¹⁶ and Implementation Plan 2017- 2050¹⁷

Plan Melbourne is the State Government's planning strategy for metropolitan Melbourne. The Plan sets out a vision for Melbourne's growth to 2050 and integrates with planning for Victoria's regional and peri-urban areas, including Hepburn. Direction 4.5 of Plan Melbourne sets out objectives and strategies for Melbourne's peri-urban areas, including:

- Future growth in peri-urban areas will be managed to protect productive land, strategic economic resources, heritage and biodiversity assets, while accommodating additional housing and employment in established towns in the outer peri-urban areas that have the capacity for growth. Consistent with Plan Melbourne and the Regional Growth Plans, planning for peri-urban areas should:
 - Define and protect areas that are strategically important to the metropolitan
 area and the state, for the environment, biodiversity, landscape, open space,
 water, agriculture, energy, recreation, tourism, environment, cultural heritage,
 infrastructure, extractive and other natural resources.
 - Avoid development in locations where there is risk to life, property, the natural environment and infrastructure from natural hazards such as bushfire and flooding.
 - Accommodate additional housing and employment in established towns that have the capacity for growth.

Policy 4.5.2: of the Plan requires:

Valued attributes of distinctive areas and landscapes be protected and enhanced.
 Planning for identified distinctive areas within green wedges and peri-urban areas

needs to identify the valued attributes of these areas and ensure they are protected and enhanced for ongoing use by present and future generations.

The Plan sets out desired planning outcomes for peri urban areas. Outcomes particularly relevant to this study include:

- Protect significant views, maintain non-urban breaks between urban areas, and conserve the cultural significance, tourism appeal and character of scenic rural landscapes.
- Manage and protect catchments (including Special Water Supply Catchments), groundwater, water infrastructure and storages, and waterways to improve water quality, protect the environment and provide a reliable and secure water supply.
- Protect agricultural land from incompatible uses, maintain farm size, promote the continuation of farming and provide a secure long-term future for productive and sustainable agriculture.
- Facilitate sustainable year- round tourism, and new tourism development (including diverse attractions, accommodation and eating establishments) that maintains the integrity of the natural environment, provides social benefits for communities and visitors and contributes to local economies.
- Plan and manage sustainable urban growth that is concentrated in and around major towns within Melbourne's peri-urban area to provide employment, infrastructure, services and community facilities to new and established urban areas in an equitable manner.
- Manage rural living to prevent negative impacts on agriculture, biodiversity and landscape values.

The Implementation Plan seeks to "Improve planning decision-making to support sustainable agriculture by identifying areas of strategic agricultural land in Melbourne's green wedges and peri-urban areas. This will consider climate change, soils and landscape, access to water, integration with industry and significant government investment in agricultural infrastructure. It will also protect the right to farm in key locations within green wedges and peri-urban areas". To this end, DELWP engaged with peri urban landowners within a 100km radius of Melbourne on Strategic Agricultural Land in 2019 which informed the development of options for planning system for Melbourne's green wedges and agricultural land. DELWP is yet to release the response to the options paper or confirm the preferred suite of planning controls.

¹⁶ https://www.planmelbourne.vic.gov.au

¹⁷ https://www.planmelbourne.vic.gov.au/implementation

Central Highlands Regional Growth Plan (2014)¹⁸

The Central Highlands Regional Growth Plan is the strategic land use plan for the region to guide growth and change for the next 30 years. The Plan has identified the region's strategic assets, drivers of change and challenges for growth and sets out a vision and principles and future directions to achieve the vision. The Plan acknowledges a challenge for land use planning is to enable flexibility for agricultural enterprises both now and in to the future. A key threat to agriculture is loss of fertile land through rezoning to rural residential and rural living zones. The Plan notes the opportunities for tourism, carbon offset schemes and renewable energy generation could provide alternative streams for farmers. On farm tourism accommodation is suggested as an option, but for Hepburn this is becoming a threat to the productivity of farms given the very high incomes able to be achieved. Climate change is also a significant risk in the shire that needs to be further qualified for the economic future of the region. Land use planning principles and directions include:

- Population growth should be planned in sustainable locations throughout the region.
- The region's economy should be strengthened so that it is more diversified and resilient.
- The region should capitalise on its close links with other regions and cities.
- The development of sustainable and vibrant communities should be supported by enhancing the level of access to key services.
- Land use patterns, developments and infrastructure should make the region more self-reliant and sustainable.
- Planning for growth should be integrated with the provision of infrastructure.
- The region's land, soil, water and biodiversity should be managed, protected and enhanced.
- Long-term agricultural productivity should be supported.
- The importance of cultural heritage and landscapes as economic and community assets should be recognised.

Central Highlands Regional Economic Development Strategy¹⁹ (2022)

The Central Highlands Regional Economic Development Strategy sets out the medium to long-term strategic directions for driving economic growth and development across the region. Directions relevant to this study include:

- Enhance local value add and collaboration across the agri-food supply chain with an emphasis on climate change adaptation, improved capabilities and opportunities to partner with Traditional Owners to develop an authentic native foods and botanicals industry.
- Continue to grow and develop the visitor and creative economies. The visitor economy is noted ads a significant contributor to the Hepburn Shire economy with Daylesford and Hepburn Springs noted as critical regional assets.
- Strengthen the renewable energy and waste management industries.

The Western Victoria Renewable Energy Zone is located on or near the western border of the Shire. The proposed corridors for the Western Victoria Transmission Network, to provide a high voltage overhead transmission line and connect the REZ into the Melbourne transmission network, pass through the south west corner of the Shire. While these projects present opportunities for local industries, land use conflict with agricultural land and tourism is of concern to local communities.

Hepburn Shire Community Vision and Council Plan 2021-2031

Hepburn's Council Plan includes the following vision statement:

Hepburn Shire – an inclusive rural community located in Dja Dja Wurrung country where all people are valued, partnerships are fostered, environment is protected, diversity supported, and innovation embraced.

Preparation of an agricultural land and rural settlement strategy was a recommendation of the Council Plan.

Hepburn Shire Land Use Strategy (1999)

A detailed review of the Hepburn Shire culminated in a Land Use Strategy detailed planning responses to address the key issues facing the municipality. These issues included:

- Population growth and the influence of reduced commuting times and proximity to Ballarat and Melbourne.
- Residential growth on small rural lots, particularly around small rural settlements and in bushland settings and the risk of land use conflict.
- A transition from an economy focused on agriculture, forestry, mining and manufacturing to an urban-based economy with a significant component of the workforce commuting to jobs outside the Shire and the growth of tourism.

 $^{^{18}\} https://www.planning.vic.gov.au/__data/assets/pdf_file/0026/94445/Central-Highlands-Regional-Growth-Plan-May-2014.pdf$

¹⁹ https://www.rdv.vic.gov.au/__data/assets/pdf_file/0010/2063908/Central-Highlands-REDS-2022.pdf

- Proximity to metropolitan Melbourne and urban Ballarat has resulted in a significant growth in smaller holdings with a focus on non-traditional crops and livestock and the reliance of off-farm income to support these enterprises.
- Threat to water quality and water security of water supply catchments and groundwater aquifers associated with vegetation clearance, dam construction and onsite effluent disposal.

The Shire's landscapes, agricultural land, biodiversity, water sources and cultural heritage were identified as valuable assets that require protection and consideration in planning policy.

This Strategy set out the following strategic principles for rural land use and agriculture:

- Establish clear settlement boundaries and compact form for existing urban-areas based on population projections, infrastructure provision according to demographic trends and needs and priority to in-fill development opportunities.
- Where possible, provide adequate separation of rural living areas from productive farming areas to prevent land use conflict.
- Demonstrate genuine need for rural living development areas as distinct from speculative land development.
- Recognise high quality agricultural land in areas around Creswick, Newlyn, Smeaton, Daylesford and Glenlyon as a finite resource within the Shire and the need to maintain this land in active production.
- Provide for a range of lot sizes catering for rural living to hobby farming and the underlying protection of future urban 4expansion areas.
- Provide for rural living development areas in appropriate locations that can access infrastructure and community facilities and are based on projected demand and supply trends.
- Encourage high quality and planned tourism developments that focus in particular on the day tripper and overnight visitor market.
- Recognise the need to diversity and expand the agriculture sector within the Shire.
- Discourage non-agricultural uses and development on high quality agricultural land.
- Development on rural land within the Shire will be assessed against a set of performance criteria and land capability that identifies the best and optimum use of the land.
- Diversification in the agricultural sector needs to be considered across rural areas
 of the Shire.
- Land use changes and developments in urban and rural areas that adversely affect agricultural production within the Shire should generally not be supported.

- Provide for opportunities to maintain rural land holdings in agricultural production wherever possible.
- Recognise that some areas of the Shire are already fragmented and no longer contain land holdings that are commercially viable for ongoing farming.

2.6 POLICY CONTEXT

The Hepburn Planning Scheme contains policies and provisions to guide land use and development. All planning schemes have a standard structure drawn from the Victoria Planning Provisions (VPP). The form and content of all planning schemes changed in 2018 and the new format was introduced to the Hepburn Planning Scheme in 2022. The sections of the scheme most relevant to this study include:

- Municipal Planning Strategy MPS)
- Planning Policy Framework (PPF) state, regional and local planning policies
- Zones
- Overlays.

A summary of the Hepburn Planning Scheme that identifies the prevailing issues and opportunities and the overarching direction for rural land use and development is provided here with further detail provided in the theme chapters.

MUNICIPAL PLANNING STRATEGY

The Municipal Planning Strategy (MPS) sets the foundation for the local policies in the planning scheme. It outlines the planning outcomes Council seeks to achieve that will be implemented by the policies and requirements of the planning scheme. It does this by setting out the vision for future use and development in the shire, providing an overview of important local planning issues and establishing strategic directions about how the municipality is expected to change. It is divided into four parts: context, vision, strategic directions and strategic framework plans. The MPS was introduced to the Hepburn Planning Scheme via Amendment C80 in 2022. Clauses and strategic directions relevant to this study are summarised here.

Clause 02.02 VISION

Council's mission for the Shire is the following:

'Hepburn Shire will maintain, promote, protect and enhance the district's unique social, cultural, environmental and heritage characteristics. This will be achieved through effective, caring management and responsible governance. We will strive to gain maximum advantage for our community by protecting and enhancing our natural and built environment.'

The key land use and development directions to deliver this mission are to:

- Protect agricultural land as a valued resource to support jobs and opportunities into the future.
- Carefully manage the development of housing and services for residents in keeping with the heritage and rural feel of those areas.
- Preserve the heritage character and strong sense of place of the townships.
- Protect and manage the municipality's valued landscapes from unsympathetic development or major change.
- Manage the Shire's natural resources sustainably and protect them for future generations.
- Support tourism as an important industry based on the Shire's beautiful townships and countryside.
- Facilitate infrastructure across the Shire to meet the needs of the community.

Clause 02.03 Strategic Directions

02.03-1 Settlement:

- Concentrate development into defendable parts of existing township boundaries and settlements to mitigate bushfire risk, protect agricultural land, and limit natural and environment risks.
- Provide for growth of Creswick, Clunes, Daylesford, Trentham and Hepburn Springs within designated township boundaries.
- Prevent residential and commercial development between settlements along major roads.
- Direct rural residential development that is not associated with rural enterprises into established townships and settlements.

02.03-2 Environmental and landscape values:

- Protect and enhance significant natural, Aboriginal and post contact cultural and heritage landscapes across the Shire.
- Protect and enhance watercourses, wetlands and water bodies and their associated riparian zones.
- Protect indigenous vegetation across the Shire including on Council managed reserves and private property.
- Protect biodiversity and environmental values of local, regional and state significance.
- Retain existing habitat and create new habitat corridors, that increases the resilience of existing stands of native vegetation.

Minimise wholesale clearing of significant vegetation in areas of high bushfire risk.

02.03-3 Environmental risks and amenity

- Contain future growth within township boundaries to protect environmental values and to limit the risk to life and property from bushfire.
- Avoid development that through its location or design increases exposure to bushfires.
- Limit development outside townships by minimising future subdivision of rural land to address bushfire risk.
- Minimise risk to life and property from flooding through appropriate siting, design and management of use and development, with adequate setbacks from waterways, and locate new development on the highest available ground with road access that provides safe passage in a flood event.
- Maintain the flood carrying capacity, free passage, temporary storage function and environmental significance of floodplains and waterways.

02.03-4 Natural resource management

- Reduce the impacts of climate change, by supporting alternative energy sources, carbon farming, micro-grids, reducing greenhouse gas emissions and adopting environmentally sustainable development principles.
- Minimise landscape and water quality impacts on the catchments through careful location and design of development and wastewater systems.
- Protect streamsides, catchments, flood plains and wetlands from the impacts of development.
- Support future development that adapts to the impacts of climate change and contributes to meeting Council's targets for reducing greenhouse gas emissions.
- Protect water resources in the Shire through integrated water and catchment management including stormwater.
- Protect mineral springs, their aquifers and environs from the impacts of waste disposal and drainage.
- Protect high quality productive agricultural land for agricultural uses over the long term.
- Protect rural land for agricultural uses and compatible rural uses.
- Support the evolution of agriculture in response to improved practices and climate change.

02.03-5 Built environment and heritage

 Protect the built, natural and cultural heritage to enhance appreciation of the Shire's history and to maximise opportunities for tourism.

- Support and strengthen the individual character and role of townships that contribute to the Shire's diversity as a place to live, work, recreate and visit.
- Protect and enhance the rural areas of the Shire for their diverse agricultural, environmental and landscape values.
- Ensure development does not obstruct significant views to prominent hilltops, ridgelines and landmarks.

02.03-6 Housing

- Support infill housing development in townships that respects and complements neighbourhood character.
- Promote and facilitate residential development and housing diversity in established townships to meet community needs, including affordable housing and aged care accommodation.

02.03-7 Economic development

- Maintain and protect agricultural land by avoiding fragmentation and commercial uses that may lead to loss of, or limitations for, production.
- Protect industry and business from encroachment of incompatible land use and development by applying the 'agent of change' principle.
- Facilitate a greater range of economic activity and home based businesses in townships and settlements.
- Locate tourist facilities and development in the Shire's townships that brings economic benefits, respects township character and enhances the distinctive tourism assets of each township.
- Ensure that the Shire's quality mineral water resources and reserves are maintained and managed as a long-term community and economic resource.
- Enhance the Shire's existing tourism offer through the development of a more diverse tourism product centred around the natural environment, bike trails, arts and culture, food and environmental sustainability.
- Protect the Shire's heritage and environmental tourism assets.

02.03-9 Infrastructure

- Ensure development is directed into townships with reticulated water or capacity for alternative potable water sources, and reticulated sewerage.
- Reduce the impacts of climate change, by supporting alternative energy sources, carbon farming, micro-grids, reducing greenhouse gas emissions and adopting environmentally sustainable development principles.
- Support the sensitive location of transmission infrastructure to support decarbonisation within the municipality that provides a net community benefit.

02.04 Strategic Framework Plans

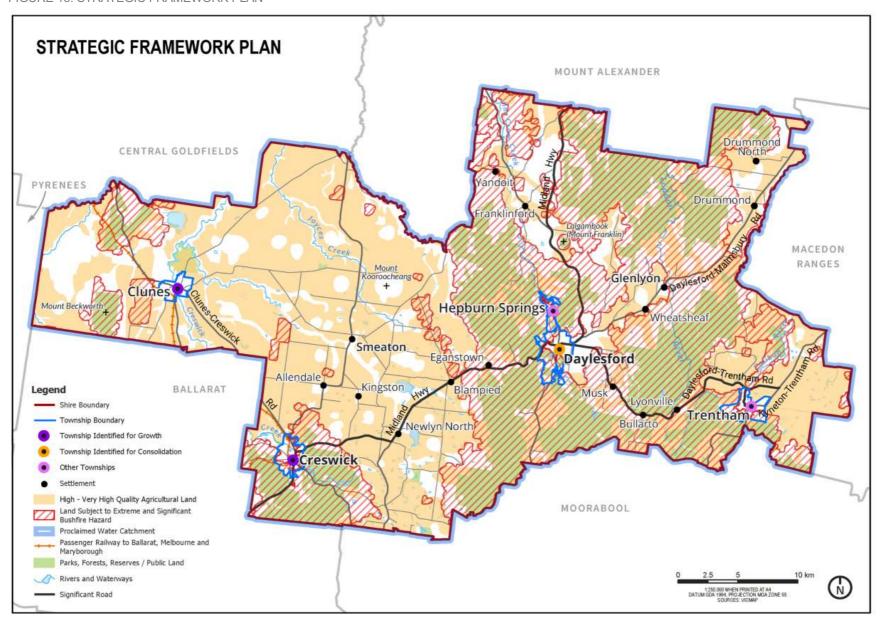
The Strategic Framework Plan (Figure 18) incorporates a settlement hierarchy and key transport networks, identifies public land, high and very high quality agricultural land and land subject to extreme bushfire hazard and indicates the Shire is located entirely within a Proclaimed Water Catchment. Separate plans are provided for settlements, environmental hazards, environmental and landscape values and economic development.

The Planning Panel that reviewed and heard submission to Amendment C80 made a number of recommendations relevant to this study:

- Adopt the exhibited version of Schedule 1 to the Significant Landscape Overlay but limit the requirement for a permit to remove vegetation to native vegetation.
- Apply a minimum lot size of 40 hectares to land in Area 3 of the current Farming Zone Schedule.

27

RURAL HEPBURN | BACKGROUND REPORT



RURAL HEPBURN | BACKGROUND REPORT 28

PLANNING POLICY FRAMEWORK

Planning for the Shire rural land and settlement must be consistent with State and policy objectives, which include:

- Protect strategically important areas of the environment, landscape, water, cultural heritage and agriculture.
- Protect productive farmland and farmland of strategic significance in the local or regional context.
- Encourage rural tourism in appropriate locations.
- Protect and enhance water supply catchments, native vegetation and other biodiversity values and rural landscapes.
- Prevent dispersed settlement and maintain separation between settlements by providing non-urban breaks between urban areas.
- Minimise risk to life, property and the environment from natural hazards.
- Establish town growth boundaries to avoid urban sprawl and protect agricultural land and environmental assets.

There are a number of state and regional policy objectives and strategies relevant to this study which are listed here, with further detail provided in the relevant theme chapters. These include:

- 11.01-1S Settlement
- 11.01-1R Settlement Central Highlands
- 12.01-1S Protection of biodiversity
- 12.02-1S Protection of the marine and coastal environment
- 12.03-1S River corridors, waterways, lakes and wetlands
- 12.05-1S Environmentally sensitive areas
- 12.05-2S Landscapes
- 12.05-2R Protection of landscapes between settlements
- 13.01-1S Natural hazards and climate change
- 13.02-1S Bushfire planning
- 13.03-1S Floodplain management
- 14.01-1S Protection of agricultural land
- 14.02-1S Catchment planning and management
- 14.03-1S Resource exploration and extraction
- 15.01-6S Design for rural areas
- 15.03-2S Aboriginal cultural heritage

- 16.01-3S Rural residential development
- 17.01-1S strengthen and diversify the economy.
- 17.04-1S Facilitating tourism
- 17.04-1R Tourism Gippsland
- 17.04-2S Coastal and maritime tourism and recreation
- 19.01-2S Renewable energy

The Hepburn Planning Scheme also includes a number of policy directions specific to the Shire that complement state and regional policies. Local policy directions include.

- 11.01-1L Township and settlements
- 12.01-1L Native vegetation and habitat protection Protect and enhance the Shire's native vegetation and habitats
- 12.05-2L Landscape management Protect and enhance the unique features of the landscape character areas of the municipality
- 14.01-1L Protection of agricultural land
- 14.01-2L Sustainable agricultural enterprises
- 14.02-1L Catchment and land protection
- 14.02-2L Mineral Springs and Fresh Water Springs Protection
- 15.03-2L Aboriginal cultural heritage.

Review of the zones and overlays that apply to rural land is provided in Chapter 3.

2.7 COMMUNITY CONSULTATION

Extensive consultation and engagement are proposed as part of the rural land and small settlement strategy project. Council has recently undertaken a number of consultation activities which provide insights into the ideas and desires of the community in relation to land use and development in Hepburn Shire. These are summarised here.

Hepburn Shire Planning Scheme Review: Stakeholder and Community Engagement Report²⁰

- What people value most:
 - The rural feel.
 - The history and heritage.
 - The landscape.
 - The look and feel of the townships.
 - The farming and agricultural heritage.
- What they want from the planning scheme:
 - Protection for current landscapes
 - Options for some development but not too much and not too fast, within current town boundaries and in keeping with the local area.
 - A protection for agricultural land but flexibility over what constitutes agriculture.
 - Protection of the environment including soil, water, fauna, flora and landscapes.
 - The maintenance for current townships heritage while providing access to services and affordable housing.
 - Management of tourism to mitigate against the pressure on housing, services and infrastructure.
 - A clear and consistent planning scheme.
 - Better transport connections.

2.8 KEY FINDINGS

Between 2016 and 2021 Hepburn experienced an annual average growth rate of 1.2%, slightly lower than the 1.7% average for regional Victoria, but on a par with the state average of 1.2%. This growth has been influenced by Covid-19 and the trend of people moving from metro to regional and rural areas. Hepburn Shire was identified as the top choice for internal migrants to rural Victoria.

The attractiveness of Hepburn as a destination for visitors and retirees is reflected in household composition and dwelling tenure. The Shire's resident population comprises a higher proportion of couples with no children and lone person households and a higher proportion of older people and lower proportion of young people relative to the population of regional Victoria and Victoria as a whole. There are around 1,100 active short-stay rentals, mostly in Daylesford and Hepburn Springs, which represents around 10% of private dwellings.

The Shire's economy was once largely dependent on agriculture, forestry and mining. In 2021, while agriculture is still significant to the local economy, there has been diversification with construction, health services and tourism emerging as important sectors. Growth in tourism, particularly tourism accommodation, is evident in the strength of real estate services and employment in accommodation and food services. There is also evidence of growth in knowledge services which is consistent with observed trends in in-migration and increased work-from-home during Covid-19.

Use and development of rural land is strongly influenced by state government growth strategies and plans including Plan Melbourne 2017 – 2050 and the Central Highlands Regional Strategic Plan. These plans identify population growth, growth in tourism, the desire to live in a rural area and the Shire's proximity and commutability to Melbourne and regional centres are key drivers of rural land use change in Hepburn. These plans also highlight that accommodating growth should not come at the expense of significant values including the Shire' rural landscapes, agricultural land, water supply catchments, cultural heritage and biodiversity.

In 1999, the Hepburn Shire Land Use Strategy identified issues to be considered in planning policy including population growth, reduced commuter times, demand for rural lifestyle and residential development of rural land, protecting natural values and avoiding hazards, particularly bushfire. These issues remain and a key consideration of this study will be to test whether the current suite of planning tools has been effective and appropriate in responding to these issues.

²⁰ Plan2Place and Wayfarer Consulting (2020) Hepburn Shire Planning Scheme Review. Stakeholder and Community Engagement Report

The Hepburn Planning Scheme comprising state, regional and local policies, provides the framework for decisions regarding use and development of rural land. The policy framework seeks to support and encourage rural industries and protect important rural values. Overarching objectives for rural land include:

- Direct population growth to key towns and contain residential growth within township boundaries.
- Prevent dispersed settlement and maintain separation between settlements.
- Protect strategically important areas of the environment, landscape, water, cultural heritage and agriculture.
- Prevent fragmentation of agricultural land and protect productive farmland and farmland of strategic significance.
- Encourage rural tourism in appropriate locations.
- Protect and enhance water supply catchments, native vegetation and other biodiversity values and rural landscapes.
- Minimise risk to life, property and the environment from natural hazards.

These objectives broadly align with the aspirations of the Hepburn community, who identified the Shire's rural feel, history and heritage, landscapes, and farming and agricultural heritage as important rural values.

3 Planning scheme performance

3.1 ZONES AND OVERLAYS

The policies summarised in Chapter 2 provide the overarching decision making framework for use and development of rural land. Consideration of these policies is invoked when a landholder seeks approval for a planning permit to change land use or undertake buildings and works. Whether a planning permit is required will depend on the zone and any overlays that apply to the landholders' land.

ZONES

A planning scheme identifies zones to designate land for particular uses, such as farming, residential or industrial. Each zone has its own purpose, identifies if a planning permit is required for use and/or development of land and the matters that must be considered before deciding to grant a planning permit. Figure 19 shows the rural zones in Hepburn.

The **Farming Zone (FZ)** is the main zone for rural land in the Hepburn Planning Scheme and aims to encourage retention of productive agricultural land and discourage uses that may have adverse impacts on agriculture. The FZ covers nearly 100,000ha or 67% of the total Shire area (Table 5). There are two schedules to the FZ. FZ1 requires a minimum subdivision area of 40ha and a minimum area of 40 ha above which no planning permit is required for a dwelling. FZ2 requires a minimum subdivision area of 20ha and a minimum area of 20 ha above which no planning permit is required for a dwelling.

The **Rural Conservation Zone** (**RCZ**) is primarily concerned with protecting and conserving rural land for its environmental features or attributes. The conservation values of the land must be identified in the schedule to the zone and could be historic, archaeological, landscape, ecological, cultural or scientific values. The RCZ covers around 2,800ha or 2% of the total Shire area. There are two schedules to the RCZ.

RCZ1 has been applied to conserve areas dominated by Plains Grassy Woodland of the Victoria Volcanic Plains and riparian zones. RCZ2 has been applied to conserve areas that contribute to ecological connectivity across private land and between public land forest blocks.

The **Rural Living Zone (RLZ)** provides for residential use in a rural setting and is designed to provide lots that are large enough to accommodate a dwelling and a farming use. The farming use is likely to be carried on for reasons other than the need to provide a significant source of household income. The RLZ covers 640ha or 4% of the total Shire area. There are two schedules to the RLZ. RLZ1 requires a minimum subdivision area of

4ha and a minimum area of 4 ha above which no planning permit is required for a dwelling RLZ2 requires a minimum subdivision area of 8ha and a minimum area of 8ha above which no planning permit is required for a dwelling.

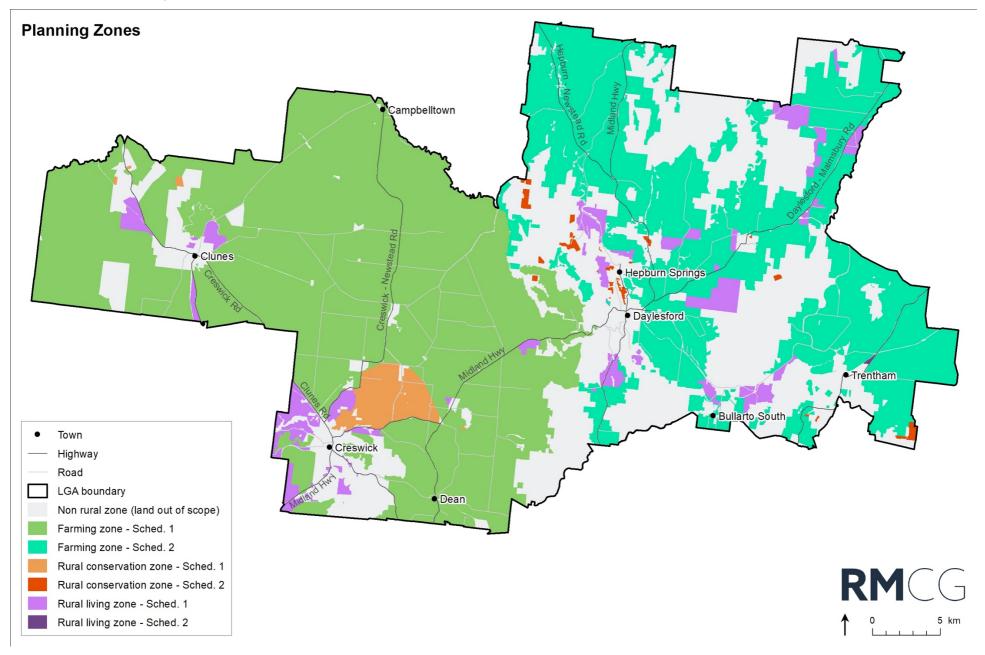
The **Rural Activity Zone (RAZ)** has not been applied to land in Hepburn Shire. In 2022, the Shire commissioned an assessment of rural land that may be suitable for application of the RAZ. The findings of the study are detailed in Chapter 8, Rural Tourism.

TABLE 5: HEPBURN PLANNING SCHEME RURAL ZONES

Zone	Shire wide area of zones (ha)	Proportion of total shire area	Schedules	Minimum lot size above which a planning permit for a dwelling is not required (ha)	Minimum lot size subdivision (ha)
FZ	99,437	67%	FZ1	40	40
			FZ2	20	20
RCZ	2,822	2%	RCZ1	-	40
			RCZ2	-	20
RLZ	5,640	4%	RLZ 1	4	4
			RLZ2	8	8

The current FZ and RCZ schedules reflect the recommendations of the 1999 Hepburn Land Use Strategy which included:

- In the Rural Zone, to respond to the variation in rural land and agricultural situations, a minimum subdivision size of 40ha in the predominantly grazing areas in the west of the Shire and another more flexible minimum size down to 20ha, in areas according to land capability assessment and criteria that have a greater potential for diversity of horticultural activities. Local policy was recommended to discourage small lot subdivisions and excisions and uses that are incompatible with rural areas.
- Apply the Environmental Rural Zone to areas of local domestic water supply and to areas within defined mineral spring aquifers. Two subdivision sizes were proposed; one reflecting rural farming areas, the other relating to areas characterised by subcommercial farming or rural lifestyle development and that the minimum subdivision size would generally reflect the existing lot sizes in the respective areas.



RURAL HEPBURN | BACKGROUND REPORT

It would appear from the current scheme that the Rural Zone recommendations were implemented and then directly translated into the new rural zones in 2006.

- FZ1 applies to land in the west of the Shire with a minimum lot size of 40ha.
- FZ2 applies to land in the west of the Shire with a minimum lot size of 20ha.

The recommendation relating to the Environmental Rural Zone and protection of water supply catchments and the mineral springs was not implemented. However, a number of overlays (ESO 1 and ESO 2) have subsequently been introduced to protect potable water supply catchments. The current RCZ schedules relate to protection of biodiversity values.

- RCZ2 has been applied to some land around Hepburn Springs.
- RCZ1 has been applied to land north east of Creswick.

This review provides an opportunity to test whether the FZ and schedules align with land where agriculture is intended as the primary land use and whether there is land with significant environmental values that may warrant application of the RCZ.

In 2016, the Centre for Regional and Rural Futures²¹ undertook a review of the agricultural versatility of land in Hepburn under future climate scenarios. The review found that extensive areas of the Shire will experience no change in agricultural versatility, areas to the south and east will experience a 10% increase in versality, while areas to the north and west will experience a 10% decline in versatility. The report concluded:

...... that Hepburn has a biophysical environment (climate, soil and topography) that is highly suited to sustaining a productive agricultural sector (now and in the future). This is borne out by the extent and diversity of agricultural production already occurring across the Shire. The level of suitability may decline somewhat into the future as the climate changes, but overall, the level of decline is small. Of more note is the shift in some versatile land into the south east of Hepburn.

If appropriate focus is placed on building adaptive capacity within the agriculture sector (through the dissemination of information related to what commodities the farmers can viably diversify into and through developing a better understanding of water resources in the Shire, both conventional and alternative) it appears Hepburn can apply an equal focus to capitalising on the opportunities presented by climate change.

On the basis of the forecast changes to agricultural versatility and the predominant agricultural land use at the time, the study recommended a number of changes to the Hepburn Planning Scheme for a number of strategic planning areas (Figure 20).

Central Hepburn:

- retain the FZ and increase the minimum subdivision minimum size and the minimum area for which a planning permit for a dwelling is not required to 80 hectares.
- apply the RLZ or RAZ to the south west corner of the area.

Clunes

 retain the FZ and increase the minimum subdivision minimum size and the minimum area for which a planning permit for a dwelling is not required to 80 hectares.

Daylesford

 Apply the RAZ and include a minimum subdivision size of at least 20 hectares to maintain the range of agricultural enterprises and the rural landscape values.

Drummond

the high quality productive agricultural land in this zone could be prejudiced by the current 20 hectares minimum subdivision size. Therefore, this rural zone should be maintained and both minimum subdivision size and minimum lot sizes for which a permit is not required to use the land for the purpose of a dwelling should be 40 hectares.

Trentham

the high quality productive agricultural land in this zone could be prejudiced by the current 20 hectares minimum subdivision size. Therefore, this rural zone should be maintained and both minimum subdivision size and minimum lot sizes for which a permit is not required to use the land for the purpose of a dwelling should be 40 hectares.

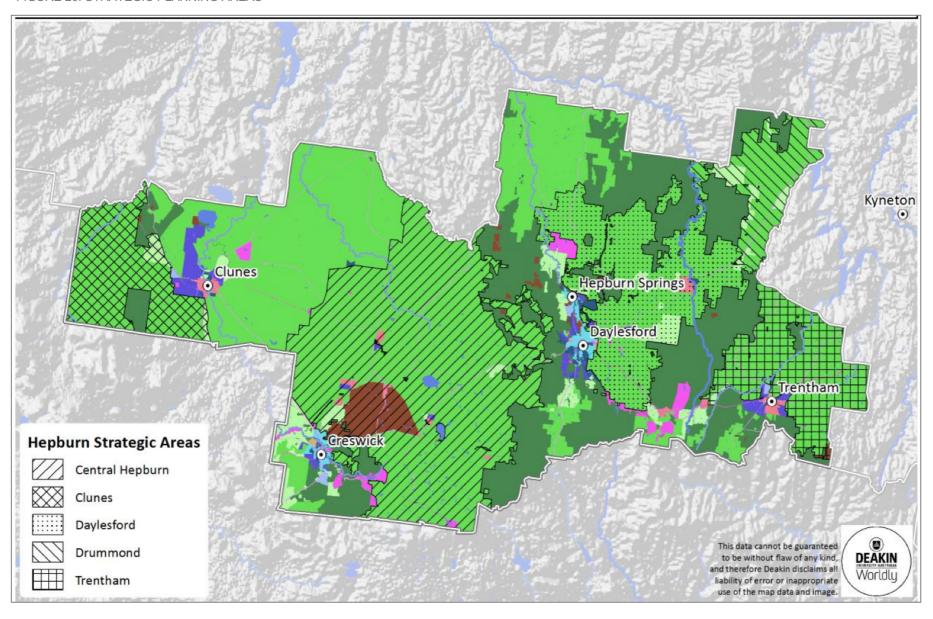
All other agricultural areas

Retain the FZ and the current 40ha minimum lot sizes.

