



Open Space Strategy 2014



Part 1 Key Directions

Executive Summary

Council's vision is to be a city that values people, heritage and resources – a city with a strong economy and diverse social and natural environment that will enrich our vibrant community.

Our open spaces are the 'green lungs' of the City and are areas for our enjoyment. We are fortunate to have this wonderful "green" environment accessible by so many of our residents and visitors to enjoy a walk or cycle, take part in a sporting activity, meet friends or just relax in a natural setting.

When we visit open space we feel a sense of wellbeing. There are many benefits for people who visit green, open spaces including: an opportunity to increase physical activity; lower stress levels; experience of changes of scenery; and, a place to wind down.

Updating our Strategy and partnering with other land managers ensures our open spaces can be enjoyed by future generations. A well-designed, planned and managed open space network provides significant aesthetic, social, psychological and environmental benefits for its users.

Acknowledgements

Council would like to acknowledge the contributions of those community members who took the time to contribute to the consultation process, as it has greatly assisted us to identify the issues and opportunities which have shaped the draft Manningham Open Space Strategy 2013.

Council would also like to acknowledge the effort, dedication and considered contribution of the community representatives on the Open Space and Streetscape Advisory Committee throughout the Strategy development process.

Inquiries

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Introduction

The Manningham Open Space Strategy 2014 is a 10 year plan that sets priorities and guidelines for the protection, development and use of public open space in the municipality. Monitoring of the progress of implementation of the Strategy will occur every 3 to 5 years and Part 3, the Open Space Inventory, will be updated annually in line with open space planning and development.

Document Structure

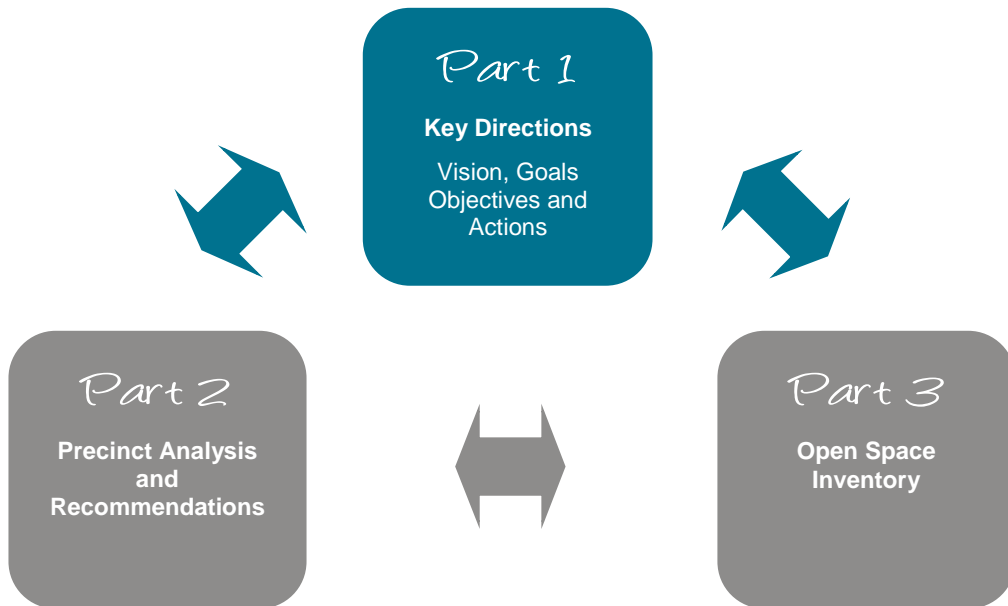


Figure 1 - Document Structure

Purpose

Open Space Strategy

Purpose

- To engage with the Manningham community and encourage involvement in public open space planning and management
- To partner with government, agencies, institutions and other land managers to improve our public open space network
- To guide Council officers involved in the planning, development and management of Manningham's public open space.

Open Space Definitions

Public Open Space

Public Open Space is defined as publicly owned outdoor land that is open for public access and public recreation including:

- Walking and cycling
- Nature appreciation
- Social activities (picnic facilities)
- Informal sporting activities
- Play (playspaces)
- Structured sport (pavilions/ stadiums and sports grounds)
- Bushland conservation.

Public Open Space is also home to the infrastructure required to house and run activities such as:

- Libraries
- Preschools
- Community halls
- Underground services
- Drainage – creeks/ retarding basins/ overland flow paths
- Water storage - dams/ storage tanks
- Water purification - wetlands/ bio filtration systems / rain gardens
- Electricity transmission lines
- Mobile phone towers
- Car parks to service open space.

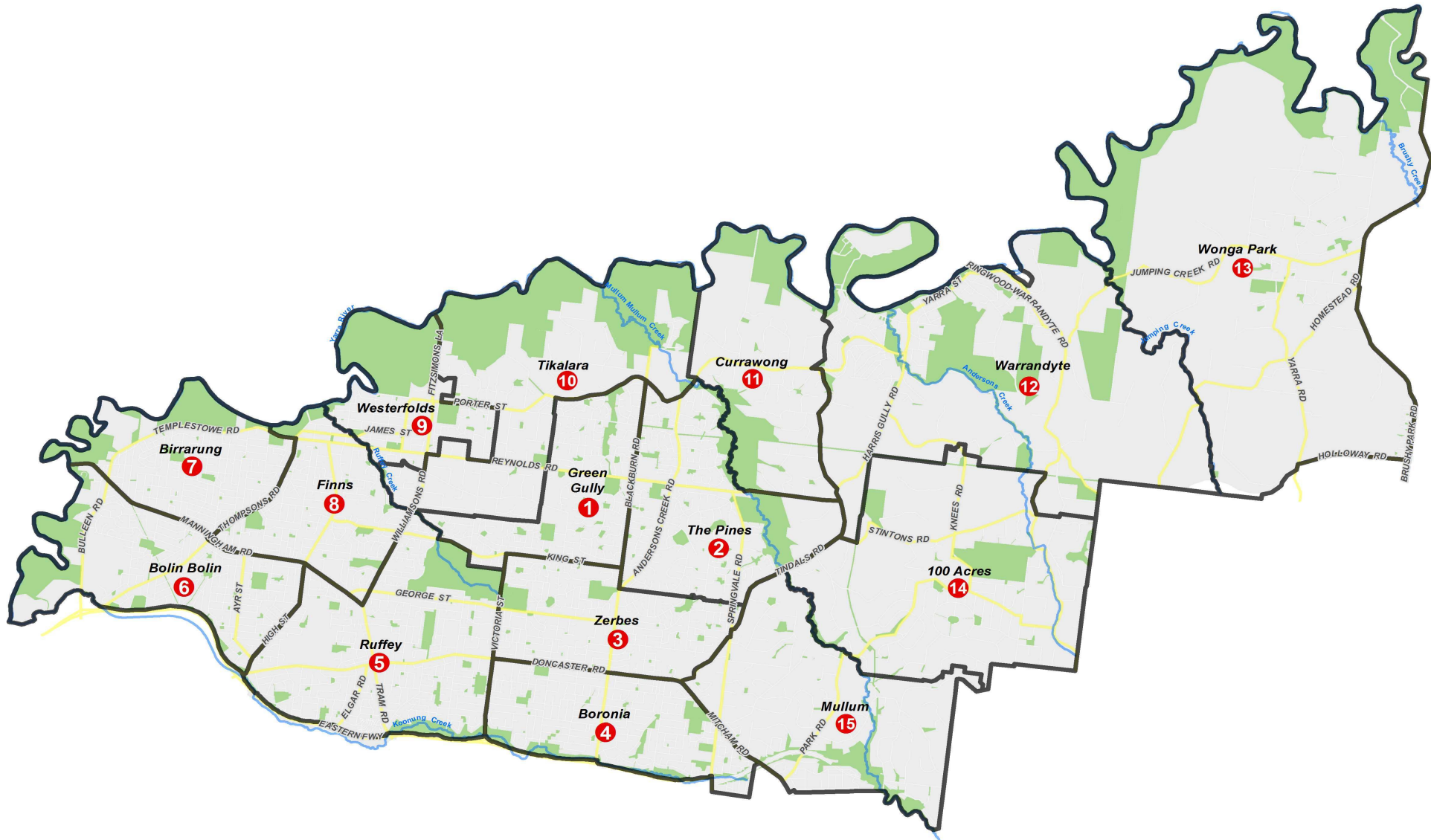
Manningham's public Open Space areas include:

