

PROJECT CONTROL

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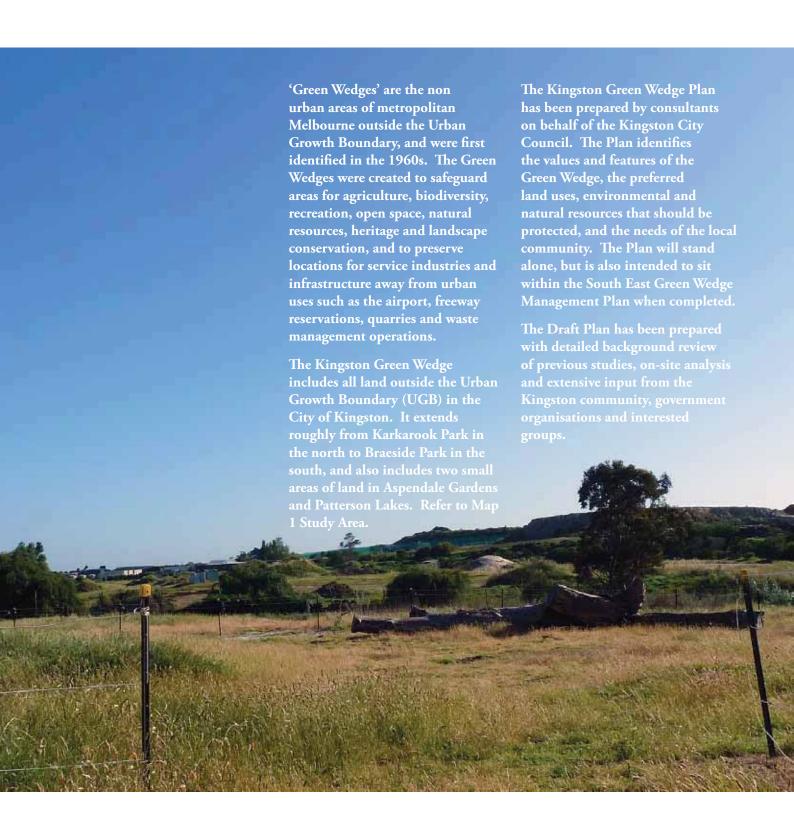
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GLOSSARY

Carbon sink	A forest, ocean or other natural environment viewed in terms of its ability to absorb carbon dioxide from the atmosphere.		
Carbon sequestration	The process of removing and storing carbon from the atmosphere in carbon sinks (refer definition above).		
Chain of Parks	Concept initially proposed in 1994 with an objective to create a series of connected parks that will provide open space and a wide range of passive and active recreational facilities.		
Gateway sites	Sites on which place markers can operate in a variety of scales and forms, such as signs, landscape treatments, or integrated built form and landscape elements.		
Green wedge	Non-urban areas of metropolitan Melbourne that are located outside the Urban Growth Boundary.		
Transitional Uses	Industrial activities that are likely to reach the end of their operations in the current location in the short to medium term (based on current approvals) and the transition of which out of the local area is addressed by the Green Wedge Plan. These uses are to be phased out by 2025.		
Zone	Planning scheme provision that controls land for particular uses, such as residential, industrial or business. Each zone has a purpose and a set of requirements.		

Sources: DPCD Planning: A Short Guide 2008 Macquarie Australian National Dictionary 2004

EXECUTIVE SUMMARY



KEY ISSUES

The Council and the community have identified the following key issues that the Kingston Green Wedge Plan needs to deal with:

- managing existing landfills and heavy industry to minimise impacts and transitioning uses that cause off-site impacts out of the Green Wedge
- protecting and improving the environmental qualities of the Green Wedge
- achieving the 'Chain of Parks' concept of open spaces linked by walking and cycling trails
- identifying appropriate areas for passive and active recreation
- retaining a predominantly open and semi-rural feel
- declining market gardening viability, and identifying and encouraging new agriculture and other 'green' uses
- improving the appearance of the area generally
- implementing the Plan and providing certainty to land owners and the broader community about the future of the Green Wedge land

VISION

The Kingston Green Wedge is to be an exemplar environmental and recreational resource for the local and regional community.

It will showcase the best in environmental management, former land fill reuse, sustainable energy generation, community interaction and focus, sustainable agriculture, open space linkages, local and regional recreation and community facilities.

It will:

- have a semi-rural feel and appearance;
- protect and regenerate areas of environmental and ecological significance;
- showcase the best environmental and ecological sustainability practices;
- provide all types of recreational areas and facilities;
- be easy to navigate and move around via all modes of transport;
- provide some local employment opportunities;
- provide local and regional services and facilities; and
- contain activities that interface well with one another.

THE PLAN STRUCTURE

The Plan is structured under the headings of: Environmental qualities, Land uses and activities, Public spaces, Movement and access, Buildings and Governance and leadership. Each chapter contains objectives, strategies and actions under these headings that collectively achieve the Vision.

EXECUTIVE SUMMARY cont.

WHAT DO WE WANT?

Environmental Qualities

- Watercourses in good condition, including in-stream and riparian habitat, stream bed and bank stability, water quality and flow connectivity.
- Watercourses that support the community's desired ecological, aesthetic and recreational values.
- Water security in flood and drought for agricultural and ecological purposes.
- A resilient environment that is adaptive to climatic change.
- Water resource data that informs decision making within the context of the Green Wedge Plan.
- Land development that enhances environmental and water resources values.

- A community that is aware of water management issues and values water resources.
- An improvement in the ecological values of water bodies and waterways.
- An improvement in the capacity of native fauna species to respond to the threat of climate change (through improved connectivity between resources and habitat).
- Protection and enhancement of existing ecological values and communities.
- Re-created habitat, habitat links and buffers for native fauna.
- Re-established populations of conservation significant species that have declined or no longer occur in the area



Land Use and Activities

- Conservation areas that safeguard the environmental values of the area and provide passive open space opportunities.
- Recreation facilities that accommodate local sporting clubs, specialist sports, and regional catchments, and that satisfy demands of the growing population of Kingston and surrounding areas.
- Agricultural type activities and community gardens that produce food for local, regional or metropolitan markets
- Urban forests that provide a green backdrop and carbon sink benefits.
- Environment parks that demonstrate future best practice in resource management and sustainability
- State of the art energy generation facilities that have no off-site impacts on nearby uses

- Elimination of uses that cause off-site impacts on residential amenity, agricultural viability and environmental qualities.
- A semi-rural style residential cluster along Pietro Road that provides a vegetated link between parkland to the north and Kingston Heath Reserve.
- School and tertiary campuses set within large grounds and associated recreation and open space uses that provide for local and regional students and incorporate publicly available facilities
- Community and church facilities that offer services or are available for use by the local and regional community
- More intensive land uses located on main roads where public transport access is possible, and smaller lots are common.
- Moorabbin Airport and associated aviation activity in a setting that contributes to the appearance, intent and function of the Kingston Green Wedge.

Public Spaces

- A linked open space system realising and expanding upon the 'Chain of Parks' concept
- An off-road, linked pathway system from Karkarook Park to Braeside Park.
- Parks, reserves and wetlands that are linked by paths, and protect and provide refuge for indigenous flora and fauna
- Passive recreational spaces large and small - that provide for quiet respite and informal activity
- Active recreation areas linked by pedestrian and cycle paths throughout the Green Wedge.
- Improvements to the appearance of roadsides through landscaping, and by regularising of footpath, verge and road treatments as appropriate to the role and function of the road.



EXECUTIVE SUMMARY cont.

Access and Transport

- Establishment of a safe, efficient and attractive road network within, through and around the Kingston Green Wedge.
- Increased use of public transport as a mode of travel to, from and within the Kingston Green Wedge.
- Increased use of walking and cycle as a mode of travel to, from and within the Kingston Green Wedge.
- Pedestrian pathways along roads to link with and complement offroad links.
- Cycle routes along major through roads, and via a linked pathway system from Karkarook Park to Braeside Park.

- Improvements to public transport timetabling, stop locations, stop facilities and service frequency.
- The safe and efficient operation of Moorabbin airport as a state transport facility and as an employer.
- Swift resolution of the Dingley By-pass route and construction.
- Resolution of the Mornington
 Freeway route and determination
 of surplus land and temporary
 land uses.
- Frequent pedestrian, cycle and habitat underpasses across new roads and freeways in accordance with current design and safety standards.



Buildings

- New buildings that protect and strengthen the existing character of the Green Wedge environment
- Buildings that are sited and designed to maintain an overall sense of spaciousness in the landscape
- Adequate space around buildings for existing and new vegetation and landscaping
- Open views and vistas from roads and public spaces
- Buildings that do not dominate the landscape
- Buildings that are fit for purpose, and screened by vegetation if this necessitates a larger structure
- Best practice environmentally sustainable building design and techniques
- Materials, colours and finishes that best immerse buildings within the landscape

- Development that reflects the particular locality and future use of the land within the Green Wedge
- The use of indigenous vegetation and substantial trees that blend with the roadside treatments
- Buildings that are sited and designed to minimise the effects of the use/development on nearby properties and ensure future development is protected from adjoining uses that may have offsite impacts
- Buildings that respect the predominant building height of the area where one exists
- 'Gateway' sites that project the 'green, semi-rural' image of the Green Wedge
- Improved appearance of existing land and activities in the Green Wedge

Governance and Leadership

- To be clear and unequivocal about the future of the Green Wedge
- Consistent and focussed decision making
- A coordinated and comprehensive approach to the implementation of the Plan
- Funding from state and federal government to support implementation of the Plan in recognition of the area as a regional resource
- Sponsorship from business and private sources for some of the key public projects
- Methods of self funding as much as possible in the on-going operations of public activities in the Green Wedge
- Funding methods to achieve infrastructure improvements to benefit the wider community



1

What is a Green Wedge Plan?

1.1 WHAT IS A GREEN WEDGE PLAN?

GREEN WEDGES

'Green Wedges' are the non urban areas of metropolitan Melbourne outside the Urban Growth Boundary. They are a legacy of the visions and planning decisions of the past, having first been proposed in planning strategies in the 1960s. The concept of defined growth areas with protected non urban areas in between provides relief from continuous development and allows for the concentration of development and integrated services.

The Green Wedges were created to safeguard areas for agriculture, biodiversity, recreation, open space, natural resources, heritage and landscape conservation, and to preserve locations for service industries and infrastructure away from urban uses such as the airport, freeway reservations, quarries and waste management operations.

The Kingston Green Wedge includes all land outside the Urban Growth Boundary (UGB) in the City of Kingston. It extends roughly from Karkarook Park in the north to Braeside Park in the south, and also includes two small areas of land in Aspendale Gardens and Patterson Lakes. Refer to Map 1 Study Area.

The Kingston Green Wedge covers 2,070.6 hectares. The land is used for a variety of purposes including the Moorabbin Airport, golf courses, land fill sites, significant wetlands, sporting fields and parks, and a number of industrial uses. The Green Wedge also includes major road reservations for part of the proposed Dingley Freeway and the Mornington Peninsula Freeway. The land falls within in a number of zones including the Green Wedge Zone, Rural Conservation Zone, Public Use Zone, Special Use Zones and Public Park and Recreation Zone.



GREEN WEDGE PLAN

The Kingston Green Wedge Plan is being prepared by consultants on behalf of the Kingston City Council. The Plan will identify the values and features of the Green Wedge, the preferred land uses, environmental and natural resources that should be protected, and the needs of the local community. The Plan will stand alone, but is also intended to sit within the South East Green Wedge Management Plan when completed.

When completed, relevant parts of the Kingston Green Wedge Plan will form a Green Wedge Management Plan under the relevant planning provisions. A Green Wedge Management Plan is a council adopted strategy that identifies the vision, objectives and actions for the sustainable development of each Green Wedge. All Green Wedges should have a Management Plan and the process for developing such a Plan is outlined in a State government Practice Note¹. The process must include extensive engagement with all stakeholders, including landowners, businesses and residents in the Green Wedge. All interested parties will have had the opportunity to input to the vision and objective setting, as well as comment on the Draft Plan.

1 VPP General Practice Note: Preparing a Green Wedge Management Plan, DSE (August 2005) The Plan will provide the Council, landowners, business operators and residents with certainty about the future of the Green Wedge and all the land within it. It will involve relevant government authorities and it is proposed that the Plan will be implemented through the Planning Scheme, as well as other mechanisms and processes, to provide it with statutory weight. The Green Wedge Plan must provide justification for any necessary change to the Kingston Planning Scheme. While this Green Wedge Plan can advocate for changes to the UGB, changes are initiated by the State Government.

The principles that are required to underpin preparation of the Green Wedge Plan are:

- Consistency with relevant State Government policies
- A common basis for the preparation of the Plan,
- A well informed, inclusive plan preparation process
- A common approach to the preparation of all plans
- Involvement of stakeholders and land owners

THE PROCESS TO DATE

The Green Wedge Plan was commenced in late 2010 and involves the following stages:

- Background research and analysis
- Discussion paper
- Vision and Key Issues consultation
- Preparation of the Draft Green Wedge Plan
- Draft Plan consultation
- Final Green Wedge Plan

Project Management

Preparation of the Plan was overseen by a Steering Committee of Councillors. A Stakeholder Reference Group was established and consulted during the Vision and Key Issues, Draft Plan and Final Plan stages of the project.

Vision and Issues Consultation

The Vision and Key Issues consultation involved extensive input from all sectors of the Kingston and wider community.

- 190 written submissions (letters, emails, Feedback Forms, Survey Monkey forms)
- 229 attendees (approx.) at three community Vision and Key Issues workshops

1.1 WHAT IS A GREEN WEDGE PLAN? cont.

- 11 individual consultation meetings with land owners/land owner groups
- 12 individual telephone consultations with land owners
- 800 randomly selected telephone survey respondents from throughout the City of Kingston

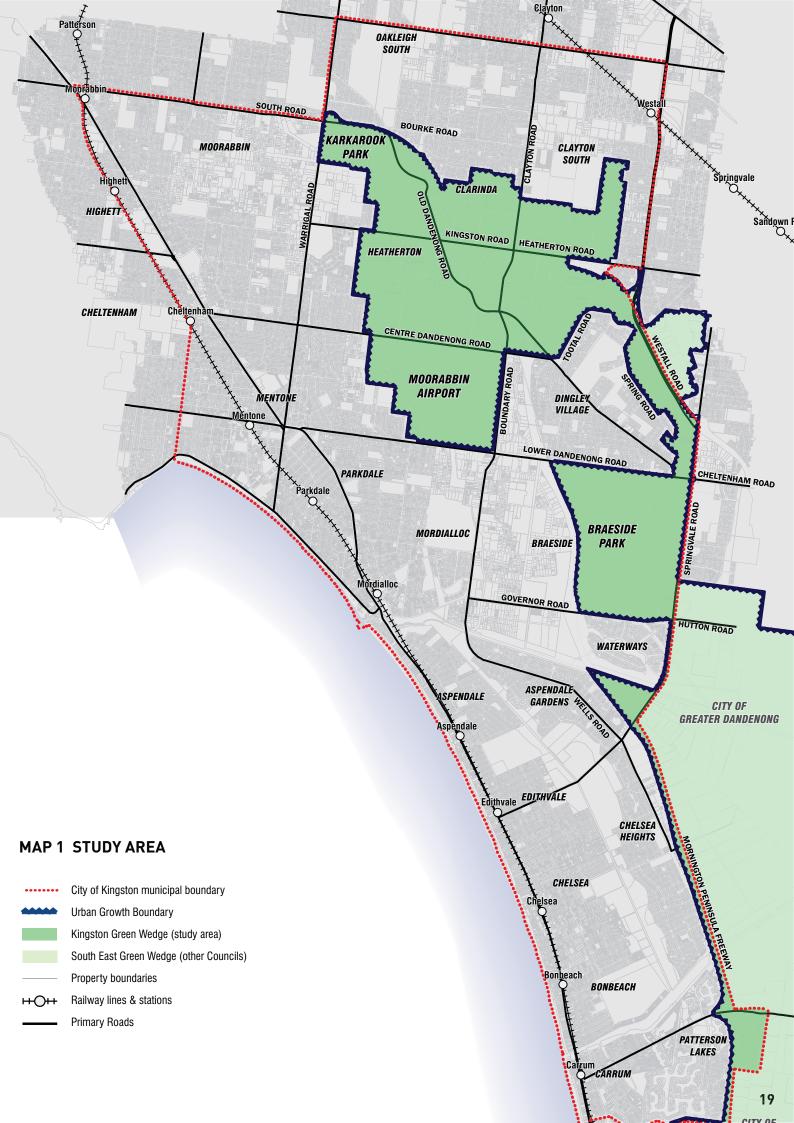
Conservatively over 1100 people were involved in this consultation phase. This is considered to be an excellent level of participation, and provided a sound basis on which to prepare a Draft Green Wedge Plan. See the Issues and Vision Summary, May 2011 for further detail.

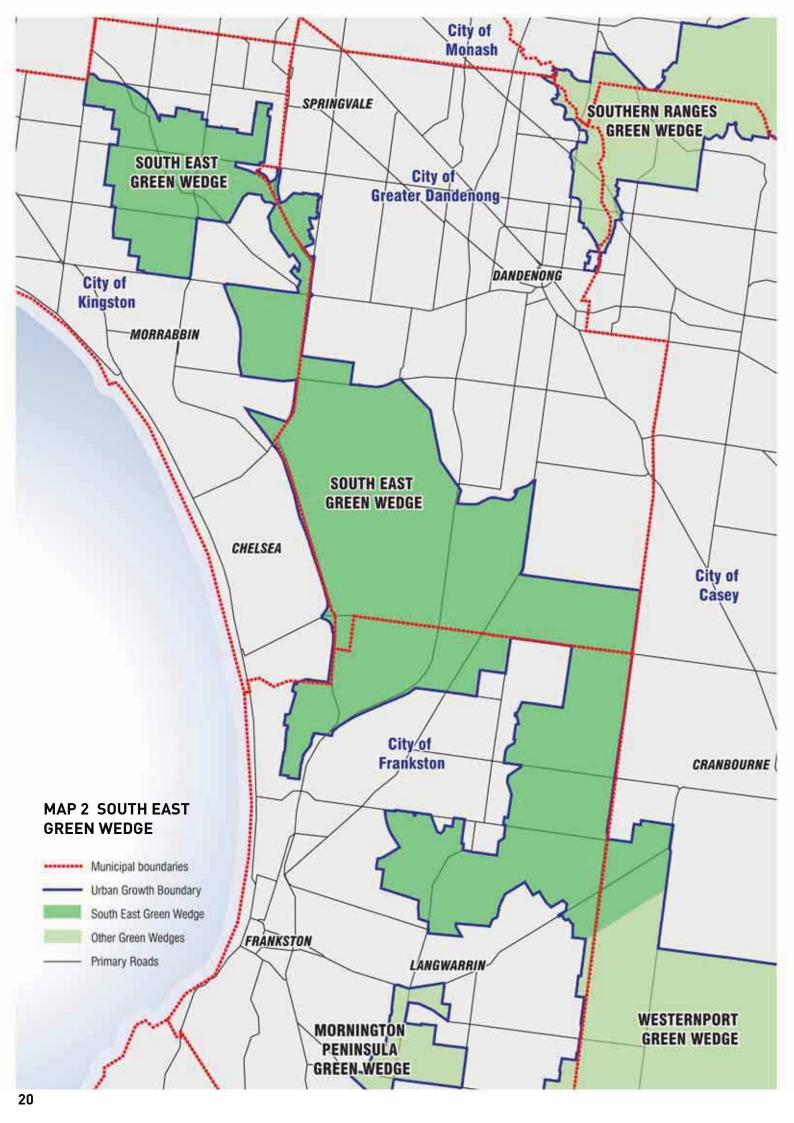
Draft Plan Consultation

The Draft Green Wedge Plan was released in September- October 2011 for an eight week consultation period. Again, a variety of consultation methods were utilised and a high level of participation from all members of the Kingston community was experienced. In total, 162 written submissions were received and over 100 attended one of two Information Sessions.

The primary feedback received indicated a high level of support for environmental and open space improvements, pedestrian and cycle linkages and agricultural or 'green' activities. There was also significant support for maintenance of the Green Wedge boundaries and reducing or eliminating the impacts of industrial uses on surrounding residential areas.

There was also, however, considerable concern and frustration expressed by land owners about the limitations of the Green Wedge zoning, previous inaction and uncertainty, and some support for changes that would allow limited development to allow other improvements to the Green Wedge. A number of submissions related to specific parcels of land and rezoning or development proposals.





What is the Vision?

2.1 THE VISION





The Kingston Green Wedge will be transformed from its 20th century role to a 21st century exemplar – it has been mined and filled with waste, its agriculture has declined and environment threatened, but its future is as a focus of sustainable uses, active recreation facilities and open space. This Green Wedge is uniquely positioned close to the urban area and heart of the city, to fulfil a special and significant role for metropolitan Melbourne. The Kingston Green Wedge provides a key open space, recreation and environmental resource for the region. This Plan provides the opportunity to transform the Green Wedge from an area that has been neglected and beset by indecision, to an area that is a showcase of good land management, regeneration and change.

KEY ISSUES

The Council and the community have identified the following key issues that the Kingston Green Wedge Plan needs to deal with:

- managing existing landfills and heavy industry to minimise impacts and transitioning uses that cause off-site impacts out of the Green Wedge
- protecting and improving the environmental qualities of the Green Wedge
- achieving the 'Chain of Parks' concept of open spaces linked by walking and cycling trails
- identifying appropriate areas for passive and active recreation
- retaining a predominantly open and semi-rural feel
- declining market gardening viability, and identifying and encouraging new agriculture and other 'green' uses
- improving the appearance of the area generally
- implementing the Plan and providing certainty to land owners and the broader community about the future of the Green Wedge land

THE VISION FOR KINGSTON GREEN WEDGE

The Kingston Green Wedge is to be an exemplar environmental and recreational resource for the local and regional community. It will showcase the best in environmental management, former land fill reuse, sustainable energy generation, community interaction and focus, sustainable agriculture, open space linkages, local and regional recreation and community facilities.

It will:

- have a semi-rural feel and appearance;
- protect and regenerate areas of environmental and ecological significance;
- showcase the best environmental and ecological sustainability practices;
- provide all types of recreational areas and facilities;
- be easy to navigate and move around via all modes of transport;
- provide some local employment opportunities;
- provide local and regional services and facilities; and
- contain activities that interface well with one another.

This vision will assist in determining what the Green Wedge will look like, include and exclude in the next 20-25 years.











SOURCES: WWW.WSUD.ORG, WWW.FLICKR.COM, WWW.ROYALHASKONING.CO.UK AND WWW.SHARP.NET.AU

3

What Environmental Qualities Do We Want?

3.1 THE ISSUES

Environmental quality within the Green Wedge is a key priority and of concern to residents and the wider community. How can we better support the native flora and fauna, and what threats to their habitats can be minimised? How do we improve the general environmental quality and prevent further degradation to the Green Wedge? In particular, how can water quality be improved, as this impacts on habitat, as well as surrounding land uses and recreational opportunities?

COMMUNITY FEEDBACK

Kingston residents highly value the Green Wedge for its nature conservation, and the provision of passive and active recreation through parklands and reserves. There is strong support in the community for these uses to continue, along with the provision of more walking and cycling trails and improvements to run-down areas.

There is explicit concern that the valued parks and wetlands may be threatened by increasingly inappropriate development. A large proportion of the community do not want industrial (including waste), commercial and retail uses within the Green Wedge. While it was sensed that these uses were inevitable in the future, most residents strongly agreed that all parks and wetlands are to be protected primarily for wildlife and future generations. Residents were also concerned with the lack of environmental management, and the loss of parkland and open space.

WATERWAYS & DRAINAGE

The quality and quantity of water resources are key issues within the Green Wedge. Most of the land area within the Kingston Green Wedge has been cleared and substantially modified for sand extraction and other land uses. Agricultural activities and urbanisation have degraded land through erosion, acidification, salinity and contamination. Watercourses and former swamps have been converted to drains, groundwater extraction has lowered the watertable, and the natural flooding regime has been altered through the creation of artificial wetlands. It is considered to be very difficult to reinstate these natural processes on a large scale because of conflicting land uses.

The Kingston Green Wedge is a part of the Dandenong foothills catchment, and consists of major drainage lines made up of natural and constructed channels with underground systems. The catchment area is highly urbanised with degrading processes that impact on local and receiving waters, particularly to the northern areas of the Green Wedge. Previous mining and landfill activities have also interfered with the natural hydrology of the area, and contribute to the high levels of pollution found in the water and drainage systems. These significant levels of interference to the natural hydrology have resulted in an unpredictable water system, with high risks in managing peak flows and

water quality in the Green Wedge. Poor water quality can also lead to many other issues such as degradation of ecological values and mosquitoes, and has been cited as a contributor to agricultural decline.

Climate change also poses a significant threat with potential reductions in annual water supplies, and increasing flood risks that will need to be minimised due to the limitations of the existing drainage system.

Improvements to water quality and predictability need to be tackled in a holistic manner to ensure the sustainability of the resource and long term solutions are found. Melbourne Water is actively pursuing measures to improve waterway health, including significant investment in construction of numerous wetlands in the Kingston area (and further upstream), and is undertaking other waterway improvements. The Council is a key partner in this work and an inter-organisational collaborative response will continue to be essential to managing water issues. Improvements to watercourses will need to be mindful of surrounding development constraints in catchment areas.

Obtaining public access along waterways has the dual benefits of ensuring the ability to improve and monitor the waterway health and undertake bank improvements, and providing a pedestrian / cycle link. Many examples exist throughout the urban area where once neglected creeks and former creeks have undergone transformation when public attention is focussed on their potential as a community and environmental resource. Merri Creek, Moonee Ponds Creek and Darebin Creek are examples of creeks and former drains in the northern area of Melbourne that now have Friends' Groups that regularly undertake clean-up and planting days, monitor environmental health and support community activity. Community gardens, public and private sporting facilities, horse agistment and parks are now regular features along these waterways, in addition to extensive walking and cycle paths.

Recognition of the waterways within the Kingston Green Wedge as legitimate ecological features has long been advocated by a number of previous reports however little action has progressed. Determination to obtain public access and further studies to determine detailed water quality and habitat improvements are required. To assist in recognition of these waterways reference to them as 'drains' should be avoided, and consequently this report will refer to these waterways as "Mordialloc Settlement Creek" and "Dunlops Creek".



COMMUNITY PLANTING DAY



FRIENDS OF MOONEE PONDS CREEK

3.1 THE ISSUES cont.

BIODIVERSITY PARKS AND CONSERVATION RESERVES

The significant elements of the biodiversity of the Kingston Green Wedge include both flora and fauna. There are numerous significant conservation reserves within the Green Wedge that contain remnant and rare vegetation species. Braeside Park is an area of regional conservation significance that contains a number of ecological vegetation communities (EVCs). The Grange Heathland Reserve is listed as an indicative place on the Register of the National estate. Karkarook Park, Rowan Woodland, Kingston Heath Reserve, Heatherton Recreation Reserve and Learmonth Reserve all contain recognised remnant vegetation and/or biodiversity values. Protection of remaining areas of ecological significance needs to be a priority of the Plan if it is to be achieved.

Many of the reserves with highest ecological value are small in area, and most are largely disconnected in that they do not form a network of vegetation and habitats. This reduces their effectiveness as wildlife corridors and leads to more frequent 'edge effect' where pests, feral and domestic cats and dogs, and weeds can more readily invade. Creating a series of habitat corridors that link at least the most significant sites should be priority of the Plan.

In addition there are a number of natural and constructed wetlands, particularly in and around the southern part of the Green Wedge, offering habitat values that create a near-continuous link virtually wrapping around the Kingston Green Wedge. These wetlands include those within Braeside Park, Woodlands Estate, Waterways Estate, Yammerbrook wetlands, Edithvale-Seaford wetlands and Wannarkladdin wetlands. Creating biodiversity corridors between all these wetland areas would be mutually beneficial to the preservation or re-establishment of biodiversity values.

Many of these conservation reserves and wetland areas within the Green Wedge contain isolated remnant vegetation and provide habitat for rare and threatened species. Detailed monitoring is recommended for the following sites which have the most intact remnant vegetation and are most representative of the naturally occurring vegetation types within the municipality:

- · Braeside Park
- The Grange Reserve
- Rowan Woodland Reserve
- Spring Park Golf Club
- Spring Valley Golf Course Heathland
- Spring Valley Golf Course Swamp

These sites are identified in the Future Environments Map, with some images in Figure 1.

FIGURE 1 PARKS AND RESERVES WITH REMNANT VEGETATION







BRAESIDE PARK







SPRING PARK GOLF CLUB







THE GRANGE RESERVE

SPRING VALLEY GOLF CLUB

ROWAN WOODLAND RESERVE

3.1 THE ISSUES cont.

Specific recommendations for these reserves are included where previous studies have identified actions that have not been undertaken as yet. These studies include the work by Biosis on Kingston reserves¹ and the Council's Biodiversity Strategy².