This study provides an opportunity to test and validate the application of the rural zones and review the minimum lot size schedules in accordance with the Rural Zones Practice Note No 42 taking into consideration the findings of this review.

²¹ Centre for Regional and Rural Futures (2016) Climate Cognisant Hepburn: Rural Land Use Review

FIGURE 20: STRATEGIC PLANNING AREAS²¹



OVERLAYS

Overlays address particular issues such as heritage, bushfire or flooding. An overlay will set out requirements for development of the land, if a planning permit is required and the matters that must be considered before deciding to grant a permit. The requirements of an overlay apply in addition to the requirements of the zone. Table 6 provides a summary of the most relevant overlays to this review, including the overlay purpose and the impact on land use and development. Overlays are discussed in further detail in the relevant theme chapter.

TABLE 6: OVERLAYS THAT APPLY TO RURAL AREAS OF HEPBURN SHIR

Overlay	Purpose	Impact on land use and development
Environmental Significance Overlay		
Schedule 1 – Special Water Supply Catchment Protection	Protect the quality and security of water supply	Limits the siting and form of development to minimise impacts on ground and surface water quality
Schedule 2 – Mineral springs and groundwater protection	Protect the mineral springs and town water supply groundwater aquifers form the impacts of effluent and drainage	Limits the siting and form of development to minimise impacts on ground water quality
Vegetation Protection Overlay		
Schedule 1 – Significant exotic and native vegetation	Protect vegetation of significance for its natural beauty, interest and importance and contribution to the character of an area	Removal of vegetation is subject to a planning permit
Significant Landscape Overlay		
Schedule 1 – Volcanic peaks landscape area and ridges and escarpments area	Protect the visual significance of vegetation, ridges, escarpments and geological features	Limits the location and form of development of land, including native vegetation clearance, that may impact landscape qualities.
Land Subject to Inundation Overlay		
Schedule 1 – Flooding from waterways in Clunes and Creswick (depths up to and including 350mm)	Identifies land in a flood storage or fringe area affected by a 1 in 100 year flood.	Limits the location and form of development to minimise impacts from flooding on property and the natural environment
Schedule 2 – Flooding from waterways in Clunes and Creswick (depths greater than 350mm)	Identifies land in a flood storage or fringe area affected by a 1 in 100 year flood.	Limits the location and form of development to minimise impacts from flooding on property and the natural environment
Schedule 1 – Flooding from waterways Coomoora, Drummond, Evansford, Kooroocheang, Mount Beckworth, Mount Cameron, Smeaton and Yandoit	Identifies land in a flood storage or fringe area affected by a 1 in 100 year flood.	Limits the location and form of development to minimise impacts from flooding on property and the natural environment
Bushfire Management Overlay		
Schedule 1 – Creswick, Daylesford, Hepburn, Trentham BAL-12.5 Areas	Specifies bushfire protection measures and referral requirement for construction or extension of dwelling in the designated area.	Requires bushfire protection measures to be incorporated into siting and design of new dwellings.
Schedule 2 – Hepburn, Hepburn Springs BAL-29 Areas	Specifies bushfire protection measures and referral requirement for construction or extension of dwelling in the designated area.	Requires bushfire protection measures to be incorporated into siting and design of new dwellings.

3.2 PLANNING SCHEME REVIEW

A review of the Hepburn Planning Scheme²² in 2020 made a number of recommendations to improve the performance of the planning scheme. Specific recommendations relevant to rural land, and whether they are in or outside the scope of this study are summarised in Table 7.

TABLE 7: PLANNING SCHEME REVIEW SUMMARY OF RECOMMENDATIONS

Clause	Recommendation	Project response
Municipal Planning	Set out the importance of rural/agricultural land and enterprises.	Strategy will provide relevant text
Strategy	Set out the importance of tourism to the municipality and the links to the key underpinnings of the tourism offer identified (such as heritage, landscape, township character, environment) and the need to balance the benefits and manage the disbenefits.	Strategy will provide relevant text for rural tourism
Local Policy	Strengthen local policy in relation to land uses in the farming zones and when dwellings are not appropriate.	Strategy will include principles and decision criteria to inform a local policy
	Develop a local policy in relation to tourism uses within the farming zones and the need for tourism facilities to be preferably located within townships with criteria identified for out of township development providing clarity on where rural enterprises will be allowed to locate	Strategy will include principles and decision criteria to inform a local policy
Further work	Undertake an industrial, commercial and residential land demand study for the Shire.	Demand/supply of RLZ land
	Undertake structure plans for Trentham, Creswick, Clunes, Daylesford, Hepburn Springs, and Glenlyon.	Final strategy will inform of designation township boundaries
35.03 RLZ, 35.06 RCZ 35.07 FZ	Require translation to new schedule template.	Final strategy will inform zone schedules
Overlays 42.01 Environmental Significance Overlay 1 and 2	These require significant redrafting to comply with Ministerial Directions and review to ensure they comply with an appropriate source document. This should be undertaken in conjunction with the water authorities and DELWP. Coliban Water have also identified a catchment specific ESO schedule for the Upper Coliban Catchment which could be explored.	Make recommendations for further strategic work based on review of background resources and consultation with water authorities.
42.02 Vegetation Protection Overlay 1and 2	Additional schedules may be required to implement any future biodiversity studies. Although Council can rely on Clause 52.17 – Native vegetation for a 'first pass' form of development control on sites greater than 4000 sqm, there is a need to be more thorough in the level of protection provided. Identification of significant stands of vegetation is required both outside and within townships for protection.	Make recommendations for further strategic work based on review of background resources and consultation
42.03 Significant Landscape Overlay 1	Schedules may be required to implement any future biodiversity studies or landscape assessments. Council can consider implementing the South West Landscape Assessment Study through the amendment to expand the existing SLO1 and the introduction of SLO2 The SLO should be reviewed as part of further strategic work on landscape assessment.	Make recommendations for further strategic work based on review of background resources and consultation
44.01 Erosion Management Overlay 1	The schedule requires significant redrafting to meet the Ministerial Direction. Management objectives and risks need to be identified. Any additional areas identified by the CMA or DELWP could be included in any amendment depending on the level of strategic work that has already been undertaken.	Make recommendations for further strategic work based on review of background resources and consultation
44.04 Land Subject to Inundation Overlay 1	The current schedule has not been populated and therefore will require significant redrafting to meet the Ministerial Direction.	Out of scope

²² Plan2Place (2020) Hepburn Planning Scheme Audit and Review Report

3.3 MINISTERIAL AMENDMENTS

A new suite of rural zones was introduced in 2004 by Ministerial Amendment VC24 to the Victoria Planning Provisions and by direct translation to the Hepburn Planning Scheme in 2006. This resulted in application of the Farming Zone to land previously zoned Rural. Direct translation means that the new zones were applied without strategic justification or analysis to ensure that the zone objectives and minimum lot size schedules were matched to existing uses, land attributes and promotion of the desired land use outcomes.

This study provides an opportunity to test and validate the application of the rural zones, consider the current rural land use and development circumstances and review the minimum lot size schedules in accordance with the Rural Zones Practice Note No 42.

In September 2013, Amendment VC103 introduced a number of changes to the Farming Zone and Rural Conservation Zone. Changes to the Farming Zone included:

- A new purpose statement promoting the retention of employment and population to support existing rural communities.
- Reducing the restrictions for alterations and extensions to dwellings and farm buildings Removing the requirement for a mandatory Section 173 agreement which restricts future subdivision after an initial subdivision is approved.
- Making less uses prohibited and more uses discretionary including some accommodation, retail and commercial uses.
- Removing the prohibition on group accommodation, landscape gardening supplies, market, trade supplies, warehouse and primary and secondary schools
- Increasing the threshold for persons that can be accommodated in a bed and breakfast from six to 10 without a permit.
- Removing the 'in conjunction' requirement which restricts uses such as group accommodation, residential hotel and restaurant.
- Removing other conditions which restrict uses such as group accommodation, place of assembly, store and transfer station.
- Removing permit requirements for uses such as primary produce sales, rural industry and rural store.
- Deleting the requirement and long-standing test to consider 'whether the dwelling is reasonably required for the agricultural activity conducted on the land'.

- Modifying the purpose of the Farming Zone to reduce the emphasis on dwellings adversely affecting the use of land for agriculture ('particularly dwellings' was changed to 'including dwellings').
- Adding a purpose to 'encourage the retention of employment and population to support rural communities.
- Removing the restriction on further subdivision following the creation of a lot for an existing dwelling.

Removing the prohibition on some uses and making more uses discretionary provides scope for accommodating farm-related infrastructure such as processing facilities and logistics that may or may not be appropriate depending on the location. In deleting the requirement for an applicant to prove 'whether the dwelling is reasonably required for the agricultural activity conducted on the land' the key remaining decision guideline regarding the nexus between dwellings and agriculture is 'the potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture'. In the absence of policy, there is potential for uses and development, particularly dwellings not associated with primary production to occur in important agricultural areas of the Shire.

3.4 DEVELOPMENT IN THE FARMING ZONE

An analysis of planning permits in the FZ (Table 8) for the last 11 years found that most approved planning permits were for dwellings. Since 2011, 532 planning permits for new dwellings were approved in the Farming Zone with around 30% approved for properties in FZ1 and the remainder in FZ2 (Figure 21). Note that this does not include dwellings that may have been constructed without the requirement for a planning permit.

Farm numbers in Hepburn have reduced by around 40% since 2001²³. This trend in farm numbers is contrary to the number of permits approved for dwellings in the FZ and suggests that many of these dwellings were for rural lifestyle purposes.

Since 2013, 55 planning permits for subdivision were approved in the FZ, with just under 70% approved for properties in FZ2 (Figure 22). The minimum lot size schedules should be reviewed in the light of the analysis agricultural industries and land ownerships to test if subdivision is supporting agricultural outcomes.

Permits were also issued for accommodation, including group accommodation, farm stays and bread and breakfasts, function centres including wedding venues, spa and health resorts and rural industry including composting, biochar manufacture, materials

²³ Australian Bureau of Statistics Agricultural Census Survey. Data provided by Kynetec

recycling, landscape gardening, storage of food products. plant nursery. Most permits were approved on land in the eastern half of the Shire (Figure 23).

Council Officers in discussion on the current performance of the planning scheme noted that guidance, additional to that in the scheme would improve decision making particularly with regard to determining whether a new dwelling was genuinely required for an agricultural use and guidance on the type and scale of tourism developments in the FZ. Issues highlighted included:

- Concern that accommodation, including workers accommodation in the FZ is a guide for development of permanent or lifestyle residences.
- Proliferation of non-agricultural uses not tied to agriculture in the FZ. More guidance is required on where this should occur given impacts on local traffic, risks in areas with poor access.
- Lack of guidance on emerging uses such as glamping, large scale festivals, mobile mini houses.
- Whether the FZ is the appropriate zone for extensive areas of predominantly timbered land.
- Lack of alignment between land capability and the minimum lot size schedule.

The Hepburn Planning Scheme Review⁴ also noted development pressure for new dwellings, lifestyle farming and tourism in the rural areas of the Shire, and that these are threatening the character of the municipality. The Review stated:

Pressure for further subdivision is a challenge for Council. The review has heard from a number of traditional farmers who wish to retire and subdivide their land and new farmers who are seeking smaller land holdings for their artisan activities. There are, at times, difficult personal circumstances that Council considers but these are rarely planning issues. Council needs to maintain a broader public interest test that preserves the land for the future generations and protects the land viability in the context of increasing natural hazard impacts and requirements for food production.

In addition to exerting a limiting influence on land prices, larger minimum lot sizes and land use controls can: maintain rural landscapes; protect environmental and natural resource assets such as remnant vegetation; protect environmental water flows by controlling the proliferation of small dams on fragmented land holdings; better manage bushfire risk; and limit infrastructure and servicing costs to small lots that are better located.

TABLE 8: PLANNING PERMITS FZ (2007 - 20021) 24

USE	TOTAL	APPROVED	REFUSED
Dwellings	405	322	16
Accommodation	31	25	1
Function centre	16	14	1
Festival	3	1	1
Gallery	3	2	1
Restaurant	5	4	0
Rural industry*	10	6	1
Rural store	4	3	0
Winery	5	5	0

^{*} composting, biochar manufacture, materials recycling, landscape gardening, storage of food products. plant nursery

FIGURE 21: DWELLINGS PERMITS APPROVED IN THE FARMING ZONE²⁴

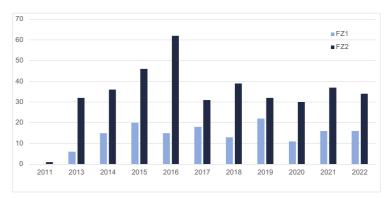
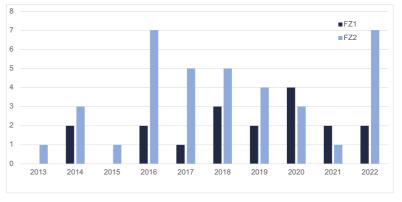


FIGURE 22: SUBDIVISION PERMITS APPROVED IN THE FARMING ZONE²⁴



²⁴ Data provided by Hepburn Shire

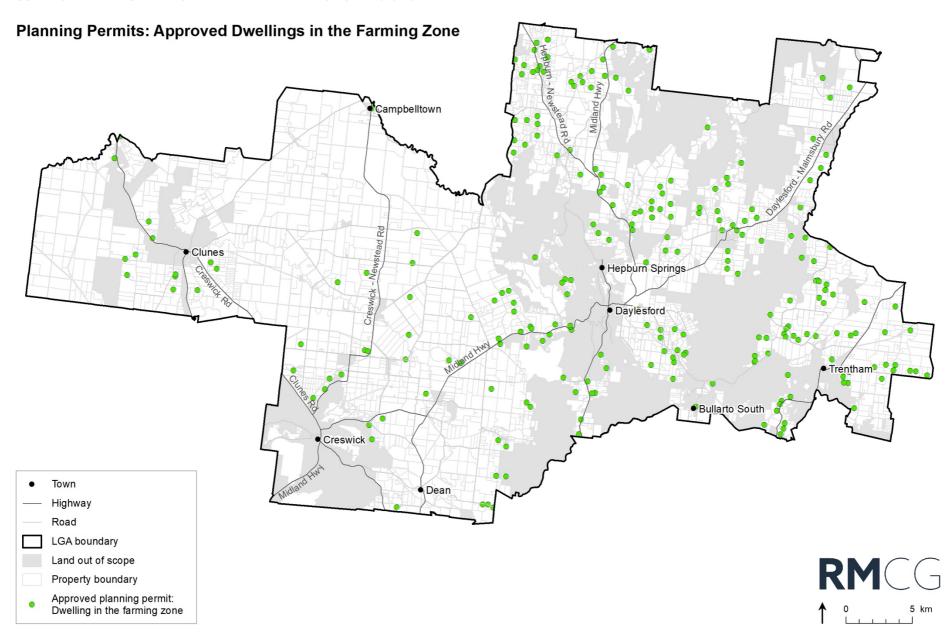
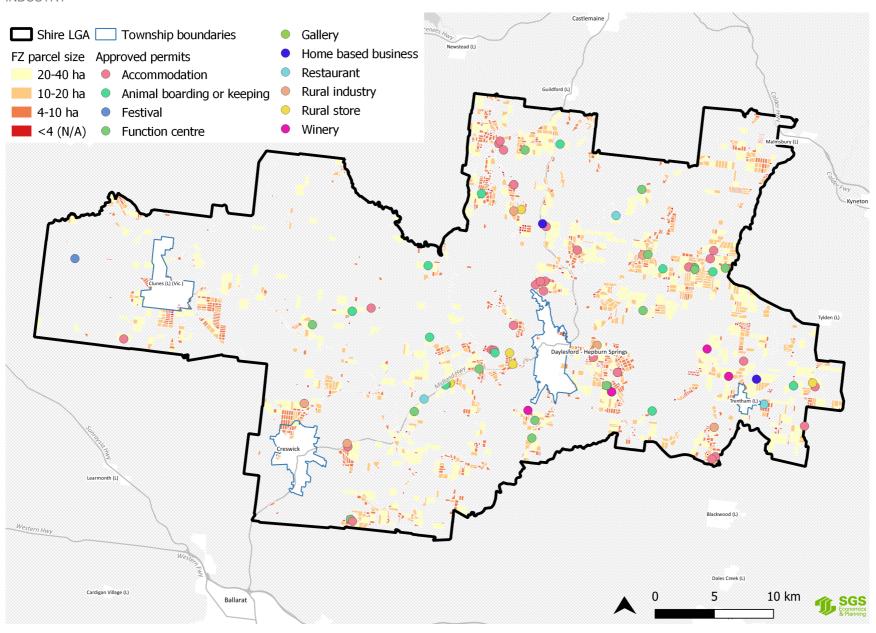


FIGURE 24: PLANNING PERMIT APPROVALS FOR TOURISM AND RURAL INDUSTRY²⁴



3.5 VCAT

The 2020 Planning Scheme Review⁴ included analysis of planning appeals between 2008 and 2017 which showed that Council has a very low rate of appeals on planning application decisions, with around 1% of applications appealed per annum or around 5 appeals per year. Some of the key issues relevant to this study raised in VCAT determinations included:

- Variable support for Council's rural land policy and provisions, with a range of decisions supporting new dwellings and others not supporting new dwellings.
- Support for careful management of sewerage and potable water in the declared water catchment area which affects the entire Shire.

In response to the assessment of VCAT appeals, the Review recommended that:

- Clearer and improved policy about rural enterprises and dwellings on rural land was required.
- Controls and policies for protection of declared potable water catchment and the management of effluent and stormwater be retained.

Additional review of VCAT for this Background Report found that:

- Farm Management Plans prepared by landholders to support planning permit applications generally are inadequate. There is a lack of evidence regarding the proposed farm business and the plans do not address FZ decision guidelines, particularly why a dwelling is required to undertake the agricultural enterprise.
- There are contradictory views about whether a site can be classified as high quality
 or productive agricultural land. Council's data was considered by a VCAT member
 to be too broad based on regional scale mapping vs site scale assessment.
- There was dispute about whether agriculture can occur in the absence of a dwelling on the land e.g. livestock grazing was considered by some VCAT members as being sufficient justification for a dwelling.
- There appears to be a conflict between the minimum lot size for a dwelling of 20ha in the FZ and the Guideline for Planning Permit Applications in Open, Potable Water Supply Catchment Areas²⁵, which recommends a dwelling density of 1 per 40ha unless there has been detailed work to demonstrate that a less dwelling density can be supported. This is discussed further in Chapter 11.

3.6 LOT SIZES

There are around 22,000 lots across all zones in Hepburn, with a total area of around 142,000ha. Just under half of all lots are in rural zones encompassing a total area of 106,000ha. An analysis of the lot supply in the FZ, RCZ and RLZ (Table 9) found that:

- There is a total of just over 8,200 lots in the rural zones, the majority in the FZ.
- There are around 3,700 lots in the FZ under 4ha, split evenly between the FZ1 and FZ2.
- In the FZ1 there are:
 - 413 lots larger than the minimum lot size below which a dwelling permit is required for a dwelling.
 - 62 lots that are larger than 80, and therefore could be subdivided to the minimum lot size of 40ha.
- In the FZ2 there are:
 - 564 lots larger than the minimum lot size below which a dwelling permit is required for a dwelling.
 - 139 lots that are larger than 40, and therefore could be subdivided to the minimum lot size of 20ha.
- The majority of lots in the RCZ are under 20ha.
- The majority of lots in the RLZ are under 4ha.

TABLE 9: LOT SIZES²⁶

Lot size	FZ1	FZ2	RCZ1	RCZ2	RLZ1	RLZ2
<4ha	1,854	1,861	115	44	1,383	
4 - 20	1,379	1,536	71	34	412	3
20 - 40ha	620	425	33	2	11	
40-100ha	378	130	9	1	2	
100-500ha	32	10				
>500ha	3					
Total lots	4,266	3,962	228	81	1,808	3
Total area (ha)	60,415	37,460	2,363	430	5,326	18

The analysis shows that land in the FZ in particular has been extensively subdivided and that there is a plentiful supply of small lots such that further subdivision for an agricultural purpose should be rarely required. There is also potential for a significant

²⁵ DSE (2012) Planning permit applications in open, potable water supply catchment areas

²⁶ Data sourced from https://mapshare.vic.gov.au/vicplan/ and analysed by RMCG

number of dwellings to be constructed in the FZ without the need for a planning permit to determine whether the dwelling is genuinely required to support an agricultural enterprise.

3.7 KEY FINDINGS

The current suite of rural zones has not been strategically reviewed since 1999. In the intervening years, there has been substantial changes to the rural zones and, as will be discussed in subsequent chapters, significant change in rural land use and rural activities. This review provides an opportunity to test whether:

- the current zones and schedules align with the values and future prospects of the land.
- the zone and schedules are achieving the desired outcomes and objectives, particularly in relation to agriculture and protection and enhancement of biodiversity values.
- rural land values are adequately reflected in the current suite of overlays.

Issues

Large number of planning permits approved for dwellings in the FZ.

Large number of permits for tourism accommodation in the FZ.

Poor standard and inadequate content of information in support of planning permits in the FZ.

Potential for a significant number of dwellings to be constructed in the FZ without the need for a planning permit to determine whether the dwelling is genuinely required to support an agricultural enterprise.

Current FZ schedules are based on out of date information.

Inconsistency between the FZ2 20ha minimum lot size and the recommendation of 1 dwelling per 40ha in water supply catchments.

Potential strategy responses

Review FZ schedules, including minimum lot size to reflect agricultural qualities of land and agricultural industries.

Local policy guidance for assessment of planning permits for dwellings in the FZ.

Local policy guidance on the types of uses appropriate for agricultural areas.

Prepare a map of productive agricultural land.

4 Rural settlement

4.1 STRATEGIC CONTEXT

Plan Melbourne¹⁶

Plan Melbourne 2014 is the Metropolitan Planning Strategy issued by the Victorian Government. Whilst all the themes are relevant to strategic planning, the State of Cities section is the most relevant to the peri-urban Victoria and Hepburn in particular.

To attract population growth out of Melbourne and into peri-urban and regional Victoria, a pipeline of new rural village-style needs to be developed. The development of such small settlements should not be an imitation of Melbourne's growth areas, but should offer a less-crowded, lower-density housing product, with larger housing lots that will particularly cater for families.

Central Highlands Regional Growth Plan

The Growth Plan includes a Regional Settlement Strategy that provides direction for the preferred locations for growth and the role of settlements within the Central Highlands settlement framework.

The Growth Pan states that 'the ongoing incremental development of small towns and rural settlements should not be precluded'. Future directions for small towns and rural settlements are summarised as follows:

- Plan for the sustainable growth of small towns by building on local opportunities.
- Consider the role of small towns within a regional context.
- Plan to further strengthen small settlements to be adaptable and resilient to local challenges.
- Encourage small settlements to be planned as part of a cluster of settlements to improve access to key services.

Hepburn Council Plan 2021-2025

The Hepburn Council Plan outlines a need to 'protect and enhance the existing character of our towns and rural settings through community-inclusive strategic planning to strengthen planning controls on growth and development'. This includes Council developing Town Structure Plans, a study of land development supply, an Agricultural Land Use and Settlement Strategy, and a local Environmentally Sustainable Design (ESD) Planning Policy.

Hepburn Shire Land Use Strategy Review⁵

The Hepburn Shire Land Use Strategy Review identifies the growth patterns in the Shire and offers recommendations for future planning provisions accordingly. There are no specific implications for rural settlements in this document.

Hepburn Planning Scheme Review⁴

The review of C80hepb Planning Scheme review, conducted in 2021, found a lack of clarity across the existing settlement hierarchy and noted many areas lacked clear direction in related to risks such as bushfire and flooding. Key excerpts are detailed below:

The existing Hepburn Planning Scheme has been operating for over 20 years, and despite planning scheme reviews in 2003, 2008 and 2011, none were implemented. Council commenced its review of the Planning Scheme in mid 2019, and authorisation of the Amendment was granted by DELWP on the 6 July 2020. Council considered all submissions received by September 2020 and referred these to the Panel.

In general, the Panel commends Hepburn Shire Council on conducting the review to bring the Planning Scheme in line with the new format, however highlights that some of the studies drawn upon to inform this Amendment are outdated and were not prepared in the context of current State planning policy. Any mismatch between the stated policy objectives and the zone applied to the land can make it difficult for policy objectives to be achieved, therefore it is important that these key planning issues be resolved.

More specifically, with regards to Municipal Planning Strategy (MPS) the Panel highlights that there are some strategic directions in the MPS which appear inconsistent with State and regional policy (or earlier studies). For example, the strategic directions for settlement appear to mirror the current policy settings rather than addressing (or flagging an intention to address) key constraints influencing existing settlements. Panel highlights that:

The term 'settlement' and 'township' are used in the MPS to reference residentially zones land. In response to questions from the Panel, the Council explained that 'settlements' has a broad meaning and can include land in historical settlements and other 'residentially zoned land' such as zoned RLZ and LDRZ. The Panel considers that the terminology is problematic because it does not distinguish

between rural living locations (where development is likely to be constrained²⁷) and urbanised areas (where development is likely to be encouraged).

To address this, the Panel suggests that the MPS needs to more clearly decouple legacy 'rural living' land (LDRZ and RLZ) from the term 'settlement', and be more directive about legacy rural living areas.

Panel is also concerned that the MPS doesn't identify other constraints that would influence settlement patterns, including flood risk, biodiversity values, high quality agricultural land, water catchment protection or cultural heritage values, and suggests that Council may consider previous regional studies (such as the Regional Growth Plan and the Regional Bushfire Planning Assessments) to inform its vision for the future settlement strategy across the Shire.

Overall, the Panel recommends that Council review the MPS to ensure that the strategic direction, particularly as those relate to settlement planning, bushfire hazards, housing supply and economic development are consistent with State policy, and to clarify the distinction between 'established townships', 'main townships' and 'settlements' and delete any policy support directing growth to LDRZ or RLZ zoning which might counter State policy on bushfire and protection of natural values.

4.2 POLICY CONTEXT

State and regional planning objectives and strategies relevant to rural settlements and rural land use and development include:

02.04 Strategic Framework Plans (Figure 25).

11.01-S Facilitate the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements:

- Ensure regions and their settlements are planned in accordance with their relevant regional growth plan.
- Guide the structure, functioning and character of each settlement taking into account municipal and regional contexts and frameworks.
- Create and reinforce settlement boundaries.
- Deliver networks of high-quality integrated settlements that have a strong identity and sense of place, are prosperous and are sustainable by:

- Balancing strategic objectives to achieve improved land use and development outcomes at a regional, catchment and local level.
- Preserving and protecting features of rural land and natural resources and features to enhance their contribution to settlements and landscapes.
- Encouraging an integrated planning response between settlements in regions and in adjoining regions and states in accordance with the relevant regional growth plan.
- Providing for appropriately located supplies of residential, commercial, and industrial land across a region, sufficient to meet community needs in accordance with the relevant regional growth plan.
- Minimising exposure to natural hazards, including increased risks due to climate change.

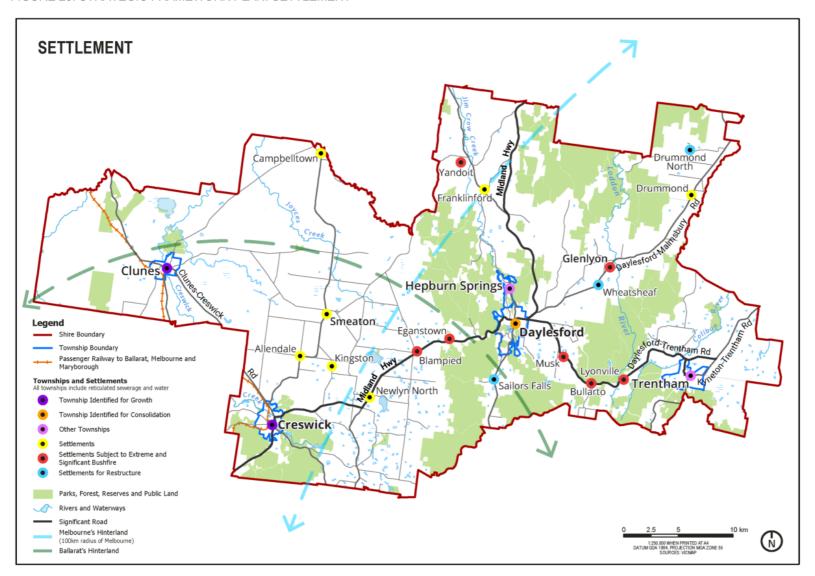
11.01-1R Settlement - Central Highlands

- Provide local and sub-regional services at Clunes, Creswick, and Daylesford to support ongoing growth, particularly closer to Melbourne and Ballarat where towns will provide a key opportunity to target growth pressure.
- Direct growth to well serviced settlements with good access to Melbourne or Ballarat, particularly Creswick and Clunes
- Limit outward growth of Daylesford to minimise environmental impacts and exposure to natural hazards.
- Maintain a clear settlement break between Metropolitan Melbourne and the Central Highlands.
- 11.01-1L Township and settlements Achieve a sustainable urban form for townships by containing future development within the township boundaries shown on the township structure plans by:
 - Provide for urban development and economic growth in the townships of Clunes, Creswick, Daylesford, Hepburn Springs and Trentham based on township boundaries and structure plans.
 - Promote Creswick and Clunes as the focus for the municipality's population growth. Locate new dwellings and residential subdivisions within township boundaries.
 - Provide for urban infill and consolidation opportunities in townships that utilise existing infrastructure.

²⁷ By factors such as bushfire risk, flood risk, biodiversity values, high quality agricultural land, water catchment protection or cultural heritage values

 Discourage development in settlements unless the risk from environmental hazards can be mitigated to an acceptable level.

FIGURE 25: STRATEGIC FRAMEWORK PLAN: SETTLEMENT



- 11.03-3S Peri-urban areas Manage growth in peri-urban areas to protect and enhance their identified valued attributes by:
 - Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
 - Provide for development in established settlements that have capacity for growth having regard to complex ecosystems, landscapes, agricultural and recreational activities including in Warragul-Drouin, Bacchus Marsh, Torquay-Jan Juc, Gisborne, Kyneton, Wonthaggi, Kilmore, Broadford, Seymour and Ballan and other towns identified by Regional Growth Plans as having potential for growth.
 - Establish growth boundaries for peri-urban towns to avoid urban sprawl and protect agricultural land and environmental assets.
 - Prevent dispersed settlement and provide for non-urban breaks between urban area.

4.3 OVERVIEW

The Strategic Framework Plan identifies 15 settlements in the Hepburn Shire. A review of the zones and an analysis of the number of dwellings and average lot sizes within a 400m, 800m and 1200m catchment of each settlement centre was undertaken to understand the potential for infill development. Settlements with residential zoning, include Glenlyon, Lyonville, Muskvale and Newlyn North and have higher number of dwellings compared to other settlements which exist more as clusters of houses in the FZ (Table 10).

Bullarto and Drummond have the highest average lot sizes in residential zones within their 1200 m catchment (Table 11). All lots in Blampied have at least one dwelling, therefore there are no vacant lots within this settlement. By contrast, Bullarto has around 40% of residential zoned lots vacant (Table 12).

Further analysis is required to understand the services within each township to assist in the designation of each settlement's role and function. Further analysis is required to understand the services within each township to assist in the designation of each settlement's role and function.

The existing defined 15 settlements across the Shire include a mix of locations without a clear profiling of their hierarchy. This includes a lack of residential zones, large parcels of residential zones outside of existing settlements, and a lack of strategic direction for their growth.

Despite some vacant lots existing within proximity of settlements, most of the new housing being permitted outside of existing townships are occurring within the farming zone.

There is considerable state policy support for better profiling settlements and their role in supporting regional growth objectives. Establishing clear directions for settlements will enable Hepburn Shire to balance the considerations of agriculture, biodiversity, infrastructure, and housing choice

Figure 28 through to Figure 42 shows the zone, lots, dwellings within the 1,200m catchment of each township and locality.

