Nillumbik Green Wedge Management Plan

Part 2: Delivering the vision

2010-2025

#### Preface

The Nillumbik Green Wedge Management Plan (GWMP) contains a long term vision for the Nillumbik Green Wedge and a range of existing and new initiatives that work towards delivering that vision.

The Plan will direct Council policy and planning decisions relating to the Nillumbik Green Wedge and will be a referenced document in the Nillumbik Planning Scheme.

#### Structure

##### A note on the structure of the Nillumbik Green Wedge Management Plan

There are two parts to the Nillumbik Green Wedge Management Plan: Part 1 provides background and context, and Part 2 sets out the vision for the Nillumbik Green Wedge with a framework and implementation plan for achieving that vision.

**Part 1: Background and context**

This explains what a green wedge is, what is special about the Nillumbik Green Wedge, the challenges and issues for its future and why Nillumbik needs a Green Wedge Management Plan.

It summarises the policy context for such a Plan and, finally, it describes how the Plan was developed through community consultation.

More detailed information is available in the Green Wedge Background Paper 2007, which outlines the way land is currently being used in the Nillumbik Green Wedge and is a key source of information for the Plan.

Appendices in Part 1 include more detailed information on:

* green wedges
* natural and cultural values of the Nillumbik Green Wedge
* the economy of the Nillumbik Green Wedge; and
* consultation that informed the Plan.

Part 1: Background and context is available from www.nillumbik.vic.gov.au or contact Council for a copy on 9433 3111.

**Part 2: Delivering the vision**

This sets out the vision for the Nillumbik Green Wedge and ways to work towards achieving that vision. It contains the following sections:

* Summary of the Green Wedge Management Plan
* Vision
* Guiding principles
* Aims
* Areas for action:
* Environment
* Economy
* People and communities
* Governance
* Implementation plan.

#### Context

The Nillumbik Green Wedge



#### Summary

##### Conserving a valuable resource

In 1994, the Local Government Review Board declared that the new Shire of Nillumbik was to be a conservation Shire with the Green Wedge as its strategic focus.

The Nillumbik Green Wedge is fundamental to the identity of the Shire and the Council Plan 2009–2013 recognises Council’s responsibility for managing and protecting it (action 2.1.5).

The concept of green wedges as rural landscapes and natural areas separating corridors of urban development is a longstanding metropolitan planning commitment.

The intention in maintaining green wedges is to retain a viable rural environment for farming, recreation, conservation and natural resources. This intention has been endorsed and promoted by the Victorian Government policy document Melbourne 2030 and, subsequently, by Melbourne @ 5 million.

In this context, the Nillumbik Green Wedge is a resource to be cared for and managed on behalf of the whole metropolitan community because of its environment and its recreational, agricultural, economic and social values.

The Council Plan 2009–2013 also recognises the importance of the Green Wedge for the local economy. It supports actions to protect the environment and landscapes by encouraging appropriate economic development in the Green Wedge including tourism, food production and agriculture.

The purpose of the Nillumbik Green Wedge Management Plan (GWMP) is to direct the sustainable management of the Nillumbik Green Wedge in relation to all strategic planning and use of the non-urban areas of the Shire.

Green Wedge townships are included in the GWMP as they are an integral part of its landscape.

While townships are not physically in the Green Wedge Zones – they are zoned as townships and inside Urban Growth Boundaries (UGB) – the protection of their character and future vitality is important to the future of the Green Wedge.

Township character will be protected through adherence to township plans, neighbourhood character guidelines and other existing overlays.

Where township plans do not exist, they will be prepared as separate projects with allied consultation.

##### A community vision for the future

The Nillumbik community has a strong attachment to the Nillumbik Green Wedge and is keenly interested in safeguarding this special place now and for future generations.

Extensive background research and many months of community consultation combined to create a vision for the future of the Nillumbik Green Wedge and aims and guiding principles for its management.

In 2030, management of the Nillumbik Green Wedge will lead the way in economic, environmental and social sustainability.

The Green Wedge will be secure and will be valued by the local and wider Melbourne community for its natural and cultural values. The future of the Nillumbik Green Wedge is one in which:

* natural and cultural values are conserved and enhanced
* bush and rural landscapes are conserved and enhanced
* the economic future is sound
* communities are strong, connected and supported and are knowledgeable about the Nillumbik Green Wedge
* local identity and diversity is respected and nurtured.

The methods of managing the Green Wedge may change according to circumstances but the aims and the guiding principles remain constant, providing fixed reference points in a changing world.

##### Aims of the Nillumbik Green Wedge Management Plan

Conserve and enhance the natural values, landscapes and cultural heritage of the Nillumbik Green Wedge.

Increase local and wider community understanding and enjoyment of the special nature of the Nillumbik Green Wedge.

Maintain strong, connected and diverse communities.

Achieve a diverse economic base in the Nillumbik Green Wedge that helps local communities to thrive but does not impact negatively on natural and cultural values or on the valued character of towns, settlements and landscapes.

Minimise bushfire risk to human life.

Involve communities and other stakeholders in delivering the GWMP.

Deliver the GWMP and future actions in keeping with the guiding principles.

##### Guiding Principles of the Nillumbik Green Wedge Management Plan

Principle 1: Collaboration

Principle 2: Sustainability: social, environmental, economic

Principle 3: Leadership

Principle 4: Connectedness

Principle 5: Conserve and enhance

Principle 6: Embrace change

Principle 7: Social equity

Principle 8: Celebrate local identity

Principle 9: Precautionary principle (anticipate the possibility of detrimental social, health or environmental outcomes of any action and act to avoid serious or irreversible harm)

Principle 10: Appreciation and enjoyment.

The guiding principles are set out in full on pages

14-17.

##### Implementing the Plan

The GWMP will be a reference document in the Nillumbik Planning Scheme and responsibility for its implementation will sit with Strategic Planning.

# Vision

During 2007, Nillumbik Shire Council consulted with Nillumbik communities to find out what people value about the Nillumbik Green Wedge and how they see its future.

What is clear from the consultation is that the community has a strong attachment to the Nillumbik Green Wedge and an aspirational vision for its future.

### What the community values about the Nillumbik Green Wedge

Biodiversity: the plants and animals, some of which are endangered.

Cultural heritage: a place that nurtures and inspires artists.

Space and landscapes: the visual aesthetics of the bush and rural landscapes and the sense of place, including the feelings of isolation, peace and wellbeing they engender.

Strong community spirit and culture of volunteering.

Local identity: the people and character of the small townships are valued for their unique qualities.

Working in partnership to deliver the GWMP.

GWMP values, vision and guiding principles (November 2007 p. 3)

### Vision

In 2030, management of the Nillumbik Green Wedge will lead the way in economic, environmental and social sustainability.

The Green Wedge will be secure and will be valued by the local and wider Melbourne community for its natural and cultural values.

The future of the Nillumbik Green Wedge is one in which:

* natural and cultural values are conserved and enhanced
* bush and rural landscapes are conserved and enhanced
* the economic future is sound
* communities are strong, connected and supported and are knowledgeable about the Nillumbik Green Wedge
* local identity and diversity is respected and nurtured.

# Aims

The Nillumbik Green Wedge Management Plan provides a strategic framework for managing the Green Wedge.

This framework is expressed as seven broad aims. Like the guiding principles, the aims provide fixed reference points in a changing world.

The methods of managing the Green Wedge may change according to circumstances, but the aims remain constant.

### Aims

Conserve and enhance the natural values, landscapes and cultural heritage of the Nillumbik Green Wedge.

Increase local and wider community understanding and enjoyment of the special nature of the Nillumbik Green Wedge.

Maintain strong, connected and diverse communities.

Achieve a diverse economic base in the Nillumbik Green Wedge that helps local communities to thrive but does not impact negatively on natural and cultural values or on the valued character of towns, settlements and landscapes.

Minimise bushfire risk to human life.

Involve communities and other stakeholders in delivering the GWMP.

Deliver the GWMP and future actions in keeping with the guiding principles.

# Guiding Principles

Management of the Nillumbik Green Wedge will be shaped by 10 guiding principles, now and into the future.

### Guiding Principles

Principle 1: Collaboration

Principle 2: Sustainability: social, environmental, economic

Principle 3: Leadership

Principle 4: Connectedness

Principle 5: Conserve and enhance

Principle 6: Embrace change

Principle 7: Social equity

Principle 8: Celebrate local identity

Principle 9: Precautionary principle (anticipate the possibility of detrimental social, health or environmental outcomes of any action and act to avoid serious or irreversible harm)

Principle 10: Appreciation and enjoyment.

### Principle 1: Collaboration

Council, community and other stakeholders work in partnership towards a sustainable Nillumbik Green Wedge and will:

* provide opportunities for collaboration and involvement
* seek and develop partnerships.

### Principle 2: Sustainability: social, environmental and economic

Sustainability is something we work towards. Council and the community must manage the Nillumbik Green Wedge in ways that:

* demonstrate exemplary sustainable practices
* conserve and enhance natural and cultural values
* contribute to a diverse local economy that does not impact negatively on Green Wedge values
* connect and support communities
* encourage sustainable living and take account of the ‘ecological footprint’ of human activity.

### Principle 3: Leadership

In managing the Nillumbik Green Wedge, Council will demonstrate:

* strong, courageous and proactive leadership
* advocacy
* creativity and innovation
* transparency.

### Principle 4: Connectedness

Recognise that the Nillumbik Green Wedge does not exist in isolation but is part of a complex web of relationships. For example, there is interconnectedness and inter-dependence, between:

* communities within the Shire of Nillumbik, for example between communities in the Shire’s urban and rural areas
* communities beyond the municipal boundary including metropolitan Melbourne
* different tiers of government and nongovernment agencies, local, state and federal, which have overlapping interests and responsibilities.

### Principle 5: Conserve and enhance

The Nillumbik Green Wedge environment and cultural heritage are irreplaceable resources for the local and wider metropolitan community.

