



PART 2 - THEMES

LAND

1. Rural Productivity and Agribusiness
2. Rural Land Stewardship
3. Landscape Qualities and Rural Design
4. Boundaries and Buffers
5. Extractive Industry



Located on the urban-rural fringe, the City of Whittlesea covers an area of approximately 49,000 hectares with extensive rural areas in the north and primarily urban development in the south. Much is in private ownership; however a significant proportion is public land.

Key goal and directions

The land goal for the Whittlesea Green Wedge is as follows:

GREEN WEDGE GOAL

Land: Healthy land used sustainably, productively and innovatively

This section of the Management Plan will focus on the following sub-themes:

LAND Sub-themes

1. Rural productivity and agribusiness
2. Rural land stewardship
3. Landscape qualities and rural design
4. Boundaries and buffers
5. Extractive industry

Each sub-theme describes key features and values, conveys community views, identifies planning controls and provides guidelines, and summarises key programs. Relevant actions are listed in Part 3: Action Plan.

Urban land

The City of Whittlesea is one of five municipalities designated by the Victorian Government as a growth area. The urban areas account for approximately 35% of the municipality. Located primarily in the southern and western areas of the municipality, these areas support new and established communities. The Victorian Government recently announced funding for the extension of the railway from Epping to South Morang, which is now under construction.

During the 2006 census period, the City of Whittlesea was ranked the 3rd fastest growing municipality and had the 5th largest increase in population across Victoria (ABS 2006). Higher density living and development is encouraged around multi-purpose centres such as, but not limited to, Epping Central.

The established areas support businesses in the industrial and commercial sectors. The Cooper Street Employment Precinct in Epping and University Hill in Bundoora are attracting a number of manufacturing and service related industries. In addition, the Melbourne Wholesale Fruit and Vegetable Market is currently under construction in Epping.

Non-Urban land

The Whittlesea Green Wedge is one of 12 Green Wedge areas surrounding metropolitan Melbourne. The Whittlesea Green Wedge covers approximately 61% of the City of Whittlesea. This includes all land to the north of the UGB, whether in public or private ownership.

The Whittlesea Green Wedge supports the upper catchment areas of the Plenty River, Darebin Creek and Merri Creek, and the water storage catchments of Toorourrong and Yan Yean Reservoirs.

Areas of productive agricultural land support locally grown produce such as olives, wineries, berry farms and cheese products offered for sale at local markets and displayed at the annual Whittlesea Agricultural Show. Grazing and equestrian activities are also common.



The rural population is concentrated around Whittlesea Township, in addition to smaller rural settlements such as Yan Yean, Humevale, Kinglake West and areas of rural living in Eden Park.

Map 4 over the page shows the distribution of farmland property sizes. Excluding Whittlesea Township, the average property size is approximately 20 hectares, with the majority of properties around 0.8 hectares and only 2.9% being greater than 100 hectares (City of Whittlesea GIS Unit 2009). This has changed slightly from an average property size in 2000 of 17 hectares, with a common property size around 5 hectares and approximately 3% of properties being greater than 100 hectares (City of Whittlesea 2000b).

Sites of heritage significance associated with Aboriginal culture, early European settlement and rural activities are scattered throughout the Green Wedge.

Rural areas provide the majority of habitat for native species, although the City of Whittlesea actively seeks to protect remnant River Red Gums in greenfields housing, business and industrial estates.

Significant landscapes associated with the Plenty Ranges and view lines from road corridors in the Plenty Valley contribute to Whittlesea's sense of place.

Stone resources and land fill capacity are provided by quarries. Proximity to expanding urban areas and transportation networks is essential to an effective extractive industry.

The Whittlesea Green Wedge contains recreation and tourism opportunities ranging from the Country Music Festival to the Growling Frog and Whittlesea Golf Courses to a network of parks.

Public land

The City of Whittlesea contains around 22,000 hectares of public land, of which 3,240 hectares is urban and 18,710 hectares is located in the rural areas.

This public land includes Kinglake National Park, Mt. Disappointment State Park, the Toorourrong and Yan Yean closed water catchment areas and the regional parklands associated with Plenty Gorge, Merri Creek and Quarry Hills. Numerous metropolitan parks are also associated with the Green Wedge. This is discussed in more detail in the sub-theme 'Tourism and Recreation'.

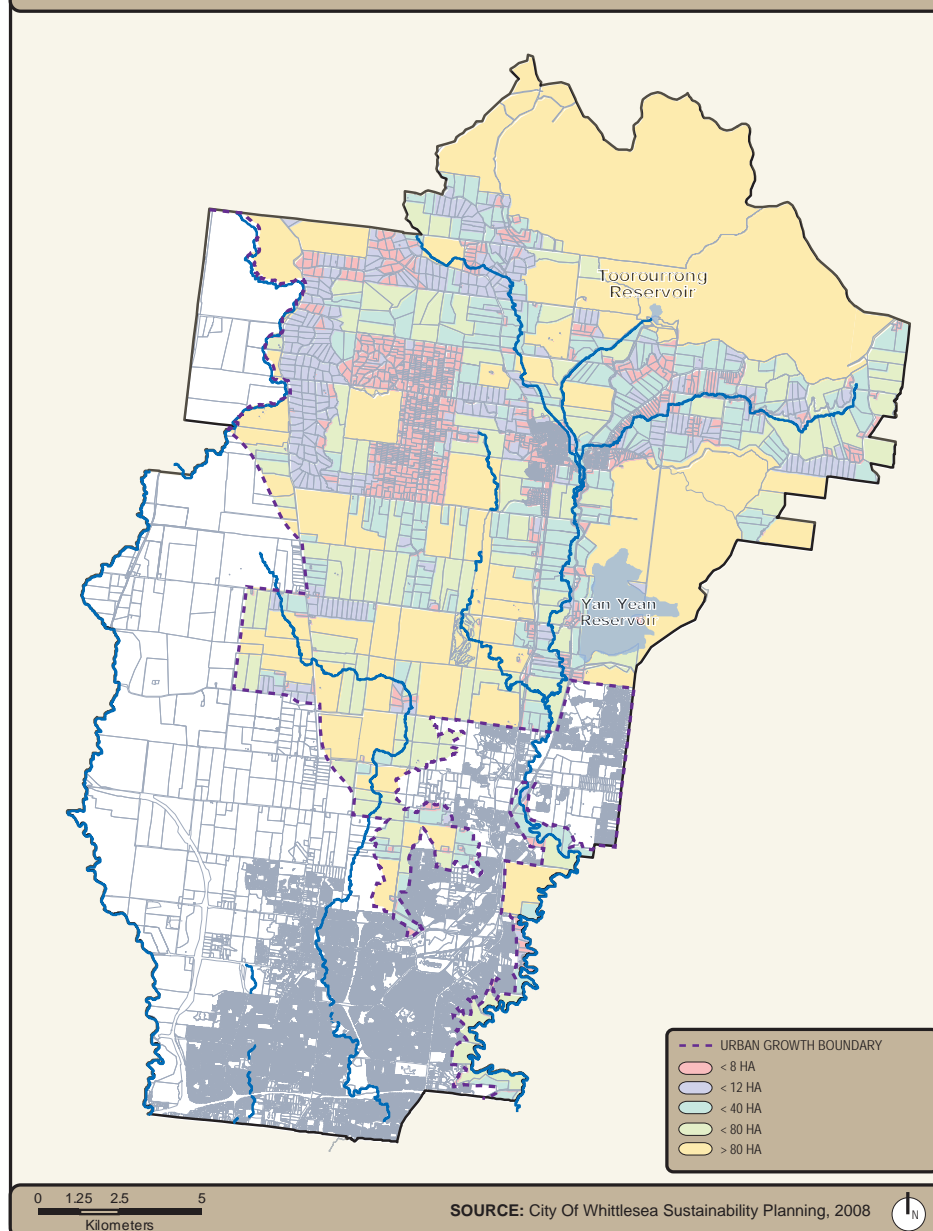


Legislative framework

Land use and management within the City of Whittlesea is influenced by a range of legislation. The main areas of interest to this Management Plan are listed briefly as follows:

- Land use and development is controlled by the *Planning and Environmental Act 1987* through the Victorian Planning Provisions and the Whittlesea Planning Scheme, administered by the City of Whittlesea.
- Extractive industry operations within the City of Whittlesea are subject to regulation by the *Resources Industry Legislation Amendment Act 2009* and the *Mineral Resources (Sustainable Development) Act 1990*. An Environmental Effects Statement may also be required in accordance with the *Environmental Effects Act 1978*.
- Land is protected from contamination by the *Environment Protection Act 1970* with its supporting *State Environment Protection Policies (SEPP)*.
- The preservation of crown land for public purposes and the management, licensing and leasing of crown land reserves, primarily for grazing, is controlled by the *Crown Land (Reserves) Act 1978*.
- The formation of authorities to manage and protect land and water resources is enabled by the *Catchment and Land Protection Act 1994*.

MAP 4 DISTRIBUTION OF FARMLAND BY PROPERTY SIZE



1.1 Objective

The objective for this sub-theme is:

Rural productivity and agribusiness objective

To secure and promote the ongoing productive capacity of the Whittlesea Green Wedge for sustainable agriculture and resource utilisation into the future.

A diverse range of traditional rural activities and new and innovative rural enterprises are encouraged to support local economic development and employment.

1.2 Features and Values

Rural productivity within the municipality provides valuable environmental, social and economic benefits for residents and visitors alike.

The City of Whittlesea has a proud association with its agricultural heritage. In 2000, the *Rural Review* identified the grazing of sheep and cattle to be the major livestock activity undertaken. Some dairy farming was occurring, however it was a relatively small proportion of the region's dairy herd. Little cropping or land used for more intensive agriculture was undertaken, other than very small areas in Kinglake West (City of Whittlesea 2000a).

In 2009, the grazing of cattle and sheep remains the major livestock activity, although organic enterprises associated with this activity are emerging. The fibre industry is represented through alpacas and sheep. Horse breeding studs and the use of pastures for hay production are increasing in number. Emerging enterprises include olive groves used for oil and fruit, organic berries and cheese production. The latter two businesses sell their local products from farm gate businesses.

ABS Census data reveals that the number of persons employed in agriculture, forestry and fishing industries within the municipality has reduced from 481 in 1996, to 477 in 2001, and is currently 387 persons (at 2006). This indicates that rural activity is very much a part time pursuit for the majority of Green Wedge residents.

There are approximately 1350 rural properties within the Whittlesea Green Wedge, excluding the Whittlesea Township.

See the opposite table for agricultural commodities for the year ended 30 June 2006. This data fails to identify the significant landholdings associated with olive groves, presumably as they have not reached critical commercial capacity yet.

City of Whittlesea Agricultural Commodities ABS 2006

Total area (hectare)	
Land use - grazing land	10,797
Pasture for hay	565
Land use - land under crop	379
Cereal crops - all purposes	90
Vegetables for humans, inc seeds	59
Nurseries	12
Orchard trees, including nuts	6
Berry fruit	5
Area of holding (hectare)	12,303
Total number (n)	
Chickens	15,967
Meat cattle	8,495
Sheep and lambs	7,561
Milk cattle (excluding house cows)	398
Horses	453
Deer	170
Ducks	127
Beekeeping hives	34
Goats	11
Pigs	2
Value of agricultural production (\$M) 2005-2006	
Value of crops	63.3
Value of livestock	3.6
Value of livestock products	0.9
Total value of agriculture	67.8

Map 5 over the page provides an indication of land uses within the Whittlesea Green Wedge based on roadside assessments conducted by Council officers in late 2008.

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The Rural Review (City of Whittlesea 2000a) covers the topics of geology and soil, land systems and farming systems based on the study conducted by Phillips Agribusiness titled *Land Capability in the City of Whittlesea* (1997).

It is not the intention of this Management Plan to reproduce this information in full. However, it is useful to include a summary depicting the nexus between local land systems, capability and agricultural uses (see Map 6 and Table 2 over the page).