TABLE 10: NUMBER OF DWELLINGS IN TOWNSHIPS/LOCALITIES²⁸

Settlement	Main zones	400m	800m	1200m	Total
Allendale	TZ, LDRZ	21	30	8	59
Blampied	RLZ			7	7
Bullarto	TZ, RLZ	14	10	12	36
Drummond	RLZ			8	8
Glenlyon	TZ, RLZ	37	55	27	119
Kingston	TZ	24	16	12	52
Lyonville	TZ, RLZ	30	28	35	93
Muskvale	RLZ	21	45	32	98
Newlyn North	TZ, LDRZ, RLZ	65	17		98
Smeaton	TZ, LDRZ	41	17	17	75
Wheatsheaf	RLZ	10	6	20	36
Locality					
Drummond North	FZ	1	6	12	19
Eganstown	FZ	16	15	34	65
Franklinford	FZ	16	8	15	39
Yandoit	FZ	8	5	23	36

²⁸ Hepburn cadastre, analysed by SGS

TABLE 11: AVERAGE LOT SIZE (SQM) IN EACH TOWNSHIP (RESIDENTIAL ZONES ONLY) AND LOCALITY (FZ ONLY) CATCHMENT²⁸

Settlement	400m	800m	1200m
Allendale	7,657	13,772	18,909
Blampied			31,021
Bullarto	9,705	8,881	103,103
Drummond	0	56,004	62,714
Glenlyon	3,675	5,104	27,878
Kingston	5,281	6,430	7,282
Lyonville	3,326	13,418	27,727
Muskvale	16,744	16,893	36,993
Newlyn North	5,414	6,377	
Smeaton	5,313	8,673	5,318
Wheatsheaf	14,787	19,052	24,849
Locality			
Drummond North	77,398	270,140	683,762
Eganstown	7,851	38,410	301,225
Franklinford	11,542	52,857	714,804
Yandoit	138,806	108,189	164,734

TABLE 12: VACANT LOTS WITHIN THE 1,200M TOWNSHIP (RESIDENTIAL ZONES ONLY) AND LOCALITY (FZ ONLY) CATCHMENT 28

Settlement	Vacant lots	Total Lots	% Vacant lots
Allendale	15	74 20.3	
Blampied	0	7	0.0%
Bullarto	25	61	41.0%
Drummond	3	11	27.3%
Glenlyon	76	195	39.0%
Kingston	10	62	16.1%
Lyonville	42	134	31.3%
Muskvale	11	108	10.2%
Newlyn North	21	100	21.0%
Smeaton	34	106 32.1%	
Wheatsheaf	1	37	2.7%
Locality			
Drummond North	4	23	17.4%
Eganstown	19	84	22.6%
Franklinford	23	62	37.1%
Yandoit	16	52 30.8%	

TABLE 13: NUMBER OF LOTS WITH DWELLINGS BY PLANNING ZONE WITHIN THE 1,200M SETTLEMENT CATCHMENT²⁸

Settlement	FZ	LDRZ	RCZ	RLZ	TZ
Allendale	33	17	4		57
Blampied	30			7	
Bullarto	8			12	49
Drummond	13			11	
Drummond North	21				
Eganstown	79				
Franklinford	54				
Glenlyon	39		1	22	173
Kingston	17		25		62
Lyonville	7			54	80
Muskvale	6	11		97	
Newlyn North	31	24		8	68
Smeaton	18	27			79
Wheatsheaf	20			37	
Yandoit	42				

4.4 SETTLEMENT ROLE AND GROWTH DESIGNATIONS

The Central Highlands Regional Growth Plan (Table 14) provides a basis for how growth should be considered and the designation of settlement role and function. This hierarchy came with a prescribed expected growth potential and the overall support for this growth based on consideration spanning infrastructure and natural hazards. This is shown in Figure 26 and Figure 27.

TABLE 14: CENTRAL HIGHLANDS REGIONAL GROWTH PLAN²⁹ DESIGNATION FOR TOWNS, SETTLEMENTS AND RURAL SETTLEMENTS.

Future settlement role	Description of the future role of the settlement and place within the Central Highlands settlement network
Town Examples: Beaufort Ballan Creswick Daylesford Smythesdale Clunes Avoca	Have a diverse to moderately diverse population and housing base with retailing, moderate employment and good access to services, including some higher order services such as medical and hospital services and some education facilities Some towns have strong employment relationships with higher order settlements nearby All utility services are provided for, with some larger towns having access to reticulated gas Provide an important sub-regional goods and services role, servicing smaller towns and rural district needs including local government, policing and ambulance services to a surrounding rural hinterland
Small town Examples: Bungaree Gordon Lake Bolac Linton Trentham	Lower population levels than towns Access to services such as small primary school and limited convenience shopping Connection to reticulated water is generally available but access to sewer connection varies
Rural settlement Examples: Dereel Snake Valley	Characterised by small rural dispersed population with some small concentrations of housing and minimal services, for example a sole general store and primary school Reliant on other settlements for a wider range of services Connection to reticulated water may be available Unlikely to have reticulated sewerage

FIGURE 26: REGIONAL SETTLEMENT FRAMEWORK PLAN – EXPECTED GROWTH POTENTIAL²⁹

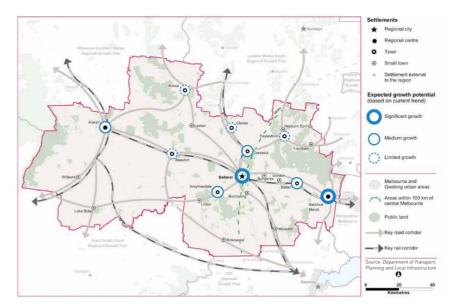
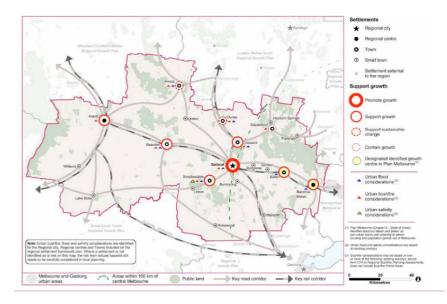


FIGURE 27: REGIONAL SETTLEMENT FRAMEWORK PLAN – SUPPORT FOR GROWTH



²⁹ Central Highlands Regional Growth Plan (2014)

4.5 KEY FINDINGS

Settlements play a key role within a state, regional, and shire planning context. There is broad support for their role in providing housing as an integrated network.

Issues

The current profile of settlements includes a mixture of non-residential zones and a lack of clear direction on expectations around infrastructure, growth and character.

Large tracks of residential zones exist outside of townships and a 1,200m walking catchment of identified settlements.

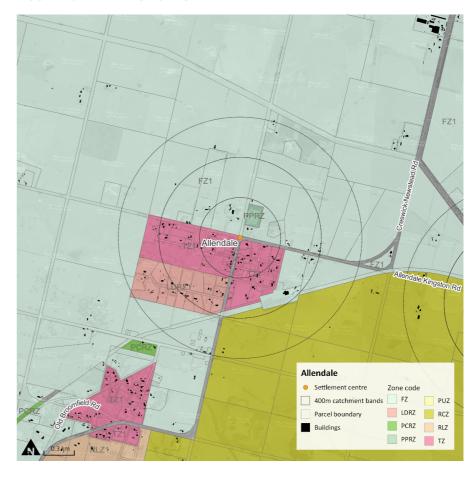
Opportunities

Through further strategic planning, settlements can be better profiled and aligned with future visions for growth and preservation.

Potential strategy response

Establish a settlement hierarchy and provide recommendations for future zones or schedules within these settlements.

FIGURE 28: PLANNING ZONES IN ALLENDALE



Rural Zones

FZ - Farming Zone

RCZ - Rural Conservation Zone

RLZ - Rural Living Zone

Residential Zones

LDRZ - Low Density Residential Zone

TZ – Township Zone

Public Land and Public Uses

PCRZ - Public Conservation and Resource Zone

PPRZ - Public Park and Recreation Zone

PUZ - Public Use Zone

FIGURE 29: PLANNING ZONES IN BLAMPIED

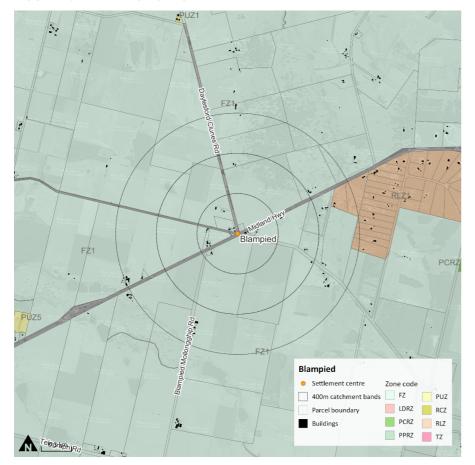


FIGURE 30: PLANNING ZONES IN BULLARTO

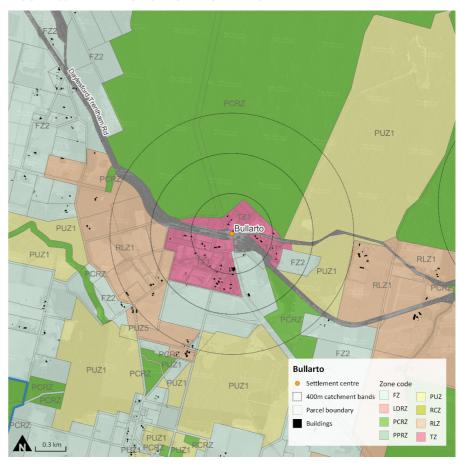


FIGURE 31: PLANNING ZONES IN DRUMMOND

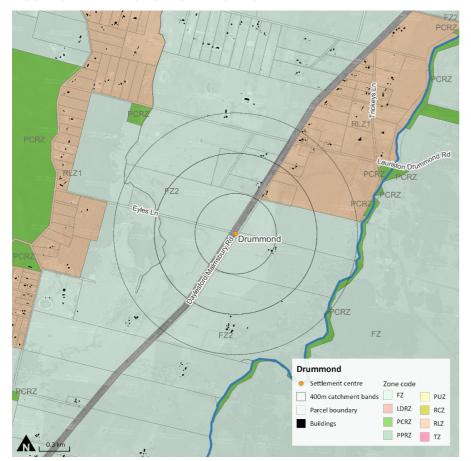


FIGURE 32: PLANNING ZONES IN DRUMMOND NORTH

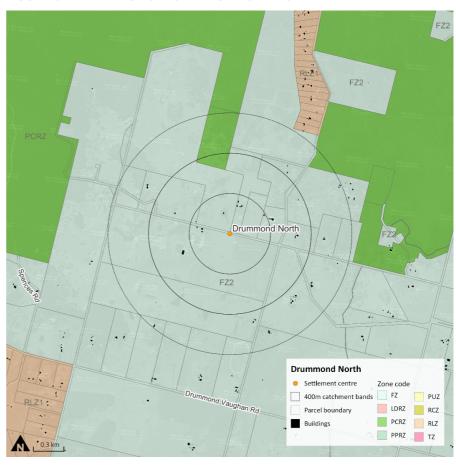


FIGURE 33: PLANNING ZONES IN EGANSTOWN

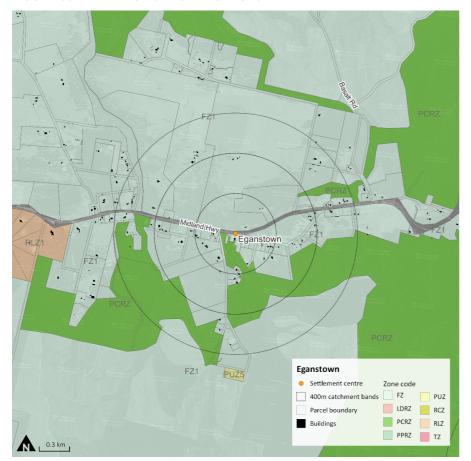


FIGURE 34: PLANNING ZONES IN FRANKLINFORD

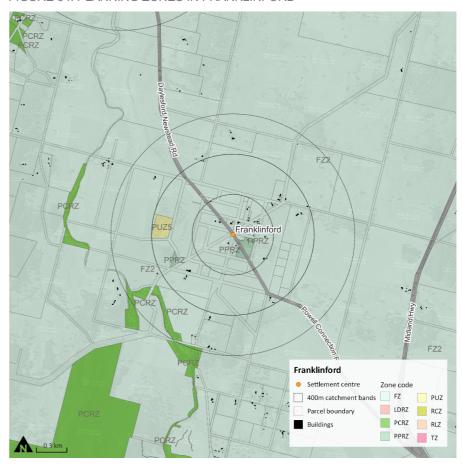


FIGURE 35: PLANNING ZONES IN GLENLYON

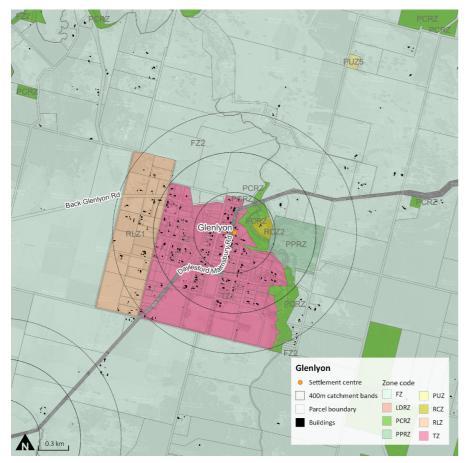


FIGURE 36: PLANNING ZONES IN KINGSTON

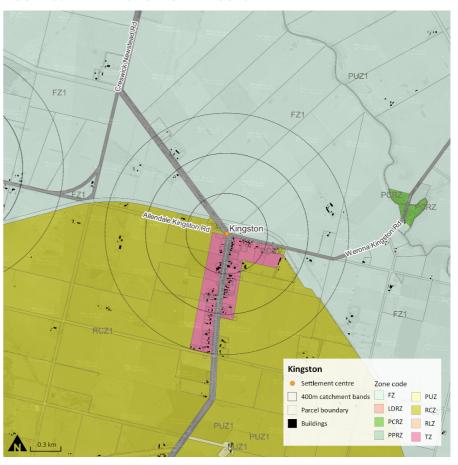


FIGURE 37: PLANNING ZONES IN LYONVILLE

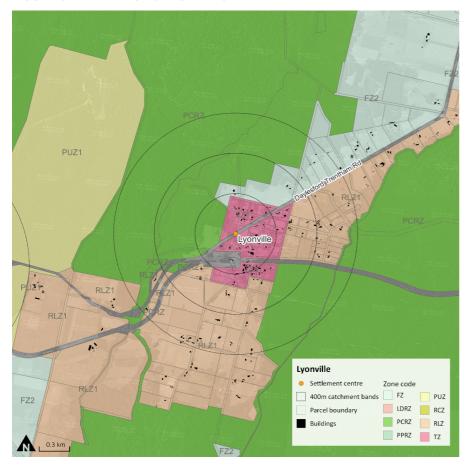


FIGURE 38: PLANNING ZONES IN MUSKVALE



FIGURE 39: PLANNING ZONES IN NEWLYN NORTH



FIGURE 40: PLANNING ZONES IN SMEATON



FIGURE 41: PLANNING ZONES IN WHEATSHEAF

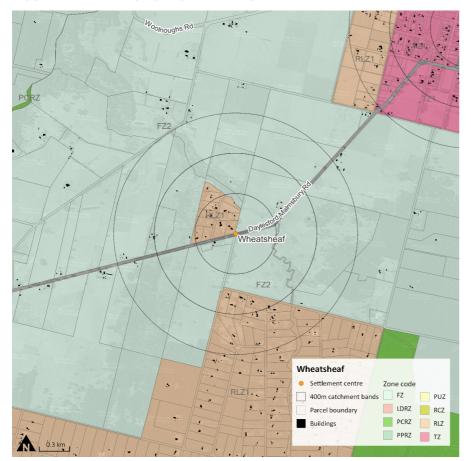
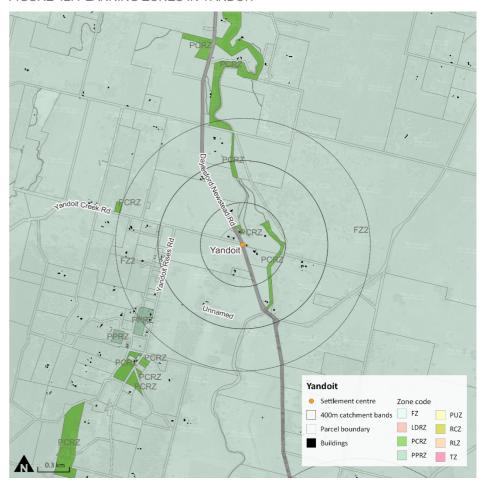


FIGURE 42: PLANNING ZONES IN YANDOIT



5 Rural living

5.1 STRATEGIC CONTEXT

Plan Melbourne 2017-2050

Plan Melbourne 2017-2050 Strategy identifies the need to manage rural living in periurban areas to prevent negative impacts on agriculture, biodiversity and landscape values. The Strategy recognises the importance of peri-urban towns in providing affordable and attractive alternative to metropolitan living but suggests there should be growth boundaries for each town to avoid urban sprawl and protect agricultural land and environmental assets.

Plan Melbourne

Direction 4.5 Plan for Melbourne's peri-urban areas.

As Melbourne grows, planning for Melbourne's green peri-urban areas is required to:

 protect biodiversity assets, including national and state parks, Ramsar wetlands and coastal areas.

Under Desired Planning Outcomes for Peri Urban Areas, the plan states:

- Rural Living
 - Manage rural living to prevent negative impacts on agriculture, biodiversity and landscape values.

Central Highlands Regional Growth Plan

The Regional Growth Plan for the Central Highlands³⁰, published in September of 2013, identifies a shared 30-year vision from the Victorian State Government for the municipalities of Ararat, Ballarat, Golden Plains, Hepburn, Moorabool and Pyrenees. It additionally suggests a direction for regional growth in sustainable regions.

Considering the interaction between native vegetation and rural land uses such as agriculture and rural living, the Plan emphasises the region could benefit from increased integration of natural resource management and land use planning activities. This would also be useful when considering other aspects of catchment management, such as water quality and bushfire hazards.

Hepburn Council Plan 2021-2025

The Hepburn Council Plan outlines several priority statements related to rural living, including a need to support appropriate land use and accommodate more affordable long-term housing within townships, optimise the use of public spaces to increase community connection, and to build and maintain quality infrastructure that supports and promotes liveability and active living.

Hepburn Planning Scheme Audit and Review (2020)

The Hepburn Planning Scheme Audit and Review highlighted significant areas of RLZ where bushfire risk is high, there are significant biodiversity assets and infrastructure provision costs are prohibitive. The review recommends a policy of settlement containment whereby any new development is concentrated into the main townships. Another option includes rezoning rural living zone outside of townships, but this could affect property values, land use and development rights.

Hepburn is within a declared water catchment and is subject to significant number of natural hazards such as bushfire and flooding. Predictions are that these natural hazards will only increase in prevalence and intensity posing risks to life and assets. Hepburn has a legacy of issues with the existing zoning in parts of the municipality that fail to address these planning risks. There are significant tracts of land zoned for low density and rural living (LDRZ and RLZ) outside the townships that are the legacy of what can only be described as poor planning decisions. These are areas where bushfire risks are high, there are significant biodiversity assets and infrastructure provision costs are prohibitive. In Trentham, some of the land within the township appears to be poorly zoned adjacent to PCRZ areas with high fire risk. Some of the smaller townships and settlements are a result of poor planning decisions while some are the legacy of early European settlement.

A policy of settlement containment is recommended for the Shire whereby any new development is concentrated into the main townships. This needs to be strongly exercised whereby no exceptions are made as each decision is cumulative with cumulative impacts and negative costs for the Shire and community overall.

Dealing with legacy issues of poor planning decisions will be challenging. There is little appetite from the State Government to purchase back inappropriate subdivisions such as those identified by Restructure Overlays in Drummond and Sailors Falls. Council could strongly advocate for greater State intervention. There are other locations where similar conditions exist, such as in Wheatsheaf, and further work may be required to understand the risk posed in other small scale settlements in rural areas.

Other options include rezoning LDRZ and RLZ outside of townships. This would no doubt be a challenging option for Council as it may impact on property values and land use and development rights. With appropriate justification, Council could raise the minimum lot sizes in these zones to minimise the number of people living outside of townships and reduce the infrastructure provision burden and impact.

on the environment. The use of requirements within overlays could also be used to limit development opportunities.

A number of requests were made in the consultation to rezone land adjacent to township boundaries on land described as 'poor agricultural land'. The land may not be currently suitable for agriculture but it would be irresponsible to rezone the land to residential given the constraints identified in this chapter and strong community values. Structure planning should be used as the process to determine township boundaries.

5.2 POLICY CONTEXT

16.01-3S Rural residential development - Identify land suitable for rural residential development by:

- Manage development in rural areas to protect agriculture and avoid inappropriate rural residential development.
- Encourage the consolidation of new housing in existing settlements where investment in physical and community infrastructure and services has already been made.
- Demonstrate need and identify locations for rural residential development through a housing and settlement strategy.
- Ensure planning for rural residential development avoids or significantly reduces adverse economic, social and environmental impacts by:

- Maintaining the long-term sustainable use and management of existing natural resource attributes in activities including agricultural production, water, mineral and energy resources.
- Protecting existing landscape values and environmental qualities such as water quality, native vegetation, biodiversity and habitat.
- Minimising or avoiding property servicing costs carried by local and state governments.
- Maintaining an adequate buffer distance between rural residential development and animal production.
- Ensure land is not zoned for rural residential development if it will encroach on high quality productive agricultural land or adversely impact on waterways or other natural resources.
- Discourage development of small lots in rural zones for residential use or other incompatible uses. Encourage consolidation of existing isolated small lots in rural zones.
- Ensure land is only zoned for rural residential development where it:
 - Is located close to existing towns and urban centres, but not in areas that will be required for fully serviced urban development.
 - Can be supplied with electricity, water and good quality road access.

5.3 CURRENT DEMAND

The review of the Rural Living Zone will be guided by Planning Practice Note 37: Rural Residential Development³¹ sets out the requirements for review and identification of land for rural residential purposes. Then practice note states that:

- A planning authority must be able to show that a rural residential rezoning is part of its strategy to provide appropriate housing for forecast increases in population and changes in household structure and composition.
- A rural residential rezoning must be supported with evidence that the proposed use and development supports and implements the housing needs of the municipality as identified in the MSS. This includes understanding the demographic and housing needs of the area and likely future trends.
- A local housing analysis should:

³¹ DELWP (2015) Planning Practice Note 37: Rural Residential Development

- identify demographic trends, including changes in household structure and composition.
- identify housing market trends, including dwelling type.
- identify projected population and household increases and housing needs over a 10 year period for the area.
- identify the number and types of additional houses required including the proportion of new housing that would be in the form of rural residential development.

5.4 CURRENT DEMAND

Between 2011 and 2016, 615 dwellings (occupied and unoccupied) were added to Hepburn Shire. This accelerated to 811 dwellings in the next five years. An analysis of Council planning application data reveals that approximately 21% of all planning applications between 2013 and 2022 for new dwellings occurred in the farming zone. Neighbourhood Residential Zone (NRZ) accounted for 35% of all new dwelling applications. A further analysis of demand vs capacity is presented below.

TABLE 15: TOTAL DWELLING CHANGE, HEPBURN SHIRE, 2011-202132

Census Year	2011	2016	2021
# Dwellings	8,051	8,666	9,477
# Change from previous Census	-	615	811
% Change from previous Census	-	7.6%	9.4%
Average Change (#) Per Year	-	123	162
Average Change (%) Per Year	-	1.5%	1.8%

TABLE 16: PLANNING APPLICATION ANALYSIS, ESTIMATED NEW DWELLINGS BY ZONE, 2013-2022³²

	C1Z	FZ	GRZ	LDRZ	NRZ	RCZ	RLZ	SUZ	TZ
% of Dwellings	2%	21%	8%	15%	35%	2%	9%	2%	7%

5.5 THEORETICAL CURRENT CAPACITY

SGS has previously conducted a lot-based capacity analysis to understand how lots could be subdivided under the current planning scheme. This provides an indication of what could occur under existing controls.

TABLE 17: DENSITY ASSUMPTIONS33

Zones	Yield calculation method
TZ (now NRZ)	1 dw/ 2ha
LDRZ	1 dw/ 2ha
GRZ1; R1Z; R2Z; R3Z	1 dw/ 400sqm
RLZ	1 dw/ 2ha

SGS's housing capacity model, using the density assumptions provided above, reveals a "net yield" of 1,750 dwellings that could be added to existing parcels assuming minimum subdivision requirements and development on all vacant lots.

TABLE 18: CURRENT THEORETICAL CAPACITY BY ZONE (OUTSIDE OF EXISTING TOWNSHIPS)³³

Zone	Yield	Net Yield	% of all dwellings outside of townships
LDRZ	140	60	3%
RLZ	1,470	850	49%
Total	2,700	1,750	100%

Furthermore, SGS has conducted an analysis of vacant lots by relevant zones through the use of Geoscape³⁴ and a spatial analysis using publicly available data. The analysis reveals that there are 1,352 vacant lots in the RLZ. It is important to note that the desktop review only considers a parcel vacant when it does not have an individual residential address registered, it does not control for contiguous lots under the same ownership. It is important to note that this analysis is meant for strategic planning and is not suitable for a lot-by-lot analysis.

³² SGS Analysis of the Hepburn Shire Planning Application data

³³ Hepburn cadastre https://mapshare.vic.gov.au/vicplan/

³⁴ https://geoscape.com.au/

TABLE 19: LOT SIZE SUMMARY BY ZONE

Zoning	Total Lots	Vacant Lots	Median Lot Size (ha)	Median Vacant Lot Size (ha)
RLZ	1,352	114	2.14	1.17

5.6 DEMAND VS CAPACITY, ISSUES AND OPPORTUNITIES

From 2016 to 2021, Hepburn Shire increased by around 800 dwellings, an increase of 9% or around 160 dwellings per year. Fifty one per cent of these changes occurred outside of township boundaries. Over a 20 year period, assuming past trends continue, this would mean that Hepburn Shire would need around 3,244 dwellings by 2043. 51% of those dwellings, assuming the same geographic split, would need to be provided outside of existing townships under a "business as usual" scenario. While there is technically enough theoretical capacity in zones outside of townships to support this projected growth, there are implications for agriculture, natural values and infrastructure that must be considered.

Over the next ten years, demand outside of townships could produce a requirement for 834 dwellings, versus 910 dwellings based on a calculation of theoretical capacity.

This does not consider site-specific implications on feasibility or control for infrastructure requirements. There are implications for agriculture, natural values and infrastructure that must be considered.

TABLE 20: DWELLING CHANGE BY TOWNSHIP³⁵

Area	2016	2021	Change 2016-21	% Change	Proportion of total change (%)
Clunes	756	862	106	14%	13%
Creswick	1,268	1,377	109	9%	13%
Daylesford	1,982	2,102	120	6%	15%
Hepburn	496	555	59	12%	7%
Rest of LGA	4,164	4,581	417	10%	51%
Hepburn Shire	8,666	9,477	811	9%	100%

TABLE 21: ESTIMATED DWELLING DEMAND BY SUB-AREA. 2023-4335

Area	Proportion of total change (%)	Projected demand, 2023-43
Clunes	13%	424
Creswick	13%	436
Daylesford	15%	480
Hepburn	7%	236
Rest of LGA	51%	1,668
Hepburn Shire	100%	3,244

Source: SGS analysis of past trends, disaggregated by Census meshblocks DWTD

5.7 ISSUES AND OPPORTUNITIES

If population growth continues similarly to what it did in the past ten years, there will be significant demand for housing growth in areas outside of existing townships. Pressure will be faced in the farming zone where intensive primary production occurs.

There is only some sufficient theoretical capacity to meet the expected demand over the next ten years within existing residential zones outside of townships.

Despite some capacity such as vacant lots within Rural Living Zone areas, a considerable share of recent housing growth has occurred within the Farming Zone. Ad hoc or unplanned development in productive agricultural areas that is unrelated to the agricultural use of the land has implications for the local housing market and the amenity of residents.

This may mean that housing supply in townships does not always match the location of the demand where people are seeking housing.

Despite strong overall strategic directions to protect intensive agriculture, there is insufficient planning scheme guidance to reduce interface issues between existing and future residential and non-residential uses such as farming uses, industrial uses, commercial uses, major roads, township approaches and environmental assets.

State government policy provides clear direction as to expected population growth and change across the region. In addition, state policy supports a consistent approach to planning for rural residential areas and encourages the provision of diverse housing types in appropriate locations.

There is limited capacity for growth in rural residential areas where appropriate, and there are opportunities for building on strategic links between settlements.

³⁵ Source: Census Quickstats - all dwellings, disaggregated using DWTD by meshblock, analysed according to Hepburn Townships. https://www.abs.gov.au/census/guide-census-data/census-dictionary/2021/variables-topic/housing/dwelling-type-dwtd

Both an aging population and smaller household sizes will likely require diverse housing options, including independent living and medium density dwellings to enable older people to downsize.

There is potential to review infrastructure and capacity within existing rural residential zones.

5.8 KEY FINDINGS

There is broad strategic and policy support for providing rural residential opportunities. It is noted that there are distinct advantages for residents in rural settlements, and they play a key growth as part of a wider network of townships in the peri-urban hinterland of Melbourne.

Issues

Population growth in existing settlements and rural residential zoning presents issues as there are risks of a potential shortfall in theoretical capacity to meet demands in the next ten years if past trends continue or accelerate.

Opportunities

Better policy guidance around the role of residential zones, and consequently better protections for intensive agriculture and primary production, will help to ensure appropriate residential growth aligned with infrastructure.

Potential strategy response

Potential revisions around existing subdivision requirements can be explored in relevant zones and schedules.

6 Food and Fibre

6.1 STRATEGIC CONTEXT

Plan Melbourne

Direction 4.5 of Plan Melbourne states that planning for Melbourne's peri-urban areas is required to:

 Support existing and potential agribusiness activities, forestry, food production and tourism.

Future growth in peri-urban areas will be managed to protect **productive land**, strategic economic resources, heritage and biodiversity assets, while accommodating additional housing and employment in established towns in the outer peri-urban areas that have the capacity for growth.

Consistent with Plan Melbourne and the Regional Growth Plans, planning for peri-urban areas should:

 Define and protect areas that are strategically important to the metropolitan area and the state, for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.

Desired planning outcomes for peri-urban areas includes:

 Protect agricultural land from incompatible uses, maintain farm size, promote the continuation of farming and provide a secure long- term future for productive and sustainable agriculture.

In response to Action 17 of the Plan Melbourne Implementation Actions: Plan Melbourne 2017-2050, DELWP exhibited a discussion paper Planning for Melbourne's Green Wedges and Agricultural Land³⁶. The paper outlined a number of options to improve protection of agricultural land in recognition of the importance of Melbourne's agricultural land, and in response to the following issues:

- Increasing land speculation and pressure to convert farmland to other uses.
- Increasing appetite for rural lifestyles and use of these areas for a range of urban activities.

- Incremental and irreversible loss of land that is agriculturally productive or has important non- urban uses.
- More land use conflict, particularly where urban areas adjoin rural areas.

A Government response to the consultation findings have yet to be released. However, the land use outcomes that were being sought through the various options are relevant to this study and included:

- Minimise further subdivision that would create more lots or smaller lots that currently provided for in the planning scheme in the FZ and RAZ.
- Minimise subdivision in the FZ and RAZ that results in creation of a lot for an existing dwelling that is smaller than the minimum lot size.
- Minimise new dwellings in the FZ.
- Delineate areas with potential for future growth in irrigated agriculture.
- Identify and protect areas with secure water resources for agricultural uses.
- Provide certainty that these areas will continue as key agricultural areas into the future.
- Protect areas of significant water infrastructure investment
- Limit non-farming and incompatible uses that would restrict ongoing productive use of land for agricultural purposes.
- Protect buffers of identified areas from encroaching sensitive uses such as dwellings to ensure agricultural activities continue without restrictions.

Central Highlands Regional Growth Plan¹⁸

The Regional Growth Plan recognises the importance of agriculture to the region and seeks to promote the industry's growth, adaptation and transition to maintain viability, protect productive agricultural change and encourage investment in agriculture by providing certainty regarding future land use within rural areas. Future directions for agriculture include:

Recognise the Central Highland region's regionally significant rural and agricultural
assets in land use planning, including the areas of highly productive and versatile
soils within Moorabool, Ballarat and Hepburn, the Bacchus Marsh Irrigation District
and the Pyrenees wine region.

³⁶ DELWP (2020) Planning for Melbourne's Green Wedges and Agricultural Land

- Provide greater certainty of land use in rural areas to encourage new investment in agricultural activities that enables growth of exports, increased productivity and strengthens farming communities.
- Manage versatile and productive agricultural areas for primary production by providing for a range of flexible rural uses, while protecting such areas from incompatible land uses.
- Support and protect opportunities for intensive agriculture in areas with excellent access to markets, and where potential amenity and water catchment impacts can be appropriately managed.

The Plan recommended the following land use policies, strategies and actions:

- Review planning schemes to recognise the need to support investment in agriculture by providing:
 - more clarity about the long-term designation of land for primary production
 - flexibility in terms of the types of rural activities that can occur on rural land to support its ongoing viability.
- Identify important agricultural areas and the need to protect them in planning schemes from unplanned loss due to permanent changes of land use.
- Provide policy support and direction in planning schemes on appropriate locations for intensive agricultural activities, including in the areas identified by this plan.
- Provide policy support in planning schemes for infrastructure projects that will benefit agriculture such as improved transport routes to markets and the supply of reticulated services such as water to intensive agriculture facilities to enable further growth.

Fertile Ground Hepburn Shire Economic Development Strategy 2016-2021

The Economic Development Strategy is now out of date and requires a refresh. The Strategy recognises the agricultural industry as the economic 'backbone' of the Shire and set out initiatives and projects focused on supporting the agricultural value chain and emerging agricultural sectors. Tourism is the Shire's largest employer and initiatives and projects aim to improve visitor experiences and attractions. Business development initiatives aim to support the agriculture, tourism, retail and other sectors.

Hepburn Community Transition Plan³⁷

The Community Transition Plan sets out initiatives for the Shire to achieve zero emissions by 2029. Agriculture and land use change are identified as significant contributors

Hepburn Shire's emissions and a number of programs have been identified to reduce emissions and sequester carbon. Some programs may have implications for rural land use e.g. Trentham Carbon Forestry Project³⁸ which seeks to boost carbon sequestration and biodiversity while maintaining a source of timber for fire and construction be selective harvesting within new local woodlots.

Hepburn Planning Scheme Review⁴

The review found that the Hepburn Community considers agricultural land a valuable resource that should be protected and that a more flexible approach to what constitutes agriculture should be considered with potential for innovation and different farming practices. A range of potential planning scheme actions were tested with the community. There was agreement that further work was needed in this area to support policy development with the most controversial area being whether minimum lot sizes should be increased or decreased.