- Council owned or managed land used as public open space. Larger reserves are usually zoned "Public Park and Recreation Zone" (PPRZ), "Public Conservation and Resource Zone" (PCRZ), or "Public Use Zone" (PUZ) in the *Manningham Planning Scheme*.
- Land owned or controlled by the Crown or State Government authorities i.e. Parks Victoria or Melbourne Water, which is available to the general public for recreational purposes.
- Council owned or managed community spaces in and around activity centres and community hubs eg. MC² Civic Plaza, Keeps Corner (Templestowe Village).

Note: Most smaller open space reserves are not included in PPRZ, PCRZ or PUZ zones but included in the underlying zoning but are 'reserved' on title.

Further definitions are provided in the Glossary at the end of Part 1 of this Strategy.

Map 1 - Orientation Plan showing Open Space Precincts



Open Space Network Precincts

For the purposes of planning for public open space into the future, the municipality has been divided into 15 precincts. These precincts reflect a number of factors which influence the provision, form, visitation and usage of public open space, including:

- Planning Scheme zonings
- major barriers to pedestrian movement, such as busy roads and waterways
- topography
- walkable catchments
- suburbs and neighbourhood identity.

These precincts have been redefined since the *Open Space Strategy* (2004), in order to better reflect the current and future characteristics of the municipality (Refer Map 1).

Although the southern municipal boundary between Doncaster Road and Springvale Road is defined by the Koonung Creek, construction of the Eastern Freeway has created a new physical boundary.

The small areas of VicRoads owned open space south of the freeway (but in Manningham) relate more to Whitehorse City Council's open space, while Whitehorse land north of the freeway is more accessible to Manningham residents. For the purposes of this strategy the small areas of Manningham land west of Springvale Road located south of the freeway are not included within the Manningham Open Space Network. Open space that is owned by Whitehorse but lies north of the Eastern Freeway is included in the Strategy (Eram Park).

Background

Why is Open Space Important?

This Strategy aims to clearly define public open space and its values in order to ensure it is protected, enhanced and effectively managed through a period of increasing urban density. As our population increases, more pressure is placed on our open spaces.

The following figure outlines the basic values of open space.