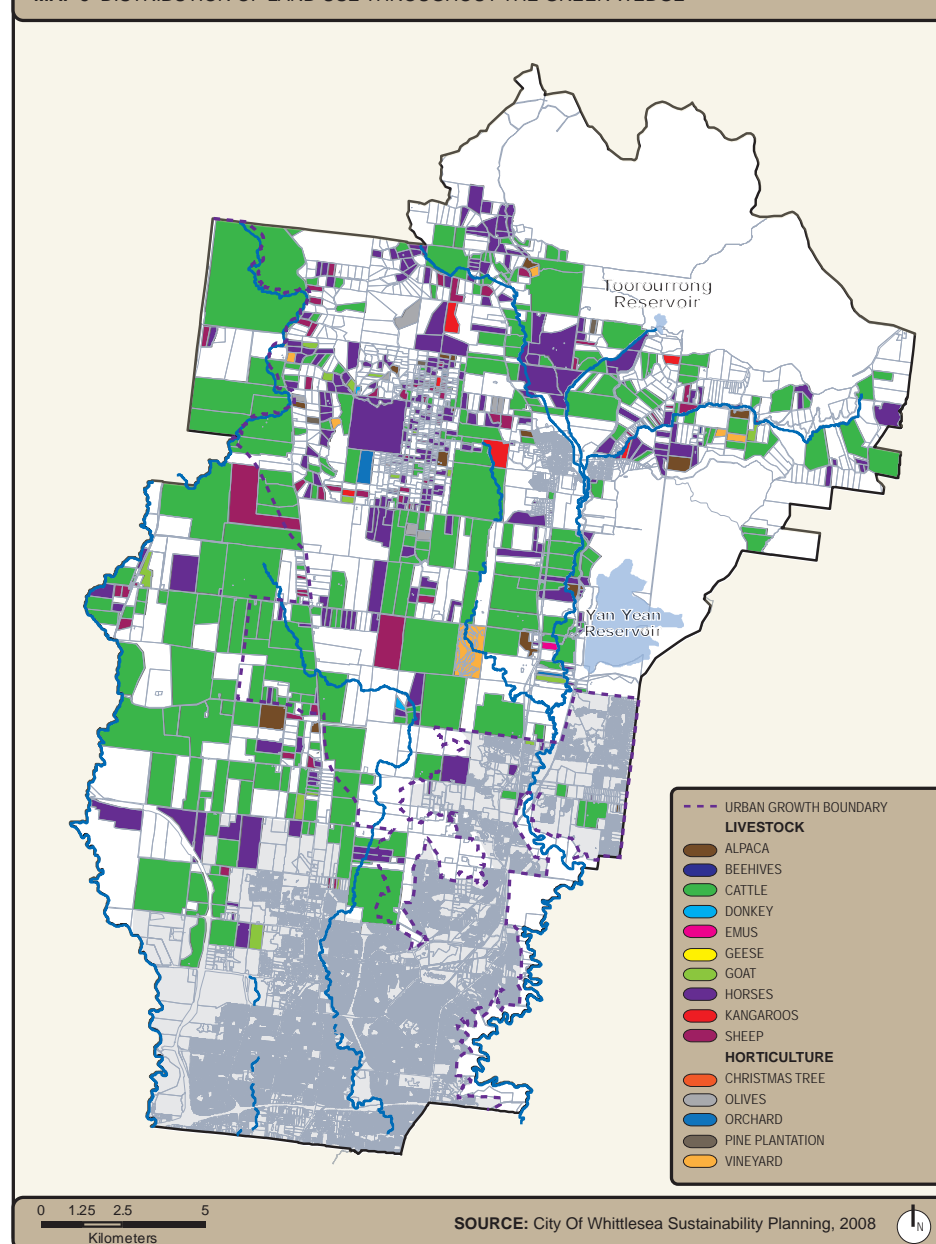
1.2.1 Food Miles

Another aspect to consider in the role of rural enterprise in promoting healthy, sustainable and prosperous metropolitan areas is the concept of food miles.

The production of local products that are sold locally is a process that should be encouraged. The opportunity for establishing a Farmers Market for the City of Whittlesea is currently under discussion. In addition, the Melbourne Wholesale Fruit and Vegetable Market is due to relocate to Epping in 2012. These two events will increase the opportunity for local farm products to contribute to the supply of local food.

The Victorian Government supports Victorian produce in season through the campaign 'Put Victoria on Your Table'. A series of events and activities, and a new website support this campaign <http://www.putvictoriaonyourtable.com.au/>

MAP 5 DISTRIBUTION OF LAND USE THROUGHOUT THE GREEN WEDGE



MAP 6 LAND SYSTEMS IN WHITTLESEA

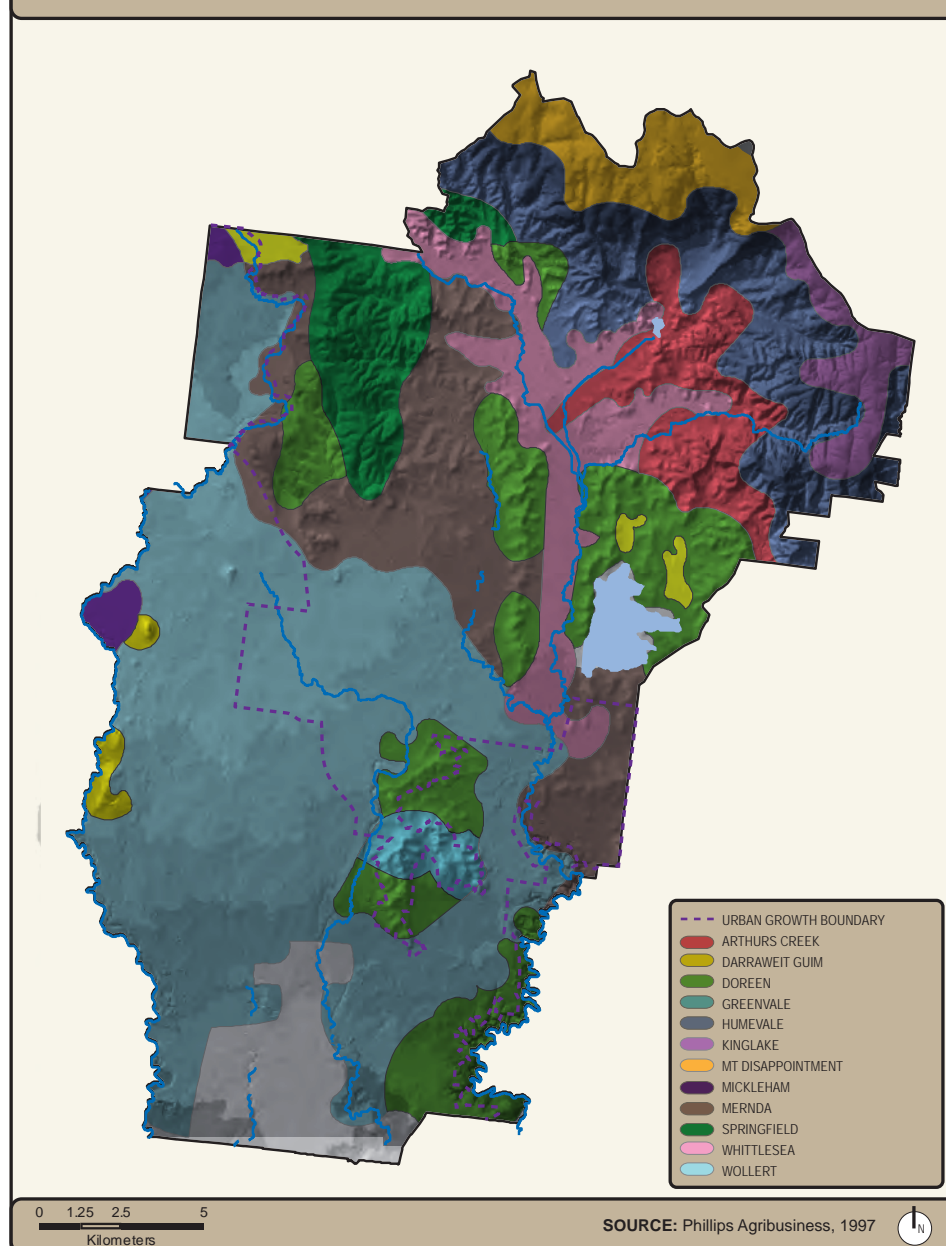


TABLE 2: Agricultural Capacity

Land Class	Land System	Agricultural Use
Class 2 Agriculturally versatile land 9-11 month growing season	Whittlesea Alluvial plains	Intensive grazing, occasional cropping
	Mernda Gently sloping lowland hills	Intensive grazing, occasional cropping
Class 3 Sound grazing land but limited in versatility 8-9 month growing season	Wollert Basaltic plains	Grazing, occasional broadacre cropping
	Doreen Moderately undulating midland hills	Grazing and open woodland
	Arthurs Creek Moderately rolling midland hills with extensive lower slopes	Grazing, occasional cropping
Class 4 Capable of grazing under moderate to low stocking rates 7-8 month growing season	Springfield Moderately to steeply upland hills	Grazing and woodland

Sources: Jeffrey 1981, MMBW 1985, Phillips Agribusiness 1997



1.2.2 Alternative Farming Practices

It is challenging for rural residents to maintain a viable business based on traditional agricultural commodities. Viable agriculture as a part-time activity, supported by off-farm income, can be achieved. Farming can be viable and part time. It can also be diverse and sustainable.

For the past four years, Council has been involved in a program of growing Chinese herbs for the expanding Chinese and complementary herbal medicine market in Australia. Considerable research and development work has been done on a wide range of species, resulting in a short list of candidates for potential commercialisation. Five farm plots around the Whittlesea area are being trialled.

Whilst further work is needed before selected herbs can be recommended to growers for higher scale production, Council is now sufficiently advanced in the project to progress towards the development of a detailed Program Plan which outlines and provides a framework for the delivery of the Chinese Medicinal Herbal Program. Such a sector has the potential for interface areas since it does not rely on large allotments for commercial viability.

In Whittlesea, there has been a marked increase in the establishment of olive groves. This niche business contributes positively to the rural landscape.

However, as olives are a long term investment, it is still too early to say if this sector will become a high economic performer. At present, at least one landholder is marketing oil produced with some success, winning silver at the 2008 Royal Melbourne Show.

The harvesting of native grasses for seed also has the capacity to provide an alternate farm income. The Whittlesea Green Wedge contains extensive areas of native grasslands, particularly in the west and north west that could be farmed in this manner.

Organic farming enterprises, namely those associated with grazing, are another emerging agribusiness market that is in its infancy in the area. Landowners are investigating opportunities to join various components of the organic market.

This is seen to have great potential, especially due the municipality's proximity to Melbourne, the new Melbourne Wholesale Fruit and Vegetable Market, rail-freight services and Melbourne Airport

According to Regional Matters, bushfood industries in Victoria are an emerging market that has shifted from wild harvest methods to commercial crop production (DSE 2005c).

In 1995, the Southern Bushfood Association was established to support and promote species indigenous to southern Australia, such as mountain pepper and native mint. Private forestry enterprises within Victoria are also increasing, ranging from farm forestry to large-scale commercial plantations.

Case Study: Plains Tender, Mernda



The partnership between Corangamite Catchment Management Authority and a landholder in Mernda has led to a portion of Plains Grassy Woodland being fenced from stock grazing to encourage regeneration of native vegetation. Nearly four years on, the PlainsTender agreement has seen hollows and fallen branches being retained on site providing habitat for fauna, and significant regeneration of River Red Gums.



1.3 What the Community is Saying

Consultation was undertaken with residents and community groups through a series of community forums and supplemented by workshops with government departments and agencies with an interest in the Whittlesea Green Wedge.

Despite the range of opinions expressed, a common thread can be drawn from the feedback received:

- **Rural residents want to give living on the land a go, but it is becoming tougher.** Issues such as lack of farm succession and limited support from government are becoming increasingly important. Farming on the urban-rural interface has a greater variety of pressures and less access to assistance than in regional locations.

Refer to the *Community Views Final Report* for a detailed summary of community responses.