The Nillumbik Green Wedge will be managed to:

* conserve and enhance biodiversity and natural values
* conserve and celebrate cultural values and identity
* conserve and enhance Nillumbik Green Wedge open spaces and landscapes.

### Principle 6: Embrace change

Recognise that there will be change in the Nillumbik Green Wedge. It is a dynamic environment.

Change must be addressed and managed in a proactive and sustainable way to conserve the values of the Nillumbik Green Wedge.

Trade-offs may be necessary, for example environmental values might be protected in one area in exchange for economic benefit in another.

### Principle 7: Social equity

The needs of all people will be considered. Attention will be paid to:

* embracing a diverse social mix
* providing people with options to suit their needs, such as different housing options for different life stages
* access to services.

### Principle 8: Celebrate local identity

Individual communities in the Nillumbik Green Wedge have a strong sense of local identity and cohesion. The Nillumbik Green Wedge will be managed in ways that:

* contribute to strong and connected communities
* celebrate diversity and support the identity of individual communities.

### Principle 9: Precautionary principle

Management needs to anticipate the possibility of detrimental social, health or environmental outcomes from any action.

In general, the precautionary principle involves acting to avoid serious or irreversible harm, even when full scientific certainty about the likelihood of such harm is lacking.

### Principle 10: Appreciation and enjoyment

The Nillumbik Green Wedge is a living landscape and will be managed in ways that promote enjoyment and an increased understanding of the natural and cultural values.

# Areas for action

## A multi-layered approach

This part of the GWMP sets out the objectives and strategies for the management of the Nillumbik Green Wedge.

The objectives provide specific goals against which to measure progress towards the aims.

The strategies provide practical ways to achieve the objectives.

Breaking down the areas of action in this way provides a multi-layered response to complex planning issues.

Several objectives may address a single aim and several strategies, in their turn, may address a single objective.

Section 5 of this document, the implementation plan, drills down even further. It provides specific actions, programs or initiatives to address various components of the Green Wedge management.

The structure of this section follows the headings in the Council Plan 2009–2013:

**4.1 Environment**

Biodiversity and landscape.

**4.2 Economy**

Agriculture, tourism, business development.

**4.3 People and communities**

Settlement, recreation, cultural heritage, transport and infrastructure and strengthening communities.

**4.4 Governance**

Implementation of the Plan.

## Environment

A healthy environment is the foundation for the wellbeing of people and the local economy. “Everyone has an impact on the environment and everyone has a responsibility to reduce that impact.” (Department of Sustainability and Environment, 2006)

The natural environment is under a great deal of pressure.

Key threats include climate change and the impacts of bushfires such as those experienced by Nillumbik in February 2009.

The Nillumbik Green Wedge is recognised for the quality of its natural environment.

It supports a diverse range of native fauna and indigenous flora, many of which are threatened species.

Conserving biodiversity and natural values is a priority for the GWMP.

The Nillumbik Green Wedge needs to be conserved and managed at a landscape scale.

The long-term conservation of biodiversity needs large areas of high quality native vegetation interconnected by a network of habitat corridors.

In Nillumbik, these areas are on both public and private land and across municipal boundaries: habitats do not discriminate.

Cooperation with adjoining councils, government, non-government agencies and individual landowners will continue to be important if we are to conserve biodiversity and the natural values of the Green Wedge. Equally important, is careful land use that focuses on preventing negative impacts to the environment.

Community groups, such as Landcare, are important in achieving this landscape scale conservation by working across boundaries and increasing individual landowner capacity.

A great many landowners manage their properties primarily to protect and enhance biodiversity and their efforts need to be supported.

The Green Wedge landscape, its biodiversity and natural values, will need to be managed in ways that conserve and enhance those values for the benefit of current and future generations.

For more detail on the specific natural and cultural values of the Nillumbik Green Wedge, see Green Wedge Management Plan, Part 1: Background and context, Appendix 2: Natural and cultural values of the Nillumbik Green Wedge.

### Biodiversity

“We need to recognise our dependence on biodiversity and ecosystems and the services they provide and factor this into our everyday decision making … The state’s biodiversity is fundamental to the welfare and wellbeing of Victorians.” (Jennings, G. DSE 2008, p. i)

The Nillumbik Green Wedge has a high diversity of plants, animals and micro-organisms which together form a valuable ecosystem. The biological forms and the physical environment interact, making the Nillumbik Green Wedge a highly complex, varied and valuable resource.

A comprehensive study of the biodiversity of Melbourne’s north-east, the North East Regional Organisation of Councils (NEROC) Report (Beardsell 1997), identified 15 biodiversity ‘hotspots’ in the Nillumbik Green Wedge and three sites of national significance for their fauna.

The Department of Sustainability and Environment (DSE) lists 72 biosites in the Nillumbik Green Wedge, 10 of which have state significance and 29 have regional significance.

The biodiversity of the Nillumbik Green Wedge is a valuable natural resource for the whole metropolitan area. Conservation of its natural values is a priority for the GWMP.

This position is fully aligned with and supportive of the Victorian Government’s proposed 50-year vision for Victoria’s land and biodiversity:

“Victorians actively conserving and restoring ecosystems to ensure our land, seas and waterways are healthy, resilient and productive.” (DSE 2008, p, 30)

### Landscape

“Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives.

The term does not mean just special or designated landscapes … It results from the way that different components of our environment – both natural … and cultural … interact together and are perceived by us.

People’s perceptions turn land into the concept of landscape.” (Countryside Agency, 2002 p. 2)

The Nillumbik Green Wedge landscapes are a defining feature of the Shire.

The Nillumbik Shire Council logo depicts a landscape of rolling hills and trees with the words ‘The Green Wedge Shire’.

The rural areas provide vistas of agricultural land, treed bushland, hills and waterways.

From key points in the Shire, there are long views towards Melbourne, Kinglake Ranges and the Yarra Valley.

The Nillumbik Green Wedge landscapes are a joy to look at and to experience. They are important to biodiversity, social wellbeing and to the economy as a key element of tourism.

The Nillumbik GWMP addresses the need to systematically assess these landscapes to determine the best ways in which to manage them.

4.1 Environment: Objectives and Strategies

**Objectives:**

Protect and enhance remnant vegetation.

Protect and enhance sites of faunal and habitat significance and strategic habitat links.

Protect and enhance catchments and manage water responsibly.

Achieve sustainable land management.

Conserve the landscapes of the Green Wedge for aesthetic, environmental and cultural values.

**Strategies:**

Identify and manage biodiversity at a landscape scale for conservation.

Support the participation of rural landholders and communities in conserving biodiversity.

Discourage further rural residential development of undersized allotments in the Green Wedge.

Pursue the protection and restoration of significant sites and wildlife corridors.

Ensure land use and development is addressed in the context of its potential effect on the wider catchment.

Conserve biodiversity through implementing sustainable land use planning and encouraging sustainable land management.

Minimise the impact of pest plants and animals.

Identify, document and protect the character of the diverse landscapes of the Nillumbik Green Wedge.

Adopt best practice on a local basis to address climate change.

#### Living and working in the Green Wedge

Stephen Bennett and Louise Heathcote

Lovegrove Vineyard and Winery, Cottles Bridge

“We’ve been here 10 years now. We knew the area for mudbrick homes, the arts, and we wanted to get into the wine industry – Stephen wanted to make wine – we loved it – Lovegrove belonged here – it’s an earthy place,” says Louise Heathcote, co-owner of Lovegrove Vineyard and Winery in Cottles Bridge.

When Louise and Stephen decided to take the plunge and look for a winery, they looked at the Mornington Peninsula but felt it was already too developed for them. They especially liked Cottles Bridge because of its proximity to Melbourne but with the feeling it’s the country with the city just down the road. They also like being in the Green Wedge.

“We feel very lucky – in fact, people tell us that every weekend,” says Louise. “I love my Saturday mornings – I drive to St Andrews and walk for an hour with friends, then sit back with a coffee and watch the market set up – we talk – we know everyone.”

“We’re determined to remain as we are – small with integrity and a realness – no greed and glitz,” says Stephen. “We have 20 acres to care for – 10 planted to vines. It’s hard to maintain, we do it ourselves with occasional casual labour on the vineyard.”

“We are adapting to climate change – altering some vineyard practices, with lighter use of chemicals and fertilisers. We get many questions from our visitors on the weekend about climate change – I think the ongoing drought has brought these thoughts to the fore.”

“It’s hard to believe we could find a similar place anywhere in Australia – Melbourne’s one of the best cities – and we’re just 35 kilometres away in beautiful country, so long as we keep caring for it,” says Louise.

## Economy

### Council is committed to working towards a sustainable economy.

Council is committed to protecting the Green Wedge and to supporting sustainable economic development including tourism, food production and agriculture (Council Plan 2009–2013, objectives 2.1.5, 3.1.6, 3.1.2).

The GWMP supports economic activity suited to the Green Wedge: activity that does not have a negative impact on its environmental values and characteristic landscapes. This is in accordance with the Council Plan 2009–2013 and Melbourne 2030.

Melbourne 2030 recognises that green wedges are “… active living areas…” that provide recreation and tourism opportunities and areas for agricultural production and a range of uses that cannot be located in urban areas, e.g. water storage, quarrying, airports (2002, p. 66).

The Nillumbik GWMP, through its implementation plan, defines what level of business development is appropriate in the Nillumbik Green Wedge and in what areas.

The Economic Development Strategy 2011 has responsibility for implementing the key economic actions contained in the GWMP.

The Nillumbik Green Wedge depends on its townships for services and employment.

The main economic opportunities are in townships inside the Urban Growth Boundaries (UGB) and not in the rural areas of the Green Wedge.

The intent of the GWMP is to direct most economic development to areas inside the UGB to make sure the Green Wedge values are not adversely affected. Larger scale commercial developments will be located in townships.

A land use framework for tourism in the Green Wedge is a priority action of the GWMP. It will identify locations in the Nillumbik Green Wedge where tourism will be encouraged or discouraged and include details of permitted and prohibited uses. For example, to support unstructured recreation such as cycling and walking in the Green Wedge and to provide opportunities for ‘coffee and cake’ in a scenic environment, small scale cafés are likely to be permitted in specified areas. Strict limits will be set on capacity and setting in the landscape, and will be defined in the Planning Scheme.