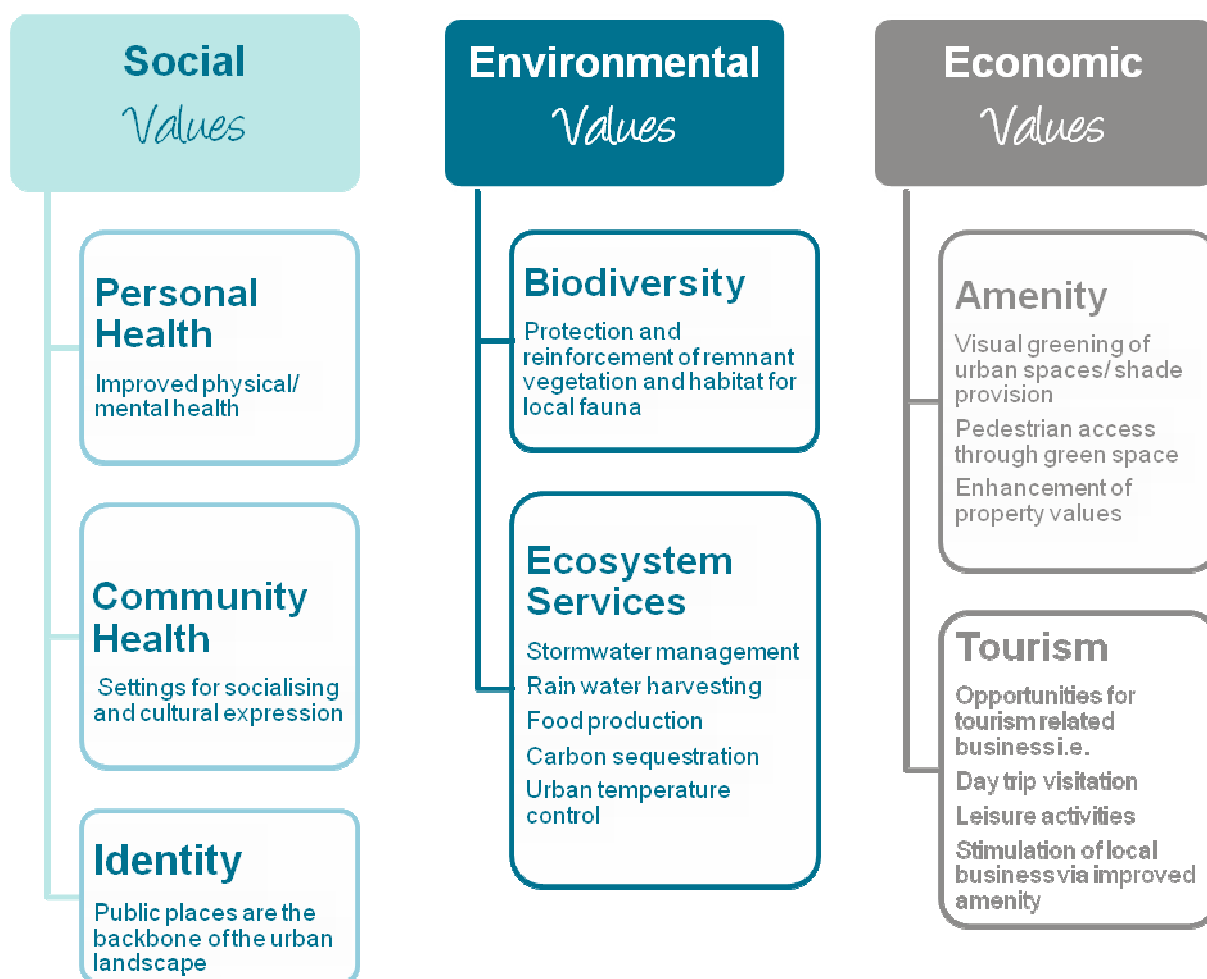


Figure 2 - Open Space Values

Social Values

Public open spaces are open to all, regardless of ethnicity, age, gender or physical ability and, when properly designed and maintained, they bring communities together, provide meeting places and foster social ties. These spaces shape the cultural identity of an area, are part of its unique character and provide a sense of place for local communities.

Our open spaces are a powerful asset in the fight against obesity and ill-health. The increase in obesity levels and other illnesses such as diabetes and cardiovascular disease are linked to ever more sedentary lifestyles and a reduction in outdoor activity. Evidence shows adult patterns of exercise are set early in life. Inactivity breeds inactivity, so a lack of exercise when young can in turn create problems in adulthood, such as diabetes and heart disease.

The impact of mental illness within the Australian population has become increasingly apparent, given the stressful lives that many now lead. Each year the economy is impacted by millions of working days through stress-related employee absence.

Under *The United Nations Convention on the Rights of the Child* (1990), children have the right to play, recreation and culture. Play is crucial for many aspects of children's development, from the acquisition of social skills, experimentation and the confrontation and resolution of emotional crises, to moral understanding, cognitive skills, such as language and comprehension, and of course physical skills. But increasing urbanisation has left our children with far fewer opportunities than previous generations to play freely outdoors and experience the natural environment. Quality public spaces can help to fill this gap, providing children with opportunities for fun, exercise and learning.

Access to quality, well-maintained public spaces has been shown to improve physical and mental health by encouraging physical

activity, sporting pursuits, active travel and social interaction, or simply by providing a space to slow down and relax.

Bushland and green areas also provide an opportunity for people to be close to 'nature' and to experience the mental and physical health and wellbeing benefits this provides.

Environmental Values

Green open spaces and areas of bushland provide environmental benefits including:

- provision of habitat for local fauna including habitat corridors
- protection/ enrichment of biodiversity
- provision of shade and cooling
- reduction of air and noise pollution
- storm water/ flood management.

There are many other tangible benefits and vital functions of our natural open spaces. These are sometimes referred to as 'ecosystem services'. These services include:

- maintenance of atmosphere and climate suitable for human life
- filtration, purification and delivery of water
- maintenance of soil fertility and structure
- pollination of vegetation
- control of potential pests, diseases and weeds
- provision of genetic resources.

Economic Values

Open space also provides opportunities for tourism related business that operate either within open spaces, such as sports, fitness and other wellbeing programs, or operate in close proximity to open space and gain the benefits of attracting visitors that are visiting our open space areas to participate in various activities, such as visiting cafes and local shops, and dining.

The provision of quality open space can also influence property market values, as nearby attractive open space can be seen as a selling point.

Manningham Strategic Context

Balance of City and Country

Manningham’s motto “Balance of City and Country” draws from the distinctive blending of the urban and rural characteristics of the municipality, with the Mullum Mullum Creek forming an informal boundary between the two.

Open space provision needs to address this balance and plan for the contrast in density and landscape character across the city and develop strong linkages throughout.

Partner Strategies

The diagram below provides the context of the Open Space Strategy in relation to other guiding Council plans and strategies. Whilst the Open Space Strategy references a number of other Council strategies and policies, the list below includes only key documents.



Figure 3 - Partner Strategies

Population

On 30 June 2011, Manningham's population was 116, 958 (figure 4). It is predicted Manningham will continue to grow incrementally over the next 20 years. The total number of under 15 year olds in Manningham has been experiencing a gentle decline for many years, which is forecast to continue until 2016 when it will change to a steady, but slight, increase in numbers. By 2031 there is forecast to be a modest increase in all age groups below 65, which will contrast with a major increase in the numbers over 65 year olds (Figure 5)¹.

By 2030, Manningham is expected to have:

- a population of around 135,376 (refer figure 4)
- families comprising couples with children as the dominant family group and the fastest growing household being lone person households
- an average annual growth rate for dwellings of around 0.8 per cent.

¹ Id Consulting (Australian Bureau of Statistics Data 2006 - 2011)