1.4 Issues

The main areas requiring action in order to secure and promote the ongoing productive capacity of the Whittlesea Green Wedge for sustainable agriculture into the future are:

- Limited understanding by the community of the role of farmers in contributing to food production, land management, revegetation and scenic rural landscapes

- Concern over the viability of many existing traditional rural enterprises in the municipality due to the combination of lack of intergeneration succession, increasing whole of farm costs (e.g. rates, employees, soil and crop improvements, remediation works), climatic change and expectations of urban neighbours.
- Lack of support to foster the area as the food bowl of northern Melbourne
- Unequal treatment of farmers in peri-urban areas as opposed to regional areas (e.g. restricted funding opportunities)

This is not an exhaustive list, but rather an overview of the current key areas requiring action. The government has announced it will examine the ability for interface councils to spilt their municipality into urban and rural areas for state government funding purposes which may help ameliorate some of these concerns

1.5 Planning Provisions

Many rural activities are supported within the green wedge zones. Through the State Planning Policy Framework of the Victorian Planning Provisions, Clause 14.01-1 specifies objectives and implementation actions focussed on agriculture.

Within the Local Planning Policy Framework, the Municipal Strategic Statement refers to the values of agricultural land at Clause 21.02-01. The Local Planning Policy at Clause 22.02 relates to the 'Rural Land Character Areas, Siting, Use and Development Policy'.

Specific zones within the Whittlesea Planning Scheme relevant to the productive capacity of Whittlesea Green Wedge include:

- *Green Wedge Zone (GWZ) seeks to encourage sustainable farming activities and a variety of productive agricultural uses.* Many farming activities, such as crop raising and extensive animal husbandry, are 'as of right' and do not require a planning permit unless an overlay requires one. A permit is required for the use and development of a dwelling. The minimum subdivision size is specified as either 40 or 80 hectares.
- *Green Wedge A Zone (GWAZ) seeks to ensure use and development promotes sustainable land management practices.* Many farming activities require a permit under the provisions of this zone. A permit is required for the use and development of a dwelling. The minimum subdivision size is specified as either 8 or 12 hectares.
- *Rural Conservation Zone (RCZ) seeks to provide for agricultural use consistent with the conservation of environmental and landscape values of the area.* Most forms of agriculture and any new dwellings require a planning permit. The minimum subdivision size is 40 hectares.



1.6 Planning Guidelines

Within the context of broader green wedge values, the following provides a guide for Council in its decision making regarding rural productivity and agribusiness:

- *Agriculture* should be viewed flexibly with a wide interpretation of primary production activities in order to support local economic development. Subject to planning approval, this should include the ability to sell local produce at the farm gate and appropriate signage that respects the local amenity and landscape.
- *Land use and development* within the GW and GWA Zones should be compatible with surrounding agricultural activity.
- Any *new dwelling* proposed should be in accordance with planning provisions and located appropriately in relation to adjoining farm properties.

1.7 Incentives And Programs

Sustainable food production and rural productivity is encouraged and supported by several programs initiated by the City of Whittlesea. This includes the following:

- *Sustainable Land Management Rate Rebate Scheme* to encourage and support good land management practices on large rural properties (annual)
- *Environmental Works Grants* for the protection and enhancement of native vegetation on private land (annual)
- Annual *weed mapping programs* that now includes criteria such as land use, typical stocking rates and enforcement related activities.
- Introduction of a *pest plant local law*
- Support and education programs for the community, local Landcare, farmers and environment groups.
- Employment of two *Sustainable Land Management Officers* available to provide onsite advice.

Council's *Local Conservation Strategy* is currently under review and due for release, retitled as the *Environmental Sustainability Strategy*, in 2011.

The Port Phillip and Westernport CMA plays a key role in the coordination and administration of environmental funding within the Port Phillip and Westernport region. Refer to the website for details <http://www.ppwcm.vic.gov.au/funding-grants.aspx>.

1.8 Actions

Refer to Part 3: Action Plan for the full range of actions proposed to sustain the Whittlesea Green Wedge into the future.

In summary, key actions proposed include:

- Investigate options for the employment of an Agribusiness Officer to provide business support to farmers
- Explore opportunity for a publicity campaign to highlight the value of farming to our communities
- Investigate further options for altering Council's farm rate to better support agribusiness on the rural fringe
- Promote and support the production of local food through initiatives such as farmers markets
- Explore opportunities for undertaking a land capability study to identify best suited agricultural enterprises
- Review planning provisions relating to agribusiness and the right to farm.



2.1 Objective

The objective for this sub-theme is:

Rural land stewardship objective

To support and promote the local capacity of communities and individuals to actively manage and sustain the Whittlesea Green Wedge through informed land stewardship practices.

Policy, education and regulation will emphasise the 'duty of care' to all landholders and land managers, but will also recognise the particular difficulties of managing land at the metropolitan interface and the need for assistance and resourcing from all levels of Government.

2.2 Features and Values

Good rural land stewardship practices provide valuable environmental, social and economic benefits for residents and visitors alike.

Modern agricultural practices need to be flexible in order to achieve traditional functions (such as food production), provide land stewardship in order to sustain the land, contribute to environmental services and the social capital of rural communities, whilst contributing to economic development and employment.

2.2.1 Sustainable Land Management

The notion of sustainable land management is embraced under the definition of Ecological Sustainable Development (ESD), which is defined as *using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased* (Commonwealth Government 1992).

Essentially, ESD is about maintaining the long-term environmental/social/cultural viability of the land and its natural resources. This concept is explored in greater depth in the land management review of the municipality's rural sector titled Sustainable Farm and Land Management Support Programs (City of Whittlesea 2005).

As our knowledge of ecosystems and the benefits of native vegetation increases, there is a growing urgency to restore degraded ecosystems and protect what remains in order to maintain 'ecological services' that are fundamental to the quality of human life and the economy.

For Whittlesea, this means adopting farming systems and land management practices which aim to maintain and enhance natural systems in order that economic viability can be sustained.

Increasingly, the value of services provided to the community by natural systems is being recognised (Binning et al. 2001). This includes understanding that the environment provides services that if unavailable, would incur significant economic and social cost. This includes water filtration, insect pest control, pollination, soil health, maintenance of healthy waterways and breakdown of waste. Less tangible benefits include cultural and spiritual meaning, landscape beauty and a sense of place. The wellbeing of individuals and communities is dependent upon ecosystem services.

2.2.2 EcoMarkets

Markets are emerging that offer landholders the opportunity to earn an income by providing environmental services on their land. EcoMarkets is a term used to describe a range of market-based systems that aim to address environmental decline. Emerging market options currently available through the Department of Sustainability and Environment are outlined in Table 3 over the page.

These market-based instruments use the economic principles of market trade to maintain or improve the natural environment. Yet this is not about locking up farms from stock or cropping activities. It is about paying farmers to manage native vegetation on their property and provides another opportunity for farmers to diversify farm income.

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TABLE 3: EcoMarkets in Victoria

BushTender	EcoTender	BushBroker
<p>Over three million hectares of Victoria's remaining native vegetation occurs on private land, of which approximately 60 per cent is of a threatened vegetation type and is estimated to support 30 per cent of Victoria's threatened species populations.</p> <p><i>BushTender</i> aims to improve the management of existing areas of native vegetation on private land.</p> <p>Under <i>BushTender</i>, landholders nominate their own bid price in a competitive tender and choose a range of actions to protect and enhance native vegetation. This could include fencing of native vegetation to exclude stock, control of environmental pests and weeds, and supplementary planting of native understorey plants.</p> <p>Successful bids are those that offer the best value for money in terms of native vegetation and biodiversity outcomes. Successful landholders receive periodic payments under contractual agreements with the Department of Sustainability and Environment or Catchment Management Authority.</p> <p>Source: Adapted from DSE 2008a</p>	<p><i>EcoTender</i> expands the BushTender approach to include multiple environmental benefits. In addition to terrestrial habitat protection and restoration, landholder bids are evaluated on potential improvements to river and estuary health.</p> <p>Under <i>EcoTender</i>, landholders are invited to tender for contracts that deliver several complementary benefits, primarily through improved native vegetation management and revegetation on their properties.</p> <p>Successful bids contain activities that offer the best value for money based on ecosystem outcomes, the significance of the environmental assets and the cost.</p> <p>Like BushTender, successful landholders receive periodic payments as they deliver the management actions under contractual arrangements with the Department of Sustainability and Environment or Catchment Management Authority.</p> <p>For further information visit the Department of Sustainability and Environment's website via www.dse.vic.gov.au/ecomarkets</p>	<p><i>BushBroker</i> provides a system where native vegetation credits can be generated and traded, allowing interested landholders to provide the offset on behalf of developers requiring transactions in native vegetation removal.</p> <p>Landholders can provide native vegetation credits from their property by protecting and better managing remnant bushland through activities such as weed control, fencing off stock and pest animal control.</p> <p>Credits can also be earned by revegetating previously cleared land with native plants indigenous to the area and fencing off scattered paddock trees to encourage natural regeneration. Putting freehold land into conservation reserves can also earn credits.</p> <p>Landholders who have earned credits are then able to sell them. Buyers are those required by legislation to offset native vegetation clearing in one area by purchasing credit in another area according to 'like vegetation' rules.</p> <p>Currently, buyers and sellers are matched in the <i>BushBroker</i> database and the two parties then negotiate a price. More recently, an electronic version of this database is under development which will operate more like a marketplace, further reducing matching costs</p>



2.2.3 Carbon trading and Carbon offsets

Trees offer a natural carbon storage system and provide the ecosystem service of carbon sequestration. The process of carbon removal from the atmosphere can be carried out through the use of land management practices such as carbon friendly farming. Until carbon credits are used on the market, however it is too early to predict how this market mechanism may assist farmers and the environment.

2.2.4 Biophysical Hazards

Past inappropriate land use, land management practices and poor siting of structures has led to a variety of land degradation problems throughout Australia, and specifically within the rural areas of our municipality. A wide range of processes threaten not only the productivity of rural land, but also the health of our waterways, biodiversity, and ultimately the lifestyle of our rural communities.

The costs associated with these biophysical hazards are far ranging. A recent ABS survey into Natural Resource Management on Australian Farms for 2006-2007 demonstrates nearly 90% of the total agricultural businesses in Victoria undertake some form of natural resource management activities to mitigate land, soil, weed or pest related problems (ABS 2008). This equates to an average effort of 49 person days per business calendar year and an average expenditure of more than \$44,000 per agricultural business on remedial works (ABS 2008).

It is beyond the scope of this Management Plan to detail the causes, effects and mitigation measures associated with biophysical hazards such as erosion, salinity and wildfire. Refer to the *Land Management Kit* produced by Council's Sustainability Planning Department for specific details on these issues (City of Whittlesea 2001). The following is a summary of the main biophysical threats to our Green Wedge land.

Salinity

The City of Whittlesea and the Shire of Nillumbik are one of three priority salinity management zones within the Port Phillip and Westernport CMA region.

In 2005, over 450 hectares in the Whittlesea/Nillumbik salinity management zone was affected by saline discharge (DPI 2005). Within the City of Whittlesea, over sixty saline discharge sites have been identified.

Historically, the removal of vegetation is considered to be the major cause of salinity in these areas (Thomas 1994). Refer to Map 7 over the page for an indication of saline discharge sites throughout the municipality.

This map identifies and prioritises sites for salinity management actions based on landscape salinity susceptibility and salinity hazard. Salinity hazard is defined as the likelihood that salinity will occur within the landscape (Clifton & Heislars 2004).

Within the City of Whittlesea, this includes five key sites represented numerically on Map 7:

GFS 1: Alluvial plain	HP
GFS 2: Main alluvial valley	HP
GFS 8: Steep valley heads	MP
GFS 10: Undulating low hills	MP
GFS 13: Undulating rises	MP

According to the Department of Primary Industries, specific management options for the following groundwater flow systems include the following:

- **GFS 1 (High Priority)** It is unrealistic to eliminate salinity from these areas due to the nature of the underlying soils and high watertables. Trees and woody revegetation will assist but the impact will be slow. Learning to live with salt is the key option, as is the planting of salt tolerant pastures.
- **GFS 2 and 13 (Moderate to High Priority)** Revegetation of these sites with trees will reduce runoff and waterlogging. The establishment of salt tolerant pastures will also assist to stabilise and reduce waterlogging risk.
- **GFS 8 and 10 (Moderate Priority)** High density revegetation, particularly on the slopes, will reduce runoff and waterlogging into adjacent areas. Perennial pasture effectiveness will be limited by the moderate annual rainfall.





