

# NORTHERN RANGES

## Green Wedge Management Plan Issues paper

June 2010



CARDINIA

Prepared by:

Phillip Thomas  
Planning and Economic Development

in association with

Cardinia Shire Council  
Strategic Planning Department

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(ABN: 32 210 906 807)

Henty Way, Pakenham

PO Box 7, Pakenham Vic 3810

Phone: 1300 787 624

Fax: (03) 5941 3784

Email: [mail@cardinia.vic.gov.au](mailto:mail@cardinia.vic.gov.au)

Web: [www.cardinia.vic.gov.au](http://www.cardinia.vic.gov.au)

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# 1. INTRODUCTION

## 1.1 What is a green wedge management plan?

Green wedges are the rural and natural areas of land located outside the metropolitan Urban Growth Boundary (UGB) and which separate Melbourne's urban growth corridors. Although they are set aside as non urban land through the Planning Scheme, green wedges can be subjected to intense pressures from recreation, tourism, infrastructure needs, intensive agriculture and hobby farmers, as they are located on the edge of a city with around four million people. A more proactive approach is needed to ensure that these pressures are managed properly and to ensure that the scenic and natural qualities of Melbourne's green wedges are not eroded over time.

Green wedge management plans are therefore required to provide this proactive approach, to improve the management and planning of Melbourne's green wedges. The purpose of a green wedge management plan is to identify the core values, features and assets (environmental, social and economic) of a green wedge to determine what should be protected and enhanced, the needs of the local community, a strategic direction for land use and development and a framework to encourage sustainable land management practices and appropriate resource management.

A green wedge management plan will include a broad range of implementation tools that include regulatory and non-regulatory measures. For example, regulatory actions may encompass changes to existing local planning schemes and non-regulatory measures may include education and incentive programs aimed at encouraging landowners to adopt sustainable land practices.

## 1.2 Purpose of the issues paper

This issues paper marks the first step in preparing a *Green Wedge Management Plan for Cardinia's Northern Ranges*. It relies largely on work Cardinia Shire Council has previously done, for example township strategies for Cockatoo, Emerald, Gembrook and the *Gembrook Rural Review 2004*. These are supplemented by other Shire-wide policies such as the Cardinia Shire Council Planning Scheme, Economic Profile, Equestrian Strategy and submissions made by Council and other parties to Parliamentary Inquiries and the Puffing Billy Business Plan and Master Plan. A full list of references is contained in Appendix 1.

Preliminary consultations have also been held with representatives from township committees, community groups, environmental agencies, government departments, Council staff and local members of the community with an interest in farming, as shown in Appendix 2. These meetings have helped inform the preparation of the issues paper although it is not a substitute for the wider public consultation, which will be co-ordinated to obtain feedback on this issues paper and to develop the draft green wedge management plan.

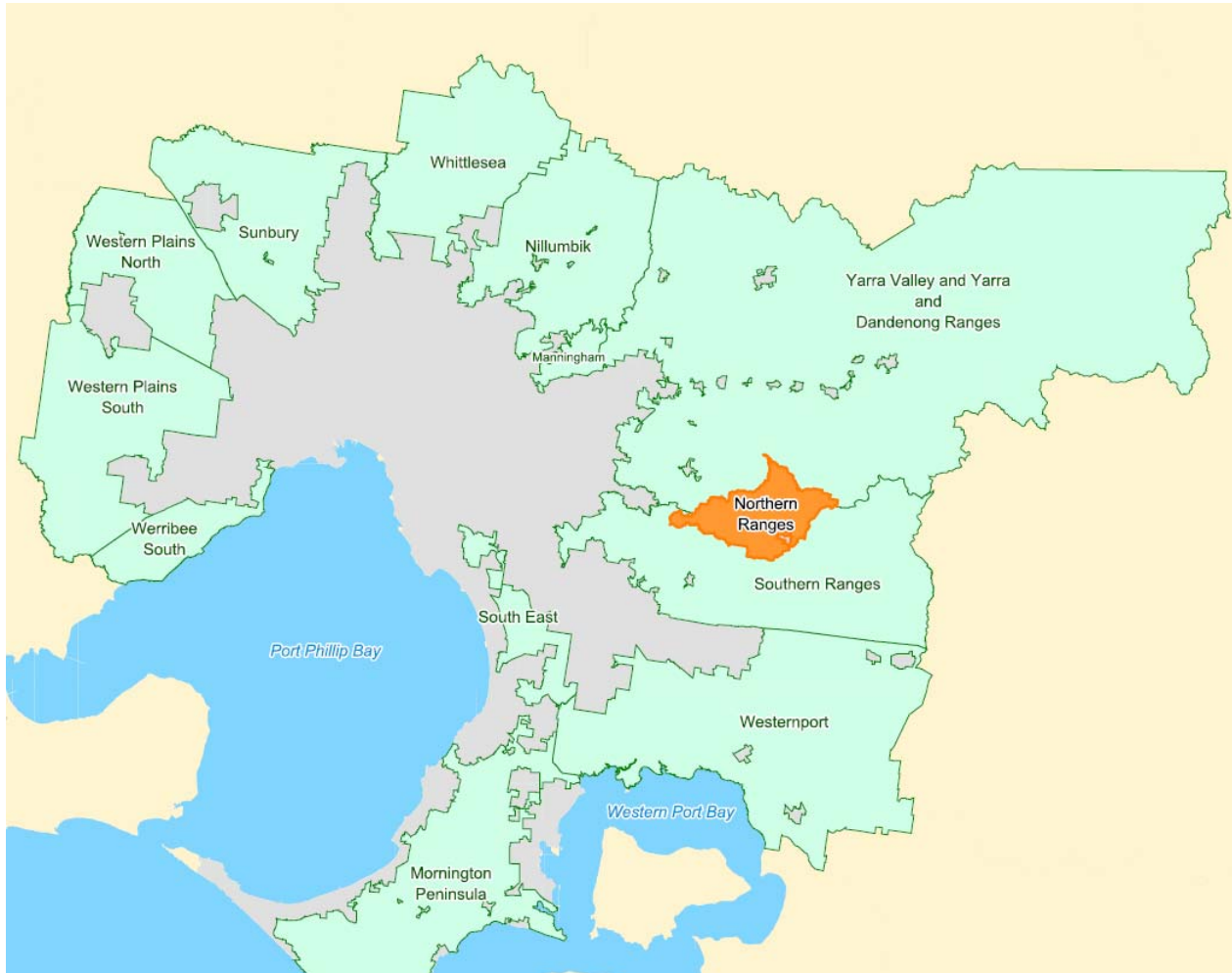
The issues paper will inform discussions between Council and the community, stakeholders and State agencies. It is anticipated that these discussions will raise further issues and questions that the green wedge management plan will need to address.

Throughout this issues paper, items for consideration have been raised in each section of the paper, and highlighted as grey boxed text. People wishing to submit a response to this issues paper are encouraged to note their responses and thoughts on these issues, in their submission.

## 1.3 Study area

Twelve green wedge precincts have been identified around Melbourne, as shown on Map 1. Cardinia Shire's Northern Ranges Green Wedge comprises as part of one of these precincts, specifically the Yarra Valley and Yarra and Dandenong Ranges Green Wedge. The Shire of Yarra Ranges has prepared a draft green wedge management plan for the Yarra Valley and Yarra and Dandenong Ranges precinct although the plan does not include land outside the Shire of Yarra Ranges. The *Cardinia Northern Ranges Green Wedge Management Plan* considers this remaining area.

**Map 1: Metropolitan green wedges**



*Source: Melbourne 2030*

The study area comprises of approximately 120km<sup>2</sup> and includes the townships of Gembrook, Emerald and Cockatoo and the districts of Avonsleigh, Nangana, Clematis, Mt Burnett (part) and Menzies Creek (part). Map 2 demonstrates an aerial photo of the study area in Cardinia Shire.

#### **1.4 Land use**


Land use in the study area is a mixture of farming, environmental (natural landscapes), urban and rural residential. The aerial photo on Map 2 reveals that approximately one-third of the study area is vegetated while the remaining area has been cleared, generally for broad scale farming. There are three main service centres in the area – Emerald, Cockatoo and Gembrook – which provide services and facilities for their townships and the wider community.

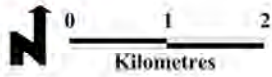
#### **1.5 Community profile**

Table 1 demonstrates that in 2006 the study area had a population of 12,566 people. The population statistics suggest the precinct has experienced minimal population growth between 2001 and 2006, especially when compared to Cardinia Shire as a whole or the rest of Melbourne.



# NORTHERN RANGES GREEN WEDGE STUDY AREA

 Study Area





**Table 1 2006 census**

No	AREA	EMERALD AREA	COCKATOO AREA	GEMBROOK AREA	STUDY AREA	CARDINIA SHIRE	MELBOURNE METROPOLITAN AREA
	INDICATOR						
1	Population 2006	6410	4310	1846	12,566	56,270	3.59m
2	Population 2001	6599	4246	1673	12,518	45,404	3.34m
3	% Growth 2001-2006	-2.9	1.5	10.3	0.3	23.9	7.6
4	% Overseas Born	17.8	12.8	15.7	15.8	14.2	29.0
5	0–4 years	6.4	7.4	7.3	6.9	7.6	6.3
6	5–17 years	20.7	24.1	23.5	22.3	22.2	16.6
7	18–64 years	63.2	63.7	60.0	62.9	60.8	64.5
8	65–84 years	8.3	3.9	8.7	6.8	8.4	10.9
9	85+ years	1.1	0.8	0.6	0.9	1.1	1.6
10	Dwellings	2384	1552	709	4645	19,670	1.47m
11	% Renting	9.4	11.3	8.9	10.0	17.2	24.5
12	Persons per dwelling	2.79	2.95	2.87	2.87	2.84	2.44

*Source: Australian Bureau of Statistics*

The study area has far fewer overseas born residents than the rest of Melbourne, fewer older people, and more young people (although fewer preschool children).

## 1.6 Report structure

The following chapters discuss issues that have emerged to date and are described under themes that are relevant to the Northern Ranges Green Wedge, namely:

- Agriculture and Horticulture
- Biodiversity
- Bushfire Management
- Leisure and Tourism
- Settlement and Townships
- Landscape Management
- Water
- Planning Controls

The final chapter highlights key issues and questions for the Northern Ranges Green Wedge and explains the next steps that will be taken to prepare the green wedge management plan.

## 2. AGRICULTURE AND HORTICULTURE

### 2.1 Introduction

Agriculture is an important value for Melbourne's green wedges as it is highly productive – the highest per hectare in Victoria – with a gross production value for the Port Phillip and Westernport Region of more than \$1 billion. Farming also contributes to the landscape and scenic qualities of Melbourne's green wedges, creates recreation and tourism opportunities through farm accommodation and wineries and underpins many of the green wedge communities both socially and economically.

It is an important economic activity in the Shire of Cardinia and accounts for 8.8 per cent of its workforce (1215 jobs in 2006) and 7.2 per cent of the Shire's output (\$252 million). Agriculture is therefore broadly comparable to industry sectors such as Education and Training (9.9 per cent jobs), and Health Care (7.8 per cent). In 2000/01 potato growing produced a value of \$18.6 million for the Shire and much of this is accounted for by the Gembrook area, although there is also a significant potato producing area in Koo Wee Rup. Potato growing therefore provides a similar value to the Shire as the beef and cattle industry (\$19.9 million in 2000/01) and is even comparable to the Shire's main agricultural industries of poultry farming (\$34.0 million), dairy (\$33.9 million) and asparagus (\$29.4 million).

Farming is an important activity in the study area, especially east of Woori Yallock Road where there is broad scale beef and cattle farming and potato growing. In the western half of the study area there is more intensive agriculture including cut flowers and berries, but also 'lifestyle' properties such as horse agistment and hobby farmers.

This broad division between genuine farming interests and lifestyle activities is typical of Melbourne's green wedges. The Department of Primary Industries (DPI) and the Port Phillip and Westernport Catchment Management Authority (PP&WCMA) investigated this issue in 2008 with a view to understanding how the personal values of property owners were able to support or hinder improved natural resource management. The report *Square Pegs in Green Wedges Landholders and Natural Resource Management in Melbourne's Rural Hinterland* surveyed 1000 landowners in Melbourne's green wedges and identified ten main types which are shown in Table 2.

The table indicates that "genuine" farmers make up about one third of landholders in Melbourne's green wedges and occupy around half of the green wedge area. Lifestyle farmers are more numerous although they account for a smaller land area, while other groups make up only a relatively small number and area. There are no local statistics for the study area although it is unlikely that it differs significantly from the overall picture.

### 2.2 Potato growing

Potato growing in the Gembrook area has historically been the main form of agriculture in the Northern Ranges Green Wedge, with an excellent reputation for high quality produce based on strong consumer demand for brushed potatoes from the red soil country. In 1995 Gembrook accounted for around 4 per cent of Victoria's potato growing area, producing around 10,000 tonnes and occupying around 400 hectares.

**Table 2: Landholder types**

TYPE	COMMENT	METRO AREA		YARRA1		SOUTH-EAST	
		% owners	% area	% owners	% area	% owners	% area
Farmers							
Commercial		8	20	7	9	9	30
Part-time		13	18	13	20	14	16
Green Commercial		2	4	3	3	2	7
Struggling	Generally operate at a loss	3	5	2	2	4	7
Hybrid Farmer	Combine farm and non farm operations	7	7	8	9	7	4
<i>Total</i>		<i>33</i>	<i>54</i>	<i>33</i>	<i>43</i>	<i>36</i>	<i>64</i>
Lifestylers							
Green Lifestyler	Nature conservation is main priority	21	14	23	20	21	11
Horse Lifestyler		13	9	14	11	11	5
Amenity	Lifestylers who are not green/do not own horses	24	16	24	19	23	12
<i>Total</i>		<i>58</i>	<i>39</i>	<i>61</i>	<i>50</i>	<i>55</i>	<i>28</i>
Other							
Resident Land Speculators	Unlikely to remain on property/favour urban development	4	4	1	1	4	5
Non farm Business <sup>2</sup>	Rural businesses not focused on primary production e.g. golf courses, B&Bs etc	6	4	7	5	6	3
<i>Total</i>		<i>10</i>	<i>8</i>	<i>8</i>	<i>6</i>	<i>10</i>	<i>8</i>

*Source: Square Pegs in Green Wedges DPI 2008*

Unfortunately the area has been faced with major difficulties over the last 30 years. Dieldrin is present in the red soils and much of the area is also affected by an organism called the potato cyst nematode (PCN). These two separate problems have combined to create an immensely difficult situation for many growers, some of whom are concerned about their future in the industry and their future options for retirement.