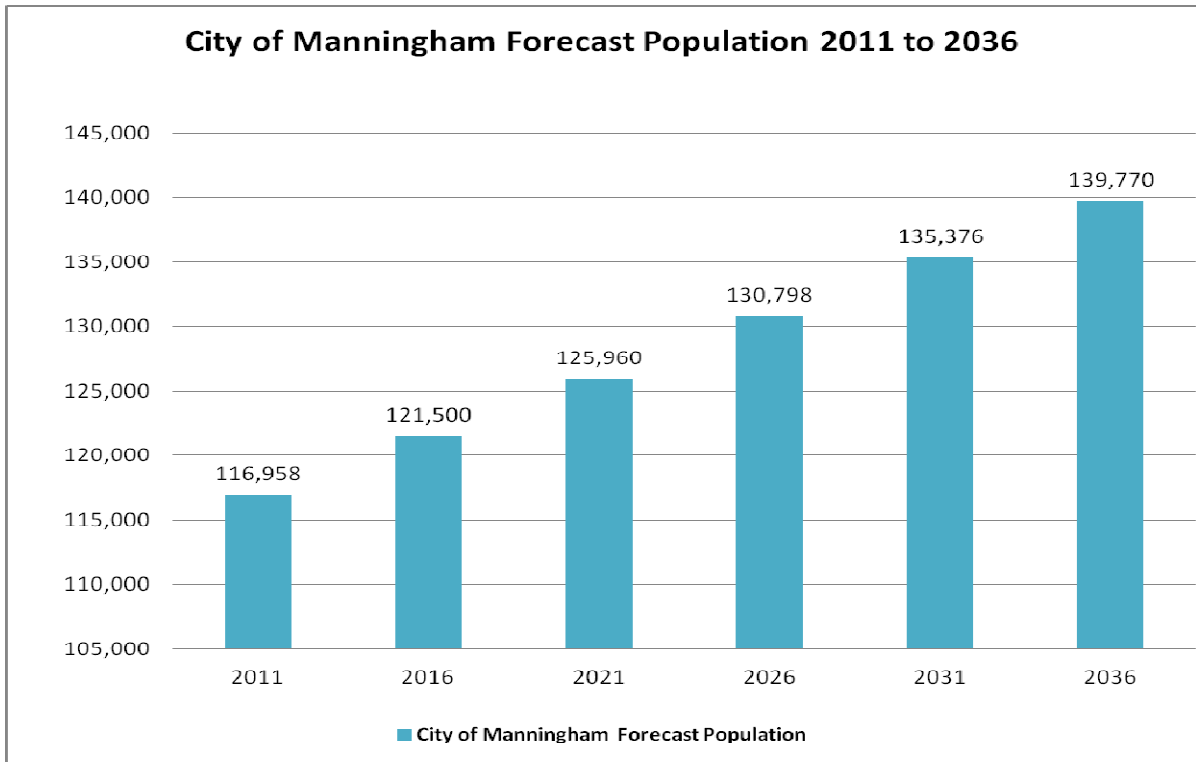
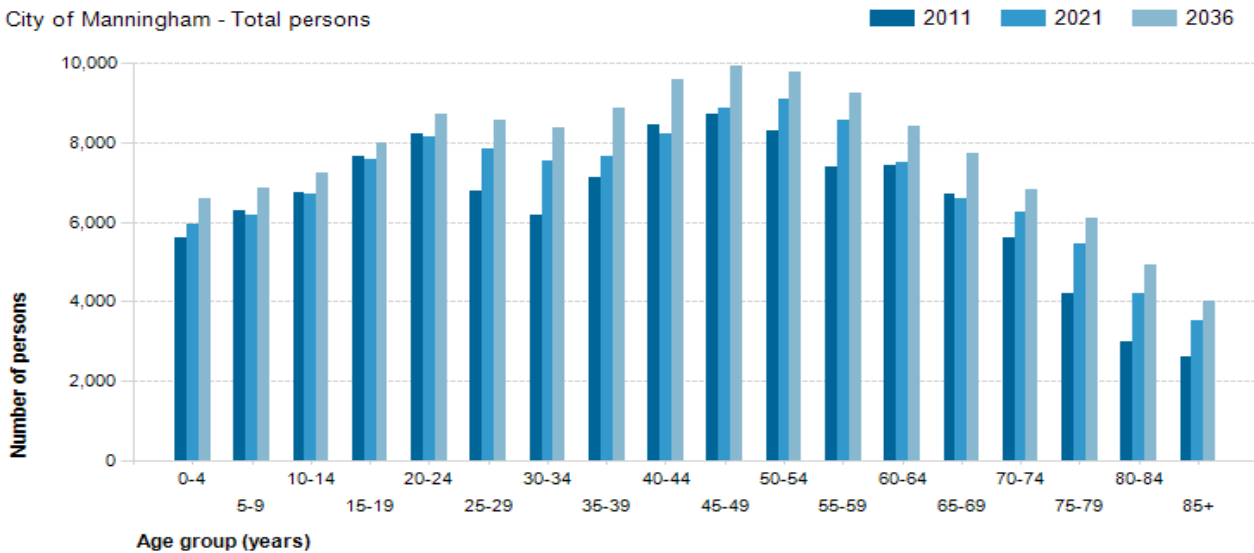


Figure 4 - City of Manningham Forecast Population 2011 – 2036

Forecast age structure - 5 year age groups

City of Manningham - Total persons



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, February 2014.



Figure 5 – City of Manningham Forecast Age Structure – Five year age groups

Open Space Provision & Catchment Hierarchy

The City of Manningham encompasses a total land area of 11,400 hectares. The municipality is primarily defined by natural boundaries: the Yarra River to the north and west and Koonung Creek to the south, while the Mullum Mullum Creek divides Manningham into two distinct areas, with the land to the west being urban in character and to the east being primarily low density residential and non-urban.

Approximately 18 per cent of the City of Manningham is classified as open space according to the definition contained in this document – over 2000 Hectares, comprising over 300 separate parks, gardens and reserves. Over half of the open space within the municipality (60 per cent) is owned by the Crown and managed by Parks Victoria. The Yarra Valley Parklands (Crown Land) is the largest connected area of open space within Manningham and is managed by Parks Victoria.

In 2008, the Victorian Government requested the Victorian Environmental Assessment Council (VEAC) to investigate public land in metropolitan Melbourne. Its report, *Melbourne Metropolitan Investigation* (2011), compared open space provision across Metropolitan Melbourne. The comparison showed that Manningham has a high percentage of open space when compared with other middle ring suburbs, even when only considering the western part of Manningham. However, more than 60 per cent of that is located along the Yarra River and is Crown Land (managed by Parks Victoria). The report also showed that Manningham has generous provision of local parks across the urban area, which is again the highest for all middle ring suburbs. Although these figures vary from more recent open space area calculations, including new open space acquisitions, they can be used to compare the supply of open space with other municipalities.

Manningham City Council is fortunate to own or manage large tracts of open space, which draw visitors from across the municipality and beyond. These are defined as regional open space. Generally, as the size of an open space diminishes, the number of visitors is lower. Local open spaces are highly valued as they are within walking distance from houses and improve local amenity.

The following table outlines the catchment hierarchy of public open space within the City of Manningham; refer also Map 2.

Open Space	Distance from Population	Purpose of Open Space
Regional	No specific distance	Primary purpose caters to a broader Manningham-wide catchment of visitors, as well as the local community. Generally these are easily accessible to people from adjoining municipalities and are of regional recreational importance and usage and/ or regional environmental value. It should be noted a substantial proportion of this land is managed by Parks Victoria.
District	1-3 km	Open space valued and visited primarily by the City of Manningham population. These spaces serve one or more suburbs and attract visitation beyond walking distance, providing facilities of a broader scale than those with a local focus.
Local	400m	Located within easy walking distance of homes or businesses. These are generally more intimate spaces that are not intended for large groups.
Urban Plaza	Located within activity centre	Located within business/ shopping centres, these spaces, can provide a refuge/ relaxing area to have a break from shopping/ work.