Scope for habitat corridors in areas of private land ownership needs to be explored and achieved wherever possible to assist in reducing the fragmentation of publicly owned areas. Additionally, management objectives and directions for parks and reserves need to be coordinated to prioritise habitat maintenance and corridors, as in some instances there is a focus on providing sporting facilities that needs to be balanced with other needs in open space areas.

The Living Links project by the Port Phillip and Westernport Catchment Management Authority (PPWCMA), has been developed to protect water quality and enhance native flora and fauna in the Dandenong Creek catchment. It aims to both develop new and enhance existing vegetation corridors along roadsides, waterways, public open spaces and private land, and to protect and enhance habitat

for native fauna. There is potential to coordinate actions within the Green Wedge to assist with the retention of biodiversity on a regional scale and ensure biodiversity is retained in an otherwise fragmented and urbanised landscape.

Historic records of threatened species, such as the Southern Brown Bandicoot, the Growling Grass Frog (*Littoria raniformis*) and Dwarf Galaxias (*Galaziella pusilla*) indicate that the Green Wedge once provided suitable habitat for them. Detailed records identified 54 significant fauna species and 16 significant flora species observed within one kilometre of the Green Wedge area. It is noted that 100 Growling Grass Frogs were trapped and released into the area in October 1999 near Braeside Park.

There are a number of other threatened flora and fauna species in the area. The complete list of observed significant flora and fauna can be found in the Background Report. Improvements to water and creek-side habitat could lead to re-establishment of these species, and this would indicate an improved environment.

¹ Biosis (2010) Assessment of City of Kingston Natural Reserves, Draft report 7 May 2010, Project no. 8002, Prepared by Jeff Yugovic BSc(Hons) DipED PhD.

² City of Kingston Biodiversity Strategy, 2007-2012

ENVIRONMENTAL RISKS (WASTE & LANDFILLS)

The potential sources of environmental risk identified on landfills within the Green Wedge were primarily related to the following:

- The age of landfills, the year which it was constructed and closed, and the related period when waste regulatory guidelines came into effect
- The types of waste received
- The known presence or absence of environmental controls and measure to minimise the likelihood of emissions and / or impact to the environment
- The sensitivity of the surrounding environment

Based on Council information provided for 28 known existing and former landfills:16 landfills are closed, 9 are still in operation with an expected 5 to 20 years remaining, and 3 have no recordable status.

Landfills constructed before the 1990s pose higher environmental risk due to limited regulatory provisions. The following key risks related to these landfills are:

- Contamination of groundwater

 / aquifers by leakage and residual
 soil contamination during usage
- Off-gassing from methane generated by decaying organic wastes
- Harbouring of disease vectors such as rats and flies form improperly operated landfills
- Odour and dust from landfill activities

A detailed waste assessment is contained in the Background Report.

3.1 THE ISSUES cont.

SITES OF POTENTIAL ECOLOGICAL VALUES

A flora and fauna assessment was undertaken of specific areas of the Green Wedge that had not been previously studied to identify land and water features of potential ecological value (refer to Appendix A Ecological Evaluation, Biosis). The surveyed sites comprised thirteen water bodies and sections of Dunlops Creek and Mordialloc Settlement Creek. It is noted that some sites that were 'ear-marked' for evaluation were inaccessible to the surveyors.

The assessment identified a number of sites with the potential to provide habitat for some flora and fauna species (refer to Figure 2). The sites are illustrated in Map 3, as 'Sites of potential ecological value'. Many of these sites offer potential habitat for two nationally significant fauna species, the Dwarf Galaxias and the Growling Grass Frog. Removal or modification of these habitats should not occur without targeted surveys for these two species. Management of these habitats may be enhanced with a better understanding of the presence / distribution of these species within the study area. Most sites were considered to offer little support to native vegetation, however there is potential for revegetation with a comprehensive weed management plan.

It is considered that the potential for improvements to these sites should be encouraged through the planning controls. Improvements to the creeks and creek corridors as habitats should be a priority, and planning controls introduced to recognise and manage their environmental qualities. The exact extent and requirements applying to the maintenance and improvement of the ecological values will require a detailed analysis.

The larger water bodies with potential for public usage in future should also be recognised, although those associated with land fill operations will have separate requirements under EPA approvals. Smaller dams on private land should be further investigated for ecological values as proposals for land use or development arise, and appropriate controls or measures to improve habitat and water quality introduced at that time.

FIGURE 2 SITES OF POTENTIAL **ECOLOGICAL VALUES**



DUNLOPS CREEK





DUNLOPS CREEK



DUNLOPS CREEK



LANTRAK TIP CONSTRUCTED WATER BODY



CONSTRUCTED DAM CLOSE TO MORDIALLOC SETTLEMENT CREEK



CONSTRUCTED DAM ADJACENT TO MORDIALLOC SETTLEMENT CREEK



CONSTRUCTED DAM CLOSE TO MORDIALLOC SETTLEMENT CREEK



CONSTRUCTED DAM CLOSE TO MORDIALLOC SETTLEMENT CREEK



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CARUANA RESERVE AREA

3.2 WHAT DO WE WANT?



FIGURE 3 DWARF GALAXIAS AND GROWLING GRASS FROG



SOURCE: CRANBOURNE LEADER & THE AGE

Improvements to the water in the Green Wedge that includes:

- Watercourses in good condition, including instream and riparian habitat, stream bed and bank stability, water quality and flow connectivity.
- Watercourses that support the community's desired ecological, aesthetic and recreational values.
- Water security in flood and drought for agricultural and ecological purposes.
- A resilient environment that is adaptive to climatic change.
- Water resource data that informs decision making within the context of the Green Wedge Plan.
- Land development that enhances environmental and water resources values.
- A community that is aware of water management issues and values water resources.

Improvements in the ecological health of the Green Wedge that involves:

- An improvement in the ecological values of water bodies and waterways.
- An improvement in the capacity of native fauna species to respond to the threat of climate change (through improved connectivity between resources and habitat).
- Protection and enhancement of existing ecological values and communities.
- Re-created habitat, habitat links and buffers for native fauna.
- Investigation for the re-establishment of conservation significant species Dwarf Galaxias (Galaziella pusilla) and Growling Grass Frog (Littoria raniformis) that have declined or no longer occur in the area (see Figure 3)

3.3 WHAT ARE WE GOING TO DO?

WATERCOURSES & STORMWATER

- Reinstate and suitably adapt/ engineer natural watercourse profiles, by removing existing concrete-lined channels and other in-stream structures, and replacing these with features that can accommodate natural riverine processes.
- Enhance the extent and quality of buffer areas between waterways and other land uses.
- Improve the understanding of water quality processes within the Green Wedge by identifying suitable locations for additional water course gauging stations to monitor water flows and quality.
- Prioritise opportunities for open space and recreational land use initiatives where improvements to watercourses can also be achieved.

- Continue to support works undertaken by Melbourne Water to improve waterway health.
- Facilitate positive experiences for the local and broader community associated with water assets.
- Use water, ecology, aesthetic and recreational values to enhance conviviality of public spaces.
- Improve the general connectivity of water resources and consolidate or consider the removal of isolated water bodies.
- Maintain and recognise the primary function of existing wetlands, which is to treat stormwater runoff into Port Phillip Bay.
- Seek inclusion of the Mordialloc Settlement Creek and Dunlops Creek in the next state-wide river condition assessment and prioritisation process.

FIGURE 4 EXAMPLES OF RAIN GARDENS



SOURCE: WWW.LANDCARERESEARCH.CO.NZ



SOURCE: WWW.RAINGARDENS.COM.AU

3.3 WHAT ARE WE GOING TO DO? cont.

- Consolidate Council's standing as leaders in best practice stormwater management and Water Sensitive Urban Design (WSUD) through consistent application within the Green Wedge.
 - Establish rain gardens
 within common streetscape
 infrastructure such as:
 bus stops, nature strips,
 roundabouts, etc (refer to
 Figure 4 for examples).
 - Ensure porous paving is used instead of impervious surfaces (refer to Figure 5 for examples).
 - Install wetlands and swales within Council reserves and private land developments (refer to Figure 7 for examples).
- Consider incorporating commissioned public art that integrates water and ecology (refer to Figure 6 for examples).

FIGURE 5 EXAMPLES OF POROUS PAVING



LINDEN GARDENS, ADELAIDE SOURCE: WWW.WSUD.ORG



BICENTENNIAL PARK, SYDNEY SOURCE: WWW.WSUD.ORG

WATER SECURITY

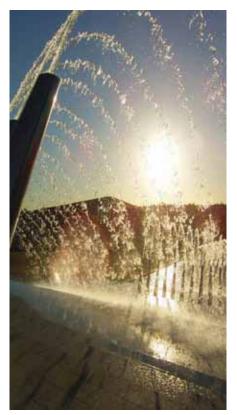
- Expand water supply options including: stormwater harvesting and recycled water infrastructure.
- Assess the potential impacts associated with the erosive hazard of flood events as well as flood event inundation.
- Support the sustainable integration of major transport infrastructure by ensuring that localised impacts to water and environmental resources are suitably managed.
- Avoid hydrological impacts associated with development which changes landscape topography.
- Ensure retarding basins associated with best practice landfill mounding will not be connected to the water resources network during peak flood events.
- Investigate opportunities for Aquifer Storage and Recovery (ASR), via: designated stormwater collection areas, infiltration ponds or galleries to improve water quality and availability.
- Support local water storage options for individual land owners including tanks wherever possible.

FIGURE 6 EXAMPLES OF ECOLOGY AND WATER THEMED PUBLIC ARTWORK





SOURCE: WWW.WSUD.ORG



3.3 WHAT ARE WE GOING TO DO? cont.

FIGURE 7 EXAMPLES OF SWALES



SANDHURST, MELBOURNE SOURCE: WWW.WSUD.ORG



KONDALILA, QUEENSLAND SOURCE: WWW.WSUD.ORG

BIODIVERSITY

- Establish areas of dedicated indigenous flora to improve biodiversity and to offset carbon emissions.
- Support major transport initiatives which integrate improvements to local environment and water resource issues.
- Improve connectivity between areas (through revegetation and land acquisition) including along waterways and between water bodies to allow species to move between available resources and habitats.
- Re-vegetate areas with indigenous flora and re-create habitat that can support indigenous fauna along corridors such as existing drainage channels/creeks.

- Expand upon and protect existing vegetation communities that are representative of pre-European communities and use droughttolerant species in plantings.
- Maintain and enhance existing refuges for indigenous fauna (reserves) and protect remnant vegetation.
- Establish a sense of local community ownership, encouraging the ongoing management and preservation of the biodiversity values in the area.
- Incorporate the use of local indigenous species in landscaping works.

3.4 HOW ARE WE GOING TO DO IT?

WATER RESOURCES

- Ensure the Dingley Arterial Bypass includes Master Drainage Planning to fully assess hydrological impacts in line with the *Transport Integration Act*. The Master Drainage Plan should:
 - Assess the potential for flooding impacts to occur to existing land uses such as residential and market gardens, as well as public spaces.
 - Identify mitigation measures such as water retarding basins/ wetlands; and upsizing drainage pipe networks to accommodate peak flow events.
 - Investigate potential for land acquisition to accommodate flood mitigation and/or water harvesting measures, such as along the Dingley corridor between Heatherton Road and Boundary Road.
- Consolidate the Deals Road drainage scheme and pursue potential for inclusion of a retarding basin near the junction of Deals Road and the Dingley Bypass.
- Seek inclusion of the Mordialloc Settlement Creek and Dunlops Creek in future state-wide River Health assessment and Waterways improvement processes.

- Seek to establish public access along the extent of the Mordialloc Settlement Creek and Dunlops Creek in the Green Wedge through purchase and negotiation with adjoining land owners.
- Install water flow and quality gauges for Mordialloc Settlement Creek at the northern end of the Green Wedge to provide baseline data which can then be used to design water treatment facilities.
- Advocate for the regular monitoring of pollution in creeks and waterways, including Mordialloc and Dunlops creeks.
- Support and monitor Moorabbin Airport Corporation's initiatives for improvements to the capacity of the Mordialloc Settlement Creek, and work with stakeholders to ensure that these incorporate suitable WSUD features.
- Complement the proposed improvements to the Mordialloc Settlement Creek outlined in the Moorabbin Airport Master Plan, through long term reclamation of a more natural stream profile between Old Dandenong Road and Centre Dandenong Road in consultation with land owners.

3.4 HOW ARE WE GOING TO DO IT? cont.

- Undertake flood estimation and mapping for sub-catchments of the Green Wedge using best practice probabilistic modelling.
- Review the Kingston Sustainable Water Use Plan (2006) with specific measures applicable to water security and watercourse condition within the Green Wedge.
- Where land use change occurs, use this as an opportunity to connect dams or other water impoundments to the watercourse system. Water bodies that are within relative proximity to the Mordialloc Settlement Creek, Mordialloc Creek or Dunlops Creek would be preferable.
- Incorporate the following areas into the Green Wedge:
 - The north-western part of the wetlands of the Waterways development and the stretch of Mordialloc Creek between Darling Road and Springvale Road.
 - Southwest of Braeside Park to include the water bodies north of Governor Road.
- Undertake an audit of fish barriers present within the Mordialloc Settlement Creek and Dunlops Creek; prioritise measures to replace these with appropriate fish ways.

BIODIVERSITY

- Coordinate works in the Kingston Green Wedge with the Living Links project by the Port Phillip and Westernport Catchment Management Authority (PPWCMA), to maximise the benefits of the project in the Green Wedge.
- Develop a Green Wedge Weed
 Management Plan to ensure the
 ecological values of the Green
 Wedge Reserves are protected
 from invasive species. Include
 specific actions for the reserves
 which may include controlled
 burns, slashing/mowing, and hand
 weeding around significant plant
 colonies.
- Undertake targeted surveys for the Growling Grass Frog (*Litoria raniformis*), Dwarf Galaxias (*Galaxiella pusilla*), and the Southern Brown Bandicoot (*Isoodon obesulus obesulus*), to determine the presence/ distribution of these species, target conservation activities towards these areas and establish linkages between important habitat areas. Stipulate targeted surveys in future planning controls if they are applied to sites with ecological value.

- Investigate need and feasibility
 for further release of significant
 species Dwarf Galaxias (*Galaziella*pusilla) and Growling Grass Frog
 (*Littoria raniformis*) that have
 declined or no longer occur in the
 area.
- Prepare Vegetation Management Plans for specific areas/ reserves identified following the completion of targeted surveys for rare or threatened species. The Plans should include revegetation, weed management and monitoring actions, and be focused on an objective to increase fauna habitat and establish linkages between reserves.
- Include in the Vegetation
 Management Plans vegetation
 management targets focusing
 on remnant and re-vegetation at
 key sites (review every 5 years)
 (incorporating recommendations
 from Yugovic et al 2010.)
- Negotiate with VicRoads to ensure adequate wildlife underpasses are included in design works for Dingley Bypass and Mornington Peninsula Freeway.
- Develop a protocol in line
 with National standards (e.g.,
 Australian Standard AS 4978.1—
 2006: Quantification, Monitoring
 and Reporting of Greenhouse
 Gases in Forest Projects Afforestation and Reforestation)
 for planning and establishing

- dedicated areas of native forestry as a sink for carbon emissions.
- Undertake detailed analysis of creeks, water bodies and land identified as having potential ecological value. (Refer to Map 3)
- Prepare a Habitat Links Strategy that defines the locations, species and methods for establishing a network of native fauna habitat links.
- Apply planning scheme overlay controls (eg Environmental Significance Overlay) to those sites identified as having ecological value, including wetlands, buffer areas and strategic habitat links.
- Apply planning scheme controls to protect and encourage appropriate vegetation along areas designated for wildlife corridors.
- Investigate the use of native vegetation offsets from other parts of the municipality to establish permanently protected areas of native vegetation in the Green Wedge.
- Acquire private freehold land to improve ecological connectivity where environmental values have been confirmed

- Undertake revegetation along the Mordialloc Settlement Creek, in association with weed management to improve habitat continuity between Braeside Park and the remnant native vegetation associated with golf courses to the north-west of the Park such as Spring Valley and Kingston.
- Work with the Carrum nursery and Green Links nursery, which propagate indigenous vegetation for the general 'Sand-belt' region, to establish and source plants for revegetation of private and public land.
- Continue controlled burning in The Grange Heathland Reserve to facilitate the recruitment of indigenous plants and to control weed seedlings. The controlled burns should be followed by weed control (1-2 years at each burn site) to prevent weed seedlings, especially in the first spring (as recommended by Yugovic et al 2010)
- Cease all planting in the Grange Heathland and Rowan Reserve Woodland Reserves and rely upon

3.4 HOW ARE WE GOING TO DO IT? cont.

natural recruitment to obtain new plants (as recommended by Yugovic et al 2010)

- Remove all plantings and progeny of such plantings in the reserves, while retaining all indigenous plantings and their progeny (as recommended by Yugovic et al 2010)
- Investigate the status of EVCs in the Kingston Green Wedge, and take appropriate management action. The investigation should include a review of the revegetation with a detailed understanding of the distribution and species composition of the EVCs prior to planting and removing plants (as recommended by Yugovic et al 2010)
- Maintain existing buffers to Reserves and implement weed control.
- Consider methods to protect reserves from invasive species which may include fencing, having regard to any negative impact this may have on connectivity and

natural recruitment between areas.

 Support the establishment of carbon sink / urban forests that utilise indigenous species and assist in the re-establishment of functioning ecological communities.

COMMUNITY AWARENESS & INVOLVEMENT

- Develop activities and/or events based around water resources, e.g., model boats, frog census, Waterwatch.
- Use different media to engage the community in valuing water resources such as Melbourne Water's Waterways Stories.
- Encourage and support landholders and residents to engage in programs of Melbourne Water and Catchment Management Authority.
- Engage the more than 20 local community groups in Kingston (City of Kingston, 2007) that work on projects such as plant propagation and re-vegetation, weed control, erosion prevention and remediation, and water quality monitoring, to assist in realization of the Chain of Parks concept.
- Develop interpretive walks for Reserves in association with Friends groups.

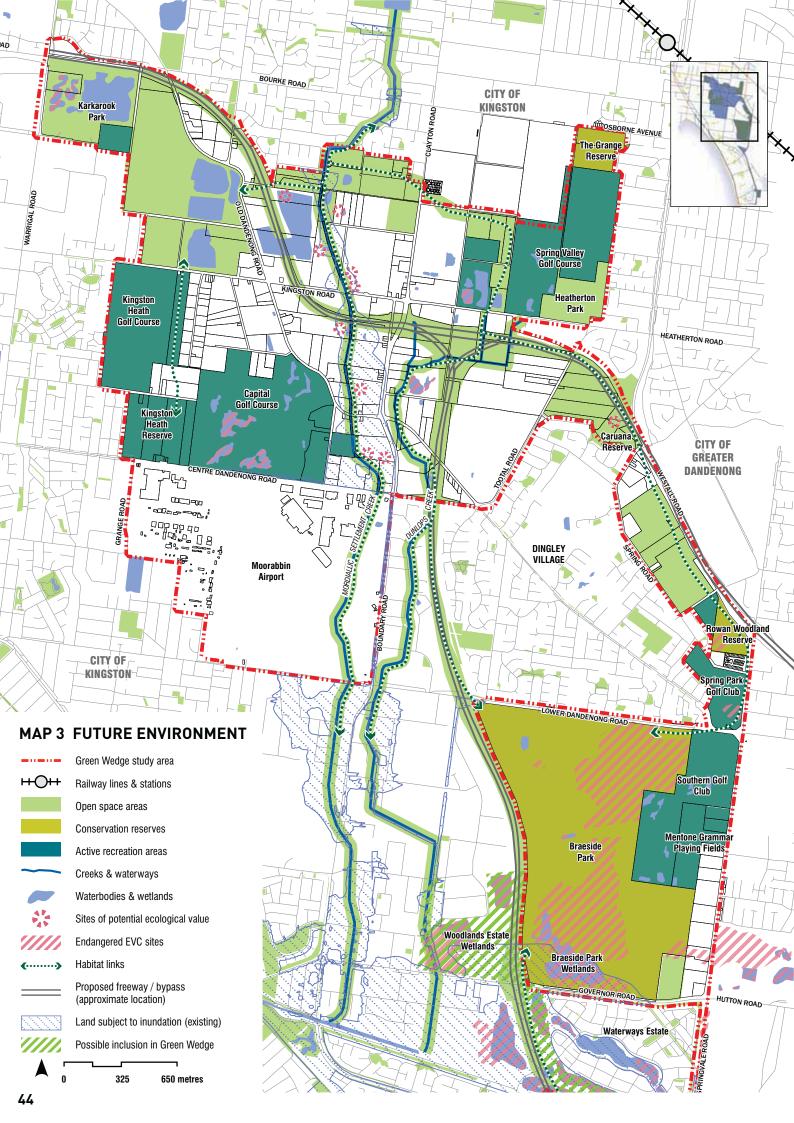


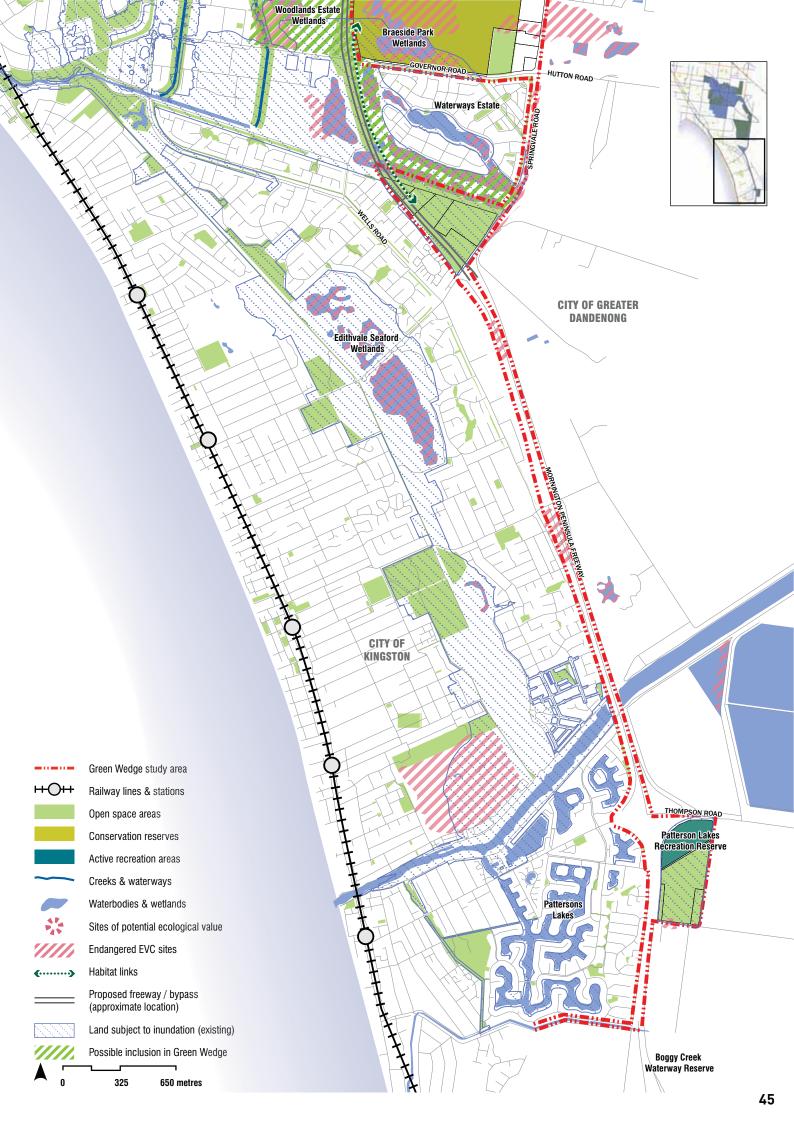
FUNDING

- Actively support community participation in major environmental programs (eg Clean Up Australia Day, National Tree Day) and establishment of Friends groups for watercourses.
- Actively support community participation in managing environmentally significant areas, such as through the establishment of Friends Groups, Landcare programs and committees of management.
- Ensure that suitable publicity (eg website, Council publications) is made available about the impacts of dogs and cats on native wildlife, and ways to minimise this impact.
- Investigate methods (eg grants, free advice) to encourage land owners to undertake revegetation and biodiversity conservation on private land.

- Access funding through available programs including:
 - Melbourne Water's Programs including Corridors of Green; Stream Frontage Management Program; and Community Grants for Rivers Program.
 - The Living Links Short Works Program
 - DSE Communities for Nature Grants program
 - Grants (between \$500 and \$40,000) available from the PPWCMA for works such as Pest plant and animal management; Protection, enhancement or establishment of native vegetation; Landcare support; Threatened species; Community education and capacity building.
- Encourage and facilitate multistakeholder investment in water infrastructure which can achieve multiple objectives for Kingston Green Wedge.







4

What Types of Land Uses and Activities Do We Want?

4.1 THE ISSUES

The types of activities that occur within the Green Wedge are of primary concern to everyone with an interest in the Green Wedge. What sorts of uses should be allowed? What should be encouraged and what discouraged? Under what conditions should certain uses be allowed, and how can this be achieved?

COMMUNITY FEEDBACK

Overwhelmingly the broader community wants to see the Green Wedge used for 'green' uses – agriculture, open space, environmental wetlands and reserves, recreational uses. A large proportion do not want to see more landfills and industrial uses. Landfills were cited as the source of smells and rubbish in the streetscape by nearby residents. Many did not consider the Airport to be a use that should be found in a Green Wedge. Many felt that some development was inevitable, and a smaller number of people support rezoning some land for residential and commercial uses.

Landowners within the Green Wedge have expressed uncertainty and frustration regarding the limited range of land uses that are permitted, the lack of clear direction as to the future of the Green Wedge, difficulty in obtaining a market valuation for the land, and a lack of willing land purchasers within the area due to these uncertainties. Several

horticultural / agricultural operators expressed their view that agricultural use was not viable and was severely constrained by interface issues with surrounding land uses and land size.

However we are required to consider the uses that may occur within the Green Wedge within a State Planning context. The State Planning Framework allows Green Wedge land to be used for uses that cannot be accommodated within builtup areas, such as waste collection and recovery, airports, as well as agriculture, recreation and nature conservation. We need to work within these parameters to determine the appropriate mix and conditions under which these uses can co-exist. Some uses such as retailing and residential cannot occur in the Green Wedge, therefore if we want them in the area the land may have to be rezoned and removed from the Green Wedge. This is not to be proposed lightly or without significant strategic justification.

LAND USE TYPES

There is a diverse range of economic/ business activity and land uses within the Kingston Green Wedge, including:

- Private recreation (such as golf courses);
- Aviation and associated uses;
- Education (including associated open space);
- Industrial activity (including manufacturing, wholesaling);
- Landfills;
- Resource recovery and recycling; and
- Agriculture and nurseries.

The businesses within the Green Wedge are at varying stages of development, with some businesses and institutions newly established, many long term tenants of the area, and a number of businesses either in decline or nearing the end of their operational timelines.

Table 1 provides a simplified summary of the level of entrenchment of the main business types/industries within the Green Wedge. Business groups have been classified as follows:

- Entrenched hose businesses that are well established in their current location, have been operating in their current location for many years, have made significant investment in the current location and expect to continue operations in the current location indefinitely;
- Developing those businesses relatively new to the area but have made investments and expect to be in the current location for some time;
- **Stable** those businesses/land uses that have operated within the green wedge for some time and see no immediate need to re-locate;
- Uncertain those businesses that identified threats to their viability in the current location and anticipate relocating unless circumstances change;
- In transition those businesses who are likely to reach the end of their operations in the current location in the short term and whose transition out of the local area will need to be addressed by the Green Wedge Plan; and
- In decline those businesses
 which identified that their current
 location is no longer suitable and
 that their industry is no longer
 viable in the local area.

TABLE 1 BUSINESS ENTRENCHMENT IN THE KINGSTON GREEN WEDGE

In decline	Agriculture	
In transition	Landfill	
Uncertain	Nurseries	
Developing	Recycling Education	
Stable	Industry	
Entrenched	Golf Moorabbin Airport	

SOURCE: URBAN ENTERPRISE 2011

TABLE 2 LOT SIZE ANALYSIS

Lot size (hectares)	No.	% of lots	Cumulative %
0-1	255	49	49
1-2	47	9	58
2-3	44	8	66
3-4	38	7	73
4-5	26	5	78
5-6	30	6	84
6-7	12	2	86
7-8	6	1	87
8-9	8	2	89
9-max (29.3)	57	11	100
TOTAL	523	100	100

LOT SIZES

Table 2 demonstrates lot sizes in the Kingston Green Wedge (refer to Map 4 Green Wedge Lot Size Analysis). Analysis of this data reveals that:

- Almost half the lots are 1ha or less;
- 73% of lots are smaller than the minimum lot size of 4ha that applies in the Green Wedge Zone. (NB. No minimum lot size applies in the Special Use zone.)
- An additional 11% are between 4 and 6 ha, 11% over 9ha and the remaining 5% are between 6 and 9 ha.

• The large lots are primarily golf courses, open space or tips.

The small lot sizes in the Kingston Green Wedge pose a number of constraints on potential land use both from a practical and legislative sense, as some uses are restricted by lot size in the planning scheme. The limitations on land use need to be taken into account in planning for the future of the Green Wedge.