### Agriculture

“Farming is entering a new era. Our farmers are facing unprecedented pressures and uncertainties. At the same time, exciting new opportunities are emerging. These changes will be far-reaching and will have a profound and lasting impact on the business of farming in Victoria in the coming decades.” (Department of Primary Industries, 2008, p. 4)

There are approximately 200 active agribusinesses in the Nillumbik Green Wedge creating around 150 jobs (4.9% of Nillumbik Green Wedge jobs) with further local employment supported through services to the industry (Essential Economics, 2008, p. 51–53).

Farming is an important land use in the Nillumbik Green Wedge not only for food production but also for biodiversity, landscape management and cultural values. Agriculture occupies 20% of the total Nillumbik Green Wedge land area. 2

The main finding of the 2010 Outer Suburban/Interface Services and Development Committee Report: Inquiry into sustainable development of agribusiness in outer suburban Melbourne, is that agriculture is one of the best uses of Green Wedge land.

It manages and preserves the landscape, supports local jobs and local economies, allows access to fresh and healthy food close to consumers and holds opportunities for the management and re-use of waste and water (Outer Suburban/Interface Services and Development Committee 2010, p.121).

The Nillumbik Land Capability Study (Woodward and Clyde 1998) recommended retaining land in Arthurs Creek, Doreen and Kangaroo Ground for soil-based agriculture.

This means that the land should not be developed or subdivided to the extent that soil-based agricultural activities are no longer technically viable.

It recommended that land in the Skyline Road and St Andrews land system should be retained for environmental conservation and be used for agriculture only where the use or development proposed does not compromise the quality of the environment.

The Study made recommendations as to the minimum lot sizes for both of these areas (Nillumbik Shire Council 2006, p. 24).

The Study recommended the following uses on agricultural land without significant3 environmental constraint: extensive animal husbandry, horticulture and beekeeping.

The Study did not support intensive4 animal industries and aquaculture because they are likely to cause detrimental impacts to the environment, landscape quality and rural amenity.

Farming can, generally, operate in the Nillumbik Green Wedge only as a supplement to non-farm incomes. This explains the high incidence of part-time and hobby farming and is borne out by Essential Economics’ finding that agricultural activities in the Nillumbik Green Wedge are small scale with low profit margins (2008, pp: 51–53).

Interestingly, while the Land Capability Study views proximity to Melbourne as a limiting factor, the Nillumbik Shire Commodity and Economic Profiles Report, identifies it as a benefit in accessing off-farm incomes.

The closeness of Melbourne may, therefore, be an important factor in promoting farm sustainability (Nillumbik Shire Council 2006, pp. 23, 25).

Ian McPhail, former Victorian Commissioner for Environmental Sustainability, states in his 2008 report State of the Environment Victoria, that “…there is still a tendency to see agriculture policy as separate from ecosystem management, yet the first is utterly dependent on the second…” (2008, p. iii).

Finding solutions to the challenges faced by agriculture in the Nillumbik Green Wedge may require a shift in the way people view its contribution to society and will mean changing traditional practices. This is no easy task but, with resourcing, partnerships with farmers, the community and different levels of government, it is a real possibility.

Future opportunities for the agricultural sector might include farm stays, development of overnight accommodation, cottage industries, restaurants, wineries, small scale intensive primary production and fresh produce (Essential Economics 2008, p. 7).

The current trend towards locally produced fresh foods is a significant opportunity and outlets include farmers markets and, potentially, shops in the townships.

An additional opportunity for farmers to be recognised as land managers is the subject of a 2008 report prepared for Australian Conservation Foundation by the CSIRO: Delivering on the Promise of Stewardship: Issues in realising the full potential of Environmental Stewardship Payments for landholders and the land.

The report notes that stewardship payments5 are used in other parts of the world, notably Europe and North America to help farmers support conservation.

It concludes that, managed well, stewardship schemes can make a big difference to landholders and the land and are: “…an essential part of the next generation of environmental governance arrangements…” (CSIRO 2008, p. 30).

Federal and state governments have established small stewardship schemes. Examples include Bush Tender in Victoria and the federal Environmental Stewardship Program (ESP).

Given the focus on maintaining valued landscapes, including farmland, this approach may be relevant to Nillumbik and of interest to state or federal government as a pilot project. The justification for doing it is described by Williams and McKenzie as follows:

“A key function of agriculture in the future will be to manage the landscape … the agricultural community can no longer be expected to produce cheap, clean food and fibre as well as provide a free service to maintain all the ecological functions of the landscape.

This service should be recognised as a fundamental part of our economy and paid accordingly.” (2008, p. 106)

For further information on agriculture in the Nillumbik Green Wedge, see Green Wedge Management Plan, Part 1: Background and context, Appendix 3: Economy of the Nillumbik Green Wedge.

#### Moving to the Green Wedge

##### Robyn Weldon ‘Indarra’ Bed & Breakfast, St Andrews

Robyn Weldon has lived on her peaceful 24 acres of land in St Andrews for around seven years. “We lived in a modern home in North Croydon and were going to look at an acre block in Warrandyte.

While in Warrandyte we picked up an agent’s brochure and saw the ad for this place. Once we came out and visited, I knew it was for me.” Indarra B&B, and the self-contained Robyn’s Nest, both have a delightful outlook across the valleys and hills towards Christmas Hills, and the property is a great base to explore local wineries and the St Andrews Market and the local country hotels.

“There is such peace and quiet here,” Robyn says. “Also, there’s a great sense of community – my son is working with our neighbour on his vineyard and my youngest daughter has blossomed with the way of life here – she loves walking with the dogs – loves knowing all the neighbours – and she loves the garden too.”

While Robyn wants to keep the area and the Green Wedge the way it is – she would like more transport to and from Hurstbridge Station from St Andrews – “It would be great to be able to pick up my youngest at the St Andrews Store, not have to drive to Hurstbridge all the time – also, of course, petrol keeps going up.”

### Tourism

Tourism is not an industry in itself but comprises a range of business activities including accommodation and hospitality, retail and recreation. In Nillumbik it also includes an arts and creative sector. Many tourism businesses serve the needs of both local people and visitors.

Existing tourism in Nillumbik’s Green Wedge includes touring, food, wine, art, heritage, romantic getaways and gourmet weekends.

Approximately 150 jobs are associated with accommodation, cafés and restaurants representing 5% of all jobs in the Nillumbik Green Wedge. Some of these jobs are only partly attributable to tourism as they serve local communities as well (Essential Economics

2008, p. 54). In addition, there are opportunities for the development of support businesses for Nillumbik Green Wedge tourism enterprises, such as wine making.

At the moment, there is a perceived lack of supporting tourism infrastructure such as cafés, restaurants, craft shops and conference facilities.

Local businesses believe these have the potential to make the Nillumbik Green Wedge a destination rather than a place that visitors drive through on their way to other locations (Essential Economics 2008, pp. 8, 11, 70).

The GWMP takes a positive view of tourism possibilities provided they are well planned and complement environmental values and the area’s cultural heritage.

Enabling enjoyment of the environment can be achieved through sensitively planned recreation and tourism activities of a scale and type that are in keeping with, and not detrimental to, the special qualities of the Nillumbik Green Wedge.

“The underlying principle [of sustainable tourism] is the need to recognise and protect the values of our special natural and cultural places …” (Department of Environment and Heritage 2004, p. 2)

Tourism in Nillumbik will focus on unstructured activities and will be low impact and sustainable.

It will be designed to enhance enjoyment through experience of the environment and an understanding of its significance. This, in turn, might increase support for its conservation.

There are sensitive environmental areas in the Green Wedge where tourism will not be encouraged, but there are also areas that are well suited to carefully planned tourism development.

Opportunities include ecotourism6, walking and nature conservation activities, cultural heritage trails, health and wellness experiences and opportunities to purchase local produce, arts and crafts.

The realisation of the regional trails network is a priority.

A tourism land use framework is to be completed as a priority action and will clearly define the types of opportunities that are acceptable in the Green Wedge.

### Business development

Potential opportunities identified in research with Nillumbik Green Wedge businesses indicate that the main drivers for economic growth are perceived as population7 growth; the area’s clean and green image; arts and cultural facilities; more cafés, restaurants and wineries; niche retailing such as alternative health; expansion of home-based businesses and the development of small scale intensive primary production (Essential Economics 2008, p. xii).

The Nillumbik Green Wedge depends on its townships for services and employment.

The main economic opportunities, including larger scale commercial development, are in townships inside the Urban Growth Boundaries and not in the rural areas of the Green Wedge.

A key issue for the GWMP is to consider how much development in the townships is needed to support economic development and whether such development will retain the character of the individual places. In other words, what extent of development is desirable and sustainable?

The character and distinctiveness of the Green Wedge townships and settlements is very important. Any development will be consistent with existing structure plans (currently in Hurstbridge and Wattle Glen).

Township strategies, including economic development opportunities, will be produced for St Andrews, Panton Hill, Kangaroo Ground, Yarrambat, Christmas Hills and Strathewen.

##### 4.2 Economy: Objectives and Strategies

**Objectives:**

Improve the economic viability of the Nillumbik Green Wedge and its townships and settlements: Hurstbridge, Panton Hill, St Andrews, Yarrambat, Arthurs Creek and Kangaroo Ground.

Expand tourism opportunities compatible with the Green Wedge, in Green Wedge townships and in identified Green Wedge locations (these will be identified in the proposed land use framework).

Ensure that agriculture remains technically viable in the Green Wedge.

**Strategies:**

Achieve economic development in townships of St Andrews, Hurstbridge and Panton Hill and in the Green Wedge, in keeping with township structure plans.

Prioritise expansion in the following identified business sectors: homebased business and services to business in the Green Wedge.

Support only low impact sustainable tourism in the Green Wedge.