Potato cyst nematode is common in Europe while Australia has generally remained free of the problem. It consists of a microscopic organism which lives in the soil and attacks the roots of potatoes and some other plants. It is not a human health issue except it reduces crop yields, increases production costs and reduces the value of potatoes grown in the area. It was discovered in Western Australia in 1983, in Wandin (1991) and then in Gembrook in 1992. Since 1992 the Department of

Primary Industries has declared four “Control Areas” in Victoria – at Thorpdale, Koo Wee Rup, Wandin and Gembrook – and movement into and out of these areas is restricted and export to interstate markets has been banned. The effects on the Gembrook potato industry have been devastating as Gembrook’s main market was interstate and as a consequence half the growers left the industry and the production of potatoes declined in the study area by half. At present only 12 potato growers now remain in the study area.

Another problem in the study area is dieldrin, as a result of widespread use of the pesticide between 1950 and 1980. At the time dieldrin was hailed as an effective pesticide which could replace Dichlorodiphenyltrichloroethane (DDT) and it was used widely across the world. It was subsequently found to build up to toxic levels in animals and humans and was withdrawn from use in 1987. The level of dieldrin soil contamination does drop over time – reportedly 30-50 years before it is graded at a safe level – although the levels remain at unacceptable levels in the Gembrook area. Whilst soil contamination does not directly affect the growing of potatoes and other vegetables, it limits options for cattle, ducks and free range chickens (but not for horses and sheep). Cattle which graze on contaminated dieldrin soils must be agisted on “clean” soils for six months before they can obtain a clean bill of health and be sold at market.

As a result of these two issues, morale among the potato growers has been low and many growers see no future in the local industry. Many farmers would be happy to leave the industry (but not the area), sell their farms and if possible subdivide their properties to allow for a comfortable retirement.

However the overall situation is a little more complex and the future is not entirely pessimistic. Firstly, the local growers are not alone, as there are farmers in other industries and other areas facing insurmountable problems of drought, changing consumer preferences and competition from new imports. Victoria’s potato industry has been declining against growth in South Australia and Tasmania. A report in 2008 by Condor Agribusiness Consulting described the Victorian situation as the following:

The (potato growing) industry has undergone considerable restructuring and consolidation over the last ten years in response to consumer preferences for washed potatoes (as opposed to brushed) and the growth of the processing/snack food industries. As a result, the fresh sector in Victoria has declined in importance and some areas have specialised in other sectors or production has moved to other regions. Drought over the last two to three years has had an additional impact on overall production volumes and quality.<sup>3</sup>

Secondly, farming around Melbourne’s urban fringe (the “peri urban” area) has been changing dramatically in recent years. Generally there has been a decline in broad acre farming and dairying, with replacement by lifestyle and hobby farmers. There has also been an increase in more intensive agriculture, with farming techniques and new technology increasing productivity. The table below highlights these changes and the notable reduction in farming in Cardinia Shire. However, the table also shows that a comparable reduction in the Yarra Ranges Shire has been accompanied by a large increase (92%) in the value of production through more intensive and more productive farming techniques across a range of industries including fruit growing, intensive animal husbandry, plant nurseries and viticulture.



**Table 3: Percentage of change in farming 1994–2006**

CHANGE 1994–2006 SHIRE	FARM HECTARES	FARM BUSINESSES	PRODUCTION VALUE \$
Baw Baw	–12%	–8%	+12%
Cardinia	–25%	–22%	–4%
Mitchell	–18%	–2%	–21%
Murrindindi	+4%	+22%	+141%
Yarra Ranges	–22%	+4%	+92%

*Source: Neil Clarke & Associates (2009) Agricultural Profile – Shire of Yarra Ranges*

Thirdly, there are examples of growers operating successfully in the industry by planting more resistant varieties and by producing high yields directly for the supermarkets. There are also new farmers to the area who have been successful in organic farming, cut flowers and more intensive forms of agriculture.

### 2.3 Access to funding

As a rural-urban interface Council, Cardinia Shire is neither completely metropolitan nor completely rural. On occasions, government funding schemes define Cardinia Shire (and other interface Councils) so that they are excluded from metropolitan and rural funding for which they would otherwise be eligible. This situation makes it difficult for Cardinia Shire Council to assist rural areas and local agriculture. A case in point is that the Regional Infrastructure Development Fund which classifies Cardinia Shire as a metropolitan Council, even though 90 per cent of the Shire is rural. Thus the Shire cannot apply for urgent capital works in its rural areas such as road improvements, tourism improvements, IT infrastructure and industry development. A more flexible approach is needed from funding agencies or a separate funding regime for interface Councils needs to be developed. For example, all areas outside the Urban Growth Boundary (UGB) could be classed as rural, now that the UGB is in place.

### 2.4 The 2004 Gembrook Rural Review

In the face of the twin problems of dieldrin and potato cyst nematode and the subsequent decline of Gembrook's potato growing industry, the Department of Sustainability and Environment (DSE) and Cardinia Shire Council coordinated a review of options for the industry. The report worked with local growers and the local community to clarify the problems and to identify options for the future. Four scenarios were outlined in the report, to assist the review:

- Rejuvenation of the Gembrook potato industry.
- The Gembrook industry dies through natural attrition.
- Packers and supply chain companies act to maintain supply.
- New land use options for Gembrook.

The review identified the following as desirable long term outcomes for the area<sup>4</sup>.

- **Productive land uses:** a rich mix of smaller agricultural enterprises, hobby farms and lifestyle businesses and farms... potatoes no longer dominant but with more nurseries, tree farming, horse activities, berries and gourmet foods.
- **Landscape and image:** maintain the beautiful rural outlook and bush feel with more trees.

- **Tourism and recreation:** linked to rural activities, local produce and landscape values... a variety of accommodation with farm stays, B&BS, camping etc... and an attractive area for walkers and horse riders.
- **Community:** more active and vibrant... more people living in the area including retired farmers... well serviced, for example retirement home, medical services, public transport and local employment, especially for young people.

The review envisioned a "...preferred future for the Gembrook agricultural economy as involving a diverse mix of small and large agricultural, tourism/recreation and environmental businesses. Lifestyle and hobby farms would be likely to dominate the mix".

The review assessed approximately 50 rural land use options for Gembrook, taking account of the area's land use capabilities including topography, climate, rainfall, soils, available land and water. The following were identified as the most promising land use options for the area and these could – at least partly – replace the existing potato and grazing regimes<sup>5</sup>:

**Table 4: Land use options for the Gembrook area**

No	INDUSTRY	COMMENTS	AREA REQUIRED
<b>Larger Industries</b>			
1	Forestry	e.g. Saw logs, wood pulp, carbon trading	15–100 hectares+
2	Nursery	Field	at least 40 hectares
3	Horses - Commercial		at least 30 hectares
4	Horses - Recreation		at least 8 hectares
<b>Smaller Niche Opportunities</b>			
5	Berries	e.g. Blueberries, raspberries	at least 4 hectares
6	Native Flowers		at least 6 hectares
7	Green Tea		at least 4 hectares
8	Vineyards & Wineries		at least 2 hectares
<b>Lifestyle Businesses and Farm Options</b>			
9	Environmental Tourism	Lifestyle farms	2-8 hectares
10	General Tourism	Lifestyle businesses	Not applicable

*Source: Cardinia Shire Council (2004) Gembrook Rural Review*

Current subdivision controls provide opportunities for forestry, field nurseries and commercial horse activities as well as for continuing potato production through bigger, merged farms. The subdivision controls also provide for the larger operations which are aiming for commercial-scale industries, such as berries and vineyards. Nevertheless, the present controls limit the market for smaller operators who are looking for the minimum land size holding.

***Recommended actions from the Gembrook Rural Review included the following:***

- Enlist local landowners to pilot the most promising land use opportunities.
- Review the planning framework for Gembrook so that investment in new, more intensive agricultural enterprises – needing smaller lots – can be encouraged and innovations in land management – such as a share farm model– can be trialled.

- Produce a 'Living with Dieldrin' brochure that clarifies the requirements for different land uses, to reassure lifestyle landowners that there are no risks to human health in Gembrook.
- Organise a community briefing by Centrelink, the Rural Finance Commission and an estate planning advisor to raise awareness of the options available to retiring farmers and to help them plan for the future.
- Appoint an agribusiness officer to support all of the above actions.

Although some of these actions (and others) have been carried forward, there has been a lack of momentum from the community and agencies and consequently local growers have been disappointed at the slow rate of implementation of the Gembrook Rural Review.

## 2.5 The question of subdivision

A number of growers would like to be able to subdivide their land to secure a financial return on their business, in order to fund a secure retirement and an estate for their families. Some wish to subdivide an allotment around their family home so that they can remain in the area (and home) where they have spent much of their lives. They see no future for the potato industry and believe that subdivision will enable the area to adapt to changing circumstances whilst providing opportunities for new more intensive agriculture and lifestyle businesses. The Planning Scheme and the Green Wedge Zones – with the associated restrictions on subdivision – are seen as the obstacles to this goal.

The current Planning Scheme controls allow Cardinia Shire Council to consider a planning permit application for the subdivision of land down to 15 hectares in the Green Wedge (Schedule 2) Zone, which is the main planning zone for the potato growing area. This would allow for individual titles to be sold off for dwellings. The current provisions could therefore allow the existing potato farms to potentially subdivide their larger lots to the 15 hectare minimum and sell off 23 titles for new dwellings.

Table 5 demonstrates the potential impacts various subdivision regulations could have in terms of new dwellings over time. It shows that the **current subdivision regulations allow for an estimated 57 dwellings – an increase of 46 new dwellings** over the current eleven farms. If the minimum subdivision size was reduced to 10 hectares then the potential increase would be **85 new dwellings** in the area and if the subdivision minimum was reduced to 5 hectares then this would provide for **170 new dwellings**. This would have major impacts on the landscape and the provision of services while genuine agriculture would be difficult if not unworkable in such an environment, as normal farm activities involving noise, spraying, smells and other farm management processes would be unwelcome to most newcomers.

**Table 5: Potential new dwellings in the Gembrook area<sup>6</sup>**

	Up to 10ha	11-20ha	21-30ha	31-40ha	41-50ha	51ha+	TOTAL DWELLINGS	EXTRA DWELLINGS
Size of Existing Farms			2			9	11	0
Size and No of Titles	9	4	6	4	6	5	34	23
Est. dwellings at min 15ha (current)	9	4	6	8	15	15	57	46
Est. dwellings at min 10ha	9	4	12	12	24	25	96	85
Est. dwellings at min 5ha	9	10	27	26	51	58	181	170

*Source: Cardinia Shire Council (2004) Gembrook Rural Review.*

The northern part of the study area around Nangana is zoned Green Wedge (Schedule 1) and allows for the subdivision of land to a minimum of 40 hectares. Land in this area is typically used for broad acre farming and subdivision.

***Issues to consider...***

*Should efforts be made to retain the eastern part of the green wedge for agriculture, or should it be accepted that there is no agricultural future in this area? Should subdivision controls be relaxed to encourage more intensive agriculture, or to allow farmers to remain on the land in their retirement? Is there a case for allowing more opportunities for hobby farmers and 'lifestylers'? Does the 2004 Gembrook Rural Review need to be revisited, or does it just need to be implemented?*

### 3. BIODIVERSITY

The Northern Ranges Green Wedge has noteworthy areas of botanical and zoological significance which have been identified, mapped and protected by Planning Scheme controls<sup>7</sup> as well as Commonwealth and State legislation. Many of these areas are in public ownership as State Forests or Nature Reserves and some have management plans.

Replanted vegetation is a poor substitute for the natural complexity of large “core patches” of native vegetation. Larger patches of native vegetation often result in a greater diversity of flora and fauna than can be found on a single property with a small patch of vegetation. Corridors of vegetation that link these core patches can be narrow and small, nevertheless they provide critical pathways for animal movement between the core patches. These corridors are usually in the form of road reserves (either made or unconstructed roads) and creek lines and can easily be broken by incremental land clearing which then isolates and threatens the core patch. It is important to identify and retain the key habitat core patches and the corridors that link these patches.

Broad scale land clearing from agricultural activities and urban development is a critical threat to local biodiversity. The loss caused by clearing is compounded by the degradation of remnant bush through the “death by a thousand cuts” due to grazing pressures, insect attack, disease, weeds, firewood gathering and lack of positive (landowner) land management.

There are 29 plants and animals that have been recorded as threatened in the region. Of these the Eastern Quoll is now extinct and is unlikely to return to the Northern Ranges. The Leadbeater Possum is listed as endangered and the Helmeted Honeyeater is listed as critically endangered. Future land management must consider how to retain and increase strategic flora and fauna corridors in order to allow for an increase in the numbers of threatened species. Native flora and fauna must also be considered in farm land management due to its ecological impact which can include:

- improving the water quality of streams and dams
- offsetting carbon to lower greenhouse emissions
- reducing soil erosion
- protection from land slip
- increasing flora and fauna.