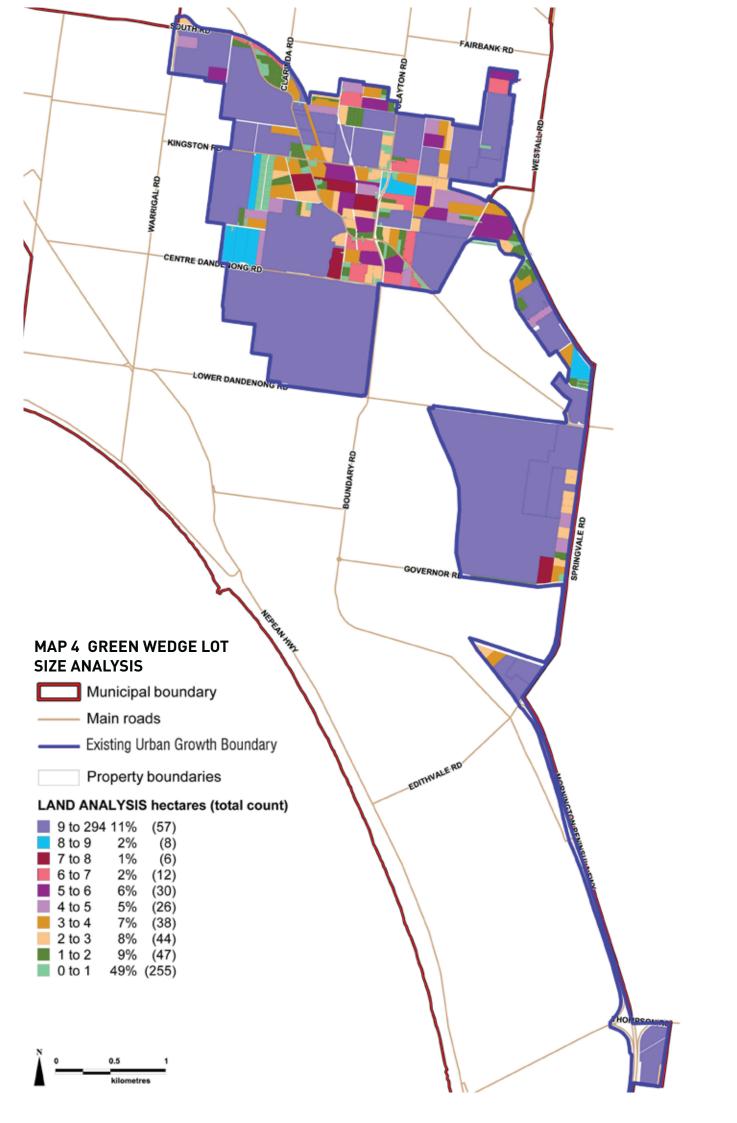


FIGURE 8 EXISTING AGRICULTURAL & HORTICULTURAL USES IN THE GREEN WEDGE







AGRICULTURE/ HORTICULTURE

Market gardening has been a feature of the Kingston Green Wedge for more than 70 years; however the number of successful businesses in the area has declined significantly from a peak of around 100 market gardening farms to just four today. This industry is considered to be in decline in the Kingston Green Wedge. This assessment is supported by the South East Green Wedge Report (SGS, 2008) which estimated that the agricultural industry within the Kingston Green Wedge was declining at 11% per annum.

The types of agriculture undertaken within the Green Wedge are predominantly horticulture — vegetable growing, flowers and wholesale plant nurseries, although there is one egg farm and occasional animal grazing / agistment (refer to Figure 8). Traditional agricultural production is significantly constrained

by the impacts of urbanisation, land fragmentation, soil degradation (from many years of intensive use) and the lack of a reliable supply of high quality, affordable water.

Opportunities for business growth are limited by land availability. Existing businesses have increased scale of production by leasing land, however this has necessitated adoption of relatively inefficient production systems due to the fragmentation of land holdings.

The farming land parcels are too small to create the economies of scale required to compete in the Melbourne vegetable market and this has been exacerbated in recent times by the Coles/Woolworths duopoly. This has been confirmed by discussions with representatives from the Department of Primary Industries who noted that only small, labour







intensive, niche agriculture would be viable on lots of the typical size in the Kingston Green Wedge (8 hectares or 20 acres) and that growers of the produce typically produced in the local area (eg. spring onions, lettuces, Asian vegetables) generally require at least 40 hectares (100 acres) in single ownership to be viable.

In addition, we must have regard for the opinions of those who own and work market gardens in the area, many of whom indicate vegetable growing is not a viable business even in the short-medium term. Gardeners also cited deteriorating soil quality, traffic and access issues, restrictive zoning controls, complaints from neighbouring uses due to dust and spray overspill, impacts from nearby land fill and industrial operations, and poor water quality as contributing factors to the local industry's decline. Only one current

market gardener is of sufficient size to compete on a metropolitan level – this is due to this particular gardener leasing a number of agricultural parcels from other former gardeners who can no longer operate a viable agricultural business on their land. The fragmented nature of the resulting parcels creates significant challenges for operational efficiency.

Combined, these constraints far outweigh the locational benefits in terms of access to markets and labour, and lower transportation costs. The lack of recent investment in new agricultural businesses attests to the area's lack of comparative advantage for market gardening in particular.

We have therefore concluded that the Kingston Green Wedge is no longer a viable location for the historical forms of agriculture in the area. It is likely therefore that the number of market gardens will reduce even further in future. Recognition of this fact does not however negate the legitimacy of continuing to support and encourage the existing operators in whatever capacity the Council is able, and certainly does not indicate these uses should not continue to be encouraged through the planning controls.

In order to retain an agricultural presence on the Green Wedge alternative uses will need to be considered and encouraged. Other types of agricultural activities that could be encouraged in the future include:

- Expansion of existing 'amenity horticulture' – wholesale and retail nurseries (subject to secure, high quality water supply)
- Greenhouse horticulture (subject to water supply also)

FIGURE 9 EXAMPLES OF POTENTIAL FUTURE AGRICULTURAL ACTIVITIES







- Community supported agriculture (creation of a direct relationship between the producers and consumers)
- Community and/or education gardens
- Activities complementary to agriculture such as:
 - Electricity generation from solar photovoltaic energy
 - 'Pick your own' style farming

These uses can be encouraged through the planning policy and controls, and through establishment by Council, seeding funding, proactive sourcing of potential operators or assistance to interested community groups.

NURSERIES

There are a number of wholesale plant nurseries operating within the Green Wedge. This is a desirable industry for the Green Wedge, in that nurseries generally contribute to the economic activity of the area by creating employment and providing a service to Kingston residents and businesses, and do not generally negatively impact on the amenity and the general concept of a Green Wedge.

However, it is considered that this industry is generally uncertain about its ongoing viability in the Green Wedge due to small land parcels and the need to maintain exposure to passing traffic once the Dingley Freeway is constructed. Furthermore, there are already a number of large nurseries in the Green Wedge (although one will need to relocate with the construction of the Dingley Bypass), meaning that the local area would be unlikely to be able to sustain any more businesses in this







RECREATION FACILITIES

industry due to the high competition levels. This is an important consideration given that nurseries are one of the few commercial uses permitted within the Green Wedge Zone at present, and if any further land was to be zoned Green Wedge, there would be limited agricultural and commercial opportunity to productively use this land.

The range and quantity of existing recreational activities within the Kingston Green Wedge is extensive and includes several a number of sports ovals/fields, tennis, basketball and baseball facilities, golf courses, go-cart circuit, pistol range, paintball fields, informal equestrian trails and facilities, and private school sports fields. Many of these serve a local and regional catchment.

The Implementation Strategy for Chain of Parks that is relevant to the Green Wedge, identifies a guiding principle for the park should be to "provide for recreational pursuits not adequately catered for in surrounding districts, including facilities orientated towards: the needs of women; elderly; disabled; and ethnic groups."

The Green Wedge is also to cater for more local recreational demand. Council has a role to play in determining local and some regional level recreational facility needs and opportunities. Sport and

Recreation Victoria is concerned with determining/ assessing demand for state and more regional level recreational facilities that serve a wider catchment, particularly in relation to funding for these facilities.

Despite the current range of facilities there is demand for more facilities as population increases, and the Green Wedge can readily accommodate more formal and informal facilities, in particular new playing fields / sportsgrounds.

Climate change adaptation should be incorporated into recreation planning. For example the potential for sport fields to be irrigated by creek water, and quality of stormwater runoff from playing fields to be treated by proposed wetlands should be explored. This would also minimise the maintenance costs of the playing fields. Rainwater collection and grey water recycling from proposed buildings should be incorporated.

Sports Fields

There are a range of particular recreational needs that have been identified, however this is not an exclusive list of options for the Green Wedge, and the Plan should be flexible enough to allow consideration of any recreational facility that can demonstrate a local /regional need and that fits within the other objectives of the Plan.

Sports fields can be developed for one specific sport if developed by an association or organisation established for this purpose or where multi-use is not possible or inappropriate. Large or regional sporting fields will require associated seating, including possible tiered and covered seating, and grassed mounding for informal spectator viewing. North-south orientation of fields is required. Siting of pavilions should always have regard to views (eg. to adjacent creek and wetlands for example). Associated training areas should also be located next to playing fields.

Playing fields will require associated car parking, service/maintenance vehicle access, change room and bathroom amenities buildings, potential clubrooms, including club administration offices, pitch lighting and fencing.

A kiosk or café could be developed in conjunction with sporting facilities. This facility could be developed with views/vistas over any nearby wetlands and/or creek.

Alternatively one larger sportsground facility that functions as a premier sporting venue to cater for a range of field sports could be developed. A sportsground of this nature could be developed to cater for ticketed events so it is a potential revenue raiser and tourism generator by hosting regional level sporting events. This may have other economic benefits to Kingston generally, with accommodation and entertainment requirements for visitors.

At present a regional indoor facility (other than for equestrian purposes) is prohibited by the Green Wedge zone provisions, however this may change with proposed amendments to the zone provisions.

In general, multi-function facilities should be supported such as:

- Possible use of indoor recreational facilities (such as basketball courts, a velodrome, equestrian centre) for a community centre or for cultural events, for example, to stage musical performances (subject to zone provision changes as noted).
- Possible dual use of sporting fields for soccer, baseball, other field sports. Possible for some of the fields to have ground markings for each of these sports, with baseball mounding relocated to the field only for the duration of the season. As an example the Ringwood soccer multi-purpose pavilion will include use by a

boxing club, administration space for boxing and cricket, and can be used generally for social events.

Measures should be adopted to ensure that sporting and recreation activities do not negatively impact on nearby residential areas. A minimum threshold distance should be established from residential areas to certain sport and recreation facilities that have noise and traffic impacts. For example, uses such as a cycling velodrome or sporting venue with large crowds should be sited away from residential areas and located more centrally in the Green Wedge. Existing paintball and go-karting activities also fall in to this category and are acceptable uses for the Green Wedge provided that off-site amenity issues are managed. Other private recreational activities of this sort (eg. BMX, urban camp) should generally be supported with the same proviso.

These recreational uses/facilities also represent more "niche" recreational uses that are "drawcard" facilities which people would be prepared to travel further/longer to, because people would not commute to them on a regular / weekly basis. These uses also typically have a large landtake and could potentially occupy reclaimed areas / former quarry sites.

Certain sport and recreational facilities that have higher usage / are in greater local demand should be developed near to residential areas. For example, tennis courts and basketball courts, with suitable landscape separation / buffer to provide some visual and acoustic mitigation.

Soccer

The Kingston Active Leisure Plan indicated demand for soccer pitches and pavilions. Development of at least one synthetic pitch could accommodate regular and intense use and hold regional events. Examples of soccer facilities include:

- Maroondah Council in Victoria has received funding from State and Federal Governments for the Ringwood soccer multi-purpose pavilion. This includes replacing the existing soccer pitch with new synthetic surface.
- Funding has been secured from the State Government for multimillion dollar sporting and recreational precinct, Casey Fields, in neighbouring Casey LGA (refer to Figure 11). This precinct includes a regional soccer facility, comprising two senior and two junior fields.

FIGURE 10 EXISTING GOLF COURSES WITHIN THE GREEN WEDGE



SPRING PARK GOLF COURSE



MELBOURNE GOLF ACADEMY (PART OF THE CAPITAL GOLF COURSE)



SOUTHERN GOLF CLUB

Golf

The Kingston Green Wedge includes a number of private golf courses. The broader Sandbelt is well known as one of the best agglomerations of golf courses in Australia and indeed the world. The golf courses within the Green Wedge have been located there for many decades, have substantial memberships and have made significant investments in their current location.

Overall, the golf courses are expected to be long term occupiers of the Green Wedge and are considered to be an 'entrenched' land use. Although these courses are privately owned, the 'green' nature of the landscapes is consistent with the overall Green Wedge themes of open space, vegetation and recreation, and should be considered a desirable use within the Kingston Green Wedge.

Golf clubs in the Green Wedge have identified access to water and retaining buffer distances as their major issues. Whilst at present sufficient water can generally be accessed through recycling storm water and storing on site, in years of drought there have been water shortages.

Many clubs have purchased adjoining land parcels to provide a buffer to surrounding uses. Owning adjacent land allows the golf clubs to minimise amenity impacts from surrounding uses (particularly landfills) on the golf course, reduce the risk of stray golf balls causing damage to other properties/persons, and control surplus land for temporary parking or future expansion. These buffer areas need to be maintained.

There is demand for an 18 hole public golf course given the loss of 18 hole

FIGURE 11 EXAMPLES OF RECREATION VENUES



DAREBIN INTERNATIONAL SPORTS CENTRE SOURCE: WWW.FLICKR.COM

public golf course at Moorabbin Airport and also that there is only one other public access golf course in the Kingston Green Wedge. Due to the large landtake of a golf course, this could realistically only be accommodated in the Heatherton locality (in the Chain of Parks / acquisition overlay) and should Parks Victoria be amenable. This could possibly form a land swap involving other Council owned land.

It is noted that golf courses also provide significant habitat and biodiversity values that need to be recognised and enhanced where possible. The Woodlands Golf Club contains one of only two biosites of state significance in the Green Wedge (the other is in Braeside Park).



CASEY FIELDS PLAYGROUND SOURCE: WWW.PANORAMIO.COM

Cycling

A cycling velodrome is an indoor cycling facility that could be used for regional and state cycling events, and serve professional cyclists and novices alike. There is potential for a cycling velodrome facility in the Green Wedge. There are currently two velodromes in Melbourne. One of these is in the Darebin International Sports Centre (in Thornbury, refer to Figure 11) and the other is in the Melbourne central activities area (Hisense Arena).

The indoor nature of velodrome facilities and the potential for sharing of amenities and other facilities and infrastructure, such as: car parking; toilets, change rooms, café/catering services, etc., means it is possible for co-location of other indoor sports such as basketball, netball and badminton, as per the Manchester



CALSHOT SOUTHAMPTON VELODROME SOURCE: WWW.FLICKR.COM

Velodrome, to achieve economies of scale and to maximise their usage. Co-location of an indoor or outdoor BMX or mountain bike track is a possibility, such as the soon to be provided facility at Britain's National Cycling Centre in Manchester U.K.

As previously noted development of an indoor recreation facility of this nature would require changes to the planning controls in Green Wedge zones.

FIGURE 12 EXISTING AIRPORT USES WITHIN THE GREEN WEDGE







DF0



FLIGHT TRAINING SCHOOL

Hockey

A particular interest in establishing a state of the art regional hockey facility has been expressed by Mentone Hockey Club. The Club has proposed a facility that includes indoor courts and outdoor pitches, change rooms, sports medical centre, training facilities, meeting rooms and associated facilities to support the sport. It is envisaged that the hockey centre would be heavily used and meet regional needs due to the increasing interest and growth in the sport. A location on Council owned land off Rowan Road, Dingley Village has been suggested however the location would require detailed investigation having regard to issues of access, land suitability, car parking and traffic management, noise and

after hours impacts on any nearby residents.

In general however the establishment of such a facility on the Green Wedge is supported by the directions of the Plan and requires further detailed discussions between the Council and Mentone Hockey Club.

MOORABBIN AIRPORT

The Moorabbin Airport is one of the largest land users within the Kingston Green Wedge, covering approximately 294 hectares. The land is owned by the Commonwealth government and includes airport, retail and business park functions.

The airport is considered an entrenched use, given that the land is subject to a long term federal lease arrangement, significant investments have been made on the site (to support both aviation and commercial uses), and there are plans to further develop the sites for commercial use. The site has a strong commercial advantage in that urban uses are not permitted on surrounding land within the Green Wedge, thus minimising competition for retail and commercial land in the local area. Furthermore, the development of the site for commercial uses has been encouraged by the Moorabbin Airport, creating a strong commercial environment for the site.

Given that the land is controlled by the federal government – and as such is not subject to the Kingston Planning Scheme – it is important that ongoing communication between all levels of government is maintained to ensure that the Moorabbin Airport contributes to, and does not undermine, the overall objectives for the Kingston Green Wedge.

LANDFILLS

The northern section of the Kingston Green Wedge has been extensively mined for its sand resources. A number of landfills located on these former mines are nearing the end of their lifecycle - most landfills will stop accepting waste by 2017. These operations are subject to approvals from the EPA and Council maintains an active interest in ensuring the operations are undertaken in accordance with the legislative requirements. Some of these properties could be made available for public use in the medium term. This industry is nearing a period of transition, and presents an opportunity to instigate change towards desirable and appropriate land uses for the Green Wedge.

New guidelines produced by the EPA for landfills include buffer distances from residential or other sensitive uses. Many of the existing sites would not comply with these guidelines. In addition the guidelines state that as potential risks from land fill gas exist for at least 30 years post-closure, this needs to be considered in all planning exercises. This has been adopted by VCAT in determining recent approvals within the buffer distances of existing and closed landfills.

Following closure of the landfills, the landfill operator retains liability for the site during the aftercare period (10 to 40 years depending on the type of waste in the landfill). The majority of the landfills are located

on private land, excluding the Victory Road solid inert site which is owned by Council. Former landfills would need to be purchased by Council/ Parks Victoria for them to be made available to the public for open space/ recreation. The ongoing liability and lengthy aftercare periods present challenges to the timely acquisition and conversion of former landfills to public use, however there are many examples of this transition being completed successfully, and the transition from landfill sites to desirable and appropriate Green Wedge uses should be pursued as a priority.

There is however a limit to the amount of land that can be purchased by Council and government, and there is also a limit to the amount of open space that is required and can be usefully and viably maintained. Alternative uses for the landfill sites need to be encouraged. As technology improves options for building on filled land may increase, and examples of cutting edge building techniques can be found overseas. These types of redevelopment are expensive and unlikely to be undertaken until the land value relative to the investment required is achieved. Other uses such as solar parks, private recreation uses and possibly plant farms that do not require substantial structures.

TRANSFER STATIONS AND MATERIALS RECYCLING

A number of land fill sites also undertake a transfer station role, and materials recycling is an activity that provides an increasingly profitable return as resources become scarcer.

The Alex Fraser Recycling plant within the Green Wedge was recently granted a 15 year permit which expires in 2024. The company has made significant investments on the site over the past two years and is strategically located to serve the south-eastern Melbourne growth area. The recycling operations are considered by the Environment Protection Authority to demonstrate best practice for the industry.

Current Green Wedge planning provisions encourage this form of activity for land that is not located in the Green Wedge Zone. However no other Green Wedge is located as close to residential areas as Kingston and therefore off-site impacts are of primary concern. As with landfills and mining activities, these uses are not considered to be a suitable long-term use of the Kingston Green Wedge due to the high potential for conflict with residential, agricultural and recreational facilities.

FIGURE 13 EXISTING BUSINESS USES IN THE GREEN WEDGE







CLAYTON ROAD







SPRINGVALE ROAD

The phasing out of these operations needs to occur over time, however many existing operations have several years of further approvals and business investments have been made on this basis. In addition, as with landfills, suitable alternative uses for these sites which have substantial contamination issues, must be found. Recycling industry is considered a 'developing' industry. As availability of non-renewable resources declines, investment in recycling processes becomes more viable. It is possible that technological and operational improvements could increase to a point within the next 10 to 15

years that some form of recycling activities may be compatible with nearby residential / agricultural uses. Recycling of glass, computer, clothing or other household waste may become possible and even desirable in a location close to urban areas, without off-site impacts.

If technology improves to this extent, there should be the opportunity within the Green Wedge Plan to revisit this issue, in limited locations and within strict parameters. For this reason, the Plan retains an 'open mind' about future possibilities in this field, while remaining firm that

any such uses with off-site impacts such as dust, noise, fumes or heavy transport through residential areas, is unacceptable. The areas designated 'Transition Areas' on the Land Use Map are the locations where this type of activity might be considered in the long term should all environmental concerns be satisfied.

FIGURE 14 EXISTING EDUCATIONAL FACILITIES IN THE GREEN WEDGE



HEATHERTON PRIMARY SCHOOL



HEATHERTON CHRISTIAN COLLEGE SOURCE: HCC WEBSITE

COMMERCIAL / INDUSTRIAL

There are two main clusters of commercial/industrial activity in the Kingston Green Wedge (see Figure 13). The cluster on Clayton Road near Kingston Road (including manufacturing, a reception centre, egg farm and other light industrial uses) and the cluster on Springvale Road between Lower Dandenong Road and Governor Road (containing a mix of large format retail, wholesale, light industrial and community uses).

These clusters are considered to be 'stable', in that businesses have been located there for a number of years and have made significant investments in buildings and plant machinery/equipment. These businesses are generally urban uses, well located from a business perspective with exposure to passing traffic and on appropriately sized

parcels with good buffer distances to residential areas.

These industries provide local employment within the Green Wedge and do not generate any significant amenity impacts or land use conflicts. It is considered that these businesses should be allowed to remain utilising their existing use rights, and that these locations can form a future focus for other uses that might otherwise appear inconsistent in form with the remainder of the Green Wedge. Uses such as community facilities, indoor recreation facilities, church or school facilities would be appropriately located within these areas.



HOLMESGLEN TAFE INDUSTRIAL SKILLS SITE



MENTONE GRAMMAR PLAYING FIELDS

EDUCATION

There are a number of education uses currently operating within the Kingston Green Wedge, including primary, secondary and tertiary education as well as associated active recreation facilities (see Figure 14). The Heatherton Christian College is centrally located in the Green Wedge. The College is growing in terms of student numbers and consider that they will be located in the current location in the medium to long term.

Education uses are considered to be compatible with the overall Green Wedge vision and existing schools and education facilities should be supported wherever possible. This will enable the existing and potential future education providers to invest with confidence in the Green Wedge, both in terms of buildings and hard infrastructure as well as active open space facilities.

Schools often present the opportunity for the broader community to benefit from their facilities, as is the case with Mentone Grammar School and Heatherton Christian College. Both schools offer their active recreation facilities to public sporting groups and associations for use after school hours. There is capacity for this to increase, especially at Heatherton Christian College.

Any expansion plans by these schools or tertiary institutions that provide agriculture related programs should be facilitated where possible by Council particularly where public use can be secured, as this will increase investment in the Green Wedge and contribute to the amenity and infrastructure of the local area. This is particularly desirable where an education provider may be interested

in developing currently vacant or disused land.

It is noted that the Minister for Planning has recently announced changes that may be made to the Green Wedge zone to allow for educational uses.

FIGURE 15 EXAMPLES OF SOLAR ENERGY PARKS







RESIDENTIAL

There are a number of dwellings scattered throughout the Green Wedge that reflect former or existing farming uses, and there are pockets where residential development has become entrenched due to old subdivision patterns. The scattered residences are not of concern to the Green Wedge objectives, although servicing of these dwellings with urban style mail, rubbish and infrastructure services is not ideal.

The cluster of residential land use along Pietro Road will remain, and it is considered that there could be wider benefits to the Green Wedge in recognising this usage and formalising the conditions under which residential development may be appropriate. This will ensure that residential development maintains the large lot, semi-rural spaciousness and appearance. There may also be benefit in extending this large lot style of residential development to the

south to enable a shared habitat and pedestrian link to be established to Kingston Heath Reserve as part of the development approval process.

A small portion of land adjoining the Urban Growth Boundary along the north of Leslie Road could also be suitable for some form of residential development for a number of reasons:

- Immediate abuttal with residentially used and zoned (non-Green Wedge) land along the rear boundaries, creating the potential for interface issues with new Green Wedge uses;
- Small allotment sizes which restrict usage to non-agricultural activities;
- Lack of frontage to a main road, which restricts opportunities for uses that require exposure to passing traffic, access for large vehicles or large numbers of visitors;

- Current vacant status. One of the sites is owned by Monash University and while educational uses are prohibited the range of uses to which the land can be put by the University is constrained;
- Future frontage to a public open space area including a link as part of the Chain of Parks, which provides the opportunity to construct a development that addresses the park and provides both an attractive interface and passive surveillance.

It is understood that some or all of the land was previously used for landfill. Therefore the potential for the land to be developed for a sensitive use may be curtailed or prohibited for some time. This requires detailed investigation to determine and resolve any issues of land stability, gas leakage and migration and land contamination.







Therefore this Plan cannot recommend that the land be rezoned or excluded from the Green Wedge at this point in time. Following further investigation by the land owners and resolution of any issues relating to future use for sensitive land uses, this land may however be considered suitable for rezoning for these purposes. Any rezoning/ removal from the Green Wedge should be accompanied by appropriate agreements relating to public domain improvements (eg roadway construction, footpaths, street tree planting to complement the park, park landscaping) and built form guidelines that clearly outline the form and low scale of development, frontage setback and landscaping treatment, orientation of the development toward the park and materials that complement the park environment.

Solar Energy Park

A viable use for former land fill sites could be as a Solar Energy Park (see Figure 15). Options for location of a facility of this nature on former land fill land should be investigated. For example, the Clayton Road land fill site is approximately 24 hectares in area, representing an opportunity to install a substantial energy facility, and Council owns land on the opposite side of Clayton Road or in Spring Road Dingley that could also be suitable.

A solar park of this size could generate enough energy to power several thousand homes. In addition, construction and on-going operation of the facility would create employment. A Solar Park in the Green Wedge has many benefits:

- Close proximity to the existing electricity grid (most solar parks to date are in remote locations)
- Minimal off site impacts
- Opportunity for community education about sustainable energy
- Potential co-location with transfer station provides a synergy of sustainable practices (recycling)
- Potential co-location with the gas extraction facility provides a synergy of 'energy generating facilities' that can form the basis of an 'Energy Park' concept

Funding for facilities of this nature is currently available through federal government ('Solar City') and state government (Sustainability Victoria) sources, and can involve community financial support in some cases.

FIGURE 16 CERES, BRUNSWICK









Community Sustainable Energy Park or Urban Farm

Establishment of a Community Sustainable Environment Park or an urban farm modelled on several highly successful examples including the Centre for Education and Research in Environmental Strategies (CERES) in East Brunswick, Myuna Farm, Doveton or the Collingwood Childrens' Farm Abbotsford could serve multiple purposes:

- Educate the community about the benefits of sustainable energy and/ or sustainable farming practices
- Provide a community focal point
- Accommodate an indigenous plant nursery
- Provide a café and venue for a farmers' market
- Provide a location for a community garden

Funding for this type of facility can be sourced from government grants, private sponsorship and self funding activities. (Refer to Figure 16 for images of CERES). The actual location of this centre could potentially be on any Council owned land, however it should be located with good access from residential areas and on public transport and walking/cycling routes.

Collocation with a future location for a Solar / Energy Park would be ideal, however along one of the waterways would also be a good location. Possible sites at present include Council owned land in Clayton Road or Spring Road.





SPECIFIC SITES

There are several key sites and areas within the Green Wedge that require direction and provide opportunities to realise the Vision. The future of these sites can shape the image, perception and direction of the rest of the Green Wedge if managed appropriately through this Plan.

Clayton Regional Landfill and Leslie Road former landfill

The Clayton Regional Landfill located at the corner of Clayton and Ryans Roads is anticipated to reach capacity within the next 2-3 years. Part of the northern portion of the site is affected by the Public Acquisition Overlay for acquisition by Parks Victoria in association with the Chain of Parks. The site is currently owned by five local Councils, and serves the region. The site opposite in Clayton Road is a former landfill, part of which is owned by the City of Kingston.

The western (Clayton Road) edge of the landfill site is currently occupied by an access road, parking, administrative buildings and waste handling structures. This section is unencumbered by the landfill itself and is proposed to contain a waste transfer station once the landfill ceases operation. The site already supports a transfer station, has good road access for large vehicles and is strategically located in the south east of Melbourne to manage the waste requirements of south-eastern Melbourne municipalities including Monash, Glen Eira, Stonnington, Whitehorse and Boroondara. In addition the gas extraction operation, which generates power returned to the electricity grid, will remain for some time.