Provide information about what types of tourism business can be established in the Green Wedge and where.

Provide for land uses that encourage expanded, compatible, tourism activity in the Green Wedge and its townships in keeping with township structure plans.

Retain existing agricultural land for soil-based agricultural production.

Support agriculture in all its forms whether it is broadacre or hobby farming.

Discourage fragmentation of existing agricultural land.

Discourage rural residential and small lot development on rural land.

## People and communities

"Many of the factors influencing health lie in the complex social, economic and physical environments in which people live…” (Department of Human Services 2001, p. 10)

This section concerns people and communities: where and how people live, how they travel, where they work and what level of services and infrastructure they can reasonably expect.

It also concerns opportunities for recreation and enjoyment of the Nillumbik Green Wedge by residents and visitors.

Nillumbik Shire Council’s Municipal Health and Wellbeing Plan (2010–2013) incorporates the Environments for Health Framework 2001, which reflects a ‘social model of health’ and supports local government to develop approaches to land use, infrastructure planning, the development and delivery of services, and community partnerships that recognise the relationship between people’s health and wellbeing and their environment.

Local government has an identified role in creating and maintaining environments that can have a positive influence on the health of local communities.

This framework, outlined below, is the means by which health and wellbeing can be achieved:

* built environment – infrastructure including roads and recreation spaces
* social environment – support services and community connectedness
* economic environment – a thriving economy and employment opportunities
* natural environment – clean air, water and conservation of the natural environment.

The strategies in the Nillumbik GWMP affect each of these areas and, combined, make a contribution to the wellbeing of people in the Nillumbik and wider Melbourne communities.

This section deals specifically with the built and social environments. It has five elements: settlement, recreation, cultural heritage, transport and infrastructure, and strengthening communities.

### Settlement

Conservation of the environment, landscapes, agriculture and rural character of the Green Wedge and its townships is a stated priority of the GWMP.

Incremental residential development in the Green Wedge and on small lots is a threat to these values. Since 1971, in the face of increasing urban development pressures, non-urban breaks have been maintained between townships by planning policies and controls. These measures aim to provide a sense of identity and community for each township and preserve the rural character of much of the Shire.

The existing settlement pattern in the Shire can be maintained if non-urban breaks between urban areas and townships and between townships, are retained and enhanced (Shire of Nillumbik Municipal Strategic Statement).

This approach is consistent with Melbourne 2030 and Council is committed to the placement of the UGB in accordance with Victorian Government policy.

Rural residential land use is defined in the Green Wedge Background Paper as a residential use in a rural environment where a significant proportion of household income is not gained from rural pursuits. It ranges from hobby-farms to lots covered with native vegetation (p. 12).

Approximately 47% of the Nillumbik Green Wedge is rural residential living, a higher percentage than any other land use.

The impact of rural residential development is incremental. Cumulatively it has the potential to threaten the Green Wedge environment and landscapes.

Impacts are as follows.

**Loss of vegetation cover**

Every new development results in loss of vegetation.

The introduction of Clause 52.43, interim measures for bushfire protection, allows vegetation removal in the aftermath of the February 2009 bushfires and has added to the potential to change the landscapes of the Green Wedge.

No matter how small each individual clearance, it has a cumulative and potentially negative impact on the Green Wedge environment and landscapes.

**Retention of agricultural land**

Rural residential living has an impact on agriculture because land values are based on residential value. This makes it harder for farmers to afford rates and, potentially, makes selling up a more attractive proposition than keeping the farm.

It also contributes to land fragmentation resulting in the loss of productive land for future agricultural use.

**Discord between rural residential and agricultural use**

The ability of farmers to carry out their everyday work can be affected as urban people move into rural areas and find it difficult to tolerate agricultural practices.

**Dispersed rural living**

Rural residential land use leads to more housing in dispersed rural areas. It does not reinforce the intended role of townships as hubs in the Green Wedge.

Measures put in place to discourage rural residential and small lot development and to encourage land consolidation have been largely unsuccessful in practice: Clauses 22.02 (subdivision in Green Wedge areas) and 22.03 (residential use and development on small lots in the Green Wedge).

To continue with this policy aim Council will need to introduce tougher controls and, potentially, incentives. This is likely to be something that the Victorian Government will also need to consider as it affects all green wedges to a greater or lesser extent.

The development of small lots – below the minimum sub-division allowed in a particular zone – is of particular concern.

In the Nillumbik Green Wedge, 81% of existing lots are already sub-divided below the minimum lot size. It is estimated that there are approximately 710 under-sized lots which could be developed by 2031 (Essential Economics 2008, p. 33).

Small lot development is inconsistent with the objective of State Planning Policy Framework (SPPF) Clause 12.02 ‘Better management of metropolitan growth’ which is:

“To locate metropolitan growth close to transport corridors and services and provide efficient and effective infrastructure to create benefits for sustainability while protecting primary production, major sources of raw materials and valued environmental areas.”

The Shire of Nillumbik is home to a growing number of single person households including those who wish to age in their communities. Rural residential living does not contribute to the identified housing need for smaller houses close to transport and services, which is suited to this group of the population.

### Recreation

Promoting community wellbeing in the Nillumbik Green Wedge involves providing physical and intellectual activities including open space, sports facilities, libraries, arts and cultural activities.

“The rural areas provide an ideal setting for establishing a diversity of recreational and tourist opportunities that protect the natural environment, cultural heritage and landscapes.” (Nillumbik Shire Council, 2005, p. iv)

Tourism is closely allied to recreation in that opportunities for visitors are also available to local communities and vice versa.

Council’s Open Space and Recreation Trails strategies are of most significance to the vision and directions of the Nillumbik GWMP.

The Open Space Strategy (2005) relates to all areas of public open space including reserves with identified conservation objectives such as wetlands, waterways and land with remnant vegetation.

It is influenced by Linking People and Spaces (Parks Victoria 2002) which has as its vision: “A linked network of open space for all to enjoy as a part of everyday life, preserved and enhanced into the future”.

The primary focus of Nillumbik’s Open Space Strategy is on: “… open space used for passive recreation8 and conservation purposes rather than organised sports” (Nillumbik Shire Council 2005, p. i).

A survey of 3000 households in the year 2000 indicated that the top three areas for improving recreation opportunities were paths, parks and bushland and conservation areas.

The same survey indicated that the biggest need is for protecting remnant vegetation, controlling weeds, providing information about what is available and encouraging use and appreciation of parks and the environment.

People with disabilities indicated that Council could do more to support access to parks.

The survey concluded that funding the Nillumbik Green Wedge vision is a key consideration in managing and developing open space to meet community demand (Jeavons and Jeavons 2000, pp. 49–54).

Nillumbik’s trail network is a particular focus for achieving the recreation vision of the Nillumbik GWMP with an emphasis on:

* Diamond Creek Trail
* Maroondah Aqueduct and Pipeline Trails
* Kangaroo Ground to Panton Hill Trail.

#### People in the Green Wedge

Lindsay Apted (1922-2010) Apted Orchards Cottles Bridge-Strathewen Road, Arthurs Creek

In 1916, the original coolstore operated in Arthurs Creek… “They used horse-drawn wagons to transport the fruit – apples and pears mainly – down to Melbourne markets. I’ve lived here all my life – it’s great country.”

“My two children – a son and a daughter – and her husband, plus my brother and two nephews – they’re all involved in the business. It’s a good life. I’m not saying it’s easy – but it’s good to be answerable only to yourself, your family and your workers.”

Lindsay believes there is no point in dividing up the land out this way any less than 100 acres per property because that’s a viable farm size.

“There are always people trying to sub-divide their land. It’s not viable to farm smaller properties and then you also get neighbours complaining about neighbours with noise and all that sort of thing. If you have the larger properties, everyone can live well together.”

### Cultural heritage

“Places of cultural significance enrich people’s lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences … [they tell] us about who we are and the past that has formed us and the Australian landscape.” (Walker and Marquis-Kyle 2004, p. 10)

Cultural heritage is made up of many components including the way communities live, their history, traditions and values.

The cultural heritage of the Shire of Nillumbik defines its character and identity, helping to tell the story of the area, its landscape and people through evidence left by generations of people, both Aboriginal and European.

Cultural heritage is a key contributor to sense of place and wellbeing. It includes buildings, landscapes, objects and intangible elements such as stories, traditions and ways of living. Nillumbik building styles, like the famous mud brick and its artistic tradition are important examples.

It is important to protect heritage places because: they help to strengthen personal and community identity; we want to pass them on to future generations; there are social, spiritual, ethical and legal obligations to do so.

The GWMP is committed to the identification and protection of cultural heritage in the Green Wedge.

### Transport and infrastructure

“The vision … is that car traffic growth in the Shire will be slowed due to walking and cycling trips … [and] … public transport trips.” (Nillumbik Shire Council 2001, p. 4)

The relative lack of public transport, population spread and high travelling outside the municipality for work means that Nillumbik Green Wedge residents have a high level of car ownership (and dependence). Thirty-six per cent of Nillumbik Green Wedge households own three or more cars. Private car use is likely to continue and will be augmented by any future dispersed housing where there is no significant public transport infrastructure planned (Essential Economics 2008, p. 21, 35).

Car-dependent Nillumbik creates costs for road repair and contributes to congested roads. More than 75% of people commute to other locations for work (Essential Economics 2008, p. 50) – the highest rate of daily travel to work places outside the Shire of all the interface councils (Parliament of Victoria 2008, p. 314).

This raises issues with regard to the environment, particularly climate change and air pollution.

It is important to focus effort on improving public transport alternatives. Providing transport options is also important to the delivery of sustainable tourism and recreation with opportunities to encourage people to park at designated ‘park and ride’ points and continue their journey along the trails network, by train or on foot/bicycle.

### Strengthening communities

The GWMP emphasises the need for community connectedness, diversity and involvement in managing the Green Wedge.

It is important to note that infrastructure not only covers the physical infrastructure we are familiar with such as roads and waste collection but also extends to social infrastructure and services, which support and connect local communities. Examples include: local and state government provided programs like childcare, healthcare, preschools, schools, and youth services, as well as sportsgrounds and facilities.