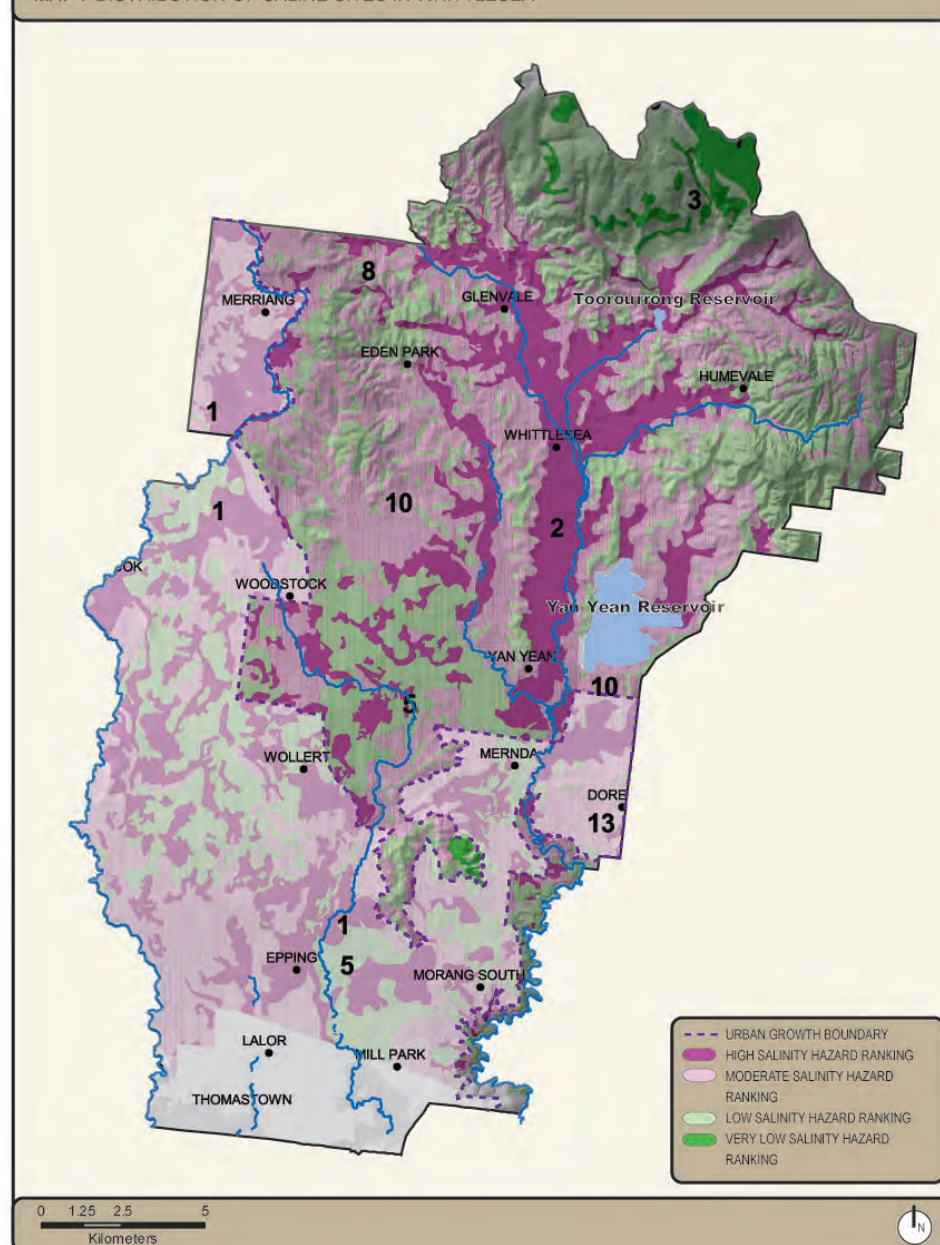
The significant economic, environmental and social impacts of salinity are widespread, particularly in regards to agricultural production, ecosystems and infrastructure.

Physical deterioration of roads, rail and housing developments are likely, particularly as urban growth areas overlap salinity hotspots.

A Victorian field guide to salt indicator plants has been developed by the Victorian Government (DCNR 1995a and DCNR 2005b).

Salt-tolerant plants include (top to bottom): waterbuttons, spiny rush, buck's horn plantain and windmill grass.

MAP 7 DISTRIBUTION OF SALINE SITES IN WHITTLESEA



Erosion

The Whittlesea Green Wedge contains areas of sheet, tunnel and gully erosion. The most severely effected areas are Eden Hills, Barbers Creek and Scrubby Creek (Beardsell 1997).

The historic removal of foothill forests and excessive grazing on the fragile soils of the Eden Hills area in particular has led to a high erosion hazard, particularly tunnel and gully erosion.

Parts of Eden Park/Humevale are identified as one of five erosion hot spots within the Yarra Catchment (Thomas and Cummings 1994).

The significant environmental and economic impacts of erosion are often site specific, yet their effects are wide ranging. This is particularly evident with regards to water quality, diminishing areas of productive agricultural land and damage to farm infrastructure such as fences.

Fire

On Saturday 7 February 2009, Victoria experienced a bushfire so severe it has been recognised as the worst natural disaster in Australia's history. The devastation resulted in the loss of 2029 homes, affected 78 communities and 500,000 hectares of land across Victoria. Businesses, schools, sporting clubs, homes, water catchments, cool temperate rainforests and towns were destroyed (refer to Map 8 over the page).

Within the municipality, the communities of Humevale, Whittlesea and Kinglake West, and the Mt Disappointment State Forest, Toorourrong water catchment and Kinglake National Park were severely affected. Over 76 houses were destroyed and another 100 properties suffered significant damage. Nearly 8400 hectares of land and 30 kilometres of roads were burnt. Over 20% of the Whittlesea Green Wedge, at that time, was fire affected.

Since then, there has been significant progress in site clean-up, temporary housing and rebuilding of community facilities. The Victorian Bushfire Appeal Fund, as well as the Commonwealth and Victorian Governments, has made available a range of financial assistance packages that continue to expand as communities move towards the rebuilding phase.

Council established a dedicated bushfire team comprising a range of Community Development officers, a community drop-in point in Whittlesea Township and a 'Project Rebuild' team comprising Council Building, Planning, Land Management and Health staff.

Residents within the Whittlesea Green Wedge are concerned about the effects of fire on weeds and erosion, wildlife and lack of vegetation, and the inability to run stock on their land due to lack of feed and shelter. Council in conjunction with Caring for our Country has employed a Land Management Recovery Officer. In partnership with landholders, rehabilitation works have occurred on 78 fire affected properties.

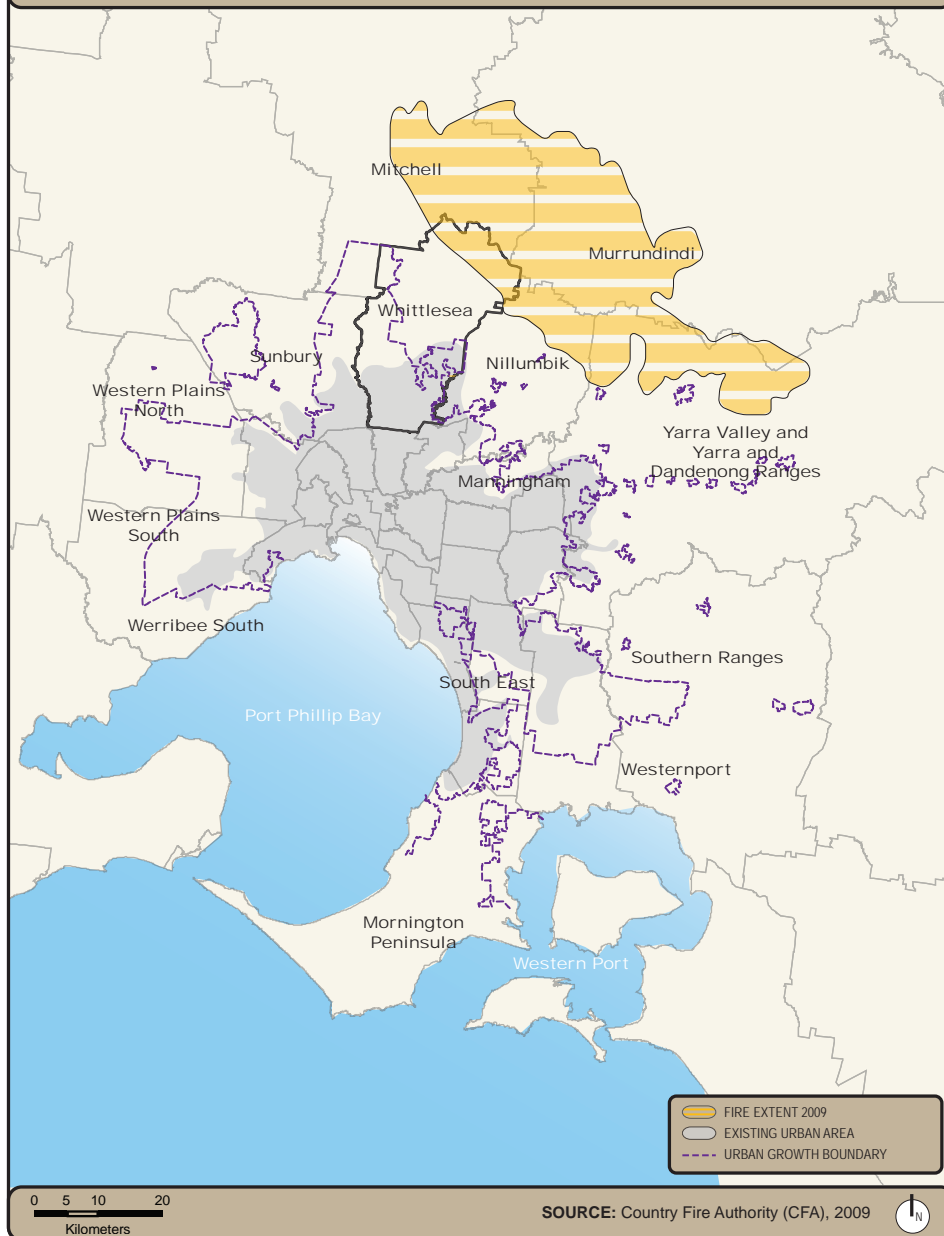
Field days focussing on pasture recovery, wildlife, native vegetation regeneration and whole farm planning have been well attended and weed control measures have occurred across the Whittlesea Green Wedge. The program 'FenceAid' has helped farmers replace kilometres of fencing throughout the Whittlesea Green Wedge.

At the request of the community, the City of Whittlesea coordinated a Bushfire Rebuilding Expo on Saturday 23 May 2009 at Whittlesea Showgrounds. Over 2500 people attended from fire affected communities across the region.