The dominant vegetation habitats (Ecological Vegetation Classes) are shown on Map 3. The map ranks different vegetation habitats in terms of whether they are Endangered, Vulnerable, Depleted, Rare, or of Least Concern<sup>8</sup> with the Endangered ranking of greatest concern. Habitats in the study area are ranked as follows:

#### ***Endangered***

- Swampy Riparian Complex

#### ***Vulnerable***

- Riparian Scrub/Swampy Riparian Woodland Complex
- Swampy Riparian Woodland
- Valley Grassy Forest

#### ***Depleted***

- Clay Heathland/Wet Heathland/Riparian Scrub Mosaic
- Damp Heathy Woodland

### ***Rare***













None in study area

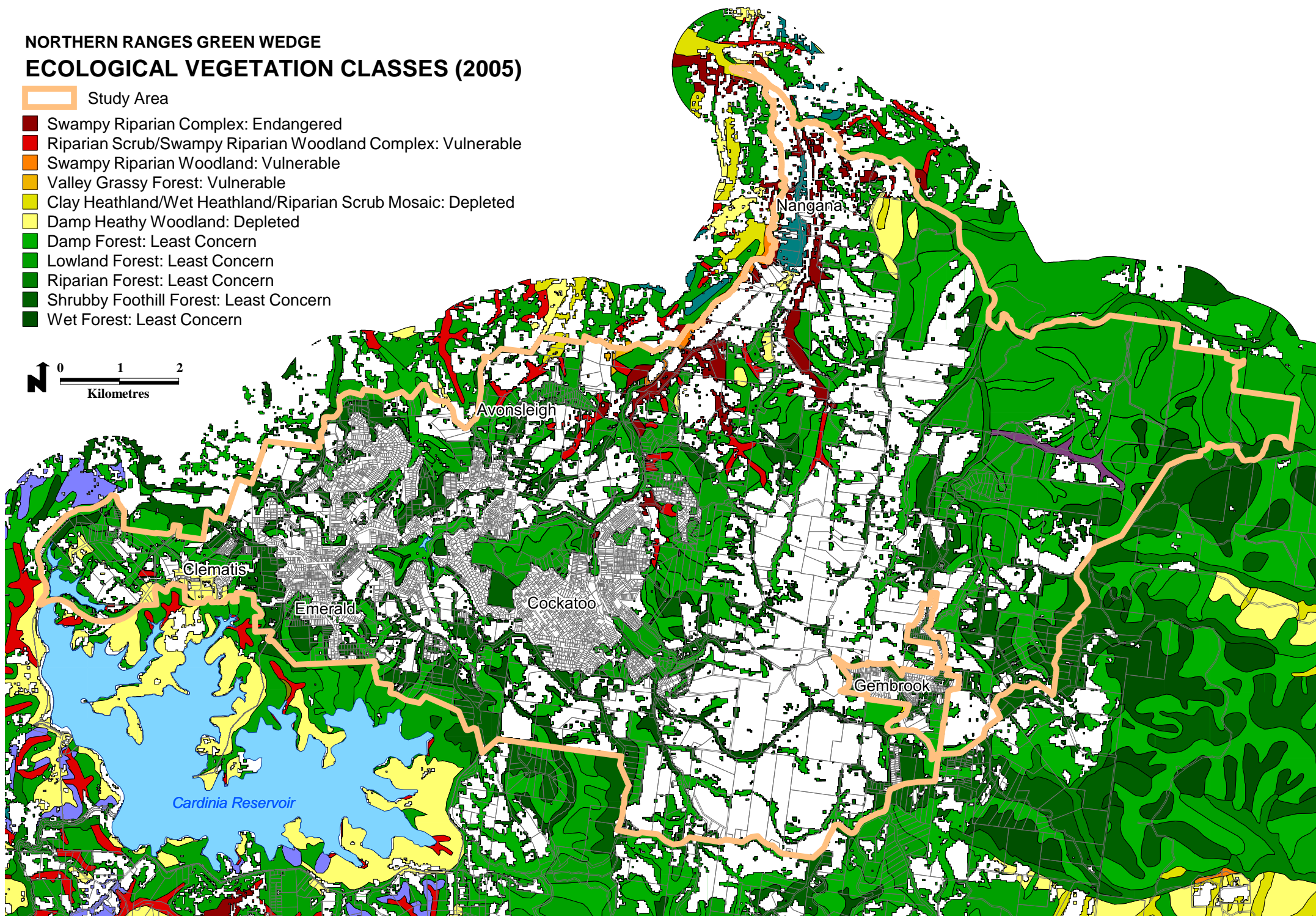
### ***Least Concern***

- Damp Forest
- Lowland Forest
- Riparian Forest
- Shrubby Foothill Forest
- Wet Forest

Map 4 demonstrates the Biosites in the study area – sites of national, state and regional significance for their biological significance, which is usually in relation to threatened fauna and flora. The map shows the following areas as being of special importance:


# **NORTHERN RANGES GREEN WEDGE** **ECOLOGICAL VEGETATION CLASSES (2005)**

-  Study Area
-  Swampy Riparian Complex: Endangered
-  Riparian Scrub/Swampy Riparian Woodland Complex: Vulnerable
-  Swampy Riparian Woodland: Vulnerable
-  Valley Grassy Forest: Vulnerable
-  Clay Heathland/Wet Heathland/Riparian Scrub Mosaic: Depleted
-  Damp Heathy Woodland: Depleted
-  Damp Forest: Least Concern
-  Lowland Forest: Least Concern
-  Riparian Forest: Least Concern
-  Shrubby Foothill Forest: Least Concern
-  Wet Forest: Least Concern

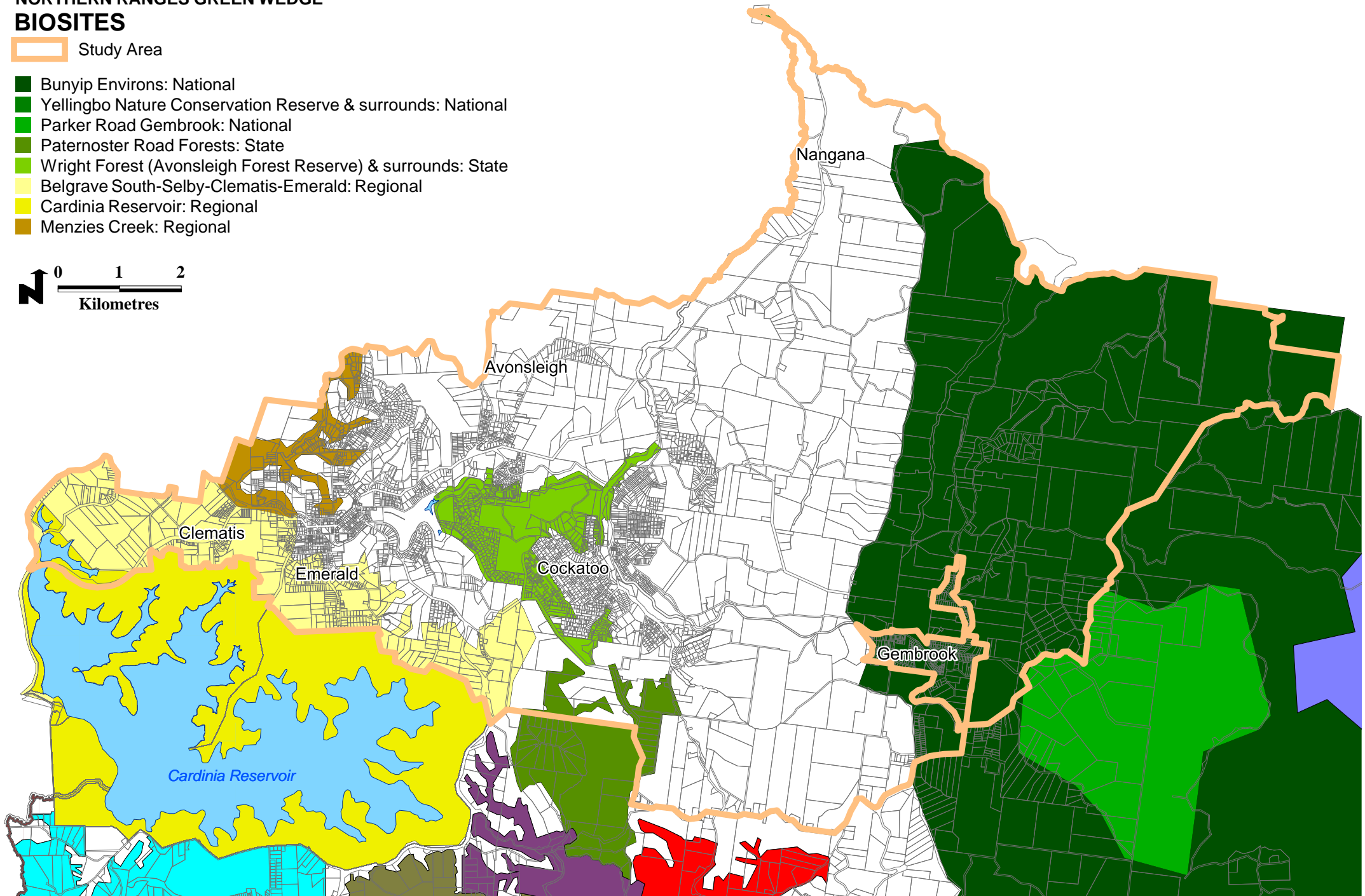
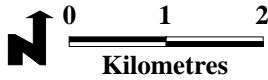




**NORTHERN RANGES GREEN WEDGE  
BIOSITES**

 Study Area

-  Bunyip Environs: National
-  Yellingbo Nature Conservation Reserve & surrounds: National
-  Parker Road Gembrook: National
-  Paternoster Road Forests: State
-  Wright Forest (Avonsleigh Forest Reserve) & surrounds: State
-  Belgrave South-Selby-Clematis-Emerald: Regional
-  Cardinia Reservoir: Regional
-  Menzies Creek: Regional





### ***National Significance***

- Bunyip Forest Environs
- Yellingbo Nature Conservation Reserve and Surrounds
- Parker Road Gembrook

### ***State Significance***

- Paternoster Road Forests
- Wright Forest (Avonsleigh Forest Reserve) and Surrounds

### ***Regional Significance***

- Belgrave South-Selby-Clematis-Emerald
- Cardinia Reservoir
- Menzies Creek

Apart from legislation and planning controls which are designed to conserve and protect biodiversity, Council and other agencies are moving increasingly towards a more proactive and market driven position for dealing with biodiversity values on private land. Initiatives such as the Bush Tender, Eco Tender and Biolinks programme<sup>9</sup> are part of this approach and each complements the more established programmes such as Landcare and Friends Groups in the study area. Landcare and Friends groups are very active across the Shire and are heavily dependent upon the support of committed groups of volunteers.

Responsible land management on private land is being pursued through numerous initiatives sponsored by the Port Philip and Westernport Catchment Management Authority and Melbourne Water, in conjunction with Landcare Groups and property owners. The Biolinks programme is of particular interest as a strategic program to create and enhance green corridors across Victoria linking important habitats (usually along waterways) and thereby enriching the State's biodiversity. The Yarra 4 Life program incorporates this approach and covers the Woori Yallock Creek catchment which includes the area from Gembrook/Emerald through to Seville. There may be opportunities to better develop the program in the Northern Ranges Green Wedge.

## **3.1 Weed Management**

Weeds are a major threat to native flora and fauna and can increase exponentially if they are not controlled properly. Remnant bushland is particularly prone to weed invasion and most of these bushland remnants are on private land. Council adopted a Weed Management Strategy in 2007 to consider a more strategic approach to weed management. The Strategy recommended a number of initiatives including an increased budget, appointment of a Weed Management Officer, a review of bushland reserves and roadside vegetation and various education and information programmes. Weed management is also supported by a number of community initiatives including the Landcare and Friends Groups and a Weed Grant Scheme.

A practical and effective on ground response to weeds has been the *Six Towns Weed Control Project*. Council has been funded by the Department of Primary Industries (DPI) to work with the community in six townships across Cardinia to eradicate three main problem weeds namely ragwort, blackberry and sweet pittosporum. The programme tackles weed infestation along roadsides in Gembrook, Cockatoo, Emerald and Upper Beaconsfield and more recently it has been expanded to include Maryknoll and Pakenham Upper. The programme commenced as a pilot project three years

ago and its success has led to its funding being extended and the project being expanded to include the two new towns.

*Issues to consider...*

*Does biodiversity mapping need to be improved or updated? Should local farmers and landholders take more advantage of environmental programmes such as BushTender, EcoTender? Can the Biolinks programme be implemented more effectively in the Northern Ranges Green Wedge? Are there opportunities to improve the community's awareness of local flora and fauna, especially of endangered or vulnerable species and areas of national biodiversity significance? How can weed management in the area be made more effective?*

#### **4. BUSHFIRE MANAGEMENT**



The Cockatoo Township has been burnt out twice by bushfires, most recently in the Ash Wednesday bushfires on 16 February 1983. Six people in Cockatoo were killed and 289 homes were lost in the Ash Wednesday fires. Separate fires on the same day at nearby Upper Beaconsfield killed more than 21 people and burnt 186 homes and burned just to the south of Cockatoo and Gembrook.