Springvale Road Commercial

The Green Wedge Zone applies to a strip of land parcels on the west side of Springvale Road between Lower Dandenong Road and Governor Road. This strip includes a range of light industrial, commercial and

community uses, such as petrol station, boat sales, plant nursery, transport depot, church, social club and educational sports fields, and effectively appears as an urban highway cluster, with a majority of the land opposite in Springvale Road being located in a residential zone. The variety of land uses along this section of the Green Wedge land is not entirely unusual in the Green Wedge, but it constitutes a type of activity and appearance that is not representative of the desired activity mix and appearance for the Green Wedge. To that extent the area is a bad example of the Green Wedge, and not one that should be utilised as a 'precedent' for other areas within it. There is therefore an argument that it should not be part of the Green Wedge. If benefits to the Green Wedge can be attained by excluding the area, then the argument to remove this strip from the Green Wedge is strengthened.

The activities are generally well established and have made investments on their current sites in terms of buildings and site improvements. However, the current Green Wedge zoning restricts the established businesses in terms of their land use options, ability to access finance for improvements and certainty for future development. In addition the land is constrained by the allotment sizes of approximately 1-5 ha.

These sites are strategically located, being at one of the Gateways to the Green Wedge and directly abutting the regionally significant Braeside Park. Consequently the appearance, siting and design of development on these sites, public domain treatments and the impacts of any activity on the park environment and values are of paramount concern. The current sites present an inconsistent and unattractive frontage to a major arterial and at the entrance to the Green Wedge. There is an opportunity to achieve improvements to the appearance of the properties, their setting and the relationship with Braeside Park through enabling controlled redevelopment and reuse of these sites.

Changes to activities on these sites should be on the condition that the environmental values of the Park are protected and the interface between the sites and the Park improved. An appropriate buffer should be required to ensure that the ecological and environmental values of the Park are maintained, and possibly improved, having regard to the current operations which have no such consistent buffer. In addition, design guidelines to ensure that future buildings are designed to minimise visual impact and improve the appearance of the sites could also be imposed.

Public domain improvements to the road verges and intersection areas are needed to set the context and complement any private domain changes to reflect the Gateway status of the area. Public benefits in the way of landscaping treatments to the verge areas (in accordance with an overall landscape master plan for the whole frontage), improvements to the kerb and channelling (in consultation with VicRoads), gateway signage or markers, or funds to undertake these works, should be obtained through the approvals process for new development or rezoning.

Changes to the land uses on the sites should also maintain a low scale community or commercial approach to reflect its role as a gateway to the Green Wedge. Any new buildings should have a low site coverage and be set within spacious landscaped grounds, with minimal advertising material. Uses should have a minimum floor area to reflect the large format style of development and ensure that each site does not accommodate several uses within the building envelope. The types of uses encouraged should be office or community uses and not retail, other than plant nursery.

The other sites fronting Springvale Road in this location are used for residential, recreation or community purposes and are considered compatible with the Green Wedge. A property fronting Governor Road adjacent the petrol station is not used for, or considered to be suited to, commercial activity and should remain within the Green Wedge.

Tootal Road Residential 3 Zone

A section of the Green Wedge is in the Residential 3 Zone – this area covers approximately 8ha near the intersection of Tootal Road and the Dingley Freeway reserve. This appears anomalous at it is an urban zone which sits outside the Urban Growth Boundary. The land is primarily located within the Public Acquisition Overlay for the Dingley Bypass, however portions of the land appear to be privately owned.

As it is outside the Urban Growth Boundary the provisions of Clause 57 apply regardless of the residential zoning. This anomaly needs to be rectified in consultation with the DPCD and landowners, and potential for future open space area determined.

Triangle Site

Land referred to as the 'triangle site' is located in Aspendale Gardens in the southern section of the Kingston Green Wedge. The site is on the western side of Springvale Road opposite the intersection with the Mornington Peninsula Freeway and is currently within the Green Wedge Zone, and partly affected by the future route of the Freeway extension. The site is approximately 28ha in area.

The triangle site adjoins the residential development both to the north and south, but forms part of the South East Green Wedge opposite in the City of Greater Dandenong. This site adjoins the Mordialloc Creek and is flood prone, and a large portion is subject to acquisition for the proposed Mornington Freeway.

Melbourne Water has advised that the remaining land would preferably be established as an open space reserve to support and regenerate environmental values, in association with Melbourne Water's River Health department. Should the site not be purchased for open space, the development options for the site are limited by environmental, access and flooding issues that will necessarily require substantial investigation.



TRIANGLE SITE

4.2 WHAT DO WE WANT

Land uses and activities that will be encouraged in the Kingston Green Wedge are:

- Conservation areas that safeguard the environmental values of the area and provide passive open space opportunities.
- Recreation facilities that accommodate local sporting clubs, specialist sports, and regional catchments, and that satisfy demands of the growing population of Kingston and surrounding areas.
- Agricultural type activities and community gardens that produce food for local, regional or metropolitan markets
- Urban forests that provide for the re-establishment of functioning ecological communities, a green backdrop and carbon sink benefits.
- Environment parks that demonstrate future best practice in resource management and sustainability.
- State of the art energy generation facilities that have no off-site impacts on nearby uses.

- Elimination of uses that cause off-site impacts on residential amenity, agricultural viability and environmental qualities.
- A semi-rural style residential cluster along Pietro Road that provides a vegetated link between parkland to the north and Kingston Heath Reserve.
- School and tertiary campuses set within large grounds and associated recreation and open space uses that provide for local and regional students and incorporate publicly available facilities.
- Community and church facilities that offer services or are available for use by the local and regional community.
- More intensive land uses located on main roads where public transport access is possible, and smaller lots are common.
- Moorabbin Airport and associated aviation activity in a setting that contributes to the appearance, intent and function of the Kingston Green Wedge.

4.3 WHAT ARE WE GOING TO DO?

GENERAL LAND USE

- Support the ongoing operations of activities in the Green Wedge, that have minimal off site impacts and conform with the vision for the Green Wedge.
- Increase certainty for existing land owners within the Green Wedge regarding future land use and zoning opportunities.
- Recognise where stable and entrenched urban uses are located within the Green Wedge and consider zoning options only where distinct community benefits can be attained as a result.
- Manage the transition of those businesses and industries identified to be in decline or in transition to desirable and viable Green Wedge uses.
- Implement planning scheme changes that encourage the desired land uses and discourage or prohibit the undesirable land uses, including requiring appropriate minimum lot sizes.

AGRICULTURE TYPE ACTIVITIES

- Support the retention of existing agricultural activities including market gardens, horticulture, poultry and egg farming and animal husbandry.
- Establish a farmers' market and farm produce retailing opportunities within the Green Wedge.
- Support agricultural educational and training facilities.
- Provide expert agricultural advice to farmers.
- Support new agricultural activities that incorporate new techniques and processes, and structures to grow produce and accommodate equipment.
- Establish a community garden for use by Kingston residents.
- Investigate alternative water sources for the Green Wedge, including sewer mining and recycled water from Carrum.
- Investigate the establishment of an Agricultural Trust to retain and encourage agricultural uses in the Green Wedge.

4.3 WHAT ARE WE GOING TO DO? cont.

RECREATION FACILITIES

- Facilitate the development of active open space facilities, including those for commercial, school and community use.
- Establish a regional sports complex providing a range of adaptable, open air sporting fields to meet current identified and potential future local and regional needs, possibly in the naturally lowlying areas next to the Mordialloc Settlement Creek, including:
 - At least one synthetic soccer pitch and pavilion that can accommodate regular, intense use and regional events
 - Possible private regional level, multipurpose facility for baseball / basketball / soccer / other sports or entertainment (eg music)
- Retain and improve existing sports field and facilities providing for local sports groups.
- Allow for specialist sports and active recreation facilities in areas where activities will not impact on the amenity of nearby residential areas:
- Develop/support development of at least one synthetic soccer pitch that could accommodate regular and intense use and hold regional events.

- Ensure seating structures and associated facilities are located to retain open views and vistas of the surrounding landscape features.
- Develop playing fields with associated car parking, service/ maintenance vehicle access, change room and bathroom amenities building, potential clubrooms, including club administration offices, pitch lighting and fencing.
- Develop a kiosk or café to serve the needs of sporting spectators and visitors to the area.
- Consider the option of one larger sportsground facility that functions as a premier sporting venue to cater for a range of field sports and ticketed events.
- Establish a public golf course of 18 holes. Negotiate the possibility of this being located on the Heatherton portion of the land to be acquired by Parks Victoria

 possibly as part of a land swap with the City of Kingston.
- Support establishment of a cycling velodrome facility.
- Support the establishment of additional private sporting activities subject to protection of nearby residential properties from undesirable off-site impacts.

WASTE & RECYCLING FACILITIES

- Monitor the continued operation, within all approvals, of existing recycling facilities.
- Investigate the potential for stateof-the-art household waste transfer and recycling facilities with no off-site impacts as a possible future use of Transition Areas identified on the Land Use Map.
- Phase out, in line with current approvals, the operation of existing landfills, waste transfer and materials recycling activities.

EDUCATION

- Support school campuses within large grounds, and school playing fields, provided that the buildings form a small proportion of the site, facilities are made available for general community use and the school meets a local or regional need.
- Support tertiary institutions that provide agriculture and sustainability training, provided that the buildings form a small proportion of the site, and facilities are made available for general community use.

RESIDENTIAL

- Allow for existing residential uses to remain in the Kingston Green Wedge.
- Allow for additional dwellings in limited instances where direct community benefit can be obtained to achieve a linkage or similar open space improvement as identified in the Plan.
- Investigate the suitability of land on the north side of Leslie Road for future residential use.

ENVIRONMENT PARKS

- Establish a Sustainable Energy Park on land previously used for landfill, to produce energy from methane, solar energy and other sources.
- Establish a community
 environment park or urban
 farm that demonstrates the best
 environmentally sustainable
 practices and technologies,
 agricultural education and
 provides information, education
 and community activities.
- Support activities that incorporate environmentally sustainable practices and technologies.

COMMUNITY SERVICE USES

- Support the establishment of community service uses (such as health facilities, church organisations, social clubs, community organisations) that provide for an identified need in the local or regional area.
- Ensure community service uses are well-located to enable easy access by the local and regional community.

4.4 HOW ARE WE GOING TO DO IT?

AGRICULTURE

- Support the retention of existing agricultural activities in the Green Wedge.
- Provide educational and advisory support to farmers.
- Support the establishment of new small scale horticultural activities that involve farm sales, and wholesale plant nurseries.
- Provide a venue and management for the establishment of a farmers' market.
- Provide a venue for a community garden.

COMMUNITY ENVIRONMENTAL PARK/ URBAN FARM

- Determine the optimal location of a Community Environmental Park or Urban Farm
- Undertake a general feasibility assessment and concept.
- Seek sponsorship and State government funding for the concept.
- Involve local community and environment groups in the proposal and funding applications.

SOLAR PARK

- Investigate options for location of a Solar / Energy Park on a former land fill site and discuss with land owners.
- Undertake a detailed feasibility assessment for a Solar / Energy Park with the assistance of Sustainability Victoria
- Prepare a detailed proposal for a Solar / Energy Park and seek State and Federal funding.

COMMUNITY FACILITIES

- Undertake a needs assessment to determine community services required in the area, and locate new facilities in the appropriately designated areas of the KGW Plan.
- Support the establishment of new community facilities by public or private organisations that demonstrate a local or regional need, are conveniently located for access by users and are designed and sited appropriately.

EDUCATION

- Engage Heatherton Christian College and Mentone Grammar School regarding land requirements and expansion plans
- Act as an intermediary between Heatherton Christian College and local sports clubs and associations to facilitate public use of the College's facilities.
- Support changes to the planning scheme to allow consideration of low site cover educational activities (eg. located in substantial grounds, sporting fields with shared usage) in the Green Wedge that are located, designed and sited appropriately.
- Approach and discuss future options for location of agricultural related education facilities within the Green Wedge with tertiary institutions.

RECREATION

- Co-locate active recreation facilities where compatible, so amenities and other infrastructure can be shared, economies of scale achieved, and ensure maximum usage of facilities.
- Ensure viability of new recreational facilities by dual use / flexibility of use; some facilities to be ticketed
- Encourage dual use of facilities where feasible to maximise their usage, which is not necessarily limited to recreational use.
- Investigate with private developers, sporting bodies and Sport Victoria, the possibility of establishing regional sports facilities, and collocation of those facilities in one sporting complex
- Support changes to the planning scheme to allow consideration of low site cover indoor sporting facilities (eg. located in substantial grounds, shared usage) in the Green Wedge that are located, designed and sited appropriately.
- Investigate the opportunity to establish a regional hockey facility in conjunction with the Mentone Hockey Club
- Investigate the inclusion of horse trails with walking / cycling trails.
- Site recreational uses that have greater acoustic, visual amenity and traffic impacts away from

- residential areas to protect residential amenity.
- Site recreational facilities that have minimal environmental impacts and higher usage/demand, closer to residential areas.
- Ensure recreational facilities incorporate a range of sustainability measures in building/infrastructure/ landscaping design, management and maintenance.
- Generally develop recreational facilities close to arterial roads, public transport nodes, car parking, walking / cycling tracks and employment and residential hubs.
- Consider purchase of land by Council along the Mordialloc Settlement Creek for recreation purposes as land becomes available for sale
- Seek funding from Sport and Recreation Victoria via grants for recreational facility planning, construction and management (eg., Community Facility funding program)
- Seek opportunities for Federal Government grants which are often associated with international events.
- Investigate purchase of the 'Triangle site' by Melbourne Water for open space purposes.

4.4 HOW ARE WE GOING TO DO IT? cont.

WASTE AND RECYCLING

- Discourage the establishment of new landfill recycling or transfer station operations in the Green Wedge.
- Support the phase out of landfill, recycling and transfer stations, to new uses that can be demonstrated to ensure reduced off-site amenity impacts.
- Continue to ensure current approvals, including those issued by the EPA, are adhered to and enforced.

MOORABBIN AIRPORT

- Maintain close liaison with Airport planning authorities to establish plans and provide input as possible.
- Support environmental improvements on the site.
- Oppose additional non-airport related activities that may impact on commercial activities in the remainder of the City.
- Support activities that will generate employment for nearby residents
- Lobby State and Federal government for greater input to Airport planning by local authorities.



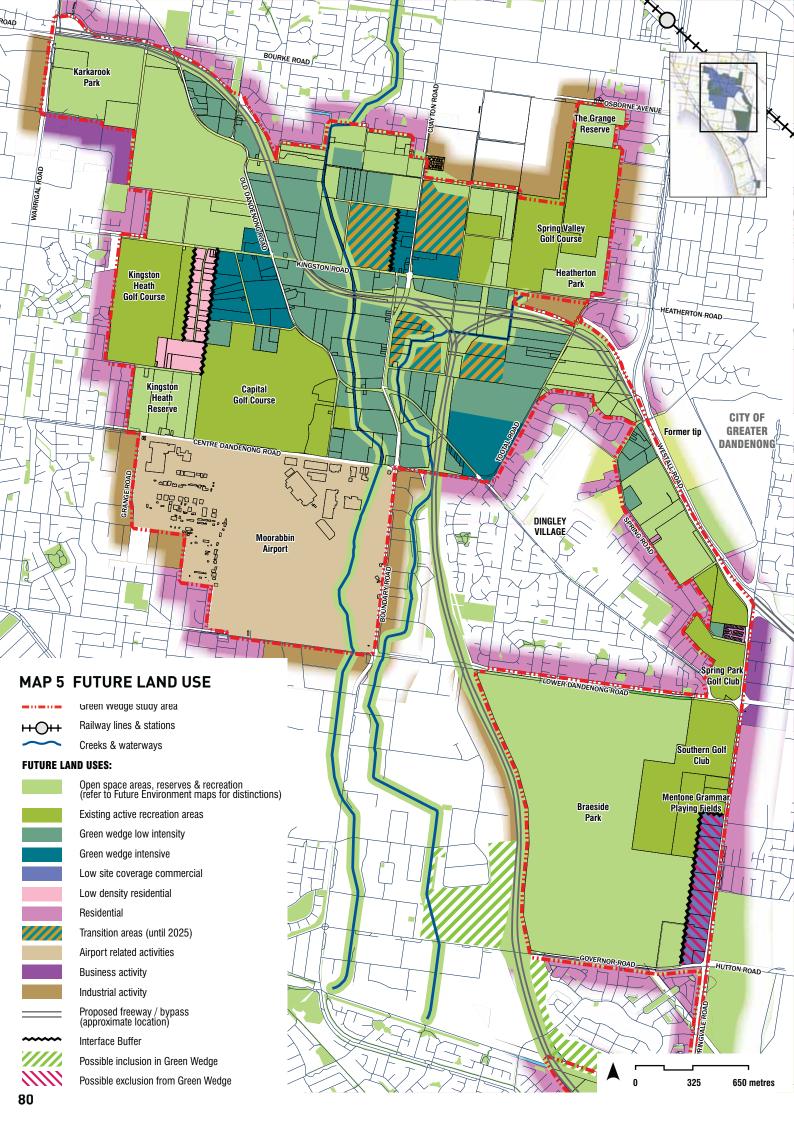
MOORABBIN AIRPORT

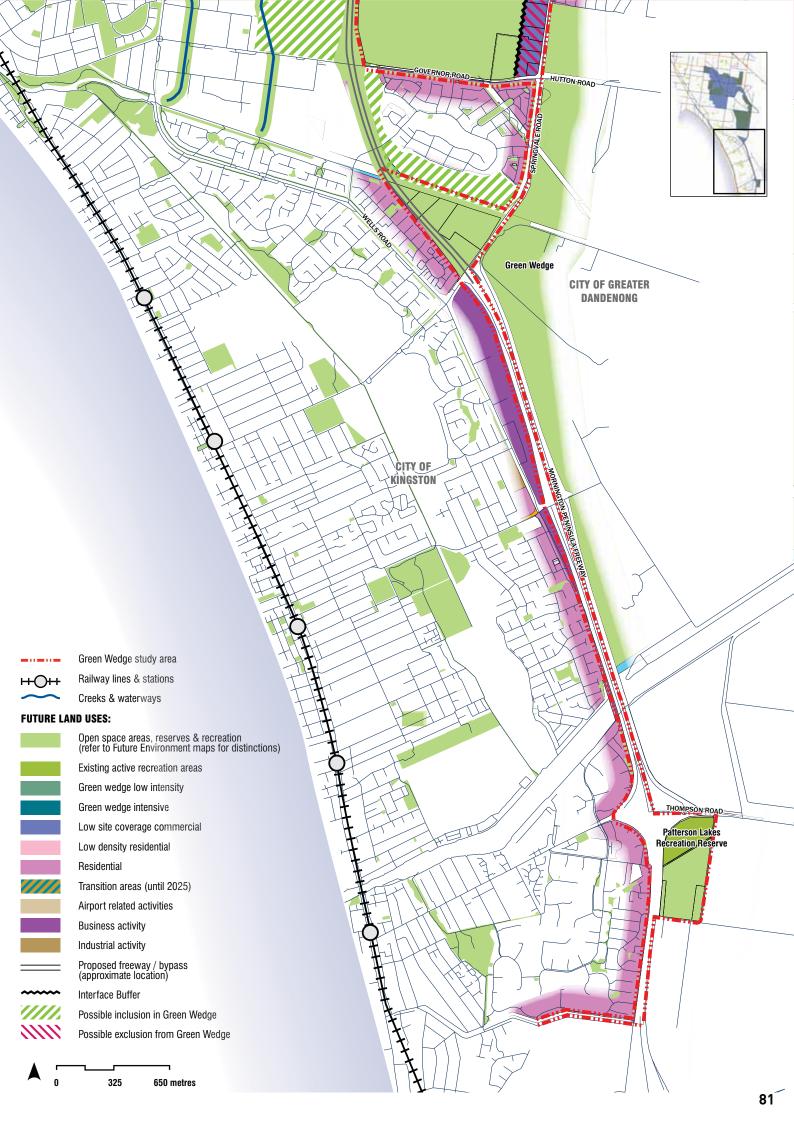
PLANNING SCHEME CHANGES

- Change the planning scheme controls to include the recommendations of this Plan as Strategy and Policy to effectively guide all future decision making.
- Through the planning scheme, actively discourage new landfill, materials recycling, transfer station and mining operations.
- Recognise the medium term operation of landfill, materials recycling and transfer station activities under current approvals in 'Transition Areas', require best practice methods to reduce off-site impacts of the operations, and eventual cessation of these activities at the end of the current approval timeframes.
- Change the zoning of land in the Special Use Zone Schedule 2 (SUZ2) to a Green Wedge zone.
- Resolve the appropriate zoning and potential open space use of remaining Residential 3 zoned land in Tootal Road, following acquisition for roadworks.
- Include detailed policy to guide decision making about appropriate land uses in Green Wedge Intensive and Low Intensity Areas, as shown on the Future Land Use Map, to ensure:
 - Intensive Areas accommodate uses such as accommodation (not residential), commercial,

- recreational or other Green Wedge uses that involve frequent public access, smaller sites and high site coverage (eg. camping and caravan parks, markets, hall, place of assembly, retail plant nurseries, some recreation facilities, place of worship, and some forms of tourist accommodation and education (if the zone provisions are altered).
- Low Intensity Areas
 accommodate agriculture, open
 space, recreational and sporting
 facilities, low site coverage
 community, commercial and
 education uses.
- Advocate for changes to the zoning and Urban Growth Boundary, when the opportunity arises, to include properties fronting Springvale Road within the urban area subject to inclusion of planning controls that:
 - Ensure that new uses and development on the sites provide a 10 metre buffer along any boundary abuttal with Braeside Park where no development can take place, and the land is professionally landscaped with indigenous vegetation as specified by Parks Victoria in consultation with the Friends of Braeside Park;
 - Limit the types of land use to office and community uses,

- in large format, low scale buildings;
- Require a maximum site coverage, hard surface coverage, setbacks, quality building design and other requirements in accordance with the Built Form Guidelines in this Plan;
- Obtain public benefits to undertake improvements to the public realm in the vicinity of the site, including but not limited to landscaping, signage, roadway appearance and general reflection of the location of the area at the 'gateway to the Green Wedge'.
- Change the minimum lot size for properties between Pietro Road and the Kingston Heath Reserve to 1 hectare, subject to the provision of a permanent public, pedestrian/cycle path (2 to 4 metres in width, depending on the volume of users) and an appropriately vegetated habitat link as indicated on the Access, Public Spaces and Environment Maps.
- Include the Built Form Guidelines in the planning scheme to ensure buildings are setback, landscaped and designed to achieve an improved appearance of the Green Wedge and to suit the particular location and form of use.





5

What Public Spaces Do We Want?

5.1 THE ISSUES

The way that public spaces are used and managed is of concern to the community. What open space is available to the public and how can it be used? How are the areas connected and in what ways? Areas along road ways are important public spaces that project an image of the Green Wedge. How can these be improved to project the green, semi-rural image that the community wants?

COMMUNITY FEEDBACK

As noted previously, community feedback strongly supported use of the Green Wedge for open space and recreational purposes. The role of the Green Wedge is seen as providing a respite from the urban area and a feeling of openness and 'greenery' is considered important. Many references were made to the implementation of the 'Chain of Parks' concept – providing pedestrian, cycle and equestrian linkages between the various parks and recreation areas. Many also commented on the poor appearance of the area and supported improvements to the appearance of the public areas, verges and roadways through the Green Wedge.

CHAIN OF PARKS CONCEPT & LINKAGES

The Chain of Parks concept dates from the 1970s, and was included in the Metropolitan Open Space Plan in 1988 as a major park. The concept was subsequently refined through a number of studies with an objective to create a series of connected parks that will provide open space and a wide range of passive and active recreational facilities for the local and wider regional catchment. This concept has been supported by the Council, State Government and the community. It is a key direction for the future of the Green Wedge.

The concept is dependent on the transition of rehabilitated former extractive and waste management industry sites. A Public Acquisition Overlay (for purchase by Parks Victoria) has been applied to some sites required for implementation of the concept, however fragmented land ownership, private land holders and a lack of state government funding for purchases has led to ad-hoc implementation of the Concept.

In 1992, a study for Melbourne Water and local Councils, (Implementation Strategy for the Chain of Parks, March 1992 by Deloitte Ross Tohmatsu et al)

PUBLIC OPEN SPACE

estimated the cost of acquisition of the entire Chain of Parks complex to be \$22.5 million (360ha at \$62,500 per ha). An additional \$32.5 million was estimated for development costs of the land for recreational activities. A revised estimate has not been prepared however it is clear that a substantial commitment of funds will be required by government and Council to achieve the concept.

The Green Wedge Plan will reinforce, strengthen and expand the implementation of this concept with a key objective to improve connections to link public parks and green space for pedestrians, cyclists, horse riders and native fauna (refer to Public Spaces Map). These linkages will be safe and provide a high level of connectivity to parks and other land uses to further encourage visitors to the Green Wedge.

Habitat links or corridors for native fauna use will vary in widths to support different types of species, with suitably dense vegetation (e.g. heavy ground cover of long grasses or bracken with an understorey of shrubs). Public open space in the Kingston Green Wedge is predominantly made up of reserves and parklands that are used for passive and active recreation and sporting activities. Many areas also have environmental values and significance as discussed in Chapter 2 – Environment.

The future of much of the rehabilitated landfills is likely to be public open space, however it necessary to ensure that this space is needed, is well developed and can be well maintained. There are a variety of uses to which open space can be put and the most appropriate use for the community, both local and regional, needs to be considered. Funding concerns and on-going maintenance costs may require consideration of semi-commercial models of operation or leasing arrangements.

There is considerable community involvement in many of the public open spaces in the Green Wedge. Local groups involved in maintenance of open spaces should be consulted and encouraged to be involved in maintenance and upgrade of open spaces.

Other authorities with responsibilities and land ownership in the Green Wedge should be encouraged to consider ways to improve public access and open space outcomes in their works. For example Melbourne Water could be encouraged to link water management (waterways, drains and wetlands, etc) as part of open spaces. Land, such as the Triangle site in Springvale Road, Aspendale Gardens, that has been identified as having some ecological value as a wetland, should be acquired by Melbourne Water fr open space.

Existing public open spaces in the Green Wedge cater for a variety of sporting and passive recreation activities, including football, soccer and other field sports, golf, wetlands for fishing, bird watching, playgrounds and walking areas. In general activities for young people such as BMX tracks, skateboarding, or basketball appear to be lacking.

6.1 THE ISSUES cont.

ACCESS

Access to open spaces within the Green Wedge varies depending on location in relation to surrounding residential areas. The parts of the Green Wedge most remote from the Urban Growth Boundary are relatively inaccessible by means other than the car. Where the car is the primary means of access, sufficient car parking must be accommodated on the site also. Many of the public open spaces are within walking distance of nearby residential properties, although improved access and signage to some locations will be beneficial. Linking of the spaces by walking, cycling or equestrian trails would improve accessibility throughout the Green Wedge.

The majority of the recreational areas and facilities are not easily accessible by public transport, with bus routes not providing sufficient infrastructure or stops close to recreational destinations. Some parks and reserves have restrictive fences, surfaces or bollards that may prevent access for users with wheelchairs and prams.

In general, access to open spaces and recreation facilities and location in relation to nearby residential areas should have a role in determining the type and appropriateness of recreational activity in any location. Small pocket parks and local recreation facilities are best located close to residential areas where walking access is encouraged. Larger facilities that may attract large crowds of spectators or regular non-local visitors should be located more remotely from residential areas, but still preferably on good public transport routes, and with space for adequate provision for car parking and associated facilities.



TOOTAL ROAD

STREETSCAPES

Streets and roads also provide important public spaces, providing connections and pleasant spaces for active transport and potentially for pedestrian movement. The streetscapes of an area are a highly visible element of the character of an area, and while having limited impact on land usage, have implications for the way the area is viewed and characterised. The distinction between 'urban' and 'non urban' can be emphasised quite readily through streetscape treatments including kerb and channel forms and materials, landscaping, vegetation species, placement and size, footpath treatments and signage.

The Green Wedge is currently dissected by a grid-like network of roads (see Access & Movement Map), ranging from four-lane arterial roads to unsurfaced local connector roads. The conditions of roads vary,

with many in poor appearance and lacking in basic infrastructure such as footpaths, kerbs and channels, planting, and lighting. Many of these roads do not support active travel transport uses.

Roads within the Green Wedge are the joint responsibility of the Council and VicRoads. VicRoads is responsible for the parts of major roadways used by through traffic, whereas the Council is responsible for other roads and any part of the roadway not used by traffic, such as footpaths and verges.

Streetscape Design Guidelines have been prepared to delineate the appropriate road designs for the various types of roadways within the Green Wedge. These guidelines will be used to apply consistency to the road network, and to support the determination of costs and funding for future road improvement planning.

The commitment of public funds to streetscape improvement can provide the impetus and example for other land users and owners to improve the appearance of their own properties, while at the same time potentially providing a screen from general view of some land use activities. Funding for these improvements could potentially be sourced through Council funds, VicRoads funds and private development.



OPEN RURAL STREETSCAPES

5.2 WHAT DO WE WANT?



- A linked open space system realising and expanding upon the 'Chain of Parks' concept
- An off-road, linked pathway system from Karkarook Park to Braeside Park.
- Parks, reserves and wetlands that are linked by paths, and protect and provide refuge for indigenous flora and fauna
- Passive recreational spaces large and small - that provide for quiet respite and informal activity
- Active recreation areas linked by pedestrian and cycle paths throughout the Green Wedge.
- Improvements to the appearance of roadsides through landscaping, and by regularising of footpath, verge and road treatments as appropriate to the role and function of the road.