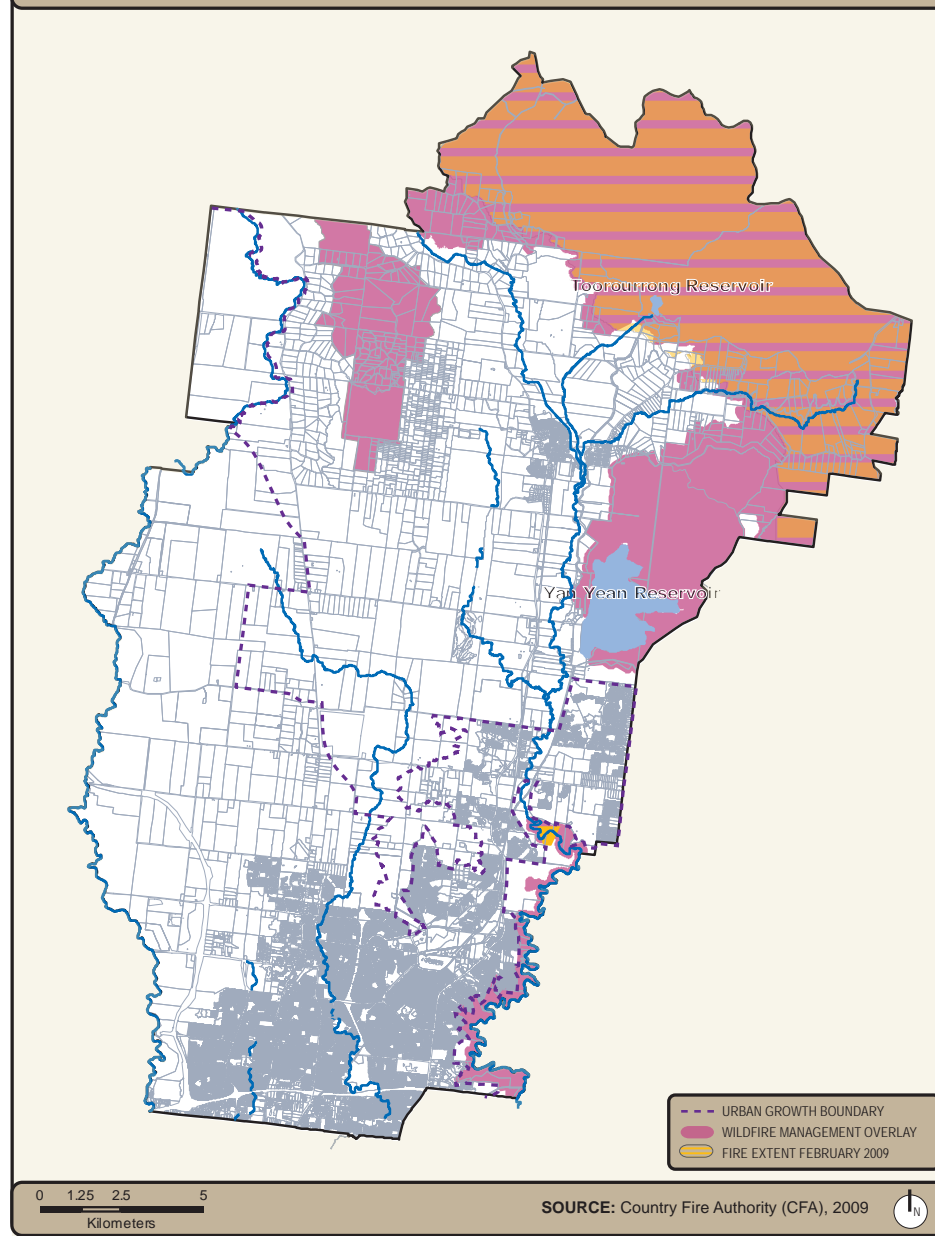
Despite the many challenges faced by our fire affected communities, a sense of determination and resilience is evident.



MAP 8 MELBOURNE METROPOLITAN FIRE EXTENT FEBRUARY 2009



MAP 9 RECONCILING THE WILDFIRE MANAGEMENT OVERLAY (WMO) AND FIRE EXTENT



2.3 What the Community is Saying

Consultation was undertaken with residents and community groups through a series of community forums and supplemented by workshops with government departments and agencies with an interest in the Whittlesea Green Wedge.

Despite the range of opinions expressed, a common thread can be drawn from the feedback received:

- **Many Whittlesea farmers are supportive of whole farm planning and good rural stewardship practices.** Links between existing and new farming families should be encouraged, whilst greater access to the EcoMarkets concept is required before active and broad uptake is achieved.

Refer to the *Community Views Final Report* for a detailed summary of community responses relating to the ten green wedge sub-themes.

2.4 Issues

The main areas requiring action in order for communities to actively manage and sustain the Whittlesea Green Wedge through informed land stewardship practices are:

- Ongoing support for sustainable land management practices
- Insufficient resources to enforce good land management practices for all rural properties means maintaining a property free from pest plants, animals or hazards such as erosion and salinity is made extra difficult
- Lack of knowledge regarding market mechanisms associated with ecosystem services
- Insufficient networking between new hobby and lifestyle farmers and existing farming networks to broaden the knowledge base of all
- Concern over the costs associated with biophysical hazards such as salinity and erosion and fragmented planning controls
- Limited recognition of good land stewardship practices regardless of property size
- Guidelines for Land Management Plans (LMP) are not consistently applied
- LMPs should not be viewed in isolation to the broader landscape context.

This is not an exhaustive list, but an overview of the current key issues.

2.5 Planning Provisions

The State Planning Policy Framework supports good rural land stewardship. Under the framework, planning should encourage sustainable land use in an agricultural context (Clause 14.01). Hazards such as salinity (Clause 13.03-3) and wildfire (Clause 13.05) are also addressed.

Within the Local Planning Policy Framework, the Municipal Strategic Statement refers to the values of agricultural land at Clause 21.02-01. The Local Planning Policy at Clause 22.02 relates to the 'Rural Land Character Areas, Siting, Use and Development Policy'.

Specific zones within the Whittlesea Planning Scheme that are relevant to the sustainable management of rural land include:

- *Green Wedge Zone, Green Wedge A Zone and Rural Conservation Zone.* Decision guidelines for use and/or development of land in each of these zones require specific rural, environmental and design and siting issues to be addressed, including the submission of a Land Management Plan.
- *Wildfire Management Overlay* is specifically aimed at identifying areas where the intensity of wildfire is significant and likely to pose a threat to life and property.

Map 9, on the preceeding page reconciles the extent of the 7 February 2009 fire with the coverage of the Wildfire Management Overlay within the City of Whittlesea.



2.6 Planning Guidelines

Within the context of broader green wedge values, the following provides a guide for Council in its decision making regarding good rural stewardship:

- *Agricultural practices* should not contribute to any further land degradation occurrences due to the costs to the natural systems and rehabilitation costs borne by landholders.
- Tighten the approach taken to requirements for a *Land Management Plan* in order to provide policy that delivers fair, effective and useful land stewardship outcomes for landholders and Council.
- Networking between existing farmers and new farmers should be encouraged to broaden the knowledge base of all.

2.7 Incentives And Programs

Sustainable rural land stewardship is encouraged by several programs initiated or supported by the City of Whittlesea. Over a quarter of the land area of the Whittlesea Green Wedge is covered by a Council-led sustainable land management (SLM) initiative. While exact numbers vary from year to year, around one third of eligible rural properties (those 10 hectares and greater) are part of Council's sustainable rate rebate scheme.

In the 2007/2008 financial year, Council directed over \$275,000 towards SLM initiatives. These programs include:

- *Sustainable Land Management Rate Rebate Scheme* to encourage and support good land management practices on rural properties over 10 hectares (annual)
- *Environmental Works Grants* for the protection and enhancement of native vegetation on private land under 2 hectares (annual)
- Annual *weed mapping programs* now include criteria such as land use, typical stocking rates and enforcement related activities
- Introduction of a *pest plant local law*
- Support and education programs for the community, local Landcare, farmers and environment groups including whole farm planning courses and publications such as the *Land Management Kit*
- Employment of two *Sustainable Land Management Officers* available to provide onsite advice to landholders
- Support for WACMAC Landcare on an annual basis in recognition of its contribution to practical land management activities within the Whittlesea Green Wedge and beyond.

Refer to Appendix 2 for a summary of Council's rate rebate scheme.

The Port Phillip and Westernport CMA plays a key role in the coordination and administration of environmental funding within the Port Phillip and Westernport region. Refer to the website for details <http://www.ppwcm.vic.gov.au/funding-grants.aspx>.

The City of Whittlesea will continue to assist fire affected residents by whatever means possible to equip our communities rebuild.

2.8 Actions

Refer to Part 3: Action Plan for the full range of actions proposed to sustain the Whittlesea Green Wedge into the future.

In summary, key actions proposed include:

- Work in partnership with government departments to better promote and facilitate the uptake of environmental market mechanisms
- Review Council's sustainable land management programs to better support small rural properties
- Further promote Council's land stewardship programs and support for property owners in their preparation of Land Management Plans.
- Commit to funding a two year fixed term Environmental Protection Officer position. This role will focus on environmental compliance relating to planning permits and implementation of Council's Pest Plant Local Law.



3.1 Objective

The objective for this sub-theme is:

Landscape qualities and rural design objective

To conserve and enhance the rural and natural landscape character of the Whittlesea Green Wedge.

The Whittlesea Green Wedge contains the convergence of a number of Victorian landforms. The natural and cultural value associated with these diverse landscapes is to be acknowledged and respected in the use and development of land.

3.2 Features and Values

The varied landscape qualities within the municipality provide valuable environmental, social and economic benefits for residents and visitors alike through contribution to desirability and a sense of place, and delivering quality tourism/recreation experiences.

Regard must be given to the visual characteristics of the landscape and the ability to sustain change without compromising visual integrity. No one landform dominates; rather each contributes to the wider landscape. The juxtaposition between different landforms provides a focus for scenic interest.

The type of development and land use occurring in the rural areas of the municipality should respect the visual sensitivity of the landscape. In this context, visual sensitivity refers to the ability of a particular landscape to accommodate change.

Rural character should be expressed in the siting, design, built form and landscape treatments of all development in the Whittlesea Green Wedge.

3.2.1 Visual Character Area Plans

Three physical Landscape Character Units are recognised in the Local Planning Policy Framework of the Whittlesea Planning Scheme: the Plenty Valley, the Plenty Ranges and the Western Plains.

In 1999, a separate study was undertaken to evaluate and document the character and qualities of the rural areas, titled *Rural Landscape Character Assessment* (Contour Consultants 1999).

This study identified four distinct Visual Character Areas (VCA) within the rural areas of the municipality:

1. The Plenty Valley VCA
2. The Plenty Ranges VCA
3. The Hills VCA
4. The Western Plains VCA

The major difference between these two models is the inclusion of 'The Hills' as a distinct landscape character.

Map 10, over the page, demonstrates the location of the three VCAs within the Whittlesea Green Wedge and the Western Plains VCA which is only partly included within the Green Wedge. Within the VCAs, a total of ten sub-areas are further defined, based on local characteristics.

The criterion used to define these areas includes underlying landscape characteristics, geomorphologic features and location of common viewing corridors.



Roadside corridor in Eden Hills

LAND

1. Rural Productivity and Agribusiness
2. Rural Land Stewardship
3. Landscape Qualities and Rural Design
4. Boundaries and Buffers
5. Extractive Industry