Infrastructure also includes commercially provided services such as general stores, post offices and pubs. In short: everything that helps a community to thrive.

#### 4.3 People and communities: Objectives and Strategies

**Objectives:**

Provide for housing and a population which meets the social and economic aims of the Green Wedge and its townships without compromising environmental, landscape or neighbourhood character values or undermining agricultural viability.

Maintain non-urban breaks between existing urban areas and townships.

Work towards creating socially sustainable communities.

Conserve local arts, heritage, culture and township/ settlement character.

Promote improved access to the Green Wedge.

**Strategies:**

Discourage further residential development of under-sized allotments in the Green Wedge.

Encourage a diversity of housing types in townships of St Andrews, Hurstbridge, Panton Hill and settlements of Kangaroo Ground, Yarrambat and Arthurs Creek to provide for smaller household sizes and ageing in communities.

Support the placement of the Urban Growth Boundary in accordance with Victorian Government policy.

Encourage high quality development that achieves the preferred character for rural and urban landscapes.

Identify and conserve the cultural heritage of the Nillumbik Green Wedge.

Support volunteering.

Encourage actions that contribute to sustainable communities including local food production, transport and social connectedness.

Support alternative forms of transport to the private, driver-only, car.

Support renewable energy initiatives in Nillumbik Green Wedge and township communities.

Promote and expand passive recreation opportunities.

Increase opportunities to understand the Nillumbik Green Wedge.

## Governance

“Governance is the process of decision making and the process by which decisions are implemented (or not implemented).”

There are 12 green wedges around Melbourne spanning 17 municipalities. Under current planning and governance arrangements, each of the 12 green wedges, including Nillumbik’s, will have its own management plan and will be managed by its own local government.

Delivering the GWMP requires strong, active and committed governance in order to achieve its objectives. Community members have indicated that Council needs to demonstrate proactive leadership in partnership with the community, other councils and organisations in delivering the Plan.

In the short-to-medium term, the GWMP should be administered through the current governance arrangements but, in the longer term, an alternative model might be considered.

This alternative model emerged from discussions with the community advisory group (see Part 1 section 5.6 and Appendix 4). It would see neighbouring green wedges unified into regional green wedges and managed by a separate authority. In this model, all costs of environmental planning and management would be met by the Victorian Government.

#### 4.4 Governance: Objectives and Strategies

**Objectives:**

Implement the Nillumbik Green Wedge Management Plan.

Work collaboratively and transparently with community and stakeholders to find the best ways in which to deliver the GWMP.

**Strategies:**

Manage the Nillumbik Green Wedge in accordance with the GWMP and its guiding principles.

# Implementation Plan

**Implementing the Plan**

Achieving the aims and objectives of the Nillumbik GWMP requires a whole-of-Council approach and partnerships with community and external agencies.

This implementation plan is aligned to Council Plan goals and set out under the headings: Economic, Environment, People and Communities, and Governance.

Actions are prioritised as high, medium or long term, with long term priority actions being subject to funding.

The Council section with lead responsibility for a particular action is identified and will be responsible for developing a detailed plan allocating tasks and delivering against the GWMP objectives.

The implementation plan covers a 15-year period and will be reviewed every four years.

Implementation of the GWMP is dependent on available resources, particularly for new initiatives of which there are many.

Effective and full implementation requires that overall coordination and oversight of the Plan be undertaken by Strategic Planning and that there be a clear understanding of and commitment to the Plan by Council and the Nillumbik community.

All actions and their implementation will be guided by the GWMP Guiding Principles (page 14).

**Areas for action**

The structure of this section follows the headings in the Council Plan 2009–2013:

5.1 Environment: Biodiversity and landscape

5.2 Economy: Agriculture, tourism, business development

5.3 People and communities: Settlement, recreation, cultural heritage, transport and infrastructure, strengthening communities

5.4 Governance: Implementation of the Plan.

**Key**

Plan actions are rated according to the following priorities:

* High (immediate to short term): Year 1 - 5 (2010-2014)
* Medium (medium term): Year 5 -10 (2014-2019)
* Long term (Subject to funding): Year 10 - 15 (2020 – 2025)
* Ongoing

**Responsibilities**

SP Strategic Planning

StP Statutory Planning

EP Environmental Planning

EDv Economic Development

E&P Environment and Planning

IM Infrastructure Maintenance

C Communications

CEO Chief Executive Officer

G Governance

CL Community and Leisure Services

## Environment

**Environment Strategies**

Identify and manage biodiversity at a landscape scale for conservation.

Support the participation of rural landholders and communities in conserving biodiversity.

Discourage further rural residential development of undersized allotments in the Green Wedge.

Pursue the protection and restoration of significant sites and wildlife corridors.

Ensure land use and development is addressed in the context of its potential effect on the wider catchment.

Conserve biodiversity by implementing sustainable land use planning and encouraging sustainable land management.

Minimise the impact of pest plants and animals.

Identify, document and protect the character of the diverse landscapes of the Green Wedge.

Adopt best practice on a local basis to address climate change.

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| Number | High Priority Action | Responsibility |
| 1.1 | Update Council’s 2001 Environmental Strategy including an investigation of the applicability of the findings and recommendations of the Victorian State of the Environment Report 2008 to the environmental sustainability of the Nillumbik Green Wedge. | EP |
| 1.2 | Conduct a biodiversity value assessment as part of a State of the Environment Report for Nillumbik. Use the Victorian State of the Environment Report as a guide or template. | EP |
| 1.3 | As part of the above assessment, identify actual and potential wildlife corridors and valuable habitat and then ensure that planning controls and incentives reflect the need to protect these areas. | EP |
| 2.3 | Complete the assessment of Council’s land management incentives programs commenced in 2009 and implement findings. | EP |
| 4.2 | Complete an up-to-date survey of faunal and habitat significance of the Green Wedge including roadsides as an update of the NEROC report. Provide the outputs to the Victorian Government to inform its biosites register and as a basis for future updates of the Environmental Significance Overlay. | EP |
| 4.3 | Seek partnerships with and involve neighbouring municipalities and agencies in land and biodiversity management. | EP |
| 5.5 | Participate in Melbourne Water’s stream flow management plan review process. | EP |
| 7.1 | Implement the Weed Action Plan 2008. | EP |
| 7.2 | Work with Victorian Government agencies such as Melbourne Water, in coordinating pest plant and animal programs. | EP |
| 7.3 | Implement the Nillumbik Rabbit Action Plan. | EP |
| 8.1 | Complete an assessment of the Green Wedge Landscape Character and implement planning controls and other recommendations arising from this study. | SP |
| 9.1 | Implement the Climate Change Action Plan. | EP |

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| Number | Medium Priority Action | Responsibility |
| 1.4 | Implement NET Gain policies and advocate to Victorian Government for greater clarity around these policies. | SP |
| 1.5 | Investigate the application of ecoMarket principles in Nillumbik (ecoMarket is the term used to describe a range of market-based systems aimed at addressing environmental decline). | EP |
| 1.6 | Continue to investigate the adequacy of planning controls relating to environmental protection and the efficiency of their implementation. | SP |
| 2.1 | Investigate how incentives can be used to ensure property rating does not over-ride the agricultural value of land. | EP |
| 2.4 | Investigate the extension of the Trust for Nature Covenants in the Green Wedge areas. | EP |
| 3.2 | Investigate the feasibility of planning permit conditions defining a maximum footprint for domestic areas on lots containing high value biodiversity. | StP |
| 4.4 | Investigate opportunities to reduce light pollution in rural areas including consideration of light emissions of new developments and associated works. | SP |
| 4.5 | Investigate the feasibility of pursuing Habitat 141-type initiatives which reconnect landscapes over a large geographic area. [Habitat 141’s vision is to work with private and public land managers, agencies, communities, governments, land owners and farmers to conserve, restore and reconnect ecosystems and habitats over a700 kilometre stretch of land straddling the South Australia, New South Wales and Victorian borders]. | EP |
| 5.2 | Investigate the appropriateness of further water extraction and diversion including dams and bores, given the incremental impact on environmental flows in waterways with reduced rainfall and climate change impacts. | EP |
| 5.3 | Work with Melbourne Water to improve water conservation (supply, use, recycling) in all spheres of human activity. | EP |
| 5.4 | Implement the Nillumbik Sustainable Water Management Plan. | EP |
| 6.1 | In priority areas for biodiversity, investigate applying permit conditions to require land management plans. | SP |
| 6.2 | Review the Environmental Significance Overlay and its schedules to ensure that protection of significant sites is up to date and to investigate the provision of an ESO buffer zone. See also actions 1.1, 1.2, 1.3. | SP |
| 6.3 | Advocate to the Department of Primary Industries for increased support for land management, advice and financial resources. | EP |
| 6.4 | Provide an advisory service for land management which is targeted to areas of identified need. | EP |
| 6.5 | Investigate the effectiveness of enforcement. | EP |
| 6.6 | Develop a model pilot of sustainable practice/whole farm planning as a beacon-type project based on existing DPI pilots (investigate environmental management systems with farmers). | EP |
| 6.8 | Investigate the applicability of current Melbourne University research being undertaken by Nicole Reichelt on Landcare and social networks. Implement outcomes where appropriate. | EP |
| 6.9 | Implement education programs for sustainable land management including horse, cattle and alpaca grazing. | EP |
| 6.10 | Investigate opportunities to conduct ecological burns on private and public land. | EP |
| 7.4 | Investigate the development of a policy to restrict planting of environmental weeds within bushland environments. | EP |
| 7.5 | Continue to investigate and implement improvements to weed and feral animal control programs. | EP |
| 7.6 | Advocate to Victorian Government to conduct Starling and Indian Myna control programs. | EP |

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| Number | Long Term Action | Responsibility |
| 1.7 | Investigate whether there are other settled areas suitable for application of the Environmental Living Zone (SUZ2) and assess the value of planning scheme amendments. | SP |
| 6.11 | Investigate a schools Landcare stewardship program for public open spaces (fit in with guidelines from the ResourceSmart school program). | EP |

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| Number | Ongoing Action | Responsibility |
| 2.2 | Implement existing land care programs e.g. community rabbit control, school environmental education. | EP |
| 4.1 | Continue to provide incentives and grants for re-planting vegetation and rehabilitation. | EP |
| 5.1 | Utilise water sensitive urban design in developments where this is possible. | ID |
| 6.7 | Promote the involvement of Nillumbik communities in Landcare and ‘Friends of’ groups. | EP |

## Economy

**Economy Strategies**

Achieve economic development in townships of St Andrews, Hurstbridge and Panton Hill and in the Green Wedge in keeping with township structure plans.