6.2 POLICY CONTEXT

02.03-7 Economic development

Rural enterprises

Hepburn Shire is a significant agricultural region and part of Melbourne's 'food bowl'. The region's contribution will become of even greater importance to the State in adapting to a changing climate. High quality agricultural land is used for horticulture, grazing and other rural industries. Other rural land is important for its contribution to the Shire's landscape and environmental setting and important for tourism attraction. The fragmentation of agricultural land through unmanaged subdivision and housing in rural areas has the potential to undermine established rural uses and must be carefully planned to maintain the long-term productivity of rural land. Rural living development not associated with agricultural enterprises needs to be directed around established townships and settlements.

Council's strategic directions for economic development are to:

- Maintain and protect agricultural land by avoiding fragmentation and commercial uses that may lead to loss of, or limitations for, production.
- Protect industry and business from encroachment of incompatible land use and development by applying the 'agent of change' principle.

³⁷ Hepburn Shire (2019) Community Transition Plan: A 10-year Masterplan for the Hepburn Shire to reach 100% renewable electricity supply, zero-net energy and zero-net emissions 2019 - 2029

³⁸ https://hepburnznet.org.au

11.03-3S Peri-urban areas

- Manage growth in peri-urban areas to protect and enhance their identified valued attributes by:
 - Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
 - Establish growth boundaries for peri-urban towns to avoid urban sprawl and protect agricultural land and environmental assets.

14.01-2S Encourage sustainable agricultural land use by:

- Ensure agricultural and productive rural land use activities are managed to maintain the long-term sustainable use and management of existing natural resources.
- Support the development of innovative and sustainable approaches to agricultural and associated rural land use practices.
- Support adaptation of the agricultural sector to respond to the potential risks arising from climate change.
- Encourage diversification and value-adding of agriculture through effective agricultural production and processing, rural industry and farm-related retailing.
- Assist genuine farming enterprises to embrace opportunities and adjust flexibly to market changes.
- Support agricultural investment through the protection and enhancement of appropriate infrastructure.
- Facilitate ongoing productivity and investment in high value agriculture.
- Facilitate the establishment and expansion of cattle feedlots, pig farms, poultry farms and other intensive animal industries in a manner consistent with orderly and proper planning and protection of the environment.
- Ensure that the use and development of land for animal keeping or training is appropriately located and does not detrimentally impact the environment, the operation of surrounding land uses and the amenity of the surrounding area.

14.01-2L Sustainable agricultural enterprises (applies to land in the Farming Zone, Rural Conservation Zone and Rural Living Zone)

- Ensure that areas of high to very high agricultural land are utilised or remain available for agricultural production.
- Support agricultural enterprises through local value-adding and processing opportunities, investment, innovation, diversification and employment that have a limited impact on the natural landscape and its amenity.

- Protect clusters of agricultural activity and other rural related enterprises which support primary and secondary processing.
- Ensure that rural land use, development and amenity are not adversely affected by land uses and developments that are more appropriately located within townships.
- Encourage intensive agriculture uses and rural related activities with access to major transport routes.
- Protect resource, natural heritage, significant historic landscapes and environmental values that support agricultural enterprises.
- Discourage the use and development of rural land for accommodation, food and drink premises, place of assembly or shop, except for a dwelling in the Rural Living Zone.
- Support small agricultural enterprises in the Rural Living Zone.

6.3 OVERVIEW OF AGRICULTURE

Data from the Australian Bureau of Statistics agricultural census was sourced for an analysis of agriculture in Hepburn Shire. All businesses undertaking agricultural activity recorded on the Australian Bureau of Statistics' Business Register (ABSBR) above a minimum threshold of \$40,000 in Estimated Value of Agricultural Operations (EVAO) were in scope for the 2020-21 Agricultural Census.

Frequently used terms used in the analysis include:

Gross value of agricultural production also referred to as the Value of Agricultural Commodities Produced is the value placed on recorded production of agricultural commodities at the wholesale prices realised in the market place.

Estimated value of agricultural operations - is an ABS construct used to estimate the size of agricultural activity undertaken by a business. It is not an indicator of receipts of individual farms (turnover), but rather an indicator of the size or extent of agricultural activity.

In 2020/21 agricultural enterprises in Hepburn Shire produced commodities with a total gross value of \$107million, up from \$68million in 2015/16 and representing around 14% of the gross value of agricultural commodities produced in the Central Highlands region in 2020/21 (Figure 43).

The main commodity groups by gross value of production (GVAP) in 2020/21 were meat, fruit and vegetables and grains (Figure 44). While the top commodities by GVAP were potatoes, lamb, beef and ornamental horticulture (nurseries) (Figure 45).

Most agricultural land is used for livestock grazing, grain and hay production with a gross value of agricultural production/ha (average over last three years) of between \$910 and \$1,650. A smaller area is used for horticultural production, primarily potatoes, which had an average gross value of production/ha of \$22,800 (Table 22). Ornamental horticulture which includes nurseries and cut flowers is undertaken on the smallest area but has the highest GVAP/ha.

Total GVAP has steadily increased over the last 25 years, and meat and fruit and vegetables have been the main commodity groups over that period. In the last five years, grains and ornamental horticulture have shown positive growth (Figure 46).

FIGURE 43: GROSS VALUE OF AGRICULTURAL PRODUCTION 2020/21, CENTRAL HIGHLAND REGION LOCAL GOVERNMENT AREAS³⁹

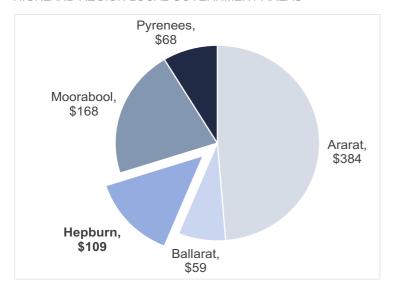


FIGURE 44: MAIN COMMODITY GROUPS BY GVAP, HEPBURN 2020/2139

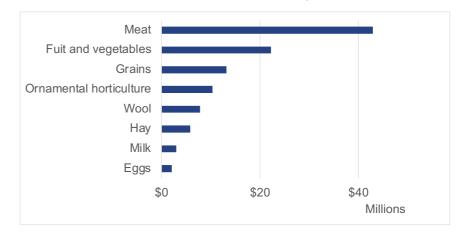
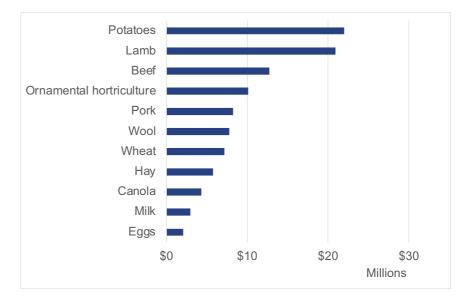


FIGURE 45: MAIN COMMODITIES BY GVAP, HEPBURN 2020/21³⁹



³⁹ Australian Bureau of Statistics Agricultural Census Survey. Data provided by Kynetec

FIGURE 46: TREND IN GROSS VALUE OF PRODUCTION, HEPBURN³⁹

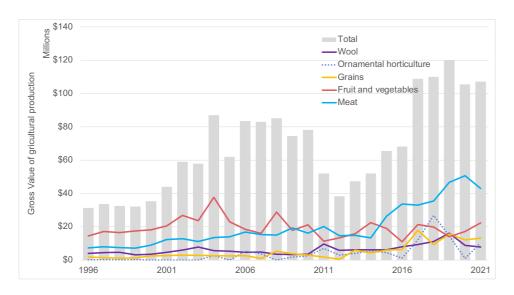


TABLE 22: GROSS VALUE OF AGRICULTURAL PRODUCTION/HA (THREE YEAR AVERAGE 2019 – 2021), HEPBURN³⁹

	Total GVAP	Total area of production (ha)	GVAP/ha
Livestock products	\$62.1m	38,000	\$1,650
Potatoes	\$17.7m	753	\$23,500
Broadacre crops	\$13.6m	10,500	\$1,300
Ornamental horticulture	\$8.5m	42	\$204,464
Hay	\$7.7	8,500	\$910

6.4 INDUSTRY ANALYSIS

LIVESTOCK

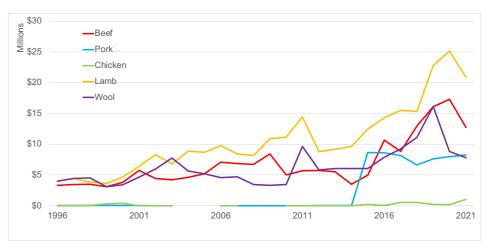
Meat and wool are the main livestock commodities produced in Hepburn, with a GVAP in 2020/21 of around \$43million and \$8million respectively. The main meat products are lamb and beef, while pork is an emerging meat industry (Figure 47). All industries have shown steady growth in GVAP. This can be attributed mainly to continued increase in

⁴⁰ https://www.mla.com.au/globalassets/mla-corporate/prices--markets/documents/trends--analysis/sheep-projections/july-2022 mla-australian-sheep-industry-projections-update 130722.pdf

beef, lamb and wool prices, as cattle and sheep populations have remained relatively steady or declined (Figure 48). The growth in the GVAP of pork can be attributed to a growth in pork production.

Livestock are processed outside the Shire at nearby facilities in Ararat and Kyneton or at facilities in outer-Melbourne. Most wool will be exported and processed overseas.

FIGURE 47: TREND IN LIVESTOCK GVAP, HEPBURN³⁹



Lamb and wool

In 2020/21, Hepburn produced 8% of the region's wool and 9% of the region's lamb. While the gross value of both wool and lamb have fluctuated over the last 25 years, there is an overall increasing trend, while at the same time, the sheep population and sheep producers has decreased. This further emphasises the point that growth in GVAP has been driven by buoyant meat and wool prices over the last decade.

This trend is consistent with national lamb and wool market which is experiencing a period of growth⁴⁰ after significant adjustment in the national sheep industry in the 1990s and 2000s. During the latter period the national flock size fell by a third and sheep farm numbers halved from the mid-1980's. Over the same period there was a gradual shift from wool to sheep meat production, particularly prime lambs⁴¹.

Most sheep enterprises are between 100ha and 500 ha in size (Figure 50). Farm numbers under 100ha, have remained steady since 2001, while the number of farms

⁴¹ Department of Economic Development, Jobs, Transport and Resources (2014) Sheep Industry Profile

between 100ha and 1000 ha has reduced, and the number of farms over 1,000ha has increased.

Most sheep enterprises have an estimated value of agricultural operations \$100k and \$500 (Figure 51) while most the most value is generated by sheep businesses in the \$500k to \$2million enterprise scale (Figure 52).

These trends are consistent with the national trends towards increased concentration of output, where a small number of larger enterprises produce the majority of the output, while small scale or niche farms, which make up a large majority of farms account for a small proportion of output⁴². This trend is driven by industry rationalisation in response to declining terms of trade and economies of increasing scale.

FIGURE 48: TREND IN LIVESTOCK NUMBERS. HEPBURN³⁹

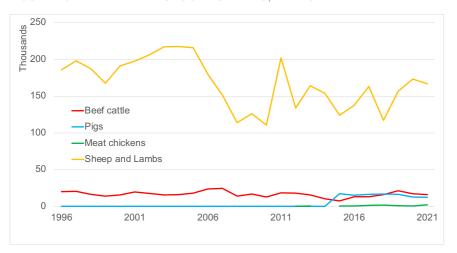


FIGURE 49: SHEEP MEAT AND WOOL TRENDS. HEPBURN³⁹

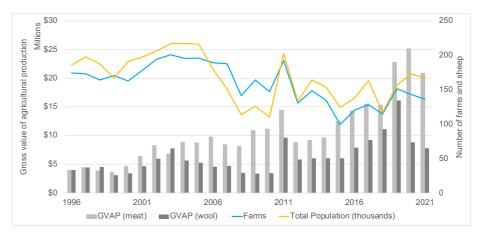
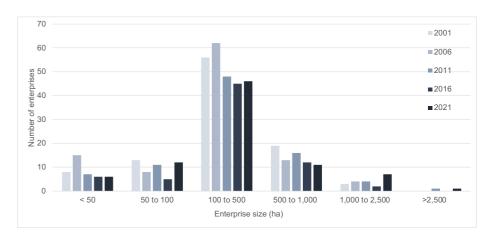


FIGURE 50: TREND IN LAMB/WOOL ENTERPRISE NUMBERS BY SIZE RANGE, HEPBURN³⁹



⁴² Productivity Commission (2005) Trends in Australian Agriculture

FIGURE 51: TREND IN LAMB/WOOL ENTERPRISE NUMBERS BY BUSINESS SIZE, HEPBURN³⁹

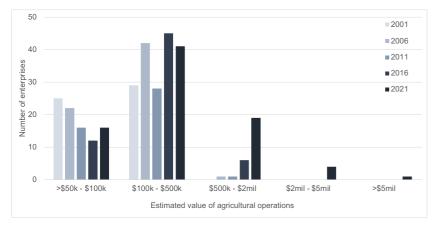
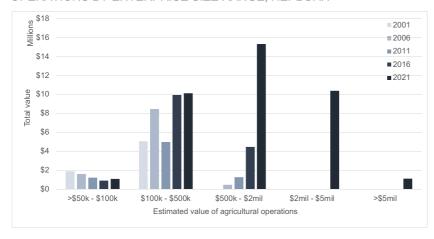


FIGURE 52: TREND IN TOTAL VALUE OF LAMB/WOOL AGRICULTURAL OPERATIONS BY ENTERPRISE SIZE RANGE, HEPBURN³⁹



Beef

In 2020/21, Hepburn produced beef cattle with a GVAP of around \$13million, which represents 25% of beef GVAP in Central Highlands region and 0.4% of state beef GVAP. GVAP from beef cattle has increased over time (Figure 53, while the population of beef cattle has decreased, and the number of beef enterprises has remained steady. This indicates that the increase in GVAP can be mostly attributed to recent buoyant beef prices. As for the sheep industry, this trend is consistent with the national industry trends. Most beef enterprises in Hepburn are between 100 and 500ha in size and there has been a trend towards larger enterprise sizes. Most farm enterprises generate less than \$500k value (Figure 53) while enterprises between \$100k and 500k make the greatest contribution to total value.

FIGURE 53: BEEF CATTLE TRENDS, HEPBURN³⁹

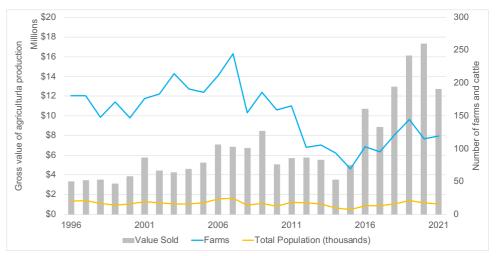


FIGURE 54: TREND IN BEEF ENTERPRISES NUMBERS BY SIZE RANGE, HEPBURN³⁹

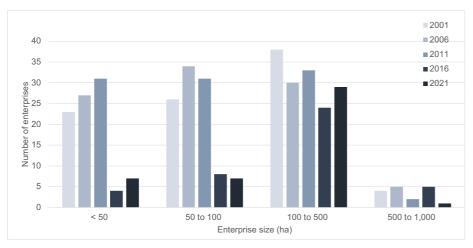


FIGURE 55: TREND IN BEEF ENTERPRISE NUMBERS BY BUSINESS SIZE, HEPBURN³⁹

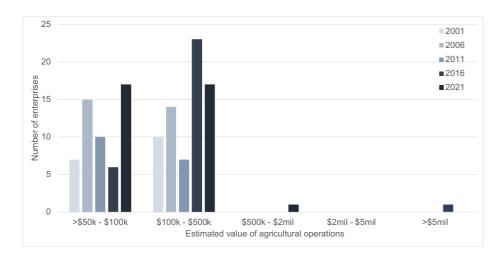
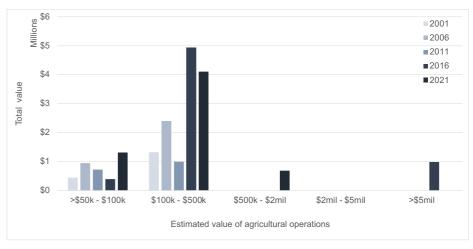


FIGURE 56: TREND IN TOTAL VALUE OF BEEF AGRICULTURAL OPERATIONS BY ENTERPRISE SIZE RANGE, HEPBURN³⁹



Pork, Chicken Meat and Eggs

Pork and chicken meat production have shown positive growth since 2016, though both industries are very small with just a handful of farms and just 2,000 birds and 12,000 pigs were slaughtered in 2021. Around 36,000 egg laying chickens produced close to 800,000 eggs in 2020/21.

Potatoes

In 2020/21 Hepburn produced around \$22million in gross value of potatoes, representing 55% of regional potato production and 15% of state potato production. The Ballarat region produced 42% of the state's potatoes in 2020/21. The gross value of potato production has fluctuated over time. The GVAP and the area sown to potatoes was highest in 2004. Since then, production and the total area sown has remained relatively steady at around 40,000 tonnes and 800 ha respectively. Potatoes in Hepburn are grown for both the fresh market and for processing (potato chips, French fries etc). Potatoes may be grown on consignment for major retailers and processors or sold via the wholesale market. Most farm businesses growing potatoes will also grow broadacre crops and/or graze livestock, as potato crops must be rotated to prevent build of soil-borne pathogens.

Most businesses growing potatoes are between 100 and 500ha in area (Figure 59) and an EVAO between \$500k and \$2million (Figure 60) and most value is generated by larger scale business (Figure 61).

FIGURE 57: POTATO PRODUCTION TRENDS, HEPBURN³⁹

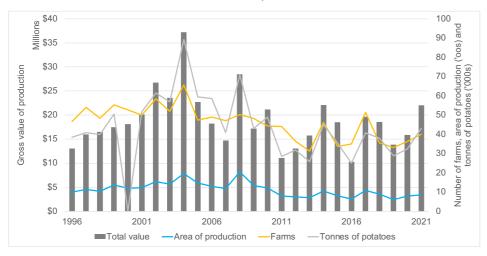


FIGURE 58: GVAP POTATOES BY MAIN POTATO PRODUCING LGAS, VICTORIA 2020/21³⁹

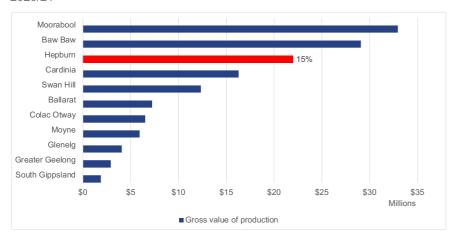


FIGURE 59: TREND IN POTATO ENTERPRISES NUMBERS BY SIZE RANGE, HEPBURN³⁹

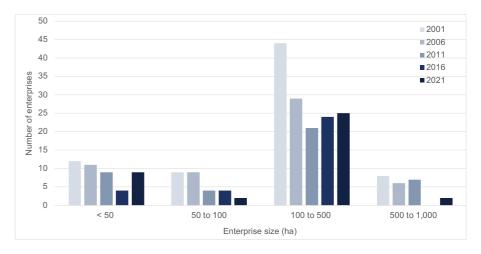


FIGURE 60: TREND IN POTATO ENTERPRISE NUMBERS BY BUSINESS SIZE.

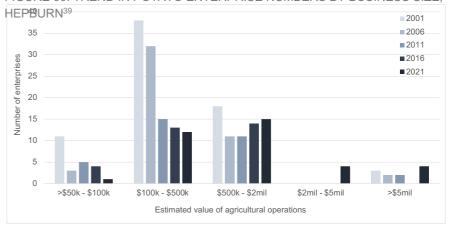
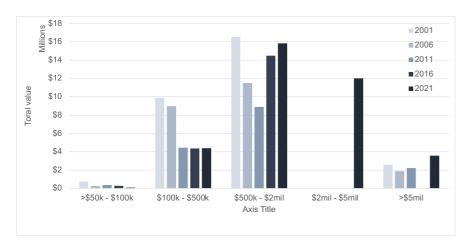


FIGURE 61: TREND IN TOTAL VALUE OF BEEF AGRICULTURAL OPERATIONS BY ENTERPRISE SIZE RANGE, HEPBURN³⁹



One of the largest potato processing facilities in Australia, McCain Foods Australia, is located in Ballarat and Hepburn potato growers supply potatoes on consignment for a range of value-added products. The majority of processing potatoes are procured by the major processors sourced on an annual contract basis, subject to yearly price negotiations. Processors prefer to negotiate with a small number of producers that produce large quantities of potatoes that meet their specific requirements.

Irrigation is critical to the profitable production of horticulture enterprises, as high yields are required to cover the high costs of production and the high price of land. As potato crops are grown as part of rotation with grain or pasture crops, irrigation systems need to be moved from paddock to paddock, both within and between years. Aerial application of fertilizer, and chemicals for disease and weed control, are commonly used in potato production as access by wheeled traffic is limited by wet soils during the growing season and the risk of damaging the soils and the crop.

The use of controlled traffic farming (crops are grown between permanent wheel tracks using specially designed equipment and GPS systems to map and align the permanent wheel tracks) is increasingly common in horticulture. Long row lengths with fewer turns improves the efficiency of this type of system.

Forestry

Timber harvesting was once an important local industry. Timber harvesting on public land in the Shire has now ceased⁴³ and there is minimal timber harvesting on private land in the State⁴⁴.

6.5 ARTISAN AGRICULTURE

There is a vibrant group of agricultural businesses in Hepburn Shire, that while part of the agricultural industry, due to the scale of operation or the type of enterprise, may not be included in the ABS Agricultural Census. For example, artisan agricultural enterprises may include:

- Enterprises that sell smaller volumes of niche commodities or specialised value added products to local retailers and restaurants or through farmers markets and online sales.
- Enterprises with a gross value of operations less than \$40,000/annum that are not included in the agricultural census.

Artisan agriculture businesses are often closely connected to the Shire's tourism industry and are recognised in destination branding and marketing. Tourism experiences include farm management or cooking classes, accommodation or events such as food and wine festivals and farmers markets.

6.6 AGRICULTURAL INFRASTRUCTURE

VALUE CHAIN

In addition to McCain Foods, other food processors in the region include Istra Smallgoods in Musk, who produce a range of pork-based smallgoods supplying retail outlets across Victoria, Unigrain in Smeaton manufactures oat cereal, pulse based and animal nutrition products. There are also engineering, freight and logistics, farm input suppliers and services that specialise in agricultural business such as agronomists, veterinarians, bankers, accountants and insurance brokers, electricians, plumbers and irrigation specialists that are part of the regional agricultural value chain. These industries generate economic output as well as employment opportunities in Hepburn and the wider region.

⁴³ https://www.vicforests.com.au/operations/timber-harvesting-safety

⁴⁴ Victoria Auditor General (2013) Managing Victoria's Native Forest Timber Resources

6.7 ISSUES AND OPPORTUNITIES

LAND USE CONFLICT

Management of agricultural businesses takes various forms in Hepburn Shire including traditional farming approaches, as well as regenerative farming, artisanal agriculture organic and biodynamic farming. These approaches are applied in both commercial and sub-commercial situations and on large and small farms. Farm management practices are generally not are consideration of planning policy. However, an underlying principle of planning is avoiding land use conflict, including land use conflict between agricultural enterprises. Land use conflict between agricultural enterprises may include:

- Contamination of organic crops, produce or pastures via spray drift or livestock trespass from neighbouring conventional agricultural enterprises or urban and rural residential gardens. Contamination may result in loss of organic certification can take many years and considerable cost to achieve and retain.
- Drift of sprays onto other susceptible crops e.g. herbicides used in broadacre cropping may kill or severely damage nearby horticultural crops.
- Genetic livestock from trespassing livestock.

While preventing off site impacts such as spray drift, excessive noise and odour are all required under various legislative instruments and local laws, the very nature of agriculture means that inadvertent off site impacts may occur. It is important therefore that individual farms, as well as agricultural precincts, have sufficient buffer to minimise the risk of agricultural practices impacting neighbours.

More familiar are land use conflict between agriculture and residential uses such as:

- Agricultural operations impacting amenity of neighbours (air quality, noise, visual amenity).
- Harassment of livestock from straying domestic animals.
- Trespass.
- Spread of pest plants and animals from gardens or poorly managed rural lifestyle properties.

Land use conflict has immediate economic and social impacts on individuals including loss of production, stress and anxiety. Longer term, land use conflict can have wider impacts such as alienation of productive agricultural land and fracture within a community.

Council officer reported that there a number of agricultural businesses operating in the RLZ. Operating an agricultural enterprise in the RLZ requires a planning permit. It is possible that these enterprises may have commenced as domestic activities providing

the household with produce, and over time grown to become agricultural businesses. There is potential for these businesses to impact neighbours or for neighbours to be impacted by agricultural operations and introduce land use conflict.

Hepburn Shire is a diverse community with wide ranging views and expectations on use of rural land and how it should be managed. Planning has an important role to play in ensuring that sensitive uses do not encroach agricultural businesses such that they are not able to able to conduct 'normal' acceptable agricultural practices.

FARM SCALE

A key challenge for Council officers is assessing applications for new farm dwellings given the diversity of business types and farm scales in Hepburn Shire. Council officers must assess planning permits for new dwellings on farms below the minimum lot size able which a planning permit is not required. In Hepburn Shire the minimum lot size threshold is 40ha or 20ha. However, minimum lot size is not an indicator of farm scale.

Some farms are able to generate significant gross value from a relatively small area with the converse also true. Just because an agricultural business is small-scale (measured by turnover or area) does not mean that it is not subject to the same forces and requirements faced by the larger scale agricultural businesses including:

- declining terms of trade (i.e. prices received for commodities reduces over time while costs of production rise).
- regulatory and quality assurance requirements.
- ongoing knowledge and skill development (technical and business).
- business and climate risks.
- satisfying changing consumer preferences and expectations.

Examples of the variation between commodity groups and farm scale are discussed here. Currently, farm business analysis identifies \$500,000 gross sales per annum as the *minimum* annual turnover for a business to provide an environment conducive to growth (i.e. provide disposable income and funds to re-invest in the business. On average most primary producers will have a profit margin of approximately 10% of gross sales (equating to \$50,000 profit per annum). Some producers who have more efficient management practices may be able to increase this to 20%.

Estimates of the minimum area required to generate \$500,000 gross sales can be estimated for a range of enterprises based on average income per hectare (Table 23). Note that most farms require additional land to provide for a diversity and rotation of crops and out paddocks for dry dairy stock for example.

This indicates that high value horticultural crops can generate sufficient income from a relatively small area to support a family and provide for business growth. By comparison, livestock grazing and broadacre cropping will require considerably more land to achieve the same outcome.

This would suggest that a 'viable' farm could be conducted on a lot less than 20ha if it was a horticultural enterprise. However, this would also be contingent on high quality soils and access to a water supply for irrigation.

TABLE 23: ENTERPRISE SCALE COMPARISON*

Enterprise	Average income/ha*	Minimum area (ha) to generate \$500k
Lettuce	\$68,000	7
Zucchini	\$28,000	18
Apples	\$41,000	12
Stone fruit	\$50,000	10
Dairy	\$7,000	71
Livestock grazing	\$800	630
Broadacre cropping	\$900	560

*Note: These statistics represent a snapshot in time and are average figures only. There will be individual cases where income per hectare differs from these figures and where a viable farm generates more or less than \$500,000 gross sales. Note also that income/ha is dependent on a range of factors, which may vary significantly between any season and any farm. It does not necessarily equate to profit. This has been collected from a range of industry sources including ABARES, ABS, Dairy Monitor, Livestock Monitor, NSW DPI, AUSVEG, RMCG pers comms)

AGRICULTURAL TRENDS

Declining terms of trade and economies of scale are key drivers of agricultural trends. Declining terms of trade requires businesses to continually seek productivity improvements to maintain viability. Some farms may increasingly rely on off farm income to offset reducing levels of farm income and the time dedicated to the agricultural business, including labour, marketing, administration, training etc. competes with off-farm employment.

Businesses that rely predominantly on the agricultural enterprise for income will seek productivity improvements by increasing farm scale and/or increasing farm output and/or increasing production efficiency in order to capture economies of scale available to larger farm business. Farm scale can be increased by buying or leasing more land. Farm output can be increased by increasing production of commodities through new or improved genetics, increasing inputs (fertiliser, water, pest control etc.), new technology, intensification of production.

The response by the agricultural industry to these trends leads to structural adjustment resulting in:

- Fewer farms.
- Increase in average farm size.
- Increase average farm business size.
- While there are still many small farms, most production is concentrated on large farms.

These trends were evident in the analysis of Hepburn Shire's agricultural industry. Other trends include a shift to intensive farming and greater integration of production along the agri-food chain. Some farm businesses conduct their own freight and logistics operations, on-farm processing and packaging, marketing and export.

These trends are consistent with the findings of the Planning for Melbourne's green wedges and peri urban region Consultation Paper⁴⁹ and land use trends in the peri region including:

- Fewer and larger farms.
- Increased concentration of farm output.
- More intensive farming techniques.
- Closer integration of agri-food chain.
- Competing land uses.
- High levels of land use conflict.
- Increased land speculation.
- High land prices.
- Limits to farm expansion.

These trends should be considered in the formulation of planning policy and ensuring there is support for agricultural businesses to respond to declining terms of trade, reap the benefits of economies of scale, to continue to innovate and adopt new technology. Planning policy can do this by clearly identifying where agriculture will be the predominant land use and ensuring decision making maintains and supports this position including:

- Avoiding fragmentation and ensuring there is a supply of suitable, vacant land.
- Avoiding development and uses that encourage land banking or inflation of land values above its agricultural value and discourage investment in agricultural enterprises.
- Facilitating investment in adoption of new technology and farm processing and value adding.

AGRICULTURAL VALUE ADDING AND TOURISM

Agricultural tourism and value adding to agricultural produce is already established in Hepburn Shire and includes selling primary produce or processed products through road-side sale and cellar doors, pick your own and online direct sales. Accommodation or dining in conjunction with and agricultural business such as farm stays and farm to table dining are also opportunities to value add to primary production.

The Hepburn Planning Scheme Review⁴ noted however, that the tourism offer in the municipality is inextricably linked to the landscape, heritage, environment and rural produce. Ensuring that this link between each is well understood and that it is important to ensure these aspects are protected, i.e. tourism development should not occur at the expense of the very values that are the foundation of the tourism industry. The Review goes on to state that ensuring retail activities associated with agriculture are located within townships is essential to ensuring that retail areas in towns remain viable and that there are opportunities to capture tourist dollars. Further guidance is required on the types of tourism activities that should be provided in the FZ and those that are more to appropriate settlements.

Value adding and direct sales are a means to increase farm productivity, enable producers to retain control of the marketing, sale and presentation of their products and producers are often able to attract premium prices. Developing and operating an agricultural value add and tourism enterprise requires additional skills and facilities to those required for primary production. Things to consider include providing adequate public facilities, maintaining a safe and accessible environment, out of hours operations (evenings, weekends, public holidays and school holidays) and regulatory requirements.

6.8 AGRICULTURAL BUSINESS CONSULTATION

Interviews were conducted with agricultural businesses to understand the issues and drivers impacting current operation and management as well as future goals and decision making. Interviews were conducted via Teams or phone and included representatives of the potato industry, livestock grazing, cropping and artisan agriculture. A summary of the interview findings is provided here.

Artisan enterprises are operating on relatively small areas (<5ha) in the FZ as well
as the RLZ. A planning permit is required for agriculture in the RLZ, and some
enterprises are currently operated without a permit as the businesses has
evolved/grown over time.

- Diversification of products and market channels is important to manage risks and resilience of an artisan agriculture business.
- Leasing land is a common point of entry for new artisan agriculture farmers and also for expansion of a farm enterprise.
- A survey of growers for the Artisan Agriculture Project⁴⁵ noted the following:
 - Most businesses are not generating a liveable wage and rely to varying degrees on off farm income; with around 42% of growers source less than 20% of income off farm and around 25% source more than 80% of income off farm.
 - less than 20% have an annual turnover greater than \$300,000. Most produce is sold via local retailer, farmers markets, online, direct to restaurants and at the farm gate.
 - Constraints to growth in decreasing order of constraint included:
 - Increased costs and planning restrictions.
 - Limited access to finance and government grants.
 - Scale inappropriate food regulatory requirements.
 - Competing land use desires and needs of neighbours.
 - Difficulty accessing food processing services e.g. commercial kitchen, boning room, fairies and abattoirs.
- Break up farm holdings leading to land not being used productively but for lifestyle or sub-commercial agricultural (hobby) farming and leasing to:
 - Reduction in critical mass of farmers. Fewer farming businesses, reduced peers and associates in the industry.
 - Change in neighbourhood demographic making implementation of land management programs more challenging.
- Increase in rural lifestyle in agricultural areas leading to land use conflict between neighbours including
 - Upset/disturbance of lambs by well-intentioned neighbours
 - Domestic dog attacks
 - Poor fire etiquette lighting fires on risky days (maybe not total fire ban days)
 - Increasing risk of moving large machinery and livestock on local roads.

⁴⁵ Hepburn Shire (2021) Artisan Agriculture Project: Pulse survey results 2020-21

- High cost of agricultural land makes it difficult to enter farming and to grow an enterprise.
- Development of irrigation bores to water rural gardens and lawns is considered a risk to irrigation water security.
- Lack of understanding in Council regarding the need for and assessment requirements for planning permits for development ancillary to agriculture e.g. for cool stores, commercial kitchens.
- Increasing farm scale in the potato industry is being driven by industry QA and requirements of McCain's Regenerative Agriculture Framework and need for longer rotations.
- Land leasing is an option for potato grower, though 8ha is the minimum with ~16ha optimum size to accommodate the machinery and make it operationally and economically worthwhile. Land must also have access to water so usually land is leased from other full time farmers, not lifestyle properties.
- Farm business costs are always rising (water, fees, rates etc) and need to increase
 margins to absorb the increases. Efficiencies are being achieved through technical
 upgrades such as use of drones, optical sorters, etc, however, need scale to match
 the capital expenditure.
- As size of machinery increases, road infrastructure is not keeping up e.g. B-doubles may require permits and some roads are not suitable. Moving farm machinery through local towns is a risk.
- Small scale farms are great for tourism and provide diversity.
- Land use conflict issues can arise:
 - Crop disease from neighbouring organic farmers
 - Use of aerial devices.
- Illegal occupation of rural lots e.g. shipping containers, caravans, and associated waste and trespass issues.
- Impact of dwellings at the urban/rural interface and increased risk of land use conflict.