LAND



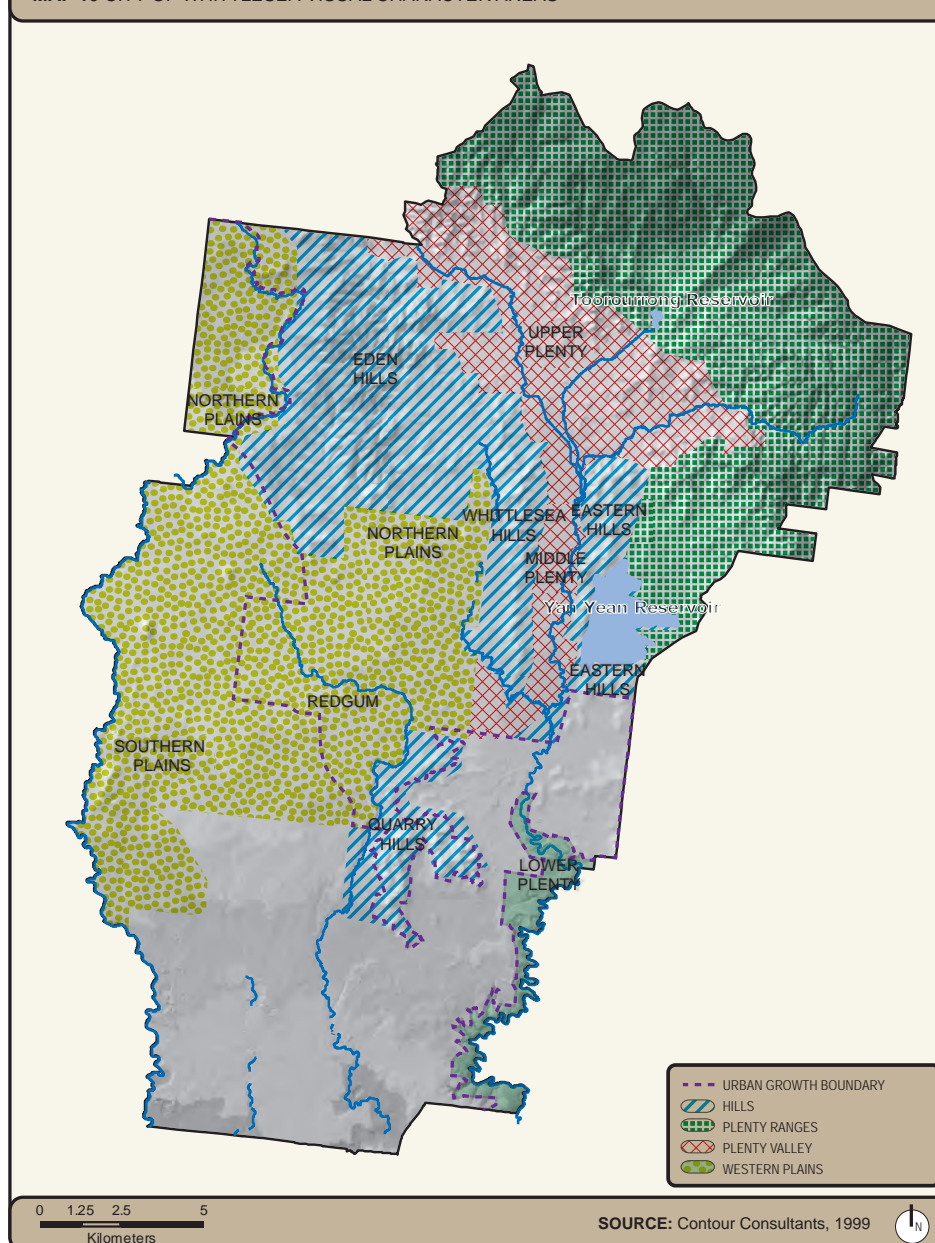
The four VCAs and their sub-areas are as follows:

1. **The Plenty Valley VCA**
 - Upper Plenty sub-area
 - Middle Plenty sub-area
 - Lower Plenty sub-area
2. **The Plenty Ranges VCA**
3. **The Hills VCA**
 - Eden Hills sub-area
 - Whittlesea Hills sub-area
 - Eastern Hills sub-area
 - Quarry Hills sub-area
4. **The Western Plains VCA**
 - Northern Plains sub-area
 - Red Gum sub-area
 - Southern Plains sub-area

Refer to Appendix 3 for details based upon the study *Rural Landscape Character Assessment* (Contour Consultants 1999).

Each VCA can be improved by landholders and community groups and guidance on how to achieve this is identified in Appendix 3. This information is also useful for Council Officers when assessing planning applications within these VCAs.

MAP 10 CITY OF WHITTLESEA VISUAL CHARACTER AREAS





Looking towards the Eden Hills sub-area of the Hills VCA



3.2.2 Viewsheds

There are many roadsides and viewing corridors within the municipality that offer important visual access to rural and natural areas.

Significant viewsheds and visually significant roadside corridors identified in the study *Rural Landscape Character Assessment in the City of Whittlesea* (Contour Consultants 1999) include:

- Epping/Merriang Road visual line
- Donnybrook Road, especially through the River Red Gum woodland onto Barkers Creek and She Oak Hill near the Growling Frog Golf Course
- Whittlesea/Wallan Road the eastern gateway to the municipality
- Glenburnie Road
- Yan Yean Road between Whittlesea Township and Kinglake
- Arthurs Creek Road.

Two critical visual quality areas that must also be planned for protection are:

- The non-urban break between Masons Road and the Whittlesea Township along the Plenty Road corridor
- The views to the Plenty Ranges and the Great Dividing Range

3.3 What The Community is Saying

Consultation was undertaken with residents and community groups through a series of community forums and supplemented by workshops with government departments and agencies with an interest in the Whittlesea Green Wedge.

Despite the range of opinions expressed, a common thread can be drawn from the feedback received:

- ***Our rural landscape is a highly valued feature of the green wedge and should be protected from urban development and infrastructure.***
There is a real sense of place and a pride in our landscapes. Areas should remain rural in nature, without urban style housing or infrastructure.

Refer to the *Community Views Final Report* for a detailed summary of community responses.

3.4 Issues

The main areas requiring action in order to conserve and enhance the rural and natural landscape character of the Whittlesea Green Wedge are:

- Limited local knowledge of the benefits of our rural and natural landscape and the threats to these areas of visual significance and sensitivity i.e. pressures for urban-style development in rural areas
- Different value sets placed on the rural landscape from residents with an urban or culturally diverse background
- Conflict regarding farm heritage (i.e. dry stone walls or Cypress hedgerows) as it relates to rural landscape character versus environmental consideration
- Pressure for urbanisation of infrastructure such as roads and lighting in rural areas
- Strengthen planning provisions to protect the 'vistas' of Melbourne

This is not an exhaustive list, but rather an overview of the current key areas requiring action.



3.5 Planning Provisions

The rural landscape is recognised as a valuable feature of the Whittlesea Green Wedge. Within the Local Planning Policy Framework, the Municipal Strategic Statement *states the wider intrinsic landscape and character qualities of these areas must be recognised* (Whittlesea Planning Scheme, Clause 21.02-10).

Clause 22.02 of the Whittlesea Planning Scheme focuses on the local planning policy 'Rural Land Character Areas, Siting, Use and Development Policy. This policy provides guidance for the proper siting of dwellings and other buildings within each of the three land character areas. It reiterates the need to consider views, vistas and the environment when assessing rural planning applications.

Specific zones and overlays within the Whittlesea Planning Scheme that are relevant to the protection of rural landscape quality within the City of Whittlesea include:

- *Green Wedge Zone, Rural Conservation Zone and Green Wedge A Zone* contain controls that limit the subdivision of land to a minimum size, thus delivering rural parcels contributing to an open rural landscape. The purpose of these zones include conserving and enhancing the character of open rural and scenic landscapes and protecting the natural environment for landscape values. These zones also include the provision to request a Land Management Plan be prepared for intensification of land use or the construction of a new dwelling.

- *Significant Landscape Overlay (SLO)* has the purpose of identifying, conserving and enhancing the character of significant landscapes. The Whittlesea Hills (Schedule 1) provides a distinctive non-urban break between the Mernda growth areas and the Whittlesea Township. The Quarry Hills (Schedule 2) form a significant non-urban break between the South Morang and Mernda growth areas. These hills also provide visual relief and interest to the surrounding Western Plains.

Refer to Map 11 over the page for landscapes protected by the SLO.

3.6 Planning Guidelines

Within the context of broader green wedge values, the following provides a guide for Council in its decision making regarding landscape qualities and rural design:

- The *scenic vistas* of Whittlesea are to be conserved. The natural and cultural value associated with these landforms is to be respected in the use and development of land.
- Any *new dwelling*, associated outbuildings and accessways are to be sited below a ridgeline and should follow the contours of the land. Construction materials are to be muted, non-reflective material. Styles should include rural vernacular aspects such as verandahs and be of a low, unobtrusive design.
- New roadside viewing platforms and park amenities should be focussed in areas of *high visual amenity* in order to promote the appeal of rural and natural landscapes.



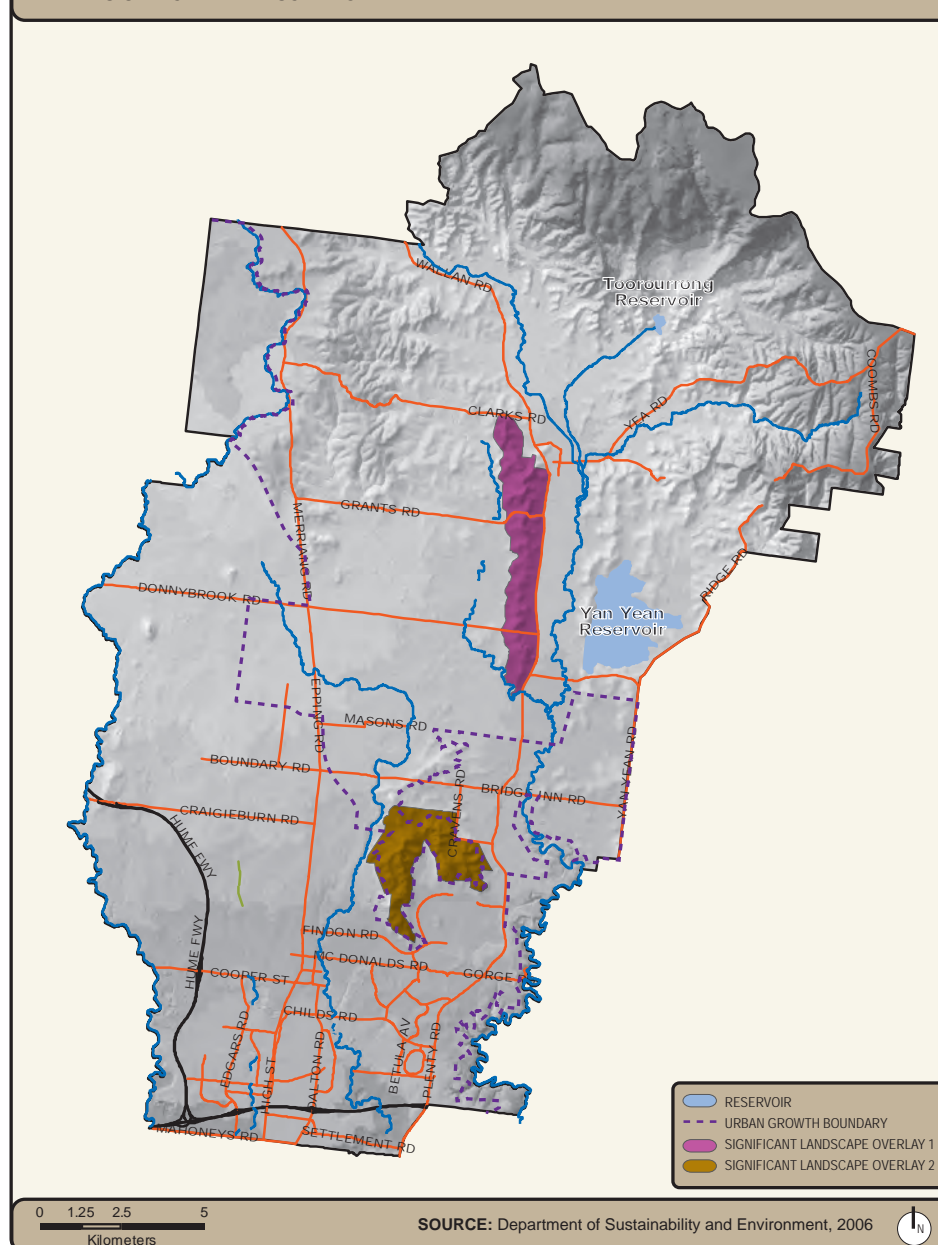
3.7 Actions

Refer to Part 3: Action Plan for the full range of actions proposed to sustain the Whittlesea Green Wedge into the future.

In summary, key actions proposed include:

- Further develop community appreciation of the rural and natural landscape character of the Whittlesea Green Wedge through development of a range of landscape exploration events
- Investigate funding arrangements to sponsor two new annual events: best rural design and best rural land management.
- Amend planning provisions targeted at protection of significant views and rural design principles during the Whittlesea Planning Scheme review process.

MAP 11 SIGNIFICANT LANDSCAPE OVERLAY 1 AND 2



4.1 Objective

The objective for this sub-theme is:

Boundaries and buffers objective

To ensure that the interface between the Whittlesea Green Wedge and urban and rural communities is clearly defined and planned to reduce conflict.

Boundaries and buffers are to be enduring features in order to preserve the integrity of both urban and rural areas.

4.2 Features and Values

Boundaries and buffers provide valuable environmental, social and economic demarcation for the municipality.

4.2.1 Boundaries and Buffers

The City of Whittlesea contains various edge conditions from watercourses to vegetation, natural catchments, land forms and soil types, to roads, lands uses and culturally defined boundaries.