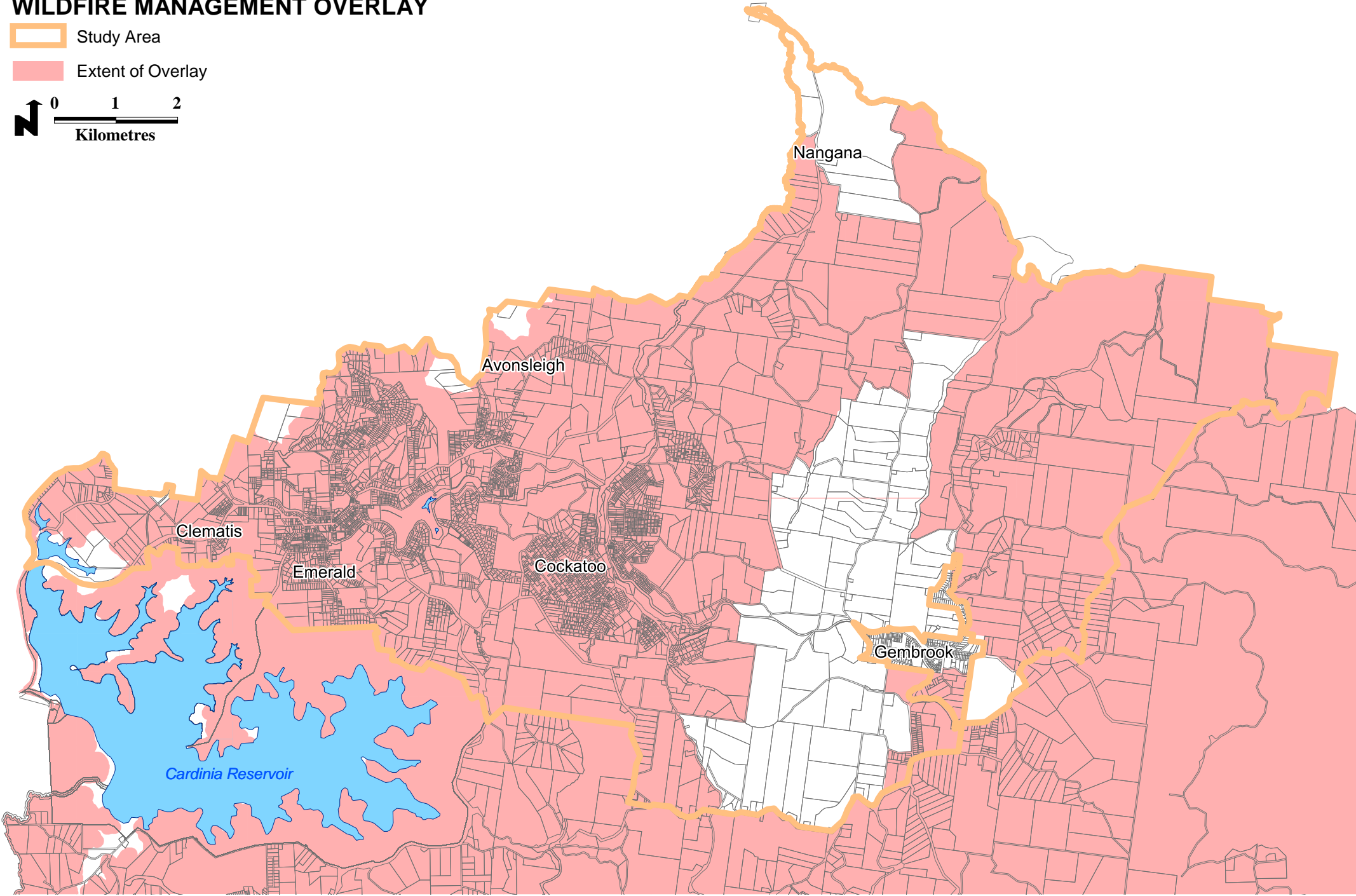
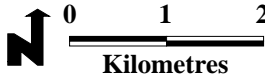
Cockatoo and other townships – like the whole of the Dandenong Ranges – have been living in the shadow of bushfires for decades. In the Cardinia Planning Scheme almost three quarters of the study area is affected by a Wildfire Management Overlay, which covers all forested areas around the townships while excluding cleared farmland around Gembrook and Nangana to the north, as shown on Map 5. Rural residential development, numerous cul-de-sacs and high fuel loads on some properties compound the dangers.

Agencies and the community have been energetic and proactive in their preparations for the current bushfire season with information programmes and coordination sessions involving local MPs, St Marks Church, Township Committees, Police and the Country Fire Authority. Cardinia Shire Council has an adopted Wildfire Preparedness Plan and the Country Fire Authority has prepared Township Protection Plans for the 52 identified high risk bushfire locations in Victoria which includes Emerald, Cockatoo and Gembrook. In addition, the community hall at Gembrook has been identified as a 'place of last resort'<sup>10</sup> however, a 'place of last resort' has not yet been designated or agreed to at Cockatoo.

Cardinia Shire is presently facing significant challenges in the context of climatic uncertainty and extremes in the frequency and/or severity of climatic conditions. The key implications of climate change in the study area include hotter weather and lower rainfall and bushfires are predicted to become worse over time. The planning challenge and the challenge for the green wedge management plan is to pursue an acceptable balance between the protection from bushfire risk and other values such as landscape and nature conservation. Community safety from bushfire is paramount, although this should not be at the expense of wholesale clearance of the bush, loss of habitat and the loss of the very values that make the area attractive and distinct in the first place.

**NORTHERN RANGES GREEN WEDGE  
WILDFIRE MANAGEMENT OVERLAY**

-  Study Area
-  Extent of Overlay



The Victorian Bushfires Royal Commission is presently investigating this issue and among other matters it is looking at the effectiveness of planning controls. It has established a Planning Experts Panel to consider planning matters and the Panel is reportedly reviewing the following seven questions:

- question 1: What role should land use planning have in the overall management of Victoria's bushfire risk?
- question 2: Should residential development be permitted at all in areas of high bushfire risk?
- question 3: How should climate change projections be factored into land use planning?
- question 4: How can Victoria's growing population be accommodated without increasing the risks of loss of life and property due to bushfire?
- question 5: How should bushfire risk mitigation measures be balanced with conservation of native vegetation?
- question 6: Can planning and building controls for the management of bushfire risk be better integrated in Victoria?
- question 7: How can the planning controls for the management of bushfire risk be improved or strengthened e.g. Wildfire Management Overlay?

The Royal Commission is due to report its findings in July 2010 and the State Government will then decide its response to the Commission's findings. It will be of particular interest to see the Commission's – and the State Government's – response to the Expert Panel's advice that:

The Panel gained a consensus that in some areas the bushfire risk is so high that new development should not be permitted, and that included individual developments and new subdivisions (Expert Panel, Bushfire Royal Commission, 15 February 2010, pg 14455).

#### *Issues to consider...*

*What is the local community's response to the Royal Commission's questions? Is there more that agencies and the community can do to make the study area and local communities better protected against bushfires?*

## **5. LEISURE AND TOURISM**

Leisure and tourism is considered part of the character of the Northern Ranges Green Wedge. The scenic landscapes, walking and cycling trails, the Puffing Billy railway line and State Forests are a central feature of the area and help promote the region as a place of fun, relaxation and enjoyment. Opportunities that assist economic growth, create sustainable townships, improve leisure activities and the quality of life of the local community, should be the message from the green wedge management plan.

### **5.1 The Puffing Billy Railway**

The principal tourism attraction within the study area is the Puffing Billy railway which attracts 260,000 visitors each year and adds \$23 million to the State's economy and 100 jobs to the local economy. The railway service runs between Belgrave (in Yarra Ranges Shire) through to Gembrook via Emerald, Cockatoo and Menzies Creek. The Emerald Tourist Railway Board (responsible for the management of Puffing Billy) is looking to improve its services and to increase its revenue by a range of initiatives including:

- a \$15 million Discovery Centre with catering facilities at Emerald Lake (the preferred site)

- twin train services starting from both Gembrook and Belgrave and ending at Emerald to improve the service on several levels 11
- use of the Pakenham-Gembrook bus service
- low key information centre at Gembrook in line with the Yarra Valley and Dandenong Ranges policy for satellite information centres
- expansion of niche products such as a first class wine and cheese carriage, and
- an extra carriage for bicycle storage to encourage cyclists and family groups.

## 5.2 Other visitor activities

There are a variety of other visitor opportunities in the area which are based on the area's scenic landscapes, state forests and agriculture. These include:

- nature based tourism such as bushwalking, picnicking, cycling, trail biking, scouts and educational camps
- the many State forests and parks including Kurth Kiln, Bunyip State Forest, Gembrook Park, Wright Forest and Emerald Park Lake
- vineyards and wineries e.g. Paternoster and Gembrook Hill
- local bed and breakfast accommodation
- plant nurseries, tearooms, cafes and
- the township of Gembrook which has a lively and popular monthly market, is the end of the line for the Puffing Billy railway line and is an attractive and historic destination in its own right.

Many of these tourism opportunities depend on the area's biodiversity and agricultural landscapes. Consequently, if these landscapes and biodiversity features are not managed and protected effectively, then the area's tourism will in turn decline.

The Northern Ranges Green Wedge also has an important emerging role as a day trip destination for the growing population in Melbourne's South East growth corridor. The corridor stretches from Dandenong to Pakenham and will accommodate at least 500,000 people. The Gembrook-Emerald area is well located to cater for this population and has the capacity to build a successful low profile tourism industry to meet the visitor needs.

In spite of this, the Cardinia Planning Scheme restricts opportunities for tourist related development in rural zones, particularly in the Green Wedge and Rural Conservation Zone. Opportunities for overnight accommodation and facilities such as restaurants are limited in these zones and this inhibits the prospect to develop a sustainable tourist industry. This Paper will seek a community response to this issue and determine what steps could be taken to amend the Planning Scheme if this is supported through the green wedge management process.

## 5.3 The trails network

The present network of walking, cycling and equestrian trails can potentially be expanded to offer greater opportunities for local residents and visitors to experience the study area. The current trail network is based on the main regional walking route alongside the Puffing Billy railway line between Belgrave and Emerald. The possibility exists to extend the trail network through to Gembrook. Council is at the initial exploration stage and the proposed trail and its alignment has not been agreed to by relevant authorities (i.e. Parks Victoria). Even so, the trail could link through to other walking, cycling and equestrian routes, as follows:

- the existing Menzies Creek trail
- a new trail alongside Cockatoo Creek
- a completed trail back to Belgrave

- Aura Vale Lake
- new trails or routes to Bunyip and Kurth Kiln State Forests
- links to parks which are outside the study area such as Lysterfield Lake Park, Cardinia Creek Parklands and Cardinia Reservoir Park, and
- a “feeder link” to connect the metropolitan area to the long distance Alpine Walking Track in Gippsland<sup>12</sup>.

Parts of the trail network will require to be upgraded to cater for cyclists, although it would be vital to design any bike routes alongside the Puffing Billy railway line in a sensitive manner e.g. with a natural colour, crushed rock surface and landscaped edges. Information brochures could also be created highlighting the areas local walks and to allow visitors the opportunity to combine a trip on the historic railway line with local walks.

#### 5.4 A regional park

A regional park which connects the various trails, forest reserves and parks in the study area has been suggested to Cardinia Shire Council. The regional park could comprise of Aura Vale Lake, Emerald Lake Park, Wright Forest, Gembrook Park, as well as Puffing Billy and the walking trails between these parks, as shown on Map 6. The proposed park could supplement the other metropolitan parks (Lysterfield Park and Churchill National Park) and would help cater for the growing population in the South East Growth Corridor. The suggested regional park aligns with Parks Victoria’s metropolitan open space strategy (*Linking People and Places*) and with Cardinia Shire Council’s *Open Space Policy*. It could offer additional economic benefits to the local community in terms of local tourism, employment opportunities and leisure activities. Opportunities could be bed and breakfast accommodation on local farms, added support for the Puffing Billy railway service and supplementation of local businesses (e.g. cafés along the regional park to support visitors). The regional park is likely to generate new funding and strategic management questions which will require to be investigated. The idea for a regional park is at the initial exploration stage and the proposed park and its alignment has not been agreed to by relevant authorities (i.e. Parks Victoria), however the merits of the regional park are considered worthwhile in discussing with the community and relevant authorities.

#### *Issues to consider...*

*How can we ensure that local people benefit from increased visitor numbers? How can the Emerald Tourist Railway Board and the local communities work effectively together? Can the planning and management of State Forests and other Crown Land be improved? Should the restrictions on tourist related development in Green Wedge and Rural Conservation Zones be relaxed? How can the trails network be improved and expanded? Is there merit in the Regional Park proposal and if so, how could this be improved?*

## 6. SETTLEMENT AND TOWNSHIPS

The western half of the study area is made up of fragmented rural residential land holdings around a commercial core, with Emerald as the main service centre while Cockatoo is the secondary service centre. The entire western half is covered by the Emerald District Strategy (2009) and the Cockatoo Township Strategy (2008), as shown on Map 7. Much of the western half was subdivided early last century into scattered low density residential allotments which have had to be restructured and acquired by Cardinia Shire Council in more recent times. The area retains many unsealed and no through roads and is also difficult to service for mail and rubbish. The urban edge of the townships of Emerald and Cockatoo are not clear and in spite of this both strategies for Emerald and Cockatoo propose limited opportunities for expansion or growth of either township.

The eastern half of the study area supports an agricultural community that is serviced by the Gembrook Township. The town is covered by the Gembrook Township Strategy (1998) which is currently being reviewed by Cardinia Shire Council. The boundary of the township is defined more than Emerald or Cockatoo, as it includes an Urban Growth Boundary which was established to accommodate modest growth and to separate urban development from the surrounding rural areas.

The far north of the study area around Nangana is broad acre farming and subdivision.

### 6.1 Community facilities

Access to community and educational facilities is broadly related to population size as shown in the following table.