Prioritise expansion in the following identified business sectors: home-based business and services to business in the Green Wedge.

Support only low impact, sustainable tourism for the Green Wedge.

Provide information with regard to what types of tourism business can be established in the Green Wedge and where.

Provide for land uses which encourage expanded compatible, tourism activity in the Green Wedge and its townships (in keeping with township structure plans).

Retain existing agricultural land for soil-based agricultural production.

Support agriculture in all its forms in the Green Wedge – whether it is broadacre or hobby farming.

Discourage fragmentation of existing agricultural land.

Discourage rural residential and small lot development on rural land.

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| Number | High Priority Action | Responsibility |
| 1.3 | Review and pursue as appropriate, the recommendations of the Outer Suburban/Interface Services and Development Committee Inquiry into Local Economic Development in Outer Suburban Melbourne and the Victorian Government response to its recommendations. | EDv |
| 2.1 | Complete the Economic Development Strategy (2010). Review the Economic Development Strategy to ensure it aligns with the objectives and actions in the GWMP. | EDv |
| 2.3 | As part of the Economic Development Strategy, promote home-based business and services to business which are compatible with amenity of Green Wedge areas. | EDv |
| 2.4 | As part of the Economic Development Strategy, consider opportunities for enterprises that embrace the principles of ‘intelligent communities’. These communities use high speed broadband to support local enterprises that may have national and international impact. | EDv |
| 3.1 | Complete a sustainable tourism plan for the Green Wedge. | EDv |
| 4.1 | Prepare a land use framework for tourism to be incorporated into the Nillumbik Planning Scheme. This will include detailed mapping of locations where tourism will be encouraged and discouraged and will include details of permitted and prohibited uses. It will also include the number, type and location. | SP |
| 6.1 | Investigate the best ways in which to provide an advisory service to farmers on business opportunities and to farmers and major land owners on land use and land management including whole farm and landscape scale management (potential urban fringe pilot with DPI which is already running pilots of this nature). | EP |
| 6.2 | Explore options to support growth of locally based food production. | EDv |
| 7.1 | Investigate and implement opportunities to support new, economically viable, agricultural opportunities in the Green Wedge. | EDv |
| 7.2 | Advocate to the Victorian Government for support for agricultural enterprises. | EDv |
| 7.3 | Investigate funding for development of a brand and marketing strategy aimed at attracting growers and visitors to the region. This is allied to the sustainable tourism plan action 3.1. | EDv |

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| Number | Medium Priority Action | Responsibility |
| 1.1 | Undertake township strategies for St Andrews, Panton Hill, Kangaroo Ground, Yarrambat, Arthurs Creek, Christmas Hills and Strathewen. As each strategy is completed, a series of recommendations will be made in relation to the planning provisions for each area, to give effect to the desired outcomes for each township. | SP |
| 1.2 | Review the current planning scheme to facilitate increased business opportunities in the Green Wedge which are compatible with Green Wedge values. This includes clarifying the full extent of ‘in conjunction use’; investigation into whether rural zones in addition to the Rural Conservation and Green Wedge Zones are needed in the Green Wedge to broaden the range of uses permitted and investigation of the intensity of permitted uses in the existing zones around townships. | SP |
| 5.1 | Assess the current level of tourism-related accommodation provision in the Green Wedge – number of beds, location etc. If a shortfall is indicated e.g. camping, youth hostel…pursue opportunities to increase appropriate tourism-related accommodation in identified Green Wedge locations. | EDv |
| 5.2 | Explore models for ‘ecotourism’ or back-to-nature tourism, including Italy for its agritourism. | EDv |
| 6.3 | Seek funding and commission an update to the 1998 Land Capability Study. | SP |
| 6.4 | Investigate the opportunity for and undertake a pilot if it seems viable, for land stewardship payments (see Australian Conservation Foundation report: Delivering on the Promise of Stewardship: Issues in realising the full potential of Environmental Stewardship Payments for Landholders and the Land, CSIRO 2008). | EP |
| 6.5 | Undertake appropriate monitoring of impacts of climate change, especially on land capability and water resources and assist the agricultural sector to adapt where necessary. See also action 6.1. | EP |

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| Number | Long Term Actions | Responsibility |
| 2.2 | Complete a comprehensive economic analysis of the Green Wedge’s environmental assets to assess their contribution to the economy of the Shire and to the wellbeing of local and Melbourne communities. | SP |

## People and Communities

People and Communities Strategies

Discourage further rural residential development on under-sized allotments in the Green Wedge.

Encourage a diversity of housing types in townships of St Andrews, Hurstbridge, Panton Hill and settlements of Kangaroo Ground, Yarrambat and Arthurs Creek to provide for smaller household sizes and ageing in communities.

Support the placement of the Urban Growth Boundary in accordance with Victorian Government policy.

Encourage high quality development that achieves the preferred character for rural and urban landscapes.

Identify and conserve the cultural heritage of the Nillumbik Green Wedge.

Support volunteering.

Encourage actions that contribute to sustainable communities including local food production, transport and social connectedness.

Support alternative forms of transport to the private, driver only, car.

Support renewable energy initiatives in Nillumbik Green Wedge and township communities.

Promote and expand passive recreation opportunities.

Increase opportunities to understand the Nillumbik Green wedge.

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| Number | High Priority Action | Responsibility |
| 1.1 | Prepare a concise paper on small lot development to recommend actions to discourage the further rural residential development of small lots in the Green Wedge. It will clarify the extent of the small lot development issue in the Green Wedge. It will be prepared in the context of the findings of the 2009 Victorian Bushfires Royal Commission and the Inquiry into Sustainable Development of Agriculture in Outer Suburban Melbourne. | SP |
| 3.1 | Prepare a land use framework for settlement to be incorporated into the Nillumbik Planning Scheme. This will include detailed mapping of locations where housing will be encouraged and discouraged and include details of permitted and prohibited uses. | SP |
| 4.1 | Finalise draft urban design guidelines for Hurstbridge. | SP |
| 5.1 | Work with communities to complete Council’s cultural plan. Content to include conservation and promotion of the cultural heritage of the Green Wedge including Indigenous culture and heritage. | CL |
| 5.2 | Develop a Heritage Strategy for the Shire of Nillumbik which includes the Green Wedge and its townships. | SP |
| 5.3 | Apply a Design and Development Overlay and Heritage Overlay to Hurstbridge township to protect the character of the streetscape. | SP |
| 6.1 | Work with communities to implement the volunteer policy and strategy. | CL |
| 7.1 | Identify opportunities to support community sustainable agriculture. | EDv |
| 7.2 | Support programs that reduce food and shopping miles. | EDv |
| 7.3 | Work with communities to identify the need for and to establish meeting places in all Green Wedge townships. | CL |
| 7.5 | On completion of the Shire-wide analysis of children and family services, which will identify issues in rural and township/settlements of the Green Wedge, develop a strategy to address those issues. | CL |
| 7.6 | Work with communities to complete and implement the Active Ageing Strategy. | CL |
| 10.1 | Implement Nillumbik Shire Council’s Recreation Trails Strategy (2001) with emphasis on the extension to the Diamond Creek Trail, Pipeline Trail (Allendale to Diamond Creek-Hurstbridge Road) and the Wattle Glen to Kinglake Trail. | CL |
| 10.2 | Continue investigation into the proposed Maroondah Aqueduct Trail as an opportunity to create an iconic recreation and tourism opportunity for Melbourne. | CL |
| 10.3 | Implement Nillumbik Shire Council’s Open Space Strategy (2005) with particular emphasis on rural open spaces and on the development of trails networks. Include investigation of the feasibility of a park and ride scheme linked to the trails network as raised in action 8.4. | CL |