Opportunities for improvement identified by interviewees include:

- Farm land kept for genuine agricultural purposes.
- Improved understanding within Council regarding the need for and assessment requirements for planning permits for development ancillary to agriculture e.g. for cool stores, commercial kitchens.
- Council advocacy role to reduce land use conflict
- Tighten up on subdivision, particularly good quality agricultural land

- Provide directions as to where and when agri-tourism is appropriate
- Sees renovation and conversion of old farm buildings as agri-tourism opportunities rather than more new buildings
- Changes to building heights under proposed SLO. Increasing height of shed on a smaller footprint is cheaper than having a large footprint on a lower height shed.
 Agrees that large sheds should be set back from road.
- Agent of change principle should apply to buffers and setbacks between ag and new development around towns and new RLZ areas.

6.9 KEY FINDINGS

There is strong strategic and policy support for food and fire industries and protection of agricultural land and the ongoing operation of agricultural enterprises. Strategies for support and protection of agriculture include:

- Minimise further subdivision that would create more lots or smaller lots that currently provided for in the planning scheme in the FZ.
- Minimise subdivision in the FZ that results in creation of a lot for an existing dwelling that is smaller than the minimum lot size.
- Minimise new dwellings in the FZ.
- Delineate areas with potential for future growth in irrigated agriculture.
- Identify and protect areas with secure water resources for agricultural uses.
- Provide certainty that these areas will continue as key agricultural areas into the future.
- Limit non-farming and incompatible uses that would restrict ongoing productive use of land for agricultural purposes.
- Protect buffers of identified areas from encroaching sensitive uses such as dwellings to ensure agricultural activities continue without restrictions.

Agriculture in Hepburn makes a significant contribution to the local, regional economy and state and experienced strong growth between 2016 and 2021, driven by buoyant livestock prices. By value of production, the top commodities in 2021 were potatoes, lamb and beef. In the last five years, production of grains and ornamental horticulture have shown positive growth.

There is a diversity of farm enterprises in Hepburn with respect to the management practices and the scale of production. Management practices include traditional production methods as well as farming operated using regenerative, organic or biodynamic principles. Artisan agriculture, which includes small farm businesses that sell primary produce and secondary products through local networks, direct to customers and online has a strong presence in Hepburn and is important attraction for visitors to the shire.

Agricultural tourism and value adding to agricultural produce is well established in Hepburn particularly for smaller scale farm enterprises. Agricultural tourism such as farm stays value adding such as direct sales of fresh and processed foods, enables producers to increase farm productivity and attract premium farm prices.

Most broadacre livestock and potato enterprises and between 100ha and 500ha in size, noting that potato production is generally grown in rotation with other enterprises such as livestock grazing or grain production. There are clear trends in increasing scale, both in

terms of property size and business size across agricultural industries and concentration of farm output with most value of production generated by large scale enterprises.

Hepburn's potato industry is part of a regional industry producing potatoes for the fresh and processing markets, including McCain Foods in Ballarat, one of the largest potato processing businesses in Australia. In 2020/21 Hepburn produced around \$22million in gross value of potatoes, representing 55% of regional potato production and 15% of state potato production. The Ballarat region produced 42% of the state's potatoes in 2020/21. The rich volcanic soils and reliable groundwater supply found in Hepburn enable the production of potatoes.

Issues

- Increasing diversity of farm operations and farm scales.
- Adoption of new technology for efficiency or productivity gains e.g. aerial spray, controlled traffic cropping
- Potential for land use conflict between farm enterprises and between farm enterprises and non-agricultural land uses.
- Proliferation of non-agricultural development.

Opportunities

- High quality agricultural soils with access to irrigation water.
- Value adding to primary produce and linking to the tourism industry.
- On-farm tourism experiences.

Potential strategy response

- Tailor policy to reflect the trends and diversity of farm scales, agricultural operations and land capability.
- Policy guidance on the types of value adding and tourism uses appropriate for the FZ.
- Consider the analysis of agricultural industries in identification of farmland of strategic significance.
- Review RLZ areas where agriculture is a widespread activity and assess need for further policy guidance or alternative zoning.

7 Agricultural land

7.1 STRATEGIC CONTEXT

Plan Melbourne Strategy⁴⁶

The eastern portion of Hepburn Shire falls within the peri-urban region of Metropolitan Melbourne and Plan Melbourne strategic directions are therefore relevant. With regard agricultural land, the Plan states that planning for peri-urban areas should:

- Define and protect areas that are strategically important to the metropolitan area and the state, for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
- Protect agricultural land from incompatible uses, maintain farm size, promote the continuation of farming and provide a secure long-term future for productive and sustainable agriculture.

Action 17 of the **Implementation Plan**⁴⁷ seeks to improve planning decision-making to support sustainable agriculture by identifying areas of strategic agricultural land in Melbourne's green wedges and peri-urban areas. This action, **Planning for Melbourne's Green Wedges and Agricultural Land**⁴⁸, included an assessment of agricultural land capability⁴⁹. Land within Classes 1, 2 and 3 was considered to be indicative of land candidate for designation as Strategic Agricultural Land.

Central Highlands Regional Growth Plan

The Central Highlands seeks to support agriculture and recognises productive agricultural land, as an important source of economic wealth with considerable potential for further investment. With regard agricultural land, the Plan provides the following directions:

Recognise the Central Highland region's regionally significant rural and agricultural
assets in land use planning, including the areas of highly productive and versatile
soils within Moorabool, Ballarat and Hepburn, the Bacchus Marsh Irrigation District
and the Pyrenees wine region.

- Review planning schemes to recognise the need to support investment in agriculture by providing more clarity about the long-term designation of land for primary production.
- Undertake further investigations into the region's strategic agricultural land assets to ensure a consistent approach across the region.
- Identify important agricultural areas and the need to protect them in planning schemes from unplanned loss due to permanent changes of land use.

Amendment C80

The Amendment C80 Planning Panel report recommended that a minimum lot size of 40 hectares be applied to land in Area 3 of the current Farming Zone Schedule on the basis that it was incongruous with other policy objectives relating to productive agricultural land, water catchments and biodiversity values.

7.2 POLICY CONTEXT

Clause 02.04 Strategic framework identifies high and very high agricultural land (Figure 62).

Clause 02.03-5 Natural resource management

The rural areas of the municipality form part of Melbourne's hinterland. Careful planning is required to maintain rural and agricultural land uses and to prevent unrelated housing and other urban development negatively impacting upon or reducing this resource.

The Shire's high quality agricultural land is part of a region supplying important horticulture including vegetables, vines, seeds and notably potatoes. Emerging rural industries include locally sourced produce, value added food manufacturing and related products and rural tourism.

In order to maintain the economic and social value of the municipality's rural land, the productivity and versatility of agricultural land needs protection. Landscape and environmental values also form a significant part of the value and character of rural areas.

Council's strategic directions for agricultural land are to:

⁴⁶ https://planmelbourne.vic.gov.au/the-plan

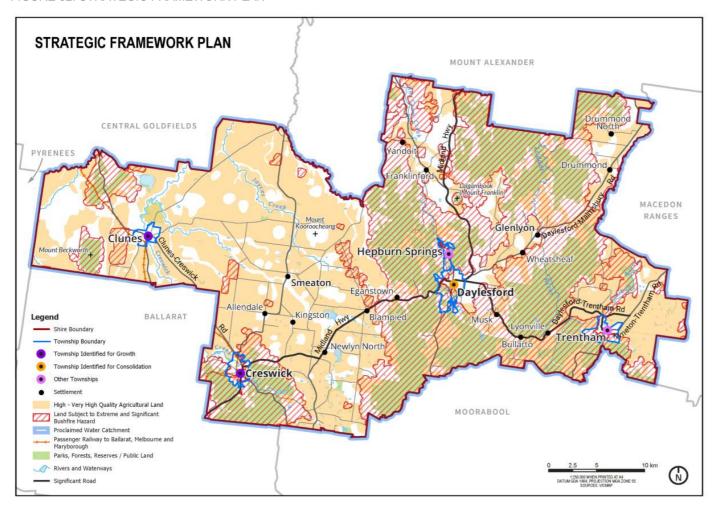
⁴⁷ https://www.planmelbourne.vic.gov.au/implementation

⁴⁸ https://engage.vic.gov.au/gwal

⁴⁹ Agriculture Victoria (2018) Assessment of Agricultural Land Capability in Melbourne's Green Wedge and Peri-Urban Areas

- Protect high quality productive agricultural land for agricultural uses over the long term.
- Protect rural land for agricultural uses and compatible rural uses.
- Support the evolution of agriculture in response to improved practices and climate change.

FIGURE 62: STRATEGIC FRAMEWORK PLAN⁵⁰



 $^{^{50}}$ Mapping of high and very high quality agricultural land was sourced from EnPlan (2007) Strategic Assessment of Agricultural Quality of the Rural Lands in Hepburn Shire

Clause 02.03-7 Economic development notes that Hepburn Shire is a *significant* agricultural region and part of Melbourne's food bowl and fragmentation of agricultural land through unmanaged subdivision and housing in rural areas has the potential to undermine established rural uses and must be carefully planned to maintain the long-term productivity of rural land. Rural living development not associated with agricultural enterprises needs to be directed around established townships and settlements. The clause includes the following strategic direction for agricultural land:

 Maintain and protect agricultural land by avoiding fragmentation and commercial uses that may lead to loss of, or limitations for, production.

Clause 14.01-1S Protection of agricultural land

Protect the state's agricultural base by preserving productive farmland by:

- Identify areas of productive agricultural land, including land for primary production and intensive agriculture.
- Consider state, regional and local, issues and characteristics when assessing agricultural quality and productivity.
- Avoid permanent removal of productive agricultural land from the state's agricultural base without consideration of the economic importance of the land for the agricultural production and processing sectors.
- Protect productive farmland that is of strategic significance in the local or regional context. Protect productive agricultural land from unplanned loss due to permanent changes in land use. Prevent inappropriately dispersed urban activities in rural areas.
 - Protect strategically important agricultural and primary production land from incompatible uses. Limit new housing development in rural areas by:
 - Directing housing growth into existing settlements.
 - Discouraging development of isolated small lots in the rural zones from use for dwellings or other incompatible uses.
 - Encouraging consolidation of existing isolated small lots in rural zones.
 - Identify areas of productive agricultural land by consulting with the Department of Economic Development, Jobs, Transport and Resources and using available information.
 - In considering a proposal to use, subdivide or develop agricultural land, consider the:
 - Desirability and impacts of removing the land from primary production, given its agricultural productivity.

- Impacts on the continuation of primary production on adjacent land, with particular regard to land values and the viability of infrastructure for such production.
- Compatibility between the proposed or likely development and the existing use of the surrounding land.
- The potential impacts of land use and development on the spread of plant and animal pests from areas of known infestation into agricultural areas.
- Land capability.
- Avoid the subdivision of productive agricultural land from diminishing the long-term productive capacity of the land.
- Give priority to the re-structure of inappropriate subdivisions where they exist on productive agricultural land.
- Balance the potential off-site effects of a use or development proposal (such as degradation of soil or water quality and land salinisation) against the benefits of the proposal.

Clause 14.01-1S Protection of agricultural land seeks to protect the state's agricultural base by preserving productive farmland by:

- Identify areas of productive agricultural land, including land for primary production and intensive agriculture.
- Consider state, regional and local, issues and characteristics when assessing agricultural quality and productivity.
- Avoid permanent removal of productive agricultural land from the state's agricultural base without consideration of the economic importance of the land for the agricultural production and processing sectors.
- Protect productive farmland that is of strategic significance in the local or regional context. Protect productive agricultural land from unplanned loss due to permanent changes in land use. Prevent inappropriately dispersed urban activities in rural areas.
- Protect strategically important agricultural and primary production land from incompatible uses. Limit new housing development in rural areas by:
 - Directing housing growth into existing settlements.
 - Discouraging development of isolated small lots in the rural zones from use for dwellings or other incompatible uses.
 - Encouraging consolidation of existing isolated small lots in rural zones.

- Identify areas of productive agricultural land by consulting with the Department of Economic Development, Jobs, Transport and Resources and using available information.
- In considering a proposal to use, subdivide or develop agricultural land, consider the:
 - Desirability and impacts of removing the land from primary production, given its agricultural productivity.
 - Impacts on the continuation of primary production on adjacent land, with particular regard to land values and the viability of infrastructure for such production.
 - Compatibility between the proposed or likely development and the existing use of the surrounding land.
 - The potential impacts of land use and development on the spread of plant and animal pests from areas of known infestation into agricultural areas.
 - Land capability.
- Avoid the subdivision of productive agricultural land from diminishing the long-term productive capacity of the land.
- Give priority to the re-structure of inappropriate subdivisions where they exist on productive agricultural land.
- Balance the potential off-site effects of a use or development proposal (such as degradation of soil or water quality and land salinisation) against the benefits of the proposal.

Clause 14.01-1L Protection of agricultural land seeks to protect the Shire's high quality productive agricultural land within the FZ, RCZ and RLZ from the encroachment of incompatible use and development by:

- Retain existing Farming Zone land and discourage land fragmentation from residential use and development.
- Prevent the subdivision of land for a new dwelling on rural land that does not meet the minimum subdivision area of the relevant rural zone.
- Prevent the subdivision of lots that will result in a concentration of lots smaller than the minimum subdivision size of the relevant rural zone.
- Encourage small lot agriculture and hobby farms to locate in the Rural Living Zone
- Prevent the subdivision of tenements in single ownership and encourage the consolidation of lots. Allow a dwelling on a rural lot that either:
- Meets the minimum subdivision area of the relevant rural zone. Is directly associated with a rural enterprise where:

- Agricultural production will be maximised.
- The land has low agricultural value.
- There will be no loss of productive agricultural land.
- Native vegetation will be retained and managed.
- Ensure if a new dwelling is approved that:
 - A separation distance and landscape screening are provided around the dwelling.
 - The building height, scale, setback and bulk responds positively to the landscape values, cultural heritage values and characteristics of the rural area.
 - It continues to operate in a habitable condition and meet the requirements of the Building Code of Australia.
- Minimise the adverse impacts that a new dwelling, accommodation use, or subdivision may have upon water quality and quantity, native vegetation and biodiversity and the productivity and operation of agricultural land.
- Restructure inappropriate subdivisions that adversely affect productive agricultural land, biodiversity or natural hazard areas.

Clause 35.07 Farming Zone

The Farming Zone (FZ) is the main zone for rural land in the Hepburn Planning Scheme and aims to encourage retention of productive agricultural land and discourage uses that may have adverse impacts on agriculture. The FZ covers nearly 100,000ha or 67% of the total Shire area. There are two schedules to the FZ. FZ1 requires a minimum subdivision area of 40ha and a minimum area of 40 ha above which no planning permit is required for a dwelling. FZ2 requires a minimum subdivision area of 20ha and a minimum area of 20 ha above which no planning permit is required for a dwelling. The 1999 Hepburn Shire Land Use Strategy provides the strategic basis for the two FZ schedules:

In various areas of Hepburn Shire significantly different rural land and agricultural situations exist. To recognise this, Council should consider the application of at least two subdivision sizes. It is recommended that Council use the larger 40ha subdivision size in the predominantly grazing areas of the west of the Shire and another more flexible minimum size down to 20ha, in areas according to land capability assessment and criteria that have a greater potential for diversity of horticultural activities.

7.3 PRODUCTIVE AGRICULTURAL LAND

Planning Practice Note 42: Applying the rural zones provides the following defines productive agricultural land generally as having one or more of the following characteristics:

- suitable soil type
- suitable climatic conditions
- suitable agricultural infrastructure, in particular irrigation and drainage systems
- a present pattern of subdivision favourable for sustainable agricultural production.

The practice notes states:

Productive agricultural land should be clearly identified and protected in the planning scheme. If the protection and retention of this land for agricultural production is of primary strategic importance, then it should be included in the Farming Zone.

High quality productive agricultural land is defined at **Clause 73.01** of the Hepburn Planning Scheme as:

Land, which is used for animal husbandry or crop raising, and is capable of continuing to sustain agricultural production, and:

- is of prime, or very good, agricultural quality, having regard to soil type, growing season, and availability of infrastructure, and is of sufficient extent to support agricultural activities on an economically viable scale; or
- has been identified through a regional, sub-regional, or local study as being
 of particularly good quality and strategic significance for agriculture in the
 regional or local context.

LAND CAPABILITY

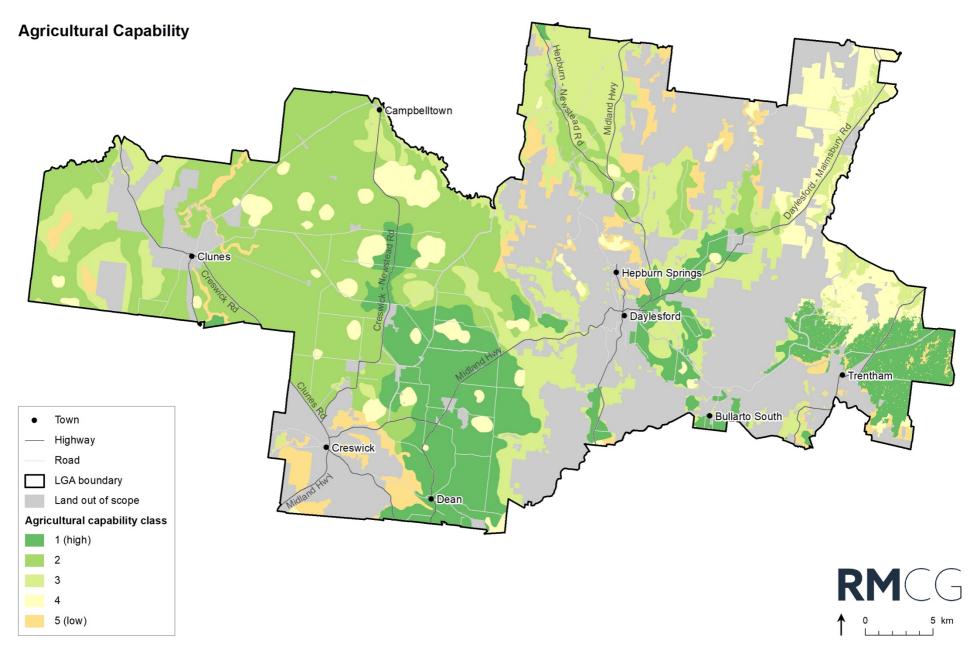
An assessment of the agricultural quality of land in Hepburn Shire was undertaken in 2007⁶. The assessment of was based on an evaluation of agricultural quality, primarily soil type and estimation of the agricultural productivity and versatility ratings of established geomorphic land units. Table 24 provides a description of each of agricultural quality class. A digital version of the agricultural quality map is not available. To enable spatial analysis of land for this project, a digital map was prepared using spatial mapping of geomorphic units and cross-referencing this with the 2007 assessment as well as soil description from land systems maps⁵¹ (Figure 63).

TABLE 24:: DESCRIPTION OF AGRICULTURAL QUALITY CLASSES

Class	Description
Class 1 – very high	Agriculturally and horticulturally versatile land, with high inherent productive potential through possessing well-structured deep permeable and fertile soils, a flat to undulating landscape, good drainage. High to very high productivity (e.g.: 16dse/ha+) and versatility. Land suited to a wide range of agricultural activities at high levels of productivity with standard management techniques and skills and a growing season of up to 10 months. Irrigation water is generally available to extend the season, the range of enterprises and productivity.
Class 2 - high	The few limitations to cropping and grazing production are readily overcome by available management practices. Requires a higher level of inputs to achieve the same productivity as Class one. Usually high productivity (e.g.: 13dse/ha+) and low to high versatility. Ranges from very good grazing, dairying and /or cropping country, to land of moderate productivity unsuitable for cropping. Using raised bed technology productive cropping is possible. Slope is greater, soils more variable, imperfectly to easily drained, the growing season may be up to 10 months. Where irrigation water becomes available to extend the season, range of enterprises and productivity, affected areas can be highly productive and versatile.
Class 3 – Average	Usually average to higher productivity (to 11dse/ha) and low to average versatility. Can sustain grazing and crop production. Cropping requires the use of no-till practices to prevent erosion, maintain soil structure and raised beds for drainage. Fertility levels are moderate to low, growing season is up to 9 months. With high inputs, high productivity levels may be achieved. Irrigation water is unavailable.
Class 4 – low	Low capacity to resist land disturbance such as cultivation without eroding. Capable of supporting moderate to low stocking rates and unsuited to cropping. Usually low to average productivity (6 to 8dse/ha) and low versatility. The length of growing season is up to 8 months. Slopes are moderate to steep, with shallow infertile soils, often of low permeability, which need care in their management. Fertility levels are generally low. Erosion hazard is high. Irrigation water is unavailable.
Class 5 – very low	Areas of low productive capacity with very low capability to resist disturbance without eroding. Length of growing season is less than 7 months and non-agricultural uses are recommended. Very low productivity (to 3dse/ha) and versatility. Includes land unsuited to agriculture and marginal grazing country. Constraints are steepness of slope, shallow, sandy, or rocky soils, high erosion susceptibility and/or poor drainage. Environmental stability may be best achieved through revegetation or forestry. Irrigation water is unavailable.

⁵¹ A study of Land in the Campaspe River Catchment (1987) Conservation Forests and Lands, and A Land Inventory of the Loddon Catchment (1988) Conservation Forests and Lands

FIGURE 63: AGRICULTURAL CAPABILITY



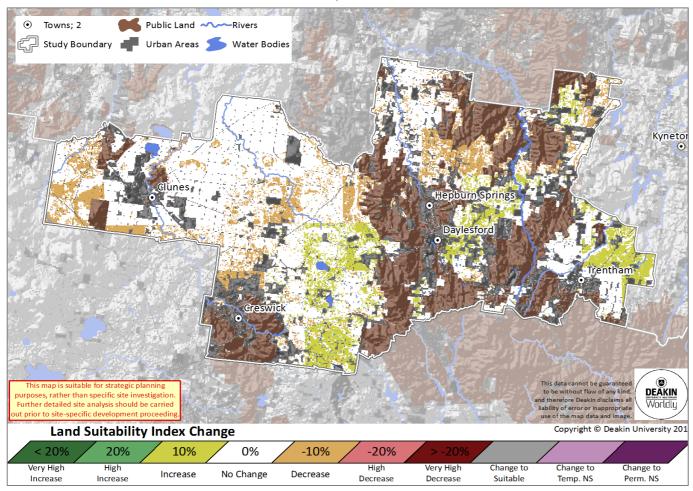
CLIMATE

The review of rural land use and the impact of the future climate on agricultural versatility by CERRF²¹ provides the following summary of the Hepburn climate.

The current climate of Hepburn, based on historical climate normal 1961 – 1990), ranges from between 13°C-14°C along its northern boundaries and between 10°C-12°C along the south eastern border, south and east of Daylesford. From the baseline (historical) period, average annual mean temperature is projected to increase by 2.3°C from 12.2°C

historically (1961 – 1990) to 14.5°C in 2050 under a high emissions pathway. Rainfall in Hepburn could decrease from the baseline period, roughly 712mm total annual rainfall, by approximately 20mm in 2050 with a shift in seasonal variance evident by 2050 also, from February to March being the driest month. The report concluded that extensive areas of the Shire will experience no change in agricultural versatility as a result of the forecast change to the climate change, areas to the south and east will experience a 10% increase in versality, while areas to the north and west will experience a 10% decline in versatility.

FIGURE 64: AGRICULTURAL LAND VERSATILITY CHANGE (HISTORICAL CLIMATE 1961-1990 TO 2050 RCP 8.5 HIGH EMISSIONS PATHWAY)²¹



INFRASTRUCTURE

There has been extensive groundwater development for irrigation and stock and domestic purposes. Irrigation bores are the primary source of irrigation water for potato production. Stock and domestic bores are licensed for small volumes for watering stock

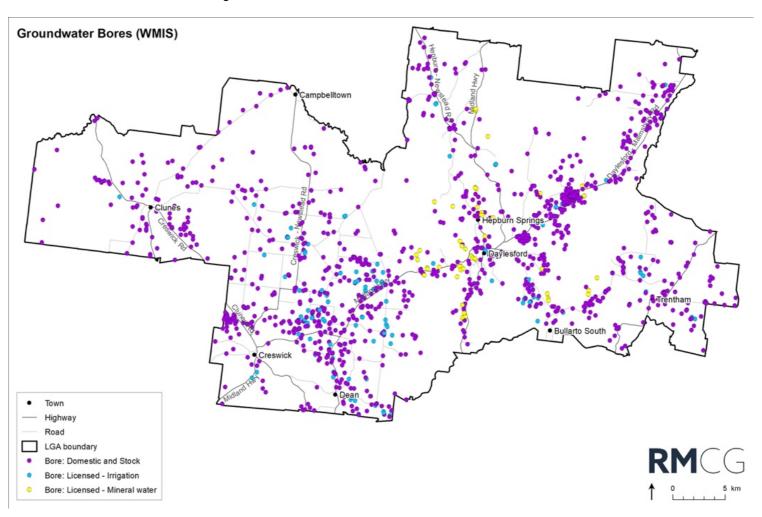
and for non-potable uses in the house and garden.

Irrigation bores are licensed for extraction of large volumes of water and operation requires significant capital investment, in addition to the bore construction. Water is pumped from the aquifer and the water is stored in a dam before it is used to irrigate a crop. A number of different irrigation types are used including lateral move, rain gun and centre pivot.

Most irrigation bores are found in the area between Creswick and Daylesford. There are also bores near Trentham and Musk.

The large number of stock and domestic bores are likely to be associated with livestock enterprises, small farms and lifestyle properties as they generally only provide for small volumes of water.

FIGURE 65: GROUNDWATER BORES, HEPBURN⁵²



⁵² DEWLP https://data.water.vic.gov.au

SUBDIVISION AND LAND HOLDINGS

Figure 66 shows the distribution of lots of various sizes in the Farming Zone across the Shire. Smaller lots (<40ha) are clustered around townships and generally in the eastern half of the Shire.

Figure 67 shows the land ownership in the Farming Zone. Land in common ownership was estimated using the rates billing address. This analysis shows that many small lots are part of larger land holdings. Land in the west of the Shire is predominantly held in larger ownerships (>100ha), while in the east land farm size is more diverse.

The agricultural capability and land ownership spatial data were analysed according to the framework in Table 25 as a 'first pass' approach to identifying productive agricultural land. The outcome of the spatial analysis is shown in Figure 68, which also shows the location of irrigation bores and where there is potential for higher value agricultural production. The analysis shows that extensive areas of rural land is productive agricultural land (based on soil type and ownership size only). There are also areas mainly around townships, where land may be less suitable for agriculture, primarily due to property size.

TABLE 25: PRODUCTIVE AGRICULTURAL LAND SPATIAL ANALYSIS FRAMEWORK

	Agricultural capability	Ownership size
Productive agricultural land	1	>10ha
	2	>40ha
	3	>20ha
	3	>20ha
	4	>20ha
Land highly constrained for agriculture	All other land	

FIGURE 66: LOT SIZE IN THE FARMING ZONE

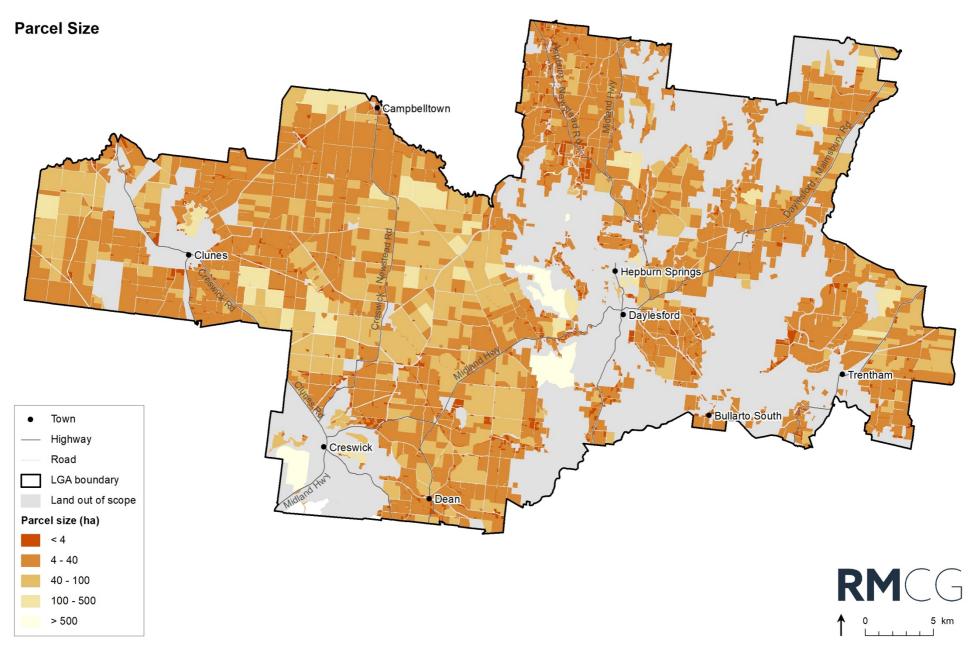
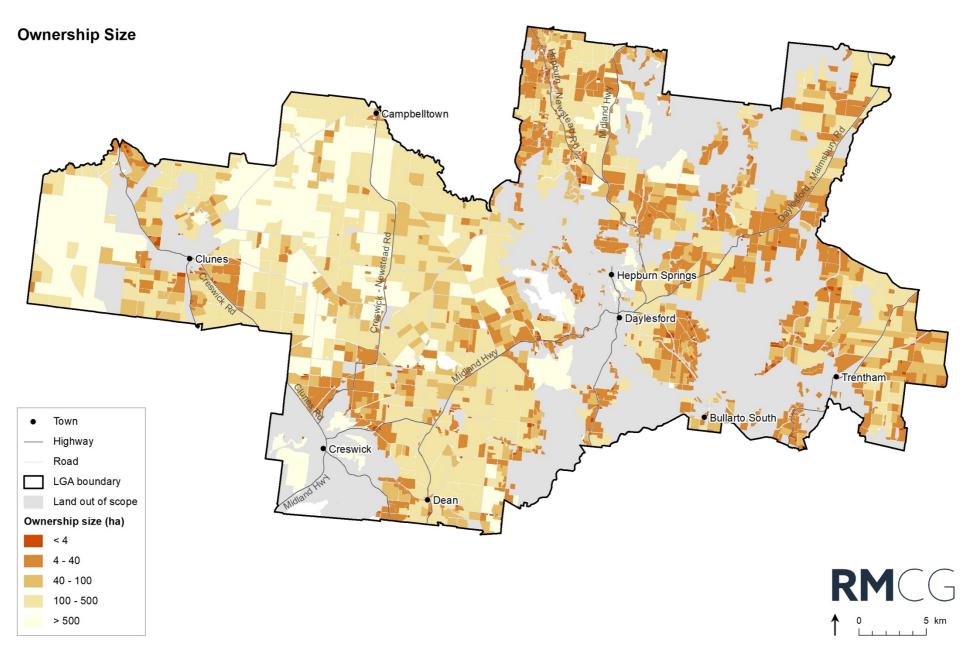
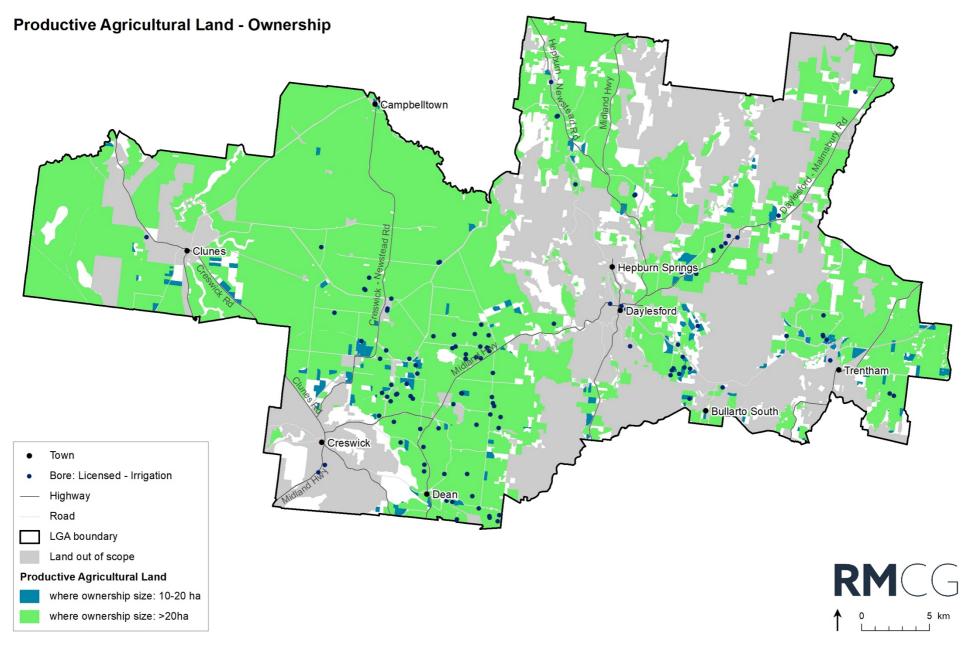


FIGURE 67: FARMING ZONE LAND OWNERSHIP PATTERNS





7.4 FARMLAND OF STRATEGIC SIGNIFICANCE

Clause 14.01-1S Protection of agricultural land of the Hepburn Planning Scheme seeks to protect the state's agricultural base by preserving productive farmland and the following strategies:

- Identify areas of productive agricultural land, including land for primary production and intensive agriculture.
- Consider state, regional and local, issues and characteristics when assessing agricultural quality and productivity.
- Avoid permanent removal of productive agricultural land from the state's agricultural base without consideration of the economic importance of the land for the agricultural production and processing sectors.
- Protect productive farmland that is of strategic significance in the local or regional context.