It is recognised that edge conditions must be clearly defined, planned and managed. Separation and buffer treatments are often required at interface locations and it is important to note that all forms of development impact on and interact with adjacent and nearby land. This is particularly the case in relation to the urban-rural interface.

Identified as one of the biggest challenges faced by all green wedge areas in the 'Introduction' chapter of this Management Plan, the urban-rural interface poses many issues. This is particularly the case where significant urban growth is occurring and has been intensified through the urban growth boundary expansion.

Substantial changes to Green Wedge boundaries have recently occurred as part of the State Government's approval of an expanded UGB in the western and northern part of the municipality under Amendment VC68. These changes have reduced the extent of Whittlesea's Green Wedge areas but have increased the extent and exposure of green wedge areas to existing and proposed growth areas and the associated issues that this brings.

The extensive land within the newly defined UGB will be the subject of comprehensive planning at the local and State Government level and will be guided by a Growth Area Framework Plan (GAFF) which is now under preparation. This plan will include substantial areas of land which will not be available for development due to environmental values and other constraints such as quarries and associated buffers. The planning of these areas will be considered under the GAFF process and in more detail in the preparation of Precinct Structure Plans. These areas will need to be managed productively and sustainably until such time as they are required for urban development. A Management Plan will be necessary for land awaiting urban conversion but will not be addressed in this GWMP.

The new UGB, which now has a 93km interface to Whittlesea's Green Wedge areas, is based on the following clearly defined boundaries:

Northern Growth Area, Beveridge

An approximate 15km reach of the Upper Merri Creek now forms the northern UGB. The northern portion of the Whittlesea urban growth area is set aside for the development of an inland port (inland

freight hub) although it is not expected that this facility will commence for a number of decades. Land between the Merri Creek and Merriang Road will need to be carefully managed for its environmental, landscape and productive values.

Northern Growth Area, Donnybrook

Between Merri Creek and Merriang Road, 4km of the new UGB is now defined by the proposed E6 freeway reservation. Initially this road will be developed as an arterial road. The undulating land between the E6 and Merriang Road will need to be carefully managed for its landscape and productive values.

River Red Gum Woodland Interface, Woodstock:

The new UGB provides a 9km interface to the significant River Red Gum Woodlands in Donnybrook. The land between the new boundary and Epping Road and the E6 Freeway reservation, will need to be carefully managed for its conservation, productive and landscape values. This land forms part of an investigation area for the establishment of a River Red Gum Grassy Woodland reserve.

Masons Road to Craigieburn Road

Between Masons Road and Craigieburn Road the new UGB is defined by the E6 Freeway reservation for approximately 4km. Existing and proposed quarries and land fill operations are located within the Green Wedge adjacent to this boundary.

Quarry Hills

The Quarry Hills comprise a significant elevated landscape which adjoins three urban growth areas: Mernda, Doreen, South Morang and Epping North. The

LAND

1. Rural Productivity and Agribusiness
2. Rural Land Stewardship
3. Landscape Qualities and Rural Design
4. Boundaries and Buffers
5. Extractive Industry

LAND



UGB now forms a 25k boundary to the Quarry Hills. Given the significant land use pressures likely to be experienced within the Quarry from the urban interface and from edge effects, the Council has initiated a long term proposal to bring approximately 1,000ha of this land into public ownership and management for conservation and landscape protection.

Land outside the UGB within the Quarry Hills will need to be managed for its landscape, productive and conservation values under private ownership until such time as the land is transferred and managed for public purposes.

Northern Growth Area – Mernda, Yan Yean and Doreen

Approximately 7.5km of the UGB defines the northern boundary of the Plenty Valley growth area defined by Masons Road, Hazelglen Drive, the Melbourne Water pipetrack reservation and title boundaries. A number of small inclusions to the UGB have been identified adjacent to this boundary. These initiatives also seek to reduce land use conflict along this interface.

Shire of Nillumbik Interface

Yan Yean Road forms a 49.8km UGB interface between urban growth areas in the City of Whittlesea and green wedges areas in the Shire of Nillumbik. Yan Yean Road is proposed to function as a arterial road under the management of VicRoads and is designated as a permanent UGB.

Plenty Gorge Park

Approximately 25km of the UGB now defines the Plenty Gorge Park. There is a need to ensure that this boundary is managed for its conservation values but

also recognise the high fire risk that this interface presents to existing and proposed development.

Whittlesea Township

Whittlesea Township is now the only Metropolitan Township that does not have the benefit of a UGB. While the extent of growth has historically been set out in the Whittlesea Township Local Structure Plan and under existing zones, an UGB is needed to provide long term certainty. A continuing commitment to maintaining the non-urban break between the Township and Mernda and Doreen to the south, protecting the Whittlesea Hills to the west, visually significant landscapes and catchment areas to the east and floodplains to the north and south will limit future development but ensure that the Whittlesea Township retains its unique rural character.

The boundaries of the Township under an UGB will be the subject of further separate investigations. Existing and proposed boundaries will need to be managed to ensure that productive rural enterprises can continue and floodplain capacity and quality is not compromised.

4.2.2 Buffers

Buffers present at the local scale include those adopted by specific industries such as extractive industry operations. This buffer format uses landform and vegetation to screen machinery and quarry extractions and aid in the reduction of noise and air pollutants.

At a regional level, buffers between urban and rural land have generally been defined by an absence of either rural or urban land uses. This has recently changed however due to the incursion of the urban growth

boundary into land which still functions primarily for agricultural purposes. Some of the key green breaks identified as having particular importance by the City of Whittlesea have been maintained however, specifically the green break between Mernda and Whittlesea Township.

At a catchment scale, the selection of particular land use zones and overlays complement a wider objective, such as the protection of the headwaters of river catchment, providing the necessary separation that may not be readily apparent at site level.



Conflict at the interface between urban and non-urban uses is not uncommon as land adjoining these areas is often left unmanaged in the hope of possible urban expansion.

Interfaces need to be managed from both sides. On the urban side, planning tools such as framework plans, precinct structure plans, development plans and individual planning permits should be used to ensure an integrated approach to planning for these areas. Within newly zoned urban land areas the role of identifying the boundaries of individual communities, landscape values and as appropriate, the need for discrete urban breaks and management of these breaks will be carried out through the implementation of these documents.

For the green wedge areas, development of Green Wedge Management Plans will assist to clarify key features, issues and priority actions. Both forms of planning must be engaged to effectively manage interface issues.

4.3 What the Community is Saying

Consultation was undertaken with residents and community groups through a series of community forums and supplemented by workshops with government departments and agencies with an interest in the Whittlesea Green Wedge.

Despite the range of opinions expressed, a common thread can be drawn from the feedback received:

- Greater certainty is required regarding boundaries between the urban and rural areas of Whittlesea. The Whittlesea Township lacks a boundary to delineate rural uses from the Township area. The UGB needs increased certainty to encourage investment in our rural areas.

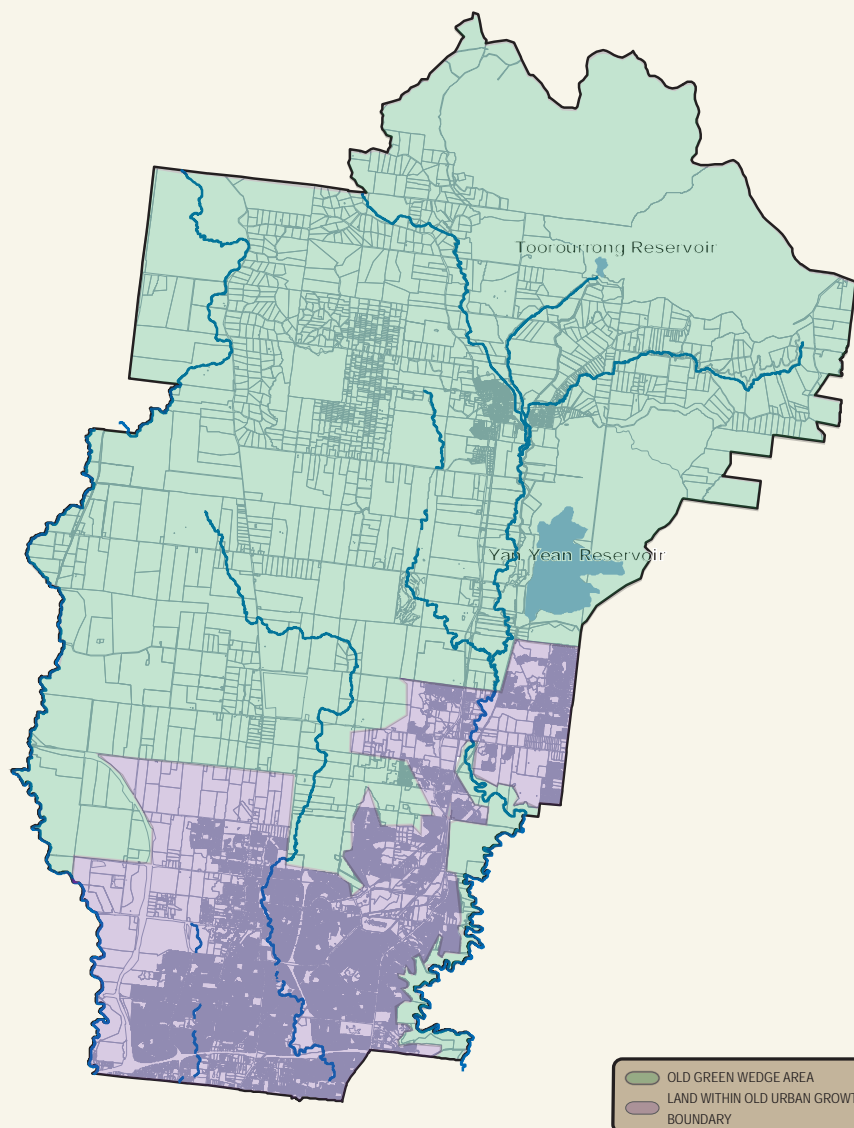
The approval of Amendment VC68 addresses some of these concerns. However, it is envisaged that new concerns relating to the management and stewardship of land which was previously rural and is now located within the UGB may arise, which will need to be further addressed.

The Inquiry into Sustainable Development of Agribusiness in Outer Suburban Melbourne (May 2010) has informed the 'Actions' section of this Management Plan which includes additional measures to mitigate against any perceived future risks to the social, economic and environmental wellbeing of the green wedge and the communities within it.

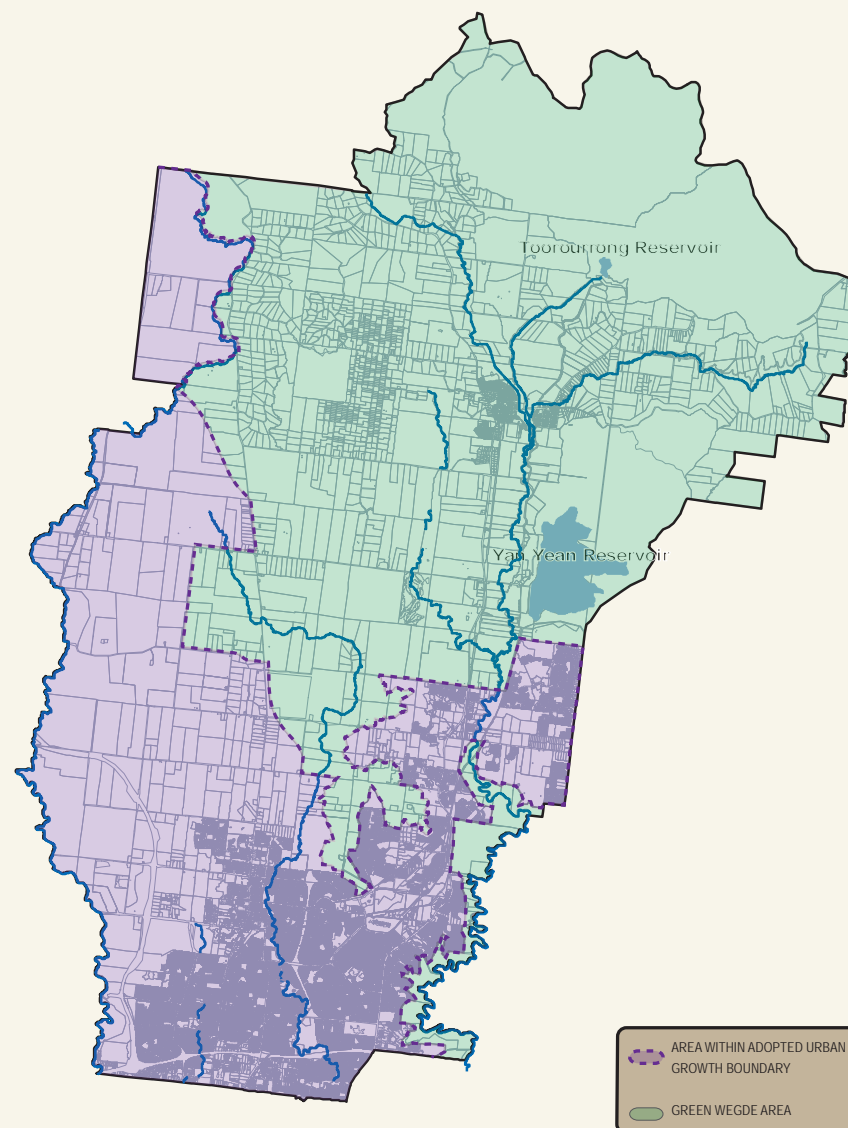
Concerns regarding the boundary of the Whittlesea Township specifically must still be addressed. Refer to the Community Views Final Report for a detailed summary of community responses relating to the ten green wedge sub themes.