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| Number | Medium Priority Action | Responsibility |
| 2.1 | Review planning policies in order to encourage increased diversity of housing in Green Wedge townships of Hurstbridge, Panton Hill and St Andrews and the settlements of Kangaroo Ground, Yarrambat and Arthurs Creek to accommodate a range of household sizes. This is in line with existing structure plans or, where they do not exist, involves producing them in consultation with the community. | SP |
| 4.2 | Prepare urban design guidelines for Panton Hill and St Andrews. | SP |
| 4.3 | Develop design policies for the Green Wedge townships of Hurstbridge, Panton Hill, St Andrews and settlements of Kangaroo Ground, Yarrambat and Arthurs Creek. | SP |
| 7.4 | Work with communities and service providers to locate existing and/or provide new facilities for delivery of healthcare and other services in the community. Consider the model established at the Hurstbridge Hub. | CL |
| 7.7 | Develop and implement programs to support community resilience and adaptation to the social, health and community impact of climate change. | CL |
| 8.1 | Work with communities to seek opportunities for expanding transport connections including car pooling, buses and park and ride schemes. | CL |
| 8.2 | Advocate for more accessible public transport systems, particularly those recommended in the Victorian Government’s North East Integrated Transport Systems Strategy 2007 and Meeting our Transport Challenges (2006) as related to the Green Wedge. | CL |
| 8.3 | Expand and improve the safety of off-road bicycle routes and walking paths in the Green Wedge, particularly those linking townships and tourism destinations and strategic public transport systems. In particular, consider connections with Whittlesea’s path networks providing car-free east-west links. | CL |
| 8.4 | Investigate the feasibility of introducing park and ride areas which link public transport to destinations within the Green Wedge e.g. recreation trails, shops, markets and other tourism and recreation opportunities. | CL |
| 9.1 | Work with communities to enable them to source renewable energy generation for Green Wedge townships. | EP |
| 9.2 | Investigate the applicability to Nillumbik of renewable energy initiatives such as the Hepburn Springs Project and Bendigo solar city project. | EP |
| 10.4 | Investigate establishing a regional trails network – walking, riding and cycling – so that they cross the entire Green Wedge and link with adjoining green wedges and municipalities of Yarra Ranges, Murrindindi, Whittlesea, Manningham and Banyule. Include an analysis of the economic benefits including potential visitor spend (relevant also to economic objectives). | CL |
| 11.1 | Investigate the production of a Green Wedge Interpretation Strategy (with individual plans for each of the recreation trails and Council-owned reserves which might include maps, self-guided walks, on and off site interpretation). | E&P |
| 11.2 | In conjunction with the above, develop an education program for a variety of audiences and directed by the aims and objectives of the GWMP. | E&P |
| 11.3 | Complete the financial business plan for the Edendale Farm Masterplan and include Green Wedge and community agricultural initiatives within Edendale Farm’s interpretation and education programs. | CL |
| 11.4 | Develop a pilot program to address the potential conflicts between farmers and non-agricultural residents of the rural areas. This should consider a country-code type approach combined with welcoming people into the area and done in conjunction with real estate agents. | EP |
| 11.5 | Actively promote the brand and lifestyle of the Nillumbik Green Wedge. | C |
| 11.6 | Publish a guide to the Green Wedge which contains information about the special character of the area and the facilities for its enjoyment and make sure all land holders and estate agents receive copies. See also 11.1 interpretation strategy. | E&P |
| 11.7 | Investigate the viability of a visitor centre which provides information about what to see and do in the area. (See 11.1 interpretation strategy). | E&P |

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| Number | Long Term Action | Responsibility |
| 4.4 | Promote the use of traditional construction techniques and styles e.g. mud brick and rammed earth in support of the traditional ‘Nillumbik style’. | StP |

## Governance

**Governance Strategies**

Manage Nillumbik’s Green Wedge in accordance with the GWMP and its guiding principles.

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| --- | --- | --- |
| Number | High Priority Action | Responsibility |
| 1.1 | Undertake four-yearly reviews of the GWMP and report on its implementation annually. The first review to take place after publication of the Royal Commission report into the February 2009 bushfires. | SP |
| 1.2 | Establish an expert committee to advise on Green Wedge funding and undertake investigations into a new possible governance arrangement. | SP |
| 1.3 | Communicate the contents of the GWMP. | C |
| 1.4 | Finalise performance indicators for the Green Wedge Management Plan including investigating use of the Victorian State of the Environment report indicators as a measure of progress in implementing the GWMP. | SP |
| 1.6 | Advocate to the Victorian Government for research into the community’s awareness of green wedges and the willingness of the wider community to support them financially. | CEO |
| 1.7 | Advocate that the Victorian Government promotes the existence and value of Melbourne’s green wedges to the wider community as a metropolitan asset. | CEO |
| 1.8 | Lobby Victorian Government for an increase in funding for the rural sectors of the Shire. | CEO |
| 1.9 | Encourage the use of sustainable and bushfire resistant design, materials and energy sources. | StP |
| 1.10 | Review vegetation controls, fuel modification practices and fire protection in the context of climate change, Victorian Government policy changes and the outcomes of the Royal Commission into the February 2009 bushfires and the latest scientific research. | SP |
| 1.12 | Provide increased support for vegetation management on Council controlled, as well as private, land in the Green Wedge. | IM |
| 1.13 | In partnership with the CFA, provide support for community fireguard groups and other community education initiatives. | IM |
| 1.14 | Consider an advisory group to assist in implementing the GWMP. | SP |

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| Number | High Priority Action | Responsibility |
| 1.5 | Advocate to the Victorian Government for interface councils to be eligible for rural and regional funding programs. | CEO |
| 1.11 | Regularly review the Municipal Fire Prevention Plan and facilitate increased opportunities for community education and bushfire preparedness in the Green Wedge. | IM |

# Abbreviations and Terms

|  |  |
| --- | --- |
| Term | Term Meaning |
| Activity centre | " Activity centres are vibrant hubs where people shop, work, meet, relax and often live. Usually well served by public transport, they range in size and intensity of use from local neighbourhood strip shopping centres to universities and major regional shopping malls. Linking them to good transport networks (road, public transport, pedestrian and cycle) is crucial as they attract high numbers of people and generate a significant volume of trips in metropolitan Melbourne. They are a central part of Melbourne 2030, which will encourage more development into activity centres to foster more sustainable, more vibrant communities and will be the focus of major change over the next 30 years.” |
| Agricultural, or farm viability (includes technical viability) | The Nillumbik Land Capability Study (Woodward-Clyde, 1998) differentiates between technical viability and farm viability. Technical viability refers to whether a farm has potential for agricultural production in a sustainable way and is not a measure of its economic performance. Farm viability refers to whether production is economically viable: does it make sufficient income to service borrowings, provide a family with an adequate standard of living, allow investment in the farm and demonstrate ecological sustainability? |
| Biodiversity | Biodiversity refers to the full range of variety and variability within and among living organisms and the ecological complexes in which they occur. It encompasses ecosystem or community diversity, species diversity and genetic diversity. |
| Carbon footprint | A carbon footprint is a measure of the impact of human activities on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide. |
| Climate change | Climate change refers to the change in climate predicted to arise from human activities. This is predominantly attributed to enhanced greenhouse effect which is the process whereby an increase in greenhouse gases including carbon dioxide (CO2), water vapour and methane, which are in the air closest to the Earth’s surface, absorb outgoing radiant heat and radiate some of this heat back downwards to warm the surface of the Earth. |
| Conservation | “Conservation means all the processes and actions of looking after a place so as to retain its natural significance and always includes protection, maintenance and monitoring.” |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation. |
| Cultural significance | “Australian conservation practice… is based on the concept of cultural significance i.e. that the values of a place can be described and that retaining significance is the primary objective of conservation. Some Acts use slightly different terms – such as ‘heritage significance’ or ‘cultural heritage value’ – but the concept is the same as cultural significance”. Cultural significance is embodied in a place, its fabric, setting, use, associations and meanings. A given place may have a range of values for different individuals or groups. In heritage practice the significance of a place is assessed in terms of five values: aesthetic, historic, scientific, social and spiritual value. |
| Ecological footprint | Ecological footprint analysis compares human demand on nature with the biosphere’s ability to regenerate resources and provide services. It does this by assessing the biologically productive land and marine area required to produce the resources a population consumes and to absorb the corresponding waste, using prevailing technology. |
| Ecotourism | “Ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation.” |
| Enhance (as in conserve and enhance) | “Enhancement means the introduction of additional organisms, genotypes, species or elements of habitat or geodiversity to those that naturally exist in a place.” |
| Green wedge | “Green wedges are the open landscapes that were set aside, more than 30 years ago, to conserve rural activities and significant natural features and resources between the growth areas of metropolitan Melbourne as they spread out along major roads and rail links.” |
| Green Wedge Management Plan (GWMP) | The GWMP sets out objectives, strategies and actions to manage the Nillumbik Green Wedge. |
| Heritage values | See cultural significance. |
| Intellectual access | This term implies that access to the Nillumbik Green Wedge will not only be physical access but will include interpretation materials suited to a range of different audiences and learning styles. |
| Interface councils | The interface councils are located on the fringes of Melbourne. They are Cardinia, Hume, Melton, Mornington Peninsula, Nillumbik, Whittlesea, Wyndham and Yarra Ranges. These councils define themselves as 30% urban and 70% rural, forming the interface between regional and metropolitan Victoria. |
| Landscape values | The value of a landscape is a combination of vegetative cover and wildlife and visual qualities, including landform features and views and the value placed on it by a community or communities. Landscape values contribute greatly to amenity and are an attraction for residents and visitors. |
| LGA | Local Government Association. |
| Melbourne 2030 (M2030) | The Victorian Government’s planning strategy for Melbourne. |
| Municipal Strategic Statement (MSS) | A statutory document that guides future land use and development in the Shire of Nillumbik. |
| Peak oil | Peak oil is the point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters terminal decline. |
| SEIFA | Social Economic Index for Areas is an analytical tool used to assess socio-economic wellbeing and identify areas of advantage and disadvantage. |
| SLA | Statistical Local Area. |
| Sustainability | Refers in its simplest form to the utilisation of resources at a level that can be maintained into the distant future and in a manner that does not irreversibly damage natural ecosystems and human societies. |
| Sustainable tourism | “Sustainable tourism development meets the need of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems.” |
| Technical viability | See Agricultural or farm viability. |
| UGB (Urban Growth Boundary) | The Urban Growth Boundary is a tool that the Victorian Government introduced in 2002 to help contain Melbourne’s outward growth. |

# Bibliography

Australian Bureau of Statistics, Population projections, http://www.abs.gov.au/Ausstats/abs@.nsf/mf/3222.0 , viewed 30 October 2008

Australian Bureau of Statistics, 2007, 2006 Census, ABS, http://wwww.id.com.au/profile/default.aspx?id=140 , viewed 16 March 2009

Australian Natural Heritage Charter http://www.environment.gov.au/heritage/ahc/publications/commission/books/australian-nationalheritage-charter.html

‘Australians ranked among the world’s worst eco-offenders’, The Age, 30 October 2008, p. 5

Beardsell, C, 1997, Sites of faunal and habitat significance in north-east Melbourne, Nillumbik Shire Council, Greensborough

Butler, G, & Associates, 1996, Nillumbik Shire Heritage Study: Environmental History Stage 1, Vol. 2

Clark, N, & Associates, 1998, Nillumbik Shire commodity and economic profiles, Nillumbik Shire Council, Greensborough