For this study, farmland of strategic significance is defined as follows:

ES 1: FARMLAND OF STRATEGIC SIGNIFICANCE

	Productive agricultural land		
Local economic cluster	Farmland of local strategic significance		
Regional economic cluster		Farmland of regional strategic significance	
State economic cluster			Farmland of state strategic significance

The analysis of agricultural industries in Chapter 6 found:

- The potato industry is an industry of state significance based on the value of production, contribution to the statewide industry and the importance of the secondary processing sector.
- The livestock industry is an industry of local significance based on the value of production and contribution to the regional livestock industry.

Indicative areas of Farmland of state and local strategic significance are shown in Figure 69 to be further refined in the development of the strategy.

7.5 KEY FINDING

Extensive areas of Hepburn Shire are productive agricultural land based on the combination of soils, climate and land holdings. Farmland of state and local significance has been identified based on the biophysical attributes and the economic contribution of agricultural production.

Issues

Pressure to rezone land on the edges of townships described as 'poor agricultural land'. Pressure for dwelling development.

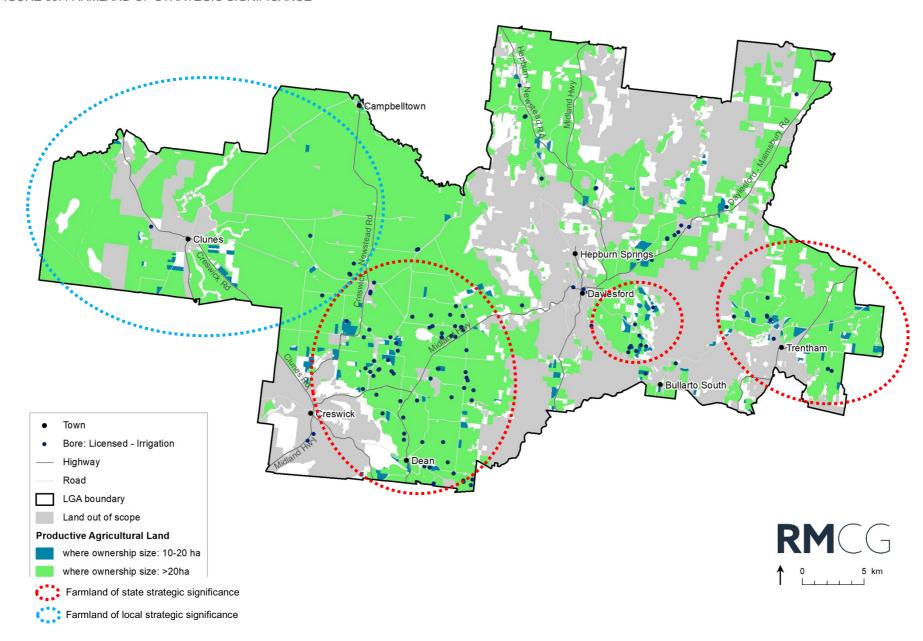
Opportunities

A strong and economically significant agricultural sector

Potential strategy response

Use mapping of productive agricultural land and farmland of strategic significance to:

- Inform preparation of township structure plans.
- Include mapping of productive agricultural land and farmland of strategic significance in the MPF.
- Review the current application of the FZ and zone schedules.



8 Rural tourism

8.1 STRATEGIC CONTEXT

Central Highlands Regional Growth Plan

The Central Highlands Regional Growth Plan includes the following directions relevant to tourism in Hepburn Shire:

- Promote and enhance the region's tourism assets and further develop the iconic precincts as key regional drawcards.
- Encourage tourism development that also protects landscape, heritage and environmental assets
- Facilitate nature-based tourism that can sustainably capitalise on the region's environmental assets

Daylesford – Hepburn Springs and Ballarat are identified as key tourism precincts.

Daylesford Macedon Tourism

The Daylesford Macedon Tourism (DM Tourism) is the peak industry body for tourism in the Daylesford and Macedon Ranges tourism region. DM Tourism has developed a regional brand that is based on the following four pillars:

- Food and drink (Indulge)
- Escape and Rejuvenate (Refresh)
- History and Culture (Learn)
- Art and Artisan (Make)

Key regional attributes that support these pillars include locally produced foods and drinks, especially where there are opportunities for visitors to engage directly with producers. DM Tourism has also developed the Tasty Little Tourism Map which documents existing producers and provides touring route options for visitors to visit local food and drink enterprises.

Consultation with Council's Economic Development officer and a representative of DM Tourism noted the following uses that are important to the rural tourism product:

- farm stays.
- premium agricultural products.
- value adding of primary produce, including cooperative processing facilities and distribution points.
- agriculture and food experiences e.g. workshops.

 alternative food distribution networks such farm gate sales, on farm produce stores, farmers markets.

Locations important to the rural tourism sector include Daylesford, Wheatsheaf, Blampied, Eganstown, Lyonsville and Musk. Important tourism routes include:

- Macedon Ranges to Trentham, Bullarto and Musk.
- Daylesford to Glenlyon.
- Ballarat to Daylesford.
- Western Highway to Ballan.

The Daylesford to Hanging Rock rail trail is a long term project.

Hepburn Shire also have a number of strategies relevant to rural tourism.

Fertile Ground – Hepburn Shire Economic Development Strategy 2016-2021

Fertile Ground, Hepburn Shire's Economic Development Strategy, 2016-2021 is built on five pillars:

- Produce support the value chain from primary industry producers through to culinary providers and consumers.
- Trade support local business and encourage opportunities for increased trade.
- Live make Hepburn Shire a great place to live.
- Grow Provide guidance through government systems so that businesses can prosper.
- Visit invite the world to experience Hepburn Shire and all it has to offer.

The strategy identifies two key projects that directly relate to agritourism, and agricultural development:

- Paddock to Plate Training Initiative Promote and harness existing training and experience opportunities provide in the area with the aim of promoting the area as the pre-eminent place to learn about food production and gastronomy.
- Agricultural Sector Development Training develop a plan that outlines a roadmap for future development of the agricultural sector.

The Hub for Premium Food

Hepburn Shire have recognised an opportunity for development of small scale 'artisan' agricultural activities. To facilitate this, they have an Artisan Agriculture Facilitation Specialist council officer who is funded through the Hub for Premium Food initiative. This project is co-funded by Council and the State Government and is aimed to assist

artisanal agricultural producers in the developing skills and services that will allow business growth and promotion.

8.2 POLICY CONTEXT

Clause 02.02 Vision:

Support tourism as an important industry based on the Shire's beautiful townships and countryside.

02.03-7 Economic development:

Locate tourist facilities and development in the Shire's townships that brings economic benefits, respects township character and enhances the distinctive tourism assets of each township.

Enhance the Shire's existing tourism offer through the development of a more diverse tourism product centred around the natural environment, bike trails, arts and culture, food and environmental sustainability.

Protect the Shire's heritage and environmental tourism assets.

11.03-3S Peri-urban areas - manage growth in peri-urban areas to protect and enhance their identified valued attributes.

 Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.

17.01-1S Diversified economy - strengthen and diversify the economy by:

Facilitate growth in a range of employment sectors, including health, education, retail, tourism, knowledge industries and professional and technical services based on the emerging and existing strengths of each region.

17.04-1S Facilitating tourism - encourage tourism development to maximise the economic, social and cultural benefits of developing the state as a competitive domestic and international tourist destination by:

- Encourage the development of a range of well-designed and sited tourist facilities, including integrated resorts, accommodation, host farm, bed and breakfast and retail opportunities.
- Seek to ensure that tourism facilities have access to suitable transport.

- Promote tourism facilities that preserve, are compatible with and build on the assets and qualities of surrounding activities and attractions.
- Create innovative tourism experiences.
- Encourage investment that meets demand and supports growth in tourism.

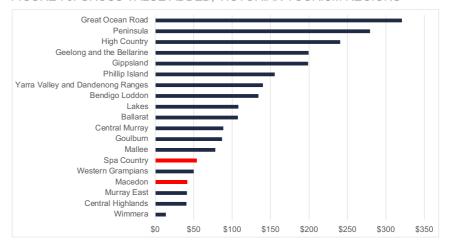
8.3 ATTRACTIONS AND VISITOR ECONOMY

Hepburn Shire is renowned for its natural mineral springs, spa and wellbeing experiences, food and wine, gold mining heritage, nature trails and parks and a range of attractive villages including Trentham, Daylesford, Hepburn Springs, Creswick, Clunes and Glenlyon. Hepburn Shire is one of a number of local governments working together to gain World Heritage Listing of the Central Victorian Goldfields, which if successful, is forecast to grow the region's visitor economy by an additional 2.2 million visitors and \$440million spent in the local economy.

There were around 250 tourism businesses in Hepburn Shire in 2019⁵³ and over 1.8million visitors were attracted to the Shire, mostly for holidays. On average, visitors stay for two nights and spend around \$200/night. Tourism in the Spa County (Daylesford/Hepburn Springs) and Macedon regions, which takes in most of the key tourism areas of Hepburn Shire was valued at \$95million as gross value added in 2020/21 or 4% of gross value added from tourism in regional Victoria (Figure 70).

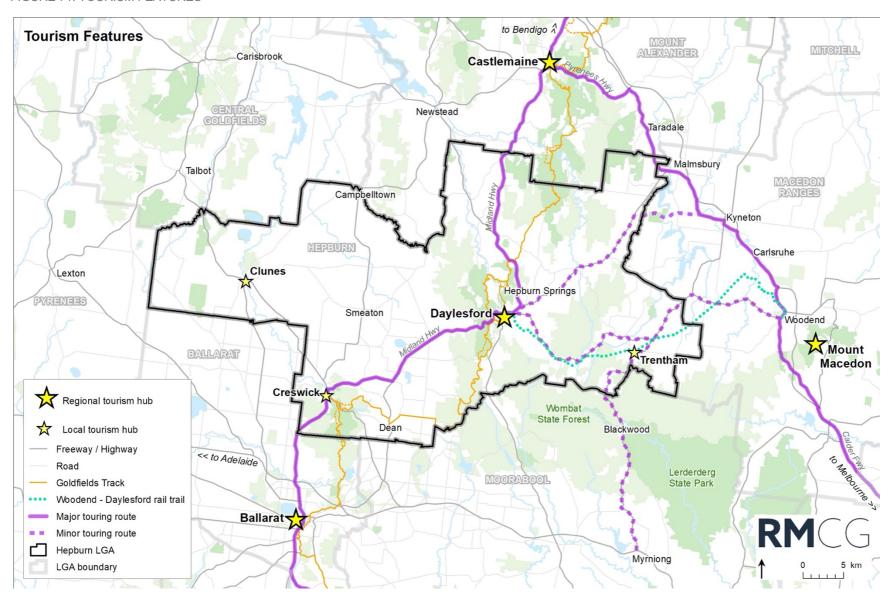
There are strong connections with tourism in adjoining municipalities. Touring routes connecting tourism experiences within the Shire and in the adjoining local government areas are shown in (Figure 71).

FIGURE 70: GROSS VALUE ADDED, VICTORIAN TOURISM REGIONS



⁵³ https://www.tra.gov.au/Regional/local-government-area-profiles

FIGURE 71: TOURISM FEATURES



8.4 ISSUES AND OPPORTUNITIES

COMPABILITY

Currently, rural tourism is predominantly provided for in the FZ. Most planning permits approved for tourism developments have been for land within the FZ (Table 26). Around five permits have been approved for group accommodation in the RLZ. Developments approved are predominantly for accommodation and function centres and were mostly approved on land in the eastern half of the Shire (Figure 72).

Tourism use permit requirements in the rural zones is set out in the Table 27. There is a broad range of tourism uses that can be considered in the rural zones, subject to a planning permit. Some of these uses e.g. camping and caravan park, residential hotel may be better suited to a township which have the infrastructure services to support developments of this scale. Large scale tourism developments in rural areas also have the potential to impact the operation of surrounding agricultural businesses, landscape and biodiversity values.

The Hepburn Planning Scheme Review⁴ noted that managing and nurturing the tourism offer within the shire is a key challenge for the municipality and critical to ensuring there are jobs for the local community. Ensuring that retail activities associated with agriculture are located within townships is essential to ensuring that retail areas in towns remain viable and that there are opportunities to capture tourist dollars.

Council also highlighted emerging tourism uses that may warrant further consideration including:

- Festivals
- Short term rental accommodation such as tiny houses, home pods and caravans

Given the risks associated with bushfire and domestic wastewater management, as well as potential to introduce land use conflict, there is a need to consider where these uses may be appropriate and under what circumstances.

Given the identification of farmland of state significance and productive agricultural land, consideration should be given to local policy that seeks to support rural tourism in some areas of the Shire, while limiting the types and scale of tourism development to protect the ongoing viability of agricultural enterprises.

TABLE 26: FZ PLANNING PERMITS (2007 - 2021)54

TOTAL	APPROVED	REFUSED
31	25	1
16	14	1
3	1	1
3	2	1
5	4	0
10	6	1
4	3	0
5	5	0
	31 16 3 3 5 10 4	31 25 16 14 3 1 3 2 5 4 10 6 4 3

^{*} composting, biochar manufacture, materials recycling, landscape gardening, storage of food products. plant nursery

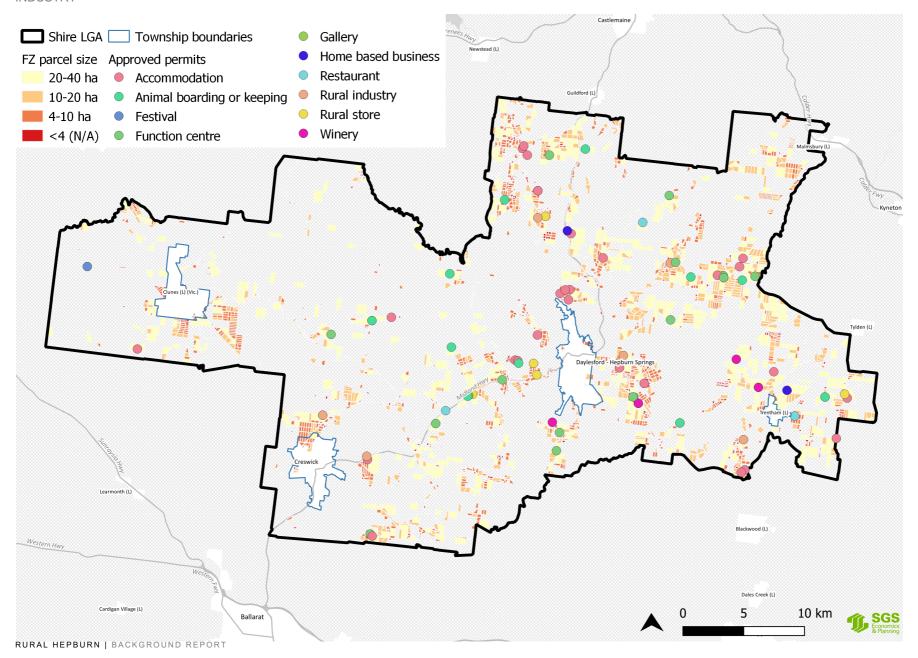
TABLE 27: TOURISM USE PERMIT REQUIREMENTS

	No permit required	Permit required	Prohibited
FZ	Bed and breakfast (limit of 10 people) Primary produce sales Rural store	Camping and caravan park Group accommodation Host farm Leisure and recreation Market Place of assembly Residential hotel Restaurant Winery	Accommodation (other than Bed and breakfast, Camping and caravan park, Group accommodation, Host farm, Residential hotel) Retail premises (other than Market, Manufacturing sales, Primary produce sales, Restaurant)
RCZ	Bed and breakfast (limit of 10 people) Informal outdoor recreation	Group accommodation Host farm Market Primary produce sales Residential hotel Restaurant Rural store Winery	Accommodation (other than Bed and breakfast, Group accommodation, Host farm and Residential hotel) Leisure and recreation (other than Informal outdoor recreation) Place of assembly Retail premises (other than Market, Manufacturing sales, Primary produce sales, Restaurant)
RLZ	Bed and breakfast (limit of 10 people) Informal outdoor recreation	Bar Hotel Leisure and recreation Market Place of Assembly Primary produce sales Restaurant	Retail premises (other than Bar, Hotel, Market, Primary produce sales and Restaurant)

95

⁵⁴ Data provided by Hepburn Shire

FIGURE 72: PLANNING PERMIT APPROVALS FOR TOURISM AND RURAL INDUSTRY



AGRICULTURAL VALUE ADDING AND TOURISM

Agricultural tourism and value adding to agricultural produce is already established in Hepburn Shire and includes selling primary produce or processed products through road-side sale and cellar doors, pick your own and online direct sales. Accommodation in conjunction with and agricultural business such as farm stays and farm to table dining are also opportunities to value add to primary production.

The Hepburn Planning Scheme Review⁴ noted that the tourism offer in the municipality is inextricably linked to the landscape, heritage, environment and rural produce. Ensuring that this link between each is well understood is important as well as ensuring these aspects are protected, i.e. tourism development should not occur at the expense of the very values that are the foundation of the tourism industry. The Review goes on to state that retail activities associated with agriculture should be located within townships and is essential to ensuring that retail areas in towns remain viable and that there are opportunities to capture tourist dollars. Further guidance is required on the types of tourism activities that should be provided in the FZ and those that are more appropriately located in settlements.

Council officers are concerned that dwellings, approved for an agricultural purpose, are being used primarily for tourism accommodation and that agriculture, if conducted at all, is subordinate to the tourism activity. This highlights another challenge in the assessment of planning permits for rural dwellings.

RURAL ACTIVITY ZONE

The Rural Activity Zone (RAZ) is a rural zone that has greater flexibility than the FZ and RCZ in that it provides for farming and other land uses to co-exist. In this zone:

- the purpose and provisions support the continuation and growth of farming but provide the opportunity for non-farming uses to be considered in appropriate locations.
- a wide range of tourism, commercial and retail uses are supported.
- farming uses are encouraged to establish and expand, subject to proper safeguards for the environment and amenity considerations.
- a planning permit is always required to use land for a dwelling.

Currently, there is no land zoned for RAZ in the Shire.

In 2022, RMCG was engaged by Hepburn Shire to undertake a RAZ supply demand assessment of rural land⁵⁵. The demand and supply assessment sought to identify land

in the Farming Zone that is characterised as currently supporting rural activity or has attributes that would support RAZ in the future and the following land uses:

- Agritourism including artisanal agriculture production, premium niche products and value adding to agriculture - such as food processing, farm gate sales, farm shops, agriculture and food experiences.
- Small scale rural industries and businesses including agriculture services (machinery servicing, transport and logistics).

Candidate areas were identified based on an assessment of:

- Agricultural quality.
- Established tourism nodes and touring routes.
- Established agri-food businesses and food related experiences.
- Established rural industry nodes.
- Proximity of towns.
- Landscapes that do not support significant amenity or landscape values.

Areas that may be suitable for application of the RAZ, subject to further detailed assessment were identified around Creswick, Eganstown, Bullarto, Daylesford and Trentham (Figure 73). Confirmation of these areas for rezoning to RAZ requires further detailed analysis to consider:

- Environmental values.
- Hazards, particularly bushfire.
- Declared water supply catchments.
- Potential for conflict with other land uses such as commercial scale agriculture, residential and rural residential uses.
- Consistency with other studies, particularly the preparation of township structure plans.

8.5 KEY FINDINGS

There is strong strategic and policy support for rural based tourism that leverages existing strengths, including mineral springs, food and wine experiences, goldfields heritage, attractive rural landscapes and heritage towns. There are strong connections to regional tourism hubs and key tourism routes have been identified. There is a considerable supply of tourism accommodation in the rural areas, including existing dwellings converted to short term rental accommodation and purpose built

⁵⁵ RMCG (2022) Rural Activity Zone – supply demand assessment

accommodation. Rural tourism opportunities include nature based tourism that capitalises on environmental assets and paddock to plate experiences. There is a strong connection between the Shire's agricultural industry, particularly artisan agriculture, and tourism.

Issues

Proliferation of dwellings for tourism accommodation.

Range of tourism uses provided for in the rural zones.

Risk that too much tourism development will impact the qualities that underpin Hepburn's tourism industry – landscape, environment, heritage and rural produce.

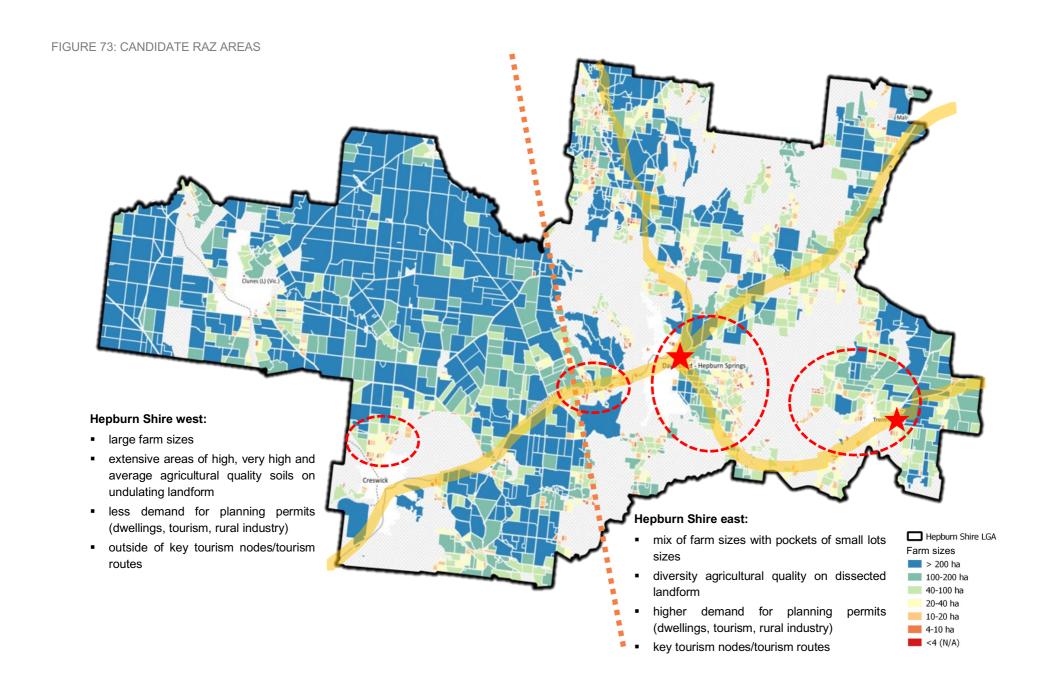
Opportunities

There are opportunities for further rural tourism development, but this requires careful consideration as to the types, scale and location.

Potential strategy response

Identify tourism uses that are compatible with agriculture and introduce local policy to guide tourism development in the FZ.

Local policy to guide large scale tourism development in rural areas of the Shire.



9 Other rural industries

9.1 RENEWABLE ENERGY

9.1.1 STRATEGIC CONTEXT

Victoria's Climate Change Act⁵⁶ sets a long term target of net zero greenhouse emissions by 2050 and to achieve this target, has planned for 50% of state electricity to come from renewable sources by 2030⁵⁷. To facilitate this outcome, **Renewable Energy Zones** (REZ) have been identified to coordinate development of electricity transmission renewable energy generation infrastructure. Hepburn Shire is located in or adjacent to the Western Victoria REZ (Figure 74). The area of interest that is the subject of the proposed **Western Victoria Transmission Network Environmental Effects Statement** includes land within Hepburn Shire (Figure 75).

Plan Melbourne

Direction 4.5 Plan for Melbourne's green wedges and peri-urban areas

As Melbourne grows, planning for Melbourne's green wedges and peri-urban areas is required to:

Support renewable energy sources such as wind and solar farms.

Under Desired Planning Outcomes for Green Wedges and Peri Urban Areas, the plan states:

Provide opportunities for renewable energy generation.

Central Highlands Regional Growth Plan

The Central Highlands Regional Strategic Plan proposes that the Central Highlands region can capitalise on renewable energy opportunities to increase energy security and support a low carbon economy. The region has excellent wind resources and is home to a number of existing and proposed wind farms. However, renewable energy projects can impact on the amenity of local residents and landscape values, which must be considered when planning future renewable energy projects. To balance renewable energy opportunities and negative impacts, the Plan recommends:

 Identify suitable land, protected by appropriate buffers, for the development of renewable energy generators.

Central Highlands Regional Economic Development Strategy⁵⁸ (2022)

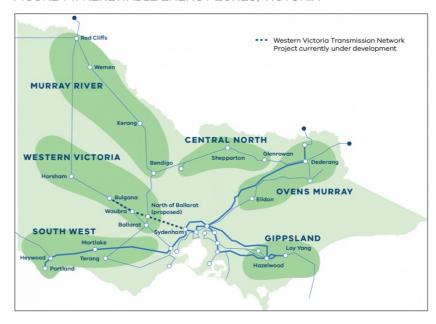
The Central Highlands Regional Economic Development Strategy sets out the medium - to long-term strategic directions for driving economic growth and development across the region. Directions relevant to this study include:

Strengthen the renewable energy and waste management industries.

Hepburn Community Transition Plan⁵⁹

The Community Transition Plan sets out initiatives for the Shire to achieve zero emissions and 100% renewable electricity supply by 2029. To reach this target in the most realistic fashion, the electricity component of approximately 60,000MWh is to be offset by rooftop solar PV and 2 to 5 mid-scale (20MW wind or 30MW solar) grid connected generation projects. This will also require some upgrade of the electricity grid and infrastructure to improve the capacity of the distribution network and to access the most suitable locations.

FIGURE 74: RENEWABLE ENERGY ZONES, VICTORIA60



⁵⁶ https://www.climatechange.vic.gov.au/legislation/climate-change-act-2017

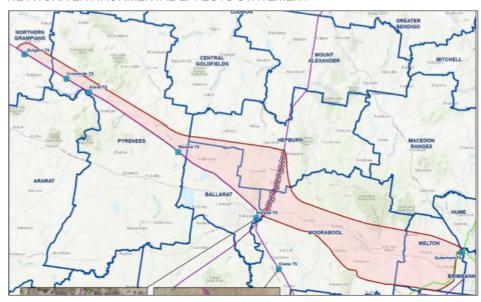
⁵⁷ https://www.climatechange.vic.gov.au/__data/assets/pdf_file/0025/522790/Energy-Sector-Pledge.pdf

⁵⁸ https://www.rdv.vic.gov.au/ data/assets/pdf file/0010/2063908/Central-Highlands-REDS-2022.pdf

⁵⁹ Hepburn Shire (2019) Community Transition Plan: A 10-year Masterplan for the Hepburn Shire to reach 100% renewable electricity supply, zero-net energy and zero-net emissions 2019 - 2029

⁶⁰ https://www.energy.vic.gov.au/renewable-energy/renewable-energy-zones

FIGURE 75: AREA OF INTEREST WESTERN VICTORIA TRANSMISSION NETWORK ENVIRONMENTAL EFFECTS STATEMENT⁶



9.1.2 **POLICY CONTEXT**

The Minister for Planning is the responsible authority for planning permit applications for all energy generation facilities, including wind and solar, that are 1 megawatt or greater and utility installations that send or distribute electricity, such as powerlines, or that store electricity if the installed capacity is 1 megawatt or greater, such as battery storage. The Minister may request preparation of an Environmental Effects Statement to assess potential development impacts.

Policy and planning guidelines have been prepared to inform planning for development of wind⁶² and solar energy⁶³ facilities. The guidelines outline a number of considerations for identifying suitable locations for wind and solar energy developments to avoid unacceptable impacts on critical environmental, cultural or landscape values. In addition to values identified under Federal and State legislation, consideration may also be given to values identified in the PPF such as landscape values, strategically

important agricultural land, cultural heritage and biodiversity values. The Guidelines for Development of Wind Energy Facilities state:

To help guide appropriate site selection, design and layout of individual wind turbines, consideration should be given to the significance of the landscape as described in relevant planning scheme objectives, including relevant overlays and strategic studies referenced in the planning scheme.

02.03-4 Natural resource management

Climate Change

In order to mitigate the impacts of climate change, Hepburn Shire Council and community groups have committed to a target of 100 per cent renewable electricity supply, zero-net energy by 2025 and zero-net emissions by 2030. This requires careful consideration of opportunities to manage and reduce greenhouse gas emissions, while also looking to carbon sequestration opportunities locally and supporting community led alternative energy infrastructure.

Considering climate change in all land use and development decisions is essential to ensuring that emission reduction goals are realised. This will include minimising: pollution to air, soil and water; the use of non-renewable resources; solid waste generation; or other activities resulting in detrimental environmental outcomes. Localised climate change action is encouraged such as best practice environmentally sustainable development, localised circular economy industries or renewable energy projects.

Council's strategic directions for renewable energy include:

- Reduce the impacts of climate change, by supporting alternative energy sources, carbon farming, micro-grids, reducing greenhouse gas emissions and adopting environmentally sustainable development principles.
- Support future development that adapts to the impacts of climate change and contributes to meeting Council's targets for reducing greenhouse gas emissions.

02.03-9 Infrastructure Utility infrastructure

The Central Highlands region has been identified as a region with significant opportunities to generate renewable wind energy and this is supported if appropriately sited to not impact upon highly valued landscapes. Renewable energy developments and associated infrastructure should incorporate benefit sharing, including opportunities for community investment. New infrastructure must limit negative impacts to biodiversity and

⁶¹ https://www.planning.vic.gov.au/__data/assets/pdf_file/0020/506504/WVTNP-EES-Scoping-Requirementsfinal.pdf

 ⁶² DELWP (2021) Development of Wind Energy Facilities in Victoria Policy and Planning Guidelines
 ⁶³ DELWP (2019) Solar Energy Facilities Design and Development Guideline

the significant landscape settings and provide a benefit to communities. Council's strategic direction for renewable energy infrastructure is to:

• Support the sensitive location of transmission infrastructure to support decarbonisation within the municipality that provides a net community benefit.

11.03-3S Peri-urban areas - Manage growth in peri-urban areas to protect and enhance their identified valued attributes by

 Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.

19.01-S Energy supply - facilitate appropriate development of energy supply infrastructure by:

- Support the development of energy generation, storage, transmission, and distribution infrastructure to transition to a low-carbon economy.
- Ensure energy generation, storage, transmission and distribution infrastructure and projects are resilient to the impacts of climate change.
- Support energy infrastructure projects in locations that minimise land use conflicts and that take advantage of existing resources and infrastructure networks.
- Facilitate energy infrastructure projects that help diversify local economies and improve sustainability and social outcomes.
- Facilitate renewable energy generation and storage to meet on-site energy needs.

19.01-2S Renewable energy - support the provision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met by

- Facilitate renewable energy development in appropriate locations.
- Protect renewable energy infrastructure against competing and incompatible uses.
- Set aside suitable land for future renewable energy infrastructure.
- Consider the economic, social and environmental benefits to the broader community of renewable energy generation while also considering the need to minimise the effects of a proposal on the local community and environment.
- Support wind energy facilities in locations with consistently strong winds over the year.

9.2 MINING AND EXTRACTIVE INDUSTRIES

9.2.1 STRATEGIC CONTEXT

The **State Government Mineral Resources Strategy**⁶⁴ seeks to grow the mineral industry as well as improve the administration and enforcements of the regulatory framework. Actions relevant this study include a more strategic land use planning approach and identification of exempt mining areas to potentially include areas significant for their conservation, agricultural productivity, distinctive landscape, public function, or amenity value.

Plan Melbourne

Direction 4.5 Plan for Melbourne's green wedges and peri-urban areas

As Melbourne grows, planning for Melbourne's green wedges and peri-urban areas is required to:

Protect extractive industries.

Under Desired Planning Outcomes for Green Wedges and Peri Urban Areas, the plan states:

- Mineral, stone and sand resources.
 - Protect sand and stone resources for future extraction to ensure a continuous supply of construction material.

9.2.2 POLICY CONTEXT

The State Government administers approval of Work Plans for mineral exploration or extractive industry licences⁶⁵. Preparation of a Work Plan requires consideration of any relevant planning controls and impacts arising from mining activities on sensitive receptors, such as the environment, cultural heritage and amenity required under various Federal and State legislation. Work plans form part of a planning permit administered by local government.

14.03-1S Resource exploration and extraction - encourage exploration and extraction of natural resources in accordance with acceptable environmental standards.

⁶⁴ DEDJTR (2018) Mineral Resources Strategy 2018–2023

⁶⁵ Mineral Resources (Sustainable Development) Act 1990

9.3 ISSUES AND OPPORTUNITIES

Mining and renewable energy provide opportunities for employment and diversification of the local economy. Extractive industries are important sources of affordable construction and road base material. These industries can also generate impacts (ground and air vibration, dust, noise) and changes to the environment and landscape.

Encroachment by sensitive receptors such as dwellings, can lead to land use conflict with established rural industry or sterilisation of areas with development potential. Recent amendments to the Victoria Planning Provisions now require planning permits for dwellings and other sensitive uses with 500m of extractive industry and 1km of a wind energy facility.

Impacts of mining and renewable energy development on agriculture, including consumption of productive agricultural land and land with irrigation development also needs to be careful managed given the importance of the industry to the local, regional and state economy.

Balancing the economic and social benefits of new rural industries and protection of significant agricultural, landscape and environmental values and the amenity of the rural areas is a significant challenge. The opportunity for Council's to influence renewable and mining development through the planning policy framework is limited.