Table 1 - Catchment Hierarchy in Open Space

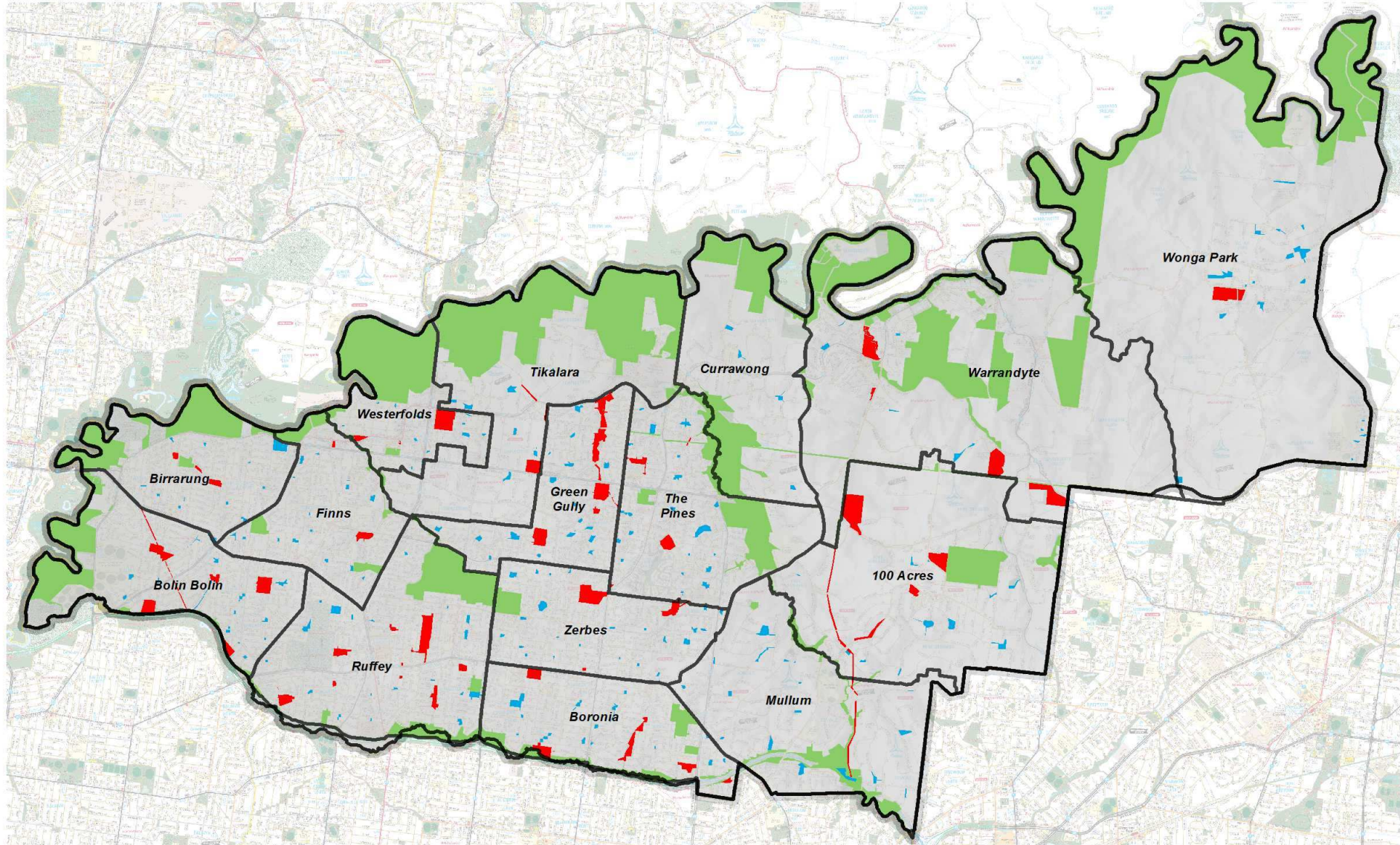
Land Management in Manningham

There are management arrangements for public open space that operate within the City of Manningham. The following departments, organisations and businesses manage public open space within Manningham:

Who	Responsibility
Parks Victoria	Manages 95 per cent of Crown Land in Manningham on behalf of the Department of Environment and Primary Industry (DEPI).
Department of Environment and Primary Industries	Manningham City Council (Committee of Management) manages 2 per cent of Crown Land on behalf of DEPI and other smaller areas of unreserved Crown Land are managed directly by DEPI.
Melbourne Water	Manages tracts of land along Manningham's linear parks and water supply reserves.
VicRoads	Manages parts of the Koonung Creek Linear Park since the extension of the Eastern Freeway.
SP Ausnet	Private electricity provider, manages land at Wetherby Road, including Kevin Heinze Garden Centre, as well as a site adjacent to Mullum Mullum Creek in Warrandyte.
City of Boroondara	Manages the Freeway Public Golf Course (15.5 hectares) which includes land both north and south of the creek, straddling the municipal boundary.
City of Whitehorse	Manages Eram Park (7.7 hectares). The Koonung Creek is the official municipal boundary between Manningham and Whitehorse from Doncaster Road to Springvale Road. The construction of the Eastern Freeway, however, dissected public land on the north and south side of the Freeway. Eram Park is located on the northern side of the Freeway but south of the Koonung Creek, and is owned and managed by the City of Whitehorse.

Table 2 - Land Management in Manningham

Map 2 - Open Space Network Hierarchy



Our Urban Environment

Residential density within Manningham is increasing. The change in the 25 years between 2011 and 2036 is expected to be an additional 11,294 dwellings (452 per annum) with a total of around 54,350 dwellings by 2036.

The *Manningham Planning Scheme* sets out the zones and overlays that control development across the City.

A number of planning controls in the *Manningham Planning Scheme* are used to facilitate multi-unit and apartment development, including the *Design and Development Overlay, Schedules 8 and 9 (DDO8/ DDO9)*. Map 3 shows Manningham's residential areas with planning zones identifying areas where future housing growth is anticipated.

Two thirds of this forecasted development is expected to occur in Doncaster Hill, within activity centres and along main roads (averaging 310 dwellings per year).

Manningham's *Residential Strategy* (2012) encourages the municipality's highest density housing development within the Doncaster Hill Activity Centre. Apartment style and townhouse development of up to three storeys is also encouraged on larger lots in and around Neighbourhood Activity Centres and along the main public transport routes. In the areas removed from activity centres, whilst change is expected, it is preferred that development is no more than two storeys, with a greater emphasis on providing spacing between homes and retaining existing trees.