5.3 WHAT ARE WE GOING TO DO?

PARKS, RESERVES AND WETLANDS

- Preserve existing parks and reserves and ensure that adjoining uses and development do not impact on the environmental qualities, tranquillity and amenity of these areas.
- Expand existing and establish new parks and reserves to include identified environmentally significant areas, buffers for sensitive environments, indigenous flora and fauna habitats and wildlife corridors.
- Establish new wetlands in areas with existing water bodies, adjacent to existing watercourses and potential habitats.
- Create wetlands to assist in water quality improvement of the watercourses and ground water, and mitigate flooding problems.
- Acquire land encumbered by former landfills as soon as safe and practicable and convert to passive recreation uses, particularly where such land can form part of the 'Chain of Parks' and/or provide a link to existing and proposed open space.
- Advocate for the acquisition of the Triangle site in Springvale Road, Aspendale Gardens by Melbourne Water, or other state government body, for open space.

STREETSCAPES

 Improve the appearance of roads within the Kingston Green Wedge by regularising footpaths, verges and road treatments as appropriate to the role and function of the road.

OPEN SPACE LINKAGES

- Progressively acquire land adjoining the Mordialloc Settlement and Dunlops Creeks (min. 10 metres each side) for public access, through the planning approvals process or non-compulsory acquisition.
- Progressively develop the Chain of Parks pedestrian and cycle paths as sections become available.
- Develop a themed path style and signage for the linked pathways to guide users and to indicate temporary alternative routes pending completion of linkages.
- Negotiate with VicRoads to ensure adequate under and overpasses are included in the Bypass and Freeway designs to accommodate pedestrians and cyclists at frequent intervals and to connect with the linkages.

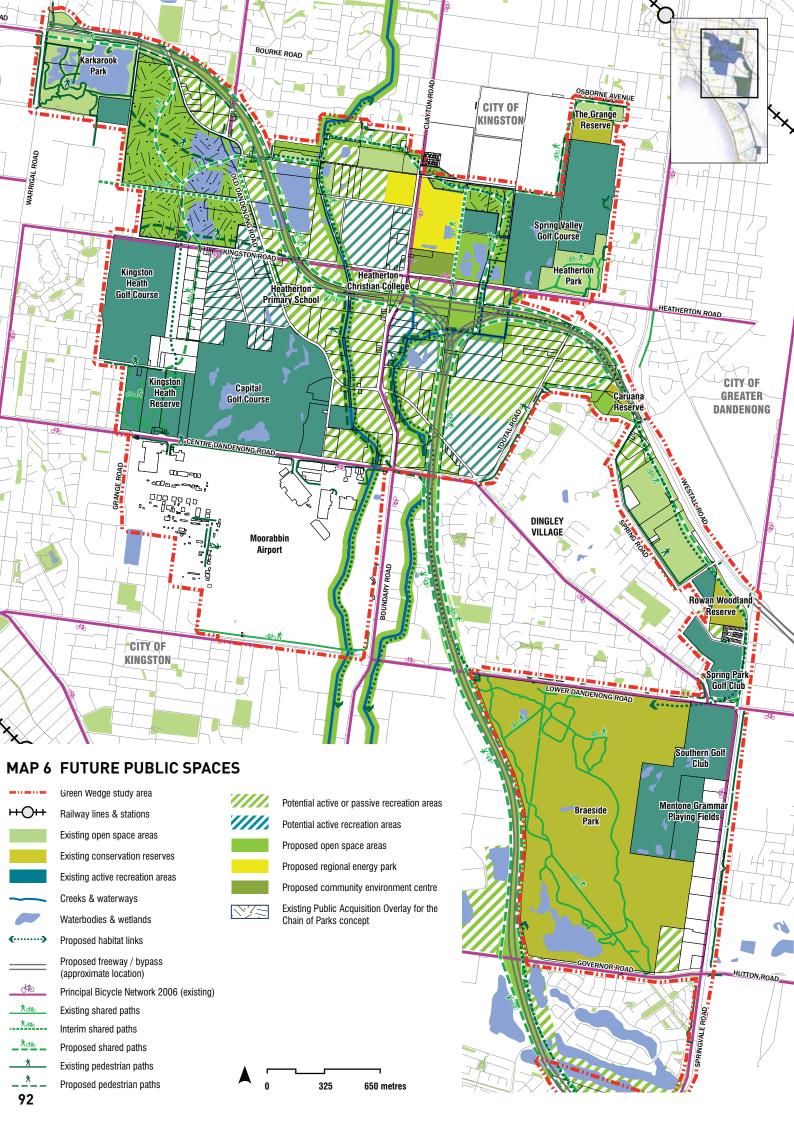
5.4 HOW ARE WE GOING TO DO IT?

PASSIVE RECREATION

- Create small 'pocket parks' close to residential and commercial areas outside the Green Wedge.
- Provide passive recreation areas within existing and new reserves and parks.
- Seek funding for open space acquisition from state and federal government sources.
- Continue implementation of the Sandbelt Open Space Project Development Plan, May 1994 (known as the Chain of Parks Concept Plan).
- Rezone Council owned land within the Chain of Parks Concept Plan area to Public Parks and Recreation Zone.
- Utilise open pace levies, developer contributions and the development approvals process to acquire land for open space and conservation purposes.
- Identify priority waterbodies for acquisition for their ecological values.
- Seek funding from State government sources (eg Sport and Recreation, Planning and Community Development), user groups and private organisations for completion of sections of the pathways.

- Involve local community, environment and user groups in 'volunteer days' to undertake works, landscaping and maintenance.
- Develop an approach to promote the design and construction of roads which incorporate footpaths and landscaping and accord with design outcomes sought in the Kingston Green Wedge Management Plan (refer to 5.5 Streetscape Design Guidelines).
- Progressively implement the road verge landscaping and footpath improvements for which Council is responsible as part of operational budgets.
- Negotiate with VicRoads to ensure upgrades to roads are made in a timely manner, incorporate the required space for landscaping and footpaths, with minimal impacts on Braeside Park.











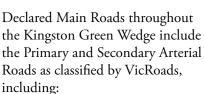
5.5 STREETSCAPE DESIGN GUIDELINES

Improvement in the appearance of roadsides is a key priority in improving the general appearance of the Green Wedge, reflecting its semi-rural status, assisting in improving habitat and ecology, and projecting the environmental awareness and sustainability themes that will underpin the Green Wedge's future.

The following Guidelines have been prepared for implementation by the relevant authority to provide a cohesive and comprehensive approach to the appearance of the public areas along roads in the Green Wedge.

TYPOLOGY 1: DECLARED MAIN ROADS





- Kingston / Heatherton Road
- Centre Dandenong Road
- Lower Dandenong Road
- Governor Road
- Thompson Road
- Warrigal Road
- Boundary / Clayton Road
- Springvale Road
- Westall Road
- Old Dandenong Road
- Clarinda Road (secondary arterial)

In general, Declared Main Roads serve as key connectors between major destinations. Predominant characteristics are listed in Table 3.







TABLE 3 DECLARED MAIN ROADS CHARACTERISTICS

Carriageway	Carry one to two lanes of traffic in each direction		
	Traffic lanes are clearly marked		
Speed Limit	70-80kph (reduced to 40kph at schools)		
Parking	Not provided		
Footpath	3-4m wide shared path on one or both sides of the road		
Bicycle Path	No dedicated bicycle lane marked on the carriageway		
Trees & Vegetation	Limited to occasional native tree planting along the roadside		
Public Transport	Form part of the public transport bus route		

Opportunities exist to

- Improve the number and regularity of street tree planting in existing nature strips. This would provide more shade and buffer from vehicular traffic for pedestrians.
- Improve amenity for pedestrians and cyclists, including provision of a continuous 3-4m shared path along one or both sides of the road.
- Plant additional large native/ indigenous trees at key locations such as at gateway sites/prominent corner sites.
- Provide additional median strip planting where possible.
- Provide wayfinding to crossing points and facilities/ features.
- Create opportunity for passive irrigation by incorporating WSUD principles into roadside verges.

Guidelines

- Extend street tree planting and other vegetation to provide regular corridors of green that intersperse or pass through the Green Wedge and flow onto private land
- Upgrade and make more consistent with the scenic vegetated landscape character of the surrounding area's major highways.
- Provide safe, direct and convenient pedestrian and cycle access and links to transit stops or interchanges.
- Provide safe crossing points along pedestrian desire-lines.

It should be noted that arterial road design is as required by the relevant roads authority.

5.5 STREETSCAPE DESIGN GUIDELINES cont.

TYPOLOGY 2: SECONDARY ROADS





Secondary Roads throughout the Kingston Green Wedge include:

- Spring/ Rowan Road
- Tootal Road
- Grange Road/ Second Avenue

In general, Secondary Roads have the following characteristics identified in Table 4.



TABLE 4 SECONDARY ROADS CHARACTERISTICS

Carriageway	Carry one lane of traffic in each direction	
	Line markings are generally not provided	
Speed Limit	60-70kph	
Parking	On street parallel parking in some locations (generally unmarked)	
Footpath	2- 3m wide footpath on one side of the road	
Bicycle Path	No dedicated bicycle lane marked on the carriageway	
Trees & Vegetation	Native roadside tree planting on both sides of the road	
Public Transport	Do not form part of the public transport bus route	

Opportunities exist to

- Widen key Secondary Roads where necessary
- Provide formal kerb infrastructure (semi-mountable rollover or flush and swale) where necessary
- Plant additional native trees along the roadside to enhance the overall landscape character of Secondary Roads
- Improve amenity for pedestrians and cyclists, including continuous provision of a 2-3m shared path along one or both sides of the road
- Create opportunity for passive irrigation by incorporating WSUD principles into roadside verges
- Remove rubbish and maintain existing roadside vegetation

Guidelines

- Incorporate the planting of native/ indigenous vegetation in the streetscape
- Avoid formal row plantings
- Avoid 'urbanising' of street infrastructure where it may not be absolutely essential (e.g. concrete kerb + channel + footpath; roundabouts)



5.5 STREETSCAPE DESIGN GUIDELINES cont.

TYPOLOGY 3: MINOR ACCESS ROADS





The existing network of Minor Access Roads throughout the Kingston Green Wedge is too extensive to list below, but in general are those roads which:

- Provide an access route to key land uses within the Green Wedge
- Provide an important access function
- Are informal in nature; unmarked, narrow in width, no kerb infrastructure and often unsealed



In general, Minor Access Roads have the following key characteristics identified in Table 5.

TABLE 5 MINOR ACCESS ROADS CHARACTERISTICS

Carriageway	Carry one lane of traffic in each direction with a carriageway width of 5-7.5m		
	Line markings are generally not provided		
Speed Limit	10-50kph		
Parking	No parking provided		
Footpath	None		
Bicycle Path	None		
Trees & Vegetation	Limited to sporadic and informal roadside vegetation		
Public Transport	N/A		

Opportunities exist to

- Widen and seal key minor access roads where necessary
- Provide informal kerb infrastructure (semi-mountable rollover) where necessary
- Plant additional native trees on the roadside to enhance the overall landscape character of minor access roads
- Create opportunity for passive irrigation by incorporating WSUD principles into roadside verges
- Remove rubbish and maintain existing roadside vegetation

Guidelines

- Protect unsealed roads, access tracks and driveways as an important character element, as far as reasonably possible
- Where sealing is required, apply a light asphalt surface
- Maintain the informal nature of minor access roads afforded by sporadic and informal roadside vegetation
- Provide indigenous and native plantings in clumps and clusters as opposed to formal row plantings
- Avoid 'urbanising' of street infrastructure where it may not be absolutely essential (e.g. concrete kerb + channel + footpath; roundabouts)

 Limit the extent of large hard/ paved surfaces, including driveways, yards, car parks, footpaths, and roads, in both the private and public domain







6

What Access & Movement Systems Do We Want?

6.1 THE ISSUES

Linkage and movement is important to connect land uses throughout and to the Green Wedge. What access to and within the Green Wedge is required? What recommendations should be made regarding existing transport proposals?

COMMUNITY FEEDBACK

There is strong support in the community for improvements to public transport and access within the Green Wedge. Many would like to see improvements to bus stops and bus frequency; better connections to Southland and rail stations; and more walking, cycling and horse trails.

There is strong support for the completion of the Dingley Bypass due to the belief that it will reduce traffic and congestion along some of the local roads. 93% of residents agreed that impacts from the Bypass onto the surrounding environment should be explored and minimised.

There is support for better road maintenance; improvements to roadside treatments; prevention of waste dumping; and upgrades to key roads.

The key concerns for most residents is the heavy traffic, perceived lack of safety and congestion currently present through local roads. Many were not happy with the high volume of trucks along Old Dandenong Road, and the condition of the roadway.

PUBLIC TRANSPORT

The existing public transport infrastructure within the Kingston Green Wedge is considered to be of a relatively poor and inconsistent standard that is in need of upgrading to serve the future needs of the area. The Green Wedge is located approximately 3km from the Frankston and Dandenong rail way lines. It is highly unlikely that any additional rail infrastructure will be constructed with direct access to the Green Wedge.

Public transport access within the Green Wedge is restricted to a small number of bus routes, comprising the following services (illustrated in Figure 17):

- 631 Southland to Waverley Gardens via Clayton, Monash University
- 705 Mordialloc to Springvale via Braeside, Clayton South
- 811 Dandenong to Brighton via Heatherton Road, Springvale
- 812 Dandenong to Brighton via Parkmore Shopping Centre
- 828 Hampton to Berwick Station via Southland Shopping Centre, Dandenong
- 902 Chelsea to Airport West SmartBus service
- 903 Altona to Mordialloc SmartBus service

There are only two SmartBus routes servicing the Green Wedge, one along the western periphery at Warrigal Road, and one along the east through Springvale Road. SmartBuses provide a more frequent service along cross-town routes, and offers the opportunity for better connections to land uses along these routes.

The alignment of bus routes throughout metropolitan Melbourne is determined by significant amounts of modelling and strategic input, which identifies the most effective and efficient routes throughout the network. The scarcity of public transport options within the Green Wedge is most likely due to the relatively low density of development within the area. It is expected that an opportunity will exist to increase the number of bus routes operating within the Green Wedge in the future as activity increases.

The existing bus network will benefit from future improvements due to the lack of shelter at most locations and / or poor pedestrian access across the roadways, particularly along the non-SmartBus routes (refer to Figure 17).

FIGURE 17 EXISTING PUBLIC TRANSPORT SERVICES WITHIN THE GREEN WEDGE



6.1 THE ISSUES cont.

FIGURE 18 EXISTING BUS SOPS WITHIN THE GREEN WEDGE







ACTIVE TRAVEL (WALKING & CYCLING)

The majority of roads within the Green Wedge do not incorporate footpaths or landscaping along the verges. This requires pedestrians and cyclists to share the roadway with vehicles, resulting in a potentially unsafe arrangement for all users.

The lack of signalised links across arterial roads is an issue, as it forces pedestrians and cyclists to travel extended distances to find a connection between one side of the carriageway to the other, or risk crossing unaided. Pedestrian access to bus stops is also poor and particularly unsafe across busy roadways.

It is considered that the provision of cross-links along existing roadways will be highly beneficial to support the pedestrian and cyclist network within the Green Wedge.

FUTURE ROAD PROJECTS

There are currently two large scale road projects proposed within the Green Wedge; the Dingley Bypass and the Mornington Peninsula Link.







SOURCE: FITZGERALD CONSTRUCTIONS

Dingley Bypass

\$20 million was allocated in the recent State budget to VicRoads for the planning and acquisition of land for the Dingley Bypass. It is proposed to connect Warrigal Road at Moorabbin to Westall Road at Dingley Village. It will provide a fully divided 19km road link between Moorabbin and Dandenong South (refer to Future Access & Movement Map).

The Green Wedge is expected to benefit from the construction of this bypass as it is anticipated to reduce traffic and congestion along Heatherton Road, Centre Dandenong Road and Old Dandenong Road. It is recommended that Council support the construction of the bypass due to these road benefits.

The relevant public acquisition overlays required to enable the construction of the bypass have been incorporated into the Kingston Planning Scheme. The constructed bypass is not expected to significantly differ from the alignment of these overlays, although pending detailed design work, it may be subject to some modifications.

At the time of writing, VicRoads is uncertain about the timing of construction which will depend on the outcomes of the planning and consultation currently underway.

Mornington Peninsula Link (Freeway Extension)

As with the Dingley Bypass, the public acquisitions necessary to facilitate the construction of the Mornington Peninsula Freeway extension have been incorporated into the Kingston Planning Scheme. Unlike the Bypass, however, the status of this project is unknown and no funding appears to have been provided for its construction in the short-term.

The benefits of the Mornington Peninsula Freeway extension are also less known (or at less publicised) at this time.

A connection should also be provided that allows for pedestrians to cross the Mornington Freeway at its connection with the Dingley Bypass. At present, no connection is indicated at this location.

6.1 THE ISSUES cont.

Complementary Road Projects

The construction of the Dingley Bypass and Mornington Peninsula Freeway Extension will not occur without the provision of key interchanges along their length – with many of these likely to occur within the Kingston Green Wedge.

It is envisaged that these interchanges may occur at roads such as Westall Road, Centre Dandenong Road, Lower Dandenong Road, Governor Road and/or Springvale Road, and that upgrade works would be required along these road in the vicinity of the Bypass or Extension.

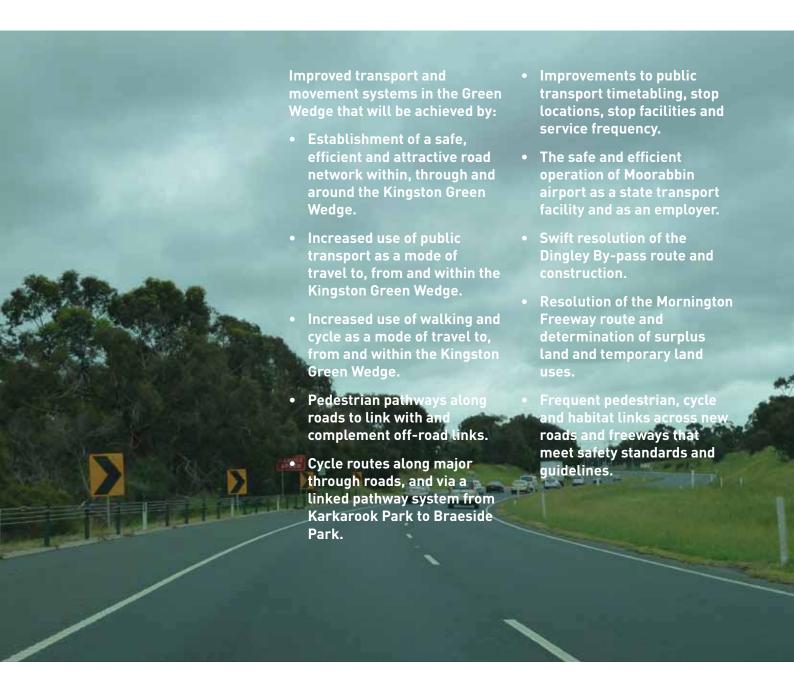
The bypass and extension can be expected to result in a redistribution of traffic movements within the Kingston Green Wedge and the potential reduction of such movements along key roads (e.g. Old Dandenong Road). They may also lead to an increase in congestion along roads where the interchanges are located.

Moorabbin Airport access

The Moorabbin Airport represents a significant transport generator/ attractor within the Kingston Green Wedge and the Melbourne southeast region. This is expected to continue into the future with a number of large retail developments proposed on the site.

The continued use of the airport as a key aerial transport route, with accompanying road transport requirements, will stimulate the need for a high level of vehicular access.

6.2 WHAT DO WE WANT?



6.3 WHAT ARE WE GOING TO DO?

FIGURE 19 EXISTING BUS SOPS WITHIN THE GREEN WEDGE









PRIVATE (ROAD-BASED) TRANSPORT

- Swiftly resolve the alignment, timing and potential for surplus land associated with the Dingley Bypass and Mornington Peninsula Freeway Extension road projects.
- Incorporate complimentary road works within the Kingston Green Wedge as part of the above projects.
- Provide a high level of vehicular accessibility to Moorabbin Airport to support its role as a major transport generator/attractor in the Kingston Green Wedge and the southeast of Melbourne.

PUBLIC TRANSPORT

- Provide a high level of public transport accessibility within the Kingston Green Wedge.
- Improve the frequency and infrastructure of existing bus services within the Green Wedge.



ACTIVE TRAVEL (WALKING & CYCLING)

Establish formalised and strong pedestrian and cycling connections within the Kingston Green Wedge, including off-road pathways linking Karkarook Park in the northwest to Braeside Park in the southeast.



6.4 HOW ARE WE GOING TO DO IT?

PRIVATE (ROAD-BASED) TRANSPORT

- Liaise with State Government to support the construction of the Dingley Bypass within the next 5 years.
- Liaise with State Government to resolve the timing for the construction of the Mornington Peninsula Freeway Extension.
- Ensure that the design of the Dingley Bypass and Mornington Peninsula Freeway includes frequent habitat links and pedestrian/cycle crossing points that meet safety standards and guidelines.
- Determine whether the alignment of the Mornington Peninsula Freeway Extension has been finalised and, if not, seek to modify the alignment (and obtain surplus land) if this assists to achieve other objectives of the Kingston Green Wedge Management Plan.
- Liaise with VicRoads to minimise the construction impacts of the Mornington Peninsula Freeway Extension on Braeside Park.

- Lobby State Government to confirm the timing of the Mornington Peninsula Freeway and the potential to expedite components of the project relating to, for example, pedestrian and cycling pathways along its length.
- Lobby State Government (and VicRoads) to incorporate the upgrading of Westall, Centre Dandenong, Lower Dandenong, Governor and Springvale Roads in the vicinity of any interchange with the Bypass or Extension.
- Investigate the potential to downgrade or remove other roads within the Kingston Green Wedge which are not located near interchanges and on which traffic volumes are expected to reduce as a consequence of the Bypass or Extension or its related works.
- Review existing and proposed access arrangements to Moorabbin Airport to identify potential opportunities for increasing connectivity to and from the site.
- Lobby Federal Government for the external traffic impacts of major land use proposals on the Moorabbin Airport site to be mitigated as appropriate.

PUBLIC TRANSPORT

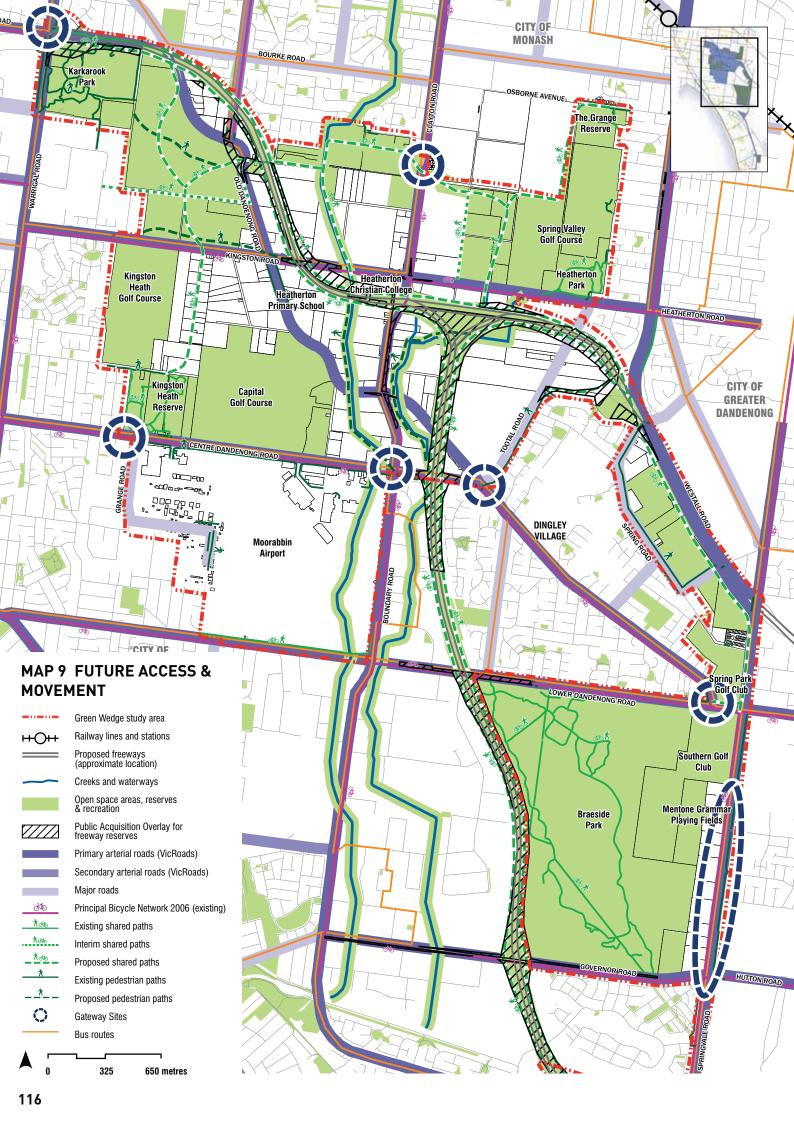
- Lobby State Government, and liaise with the Department of Transport, to provide additional bus services within the Kingston Green Wedge, including those to/ from existing rail based transport services.
- Lobby State Government, and liaise with the Department of Transport, to better incorporate the existing Smartbus routes operating in the vicinity of the Kingston Green Wedge to existing and future land uses to be provided within the Wedge.
- Improve the quality of bus stops and shelters located within the Kingston Green Wedge.
- The quality of the bus stops and shelters should extend to all facets of design including: proximity to key land uses, visibility, weather protection, design, safety, comfort and convenience, incorporation of lighting (preferably solar powered) and DDA compliance.

ACTIVE TRAVEL (WALKING & CYCLING)

- Provide a spinal connection from one side of the Green Wedge to the other by including in the design of both the Dingley Bypass and Mornington Peninsula Freeway Extension pedestrian and cycle facilities on both sides of the road(with these facilities provided ahead of the construction of the road components of these projects if possible).
- Investigate the possibilities for additional east-west shared path and habitat links.
- Provide off-road connections to key uses including schools, shopping centres, community facilities and major sporting venues
- Implement the Principal Bicycle Network through lobbying VicRoads and construction/ marking of bike lanes.

- Ensure that all new land uses within the Kingston Green Wedge provide bicycle parking facilities in accordance with statutory (minimum) requirements.
- Lobby State Government and VicRoads to increase the amount of cycle infrastructure currently provided within the Green Wedge (particularly given that VicRoads are currently reviewing the Principle Bicycle Network to include more off-road facilities).







What Buildings Do We Want?

7.1 THE ISSUES

The way buildings are sited and designed within a landscape is important to the appearance and image of a place. The integrity of the landscapes in the Green Wedge has the potential to be threatened by new development which does not respond positively to the local characteristics of the Green Wedge environment. How should buildings be designed and sited to fit into the Green Wedge landscape? How can the various building forms for differing land use types be accommodated and still create a cohesive 'whole'?

COMMUNITY FEEDBACK

The Kingston community generally wants to retain or reinstate an open spacious feel to the Green Wedge. They want 'run down' areas improved. They generally accept that new development will occur, but are concerned that it occurs in the form that suits the environment.

BUILDING SITING AND DESIGN

In the mixed semi-rural, part industrial and open space environment of the Kingston Green Wedge the siting of buildings is complex, and needs guidance. Maintaining, and in some places reinstating, a 'green' appearance requires space around buildings and attention to the surroundings. In addition, the design and siting of other elements such as vegetation, fencing, car parking, signage, lighting etc. must be considered to ensure that the character of the landscape is not compromised by new development.

GATEWAY SITES

The construction of the proposed Dingley Bypass and Mornington Peninsula Freeway Extension will include provision of key interchanges along their length- with many of these likely to occur within the Kingston Green Wedge. The Bypass and Extension can be expected to result in a redistribution of traffic movements within the Green Wedge with potential interchanges at roads such as Westall Road, Centre Dandenong Road, Lower Dandenong Road, Governor Road and/or Springvale Road.

These potential interchanges will elevate the use and importance of these entry points into the Green Wedge. As a result, there is a need for high quality buildings and/or substantial vegetation at identified gateway sites, dependent on existing/future land uses.

7.2 WHAT DO WE WANT?



7.3 WHAT ARE WE GOING TO DO?

- Implement building and design guidelines that achieve the desired outcomes
- Provide the guidelines in a form and in time to ensure they are taken into account in all development proposals (public or private)
- Investigate methods to enforce improvements to the appearance of land
- Support and encourage private realm improvements with investment in public realm improvements



7.4 HOW ARE WE GOING TO DO IT?

- Apply the following Private Realm Design Guidelines through the planning scheme
- Monitor the effectiveness of the Guidelines and review as required
- Investigate utilising Local Laws to improve the appearance of unsightly or unkempt land
- Apply the Category 3 advertising controls through the Green Wedge area, and by Policy advocate a maximum pole sign height of 7m to ensure that the signs do not extend beyond the tree canopy height.