The Hepburn Planning Scheme can play a role in balancing the economic and social benefits and impacts on the Shire's rural areas by highlighting significant values that warrant consideration in assessment of permits. There is an opportunity through this study to strengthen policy and highlight significant values to be considered in new mining and renewable energy developments.

Council can also assist the community to adapt to the changes that will occur as a result of an expanding renewable energy sector such as participating in renewable energy community benefit programs⁶⁶

9.4 KEY FINDINGS

There is strong strategic and policy support for development of renewable energy as part of achieving the State government's goal of zero emissions by 2050 and for 50% of state electricity to come from renewable sources by 2030. Hepburn Shire has an ambitious target of zero emission by 2029. While the target of net zero emissions is shared by both State Government and Hepburn Shire, there is concern in the Hepburn community

regarding the impacts of renewable energy infrastructure, such as the Western Victoria Transmission Network.

Mining was historically an important industry in Hepburn, however currently there are no active mines in the Shire. There are a number of current of exploration licences. Similar to renewable energy, approval of planning permits for mineral exploration and extractive industry licences are largely the responsibility of State government.

While the Minister for Planning is the responsible authority for planning permit applications for all energy generation facilities and mining approvals, it is important that the Hepburn Planning Scheme identifies significant values so that these will be considered in the assessment of planning permits.

Issues

Renewable energy development and mining can have impacts on landscape, environmental, agricultural, rural tourism and community values.

Permits for renewable energy development, including transmission and mining are determined by the Minister for Planning, not Council.

Opportunities

Potential for Hepburn community to access to renewable energy via the regional transmission grid.

Potential for further local renewable energy generation.

Potential to access community benefit programs for investment in locally important projects.

Potential strategy response

Update the MPF and strategic framework plans with important agricultural, biodiversity, landscape and community values.

Identify opportunities for Council to assist community to participate in the Environmental Effects Statement Process.

Identify opportunities for Council to assist the community to access community benefit programs.

⁶⁶ Community engagement and benefit sharing in renewable energy development in Victoria: A guide for renewable energy developers

10 Environment

10.1 STRATEGIC CONTEXT

Protecting Victoria's Environment – Biodiversity 2037 aims to prevent further decline in the State's biodiversity value and achieve an overall improvement. Investment in biodiversity actions is to be delivered through a process of Biodiversity Response Planning. The land use planning framework is identified as a good opportunity to ensure that biodiversity is integrated early in decision-making processes.

Priority 18:

Use of strategic land-use planning tools to better protect areas of private land that support significant biodiversity values.

The Plan notes NaturePrint a statewide spatial analysis for biodiversity conservation and a new decision-support tool, Strategic Management Prospects (SMP).

Plan Melbourne

Direction 4.5 Plan for Melbourne's green wedges and peri-urban areas

As Melbourne grows, planning for Melbourne's green wedges and peri-urban areas is required to:

 protect biodiversity assets, including national and state parks, Ramsar wetlands and coastal areas.

Under Desired Planning Outcomes for Peri Urban Areas, the plan states:

- Environmental and biodiversity assets
 - Protect and enhance environmental and biodiversity assets, such as coastal areas, wetlands, rivers and creeks, forests and grasslands.
- Rural Living
 - Manage rural living to prevent negative impacts on agriculture, biodiversity and landscape values.

Central Highlands Regional Growth Plan

The Central Highlands region features rich and diverse environmental, landscape and heritage assets and these are critical to the region's economy, attractiveness and liveability. Future directions for environmental assets include:

 Capitalise on environmental assets by advancing tourism and economic diversification opportunities, while protecting and maintaining environmental assets and values

- Direct settlement growth and development to areas where it will avoid impacting on high value environmental assets, including designated water supply catchment areas, strategically important terrestrial habitat, soil health, waterways and wetlands.
- Strategically plan for enhancements to environmental assets to:
 - enhance land, water and biodiversity assets, including land.
 - critical for connecting areas of high value habitat.
 - reduce threats to high value areas and assets.

Land use policies, strategies and actions include:

- Plan new development areas in locations that minimise impacts on environmental assets.
- Consistently apply planning tools, where appropriate, to recognise the values of threatened vegetation communities including grasslands, grassy woodlands and wetlands across the region.
- At a regional level, incorporate into planning schemes updated information on relative habitat value by updating relevant overlays to reflect significant environmental assets across the region.
- Local planning authorities collaborate with natural resource managers to:
 - identify opportunities for preferred locations for large-scale vegetation corridors.
 - improve the management and use of water resources, to minimise risks to the environment (including risks to surface and groundwater supply) and provide for potential growth and liveability.
- Exchange mapped and modelled data of environmental assets and natural hazards to provide for accurate interpretation of the best available data for consideration in planning decisions.
- Encourage natural resource management strategic planning exercises to consider implications for land use planning, such as when developing or revising substrategies under regional catchment strategies or when identifying strategic locations for environmental works. Examples include vegetation corridors, carbon farming, competitive market approaches such as EcoTender and BushTender and offset market activities.

Identify opportunities to capitalise on the region's environmental assets to support economic development opportunities in a manner which maintains and protects those assets.

North Central Regional Catchment Strategy

The Regional Catchment Strategy sets out region-scale directions for investment in protection and enhancement of land, water and biodiversity. The strategy states that generally, the condition of native vegetation and habitat is assumed to be relatively stable across intact landscapes but declining in fragmented landscapes.

10.2 POLICY CONTEXT

02.03-2 Environmental and landscape values

Biodiversity

A rich diversity of plants, animals and habitats exist across the Shire. Many species are under threat from activities such as land clearing, invasive flora and fauna, climate change and bushfire management. Reducing habitat fragmentation across the landscape for wildlife and plant dispersal, and protecting large old trees on private and Council land are among key focus areas for Council. Council's strategic directions for environmental and landscape values are to:

- Protect and enhance watercourses, wetlands and water bodies and their associated riparian zones.
- Protect indigenous vegetation across the Shire including on Council managed reserves and private property.
- Protect biodiversity and environmental values of local, regional and state significance.
- Retain existing habitat and create new habitat corridors, that increases the resilience of existing stands of native vegetation.
- Minimise wholesale clearing of significant vegetation in areas of high bushfire risk.

Clause 02.04 Strategic framework Environment and Landscape (Figure 76).

11.03-3S Peri-urban areas - manage growth in peri-urban areas to protect and enhance their identified valued attributes.

- Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
- Establish growth boundaries for peri-urban towns to avoid urban sprawl and protect agricultural land and environmental assets.

 Prevent dispersed settlement and provide for non-urban breaks between urban areas.

12.01-1S Protection of biodiversity - protect and enhance Victoria's biodiversity.

- Use biodiversity information to identify important areas of biodiversity, including key habitat for rare or threatened species and communities, and strategically valuable biodiversity sites.
- Strategically plan for the protection and conservation of Victoria's important areas of biodiversity.
- Ensure that decision making takes into account the impacts of land use and development on Victoria's biodiversity, including consideration of:
 - Cumulative impacts.
 - Fragmentation of habitat.
 - The spread of pest plants, animals and pathogens into natural ecosystems.
 - Avoid impacts of land use and development on important areas of biodiversity.
- Consider impacts of any change in land use or development that may affect the biodiversity value of national parks and conservation reserves or nationally and internationally significant sites.
- Assist in the identification, protection and management of important areas of biodiversity.
- Assist in the establishment, protection and re-establishment of links between important areas of biodiversity, including through a network of green spaces and large-scale native vegetation corridor projects.
- Support land use and development that contributes to protecting and enhancing habitat for indigenous plants and animals in urban areas.

12.01-1L Native vegetation and habitat protection - protect and enhance the Shire's native vegetation and habitats.

- Protect identified remnant vegetation and habitat across the Shire as shown on the Native vegetation and habitat protection map.
- Enhance linkages between habitat on private land, roadsides, waterways and public land for wildlife and plant dispersal.
- Encourage revegetation and restoration in areas of significant remnant areas.
 Protect large old native trees on private and public land.
- Protect native vegetation and habitat significant to the survival of the listed threatened species.

- Retain native vegetation and habitat significant to the survival of the threatened fauna and locally significant.
- Retain Environment Protection and Biodiversity Conservation Act (EPBC) listed ecological communities as a significant environmental and landscape.
- Encourage land owners to protect and enhance local biodiversity through the removal of weeds listed in the Catchment and Land Protection Act 1994 and the very high threat list in the Advisory List of Environmental Weeds in Victoria.
- Locate development to minimise loss of significant remnant vegetation and identified habitat areas.
- Encourage the maintenance and enhancement of habitat corridors in new and existing residential areas and along township watercourses and open space corridors.
- Encourage proposals to retain and establish vegetation that links regional biodiversity assets and significant wetlands outlined in the North Central Regional Catchment Strategy 2013-2019.
- Minimise the number of vehicle crossovers and additional access points to vegetated roadsides.
- Complement the three step approach to the removal of native vegetation outlined in the Guidelines for the removal, destruction or lopping of native vegetation by seeking to improve biodiversity outcomes prior to considering any offsets.

12.01-2S Native vegetation management - ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.

 Ensure decisions that involve, or will lead to, the removal, destruction or lopping of native vegetation, apply the three-step approach in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017):

12.03-1S River and riparian corridors, waterways, lakes, wetlands and billabongs - protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands and billabongs.

- Protect the environmental, cultural, landscape values of all waterway systems as significant economic, environmental and cultural assets.
- Conserve waterway systems and the landscapes and environmental values surrounding them by protecting ecological values, indigenous vegetation, terrestrial and aquatic habitats and encouraging biodiversity.

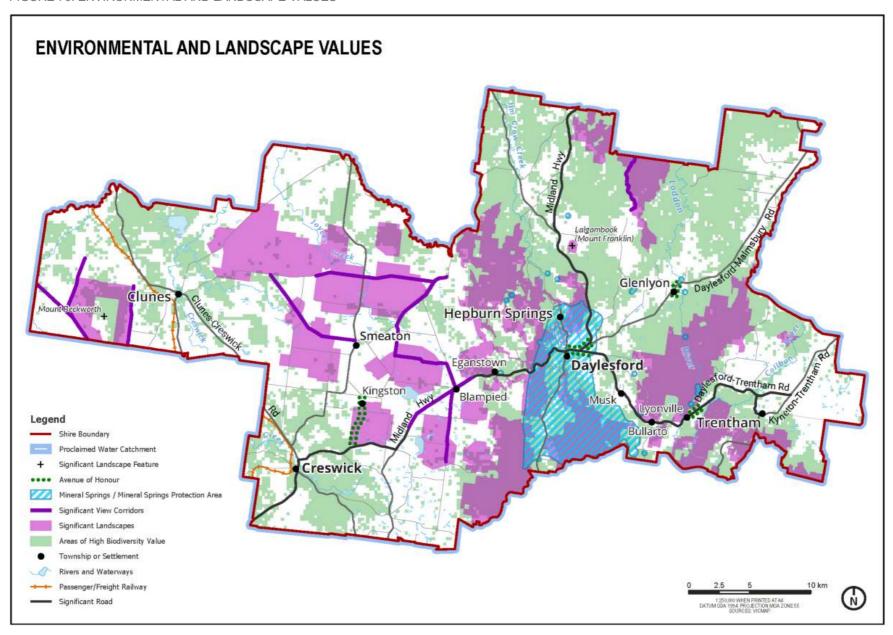
- Sensitively design and site development to maintain and enhance the waterway system and the surrounding landscape setting, environmental assets, and ecological and hydrological systems.
- Address the impacts of use and development on drought and flooding events at a catchment and site scale to protect the health and natural function of waterway systems and their surrounding landscape and environment.
- Protect geomorphology, bank stability and flood management capacity to strengthen the environmental value and health of waterway systems by:
- Retaining, enhancing and re-establishing indigenous riparian vegetation along waterway systems, ensuring it responds to the bushfire risk of a location.
- Enhancing and re-establishing both terrestrial and aquatic habitats and their linkages along and surrounding waterway systems.
- Limiting earthworks in proximity to waterway systems to minimise alterations to geomorphology, natural drainage, natural flows and water quality.
- Facilitating the restoration of waterway systems through the removal of weeds, invasive species and pests.

35.06 Rural Conservation Zone

The Rural Conservation Zone (RCZ) is primarily concerned with protecting and conserving rural land for its environmental features or attributes. The conservation values of the land must be identified in the schedule to the zone and could be historic, archaeological, landscape, ecological, cultural or scientific values. The RCZ covers around 2,800ha or 2% of the total Shire area. There are two schedules to the RCZ:

- RCZ1 Conservation Values has been applied to conserve areas dominated by Plains Grassy woodland of the Victoria Volcanic Plains and riparian zones.
- RCZ2 Conservation Values has been applied to conserve areas that contribute to ecological connectivity across private land and between public land forest blocks.

Overlay	Purpose	Impact on land use and development			
Vegetation Protection Overlay					
Schedule 1 – Significant exotic and native vegetation	Protect vegetation of significance for its natural beauty, interest and importance and contribution to the character of an area	Removal of vegetation is subject to a planning permit			



10.3 ENVIRONMENTAL VALUES

Hepburn is located within three bioregions: Goldfields, Victorian Volcanic Plain and Central Victorian Uplands. The Victorian Volcanic Plain bioregion is the most extensively cleared and modified. Vegetation in the Shire is important for habitat, biodiversity and landscape values. Significant areas of public and private land remain forested or are sites of remnant grasslands and vegetation. The type and extent of Ecological Vegetation Classes (EVC) found on private land in Hepburn are shown in Figure 77.

There are no detailed assessments of biodiversity values that covers all private land across Hepburn Shire. In the absence of more detailed and accurate information regarding condition, bioregional conservation status provides high level overview of condition as it considers remaining extent, threats, quality of remnants and security of land tenure. Native vegetation in the Shire includes vegetation communities and species listed under various State and Federal legislation (Table 28). The conservation status of these remnants includes endangered EVCs (Figure 77). Mapping indicates the presence of listed species on private land as well as the importance of public land as habitat for listed species (Figure 79).

10.4 ISSUES AND OPPORTUNITIESB

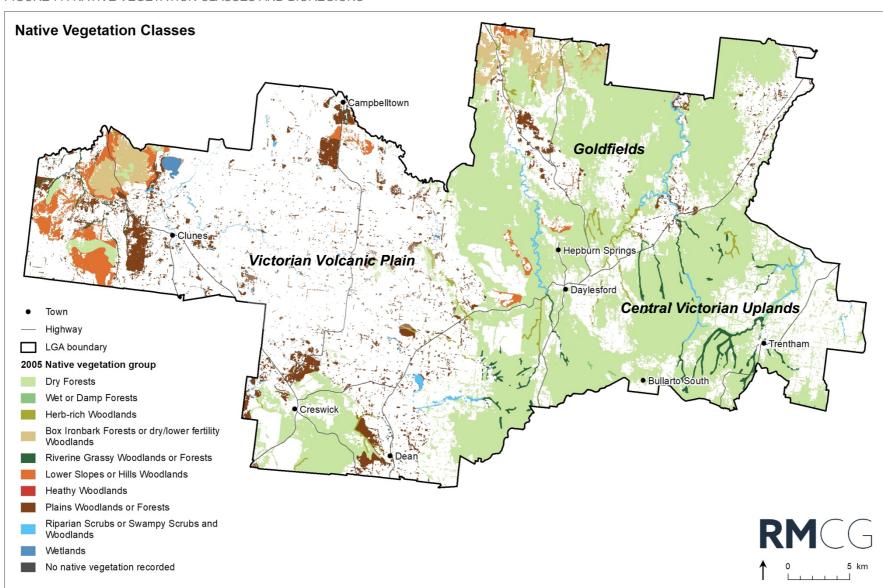
PROTECTION, ENHANCMENT AND ECOLOGICAL CONNECTIVITY

In 2018, Arthur Rylah Institute undertook a study to identify wildlife corridors for the restoration of regional habitat connectivity, which included northern parts of Hepburn Shire. Ecological connectivity provides the capacity for the movements of organisms, gene flow, and range shifts and is a key factor in the long-term viability of populations, particularly for animal species, and climate adaptation. The map output (Figure 80) indicates the ecological connectivity value and where there is potential to increase this value and develop functional biolinks through native vegetation and enhancement. Strategic Management Prospects analysis undertaken by DELWP provides regional scale mapping (Figure 81) to identify areas that would benefit from various management actions.

These analyses indicate that there are environmental values that would benefit from protection and further enhancement. Council has commenced an assessment of biodiversity values around key towns to inform the preparation of structure plans. However, a more detailed biodiversity assessment is required to determine the particular values, threats and appropriate policy responses.

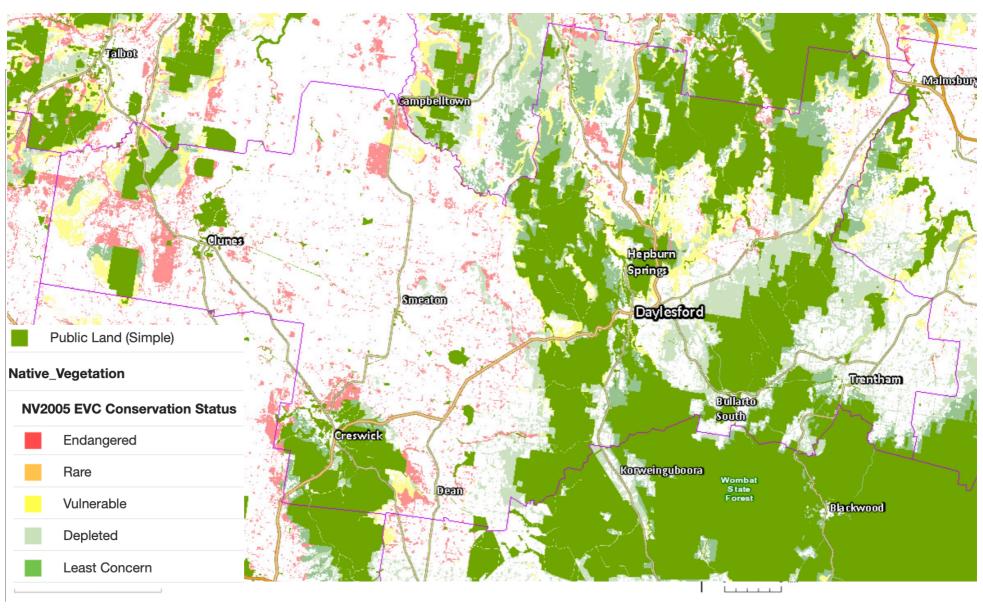
TABLE 28: LISTED VEGETATION COMMUNITIES AND SPECIES

	EGETATION COMMONTTE					
Listing	Listing Listed vegetation communities and species					
Native vegetation and habitat significant to the survival of listed threatened species	Forests of the Central Victoriar Uplands Basalt Pepp Plains Woodlands or Forests Spiny Rice flower Button Wrinklewort Matted Flax-lily					
Native vegetation	Forest and woodlands predominantly of the Goldfields					
and habitat significant to the survival of the threatened fauna and locally significant species	Swift Parrot Painted Honeyeater Brush-tailed Phascogale Hooded Robin Speckled Warbler	Barking Owl Square-tailed Kite Crested bellbird Koala				
significant species	Forests of the Central Victorian Greater Glider Powerful Owl Koala Plains Woodlands or Forests Striped Legless Lizard Golden Sun moth	n Uplands				
	Wetlands					
	Blue-billed Duck Freckled Duck Lewin's Rail Eastern Great Egret	Brolga Plumed Egret Growling Grass Frog Painted Snipe Latham's Snipe				
	Waterways Platypus River Blackfish					
Environment Protection and Biodiversity Conservation Act (EPBC) listed ecological communities	Forest and woodlands, predominantly of the Goldfields Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia. Wetlands Seasonally Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains. Plains Grasslands and Woodlands Grassy Eucalypt Woodland of the Victorian Volcanic Plain between Clunes, Creswick and Campbelltown. Natural Temperate Grassland.					

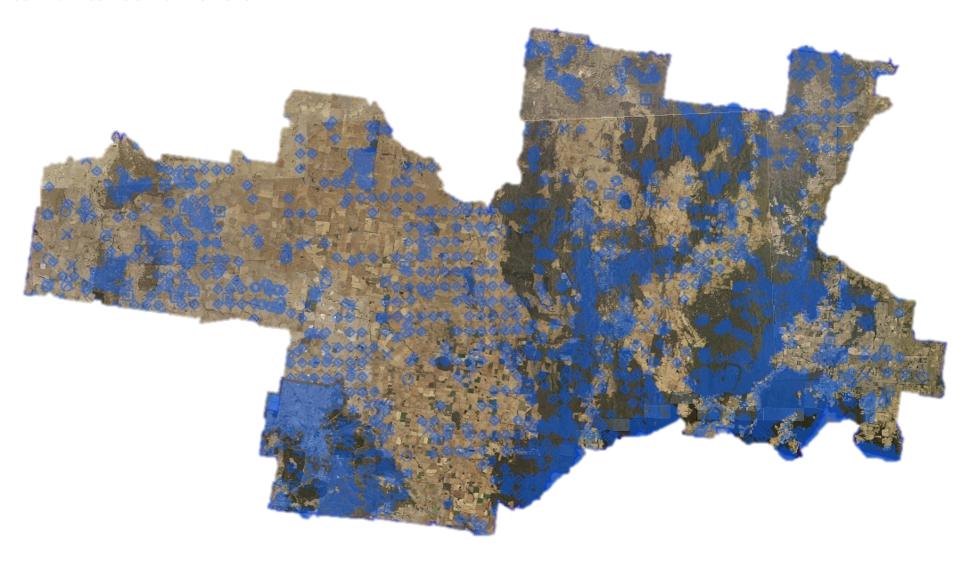


⁶⁷ https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit

FIGURE 78: EVC CONSERVATION STATUS⁶⁸

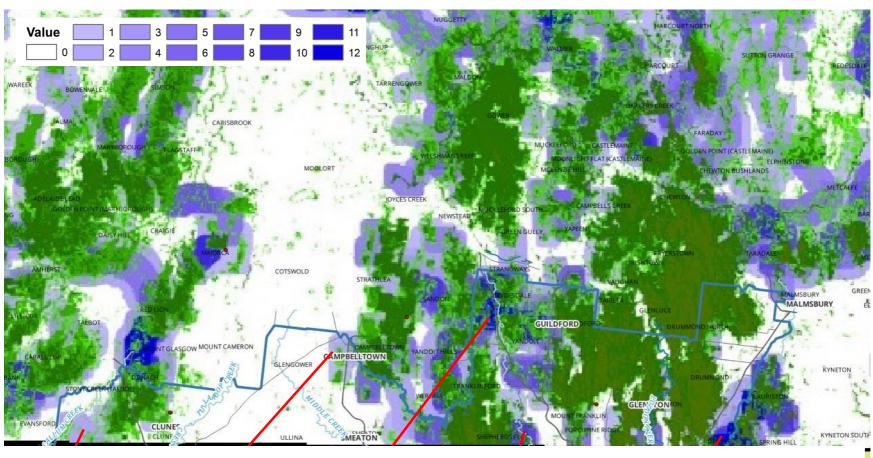


⁶⁸ https://northcentral.rcs.vic.gov.au/regional-maps/



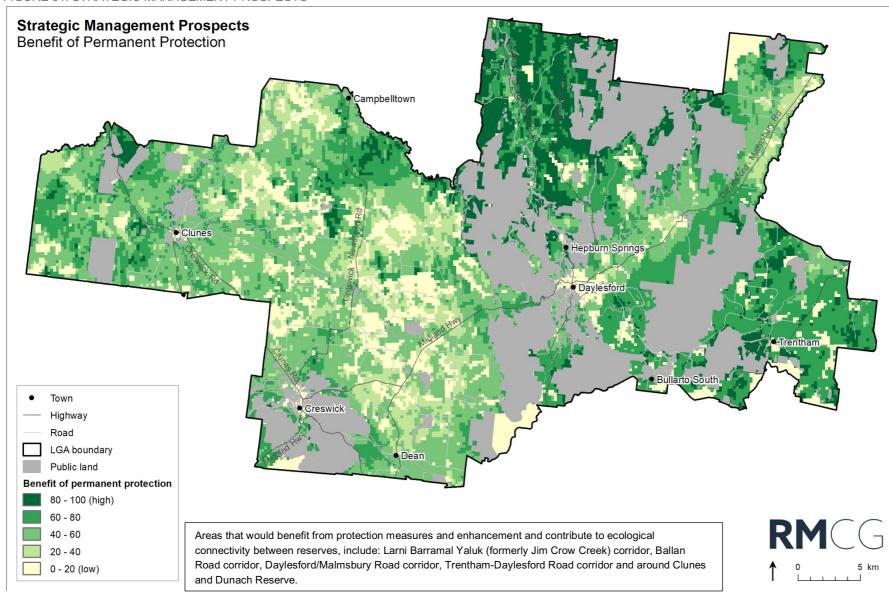
⁶⁹ https://vba.biodiversity.vic.gov.au/vba/index.jsp

FIGURE 80: COMPOSITE REGIONAL CONNECTIVITY MAP^{70*}



^{*} Connectivity analysis only included northern part of the Hepburn Shire. Darker purple indicates land which has great ecological connectivity value than lighter purple areas.

⁷⁰ Liu, C et al (2018) dentifying wildlife corridors for the restoration of regional habitat connectivity: A multispecies approach and comparison of resistance surfaces https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206071



⁷¹ https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit

PLANNING POLICY

The recognition of biodiversity values in planning policy is limited given the potential extent of important environmental values Figure 82. There is potential for further application of policy tools to protect and enhance biodiversity values and enhance ecological connectivity. This will require more detailed biodiversity assessment and mapping to identify environmental values, threat to these and the outcomes to be achieved. The Hepburn Planning Scheme Review⁴ included the following observations regarding planning policy and biodiversity protection and enhancement:

- Clause 52.17 is currently relied up for a 'first pass' form of development control on sites greater than 4000 sqm. There is a need to be more thorough in the level of protection provided and identification of significant stands of vegetation is required both outside and within townships for protection.
- Native vegetation control exemptions undermine to some extent efforts to protect native vegetation and grasses particularly on rural land. There are extensive exemptions in the native vegetation provisions of the planning scheme that make preservation of trees along road sides and along boundary fence lines in some rural settings challenging. Identification of vegetation to be protected and consideration of other options through improved education of land owners and managers is an could be provided by Council.
- The Shire is rich in biodiversity, which is recognised in areas covered by the VPO, RCZ and in public reserves. However, there are still large areas of unprotected biodiversity throughout the Shire, particularly on private land. Council needs improved information and strategies to supplement any work undertaken at the State and Commonwealth level to enable a more proactive response. While Council has undertaken some work in this area, further local and regional assessments on private land are required. This further work should include evaluating the use of planning scheme tools to implement improved environmental and biodiversity protections.

THREATS TO BIODIVERSITY

A number of threats to Hepburn's biodiversity have been identified:

- Habitat degradation by weeds, in particular invasion of native grasslands by grassy weeds and invasion of forest habitats by woody weeds.
- Loss of habitat connectivity and fragmentation of remnant vegetation associated with low density development.

- Degradation and loss of biodiversity values, particularly native grassland on private land.
- Complex and non-ideal boundaries between private and public land e.g. high perimeter to area ratios, insertions into reserves, that form barriers to fauna movement.
- Clearance of native vegetation to create access to, and defendable space around, new rural dwellings.
- Poor management of native vegetation.
- Climate change resulting in changes to composition of native vegetation and habitat as well as more frequent extreme events, particularly bushfire.

10.5 KEY FINDINGS

Hepburn's biodiversity includes Federal and State listed flora and fauna species. While most biodiversity values are concentrated in public reserves, there are extensive biodiversity values, including EPBC listed species on private land and roadsides. There is strong strategic and policy support for protection and enhancement of the Shire's biodiversity.

There is scope for introduction of additional planning controls to protect and enhance existing biodiversity values. Increasing ecological connectivity and creating connections between remnant vegetation, in particular will benefit existing fauna and flora and fauna and support species to adapt to the changing climate. However, more detailed mapping and description of biodiversity values is required.

Issues

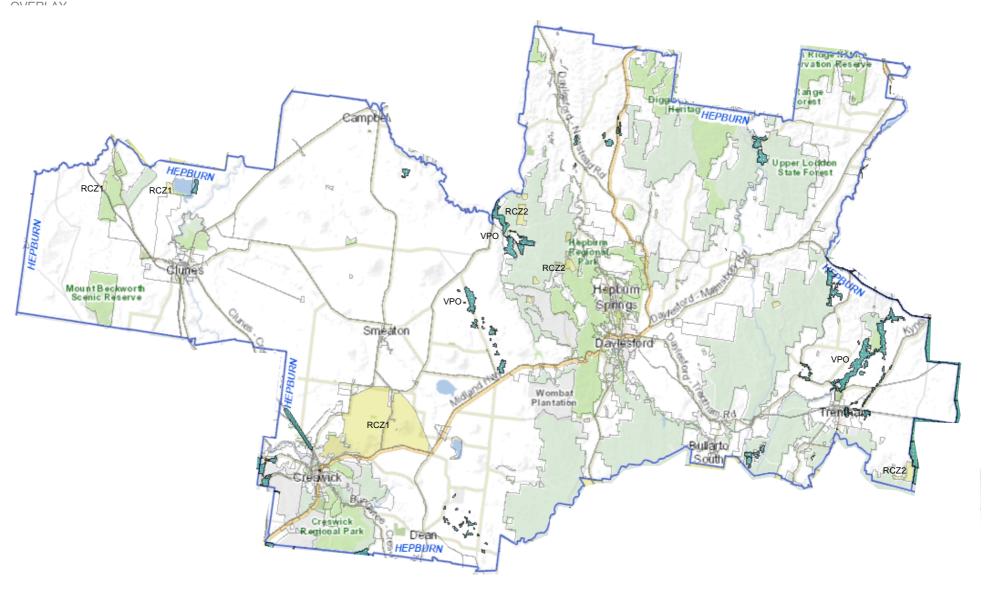
Limited application of planning controls to protect and enhance biodiversity values.

Lack of shire-wide description and appropriately scale mapping of biodiversity values to support introduction of additional planning controls.

Threats to biodiversity including further fragmentation of nat8ive vegetation remnants, climate change, poor land management.

Potential strategy response

Recommend further strategic work to provide appropriately scaled mapping as the basis for planning controls to identify, protect and enhance these environmental assets.



11 Water supply catchments and groundwater

11.1 STRATEGIC CONTEXT

Plan Melbourne

Plan Melbourne acknowledges the critical role of water supply catchments in green wedges and peri-urban areas in supporting metropolitan Melbourne.

Direction 4.5 Plan for Melbourne's green wedges and peri-urban areas

As Melbourne grows, planning for Melbourne's peri-urban areas is required to:

 protect major state infrastructure and resource assets, including water supply dams and water catchments and waste management and recycling facilities.

Under Desired Planning Outcomes for Peri Urban Areas, the plan states:

- Water supply catchments
 - Manage and protect catchments (including Special Water Supply Catchments), groundwater, water infrastructure and storages, and waterways to improve water quality, protect the environment and provide a reliable and secure water supply.

Central Highlands Regional Growth Plan

The Growth Plan notes that large parts of the region are included in declared water supply catchments, which provide potable water for settlements both within and outside the region. Development pressures in high amenity areas in eastern parts of the region may conflict with planning objectives relating to the protection of state and regionally significant water catchments. The plan encourages the following opportunities to minimise environmental impacts on water catchments:

- Review domestic wastewater management plans, particularly in areas subject to pressure for rural residential development.
- Review of council domestic wastewater management plans to enable effective planning for the type of settlement and economic activity that can occur in these areas
- Strategically planning the siting of rural residential development to have regard to regionally significant assets
- Direct most urban growth to sewered settlements.

The Growth Plan also recommends appropriate land use and development and infrastructure improvements to protect water catchments.

The Victorian Mineral Springs Strategic Masterplan 2015-2021 reviews and sets out recommendations for the management of mineral spring reserves and visitor infrastructure.

Guidelines for Planning Permit Applications in Open, Potable Water Supply Catchment Areas²⁵ and Planning Practice Note 55⁷²

The Practice Note sets out the process for assessment of planning permits within open water supply catchments, incorporating the Guidelines for Planning Permit Applications in Open, Potable Water Supply Catchment Areas, and aims to protect the quality of water within potable water supply storages. There are:

- Guideline 1: Density of dwellings
- Guideline 2: Effluent disposal and septic tank system maintenance
- Guideline 3: Vegetated corridors and buffer zones along waterways
- Guideline 4: Buildings and works
- Guideline 5: Agricultural activities

The Guidelines advise that a Domestic Wastewater Management Plan is considered an acceptable basis for relaxing their 1:40 dwelling density guideline. This type of plan provides the strategic basis for land use planning in an open drinking water catchment.

Domestic Wastewater Management Plan⁷³

The Domestic Wastewater Management Plan sets out a plan to reduce the environmental, health and economic risks to Council and the community posed by domestic wastewater. The Plan recognises this as a critical issue as the Shire is located in several water supply catchments, including the Loddon and Campaspe River catchments which supply drinking and irrigation water, and is in the upper catchment of other catchments that supply potable storage reservoirs for several towns and settlements. The Shire's mineral spring reserves are important geological and hydrological features that underpin the tourism industry and rural land uses are also heavily reliant on water.

The Plan identifies actions that can be undertaken to:

⁷² DELWP (20

⁷³ Hepburn Shire Council (2014) Domestic Wastewater Management Plan

- Comply with current on-site domestic wastewater legislation.
- Minimise the impacts of domestic wastewater on human health and the environment.
- Direct the management of current Onsite Wastewater Treatment Systems (OWTS).

The plan uses a risk management approach in order to identify properties at highest risk of contaminating water supplies and sets out a process for managing that risk through audit, education and legislation. There are no planning policy recommendations.