The larger lot sizes in the Low Density Residential areas play an important role in offering a lifestyle opportunity for residents whilst contributing to Manningham's 'balance of city and country'. Low density residential development is encouraged in areas that have identified environmental or landscape features, or areas within the Low Density Residential Zone (LDRZ) and the non-urban areas, including Warrandyte, Park Orchards and Wonga Park.

Increasing population, urban density, small-lot subdivision, larger houses and smaller private open spaces are placing increasing

pressure on existing public open space. This will also have a cumulative impact on the broader landscape of Manningham, with views and streetscape vistas becoming 'harder', increasingly dominated by buildings rather than trees.

In 2011, more than 2,000 community members were engaged in a process that generated 20,000 wishes for Manningham in 2030. The underlying voice throughout all the conversations was a sense of community connection and finding new ways to foster community spirit. Through this consultation, it was demonstrated that Manningham's natural spaces and the defining beauty of this area is highly valued.

Manningham contains one of 12 non-urban areas of metropolitan Melbourne lying outside the Urban Growth Boundary, known as the Green Wedge.

Important functions provided by the Green Wedge include biodiversity, agriculture, open space, attractive landscapes, tourism and recreation and cultural heritage.

The *Green Wedge Action Plan 2020* (2011) aims to achieve four objectives:

- To promote and support Environmental Care and Stewardship
- To facilitate Living and Working Sustainably
- To ensure Sustainable Built Form and Infrastructure
- To provide supportive Planning Policy and Governance.

Manningham's *Healthy Habitats - Bushland Management Strategy* (2012) sits alongside the *Green Wedge Action Plan 2020* (2011) and aims to achieve the following objectives:

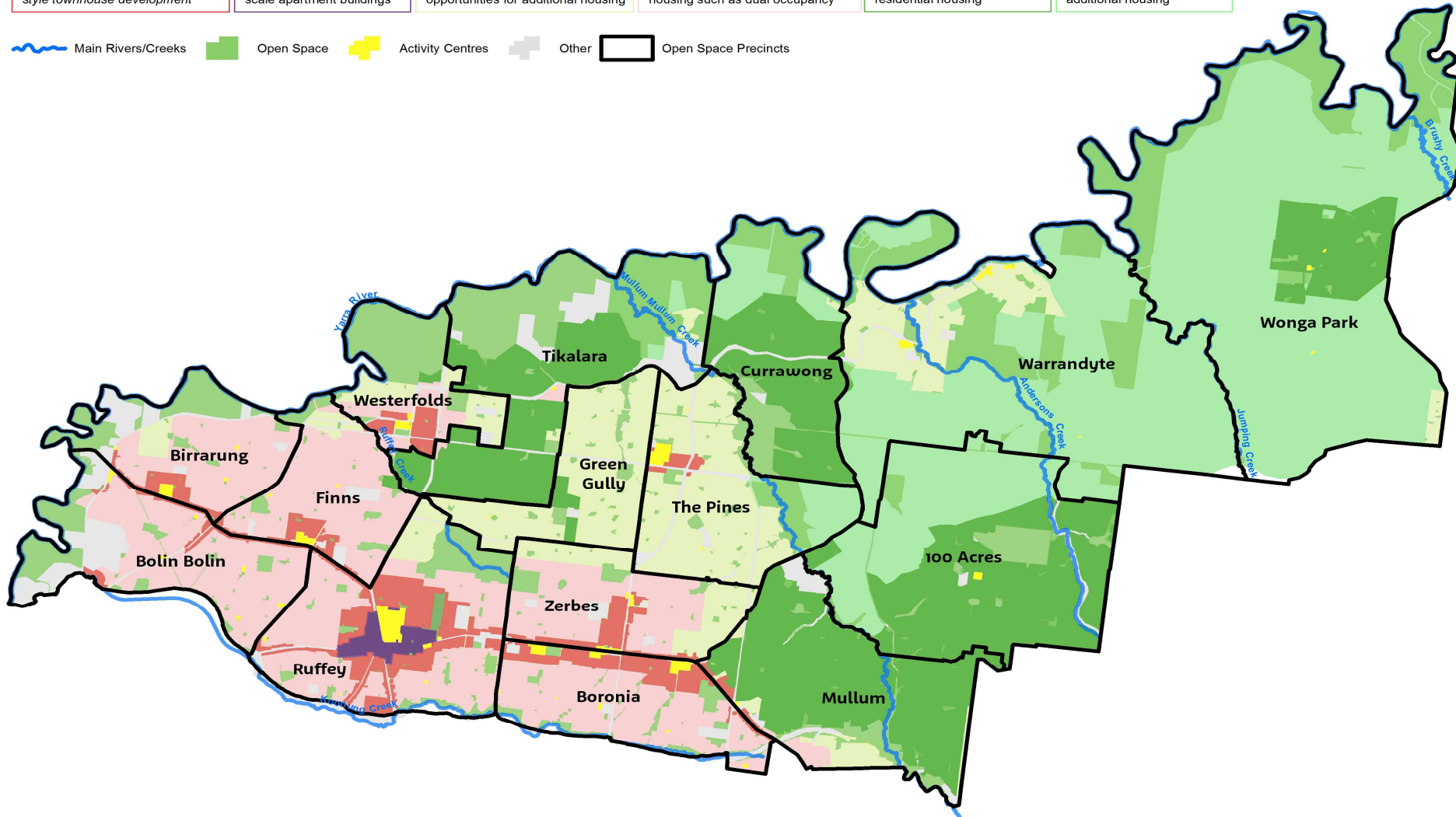
- maintain and where possible, restore ecological processes
- manage and minimise threatening processes
- improve habitat
- protect threatened species.

Specific recommendations from *Healthy Habitats: Bushland Management Strategy* are included in Parts 2 and 3 of this Strategy.

Map 3 - Residential Changes Areas

DD08/09: Residential Areas	Doncaster Hill (PAC)	R1Z	R3Z	LDRZ	Green Wedge (RCZ)
Design & Development Overlay Substantial change - Apartment style townhouse development	Principal Activity Centre Substantial change - Large scale apartment buildings	Residential 1 Zone Incremental change - Fewer opportunities for additional housing	Residential 3 Zone Incremental change - Includes new housing such as dual occupancy	Low Density Residential Zone Few opportunities for residential housing	Rural Conservation Zone Very few opportunities for additional housing

~ Main Rivers/Creeks
 ■ Open Space
 ■ Activity Centres
 ■ Other
 □ Open Space Precincts



Our Economic Environment

Manningham's open space network provides a major drawcard for recreation and tourism industries and significant sources of employment for local communities and flow on economic benefits.