Private Realm Design Guidelines have been developed to manage new development, control negative change and protect and strengthen the valued qualities of the Green Wedge environment. The Guidelines have been structured around eight separate typologies, based on existing characteristics and reflective of the varying land uses that occur throughout the Green Wedge.

The seven typologies include:

- Green Wedge Low-Density Residential
- Highway Low Site Coverage Commercial
- 3. Green Wedge Intensive
- 4. Green Wedge Low Intensity
- 5. Transition Areas
- 6. Open Space/Recreation
- 7. Green Wedge Gateway Sites



7.5 BUILDING DESIGN GUIDELINES







TYPOLOGY 1: GREEN WEDGE LOW-DENSITY RESIDENTIAL

- Maintain the semi-rural and spacious character of the low density residential area along Pietro Road, afforded by low-scale dwellings, large informal gardens, hobby farms and an absence of footpaths.
- Avoid urban styles of residential development (e.g. large scale buildings with large areas of hard surfaces, and formal garden design and fencing).
- Ensure new dwellings are sited at a distance from boundaries to minimise potential interface issues with adjoining golf course or agricultural uses.
- Require predominantly single storey height for buildings and structures.

- Minimise building footprints and the presence of outbuildings/ storage areas, and ensure total building site coverage does not exceed 20%.
- Set buildings back from front and side boundaries a minimum of 10 metres to allow sufficient space for landscaping and vegetation, and to retain a spacious setting.
- Encourage the removal of environmental weeds and planting of appropriate native / indigenous vegetation where possible.
- Encourage the use of vegetation, rather than fencing, to create privacy wherever possible.
- Ensure front boundary fencing and entry gateways are kept to a low height and encourage the use of traditional materials (e.g. timber, post and wire) or

- transparent materials that allow a view to the property frontage.
- Require that crossovers, garages and driveways are kept to a minimum width and do not dominate the street frontage.
- Minimise areas of non permeable surfacing.
- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Utilise materials, colours and finishes that best immerse built form within the semi-rural landscape (e.g. timber, render, glazing, stone, brick and iron roofing).
- Encourage the use of indigenous vegetation in all new developments.







TYPOLOGY 2: HIGHWAY LOW SITE COVERAGE COMMERCIAL

- Site and orientate buildings so that they provide a consistent setback of at least 10 metres and area oriented parallel to Springvale Road.
- Provide a 20 metre plantation buffer along the rear boundary of all properties, landscaped with appropriate vegetation, in consultation with Parks Victoria and Friends of Braeside Park.
- Buildings should be setback a minimum of 5 metres from any side boundary to allow views through to Braeside Park.
- Encourage a scale of development, design detailing and landscape treatments that respond to the width of the Springvale Road highway reservation and the speed of passing traffic.
- Limit building heights to a maximum of 8 metres (2 storeys) above natural ground level.

- Ensure development adopts best practice environmentally sustainable design and development principles.
- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Incorporate large scale tree
 planting and vegetation along the
 front 5 metres of the road frontage
 to complement the existing/
 proposed planting theme of
 Springvale Road.
- Encourage the use of indigenous planting and vegetation.
- Minimise the area of sealed surfaces and ensure that spaces between buildings are able to support substantial vegetation and landscaping.
- Use planting and/or fencing to screen service areas where possible.

- Minimise the extent of yards, car parks and service areas along the highway frontage.
- Ensure building facades are well articulated using design treatments such as:
 - Well considered placement of doors and windows;
 - Variations in surface texture, colours or materials;
 - Avoiding large expanses of blank walls;
 - Avoiding reflective glazing to the exterior of buildings.
- Avoid bland, boxy, unarticulated building forms.
- Minimise the use of bold, bright materials, colours and finishes.
- Encourage the use of vegetation, rather than fencing wherever possible.

7.5 BUILDING DESIGN GUIDELINES cont.

- Encourage the use of transparent front fencing where front fencing is required.
- Avoid high/solid fencing, particularly along the road frontage and forward of the building.
- Minimise the number and width of vehicle entry points off Springvale Road.
- Minimise the size and extent of signage and advertising, particularly internally illuminated signs.

- Consolidate advertising and signage into a single location where possible.
- Advertising elements such as banners, flags, fence signs and inflatables should be avoided.
- Restrict lighting for advertising to business operation hours, as far as reasonably possible.







TYPOLOGY 3: GREEN WEDGE INTENSIVE

- Site and orientate buildings so that they provide a consistent setback of at least 10 metres and are oriented parallel to the street.
- Limit building heights to a maximum of 8 metres (2 storeys) above natural ground level.
- Require spacing/gaps between buildings of at least 4 metres from a side boundary to maintain a sense of openness.
- Boundary to boundary development will not be permitted.
- Ensure that spaces between buildings are able to support substantial vegetation.
- Avoid extensive areas of paved surfaces and car parking located between buildings and the road frontage.
- Incorporate tree planting and vegetation along the front 5 metres of the property boundary.

- Avoid bland, boxy, unarticulated building forms.
- Ensure development adopts best practice environmentally sustainable design and development principles.
- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Utilise colours and finishes that harmonise with the surrounding natural environment (i.e. natural colours, muted tones, matte finishes and non-reflective materials).
- Bright, bold, extravagant colour schemes are to be avoided.
- Use indigenous vegetation to screen large buildings/structures and unsightly areas (e.g. service yards, industrial elements)

- Encourage the removal of environmental weeds and other exotic vegetation and their replacement with appropriate indigenous vegetation.
- Minimise native vegetation removal in new development. Development which requires vegetation removal should aim to replace or rehabilitate with an equivalent vegetation cover using locally appropriate species.
- Encourage formal landscape design (e.g. edges, row planting, garden beds) using locally appropriate species.
- Minimise the size and extent of signage and advertising, particularly internally illuminated signs.
- Advertising elements such as banners, flags and inflatables should be avoided.

7.5 BUILDING DESIGN GUIDELINES cont.

- Locate signage on the building (rather than on fencing or poles) where possible, so that it complements the architecture.
- Encourage the use of vegetation rather than fencing, wherever possible.
- Encourage the use of low, transparent fencing where fencing is required.
- Avoid high/solid fencing, particularly along the road frontage and forward of the building.
- Restrict lighting for advertising to business operation hours, as far as reasonably possible.







TYPOLOGY 4: GREEN WEDGE LOW INTENSITY

- Buildings should be subordinate visually to the spacious, rural landscape.
- Minimise building footprints and limit the overall presence of built form to enhance the rural character and maintain a sense of openness.
- Locate buildings and farming infrastructure such as sheds and machinery away from roads and where possible, within existing clusters of buildings/structures.
- Locate horticultural structures so that they are not highly visible from roads or other public places, or screen with substantial vegetation.
- Maintain wide spacing between groups/clusters of buildings.
- Avoid development on any property boundary.

- Limit building heights to a maximum of 8 metres (2 storeys) above natural ground level.
- Ensure development adopts best practice environmentally sustainable design and development principles.
- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Avoid large areas of nonpermeable surfaces including yards, driveways and car parking
- Utilise materials, colours and finishes that best immerse built form within the rural landscape (i.e. dark, natural colours, muted tones, matte finishes and non-reflective materials).
- Bright, bold, extravagant colour schemes are to be avoided.

- Use glazing and roofing materials of low reflectivity.
- Minimise the size and extent of signage and advertising, particularly internally illuminated signs.
- Locate signage on the building where possible, so that it complements the architecture.
- Encourage the removal of environmental weeds and other exotic vegetation and their replacement with appropriate native vegetation.
- Minimise native vegetation removal in new development.
 Development which requires native vegetation removal should aim to replace or rehabilitate with an equivalent vegetation cover using locally appropriate species.

7.5 BUILDING DESIGN GUIDELINES cont.

- Avoid formal landscape design in the private realm (e.g. geometrically aligned/spaced tree avenues or garden beds) and hard surfaces in landscaping.
- Screen unsightly areas, large developments, or developments with an unavoidably urban character or large amounts of hard surface, with large scale native trees and vegetation.
- Avoid high/solid fencing, particularly along the road frontage.

- Encourage the use of traditional fencing materials (e.g. timber, post and wire) or transparent materials that allow a view to the property frontage.
- Discourage the use of cyclone wire fencing where practicable.
- Prioritise interior lighting systems that emit minimal light on the outdoor environment.







TYPOLOGY 5: TRANSITION AREAS

- Require site responsive building forms that are substantially absorbed by the landscaped setting.
- Provide robust, suitably scaled landscape treatments to screen the visual impact of buildings/ structures and roads when viewed from surrounding areas.
- Development should be kept below the future mature tree canopy height.
- Maintain wide spacing between groups/clusters of buildings.
- Avoid development on any property boundary.
- Built form should be sited and constructed to minimise the effects of the development on nearby properties.
- Locate buildings and farming infrastructure such as sheds and machinery away from roads and where possible, within existing clusters of buildings/structures.

- Buildings should be substantially setback from the front boundary so as to provide adequate room for landscaping.
- Where space permits, medium to large sized trees should be planted to provide scale, aesthetic relief and shade to building entrances.
- Minimise areas of non-permeable surfaces including yards, driveways, service bays and car parking areas, as far as reasonably possible.
- Screen unsightly areas, large developments and large amounts of hard surface, with large scale native trees and vegetation.
- On sites where buildings are not present, substantial native/ indigenous tree planting should be provided to complement and emphasise the natural landscape character of the Green Wedge and adjoining public spaces.

- Encourage the removal of environmental weeds and other exotic vegetation and their replacement with appropriate native vegetation.
- Minimise native vegetation removal in new development.
 Development which requires native vegetation removal should aim to replace or rehabilitate with an equivalent vegetation cover using locally appropriate species.
- Ensure development adopts best practice environmentally sustainable design and development principles.
- Incorporate informal road treatments such as spoon and grassed drains and avoid suburban detailing such as upstanding kerbs and channels.
- Incorporate Water Sensitive Urban
 Design techniques to improve the
 water quality of the catchment
 and maintain appropriate flows.

7.5 BUILDING DESIGN GUIDELINES cont.

- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Ensure building facades are well articulated and avoid large expanses of blank walls.
- Utilise materials, colours and finishes that best immerse built form within the surrounding landscape (i.e. dark, natural colours, muted tones, matte finishes and non-reflective materials).
- Bright, bold, extravagant colour schemes are to be avoided.
- Use glazing and roofing materials of low reflectivity.
- Minimise the size and extent of signage and advertising, particularly internally illuminated signs.

- Locate signage on the building where possible, so that it complements the architecture.
- Encourage the use of vegetation, rather than fencing where practicable.
- Avoid high/solid fencing, particularly along the road frontage.
- Discourage the use of cyclone wire fencing where possible.
- Prioritise interior lighting systems that emit minimal light on the outdoor environment.
- Lighting should be functional, not purely decorative, and a modest element within the overall landscape.







TYPOLOGY 6: OPEN SPACE/ RECREATION

- Require site responsive building forms that are substantially absorbed by the landscaped setting.
- Keep development below the future mature tree canopy height and limit heights to a maximum of 8 metres (2 storeys) above natural ground level.
- Built form should:
 - be appropriately sited to maintain the sense of spaciousness in the landscape and minimise visibility;
 - be sited with existing clusters of buildings/structures;
 - be set back from watercourses and roads;
 - be set amongst existing vegetation, and/or proposed landscaping of locally appropriate species;
 - be sited in a location that requires minimal vegetation removal; and

- be sited and constructed to minimise the effects of the development on nearby properties.
- Ensure development adopts best practice environmentally sustainable design and development principles.
- Ensure all buildings and structures are designed and oriented to utilise natural light and ensure optimal thermal performance.
- Create a positive relationship between new development and natural features such as creeks or reserves.
- Avoid bland, boxy, unarticulated building forms.
- Utilise colours and finishes that complement the vegetated character of the area, including dark, natural colours, muted tones, matte finishes and nonreflective materials.

- Use glazing and roofing materials of low reflectivity.
- Encourage the removal of environmental weeds and other exotic vegetation and their replacement with appropriate native vegetation.
- Continue to extensively plant native trees/vegetation that will grow large.
- Screen unsightly areas, large developments and large amounts of hard surface, with large scale informal native trees and vegetation.
- Minimise native vegetation removal in new development.
 Development which requires native vegetation removal should aim to replace or rehabilitate with an equivalent vegetation cover using locally appropriate species.

7.5 BUILDING DESIGN GUIDELINES cont.

- Avoid high/solid fencing, particularly along the road frontage.
- Encourage the use of traditional fencing materials (e.g. timber, post and wire) or transparent materials that allow a view into and across the site.
- Discourage the use of cyclone wire fencing where practicable.
- Minimise the size and extent of signage and advertising.
- Lighting should be functional, not purely decorative, and a modest element within the overall landscape.





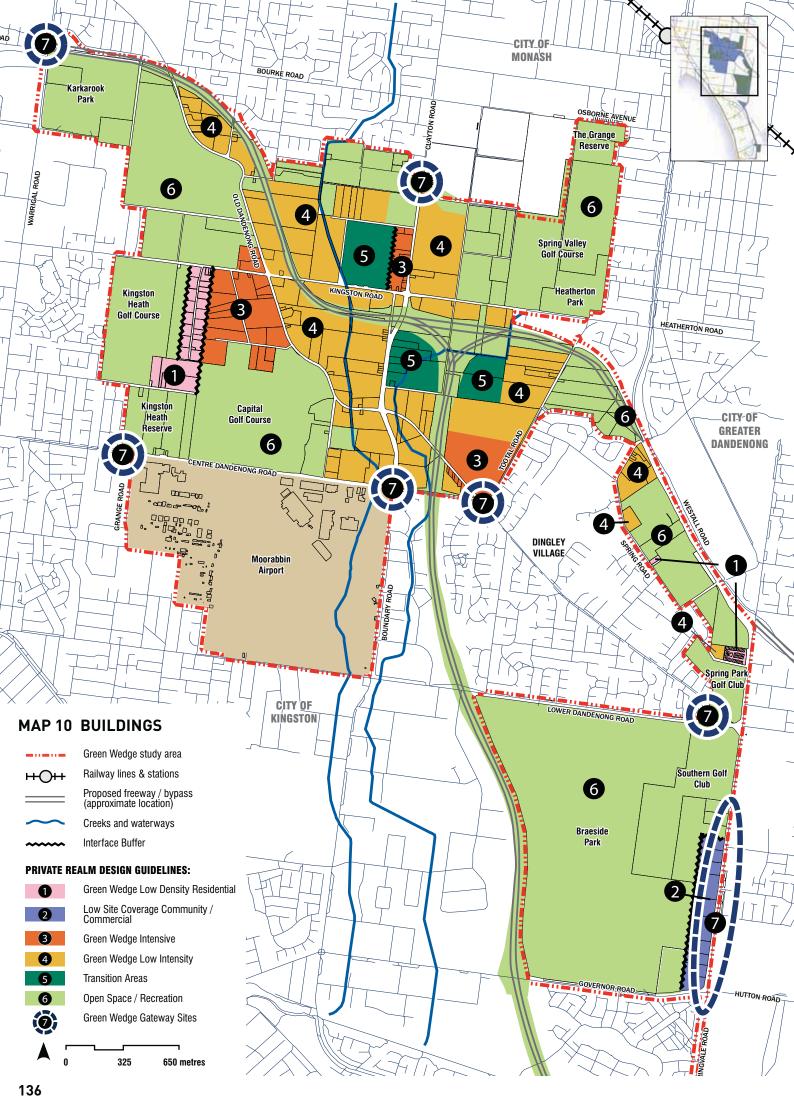


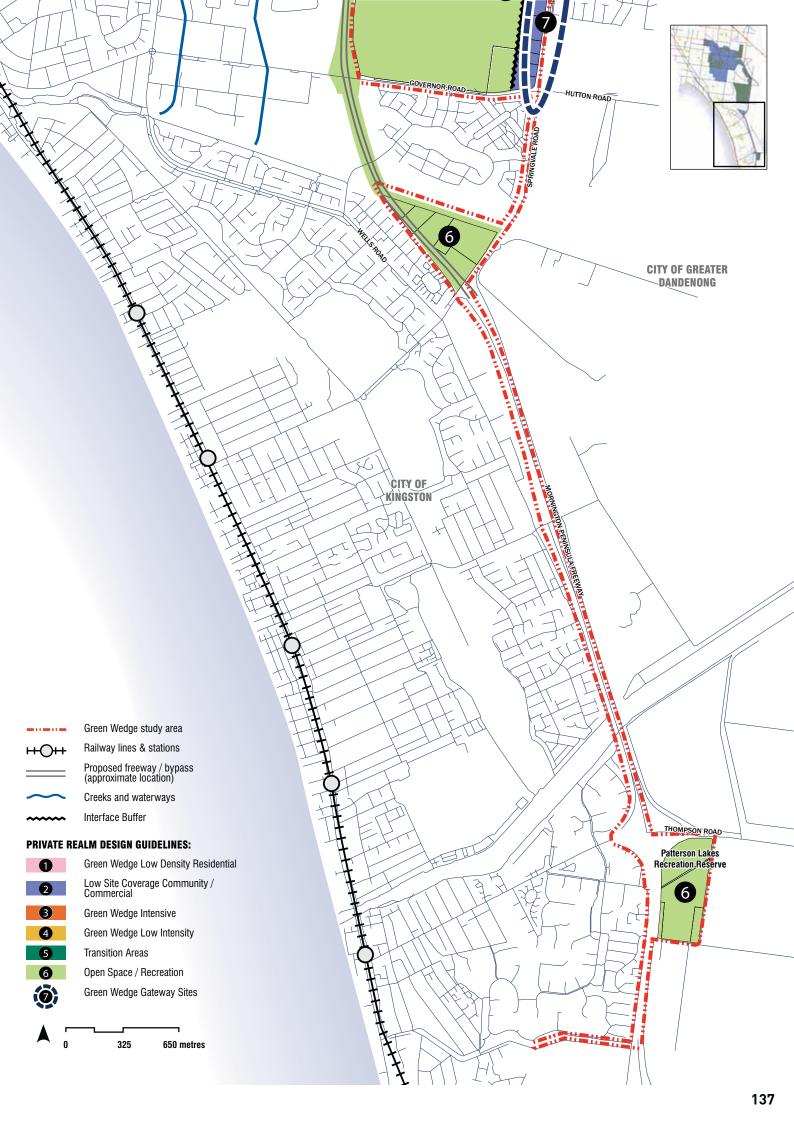
TYPOLOGY 7: GREEN WEDGE GATEWAY SITES

- Development on gateway sites should emphasise the importance of the gateway location and act as a visual landmark through:
 - achieving well designed, high quality architecture that is underpinned by the principles of sustainability;
 - providing robust, suitably scaled landscape treatments;
 - actively defining corners and edges through addressing all street frontages;
 - providing active frontages to all visible facades;
 - providing substantial native/ indigenous vegetation that reduces the visual mass of new development and screens large amounts of hard surfaces;
 - ensuring attractive side elevations; and
 - incorporating landmark elements such as urban art/ sculpture.

- On sites where buildings are not present, substantial native/ indigenous tree planting should be provided to complement and emphasise the natural landscape character of the Green Wedge and adjoining public spaces.
- Avoid bland, boxy, unarticulated building forms.
- Buildings should be setback from the front boundary so as to provide for adequate areas of car parking and landscaping.
- Incorporate large scale native/ indigenous tree planting along or close to the property frontage to complement the existing planting theme of the public realm/road reservation.
- Where space permits, medium to large sized trees should be planted to provide scale, aesthetic relief and shade to front entrances.
- Large expanses of cement or asphalt, particularly in the front setback should be avoided.
- Utilise colours and finishes that complement the character

- of the area, including dark, natural colours, muted tones, matte finishes and non-reflective materials.
- Minimise the use of bold, bright materials, colours and finishes.
- Use glazing and roofing materials of low reflectivity.
- Avoid high/solid fencing, particularly along the road frontage.
- Discourage the use of cyclone wire fencing where practicable.
- Lighting should be functional, not purely decorative, and a modest element within the overall landscape.
- Ensure development adopts best practice environmentally sustainable design and development principles.
- Advertising elements such as billboards, sky signs, pole signs and inflatables should be avoided.
- Minimise the size and extent of signage and advertising.





8

What Governance & Leadership Models Do We Want?

8.1 THE ISSUES

The implementation of the Plan and identifying realistic ways to do it are critical to the success of the Plan. What role should the Council play, and what should be the responsibility of different levels of government? How should implementation of the Plan be managed and funded? Answers to these questions are critical to the success of the Plan, and take it from being a 'coffee table' production to an active, living document.

COMMUNITY FEEDBACK

The primary concern from the consultation to date has been to establish certainty for the future of the Green Wedge. Lack of a driving strategy has lead to indecision and ad hoc decision making that feeds uncertainty and therefore land speculation in the market place. Land owners find it difficult to make decisions about investment and to obtain finance. The community had mixed views about the most appropriate way to fund improvements to the Green Wedge but general rates were not favoured. Seeking funds from other levels of government was the obvious first preference.

MANAGEMENT

The Council has a lead role to play in driving the implementation; however it does not have control over all the land and must find ways to influence decision making. The role of the Council can therefore vary between advocate, lobbyist, responsible authority / decision maker under the planning scheme, and coordinator. The in-house mechanisms to drive and oversee implementation of the Plan will need to be established early. This requires ownership of the Plan by the administration, and ideally involves staff who will implement the Plan in the development phase. A cross-departmental approach will be required to engage all areas of the Council administration in the carriage of different elements, and high level coordination and reporting will be need to be established.

The Council will also have a role in coordinating various community groups in implementing parts of the Plan. For example, the many environmental groups active in the Green Wedge need to be harnessed to input to detailed planning and possibly implementation and maintenance.

FUNDING

The implementation of the recommendations in the Kingston Green Wedge Plan will require investment and funding from a range of sources, including State Government, State Government agencies, local government and the private sector.

A key component of this and previous Green Wedge plans is the acquisition of land previously occupied by undesirable uses or uses in decline or transition, to enable the transition to a more desirable and appropriate use for a Green Wedge, and to implement major projects/concepts such as the 'Chain of Parks'. Acquisition of large amounts of private land can be very costly, and poses a challenge to the implementation of the core recommendations of the GWP. As such, funding should be sought from all available sources to reduce the potential funding burden on Council and to increase the likelihood of successful and timely implementation.

Government

A variety of sources of funding through State and federal government have been mentioned throughout this report such as Melbourne Water programs, Living Links, PPWCMA and Solar Cities. All these sources need to be sought, with applications based on the Plan being consistently and comprehensively prepared with lobbying and representations undertaken as required.

The existing Public Acquisition Overlay (PAO) areas will allow the implementation of sections of the 'Chain of Parks', funding for which has been allocated to Parks Victoria. It will be important for the City of Kingston to co-ordinate the implementation of the Green Wedge Plan with Parks Victoria and vice-versa to ensure a strategic and collaborative outcome for the effective establishment of the 'Chain of Parks'. Council should discuss opportunities for acquiring the remaining sections of the Chain of Parks not covered by a PAO with Parks Victoria, including former landfill sites.

Similarly, the Dingley Bypass reserve - controlled by VicRoads - presents the opportunity to access part of the funding for a major project to develop a desirable outcome for the Green Wedge. The Dingley Bypass reserve constitutes one of the only continuous land links through the Green Wedge and as identified in other sections of this report presents an excellent opportunity to develop an open space link/trial within the road reserve. The State Government funding for this project should be utilised wherever possible to dovetail in with open space funding and implementation for the Kingston Green Wedge.

In addition, adjoining local Councils may be a source of funding for some aspects of the Green Wedge implementation Plan where it can be demonstrated to them that the changes, improvements or uses will be of direct benefit to their communities and will reduce their costs in provision.

8.1 THE ISSUES cont.

Sponsorship

Private sponsorship is a distinct possibility for some of the more cutting edge and high profile components of the Plan. The Solar Park for example could seek sponsorship/part ownership from energy companies. A community energy park can also seek seeding funding from business due to its 'feel good' aspect and genuine educational role (as has the CERES facility in Brunswick).

Rates and Charges

It is important to note that acquisition of other private land will be costly and challenging, particularly where the land is privately owned and unencumbered. This challenge reduces the viability of the development of active open space reserves within the Green Wedge, as Active Open Space is generally a public use requiring significant Council funding to acquire large tracts of land and to develop facilities, including fields, roads and carparking, pavilions, fencing and goal posts.

At the local level, Council has the opportunity to fund some of the works and land acquisition contemplated through development contributions and special rates and charges. Development contributions are payments or works-inkind towards the provision of infrastructure made by the proponent of new development. Contributions can be collected from developers using a variety of mechanisms,

 A Developer Contribution Plan approved under Part 3B of the Planning and Environment Act 1987;

including:

- Agreements made pursuant to Section 173 of the Planning and Environment Act 1987;
- Development Plan Overlay and planning permit conditions; and
- Special Rates and Charges Schemes.

The types of infrastructure able to be levied through development contributions include those that are likely to benefit the wider community. The cost of infrastructure is not entirely covered by the developer. Costs are fairly apportioned amongst the likely users.

Developer Contribution Plans (DCP)

A DCP enables Council to levy new development for contributions to planned infrastructure needed by a future community. Council collects levies through an approved DCP, which is included as an overlay in the Planning Scheme.

The calculation of the levy is based on the estimated cost of the infrastructure. Recurrent costs such as maintenance and operating costs or costs associated with the administration of the DCP cannot be included in the calculation of a development contributions levy.

DCPs have the benefit of sharing costs amongst multiple users and integrating strategic planning and infrastructure programs and offering greater certainty for developers. However, DCPs include the need for an amendment to the Planning Scheme making them time consuming and costly and can only collect a portion of total funding.

It is noted that the DCP process is currently under review by the new government. The timing and likely outcome of this review is unknown at present.

Section 173 Agreement

Section 173 Agreements are voluntary agreements entered into by a land owner or developer (or applicants for a planning permit) and Council under Part 9, Division 2, Sections 173-184 of the Planning and Environment Act 1987.

Flexibility is the main advantage of Section 173 Agreements, however they can also lack transparency, accountability and monitoring can be complex.

8.1 THE ISSUES cont.

Development Plan Overlay

Council can also collect development contributions through the introduction of a Development Plan Overlay (DPO). DPOs can specify that infrastructure required to support development in the DPO area is identified and contributed to by the proponent of development. This is then implemented through conditions on any planning permit granted.

Rates and Charges

Council's expenditure, including capital investment is borne by ratepayers according to the relative value of their properties. Although general rates are simple, flexible and well understood, they are often rejected by ratepayers as they are viewed as an additional tax. Nevertheless it is reasonable to assume that the Council will allocate funds from general revenue for implementation of the Plan that equate to the size or proportion of rates gathered from the Green Wedge and possibly more, having regard to the benefits of the development of the open space and recreational uses within the Green Wedge for the wider community.

The Local Government Act permits Council to levy additional Special Rates and Charges where particular properties will receive a direct benefit from works or services provided. Council can use Special Rates to fund both recurrent programs and capital works. Although special rates ensure that the users are the primary funding tool, resident acceptance is generally low and questions of equity arise with regard to the spatial provision of works.

Differential rates refer to the opportunity for Council to apply higher rates to properties which have directly benefited from a development approval or up-zoning. This mechanism is not widely used for the purposes of collection funds for infrastructure provision.

Removing uncertainties in terms of zoning should have a positive impact on investment and property values – this would flow on to the Council rates base.

Levy

The open space levy applied to medium density and subdivision applications can be increased by planning scheme provisions where the need can be established. It may be possible to increase the open space levy under Clause 52.01 of the planning scheme to include an additional component for Green Wedge open space acquisition and improvement.

Appropriate Mechanisms

A DCP is most effective when applied to an area experiencing a high degree of change as only new development can be charged. It would therefore be a slow method of collecting funds in the Green Wedge due to the generally slow rate of change, and is not therefore considered to be an appropriate mechanism for all land, but may be applicable to any areas excised from the Green Wedge in this process.

The beneficiaries of infrastructure identified in the Kingston Green Wedge are, for the most part, the existing landowners and businesses in and around the Green Wedge.

Implementing a Special Rates Scheme could wholly or partly fund specific improvements to infrastructure for which the benefits can be directly apportioned to a small area. A Special Rates Scheme also has the inherent benefit of the ability to obtain recurrent funding for the purposes of maintenance.

Given the low overall levels of new development expected in the Green Wedge, Council will not have the opportunity to obtain significant funding from local sources. Therefore it is essential that Council actively pursues funding opportunities through major State government projects, partnerships with State government agencies and applying for State and Federal government grants to implement the key components of the GWP. Grants can be accessed to develop/improve local infrastructure, particularly passive and active open space facilities, community facilities and trails.

It is important to note that it is extremely difficult to quantify the levels of funding required to implement the actions of the Green Wedge Plan at this stage due to the broad nature of the actions proposed. Further work on identifying funding opportunities and quantifying the costs of actions is recommended.

Council Land

Fees, leases or rents received for Council owned land or buildings in the Green Wedge could be applied to improvements in the Green Wedge.