Council is currently reviewing its Domestic Wastewater Management Plan.

11.2 POLICY CONTEXT

Clause 02.01 Context

Hepburn is located within a number of water supply catchments, including the Loddon and Coliban Rivers, designated by the State Government to provide drinking water, and in some cases irrigation water for central and northern Victoria.

02.03-4 Natural resource management

Water

Water catchments within the Shire ultimately link to the Murray River and Port Phillip Bay. The whole of the Shire is within proclaimed water supply catchments declared under the Catchment and Land Protection Act 1994. Potable supply is provided to townships within and downstream of the Shire.

Hepburn Shire is known as the Spa Centre of Australia. Mineral springs are a major tourist attraction and economic asset for the Shire and wider region. Maintaining groundwater quantity, quality and management is an important issue for Council and the Catchment Management Authorities. Mitigating the impacts of stormwater from development will also assist to maintain water resources. Strategic directions for water

- Minimise landscape and water quality impacts on the catchments through careful location and design of development and wastewater systems.
- Protect streamsides, catchments, flood plains and wetlands from the impacts of development.
- Protect water resources in the Shire through integrated water and catchment management including stormwater.
- Protect mineral springs, their aquifers and environs from the impacts of waste disposal and drainage.

11.03-3S Peri-urban areas manage growth in peri-urban areas to protect and enhance their identified valued attributes by:

 Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.

14.02-1S Catchment planning and management - assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment by:

 Ensure the continued availability of clean, high-quality drinking water by protecting water catchments and water supply facilities.

14.02-1L Catchment and land protection - ensure that use and development in a special water supply catchment protects, restores and enhances the quality and quantity of the natural resources and environmental systems for the long term supply of quality water for future generations by:

- Ensure that use and development incorporate measures to protect, restore and enhance the natural resources and environmental systems, including waterways in special water supply catchments.
- Provide for the effective control of stormwater drainage and wastewater disposal in a manner that prevents any detrimental impacts to the natural resources and environmental systems.
- Manage the cumulative effects of unsewered development by ensuring land can accommodate effective on-site treatment of all wastewater generated from the land.
- Encourage best practice approaches for all effluent disposal systems, effluent fields, irrigation fields and stormwater disposal.
- Minimise and reduce the impact of use and development on the health and capacity of natural resources and environment systems including waterways, soil types, soil structure, soil condition, vegetation and aquatic and terrestrial habitats.
- Maximise, maintain and enhance riparian edges and vegetation cover all year round.

14.02-2S Water quality - protect water quality by:

- Protect reservoirs, water mains and local storage facilities from potential contamination.
- Ensure that land use activities potentially discharging contaminated runoff or wastes to waterways are sited and managed to minimise such discharges and to

protect the quality of surface water and groundwater resources, rivers, streams, wetlands, estuaries and marine environments.

- Prevent the establishment of incompatible land uses in aquifer recharge or saline discharge areas and in potable water catchments.
- Use the mapped information available from the Department of Environment, Land, Water and Planning to identify the beneficial uses of groundwater resources and have regard to potential impacts on these resources from proposed land use or development.

14.02-2L Mineral Springs and Fresh Water Springs Protection - Hepburn

This policy applies to land that is affected by the ESO2 and aims to enhance and protect the quality and quantity of mineral springs and fresh water springs water and not compromise aquifer integrity through development by:

- Ensure that development does not negatively impact on the quality or supply of water to a mineral spring or fresh water spring.
- Direct all stormwater and drainage associated with development away from the eye of a mineral spring or fresh water spring.
- Ensure that development includes an effluent and waste water treatment and disposal system to prevent effluent disposal entering groundwater sources.

Clause 42.01 Environmental Significance Overlay (ESO) has been applied to protect water supply catchments and mineral springs groundwater.

- ESO 1 Special Water Supply Catchment Protection seeks to protect the quality and security of water supply by limiting the siting and form of development to minimise impacts on ground and surface water quality.
- ESO2 Mineral springs and groundwater protection seeks to protect the mineral springs and town water supply groundwater aquifers from the impacts of effluent and drainage by limiting the siting and form of development to minimise impacts on ground water quality.

11.3 WATER VALUES

WATER SUPPLY CATCHMENTS

Hepburn Shire falls predominantly within the Cairn Curran water supply catchments and to a lesser extent the Tullaroop Reservoir, Creswick and Eppalock water supply

catchments. Declared water supply catchments are protected under the *Catchment and Land Protection Act 1994*. These catchments have significant values as a source of water supply, both for domestic and for stock and domestic use. Once a catchment is 'Declared', approvals for activities conducted under other statutes and statutory planning schemes must be referred to the responsible land management authority (water authority, catchment management authority or State Government).

GROUNDWATER

The **North Central Regional Catchment Strategy**⁷⁴ states that sub-regional aquifer systems within the Loddon and Campaspe catchments are known to contain useful quantities of lower salinity groundwater commonly used for stock and domestic purposes or for irrigation (e.g. potato industry in the upper Loddon River basin around Smeaton). Lower salinity groundwater also features in the mineral water industry in both the upper Campaspe and Loddon catchments and is well known from the Daylesford and Hepburn Springs areas.

GROUNDWATER

Groundwater is the main source of water for irrigation in the Shire. The Shire falls within two groundwater management areas Loddon Highlands WSPA and Central Victoria Mineral Springs GMA. Groundwater in both areas is highly valued and is shared between the environment, domestic and stock users, irrigated agriculture, commercial users and urban communities. Groundwater resources are managed under local management plans with a cap on the total amount or entitlement that can be used for consumptive purposes.

Total entitlement in the Central Victoria Mineral Springs GMA is capped at around 6GL/year.⁷⁵. The southern parts of the Loddon and Coliban Management Zones fall within Hepburn Shire. Most entitlement and usage occur in the Loddon Management Zone (Table 29, Figure 83). Annual usage rarely exceeds 50% of total entitlement⁷⁶.

Total entitlement in the Loddon Highlands GMA is capped at approximately 20GL/yr. The Newlyn, Blampied and Mollongghip Management Zones fall within Hepburn Shire. Most entitlement and usage are within the Ascot Management Zone, to the east of Hepburn Springs. Most entitlement and usage in Hepburn Springs are within the Newlyn and Blampied Management Zones.

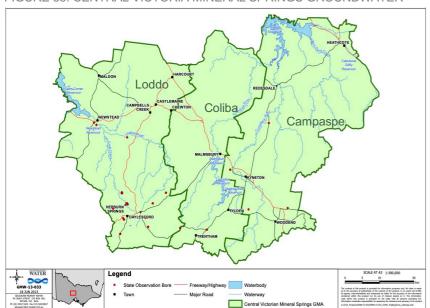
⁷⁴ https://northcentral.rcs.vic.gov.au/themes/water-2/

⁷⁵ Goulburn Murray Water (2013) Central Victorian Mineral Springs Groundwater Management Area Local Management Plan

TABLE 29:M GROUNDWATER ENTITLEMENT

	Management zone	Entitlement limit (ML/yr)	Recorded use 2021/22 ⁷⁶⁷⁷ (ML)
Central Victoria Mineral Springs			
	Campaspe	1,150	184
	Coliban	2,144	380
	Loddon	2,730	659
	Total	6,024	1,222
Loddon Highlands			
	Ullina	3,009	156
	Talbot	1,196	277
	Ascot	7,042	2,318
	Mollongghip	353	40
	Blampied	1,253	561
	Waubra	4,703	893
	Newlyn	2,946	795
	Total	20.502	5.041

FIGURE 83: CENTRAL VICTORIA MINERAL SPRINGS GROUNDWATER



⁷⁶ Goulburn Murray Water (2022) 2022 Annual Newsletter Central Victorian Mineral Springs Groundwater Management Area

FIGURE 84: LODDON HIGHLANDS GROUNDWATER MANAGEMENT AREA DUNOLLY TALBOT HCARISBROOK Loddon Highlands WSPA ULLINA WATER Legend 000 Semi-Major Road GMW-12-124 Loddon Highlands Management zones

Loddon Highlands WSPA

⁷⁷ Goulburn Murray Water (2022) Loddon Highlands Water Supply Protection Area Groundwater Management Plan Annual Report

11.4 ISSUES AND OPPORTUNITIES

WATER AVAILABILITY

Groundwater in the larger freshwater aquifers is extensively used for irrigation, with trading and allocations managed by rural water authorities. A drying climate means less groundwater recharge (replenishment) and recession of groundwater levels has been observed across most aquifers. Whilst this recession is not yet severely impacting availability for all irrigators, it is nevertheless a longer-term concern, along with a trend of increasing groundwater use across the region. The groundwater level trend in the Loddon Highlands Waste Supply Protection Area (WSPA) is declining and is stable in the Central Victorian Mineral Springs Groundwater Management Area (GMA).

Given the current usage, there is potential for underutilised licenses to be activated to increase the extent of irrigated agriculture. This will depend, amongst other things, on the extent of land suited to irrigated agriculture.

The proliferation of small farms and development of associated dams and stock and domestic bores and the impacts on water security is causing concern within the community.

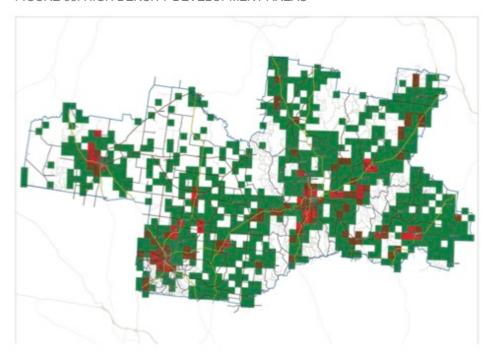
WATER QUALITY

In rural areas, wastewater is treated by an onsite wastewater treatment system (OWTS) to prevent the transport of nutrients, pathogens and other pollutants to surface waters and to prevent any negative impacts on groundwater. The DWMP estimated that there were around 4,500 properties with an OWTS. ESO 1 Special Water Supply Catchment Protection, sets out the requirements and guidelines to minimise the impacts of domestic wastewater on water supply catchments.

Council has identified high density development areas where there are more than 20 dwellings per square km (or more than 8 dwellings per 40 hectare). Council seeks compulsory status reports on OWTS as a priority from properties within high density development areas. Since 2014, an additional 493 dwellings have been constructed in the FZ, predominantly in the eastern parts of the Shire. It will be important that the review of the current DMWP consider the cumulative impacts of further OWTS.

Macedon Ranges Shire, in conjunction with Coliban Water recently introduced an update to the ESO that applies to the Eppalock Proclaimed Water Supply Catchment, which seeks to protect water quality. Consideration should be given to harmonising, where appropriate ESOs across potable water supply catchments.

FIGURE 85: HIGH DENSITY DEVELOPMENT AREAS



11.5 KEY FINDINGS,

Issues

Increasing intensity of septic tanks impacting water quality.

Potential strategy response

Review, update and/or harmonise ESOs that apply to water supply catchments.

12 Landscape

12.1 STRATEGIC CONTEXT

Plan Melbourne

Direction 4.5 - Plan for Melbourne's green wedges and peri-urban areas.

Consistent with Plan Melbourne and the Regional Growth Plans, planning for green wedge and peri-urban areas should:

 define and protect areas that are strategically important to the metropolitan area and the state, for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.

Desired planning outcomes for peri-urban areas include:

 Protect significant views, maintain non-urban breaks between urban areas, and conserve the cultural significance, tourism appeal and character of scenic rural landscapes. Recognised high-value landscape features include open farmed landscapes, sites of geological significance, ranges, hills and ridges and open coastal spaces.

Central Highlands Regional Growth Plan

The landscape character of the region is both a significant contributor to its amenity and an attractor for residents and tourists. Given the expected growth of western Melbourne, the proximity of the high quality rural and natural character of the Central Highlands will be an important drawcard. As such, the protection of the region's key rural and natural landscapes will have important economic and social benefits.

The South West Victoria Landscape Assessment Study (2013) assesses the visual character and significance of the landscape. This provides planning guidance for identifying, retaining and respecting significant landscape values. As shown on Map 6, some broad landscapes have been designated as regionally significant and others of state significance (or higher). The region will need to consider a consistent way to apply suitable planning tools to recognise and protect these significant landscapes.

Protection of rural character more generally will be assisted by directing urban development into designated settlements, encouraging clear urban boundaries and

strategically directing the location of rural residential development to locations with minimal landscape impacts.

Land use policies, strategies and actions include:

- Develop and apply a consistent range of planning measures to protect the identified values of significant landscapes.
- Support implementation of the recommendations made by the South West Landscape Assessment Study.
- Use planning provisions to create clear urban boundaries and maintain distinctive breaks and open rural landscapes between settlements.

The **South West Landscape Assessment Study**⁷⁸ provides a landscape assessment of South West Victoria and identifies the most significant landscape character types and the most significant landscapes of the region. The Study identifies the Hepburn Gold Mines and Volcanic District and the Island Uplands (Mount Beckworth) as State significant and worthy of protection through the Hepburn Planning Scheme.

The Study provides the basis for introduction or expansion of the Significant Landscape Overlay (SLO) over areas in the west of the Shire to protect the landscape character of each type. The Hepburn Gold Mines and Volcanic District SLO would expand the existing SLO location in the west while the Island Uplands SLO would introduce a new SLO over land around Mt Beckworth.

Council sought to introduce the proposed suite of SLOs via Amendment C80 in 2021, however this component of the amendment was abandoned, primarily due to concerns expressed by farmers on the impacts on agricultural operations and lack of consultation. Council acknowledged that engagement on the Amendment was hampered by restrictions on face to face discussions imposed during the COVID-19 lockdown period. There is an opportunity to revisit the proposed SLOs via the Agricultural Land and Rural Settlement Strategy implementation process.

12.2 POLICY CONTEXT

Clause 02.02 Vision includes the following strategic direction:

Protect and manage the municipality's valued landscapes from unsympathetic development or major change.

⁷⁸ DELWP and Planisphere (2013) South West Landscape Assessment Study,

02.03-2 Environmental and landscape values

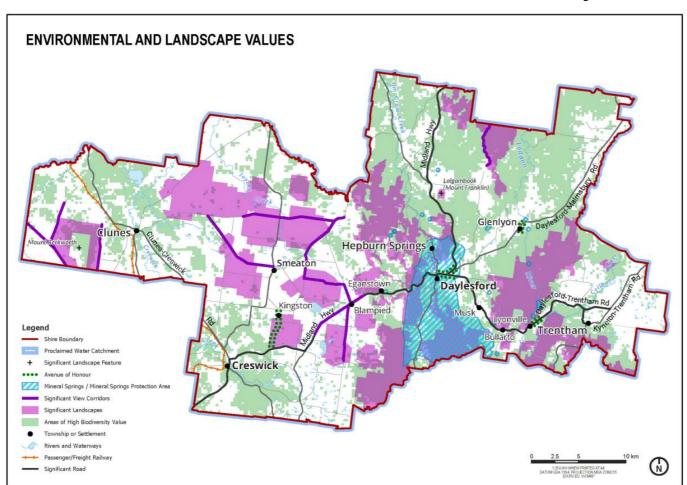
Hepburn contains a range of spectacular landscapes of state, regional and local significance, which are the traditional lands of the Dja Dja Wurrung Clans. Large panoramic views of Lalgambook (Mt. Franklin) and the whole groups of volcanic hills give heart to the country of Larnibarramal (Home of the Emu). The peaks and plains of the Victorian Volcanic Plains bioregion, the ridges and forests of the Central Victorian Uplands and the unique mineral springs area, form landscapes that are significant for their Aboriginal and post contact cultural, visual, environmental, geological and scientific values. These landscapes are attractive to tourists, visitors and locals alike and have

strong cultural obligations and connections for the Dja Dja Wurrung Clans. The strategic direction relevant to lands cape:

Protect and enhance state significant landscapes such as volcanic outcrops, cones and goldfields.

Clause 02.03-5 Built environment and Clause 02.03-7 Economic Development identify the Shire's gold mining landscapes and heritage and rural land as important landscape values. Clause 02.03-9 Infrastructure notes the risk that utility infrastructure, particularly renewable wind energy infrastructure, may impact significant landscapes.

Council's strategic directions for infrastructure are to:



 Support the sensitive location of transmission infrastructure to support decarbonisation within the municipality that provides a net community benefit.

Significant landscapes are included in Clause 02.04 Strategic Framework Plans.

11.01-1S Settlement

Deliver networks of high-quality integrated settlements that have a strong identity and sense of place, are prosperous and are sustainable by:

- Preserving and protecting features of rural land and natural resources and features to enhance their contribution to settlements and landscapes.
- **11.03-3S Peri-urban areas** manage growth in peri-urban areas to protect and enhance their identified valued attributes, by:
- Identify and protect areas that are strategically important for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
- Provide for development in established settlements that have capacity for growth having regard to complex ecosystems, landscapes,

- agricultural and recreational activities in towns identified by Regional Growth Plans as having potential for growth.
- Prevent dispersed settlement and provide for non-urban breaks between urban areas.
- 12.05-2S Landscapes protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments by:
- Ensure significant landscape areas such as forests, the bays and coastlines are protected. Ensure development does not detract from the natural qualities of significant landscape areas.
- Improve the landscape qualities, open space linkages and environmental performance in significant landscapes and open spaces, including green wedges, conservation areas and non-urban areas.
- Recognise the natural landscape for its aesthetic value and as a fully functioning system. Ensure important natural features are protected and enhanced.

12.05-2R Landscapes - Central Highlands Strategy

 Provide clear urban boundaries and maintain distinctive breaks and open rural landscapes between settlements.

12.05-2L Landscape management - protect and enhance the unique features of the landscape character areas of the municipality identified as the Goldfields, The Uplands and Western Volcanic Plain.

This policy applies to land shown on the Landscapes character areas and significance map:

Municipal-wide strategies

- Ensure development responds to the landscape character area identified in attached landscape character types and significance map.
- Manage land use, development and infrastructure to:
- Conserve and enhance significant landscapes, views and vantage points. Maintain sequences of views from key transport corridors.
- Encourage retention of native vegetation and revegetation that contributes to the significant landscapes particularly on escarpments, ridgelines and at vantage points.
- Maintain significant landscapes and views for the important contribution they make to the local and regional tourism economy.
- Design development to complement the character of the surrounding landscape with consideration of form, construction materials, colours and finishes, and design detailing.

- Site and design development in the foreground of identified significant views to minimise visual intrusion through low building heights, minimal building footprints, recessive colours and materials to the setting, and integration with vegetation.
- Site large scale development to avoid impacting on significant landscapes and views, with particular consideration given to the foreground of identified significant views, that are particularly sensitive to visual intrusion.
- Protect sites of geological significance that have been exposed either naturally or due to past extraction work as they are examples of significant geological processes, phenomena or stratigraphy, including:
 - Tuff ring and crater, Hepburn Lagoon.
 - Quartz veined Ordovician sediments typical of Creswick area, Creswick-Dean Road.
 - Tertiary gravel cliffs, Portuguese flat dredge hole.
 - Pink Ordovician sediment anticline, syncline, fault and quartz veining.
 Springmount Road cuttings.
 - Weathered folded Ordovician sediment. Clay quarry, Creswick.

Goldfields strategies

- Maintain the rural landscape character of the Goldfields area.
- Maintain and strengthen the mosaic of native vegetation among the agricultural landscapes of the area.
- Locate development within the topography of the site and screen with vegetation to minimise visual impact.
- Retain views to landscape features such as ridge rises and notable exposed bedrock features, particularly from identified significant viewing locations and road corridors.

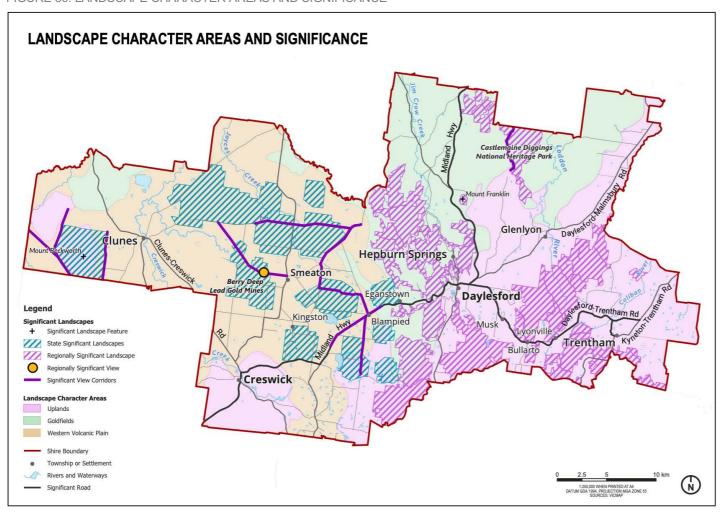
Uplands strategies

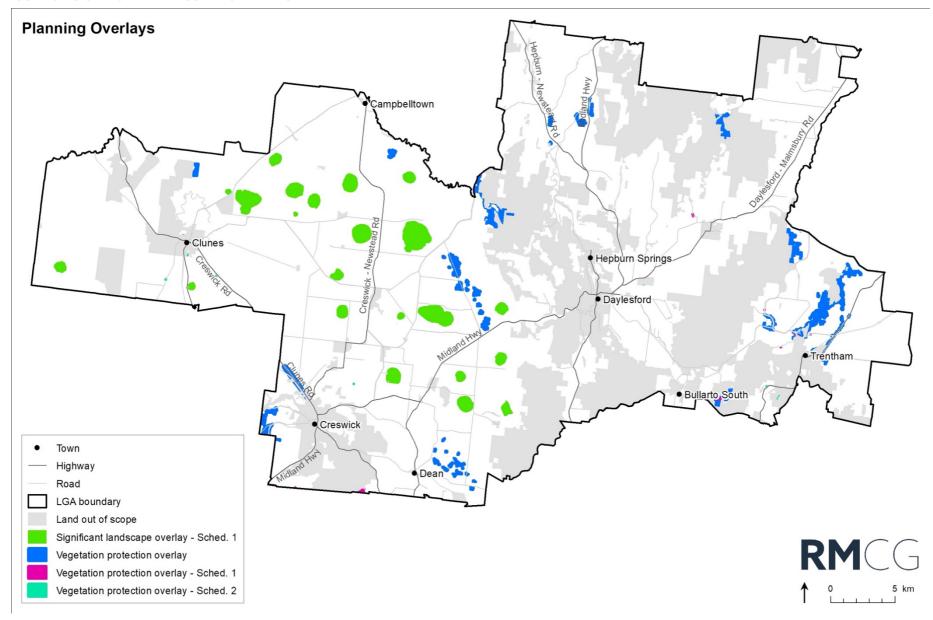
- Maintain the productive agricultural landscape character of the area and the dominance of topography and vegetation.
- Preserve and enhance the landscape features of the area such as gorges and mountains.
- Site development to ensure the retention of views to the Macedon Ranges, Mount Beckworth and other volcanic landscape features, particularly from identified significant viewing locations and road corridors.

Western Volcanic Plain strategies

- Protect the volcanic cones, craters and lakes, lava flows, rocky outcrops and native vegetation remnants from destructive or dominating development.
- Preserve and enhance dry stone walls.
- Ensure shelter belt planting remains a feature of the area and retains views to important volcanic features.
- Ensure restoration of shelterbelt planting responds to ecological challenges such as vegetation dieback and lower rainfall, and achieves both ecological and landscape character values.
- Retain long range views to distant geological features such as Mt. Kooroocheang and Mt. Franklin (Lalgambook) and their surrounding volcanic peaks, particularly from identified significant viewing locations and road corridors.

FIGURE 86: LANDSCAPE CHARACTER AREAS AND SIGNIFICANCE





Hepburn's landscapes are highly valued by residents and visitors and form part of the Shire's identity and unique selling point important for its desirability as a place to live and visit. The landscape character is inextricably linked to geological features, biodiversity, vegetation, heritage, and farming. The Hepburn Planning Scheme Review noted that:

Protecting these landscapes is important not only for the intrinsic value of these landscapes but also for their contribution to the local economy. The loss of the landscape character will eventually negatively impact on attractiveness of the area for tourism. Recognising their important value and this link is critical to being able to better protect them.

12.3 ISSUES AND OPPORTUNITIES

The **South West Landscape Assessment Study**⁷⁹ provides the basis for introduction or expansion of the Significant Landscape Overlay (SLO) over areas in the west of the Shire to protect the landscape character of each type. There is an opportunity through this agricultural study to undertake further engagement impacts of SLOs proposed by the Study, particularly on the impacts on agricultural operations,

Large scale infrastructure development can have impacts on landscape qualities. The Hepburn Planning Scheme Review recommended Council undertake further work to understand the local impacts of initiatives for more renewable energy facilities (e.g. wind farms and associated infrastructure) on the local landscape character.

12.4 KEY FINDINGS

Issues

Impact of large scale renewable energy infrastructure on local character

Opportunities

Reconsider introduction of SLOs proposed by Amendment C80.

⁷⁹ DELWP and Planisphere (2013) South West Landscape Assessment Study,

13 Other considerations

There are number of significant matters and that inform the strategic directions for rural land use and development, but detailed review is beyond the scope of this rural land strategy. Some of these matters are the subject of current or proposed strategic work being conducted by Council. These matters are briefly described and any relevance to rural land use and development has been noted for consideration in the preparation of the rural land strategy.

13.1 CULTURAL HERITAGE

The Dja Dja Wurrung people are the Traditional Owners of the majority of the Hepburn Shire area and the original inhabitants of the region. Dja Dja Wurrung country incorporates a large portion of land in the Central region of Victoria between the Avoca and Loddon Rivers.

Aboriginal Cultural Heritage comprises the intangible and tangible aspects of the whole body of cultural practices, resources and knowledge systems that have been and continue to be developed, nurtured, refined and passed on by Aboriginal Peoples as part of expressing their cultural identity⁸⁰. It creates and maintains continuous links between People, lands and waters. It shapes identity and is a lived spirituality fundamental to the wellbeing of communities through connectedness across generations⁸¹.

The **Dhelkunya Dja Wurrung Country Plan 2014-2034** sets a vision for the health and well-being of the Dja Dja Wurrung people to be strong and underpinned by their living culture, for their lands and waters to be in good condition and actively managed to promote the laws, culture and rights of all Dja Dja Wurrung people and being politically empowered with an established place in society, and being capable of managing their own affairs from a strong and diverse economic base. The Plan includes objectives to:

- Strengthen understanding of what significant sites and artefacts exist on Dja Dja Wurrung Country.
- Secure the right and means to effectively protect and manage cultural landscapes and sites.
- Make use of our cultural heritage to promote healing and reconciliation, teach
 Djaara people about their Country and laws, and raise cultural awareness among
 the broader community.

Council has prepared a brief for an Aboriginal Cultural Heritage Strategy to identify key areas and sites and recommendations for their protection. Areas of cultural heritage sensitivity are shown in Figure 89

13.2 NATURAL HAZARDS

BUSHFIRE

All of Hepburn Shire is designated a Bushfire Prone Area. Bushfire Prone Areas are subject to or likely to be subject to bushfire and building permit requirements will be triggered where new buildings are required to build to a national bushfire construction standard, known as a Bushfire Attack Level (BAL).

The Bushfire Management Overlay (BMO) has been applied to bushfire prone areas with very high and extreme bushfire hazards and also triggers planning permit requirements including mandatory bushfire protection measures such as defendable space, water supply, access and ongoing vegetation management requirements. Areas where a BMO applies are also by default Bushfire Prone Areas. Areas of bushfire hazard are shown in Figure 88.

Challenges exist in Hepburn given the extent of high bushfire hazard areas that intersect with settlements as well as areas experiencing rural residential and tourism expansion. Future planning for rural tourism and rural residential development will need to consider the potential for changes in landscape bushfire risk.

Council is currently undertaking bushfire risk assessments around key towns to inform preparation of township structure plans.

Fire risk can be reduced by preparing fire breaks, managing grass levels, good weed and stock management. Fire risk mitigation measures are detailed in a Bushfire Management Plans and form part of a planning permit for buildings and works in the BMO. A bushfire management plan shows all of the bushfire protection measures that will be implemented as part of a development to reduce the risk from bushfire to an acceptable level. Standard requirements include creating 30m of defendable space around a dwelling and access with a trafficable width of 3.5m. This can lead to significant vegetation clearance which may have negative impacts on biodiversity.

⁸⁰ Janke, T. (1999) Our Culture, Our Future: Proposals for the recognition and protection of Indigenous cultural and intellectual property, final report to the Australian Institute of Aboriginal and Torres Strait Islander Studies,

⁸¹ Victorian Aboriginal Heritage Council, Aboriginal Cultural Heritage: Keep us Strong

Climate change will also increase the frequency and intensity of extreme weather events such as the heatwaves and drought. These changes will increase the bushfire risk to homes, farms and infrastructure in rural areas and should be a consideration in planning for rural areas.

The 2022 Planning Scheme Review did not make any recommendations with regard planning and development in bushfire prone areas. Council officers did not note any issues with assessment of planning permits for building and works on land within the BMO.

FLOODING

Floodplain areas at risk of inundation by a 1 in 100 year flood have been identified by the Land Subject to Inundation Overlay (LSIO). The LSIO has been applied to properties in the west of the Shire around Clunes, associated with local creeks and rivers.

The LSIO provides guidance and standards on how development of properties should respond to flood risk. Building and works on land within an LSIO will require a planning permit. Council officers did not note any issues with assessment of planning permits for building and works on land within the BMO.

EROSION

Land to prone to erosion and landslip have been identified by the Erosion Management Overlay (EMO) to minimise land disturbance and inappropriate development. A planning permit will generally be required for new buildings and works, including removing trees and vegetation. Council officers did not note any issues with assessment of planning permits for building and works on land within the BMO.

13.3 KEY FINDINGS

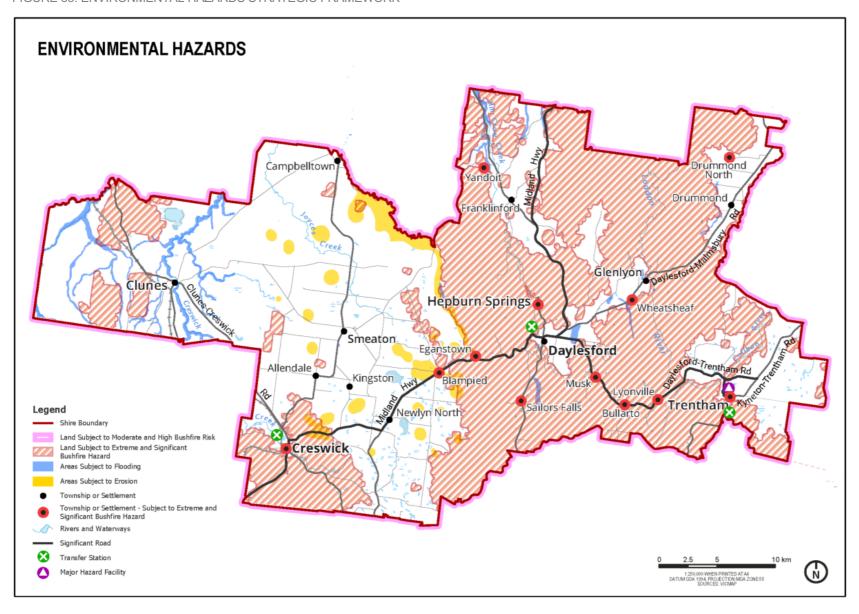
There are areas of the Shire of particular significance to the Dja Dja Wurrung. Preparation of a cultural heritage strategy is being undertaken in parallel with this study. There are areas of significant hazard in the Shire's rural areas, particularly bushfire. Building and works within areas of hazard is guided by various overlays which Council officers noted were performing well. These hazards though will need to be considered in the review of rural settlements, RLZ and local policy for dwellings and tourism development in the rural areas.

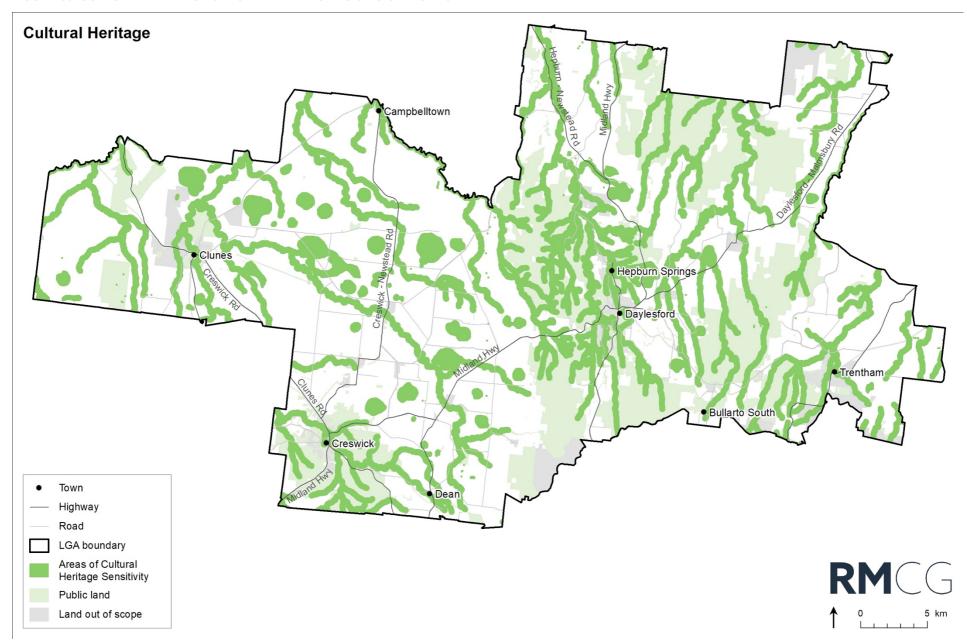
Potential strategy response

Inform a rural strategic framework plan.

Inform consideration of RAZ and RLZ recommendations.

Consider hazards, particularly bushfire and safety of human life in rural development strategies and policy local policy.





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