The natural environment, our open space networks and our native fauna are a key tourism asset for Manningham residents, visitors and tourists.

The *Tourism Strategic Plan for Manningham Council* (2007) nominates key attractions for Manningham and of these many are located within the open space network or adjacent to parks or reserves. These attractions include:

- Heide Museum of Modern Art
- Heidelberg School Artists Trail
- Petty's Heritage Orchard and wetlands
- Schramm's Cottage, School and Garden
- Warrandyte's gold heritage
- Warrandyte Gold Soundscapes Trail
- Main Yarra Trail
- Mullum Mullum Trail
- Bolin Bolin Cultural Landscape Trail
- Ruffey Lake Park
- Zerbes Reserve (German Heritage Interpretive Signs)
- Ruffey Lake Heritage Trail
- Public Art (iconic sculpture)
- Festivals and events, such as the Multicultural Festival (Ruffey Lake Park), Warrandyte Festival
- Native Fauna
- Sporting 'fixture' events
- Other parks and reserves.

Open Space Achievements Since 2004

There have been a number of achievements associated with the implementation of the Open Space Strategy (2004) that have enhanced Manningham's Open Space Network. A broad overview of the most significant of these achievements has been mapped using the following categories:

- Linear Park Enhancement
- Doncaster Hill Open Space Development
- Major Recreation Facility Construction
- Playspace Development
- Outdoor Fitness
- Major Reserve Improvements
- Newly Acquired Open Space.

Linear Park Enhancement

Linear parks have always been highly valued in Manningham due to their location along Manningham's waterways. These riparian corridors contain significant bushland areas and provide important connected habitat for local fauna. They have always played a vital role in connecting people to the environment and providing transport and exercise networks throughout the City.

A number of improvements have been made to our linear parks, including:



1	Mullum Mullum Creek Linear Park	Trail construction/ secondary paths/ public toilets/ playground/ signage and land acquisition
2	Warrandyte River Reserve	Playspace upgrade, path and car park upgrades/ picnic facilities and signage installation
3	Ruffey Creek Linear Park	Land acquisition and trail construction to complete missing links
4	Koonung Creek Linear Park	Trail upgrade, signage installation and VicRoads land exchange (acquisition)
	Various	Bushland management within a number of linear parks

Doncaster Hill Open Space Development

The *Open Space Strategy (2004)* identified the need to expand and develop key open space reserves identified as part of the *Doncaster Hill Strategy (2004)* to cater for the increasing population density. JW Thomson Reserve and Carawatha Reserve have received significant upgrades since 2004, including playspaces, picnic facilities, paths and landscaping. In addition, strategic parcels of land adjoining these key reserves have either been acquired or are designated for future acquisition via a Public Acquisition Overlay in the *Manningham Planning Scheme*.



1	JW Thomson Reserve	Playspaces, picnic facilities, paths and landscaping, land purchase
2	Carawatha Reserve	Playspaces, picnic facilities, shelter, paths and landscaping
3	Hepburn Reserve	Land purchase toward future public open space development (2 of 4 parcels acquired)
4	Doncaster Hill Precinct 1	MC ² Civic Plaza
5	Schramms Reserve	Shared paths, playspace and shelter

Major Recreation Facility Construction

The rise in popularity of soccer has led to the construction of a soccer training facility at Petty's Reserve in Templestowe, and a new synthetic training soccer pitch has been constructed at Andersons Park, Doncaster East.

The continuing focus on cricket and football has also seen the construction of new or

upgraded pavilions at Templestowe Reserve, Bulleen Park, Donvale Reserve and Stintons Reserve, including improvement of facilities for female participants.

A community hub has been created at Ted Ajani Reserve to appropriately house a range of community groups that provide services to the local community.

Wonga Park Tennis Club has had two additional courts built to cater for the continuing popularity of tennis in the area. Horse riders have also had their facilities improved at Buck Reserve, Donvale with a new ménage and cross-country course.

A Dog Activity Centre has been developed at Aranga Reserve in Donvale to cater for the dog owners of Manningham. The facility provides a fenced training and exercise area.

There have also been significant improvements at Aquarena Aquatic and Leisure Centre, including existing facility upgrades and new facility construction.



1	Pettys Reserve	Soccer facility
2 ^A	Templestowe Reserve	New sport pavilion
2 ^B	Bulleen Park	New sport pavilion
2 ^C	Stintons Reserve	New sport pavilion
2 ^D	Donvale Reserve	New sport pavilion
3	Ted Ajani Community Hub	New community centre and sports pavilion
4	Wonga Park Tennis Club	2 additional tennis courts
5	Buck Reserve	Horse riding facilities
6	Aranga Reserve	Dog Activity Centre
7	Aquarena Aquatic and Leisure Centre	Major facility upgrade

Playspace Development

Playspace development has been a focus since the *Open Space Strategy (2004)* was adopted and 58 playspaces have been upgraded or constructed across the municipality, the most substantial are shown on the map below. The most significant of these is Wombat Bend, a regional playspace catering for people of all abilities.



1	Wombat Bend	Regional playspace
2	The Pines Reserve	District playspace
3	Landscape Reserve	Large playspace
4	Marshall Reserve	Large playspace
5	Ruffey Lake Park	Regional playspace upgrade
6	Harold Reserve	Large playspace

Outdoor Fitness

Several fitness stations have been installed across the municipality at the following locations:



1	Finns Reserve	Static fitness equipment
2	Morris Williams Reserve	Static fitness equipment
3	Landscape Reserve	Static fitness equipment
4	The Pines Reserve	Fitness/ Therapeutic equipment

Major Reserve Improvements

There has been a range of improvements at Ruffey Lake Park, including path upgrades, new toilets, picnic shelters, and play structures, as well as significant car park works.

Wittons Reserve was upgraded with a new car park, canoe launch and picnic facilities.

Finns Reserve received an upgrade to complement Wombat Bend's all abilities playspace, including carpark, trail and picnic facilities.



1	Ruffey Lake Park	Path upgrades, new toilets, carpark upgrade
2	Wittons Reserve	New carpark, canoe launch and picnic facilities
3	Finns Reserve	Upgrade carpark, trail, picnic facilities

Newly Acquired Open Space

Manningham City Council has increased the municipality's open space network since 2004 in a variety of ways including:

- open space has been contributed to Council by developers when subdividing land
- open space has been purchased by Council to enhance the open space network
- open space has been transferred to Council from other public agencies.