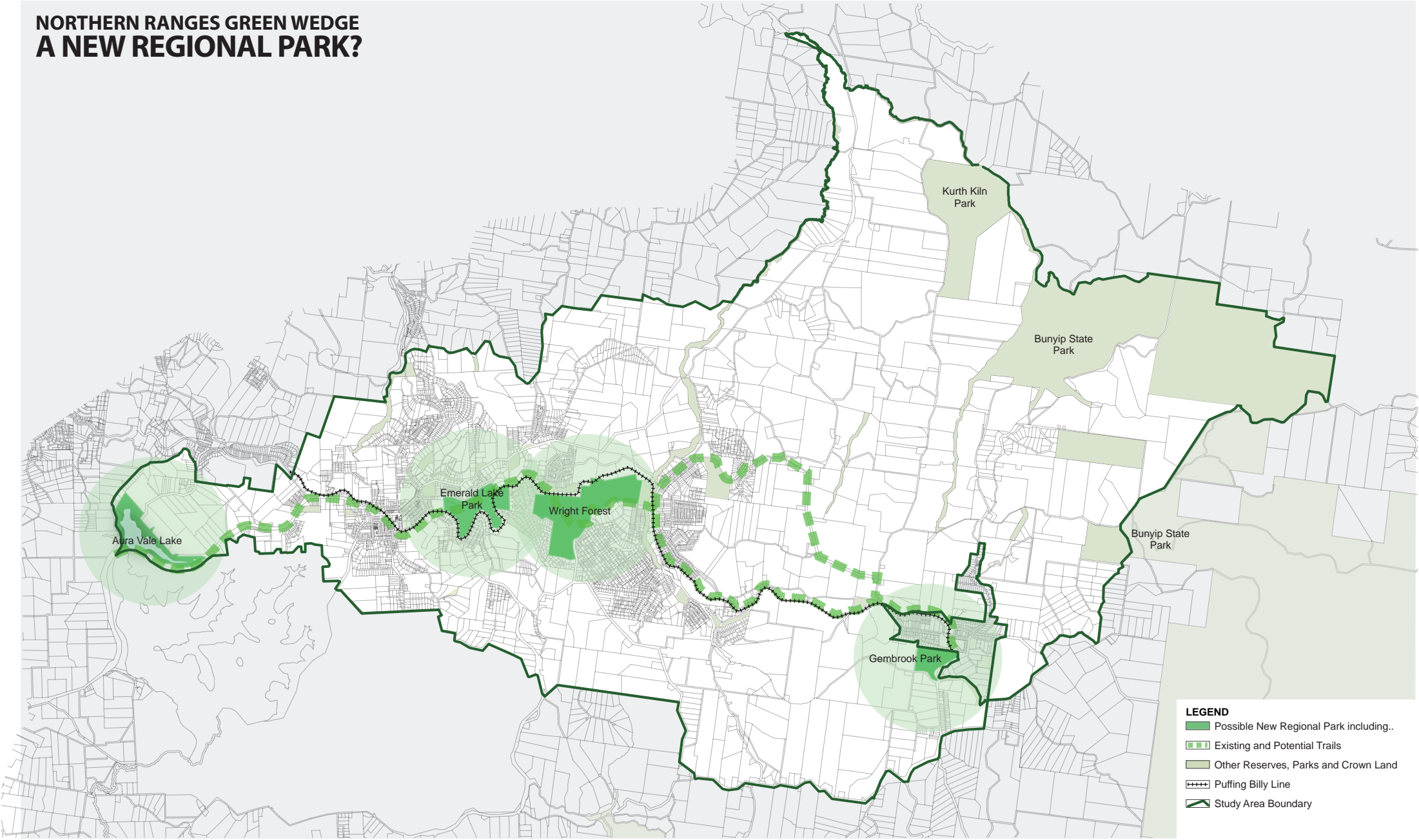
**Table 6: Community/educational facilities by township**

COMMUNITY FACILITY TOWNSHIP	MATERNAL & CHILD HEALTH	DOCTOR	PRIMARY SCHOOL	SECONDARY SCHOOL	OUT OF SCHOOL HOURS CARE	PLAYGROUP	KINDERGARTEN	CHILDCARE
Emerald		4				3		
Cockatoo						2	2	
Gembrook								
Other								

*Source: GIS Mapping Cardinia SC*



**NORTHERN RANGES GREEN WEDGE  
A NEW REGIONAL PARK?**

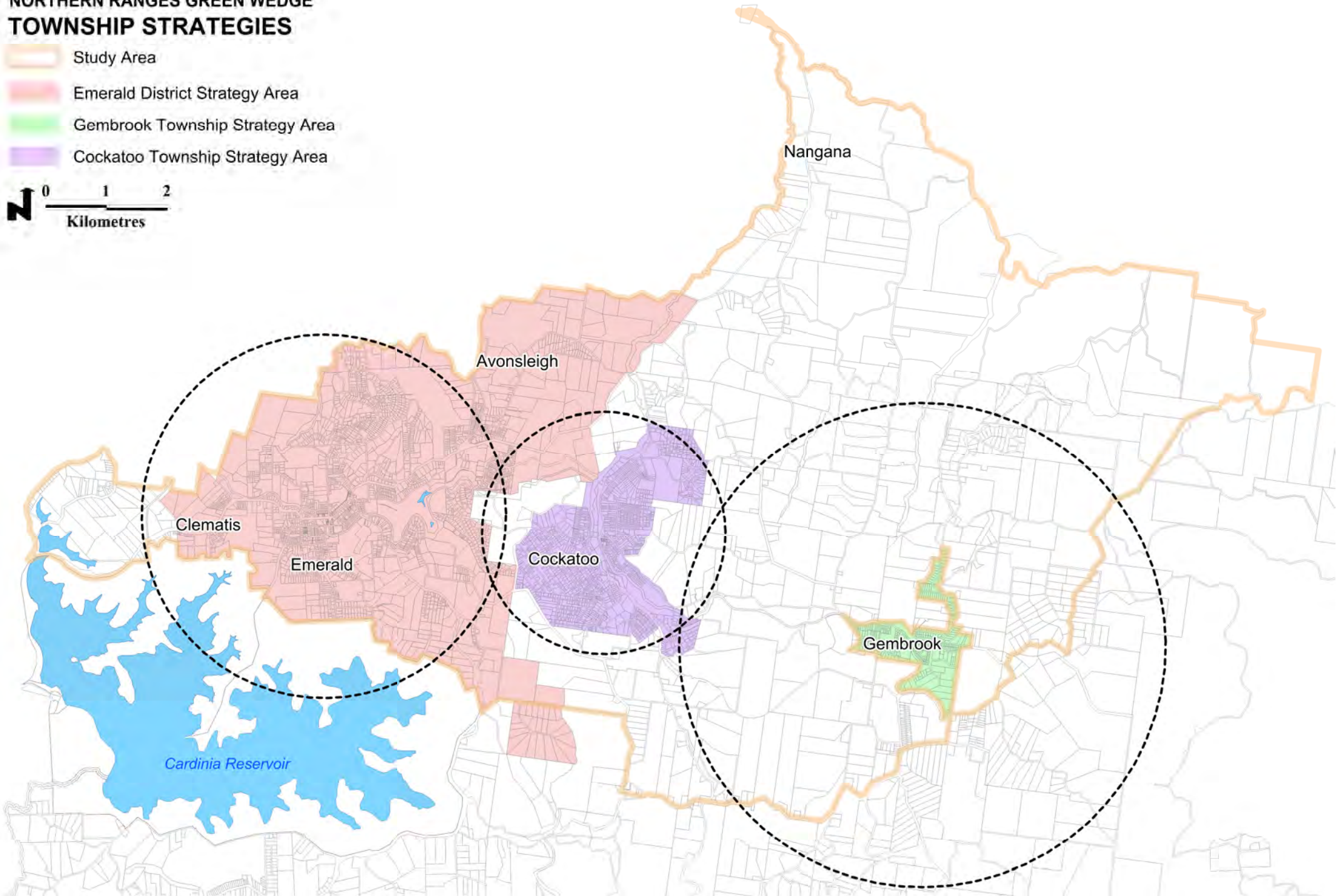
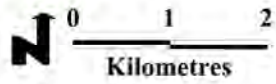


- LEGEND**
- Possible New Regional Park including..
  - Existing and Potential Trails
  - Other Reserves, Parks and Crown Land
  - Puffing Billy Line
  - Study Area Boundary



# NORTHERN RANGES GREEN WEDGE TOWNSHIP STRATEGIES

- Study Area
- Emerald District Strategy Area
- Gembrook Township Strategy Area
- Cockatoo Township Strategy Area



## 6.2 Community initiatives

There are a number of volunteer based community groups which are active in the study area and offer significant benefits for land management and environmental improvement. Three Landcare Groups are active in the study area – Johns Hill (Emerald), Macclesfield (Emerald) and Cardinia Hills (Cockatoo) – and there are Friends Groups for Wright Forest, Kurth Kiln Regional Park, Gembrook Park, Emerald Lake Park and Bunyip State Park. The Southern Ranges Environmental Alliance has a coordinating role for the Landcare and Friends Groups for Gembrook and Emerald, whilst the Cardinia Environment Coalition is an umbrella group comprising of 25 local Friends, Landcare and conservation groups. It has focussed on community based land management and environmental projects and has been successful in securing funds to progress a number of projects including a ‘Biolinks Action Plan for the Westernport Catchment’ (Central Region). The Cardinia Environment Coalition also works with private landowners who have agreed to a covenant with the Trust for Nature to permanently protect the natural heritage of their property. Cardinia Shire has more Trust for Nature covenants than any other metropolitan municipality and the coalition can take some credit for this record.

### *Issues to consider...*

*There are difficulties associated with the fragmented, low density development around Emerald and Cockatoo, in terms of bushfire dangers, servicing costs, and access to facilities. Do local communities share these concerns and if so, what do they think can be done? What can be done to better support the numerous community groups and initiatives in the area?*

## 7. LANDSCAPE MANAGEMENT

There are some beautiful and iconic landscapes in the study area, particularly in the agricultural areas around Gembrook. These landscapes are important for visitors and are the reason why many people are attracted to the area. These landscapes are recognised through two overlays in the Cardinia Planning Scheme, with the Environmental Significance Overlay (Schedule 1) and the Significant Landscape Overlay (Schedule 1), as shown on Map 8. The Environmental Significance Overlay covers virtually the whole study area, while the Significant Landscape Overlay affects only the scenic view corridor of the Puffing Billy railway line and much of the potato growing area around Gembrook.

The expansive vistas across the agricultural red soils are especially valued while the enclosed corridors through the tall eucalyptus forests are also an important part of the area’s landscape. No study has yet been carried out to assess these landscapes in terms of community values to create technical criteria to help assess planning applications, although a number of other Councils have now carried out such assessments as the basis for more effective landscape and planning controls.

The landscapes associated with the Puffing Billy railway line and visitor experience is of great importance to the Emerald Tourist Railway Board and consequently the organisation is proposing to submit an application to Cardinia Shire Council to reinforce the planning controls over the area through a proposed Heritage Overlay. At present, Cardinia Shire Council has not received such an application.

*Issues to consider...*

*Do local communities value these local landscapes and if so what particular aspects? Do they support the existing planning controls to protect these landscapes, and do they think these controls should be strengthened? Should an overall assessment be carried out of the whole area?*

## **7.1 Water**

There are a number of water related issues in the study area including river health, reticulated sewerage backlog, water access for farming and stormwater runoff.

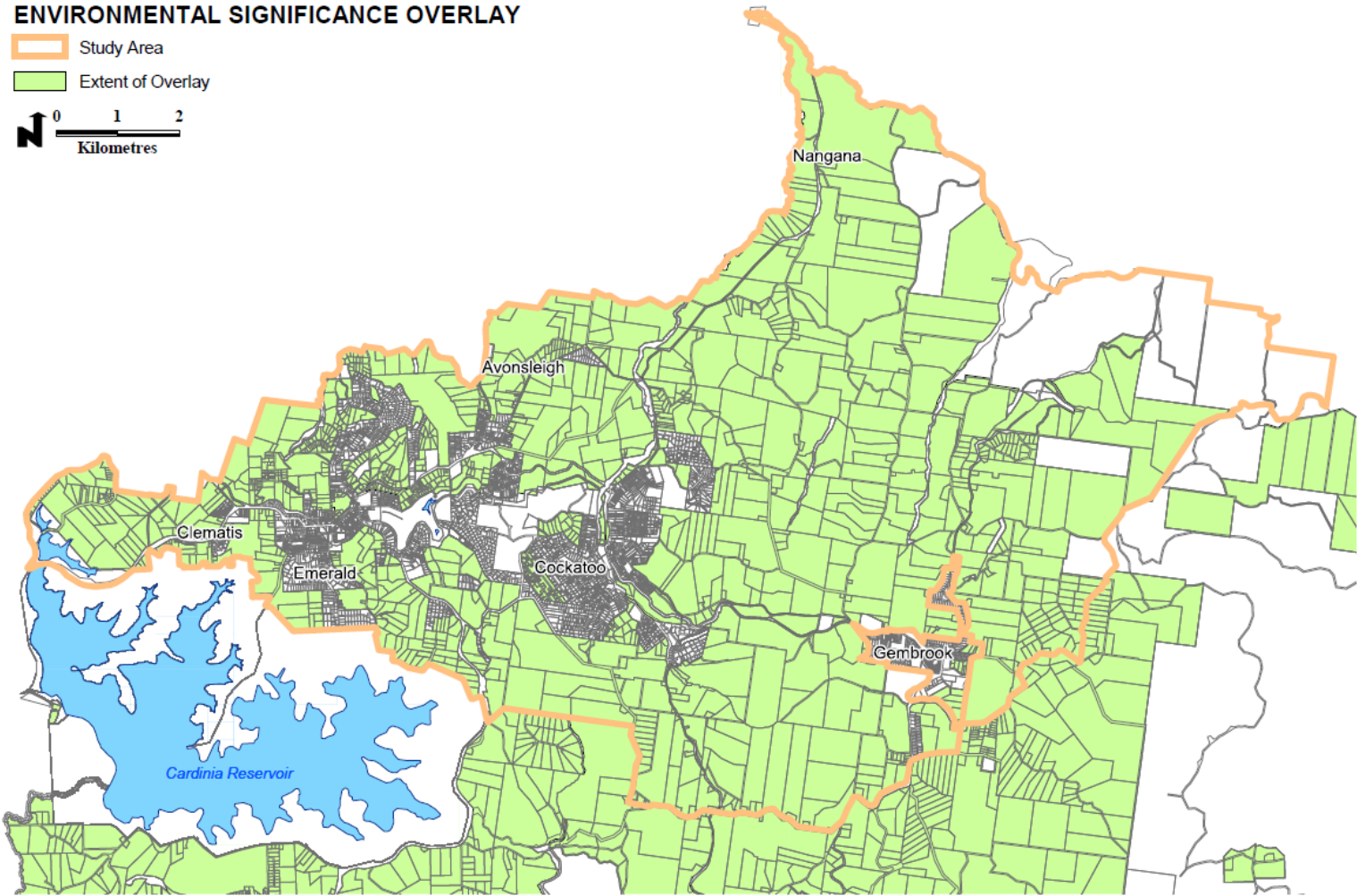
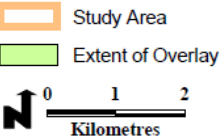
## **7.2 River health**

The study area forms part of the Woori Yallock Creek catchment which in turn is part of the Upper Yarra catchment. Local streams include the Cockatoo Creek, Menzies Creek, Shepherds Creek, Wattle Creek, Gembrook Creek and Bourke's Creek. In 2007 Melbourne Water assessed the river health for the Woori Yallock Creek to be moderate in condition with a target for good. Results for each indicator were as follows:

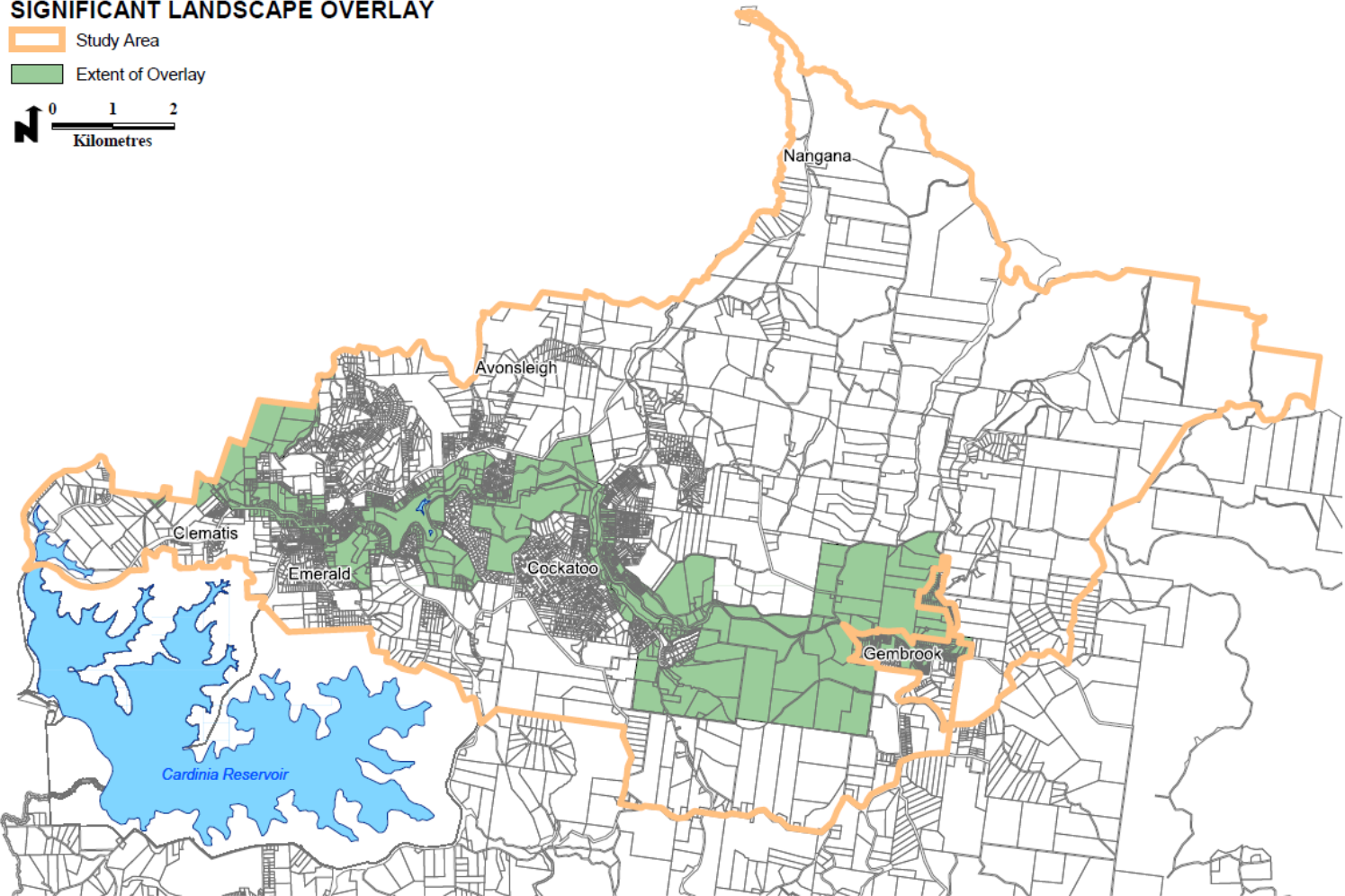
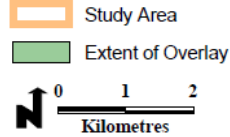


**Map 8:**

**NORTHERN RANGES GREEN WEDGE  
ENVIRONMENTAL SIGNIFICANCE OVERLAY**



**NORTHERN RANGES GREEN WEDGE  
SIGNIFICANT LANDSCAPE OVERLAY**



**Table 7: River health - Woori Yallock Catchment**

INDICATOR	2007
Water Quality	Moderate
Aquatic Life	Good
Habitat and Stability	Good
Vegetation	Moderate
Flow	Moderate

*Port Phillip and Westernport Regional River Health Strategy; Melbourne Water et al 2007*

### **7.3 Sewerage backlog**

There are many residential allotments (generally low density residential lots) in the study area which are not connected to reticulated sewer and these areas are presently being targeted by Yarra Valley Water as part of its sewerage backlog programme, as shown on Map 9. Connection rates to reticulated sewer were initially low although connection rates have been improving with a concentrated effort by both Yarra Valley Water and Cardinia Shire Council. Connections in the Emerald area have been downgraded from an expected completion date of 2009/10 to 2014/15 and Cardinia Shire Council is disappointed with this outcome, while the Emerald/Avonsleigh area is expected to be completed by the year 2024. Meanwhile the Cockatoo sewerage backlog programme is still progressing with most of the town now complete and connected to reticulated sewer.

Septic and sewer leakage is a “Priority Risk Management Issue” for stormwater and wastewater management in Cardinia Shire, as it poses a risk to habitats in the Cockatoo and Gembrook Creeks as well as the Yarra River itself<sup>13</sup>.

### **7.4 Drainage**

Drainage generally – and particularly for steep local roads – was identified as a priority issue in the Cockatoo Township Strategy. No formal drainage system exists in the area and this causes erosion and water quality problems for the Cockatoo Creek.

### **7.5 Water allocations**

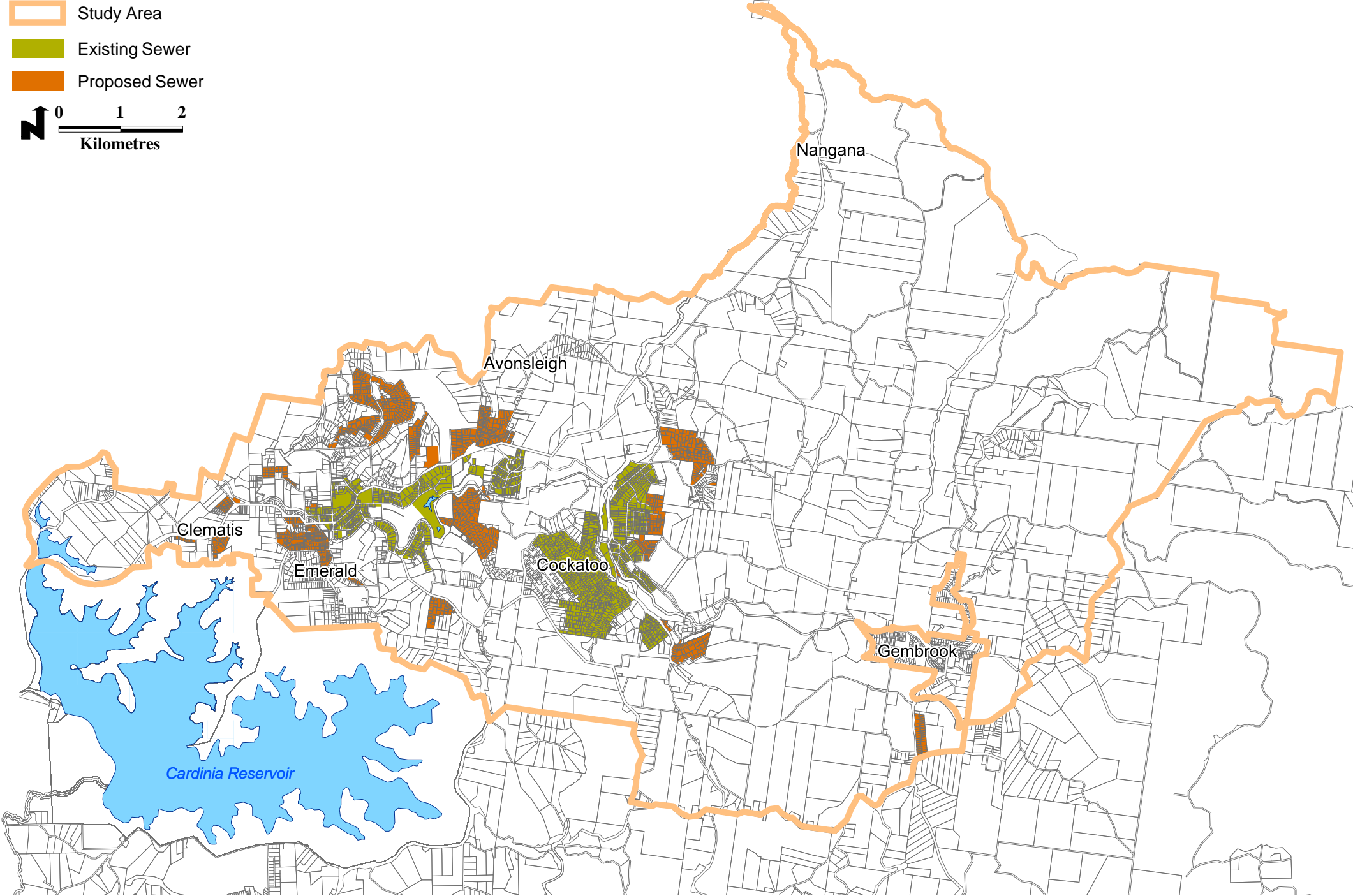
Melbourne Water is responsible for issuing water diversion licences (or water allocations) in the Upper Yarra Catchment. Since 2006 there has been a cap on any further water allocations for commercial and irrigation use, as more water has been allocated than is sustainable in the long term. This situation has created water access problems, as some users have a greater need to access water although they cannot access any water if the licensees do not wish to sell their water allocations. Consequently, the Minister has appointed the Woori Yallock Streamflow Management Committee which is coordinated by Melbourne Water to report on how limited water in the catchment should be shared between farming and environmental interests.

#### ***Issues to consider...***

***Should Council advocate more strongly to accelerate the sewerage backlog programme? What can be done to release some of the water rights that have been allocated but are not being used?***

**NORTHERN RANGES GREEN WEDGE  
SEWERAGE BACKLOG**

- Study Area
- Existing Sewer
- Proposed Sewer



## 8. PLANNING CONTROLS

The Cardinia Planning Scheme regulates land use and development in the municipality. It contains State and local planning policies (Municipal Strategic Statement), zones and overlays and other provisions that affect how land can be used and developed. The planning scheme indicates if a planning permit is required to change the use of land, or to construct a building, subdivide land or make other changes to the land. A copy of every planning scheme in Victoria is available to inspect at the Department of Planning and Community Development website [www.dpcd.vic.gov.au](http://www.dpcd.vic.gov.au)

### 8.1 Zoning

The zones for the study area are shown on Map 10. The main farming areas around Gembrook are zoned as Green Wedge Schedule 1 (minimum subdivision 40 hectares) and Green Wedge Schedule 2 (minimum subdivision 15 hectare). Privately owned land around Cockatoo and Emerald with flora and fauna habitats and values are zoned Rural Conservation Schedule 1 (minimum subdivision 40 hectares) and Rural Conservation Schedule 2 (minimum subdivision 15 hectares), while State Forests and nature reserves are zoned Public Conservation and Resource Zone. There are extensive areas zoned for Low Density Residential uses around Emerald and Cockatoo and subdivision and development reflects this zoning.

### 8.2 Overlays

There are a series of planning overlays which affect the study area and include particular planning controls over the areas affected by these overlays. The main overlays and the percentage of area affected are shown in Table 8.

**Table 8: Planning scheme overlays**

OVERLAY	% AREA	COMMENT
Environmental Significance (ESO)	80%	Environmental and landscape values
Wildfire Management (WMO)	75%	Bushfire prone areas
Significant Landscape (SLO)	20%	Puffing Billy scenic corridor
Design and Development (DDO)	10%	Development in low density areas
Vegetation Protection (VPO)	10%	Vegetation in low density residential areas
Heritage (HO)	3%	15 heritage places
Restructure (RO)	3%	Old and inappropriate subdivisions