8.2 WHAT DO WE WANT?



8.3 WHAT ARE WE GOING TO DO?

MANAGEMENT

- Embed the Plan in the planning scheme as soon as possible following its completion and adoption by Council.
- Co-ordinate the Green Wedge Plan actions with major projects in the area and regional and metropolitan strategic planning.
- Establish in-house Council mechanisms and processes to implement, coordinate and monitor the implementation of the Plan.
- Lobby and advocate at state and federal levels of government for assistance in implementation of the Plan.
- Coordinate local groups in detailed planning, implementation and maintenance of aspects of the Plan.

FUNDING

- Monitor all State and Federal Government grant opportunities
- Prepare effective and comprehensive funding applications for all identified government sources of funding.
- Ensure land is allocated and developed along the Dingley Bypass and Mornington Peninsula Freeway for open space and linkages
- Require and collect development contributions from areas that are rezoned under the GWP and are likely to be developed for urban uses in the short to medium term.
- Collect revenue through special rates schemes where specific infrastructure improvements are required.
- Approach adjoining Councils to discuss contributions to aspects of the Plan implementation that involve open space and linkages provision that will benefit their communities.
- Seek private sponsorship and seed funding from business, organisations and authorities that would benefit from marketing opportunities from involvement in sustainability related projects.

8.4 HOW ARE WE GOING TO DO IT?

- Introduce a planning scheme amendment to give statutory effect to the Plan. (see Chapter 8.5)
- Establish a group to oversee implementation of the Plan.
- Meet with adjoining Councils regarding implementation of the Plan.
- Actively monitor State and Federal grant programs, particularly in the areas of recreation, sustainability, agriculture innovation, environment and economic development, and submit funding submissions based on the outcomes and actions of the GWP.
- Lobby VicRoads to include an open space corridor within the Dingley By-pass reservation and project cost, including trails and linkages to existing open space areas and the Chain of Parks where possible.
- Liaise with Parks Victoria regarding extent and timing of land acquisition for the Chain of Parks and funding available to implement components of the GWP.

- Advocate for the Kingston Green Wedge to be recognised and included in major strategic and open space planning projects.
- Identify key public realm and infrastructure improvement projects within the Green Wedge and develop a Special Rates Scheme which identifies relevant properties, charges and Council contributions if required.
- Identify and approach key stakeholders and potential sponsors to discuss opportunities to provide funding for recreational, sustainability and community facilities within the Green Wedge.
- Investigate the establishment of a Farmland Trust to work with investors in agricultural land to be preserved for agricultural uses.

The planning scheme is only one method of implementing the recommendations of the Green Wedge Plan, however it is the focus of land owner attention, and one of the few statutory tools available to the Council. All changes to the planning scheme will require a separate planning scheme amendment process, with exhibition, probable independent Planning Panel process and approval by the Minister. Changes to the zoning, Urban Growth Boundary and minimum lot sizes will require approval of both houses of Parliament.

GENERAL

The Kingston Green Wedge contains a wide array of urban style uses, in addition to the more traditional non-urban uses for which the Green Wedges are intended. It is not a 'clean slate' but one with a long history of agricultural, mining, recreational and business utilisation resulting in a complex range of existing use rights, approvals under various Acts, land acquisition proposals, freeway reservations and mix of land ownership including all levels of government, many different government department responsibilities, large corporations, long standing small private landholders, small business owners and operators. The preferences of all these people and organisations, and the wider community need to be taken into account, but ultimately the planning controls cannot satisfy all those with an interest in the Green Wedge due to the widely divergent views held by the various interested parties.

It needs to be recognised and acknowledged that the Kingston Green Wedge is a sensitive environment close to, surrounded by and containing residential uses. This factor, combined with its history and fragmentation of lots and land ownership, indicates that this Green Wedge is more akin to a semi-rural or rural living area, than a traditional Green Wedge or rural environment. As a result the potential for land use conflicts is magnified and needs to be carefully managed. This land use conflict is much more pronounced and on-going in this Green Wedge than all others due to the close proximity of the UGB on all sides.

POLICY

Policy/Strategy can be used to guide decision making on appropriate locations for various land uses in the Green Wedge. Policy should be used to designate more intensive land uses (allowable within the Green Wedge) to the areas designated for 'Green Wedge Intensive' on the Land Use map as discussed in that section of the Plan. These uses include camping and caravan parks, markets, hall, place of assembly, retail plant nurseries, some recreation facilities, place of worship, and some forms of tourist accommodation and education (if the zone provisions are altered).

The Policy can also contain built form, landscape, environmental and conservation objectives that can be utilised in the consideration of permit applications. In addition, the Policy can be utilised to discourage undesirable uses and certain uses in locations where land use conflict may occur, such as some intensive forms of agriculture close to residential areas, and residential uses close to activities that may disrupt residential amenity such as recreational or sporting venues.

Whether this strategic direction is contained in the MSS or a Local Policy needs to be considered having regard to the structure of the existing MSS and advice from the DPCD during preparation of the Amendment.

LOT SIZE

The vast majority of land lots within the Kingston Green Wedge are very small, with almost half being under 1 hectare and 73% being under the minimum lot size of 4 hectares. This makes the Kingston Green Wedge unique, for while all Green Wedges have some element of small lots and inappropriate subdivision, none would have this level of fragmentation. (It is also worth noting that the 4 hectare minimum lot size is exceptional in the metropolitan Green Wedge context, as most Green Wedge areas have a minimum of 40 hectares, with minor exceptions.)

Small lot sizes result in many properties being less than the minimum required for various land uses under the zoning requirements. This effectively renders the land with significant land use constraints. This has led to some of the frustration with the planning controls in the Green Wedge at present, but can also be seen as a result of uncertainty and speculation. Ideally lot sizes should continue to be encouraged to increase to ensure that the spacious, green appearance of the

Green Wedge is improved and not further compromised. Incentives to consolidate lots are provided through the planning provisions of the Green Wedge zones by requiring the minimum lot sizes for certain uses (eg restaurant, function centre in conjunction with agriculture, outdoor recreation, rural industry or winery). While it may be tempting to extend the minimum lot size to other uses, bearing in mind the extent of small lot fragmentation in the Kingston Green Wedge, further restricting land use options would be counterproductive to achieving change and improvements to the appearance and function of the area.

Small lot sizes also result in limited opportunities for agriculture of any economic scale in future. A 40 hectare minimum is generally required for economic agricultural operations such as market gardening or similar. Small, labour intensive, niche agriculture may be viable on smaller allotments, possibly as small as 8 hectares. However, only 13% of lots in the Kingston Green Wedge are 8 hectares or larger, and although small, contiguous lots in the same

ownership occur occasionally, most lots over 40 hectares are occupied by open space, future open space, golf courses and refuse disposal uses which are unsuitable for agriculture. Encouraging agricultural uses that can economically operate on smaller lots will involve more intensive land uses requiring structures or supplementary sources of income (eg hot-housing, hydroponics, cafe, produce sales). The planning controls and policy must recognise and accommodate these options.

Having regard to the extreme level of lot fragmentation, it is not considered realistic or reasonable to impose a requirement for consolidation in this Green Wedge through a Restructure Overlay for example. The purpose of a requirement to create larger lot sizes would be to make the land more usable for uses that require larger land holdings such as broadscale farming, plant nursery, or recreational facilities. However the number of 0-4 hectare lots required to establish a lot large enough for these purposes would be numerous in many instances, and therefore an unrealistic impost.

ZONING

An examination of broad zone options for the Kingston Green Wedge has included consideration of:

- Retaining the existing zonings
- Rezoning all Special Use 2 land to Green Wedge zone, retaining the Green Wedge zone where it exists
- Rezoning the existing Special Use 2 zone and Green Wedge zone land to Green Wedge A zone
- Creation of a new Green Wedge or Special Use zone for the existing Special Use 2 and Green Wedge zoned land

Each of these options will be discussed. To assist in comparisons between the three existing zone options Table 6 (end of section) has been produced.

Option 1 – Retain existing Special Use 2 and Green Wedge zonings

This option effectively sees no change to the land use requirements as they currently exist.

The advantages of this option include:

- No change required to the community's understanding of the restrictions/options on the land
- Existing, lawful uses can remain and continue to operate

The disadvantages are:

- No substantial change will occur in the GW zone, with all changes reliant on market forces
- New landfills are encouraged in the Special Use zone and could establish with a permit
- Existing frustrations with the range of options available to land owners will remain
- Few opportunities for the Council to obtain additional funds for improvements to the area

Option 2 – Rezone all Special Use 2 zone to Green Wedge zone

This option proposes the rezoning of land within the Special Use zone Schedule 2 – Earth and Energy Resources Industry, to the Green Wedge zone that exists on other Green Wedge land.

This option has the following advantages:

- Removes a zone that encourages new land fill operations (although still allowable apart from Construction and Demolition Recycling)
- Applies consistent controls across the Green Wedge
- Encourages some change by allowing more uses in the land previously zoned Special Use

Disadvantages are:

- The Green Wedge zone still allows some undesirable uses
- For a majority of the Green Wedge there is no change to the range of land use options, resulting in little change

Option 3 – Rezone Special Use 2 and Green Wedge zone to Green Wedge A zone

This option proposes the rezoning of all Special Use 2 and Green Wedge zoned land to the Green Wedge A zone. The Green Wedge A zone is a zone originally created in the VPPs to translate Rural Living zones in old planning schemes into the VPP format. The zone exists in a number of fringe municipalities typically outside but adjacent to the Urban Growth Boundary. The zone purpose is similar to that of the Green Wedge zone, with the absence of reference to mineral and stone resources, reduced emphasis on agricultural activities but instead focussing on sustainable land management, and addition of reference to protecting the amenity of 'existing rural living areas'. The land uses allowable are similar in most cases to the Green Wedge zone, however significantly most industry is prohibited. The permit requirements for building and works are also increased with permits required for buildings closer to roads and boundaries than in the Green Wedge zone.

Advantages of this option are:

 The purpose of the zone contains similar objectives as the Green Wedge zone in protecting and conserving biodiversity, scenic landscapes and sustainable management practices.

- Recognises the potential land use conflicts between uses in this area, and requires permits to assess these potentials (eg between agriculture and residential)
- Prohibits new land fill / materials recycling operations
- Allows a wider range of land uses than the Special Use zone
- Enables greater scrutiny of buildings and works that may be visible from roads and other properties.
- The zone already exists which reduces issues with the creation of a new zone (ie. unlimited possibilities)

Disadvantages are:

- Restricts the options for existing land fill sites as they become a prohibited ('existing') uses, and may lead to stagnation or lack of improvements to these operations over time due to the inability to raise capital
- The purpose of the zone does not mention the need to protect the amenity of surrounding residential areas, instead referring to rural living areas
- Increases the number of permits required which has some resourcing implications for the Council

Option 4 – Create a new Green Wedge zone or Special Use zone schedule

This option effectively involves creating a new zone to apply to the Special Use 2 and Green Wedge zoned land. Should the option of utilising the Green Wedge A zone not be acceptable to the DPCD due to the original purpose of the zone for example, this may be the only viable option. A Green Wedge 'B' zone may be an option, which would be based on the Green Wedge A, but contain a purpose more clearly tailored to encouraging agriculture and minimising land use conflict between nearby residential and other uses within the Green Wedge. A new Special Use zone schedule would have the same purpose.

Advantages of this option are:

- Enables the tailoring of the controls specific to the area
- There is an argument that the Kingston Green Wedge is unique and deserves its own zone provisions

The main disadvantages are:

- The option may not be supported by the DPCD/Minister
- The area is still covered by the general provisions of Clause 57 Metropolitan Green Wedge Land which limit the range of land uses that can be allowed in any case

ZONING RECOMMENDATIONS

In general, Option 3 is considered to provide the best fit with the needs identified for the Kingston Green Wedge. The mix of land uses allowable is appropriate for the majority of the Green Wedge, and the increased buildings and works permit requirements are also appropriate. The issues regarding the zone purpose will require discussion with the DPCD but are not considered insurmountable.

Green Wedge Intensive areas

The Plan identifies the areas designated as 'Green Wedge Intensive' on the Land Use map are the most appropriate locations for many of the more business oriented activities that require close proximity to users. The intention in these areas would not be to allow residential subdivision, and this will need to be clear in Policy (or through the Schedule if possible), but rather to allow other suitable uses such as camping and caravan parks (strictly tourist-style accommodation), markets, hall, place of assembly, retail plant nurseries, some recreation facilities, place of worship, and tourist accommodation and education (if the zone provisions are altered). The Local Policy / Strategy needs to reflect these land use intentions with the accompanying map.

Transitional areas

The impact of a change to the Green Wedge A (or similar) zone on existing land fill/materials recycling / transfer station activities in locations which the Plan has identified as 'Transitional' will be to render these uses as 'non-conforming' and the 'Existing use' provisions of the planning scheme at Clause 63 will apply. The effect of these provisions is that any change to the operations of the Refuse disposal / Materials recycling / Transfer station will require approval and will need to demonstrate that the amenity of the area will not be further damaged by that change or that a new use will be less detrimental to the amenity of the locality. The aim of all further approvals in these areas will be to encourage state-of-the-art facilities that reduce and minimise off-site impacts.

The accompanying Green Wedge policy will be explicit about the timeframes envisaged for the phasing out of these activities and options for the future.

Pietro Road/Kingston Heath Reserve Link

The Plan does propose to allow for smaller lot subdivision in a small area between Pietro Road and Heatherton Reserve in order to obtain a community benefit of a pedestrian/cycle link through to the Kingston Heath Reserve. This link is considered to be important to the establishment of a connection between the future parkland extending from Karkarook Park to Kingston Road. A north-south link between the two open space areas is considered highly desirable not just for pedestrians and cyclists, but also for wildlife, and a wildlife corridor is designated to the west of the Pietro Road properties, on land owned by the Kingston Heath Golf Course. This wildlife corridor needs to extend through the 2-3 properties between the southernmost extents of this land to Kingston Heath. Achievement of the physical path and the wildlife corridor can be managed through planning approvals for subdivision and / or development of the 2-3 lots.

In order to achieve the links the Plan therefore proposes to allow for the subdivision of these lots to a minimum of 1ha, which is slightly larger than the existing Pietro Road properties. This can be achieved through designation of the area with a minimum 1 ha subdivision size in the schedule to a Green Wedge zone for example. A Vegetation Protection Overlay should also be applied to the Pietro Road properties, the site to the west, and the lots between Pietro Road and Kingston Heath to preserve existing vegetation. Policy will require additional planting in appropriate species at the time of any approvals for subdivision or development in this area.



Springvale Road properties

Properties fronting Springvale Road between Governor Road and the Mentone Grammar sports complex (not including this complex) are identified by this Plan for possible future removal from the Green Wedge and rezoning to a business or commercial zone should the opportunity arise to do so. The sole intention of this rezoning would be to allow for limited redevelopment that can achieve some improvements to the appearance of the properties and establishment of a vegetation buffer to Braeside Park at the rear. The types of use envisaged for this area are low site coverage commercial and community related, and not retail. The form of development is low level, single tenancy buildings sited within landscaped grounds.

Should this be supported by the State Government, the planning scheme will need to be altered to remove this area of land from the Green Wedge, by modifying the Urban Growth Boundary, and rezoning the land to a suitable business zoning – the most appropriate appears to be the Business 4 zone at present. However the recently released review of commercial and business zones will require reevaluation of the appropriate controls (zone and overlays) once this is resolved.

Policy needs to clearly outline the appropriate uses within the zone and limits on the minimum buildings area of 1000sq.m. included in the schedule to the zone. The planning scheme also needs to include the built form and landscaping controls proposed for this area of land in a Design and Development Overlay as mandatory requirements and reflected in Strategy/Policy. Financial or other contributions to enable improvements to the road verge and 'entrance' treatment to the Green Wedge need to be negotiated with the land owners during redevelopment, and the requirement for these contributions needs to be established through the controls.

Earthworks

In addition, due the importance of ground water and other environmental concerns, and the appearance of the area, a permit should be required for all earthworks in the Green Wedge A (or similar) zone.

TABLE 6 EXISTING LOT SIZES WITHIN THE SUZ2

Size of lots (Hectares)	Number of lots	Percentage (%) of lots
0-1	30	38
1-2	15	19
2-4	14	18
4-8	9	11
8-10	2	3
10-16	1	1
16-20	2	3
20-30	2	3
30-40	3	4
40-80	2	3

MINIMUM LOT SIZE PROVISIONS

Future minimum lot size requirements for the Special Use Zone 2 area must be considered should the zoning be changed as is recommended in previous paragraphs. A change in the zoning to the Green Wedge 'A' zone would allow for a more limited range of uses, while much of the land will continue to be limited in its redevelopment options by previous landfill operations. A smaller minimum lot size could allow for small parts of landfill sites to be subdivided for a permissible purpose.

The existing lot sizes of land within the SUZ2 at present are reflected in Table 6.

It is noted the lots over 30 hectares are either existing or previous land fill sites, and those over 40 ha are to be acquired for the Chain of Parks. Therefore the subdivision potential of all lots over 30 ha is limited.

The analysis indicates that a minimum lot size of 4 ha would allow for approximately 50additional lots to be created, an 8ha minimum would allow only 7 lots to be subdivided (including the landfill sites) , and a 40 ha minimum would allow none.

The opportunity to subdivide some portions of the large landfill lots for alternate permissible uses within a future new zone might encourage the reuse of these sites for more compatible uses and may facilitate a positive change in land use to achieve the objectives of the plan.

An 8 ha minimum appears to be a reasonable standard to adopt should the land be rezoned from SUZ2 to another zone.

As this would allow for a greater subdivision potential than the current provisions, this part of the Plan would require ratification by parliament. In the interim amendment that would be created to see implementation of parts of the Plan not requiring parliamentary approval, the 40ha minimum should be applied. (NB This same issue arises with the Pietro Road 1 ha minimum proposal - this aspect of the Plan will need to be managed through a separate amendment process)

BUILT FORM CONTROLS

The Design Guidelines prepared for the Green Wedge Plan should be introduced into the planning scheme in some form to provide statutory weight and guidance about the form, siting, landscaping and design of new buildings. Options for introducing the built form controls into the planning scheme include Policy/ Strategy or an Overlay such as the Design and Development overlay or a Significant Landscape overlay. The advantages and disadvantages of each option are discussed below.

Policy

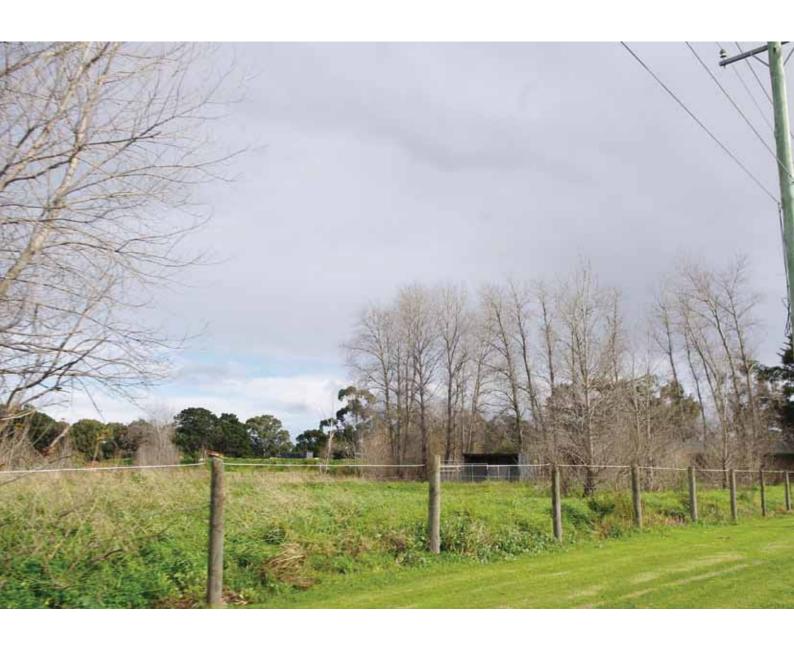
A Local policy or strategy within the Municipal Strategic Statement could be included to guide owners and planners as to the preferred built form in the various precincts within the Green Wedge. This would be utilised when a permit is required for buildings or works under provisions in the zone, but will not require a permit in its own right. Local policy does not have the same statutory weight as an overlay and cannot include specific provisions such as preferred setbacks or heights.

Overlays

Overlays can contain specific built form or landscaping requirements and provide the ability to require that a permit be obtained for all buildings and works, or exempt certain types of development. A DDO is the usual method by which to apply built form objectives and requirements such as appearance, setbacks, heights or materials. The DDO can be designed to implement the Built Form Guidelines contained in the Green Wedge Plan. It cannot control vegetation removal however.

The Significant Landscape overlay can be used in circumstances where the landscape is the primary concern and worthy of protection. While the rural landscape is certainly worthy of protection, there are areas within the Green Wedge where this is not the primary issue, therefore the DDO is considered to be the more appropriate tool.

To effectively apply the Design Guidelines over all the green Wedge it si proposed that the DDO be applied to all present and future Green Wedge zoned land. The DDO should require a permit for all development over 2 storeys in height (8m), and closer to the front / side boundary in each precinct than specified in the Guidelines. The Guidelines regarding site coverage should also form part of the permit trigger.



CHANGES TO THE UGB

Three changes to the UGB are advocated in the Plan:

- location of the Woodlands environmental wetlands owned by Melbourne Water outside the UGB
- location of part of the wetlands adjacent to the Waterways estate outside the UGB
- location of the properties fronting Springvale Road between Governor Road and the southern boundary of the Mentone sports complex within the UGB (and rezoning to an appropriate commercial zone)

All these changes would be subject to Ministerial approval. The rationales for each of these changes are discussed in the Plan.

SUMMARY OF PROPOSED PLANNING CONTROLS

It is therefore proposed that:

- The UGB be altered to include the two adjacent open space areas when the opportunity arises outside the UGB
- The UGB be altered to include the identified Springvale Road properties within the UGB.
- The existing Special Use 2 and Green Wedge zoned land be included within a Green Wedge A Zone, with a minimum lot size of 8 ha. If this zone is unacceptable to the DPCD/Minister then develop a new similar zone.
- The minimum lot size for land in Pietro Road be amended to 1 ha.
- Rezone Council owned land within the Chain of Parks Concept Plan area to Public Parks and Recreation Zone.
- A new Policy / Strategy be developed and inserted in the planning scheme that includes:
 - Vision and objectives for the Green Wedge
 - Appropriate land uses in Transitional areas and timelines for phasing out of activities
 - Appropriate land uses Intensive areas

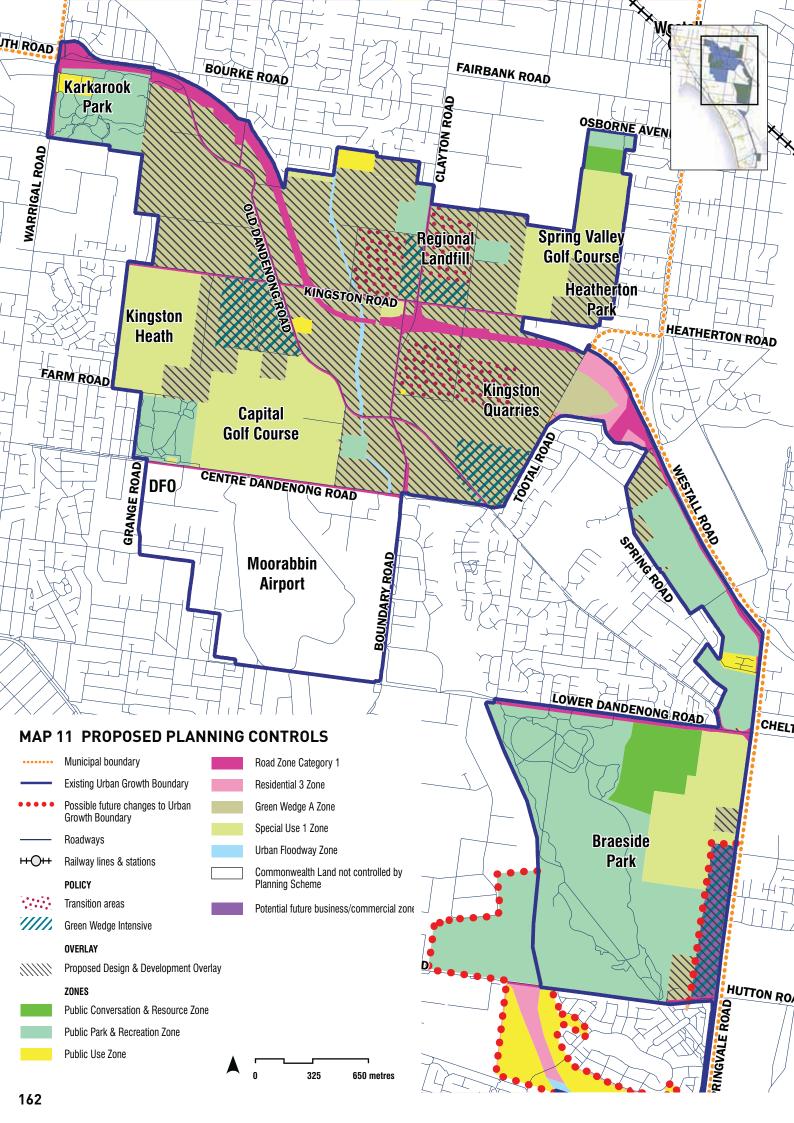
- Broad design objectives
- Guidelines for Pietro Road and adjacent land for subdivision
- A permit be required for all earthworks in the Green Wedge A zone
- A DDO be introduced over all land within the Green Wedge zone containing the built form guidelines specific to each area
- A VPO be introduced over land fronting Pietro Road, adjacent land to the west and to the south to protect existing trees.
- Apply planning scheme overlay controls (eg Environmental Significance Overlay) to those sites identified as having ecological value, including wetlands, buffer areas and strategic habitat links.
- Apply planning scheme controls to protect and encourage appropriate vegetation along areas designated for wildlife corridors.

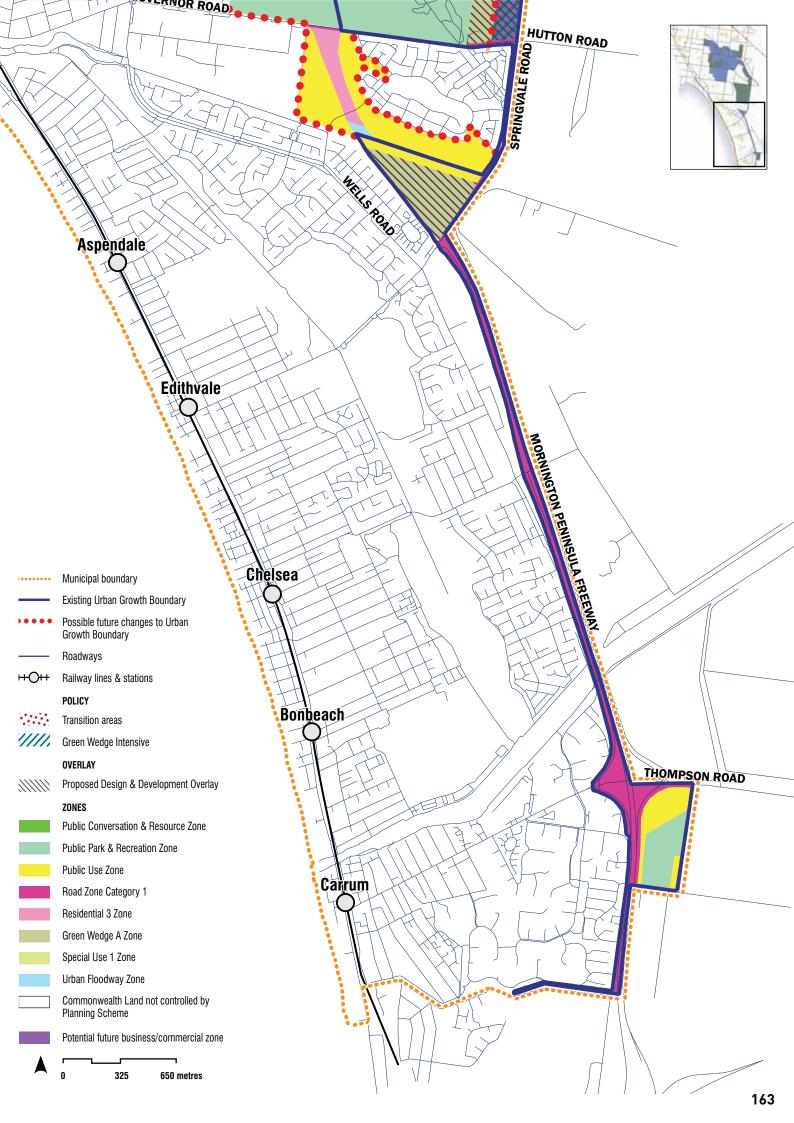
The final proposed planning controls applying to the Kingston Green Wedge are shown on the Proposed Planning Controls Map.