Commissioner for Environmental Sustainability, 2008, Victoria – State of the Environment, Victorian Government, Melbourne

Context Pty Ltd August, 2008, Knox City Council: 2008–2018 Sustainable Environment Strategy, Knox City Council, www.knox.vic.gov.au/Page/Download.asp?name=Knox\_Sustainable\_Environment\_Strategy.pdf&size=1419406&link=../Files/Knox\_Sustainable\_Environment\_Strategy.pdf

Countryside Agency and Scottish Natural Heritage, 2002, Landscape Character Assessment: Guidance for England and Scotland, http://www.countryside.gov.uk/images/LCA\_guidance\_tcm2-19316.pdf, viewed 25 May 2007

Countryside Agency, 2006, Landscape: beyond the view, www.landscapecharacter.org.uk, viewed 25 May 2007

Department of Environment and Heritage, 2004, Steps to sustainable tourism, Department of Environment and Heritage, Canberra

Department of the Environment, Sport and Territories, 1996, National Strategy for the Conservation of Australia’s Biological Diversity, http://www.environment.gov.au/biodiversity/publications/strategy/chap2.html , Department of Environment, Sport and Territories, Canberra, viewed 7 May 2008

Department of Human Services (Victoria), 2001, Environments for health – promoting health and wellbeing through built, social, economic and natural environments: municipal health planning framework, DHS, Melbourne

Department of Planning and Community Development (Victoria), 2008, Planning for all of Melbourne, the Victorian Government response to the Melbourne 2030 audit, DPCD, Melbourne

Department of Planning and Community Development (Victoria), 2008, Melbourne @ 5 Million – full report, http://www.dse.vic.gov.au/DSE/nrenpl.nsf/LinkView/1352EB2F109044AFC 2575120016BE8B718331E8AB7D9987CA256D1900299B45, DPCD, Melbourne, viewed 11 March 2009

Department of Planning and Community Development (Victoria) 2008, Melbourne @ 5 Million – Fact Sheet, http://www.dse.vic.gov.au/DSE/nrenpl.nsf/LinkView/1352EB2F109044AFCA2575120016BE8B718331E8AB7D9987CA256D1900299B45, DPCD, Melbourne, viewed 15 December 2008

Department of Primary Industries (Victoria), 2008, Future Farming: Productive, Competitive, Sustainable, DPI, Melbourne

Department of Primary Industries (Victoria), 2008, Square Pegs in Green Wedges, DPI, Melbourne

Department of Sustainability and Environment (Victoria) 1997, Victoria’s Biodiversity Strategy – Sustaining our Living Wealth, DSE, http://www.dse.vic.gov.au/dse/nrence.nsf/LinkView/C7933C595DA23CA256EE7000B6CCC1C26CB3A9ABC1C2FCA256EE700148D0B, viewed 8 May 2008

Department of Sustainability and Environment (Victoria), 2003, Planning Provisions for Melbourne’s Green Wedges, DSE, Melbourne

Department of Sustainability and Environment (Victoria), 2005, Principles, issues and guidelines for the preparation of green wedge management plans, DSE, Melbourne

Department of Sustainability and Environment (Victoria) 2006, Our Environment, Our Future – Sustainability Action Statement 2006, Fact Sheet, DSE, http://www.dse.vic.gov.au/ourenvironment-ourfuture/downloads.htm , viewed 23 December 2008

Department of Sustainability and Environment (Victoria), 2008, Land and biodiversity at a time of climate change, Green Paper, DSE, Melbourne

Department of Transport (Victoria), 2006, Meeting our Transport Challenges, DoT, http://www.transport.vic.gov.au/DOI/Internet/planningprojects.nsf/AllDocs/80E779DD0C35BA08CA2573AE000509F0?OpenDocument , viewed 28 May 2008

Department of Transport (Victoria), 2007, North East Integrated Transport Study (NEITS), DoT, http://www.transport.vic.gov.au/Doi/Internet/planningprojects.nsf/AllDocs/8D2A24F5A2FB7552CA256F3200257724?OpenDocument#neits , viewed 28 May 2008

Diamond Creek sub catchment Working Group, 1999, Diamond Creek sub catchment – Local Action program

Dovers, S, 2008, ‘Policy and Institutional Reforms’ in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Ellender, I, 1994, The Aboriginal Heritage of the Shire of Eltham, unpublished study

Essential Economics, 2008, Nillumbik Green Wedge Management Plan Economic Research, Nillumbik Shire Council, Greensborough

Flora and Fauna Guarantee Act, 1988, s. 4, http://www.austlii.edu.au/au/legis/vic/consol\_act/fafga1988205/s4.html , viewed 7 May 2008

Foran, B, Gurran, N, 2008, ‘Population reforms’ in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Goldie, J, 2005, ‘Population, the great multiplier’, In Search of Sustainability, eds J Goldie, B Douglas, B Furnass, CSIRO Publishing, Collingwood, Victoria

Harris, G, 2005, Melbourne’s Green Belt and Wedges, School of Social Science and Planning, RMIT University, Melbourne

Hatfield-Dodds, S, Proctor, W, 2008, Delivering on the Promise of Stewardship: issues in realising the full potential of environmental stewardship payments for landholders and the land, a discussion paper prepared for the Australian Conservation Foundation, CSIRO Sustainable Ecosystems, Canberra

Hughes, L, 2008, ‘Climate change’ in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Jeavons and Jeavons, 2000, Preliminary progress report Open Space Strategy, pp. 49–54, cited in Nillumbik Shire Council 2005, Open Space Strategy, Appendix 2, pp. 2–4, Nillumbik Shire Council, Greensborough

Johns, D, The Kinglake Fires – January 2006

Knox, A, 1985, Living in the Environment, Second Back Row Press, NSW

Knox, A, We are what we stand on, Adobe Press, Eltham

Land and Water Australia, 2003, Biodiversity Conservation in Regional NRM Planning research project VRA1 Fact sheet: September 2003, http://downloads.lwa2.com/downloads/publications\_pdf/PF030618.pdf, viewed 7 May 2008

Lowe, Ian, 2005, ‘Achieving a sustainable future’, in Search of Sustainability, eds J Goldie, B Douglas, B Furnass, CSIRO Publishing, Collingwood, Victoria

Lowe, Ian, 2008 ‘Energy’, in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Maribyrnong City Council, Peak Oil Policy, http://www.maribyrnong.vic.gov.au/Files/PeakOilPolicy.pdf , viewed 7 May 2008

Melbourne and Metropolitan Board of Works, 1981, Metropolitan Strategy Implementation

Melbourne Water Corporation 2007, Port Phillip and Westernport Regional River Health Strategy, Melbourne Water, Melbourne

Mitchell, N, 2004, ‘Landscape-scale conservation: grappling with the green matrix’, cited in Levitt, J N, Land Lines vol.16, no.1, Lincoln Institute of Land Policy http://www.lincolninst.edu/pubs/PubDetail.aspx?pubid=869 , viewed 28 May 2008

Nillumbik Shire Council, 2000, Draft Hurstbridge Township Strategy, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, 2001, Integrated Transport Strategy, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, 2001, Sustainable Water Management Plan, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, December 2006, Green Wedge: Background paper, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, 2005, Open Space Strategy, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, February 2007, Green Wedge: Discussion paper, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, 2009, Council Plan 2009–2013, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, 2008, Draft Climate Change Action Plan: 2008-2015, Nillumbik Shire Council, Greensborough

Nillumbik Shire Council, Municipal Strategic Statement, Nillumbik Shire Council, Greensborough Nillumbik Tourism Association, 2008, Business Plan,

Nillumbik Tourism Association, http://www.nillumbiktourism.com/?PK\_PAGE\_ID=803 , viewed 7 May 2008

Outer Suburban/Interface Services and Development Committee, 2010, Final report on the Inquiry into Sustainable Agriculture in Outer Melbourne Parks Victoria, 2002, Linking people and spaces, Victorian Government, Melbourne

Port Phillip and Westernport CMA, 2000, Port Phillip and Westernport Native Vegetation Plan, Port Phillip and Westernport CMA, Frankston

Port Phillip and Westernport CMA, 2002-2003, Sustainability Objectives for natural resource management in the Port Phillip and Westernport region, Port Phillip and Westernport CMA, Frankston

Possingham, H, 2008, ‘Biodiversity Reforms’, in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Sciusco, L, 1996, Nillumbik Shire Council Aboriginal Heritage Study, unpublished study

Scott, J, M, 2002, ‘Measuring whole farm sustainability and profitability at a credible scale’, Proceedings of the Fenner Conference on the Environment, Chicago State University, http://www.csu.edu.au/special/fenner/ , viewed 31 December 2008

Sustainability Victoria, 2008, Green Light Report – Victorians and the Environment, Sustainability Victoria, http://www.sustainability.vic.gov.au/www/html/2698-greenlight-report.asp?intSiteID=4 , viewed 23 December 2008

Tilbury, D, Wortman, D, 2008, Engaging people in sustainability, IUCN Publications, Cambridge, UK Tourism Victoria, 2007, Sustainability in Tourism, www.tourismexcellence.com.au//sustainability-intourism.html , viewed 7 May 2008

Walker, M and Marquis-Kyle, P, 2004, The illustrated Burra Charter: good practice for heritage places, Australia ICOMOS inc., Burwood

Western Australian Government, 2003, State Sustainability Strategy http://www.dec.wa.gov.au/our-environment/sustainability/statesustainabilitystrategy.html , viewed 23 December 2008

Whittlesea City Council, 2008, ‘About Whittlesea’, Whittlesea City Council website, http://www.whittlesea.vic.gov.au/content/content.asp?cnid=94 , viewed 15 December 2008

Williams, J, McKenzie, F, 2008, ‘Agriculture’ in Ten Commitments Reshaping the Lucky Country’s Environment, eds D Lindenmayer, S Dovers, M Harriss Olsen, S Morton, CSIRO Publishing, Collingwood, Victoria

Woodward-Clyde, 1998, Nillumbik Land Capability Study, Nillumbik Shire Council, Greensborough