MAP 12 OLD URBAN GROWTH BOUNDARY



MAP 13 ADOPTED URBAN GROWTH BOUNDARY



4.4 Issues

The main issues requiring action in order to ensure the interface between urban and rural communities and the Whittlesea Green Wedge are defined and planned to reduce conflict are:

- The development of guidance on innovative treatments of edge conditions
- Clearly defined boundaries that preserve the integrity of both rural and urban areas which encourage appropriate diversification and further investment within these areas
- Guidance on buffer opportunities to create green breaks between settlements
- Development of effective partnership arrangements between residents, Council and developers, that seek to implement effective change management strategies.

This is not an exhaustive list, but rather an overview of the current key areas.

4.5 Planning Provisions

To date, the non-urban areas of the municipality have experienced pressures from a variety of sources such as urban expansion and small rural subdivision. Recent clarification of the UGB extension may help alleviate some of these pressures in the short to medium term as it provides certainty for non-urban landowners to invest in agricultural enterprises and provides incentives for farmers to practice good land management. However, the matter of appropriately managing and maintaining the areas of essentially green agricultural land which are now located within the UGB and which will not be developed for the next

10 to 20 years must be addressed through both statutory and non statutory policy frameworks.

4.6 Planning Guidelines

Within the context of the broader green wedge values, the following provides a guide for Council in its decision making regarding boundaries and buffers:

- A clearly defined boundary should be introduced around Whittlesea Township. This boundary should be established in consultation with the local community and preserve the integrity of productive rural land whilst providing a long term approach to defining urban areas in accordance with Council and State Government policies.
- Innovative treatment of 'edge properties' should be encouraged and supported in order to maintain effective land stewardship practices.
- Promote and encourage options for 'farming nature' on properties located within green breaks that contain significant ecosystems and habitats as part of farm diversification initiatives.
- Newly designated urban land should have effective change management strategies in place that seek to develop partnerships between developers, Council, new and existing residents. Sharing of experiences should be encouraged and could involve activities such as urban school students 'being a farmer for a day' to increase tolerance and understanding.

4.7 Actions

Refer to Part 3: Action Plan for the full range of actions proposed to sustain the Whittlesea Green Wedge into the future.

In summary, key actions proposed include:

- Investigate innovative options that support sustainable land use and management, especially at the urban-rural interface
- Undertake a review of the Whittlesea Township Local Structure Plan with an emphasis on defining the township boundary and addressing interface issues between urban and rural areas.



LAND

1. Rural Productivity and Agribusiness
2. Rural Land Stewardship
3. Landscape Qualities and Rural Design
4. Boundaries and Buffers
- 5. Extractive Industry**

5.1 Objective

The objective for this sub-theme is:

Extractive Industry objective

To ensure the needs of extractive industries are identified and protected in the context of broader green wedge values.

The need for extractive industries to be located close to existing and proposed markets is to be balanced with other competing needs, including the protection of areas of environmental significance and landscape amenity.

5.2 Features and Values

Extractive industry provides valuable economic benefits for the municipality, having a number of associated economic investment and indirect employment benefits.

5.2.1 Current Extractive Operations

Extractive industries are important to the municipality's economy. The majority of the City of Whittlesea's extractive industry operations are now located within the newly designated urban areas. Of the current Work Authorities, two are partly located within the Whittlesea Green Wedge (refer to Map 14).

Clause 74 of the Victorian Planning Provisions defines extractive industry as *land used for the extraction or removal of stone from land for commercial use, or to use the stone for building construction, road or manufacturing works.*

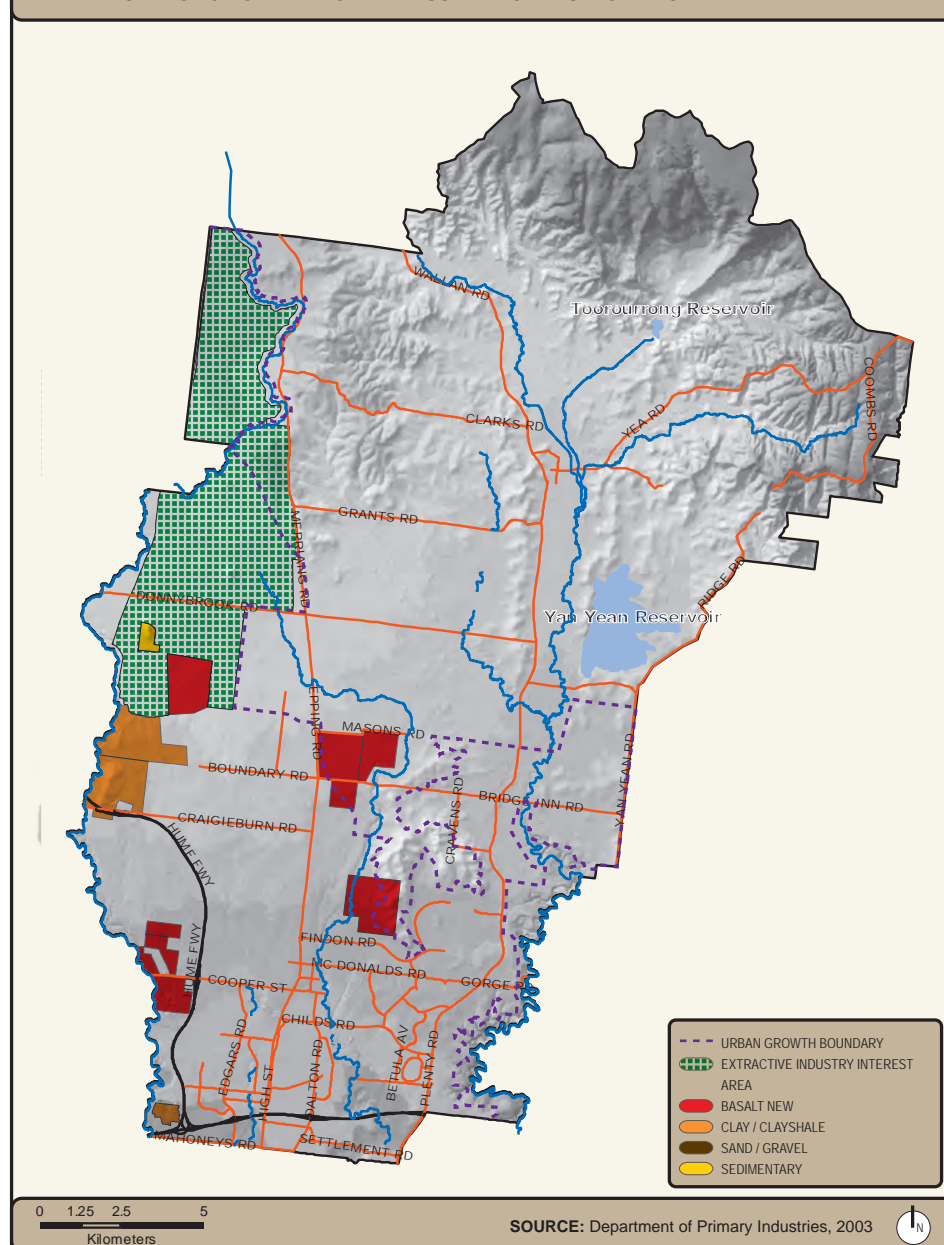
Stone is taken to encompass at its broadest sense, sand, clay, rock and gravel. This also refers to the treatment of stone or the manufacture of bricks, tiles, pottery, cement products on or adjacent to the land from which the stone is extracted.

Extractive industry can have significant impacts on the landform, air quality, biodiversity and water resources. In order to safeguard the amenity and environment of the surrounding land, it is necessary to ensure an appropriate separation distance, or buffer, between extractive industry operations and sensitive uses on nearby land.

New extractive industries are required to own a clearly defined buffer area which is appropriate to the nature of the operations (DSE 2006a). Many operators commenced in the municipality before this requirement came into effect and may rely on adjacent green wedge land for these buffers.



MAP 14 DISTRIBUTION OF EXTRACTIVE INDUSTRY WORK AUTHORITIES



5.3 What the Community is Saying

Consultation was undertaken with residents and community groups through a series of community forums and supplemented by workshops with government departments and agencies with an interest in the Whittlesea Green Wedge.

Despite the range of opinions expressed, a common thread can be drawn from the feedback received:

- **Locate extractive industries in areas of low environmental significance and manage buffer zones for conservation purposes.** Networks between extractive industries and Council are encouraged to satisfy other green wedge objectives such as environmental protection and community liveability.

Refer to the *Community Views Final Report* for a detailed summary of community responses relating to the ten green wedge sub themes.



5.4 Issues

The main areas requiring action in order to protect and balance the need for existing and proposed extractive industry operations within the Whittlesea Green Wedge are:

- Increased emphasis to be placed on networking with extractive industry operators in order to achieve reasonable green wedge outcomes from these sites
- Concern over the unknown effects of quarry operations on local hydrology (i.e. changes to ground water quality and supply as accessed by bores on adjoining farming enterprises)

This is not an exhaustive list, but rather an overview of the current key areas requiring action.

5.5 Planning Provisions

An extractive industry is not a prohibited use in the green wedge zones (GWZ and GWAZ). Through the State Planning Policy Framework of the Victorian Planning Provisions, the Minister has directed that an extractive industry cannot be prohibited within the green wedge zones and is subject to a planning permit process.

Specific zones within the Whittlesea Planning Scheme that are relevant to extractive industry operations include:

- *Special Use Zone (Schedule 4)* which has the purpose of providing for the use and development of land for extractive industry. This zone also aims to encourage land management practice and rehabilitation that minimises adverse impact on the use and development of nearby land.

5.6 Planning Guidelines

Within the context of broader green wedge values, the following provides a guide for Council in its decision making regarding extractive industry operations:

- The need for extractive industries to be located close to *market sources* is to be balanced with other needs, including the protection of areas of environmental significance and landscape amenity. Increased emphasis should be placed on developing networks with operators in order to achieve reasonable green wedge outcomes for these sites.
- Due to community concern over the unknown effects of quarry operations on local *ground water supply*, any new extractive industry operation should be encouraged to put in place all reasonable efforts to reduce the use of surface and ground water in extractive activities.

- Ensure that the required rehabilitation of extractive industry sites achieves environmental, community and economic benefits which are integrated with the surrounding area.

5.7 Actions

Refer to Part 3: Action Plan for the full range of actions proposed to sustain the Whittlesea Green Wedge into the future.

In summary, key actions proposed include:

- Consolidate knowledge of current extractive industry operations and potential impacts on green wedge values
- Strengthen networks between all stakeholders to foster open discussion of issues and opportunities for extractive industry operations.