TABLE 7 COMPARISON BETWEEN GW ZONE, GW 'A' ZONE AND SPECIAL USE ZONE 3

USE	SPECIAL USE ZONE 2	GW ZONE	GWA ZONE
Abattoir	Permit required	Permit required	Prohibited
Agriculture	Permit required	Crop raising no permit required	Permit required
		All other agriculture permit required	
Animal boarding	Prohibited	Permit required	Permit required
Animal keeping	Permit required, no more than 4 animals	No more than 6 animals without a permit	No more than 3 animals without a permit
Bed and breakfast	Prohibted	No more than 6 persons without a permit	No more than 6 persons without a permit
Camping and caravan park	Prohibited	Permit required	Permit required
Crop raising	Permit required	No permit required	Permit required
Dwelling	Prohibited	Permit required, only 1 per lot	Permit required, only 1 per lot
Extensive animal husbandry	No permit required	No permit required	Permit required
Funeral parlour	Permit required	Prohibited	Prohibited
Horse stables	Prohibited	Permit required	Permit required
Hospital	Permit required	Prohibited	Prohibited
Informal outdoor recreation	No permit required	No permit required	No permit required
Intensive animal husbandry	Prohibited	Permit required	Prohibited
Manufacturing sales	Permit required	Permit required, must be incidental part of Rural industry	Prohibited
Market	Prohibited	Permit required	Only Community market permit required
			Other markets prohibited
Materials recycling	Permit required	Permit required & only in conjunction with Refuse disposal or Transfer station. Must not include the collecting, dismantling, storing, recycling or selling of used or scrap construction and demolition materials	Prohibited
Milk depot	Permit required	Permit required	Prohibited
Mineral extraction	Permit required	Permit required	Permit required
Motor racing rack	Permit required	Prohibited	Prohibited
Office	Prohibited	Prohibited	Prohibited
Plant nursery	Permit required	Permit required	Permit required
Primary produce sales	Prohibited	Permit required	Permit required
Refuse deposal	Permit required	Permit required	Prohibited
Rural store	Permit required	Permit required	Prohibited unless it is in a building, and used to store equipment, goods or vehicles used by a resident on the lot
Research and development centre	Permit required	Permit required, must be in conjunction with agriculture, natural systems, rural industry or winery	Prohibited
Sawmill	Permit required	Permit required	Prohibited
Shop	Prohibited	Prohibited	Prohibited
Solid fuel depot	Permit required	Permit required	Prohibited
Transfer station	Permit required	Permit required, must not include scrap or demolition materials	Prohibited
Transport terminal	Prohibited	Permit required	Prohibited
Vehicle store	Permit required	Permit required	Prohibited unless in a building and used to store vehicles by a resident on the lot
Veterinary centre	Prohibited	Permit required	Permit required

NB. This table is not exhaustive, and should not be utilised without checking the particular circumstances of the proposal. Reference to the Definitions in the planning scheme is required to fully determine the range of uses included within each term.





9

Implementation

9.1 INTRODUCTION

The Strategy will be implemented over a 20-25 year period. A detailed Action Plan has been prepared to accompany the Green Wedge Plan, identifying the responsibilities for action and approximate timeframes.

Implementation of the Green Wedge Plan will require cooperative involvement from a number of government departments, agencies and organisations. The Kingston Planning Scheme is the primary statutory tool to implement the recommendations of the Plan, however it is not the only statutory mechanism that may be used by the Council. While most of the actions require some input from the Council in its various roles, some require direct input and management by others.

The Action Plan identifies the Council department that will be responsible for hosting the implementation of the action, or providing input, and it is anticipated that these actions will then be contained within the business plans for the relevant departments. Other

responsible agencies or stakeholders that would be directly involved or consulted are listed in the second column. These organisations may provide funding, own relevant sites or manage related infrastructure, for example.

Implementation will be staged over the 20-25 year timeframe. The staging will be required as certain actions have to be completed before others can be commenced. In some cases the changes proposed are substantial and require incremental implementation, or accumulation of funds from a number of potential sources.

The timeline for implementation is classified as follows:

• Immediate: 6 to 18 months

• Short: 18 months to 5 years

Medium: 5 to 10 years

• Long: 10 to 25 years

 On-going: throughout life of the Plan

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
EN	/IRONMENTAL QUALITIES			
Wat	ter Resources			
1	Ensure the Dingley Arterial Bypass includes Master Drainage Planning to fully assess hydrological impacts in line with the Transport Integration Act. The Master Drainage Plan should:	Department / Unit name (eg. Capital Works, Drainage & Infrastructure)	VicRoads Melbourne Water	Immediate
	 Assess the potential for flooding impacts to occur to existing land uses such as residential and market gardens, as well as public spaces. 			
	 Identify mitigation measures such as water retarding basins/wetlands; and upsizing drainage pipe networks to accommodate peak flow events. 			
	 Investigate potential for land acquisition to accommodate flood mitigation and/or water harvesting measures, such as along the Dingley corridor between Heatherton Road and Boundary Road. 			
2	Consolidate the Deals Road drainage scheme and	Department / Unit name	ne Melbourne Water	Immediate
	pursue potential for inclusion of a retarding basin near the junction of Deals Road and the Dingley Bypass.	(eg. Capital Works, Drainage & Infrastructure)		
3	Seek inclusion of the Mordialloc Settlement Creek	Department / Unit name	Melbourne Water	Short
	and Dunlops Creek in future state-wide River Health assessment and Waterways improvement processes.	(eg. Capital Works, Drainage & Infrastructure)		
4	Seek to establish public access along the extent of the	Department / Unit name	Melbourne Water	Medium
	Mordialloc Settlement Creek and Dunlops Creek in the Green Wedge through purchase and negotiation with adjoining land owners.	(eg. Capital Works, Drainage & Infrastructure)		
5	Install water flow and quality gauges for Mordialloc	Department / Unit name	Melbourne Water	Short
	Settlement Creek at the northern end of the Green Wedge to provide baseline data which can then be used to design water treatment facilities.	(eg. Capital Works, Drainage & Infrastructure)		
6	Advocate for the regular monitoring of pollution in	Department / Unit name	Melbourne Water	Short
	creeks and waterways, including Mordialloc and Dunlops creeks.	(eg. Capital Works, Drainage & Infrastructure)		
7	Support and monitor Moorabbin Airport Corporation's initiatives for improvements to the capacity of the Mordialloc Settlement Creek, and work with stakeholders to ensure that these incorporate suitable WSUD features.	Department / Unit name	Moorabbin Airport Corporation Melbourne Water	Immediate

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
8	Complement the proposed improvements to the Mordialloc Settlement Creek outlined in the Moorabbin Airport Master Plan, through long term reclamation of	Department / Unit name	Moorabbin Airport Corporation	Long
	a more natural stream profile between Old Dandenong Road and Centre Dandenong Road in consultation with land owners.		Melbourne Water	
9	Undertake flood estimation and mapping for subcatchments of the Green Wedge using best practice probabilistic modelling.	Department / Unit name	Melbourne Water	Medium
10	Review the Kingston Sustainable Water Use Plan (2006) with specific measures applicable to water security and watercourse condition within the Green Wedge.	Department / Unit name	Melbourne Water	Short
11	Where land use change occurs, use this as an opportunity to connect dams or other water impoundments to the watercourse system. Water bodies that are within relative proximity to the Mordialloc Settlement Creek, Mordialloc Creek or Dunlops Creek would be preferable.	Department / Unit name	Melbourne Water	Long
12	Consider incorporating the following areas into the Green Wedge:	Department / Unit name	Waterways land owners Melbourne	Immediate
	 Waterways development and the stretch of Mordialloc Creek between Darling Road and Springvale Road. 		Water	
	 Southwest of Braeside Park to include the water bodies north of Governor Road. 			
13	Undertake an audit of fish barriers present within the Mordialloc Settlement Creek and Dunlops Creek; prioritise measures to replace these with appropriate fish ways.	Department / Unit name	Melbourne Water	Medium
Bio	diversity			
14	Coordinate works in the Kingston Green Wedge with the Living Links project by the Port Phillip and Westernport Catchment Management Authority (PPWCMA), to maximise the benefits of the project in the Green Wedge.	Department / Unit name	PPWCMA	Short
15	Develop a Green Wedge Weed Management Plan to ensure the ecological values of the Green Wedge Reserves are protected from invasive species. Include specific actions for the reserves which may include controlled burns, slashing/mowing, and hand weeding around significant plant colonies.	Department / Unit name		Short

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
16	Undertake targeted surveys for the Growling Grass Frog (Litoria eniformis), Dwarf Galaxias (Galaxiella pusilla), and the Southern Brown Bandicoot (Isoodon obesulus obesulus), to determine the presence/distribution of these species, target conservation activities towards these areas and establish linkages between important habitat areas. Stipulate targeted surveys in future planning controls if they are applied to sites with ecological value.	Department / Unit name		Short
17	Investigate need and feasibility for further release of significant species Dwarf Galaxias (Galaziella pusilla) and Growling Grass Frog (Littoria eniformis) that have declined or no longer occur in the area.	Department / Unit name		Medium
18	Prepare Vegetation Management Plans for specific areas/ reserves identified following the completion of targeted surveys for rare or threatened species. The Plans should include revegetation, weed management and monitoring actions, and be focused on an objective to increase fauna habitat and establish linkages between reserves.	Department / Unit name		Medium
19	Include in the Vegetation Management Plans vegetation management targets focusing on remnant and re-vegetation at key sites (review every 5 years) (incorporating recommendations from Yugovic et al 2010.)	Department / Unit name		Medium
20	Negotiate with VicRoads to ensure adequate wildlife underpasses are included in design works for Dingley Bypass and Mornington Peninsula Freeway.	Department / Unit name	VicRoads	Immediate
21	Develop a protocol in line with National standards (e.g., Australian Standard AS 4978.1—2006: Quantification, Monitoring and Reporting of Greenhouse Gases in Forest Projects - Afforestation and Reforestation) for planning and establishing dedicated areas of native forestry as a sink for carbon emissions.	Department / Unit name		Short
22	Undertake detailed analysis of creeks, water bodies and land identified as having potential ecological value	Department / Unit name		Immediate
23	Prepare a Habitat Links Strategy that defines the locations, species and methods for establishing a network of native fauna habitat links.	Department / Unit name		Medium
24	Apply planning scheme overlay controls (eg Environmental Significance Overlay) to those sites identified as having ecological value, including wetlands, buffer areas and strategic habitat links.	Department / Unit name		Short

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
25	Apply planning scheme controls to protect and encourage appropriate vegetation along areas designated for wildlife corridors.	Department / Unit name		Immediate
26	Investigate the use of native vegetation offsets from other parts of the municipality to establish permanently protected areas of native vegetation in the Green Wedge.	Department / Unit name		Immediate
27	Acquire private freehold land to improve ecological connectivity where environmental values have been confirmed	Department / Unit name		On-going
28	Undertake revegetation along the Mordialloc Settlement Creek, in association with weed management to improve habitat continuity between Braeside Park and the remnant native vegetation associated with golf courses to the north-west of the Park such as Spring Valley and Kingston.	Department / Unit name		Short- Medium
29	Work with the Carrum nursery and Green Links nursery, which propagate indigenous vegetation for the general 'Sand-belt' region, to establish and source plants for revegetation of private and public land.	Department / Unit name		Short
30	Continue controlled burning in The Grange Heathland Reserve to facilitate the recruitment of indigenous plants and to control weed seedlings. The controlled burns should be followed by weed control (1-2 years at each burn site) to prevent weed seedlings, especially in the first spring (as recommended by Yugovic et al 2010)	Department / Unit name		On-going
31	Cease all planting in the Grange Heathland and Rowan Reserve Woodland Reserves and rely upon natural recruitment to obtain new plants (as recommended by Yugovic et al 2010)	Department / Unit name		Immediate
32	Remove all plantings and progeny of such plantings in the reserves, while retaining all indigenous plantings and their progeny (as recommended by Yugovic et al 2010)	Department / Unit name		On-going
33	Investigate the status of EVCs in the Kingston Green Wedge, and take appropriate management action. The investigation should include a review of the revegetation with a detailed understanding of the distribution and species composition of the EVCs prior to planting and removing plants (as recommended by Yugovic et al 2010)	Department / Unit name		Short
34	Maintain existing buffers to Reserves and implement weed control.	Department / Unit name		On-going

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
35	Consider methods to protect reserves from invasive species which may include fencing, having regard to any negative impact this may have on connectivity and natural recruitment between areas.	Department / Unit name		Short
36	Support the establishment of carbon sink / urban forests that utilise indigenous species and assist in the re-establishment of functioning ecological communities.	Department / Unit name		On-going
Con	munity Awareness and Involvement			
37	Develop activities and/or events based around water resources, e.g., model boats, frog census, Waterwatch.	Department / Unit name		On-going
38	Use different media to engage the community in valuing water resources such as Melbourne Water's Waterways Stories.	Department / Unit name		On-going
39	Encourage and support landholders and residents to engage in programs of Melbourne Water, Landcare programs and Catchment Management Authority.	Department / Unit name		On-going
40	Engage the more than 20 local community groups in Kingston (City of Kingston, 2007) that work on projects such as plant propagation and re-vegetation, weed control, erosion prevention and remediation, and water quality monitoring, to assist in realization of the Chain of Parks concept.	Department / Unit name		Immediate
41	Develop interpretive walks for Reserves in association with Friends groups.	Department / Unit name		Short- medium
42	Actively support community participation in major environmental programs (eg Clean Up Australia Day, National Tree Day) and establishment of Friends groups for watercourses.	Department / Unit name		Short
43	Actively support community participation in managing environmentally significant areas, such as through the establishment of Friends Groups, Landcare programs and committees of management.	Department / Unit name		On-going
44	Ensure that suitable publicity (eg website, Council publications) is made available about the impacts of dogs and cats on native wildlife, and ways to minimise this impact.	Department / Unit name		Immediate
45	Investigate methods (eg grants, free advice) to encourage land owners to undertake revegetation and biodiversity conservation on private land.	Department / Unit name		Immediate

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
Fun	ding			
46	 Access funding through available programs including: Melbourne Water's Programs including Corridors of Green; Stream Frontage Management Program; and Community Grants for Rivers Program. 	Department / Unit name		Immediate – on-going
	 The Living Links Short Works Program 			
	 DSE Communities for Nature Grants Program 			
	 Grants (between \$500 and \$40,000) available from the PPWCMA for works such as Pest plant and animal management; Protection, enhancement or establishment of native vegetation; Landcare support; Threatened species; Community education and capacity building. 			
47	Encourage and facilitate multi-stakeholder investment in water infrastructure which can achieve multiple objectives for the Kingston Green Wedge.	Department / Unit name		On-going
LAN	ID USE			
Agr	iculture			
48	Support the retention of existing agricultural activities in the Green Wedge.	Department / Unit name		On-going
49	Provide educational and advisory support to farmers.	Department / Unit name		Immediate
50	Support the establishment of new small scale horticultural activities that involve farm sales, and wholesale plant nurseries.	Department / Unit name		On-going
51	Provide a venue and management for the establishment of a farmers' market.	Department / Unit name		Short
52	Provide a venue for a community garden.	Department / Unit name		Short- medium
Sola	ar / Energy Park			
53	Investigate options for location of a Solar / Energy Park on a former land fill site and discuss with land owners.	Department / Unit name		Short
54	Undertake a detailed feasibility assessment for a Solar / Energy Park with the assistance of Sustainability Victoria	Department / Unit name		Short
55	Prepare a detailed proposal for a Solar / Energy Park and seek State and Federal funding.	Department / Unit name		Short
Con	nmunity Environmental Park / Urban Form			
56	Determine the optimal location of a Community Environmental Park or Urban Farm	Department / Unit name		Short

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
57	Undertake a general feasibility assessment and concept.	Department / Unit name		Short
58	Seek sponsorship and State government funding for the concept.	Department / Unit name		Short
59	Involve local community and environment groups in the proposal and funding applications.	Department / Unit name		Short
Com	nmunity Facilities			
60	Undertake a needs assessment to determine community services required in the area, and locate new facilities in the appropriately designated areas of the KGW Plan.	Department / Unit name		Short
61	Support the establishment of new community facilities by public or private organisations that demonstrate a local or regional need, are conveniently located for access by users and are designed and sited appropriately.	Department / Unit name		On-going
Edu	cation			
62	Engage Heatherton Christian College and Mentone Grammar School regarding land requirements and expansion plans	Department / Unit name		Short
63	Act as an intermediary between Heatherton Christian College and local sports clubs and associations to facilitate public use of the College's facilities.	Department / Unit name		Short
64	Support changes to the planning scheme to allow consideration of low intensity educational activities (eg. located in substantial grounds, sporting fields with shared usage) in the Green Wedge that are located, designed and sited appropriately.	Department / Unit name		Immediate
65	Approach and discuss future options for location of agricultural related education facilities within the Green Wedge with tertiary institutions.	Department / Unit name		Short
Rec	reation		_	
66	Co-locate active recreation facilities where compatible, so amenities and other infrastructure can be shared, economies of scale achieved, and ensure maximum usage of facilities.	Department / Unit name		On-going
67	Ensure viability of new recreational facilities by dual use / flexibility of use; some facilities to be ticketed	Department / Unit name		On-going
68	Encourage dual use of facilities where feasible to maximise their usage, which is not necessarily limited to recreational use.	Department / Unit name		On-going

STR	ATEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
69	Investigate with private developers, sporting bodies and Sport and Recreation Victoria, the possibility of establishing regional sports facilities, and collocation of those facilities in one sporting complex	Department / Unit name		Immediate
70	Support changes to the planning scheme to allow consideration of low site cover indoor sporting facilities (eg. located in substantial grounds, shared usage) in the Green Wedge that are located, designed and sited appropriately.			
71	Investigate the opportunity to establish a regional hockey facility in conjunction with the Mentone Hockey Club	Department / Unit name		Immediate
72	Investigate the inclusion of horse trails with walking / cycling facilities.	Department / Unit name		Short
73	Site recreational uses that have greater acoustic, visual amenity and traffic impacts away from residential areas to protect residential amenity.	Department / Unit name		On-going
74	Site recreational facilities that have minimal environmental impacts and higher usage/demand, closer to residential areas.	Department / Unit name		On-going
75	Ensure recreational facilities incorporate a range of sustainability measures in building/infrastructure/landscaping design, management and maintenance.	Department / Unit name		On-going
76	Generally develop recreational facilities close to arterial roads, public transport nodes, car parking, walking / cycling tracks and employment and residential hubs.	Department / Unit name		On-going
77	Consider purchase of land by Council along the Mordialloc Settlement Creek for recreation purposes as land becomes available for sale	Department / Unit name		On-going
78	Seek funding from Sport and Recreation Victoria via grants for recreational facility planning, construction and management (eg., Community Facility funding program)	Department / Unit name		Immediate
79	Seek opportunities for Federal Government grants which are often associated with international events.	Department / Unit name		On-going
80	Investigate purchase of the 'Triangle site' by Melbourne Water for open space purposes.			

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Was	te and Recycling			
81	Discourage the establishment of new landfill recycling or transfer station operations in the Green Wedge.	Department / Unit name		Immediate
82	Support the transition of landfill, recycling or transfer stations on appropriate land, to new uses that can be demonstrated to ensure reduced off-site amenity impacts.	Department / Unit name		Immediate – on-going
83	Continue to ensure current approvals, including those issued by the EPA, are adhered to and enforced.	Department / Unit name		On-going
Mod	rabbin Airport			
84	Maintain close liaison with Airport planning authorities to establish plans and provide input as possible.	Department / Unit name		On-going
85	Support environmental improvements on the site	Department / Unit name		On-going
86	Oppose additional non-airport related activities that may impact on commercial activities in the remainder of the City	Department / Unit name		On-going
87	Support activities that will generate employment for nearby residents	Department / Unit name		On-going
88	Lobby State and Federal government for greater input to Airport planning by local authorities	Department / Unit name		Immediate
Plar	nning Scheme Changes			
89	Change the planning scheme controls to include the recommendations of this Plan as Strategy and Policy to effectively guide all future decision making.	Department / Unit name		Immediate
90	Through the planning scheme, actively discourage new landfill, materials recycling, transfer station and mining operations.	Department / Unit name		Immediate
91	Change the zoning of land in the Special Use Zone Schedule 2 (SUZ2) to a Green Wedge zone.	Department / Unit name		Immediate
92	Change the minimum lot size for properties between Pietro Road and the Kingston Heath Reserve to 1 hectare, subject to the provision of a permanent public, pedestrian/cycle path (2 to 4 metres in width, depending on the volume of users) and an appropriately vegetated habitat link as indicated on the Access, Public Spaces and Environment Maps.	Department / Unit name		Immediate

STRATEGY / ACTION		COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
93	Advocate for changes to the zoning and Urban Growth Boundary to include properties fronting Springvale Road within the urban area subject to inclusion of planning controls that:	Department / Unit name		Immediate
	 Ensure that new uses and development on the sites provide a 10 metre buffer along any boundary abuttal with Braeside Park where no development can take place, and the land is professionally landscaped with indigenous vegetation as specified by Parks Victoria in consultation with the Friends of Braeside Park; 			
	 Limit the types of land use to office and community uses, in large format, low scale buildings; 			
	 Require a maximum site coverage, hard surface coverage, setbacks, quality building design and other requirements in accordance with the Built Form Guidelines in this Plan; 			
	 Obtain public benefits to undertake improvements to the public realm in the vicinity of the site, including but not limited to landscaping, signage, roadway appearance and general reflection of the location of the area at the 'gateway to the Green Wedge'. 			
94	Include the Built Form Guidelines in the planning scheme to ensure buildings are setback, landscaped and designed to achieve an improved appearance of the Green Wedge and to suit the particular location and form of use.			Immediate
PUB	LIC SPACES			
95	Seek funding for open space acquisition from state and federal government sources.	Department / Unit name		Immediate – On-going
96	Continue implementation of the Sandbelt Open Space Project Development Plan, May 1994 (known as the Chain of Parks Concept Plan)	Department / Unit name		Immediate – On-going
97	Rezone Council owned land within the Chain of Parks Concept Plan area to Public Parks and Recreation Zone upon implementation of the Plan.	Department / Unit name		Immediate
98	Utilise open pace levies, developer contributions and the development approvals process to acquire land for open space and conservation purposes as opportunities arise.	Department / Unit name		On-going
99	Identify priority waterbodies for acquisition for their ecological values.	Department / Unit name		Immediate

STRA	TEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
100	Seek funding from State government sources (eg Sport and Recreation, Planning and Community Development), user groups and private organisations for completion of sections of the pathways.	Department / Unit name		Immediate
101	Involve local community, environment and user groups in 'volunteer days' to undertake works, landscaping and maintenance.	Department / Unit name		Short
102	Develop an approach to promote the design and construction of roads which incorporate footpaths and landscaping and accord with design outcomes sought in the Kingston Green Wedge Management Plan (refer to 5.5 Streetscape Design Guidelines).	Department / Unit name		Immediate
103	Progressively implement the road verge landscaping and footpath improvements for which Council is responsible as part of operational budgets.	Department / Unit name		Immediate -Long term
104	Negotiate with VicRoads to ensure upgrades to roads are made in a timely manner, incorporate the required space for landscaping and footpaths, with minimal impacts on Braeside Park.	Department / Unit name		On-going
ACC	ESS & MOVEMENT			
Priv	ate (Road Based) Transport			
105	Liaise with State Government to support the construction of the Dingley Bypass within the next 5 years.	Department / Unit name		Immediate
106	Liaise with State Government to resolve the timing for the construction of the Mornington Peninsula Freeway Extension.	Department / Unit name		Short
107	Ensure that the design of the Dingley Bypass and Mornington Peninsula Freeway includes frequent habitat links and pedestrian/cycle crossing points that meet safety standards and guidelines.	Department / Unit name		Immediate
108	Determine whether the alignment of the Mornington Peninsula Freeway Extension has been finalised and, if not, seek to modify the alignment (and obtain surplus land) if this assists to achieve other objectives of the Kingston Green Wedge Management Plan.	Department / Unit name		Immediate
109	Liaise with VicRoads to minimise the construction impacts of the Mornington Peninsula Freeway Extension on Braeside Park.	Department / Unit name		Medium

STRA	TEGY / ACTION	COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
110	Lobby State Government to confirm the timing of the Mornington Peninsula Freeway and the potential to expedite components of the project relating to, for example, pedestrian and cycling pathways along its length.	Department / Unit name		Short
111	Lobby State Government (and VicRoads) to incorporate the upgrading of Westall, Centre Dandenong, Lower Dandenong, Governor and Springvale Roads in the vicinity of any interchange with the Bypass or Extension.	Department / Unit name		Immediate
112	Investigate the potential to downgrade or remove other roads within the Kingston Green Wedge which are not located near interchanges and on which traffic volumes are expected to reduce as a consequence of the Bypass or Extension or its related works	Department / Unit name		Short- Medium
113	Review existing and proposed access arrangements to Moorabbin Airport to identify potential opportunities for increasing connectivity to and from the site	Department / Unit name		Short
114	Lobby Federal Government for the external traffic impacts of major land use proposals on the Moorabbin Airport site to be mitigated as appropriate	Department / Unit name		Immediate
Publ	ic Transport			
115	Lobby State Government, and liaise with the Department of Transport, to provide additional bus services within the Kingston Green Wedge, including those to/from existing rail based transport services.	Department / Unit name		Short- Medium
116	Lobby State Government, and liaise with the Department of Transport, to better incorporate the existing Smartbus routes operating in the vicinity of the Kingston Green Wedge to existing and future land uses to be provided within the Wedge.	Department / Unit name		Short
117	Improve the quality of bus stops and shelters located within the Kingston Green Wedge. $ \\$	Department / Unit name		Immediate -On-going
118	The quality of the bus stops and shelters should extend to all facets of design including: proximity to key land uses, visibility, weather protection, design, safety, comfort and convenience, incorporation of lighting (preferably solar powered) and DDA compliance.	Department / Unit name		On-going
Activ	ve Travel (Walking & Cycling)			
119	Provide a spinal connection from one side of the Green Wedge to the other by including in the design of both the Dingley Bypass and Mornington Peninsula Freeway Extension pedestrian and cycle facilities on both sides of the road(with these facilities provided ahead of the construction of the road components of these projects if possible).	Department / Unit name	VicRoads	Immediate – Long
120	Investigate the possibilities for additional east-west shared path and habitat links.	Department / Unit name		On-going
121	Provide off-road connections to key uses including schools, shopping centres, community facilities and major sporting venues.	Department / Unit name		On-going
122	Implement the Principal Bicycle Network through lobbying VicRoads and construction/marking of bike lanes.	Department / Unit name		On-going

STRATEGY / ACTION		COUNCIL RESPONSIBILITY (to be completed)	OTHER RESPONSIBLE AGENCIES / STAKEHOLDERS (to be completed)	TIMELINE (draft)
123	Ensure that all new land uses within the Kingston Green Wedge provide bicycle parking facilities in accordance with statutory (minimum) requirements.	Department / Unit name		Immediate
124	Lobby State Government and VicRoads to increase the amount of cycle infrastructure currently provided within the Green Wedge (particularly given that VicRoads are currently reviewing the Principle Bicycle Network to include more off-road facilities).	Department / Unit name		Immediate
BUII	DINGS			
125	Apply the Private Realm Design Guidelines through the planning scheme	Department / Unit name		Immediate
126	Monitor the effectiveness of the Guidelines and review as required	Department / Unit name		Short-On- going
127	Investigate utilising Local Laws to improve the appearance of unsightly or unkempt land	Department / Unit name		Immediate
128	Apply the Category 3 advertising controls through the Green Wedge area, and by Policy advocate a maximum pole sign height of 7m to ensure that the signs do not extend beyond the tree canopy height.	Department / Unit name		Immediate – On-going
GOV	ERNANCE & LEADERSHIP			
129	Introduce a planning scheme amendment to give statutory effect to the Plan.	Department / Unit name		Immediate
130	Establish a group to oversee implementation of the Plan.	Department / Unit name		Immediate
131	Meet with adjoining Councils regarding implementation of the Plan.	Department / Unit name		Immediate
132	Actively monitor State and Federal grant programs, particularly in the areas of recreation, sustainability, agriculture innovation, environment and economic development, and submit funding submissions based on the outcomes and actions of the GWP.	Department / Unit name		On-going
133	Lobby VicRoads to include an open space corridor within the Dingley By-pass reservation and project cost, including trails and linkages to existing open space areas and the Chain of Parks where possible.	Department / Unit name		Immediate
134	Liaise with Parks Victoria regarding extent and timing of land acquisition for the Chain of Parks and funding available to implement components of the GWP.	Department / Unit name		Immediate
135	Advocate for the Kingston Green Wedge to be recognised and included in major strategic and open space planning projects.	Department / Unit name		On-going
136	Identify key public realm and infrastructure improvement projects within the Green Wedge and develop a Special Rates Scheme which identifies relevant properties, charges and Council contributions if required.	Department / Unit name		Immediate
137	Identify and approach key stakeholders and potential sponsors to discuss opportunities to provide funding for recreational, sustainability and community facilities within the Green Wedge.	Department / Unit name		Short – On- going
138	Investigate the establishment of a Farmland Trust to work with superannuation funds and financial institutions to invest in agricultural land to be preserved for agricultural uses.	Department / Unit name		Short