*Source: Cardinia Shire Council Planning Scheme*























### 8.3 Municipal Strategic Statement (MSS)

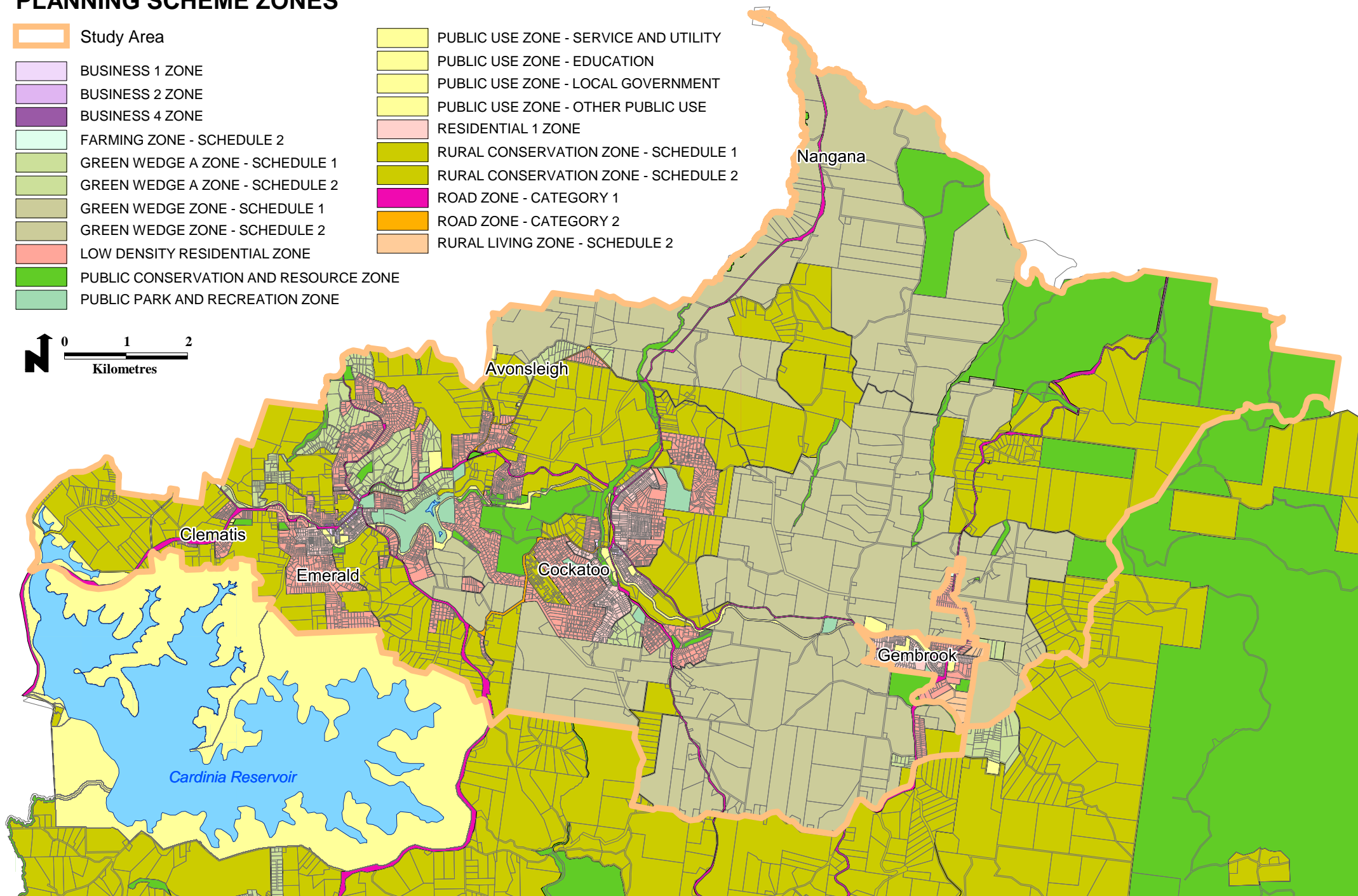
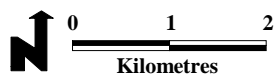
Cardinia Shire Council's MSS includes a vision for ... the sustained wellbeing of the community and environment through... a strong economic base... recognising and protecting diverse and significant environmental values... providing opportunities for a cohesive and robust community and... enhancing the experience of people who live, work and visit the municipality (Clause 21.04). To deliver this vision, the MSS includes strategies for:

- Agriculture
- Catchment management
- Economic development



# NORTHERN RANGES GREEN WEDGE PLANNING SCHEME ZONES

- |  |                                       |   |                                       |
|--|---------------------------------------|---|---------------------------------------|
|  | Study Area                            |  | PUBLIC USE ZONE - SERVICE AND UTILITY |
|  | BUSINESS 1 ZONE                       |  | PUBLIC USE ZONE - EDUCATION           |
|  | BUSINESS 2 ZONE                       |  | PUBLIC USE ZONE - LOCAL GOVERNMENT    |
|  | BUSINESS 4 ZONE                       |  | PUBLIC USE ZONE - OTHER PUBLIC USE    |
|  | FARMING ZONE - SCHEDULE 2             |  | RESIDENTIAL 1 ZONE                    |
|  | GREEN WEDGE A ZONE - SCHEDULE 1       |  | RURAL CONSERVATION ZONE - SCHEDULE 1  |
|  | GREEN WEDGE A ZONE - SCHEDULE 2       |  | RURAL CONSERVATION ZONE - SCHEDULE 2  |
|  | GREEN WEDGE ZONE - SCHEDULE 1         |  | ROAD ZONE - CATEGORY 1                |
|  | GREEN WEDGE ZONE - SCHEDULE 2         |  | ROAD ZONE - CATEGORY 2                |
|  | LOW DENSITY RESIDENTIAL ZONE          |  | RURAL LIVING ZONE - SCHEDULE 2        |
|  | PUBLIC CONSERVATION AND RESOURCE ZONE |   |                                       |
|  | PUBLIC PARK AND RECREATION ZONE       |   |                                       |





- Heritage
- Housing and settlement
- Landscape
- Open space
- Subdivision restructure
- Leisure and tourism
- Vegetation and areas of botanical and zoological significance, and
- Wildfire management

Council has recently prepared an Amendment to the Cardinia Planning Scheme to revise the Municipal Strategic Statement. The Amendment was placed on exhibition on 22 October 2009 and proposes a number of changes that are relevant to the Green Wedge Management Plan in relation to:

- Green wedge areas
- Cockatoo
- Emerald Avonsleigh and Clematis

Further details are summarised in Appendix 3 or can be found at the website <http://www.dse.vic.gov.au/shared/ats.nsf/webviewdisplay?openform>

#### **8.4 Local Planning Policies**

Policy 22.01 (Small Lot Rural Subdivision) is not relevant to the *Northern Ranges Green Wedge Management Plan* as it does not apply to any of the zones represented in the study area. This policy is proposed to be deleted as part of the current Planning Scheme Review.

##### *Issues to consider...*

*Do the existing zones and overlay controls for the area offer sufficient control over development, or are they too restrictive? Are additional policies or objectives needed for some aspects of development? Are the existing policies, goals and objectives correct but not reflected adequately in decisions on planning applications?*

## 9. SUMMARY AND NEXT STEPS

This issues paper has identified nine key issues for the Northern Ranges Green Wedge and has posed a number of questions in relation to each of those issues. Some of these issues are controversial and more significant than others which may generate local debate about the preferred future for the area, while the community may have a common position on other issues. The issues are summarised below.

### 9.1 Summary

#### Issue 1      Agriculture and horticulture

The area has a mix of broad acre and lifestyle farming but the potato industry is presently experiencing difficulties and many growers see no future for the local industry.

##### *Issues to consider...*

*Should efforts be made to retain the eastern part of the Green Wedge for agriculture, or should it be accepted that there is no agricultural future in this area? Should subdivision controls be relaxed to encourage more intensive agriculture, or to allow farmers to remain on the land in their retirement? Is there a case for allowing more opportunities for hobby farmers and “lifestylers”? Does the 2004 Gembrook Rural Review need to be revisited, or does it just need to be implemented?*

#### Issue 2      Biodiversity

There are some very significant habitats in the area and mapping needs to be updated while environmental management of habitat on private land can be improved.

##### *Issues to consider...*

*Does biodiversity mapping need to be improved or updated? Should local farmers and landholders take more advantage of environmental programmes such as BushTender, EcoTender? Can the Biolinks programme be implemented more effectively in the Northern Ranges Green Wedge? Are there opportunities to improve the community's awareness of local flora and fauna, especially of endangered or vulnerable species and areas of national biodiversity significance? How can weed management in the area be made more effective?*

#### Issue 3      Bushfire management

Cockatoo was burnt out by the 1983 Ash Wednesday fires and despite planning controls and fire management plans, the area is still far from safe against future bushfires. The Royal Commission's findings will guide how the area can be better protected and prepared in future.

##### *Issues to consider...*

*What is the local community's response to the Royal Commission's questions? Is there more that agencies and the community can do to make the study area and local communities better protected against bushfires?*

## **Issue 4      Tourism and leisure**

The study area is well placed to increase its local tourism industry to provide leisure opportunities for the local community and visitors. Puffing Billy, nature based tourism and a possible regional park could be the basis for growth.

### *Issues to consider...*

*How can we ensure that local people benefit from increased visitor numbers? How can Puffing Billy and the local communities work more effectively together? Can the planning and management of State Forests and other Crown Land be improved? Should the restrictions on tourist related development in Green Wedge and Rural Conservation Zones be relaxed? How can the trails network be improved and expanded? Is there merit in the Regional Park proposal and if so, how could this be improved?*

## **Issue 5      Settlements and townships**

Settlement around Emerald and Cockatoo represents scattered low density residential development and there are public costs associated with such development.

### *Issues to consider...*

*How can we ensure that local people benefit from increased visitor numbers? How can the Emerald Tourist Railway Board and the local communities work effectively together? Can the planning and management of State Forests and other Crown Land be improved? Should the restrictions on tourist related development in Green Wedge and Rural Conservation Zones be relaxed? How can the trails network be improved and expanded? Is there merit in the Regional Park proposal and if so, how could this be improved?*

## **Issue 6      Landscape management**

The study area is characterised by beautiful rural landscapes and forest areas. There are planning controls to protect these landscapes, although the planning controls could be made more effective by including clear and precise statements of what makes those landscapes significant.

### *Issues to consider...*

*There are difficulties associated with the fragmented, low density development around Emerald and Cockatoo, in terms of bushfire dangers, servicing costs, and access to facilities. Do local communities share these concerns and if so, what do they think can be done? What can be done to better support the numerous community groups and initiatives in the area?*

## **Issue 7      Water**

Many agencies are working to improve the water quality in streams and rivers in the area, except the scale and cost to implement the reticulated sewerage backlog is still a problem. There is evidence that local water allocations are not being used and that other landowners and farmers cannot access this water that they need.

*Issues to consider...*

*Should Council advocate more strongly to accelerate the sewerage backlog programme? What can be done to release some of the water rights that have been allocated but are not being used?*

## **Issue 8      Planning controls**

There is an existing framework of planning controls that specify State and local planning policies (Municipal Strategic Statement), zones and overlays and other provisions that affect how land can be used and developed in the study area. There may be an opportunity to amend these planning controls through the green wedge management plan process.

*Issues to consider...*

*Do the existing zones and overlay controls for the area offer sufficient control over development, or are they too restrictive? Are additional policies or objectives needed for some aspects of development? Are the existing policies, goals and objectives correct but not reflected adequately in decisions on planning applications?*

## 9.2 Next Steps

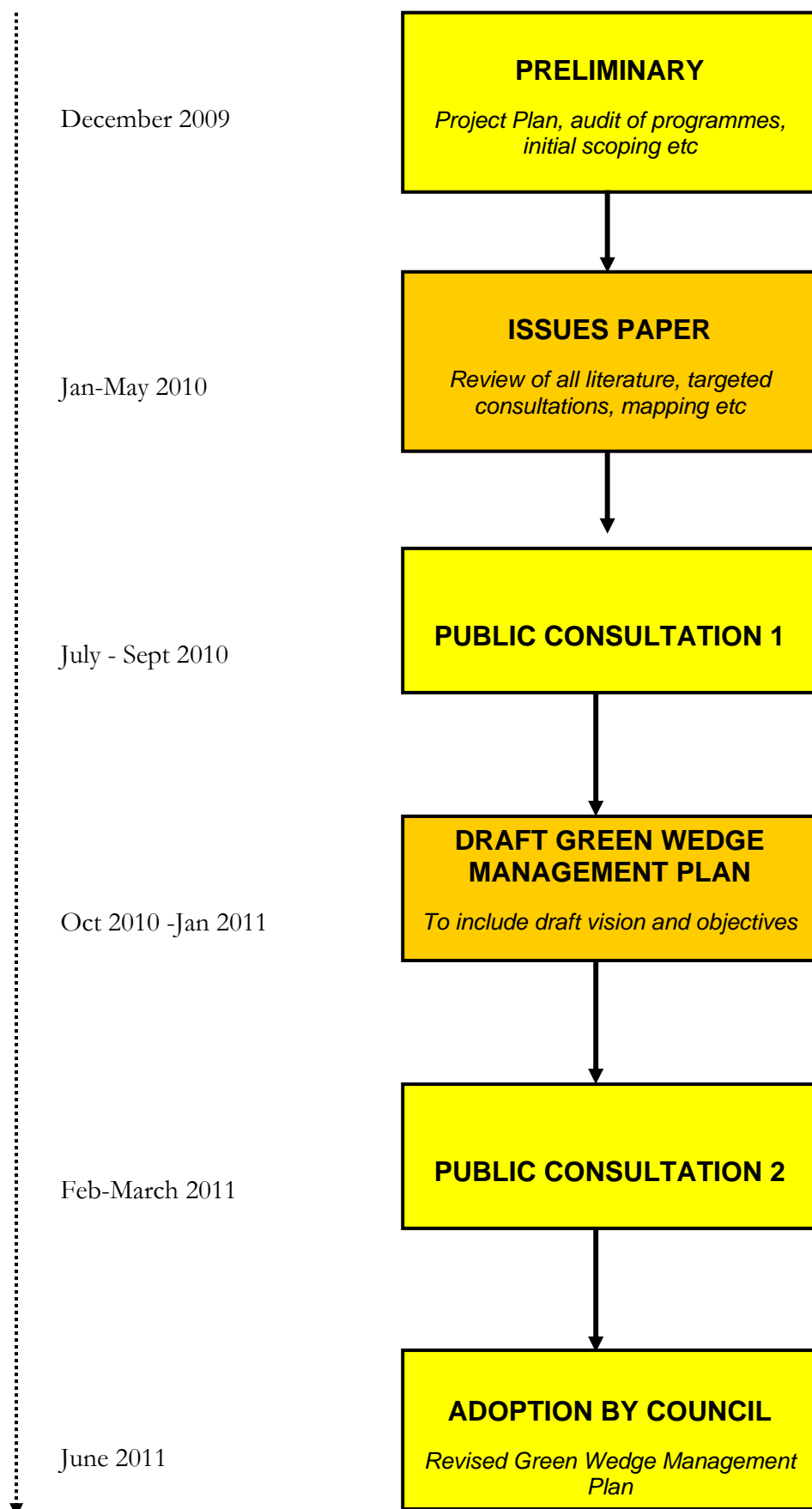
This issues paper is the first step in preparing a green wedge management plan for the Northern Ranges Green Wedge. It will form the basis for community consultation and community responses and will help inform a draft plan, which will then be the subject of a second round of community consultation.

The consultation will aim to develop a shared vision and goal for the Northern Ranges Green Wedge. Given that the Northern Ranges Green Wedge is part of the same precinct as the Yarra Valley and Yarra and Dandenong Ranges Green Wedge Precinct, the draft vision below may have much in common with the Northern Ranges. It may be useful to present this draft vision of the Shire of Yarra Ranges for discussion:

The [Council] will encourage and support productive and sustainable farming, a healthy biodiversity, and attractive landscapes in its Green Wedge. These are the primary green wedge values and are what make it attractive for other activities such as tourism, recreation, and rural living. Council will work with other stakeholders to protect and enhance these primary values. Other activities will only be accommodated if they positively contribute to the primary values (Yarra Ranges Shire Council, 2009).

The next steps and an indicative timetable is shown on the flow chart on the following page.

***NORTHERN RANGES GREEN WEDGE MANAGEMENT PLAN***  
***NEXT STEPS AND INDICATIVE TIMING***





## **10. APPENDIX 1**

### **10.1 References**

#### ***Primary references***

- A Land Capability Study of the Cardinia Shire (1997) MJ McMillan et al for DNRE
- Agricultural Audit and Action Framework (2004) Environment and Heritage
- Calendar of Grants and Incentives (2009) Port Phillip and Westernport Catchment Management Authority
- Cardinia Shire Planning Scheme; Cardinia Shire Council
- Creating the Future, Council Plan and Action Plan (2009) Cardinia Shire Council
- Emerald District Strategy (June 2009) Strategic Planning, Cardinia Shire Council
- Equestrian Strategy (2002) Sustainable Communities, Cardinia Shire Council
- Gembrook A Vibrant Semi-Rural Growth Area or Hidden Gem (2004) CAS for Cardinia Shire Council
- Gembrook Potato Industry (June 2009) Council Briefing
- Municipal Strategic Statement Review on Exhibition (18 December 2009) Cardinia Shire Council
- Municipal Health Plan Vol 1 and 2 (2004) Community Services, Cardinia Shire Council
- Municipal Wildfire Preparedness Plan (2005) Environment and Heritage, Cardinia Shire Council
- Public Open Space Policy (2006) Assets and Services
- Puffing Billy Railway Business Plan 2009-2014 (June 2009) SGS for Emerald Tourist Railway Board
- Square Pegs in Green Wedges(2008) Peter Parbery for Department of Primary Industries and Port Phillip and Westernport Catchment Management Authority
- Submissions to Parliamentary Inquiry (Jan 2009) D Nickell, Neil Firrito, Peter Parbery et al
- The Future of the Gembrook Potato Industry (March 2004) CAS, Cardinia Shire Council

#### **10.2 Other references**

- Agricultural Assessment: A Cardinia Rural Residential Strategy (2000) Phillips Agribusiness
- Agricultural Profile Shire of Yarra Ranges (February 2009) Neil Clark & Associates
- Annual Report 2008/09 (2009) Port Phillip and Westernport Catchment Management Authority
- Biolinks Linking Habitats Across Westernport (2008) Cardinia Environment Coalition
- Cockatoo Township Strategy (March 2008) Cardinia Shire Council
- Community Consultations for Gembrook Strategy Review (June 2009) Strategic Department, Cardinia Shire Council
- Economic Profile (2009) Cardinia Shire Council
- Environment Management Strategy (2003) Environment & Heritage Department, Cardinia Shire Council
- Planning Experts' Written Statement; Victorian Bushfires Royal Commission, Feb 2010
- Flora Surveys (2007) Cardinia Shire Council
- Future Farming – Productive, Competitive and Sustainable (2008) Department of Primary Industries

- Gateway to Gippsland Food and Wine Produce Directory (2009) Cardinia & Baw Baw Shire Council
- Gembrook Township Strategy (1998) Strategic Department, Cardinia Shire Council
- Gembrook Township Strategy Background Report (1997) Tract Consultants for Cardinia Shire Council
- Gembrook Rural Review Towards An Action/Implementation Plan (2004) Cardinia Shire Council
- Gembrook Rural Review Action Plan (2004) Cardinia Shire Council
- Interim Findings and Future Directions Report [Future Farming]; Rural Planning Group 2009
- Joint Submission to Parliamentary Inquiry Jan 2009 (December 2008); Casey and Cardinia Shire Council
- Linking People & Spaces (2002) Parks Victoria
- Municipal Fire Prevention Plan (2007) Cardinia Shire Council
- Port Phillip and Westernport Regional River Health Strategy (June 2007) Melbourne Water et al
- Preventative Planning for Bushfire Risk (Dec 2009) M Buxton in Planning News
- Puffing Billy Corridor Landscape Evaluation Study (1991) Sherbrooke & Pakenham Shires
- Puffing Billy Draft Corridor Master Plan (Jan 2010) SGS for Emerald Tourist Railway Board
- Roadside Management Plan (1997) Cardinia Shire Council
- Securing Our Natural Future – White Paper for Land & Biodiversity (Nov 1009) Department of Sustainability and Environment
- Stormwater Management Plan Vols 1&3 (2008) Assets & Services
- Submission to Parliamentary Inquiry into Rural & Regional Tourism (June 2007) Cardinia Shire Council
- Sustainable Water Use Plan (2006) Cardinia Shire Council
- The Queensland Potato Industry A Strategic Assessment (2005) Condor Consulting
- Weed Management Strategy (March 2007) Environment & Heritage, Cardinia Shire Council
- Yarra Ranges Green Wedge Management Plan (draft) (October 2009) Shire of Yarra Ranges

## **11. APPENDIX 2**

### **11.1 Consultation**

#### **Local stakeholders**

- Bruce Ure - Gembrook Victoria Farmers Federation
- David Nickell - Gembrook Township Committee
- Eamonn Seddon and - Emerald Tourist Puffing Billy Railway Board
- Frank Maguire - Emerald Township Committee
- Kelly Brooks McMillan - Cardinia Environment Coalition
- Owen Dibley – Cockatoo Township Committee

#### **Government agencies**

- Carrie White - Parks Victoria
- Dan Robertson - Melbourne Water
- Denise Turner and Jonathan Drohan - Department of Primary Industries
- Ian Morgan and Adam Shalekoff - Port Phillip and Westernport Catchment Management Authority
- Jack Krohn, Patsy Martin and Emily Allsopp - Green Wedge Team at Department of Planning and Community Development
- Keir Delaney and Sean Coley - Outer Suburban/Interface Services Committee
- Michael Ward - Department of Sustainability and Environment

#### **Council**

- Frances Grigoriou - Economic Development
- Karen Muscat and Robert Jones - Environment Department
- Marcelle Bell and Belinda Powell - Strategic Planning
- Phillip Walton - Director Planning and Development
- Russell Hodges - Manager Rates and Valuation
- Vincent Morris - Agribusiness Officer

## **12. APPENDIX 3**

### **12.1 Existing and proposed Municipal Strategic Statement (MSS)**

#### **Existing Municipal Strategic Statement (MSS)**

Cardinia Shire Council's MSS includes a vision for ... *the sustained wellbeing of the community and environment through... a strong economic base... recognising and protecting diverse and significant environmental values... providing opportunities for a cohesive and robust community and... enhancing the experience of people who live, work and visit the municipality (Clause 21.04)*. To deliver this vision, the MSS includes strategies for:

#### **Agriculture**

- Protect high quality agricultural land from inappropriate development and fragmentation
- Use land capability as a guide for decision making on agricultural land
- investigate agricultural opportunities for the high quality soils around Gembrook where land has been affected by dieldrin and PCN (Potato Cyst Nematode).

#### **Catchment management**

- Retain and re-establish native vegetation to minimise erosion, reduce salinity and to protect landscape and habitat values.
- Protect the environs of waterways, for instance by fencing off waterways and by re-establishing riparian vegetation.

#### **Economic development**

- Focus on the key areas of agriculture, tourism, industry and services

#### **Heritage**

- Protect sites of State and regional heritage significance including sites of Aboriginal cultural heritage

#### **Housing and settlement**

- Limit residential development and rural residential subdivision in Emerald, Gembrook, Cockatoo, Clematis, and Avonsleigh.
- Maintain the scenic quality of the townships and their surrounding landscape by avoiding the scattering of development into the nearby landscape.
- Minimise the environmental impacts of the townships by providing sewage treatment and stormwater management systems
- Increase community awareness among rural residential landowners regarding stock and horses and their responsibilities regarding pest plants and pest animals

#### **Landscape**

- Recognise the value of the landscape for the community and as a competitive strength for sustainable tourism
- Protect significant landscapes including the Cockatoo Creek, the Menzies Creek Valley, and the scenic corridor of the Puffing Billy Tourist Railway.
- Control the use of structures for intensive agriculture e.g. igloos and poultry sheds.
- Minimise the fragmentation of land and removal of vegetation in areas of high landscape value.

## **Open space**

- Develop a green web for passive open space along major waterways to help improve water quality and to act as wildlife corridors.
- Develop a network of pedestrian, bicycle and equestrian trails across the Shire.

## **Subdivision restructure**

- Restructure inappropriate subdivisions which otherwise would result in significant environmental degradation and infrastructure costs.

## **Tourism**

- Recognise the tourist attractions of State and regional significance e.g. Puffing Billy Tourist Railway, Emerald Lake Park and Cardinia Reservoir Park
- Support the ongoing development of the Puffing Billy Tourist Railway as a tourist attraction of State significance
- Ensure that its scenic corridor is protected from inappropriate development
- Encourage the establishment of tourism activities in the townships e.g. accommodation, restaurants, cafes, galleries, markets etc
- Develop Gembrook township as a major tourism destination based on heritage and the scenic qualities of the area
- Protect areas of high scenic value and landscape quality especially the rural outlook from key tourist routes

## **Vegetation and Areas of botanical and zoological significance**

- Avoid land subdivision for rural residential lots in areas of botanical or zoological significance.
- Protect identified areas which are of botanical and zoological significance.
- Require the replanting of indigenous vegetation when vegetation has been removed for earthworks, especially on steep land or close to a watercourse.
- Encourage land management practices which control and remove weeds, and which raise community awareness regarding weed management.

## **Wildfire management**

- Minimise the development of land in areas of high fire intensity.
- Investigate the inclusion of areas in a Wildfire Management Overlay in consultation with the CFA.
- Use controlled burning to reduce ground fuel levels and to help maintain healthy and diverse forests and woodlands.

## **12.2 Proposed Municipal Strategic Statement (MSS) revision**

Council has recently prepared an Amendment to the Planning Scheme which contains a revised MSS. The Amendment was placed on exhibition on 22 October 2009 and proposes a number of changes that are relevant to the green wedge management plan:



## **Green wedge areas**

- Attract new industries, companies and lifestyle investors to the Gembrook area; assist potato growers to make decisions about their future; and enhance environmental and landscape values.
- Develop Green Wedge Management Plans to fulfil statutory, strategic, environmental, economic and social requirements
- Develop links between tourism and agriculture e.g. wineries and host farms.

The draft MSS also includes guidance for Cockatoo and Emerald Townships (as well as Gembrook) in line with adopted Township Strategies:

### **Cockatoo**

- Develop a track and path system along Cockatoo Creek with signage, seating and multiple access points.
- Complete the Emerald to Gembrook Trail.
- Carry out revegetation and weed control works along each side of Cockatoo Creek.
- Implement the Municipal Wildfire Preparedness Plan including fire management plans for bushland reserves, fire breaks, buffer zones and water points.

### **Emerald, Avonsleigh and Clematis**

- Contain residential development within the existing residentially zoned land.
- Encourage tourism activities around Emerald town centre and the Emerald Lake Park.
- Support host farms, bed and breakfasts and holiday opportunities in association with agriculture to enhance the prosperity of farms.
- Implement the Municipal Wildfire Preparedness Plan including fire management plans for bushland reserves, fire breaks, buffer zones and water points.

## 13. APPENDIX 4

### 13.1 Glossary of terms

CFA	Country Fire Authority
DDT	dichlorodiphenyltrichloroethane (a controversial chemical pesticide)
DPCD	Department of Planning and Community Development
DPI	Department of Primary Industries
DSE	Department of Sustainability and Environment
MSS	Municipal Strategic Statement
PCN	Potato Cyst Nematode
PP&WCMA	Port Phillip and Westernport Catchment Management Authority

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1 The Northern Ranges Green Wedge is technically part of the study's South East Region but for the purposes of this analysis it is included in the Yarra Region as it is part of the Upper Yarra catchment and shares many characteristics.

2 Non-farm businesses are: "Rural businesses that are not focused on primary production, for example golf courses, bed and breakfast, active recreation (horses, dirt bikes, paintball), quarries, waste treatment (where private)"

3 The Queensland Potato Industry - A Strategic Assessment; Condor Consulting 2005

4 Gembrook Rural Review - Action/Implementation Plan; August 2004

5 Gembrook - Melbourne's Best Kept Secret; Gembrook Rural Review August 2004

6 Derived from Table 3 on p9 of Gembrook - Melbourne's Best Kept Secret; Gembrook Rural Review August 2004

7 Most notably the Environmental Significance and Vegetation Protection Overlays.

8 These are defined as follows: Endangered = less than 10 per cent of the pre-European extent of this vegetation class remains; Vulnerable = 10-30 per cent of the pre-European extent of this vegetation class remains; Depleted = Greater

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than 30 per cent and up to 50 per cent of pre-European extent remains (or a combination of depletion, loss of quality, current threats and rarity e.g. greater than 50 per cent pre-European extent remains but moderately degraded over most of this area); Rare = A rare vegetation class, but neither depleted, degraded nor currently threatened to an extent that would qualify as Endangered, Vulnerable or Depleted; Least Concern = Greater than 50 per cent pre-European extent remains and subject to little or no degradation over a majority of this Area.

9 BushTender is an auction-based approach to achieving better management of existing patches of native vegetation on private land. Landholders competitively tender for contracts to improve their native vegetation and the successful bids are those that offer the best value for money. EcoTender is a similar process but to achieve broader environmental and land management benefits. Biolinks are planted corridors designed to connect habitats of biodiversity significance and to make these more viable for the long term.

10 “Neighbourhood Safer Places - Places of Last Resort are identified buildings or spaces within the community that may afford some protection from radiant heat, the biggest killer during bushfire. They are a place of last resort in emergencies only.”

11 This would provide a new start point for the Puffing Billy which would relieve pressures on Belgrave, better service residents in the Cardinia-Casey growth corridor, and make much better use of the railway line - which at present offers one 6-hour return service per day with a 30-minute turnaround at Gembrook.

12 The Alpine Walking Track is a 650k bush-walking track which goes from Walhalla to Mt Kosciusko and Canberra. Gembrook is the closest part of Melbourne to the Track and might be the best point for a feeder track to link with the AWT.

13 Stormwater Management Strategy; Cardinia SC 2008