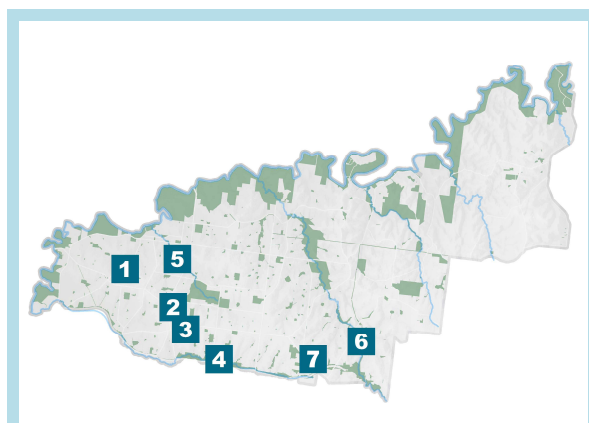
The total area of open space acquired since 2004 is six hectares, including land parcels along our linear parks, as well as parcels adjacent to existing open space reserves.

Five hectares of this land has become part of the Koonung Creek Linear Park and is located between the Koonung Creek and the Eastern Freeway⁴.

A significant parcel of land (nine hectares) along the Mullum Mullum Creek will be added to Manningham's open space network in the next 3 years, more than doubling the amount of land acquired since 2004. This acquisition will allow the continuation of the linear park and the shared path.

Other acquisitions of open space have allowed the creation of new parks or increased park size to provide more recreation opportunities for the community or to protect biodiversity.

Council has recently acquired a new open space reserve, Goldschlager Reserve, via donation. Council has also negotiated the acquisition of another new open space reserve, Mulsanne Reserve, and the expansion of Wittons Reserve. The following open spaces have been created/enlarged since 2004:



1	Ted Ajani Reserve	Enlarged
2	JW Thomson Reserve	Enlarged
3	Hepburn Reserve	In progress (2 of 4 properties acquired)
4	Koonung Creek Linear Park	Land exchange/ acquisition from Vic Roads
5	Ruffey Creek Linear Park	Enlarged
6	Goldschlager Reserve	New
7	Mulsanne Reserve	New

Emerging Issues for Open Space

Metropolitan Melbourne Population Increase

Melbourne is experiencing high population growth and is increasing at a rate of approximately two per cent annually. In June 2012, the population reached 4.25 million. As Melbourne's population grows, its landscape is becoming increasingly urbanised.

In 2008, the Victorian Government requested the Victorian Environmental Assessment Council (VEAC) to investigate public land in Metropolitan Melbourne. Its report, *Melbourne Metropolitan Investigation* (2011), found that public open space is a key contributor to Melbourne's liveability and anticipates that Melbourne's increasing population will place pressure on the quantity and quality of public open space.

It suggested that without the retention and further creation of open space on both State public land and local Council land, public open space per capita would decrease over time for almost all municipalities. It also suggested that the projected decrease in public open space per capita was likely to be exacerbated in established municipalities, where there is limited scope to create additional open space to meet population increases.

Melbourne's population, like most developed cities, is ageing as a result of sustained low fertility and increasing life expectancy. Over the next several decades, population ageing is projected to have significant impacts on health, labour force participation, housing and service provision. A focus for government must be accommodation of the growing population through the provision of infrastructure, while protecting biodiversity and open space.

Changing Lifestyle Patterns and Expectations

Changing technologies and lifestyle expectations are affecting our patterns of work and leisure.

Over recent decades, there has been a gradual, long-term trend away from 'standard' full-time jobs to part-time work. The proportion of employed people who worked part-time increased from 16 per cent in 1979 to 29 per cent in 2009. While part-time work tends to be more prevalent among women, its increase over the past 30 years has been evident for both men and women². The increased availability of part-time work has expanded opportunities for people to balance work with family responsibilities, to participate in education, or to make the transition to retirement.

Children's participation in more sedentary forms of recreation, such as playing computer games, has been identified by the World Health Organisation as one of the key worldwide trends contributing to an overall increase in childhood obesity.³ The *ABS National Health Survey* (2007-08) found around 25 per cent of Australian children aged 5 to 17 years were either overweight or obese. The Australian Government Department of Health and Ageing states on its website that the most concerning long-term consequence of childhood obesity is its persistence into adulthood and an increased likelihood of developing short and long-term health conditions such as type 2 diabetes, heart disease and high blood pressure.⁴

² Australian Bureau of Statistics Article 1370.0 *Measures of Australia's Progress, 2010*.

³ World Health Organisation, *Global Strategy on Diet, Physical Activity and Health*, Accessed 27 April 2010.

⁴ Commonwealth Department of Health and Ageing, *A Healthy and Active Australia*, Accessed 27 April, 2010.

Statistics confirm that children are spending more time indoors and in front of screens and less time outside in their gardens or in parks. In 2009, it was reported by the Australian Bureau of Statistics that over 40 per cent of children aged 5-14 watched an average of 20+ hours of television per fortnight. In the same report, it was revealed that 40 per cent of children also spent less than two hours per fortnight doing informal physical activity (e.g. bike riding).

Fewer people now live in each household, yet new houses are frequently larger and private open space smaller. Therefore open space becomes more difficult to access and people are losing their connection with nature.

Manningham's open space network and the recreation options available will need to respond to changing lifestyles by providing varied and flexible opportunities for recreation, and has a role to play in encouraging outdoor recreation and physical activity.

Health and Wellbeing

Cardiovascular disease (CVD), diabetes and chronic kidney disease (CKD) account for approximately a quarter of the burden of disease in Australia, and just less than two-thirds of all deaths. These three diseases often occur together and share risk factors, such as physical inactivity, overweight and obesity and high blood pressure. In recent years obesity has overtaken smoking as the leading cause of premature death and illness in Australia.

The impact of mental illness within the Australian population has also become increasingly apparent since 2004. Recent statistics show an estimated 20 per cent of the population aged between 16 and 85 has a mental disorder⁵.

These are serious health problems for our community and research has shown that parks and nature have enormous untapped potential to improve health and wellbeing, as

they provide an opportunity for people to exercise, relax and socialise.

Climate Change

Climate change is likely to impact on Melbourne's public land through increasing mean temperatures, greater rainfall variability and more frequent storm events, greater bushfire risk, pressure on biodiversity and rising sea levels.

The *Victorian Climate Change Adaptation Plan (2013)* states that planning policies are central to providing appropriate, up to date guidance on climate risks, to support decisions planning for future growth including:

- impacts of extreme weather events and changes in rainfall and temperatures, particularly on public safety, water supply and stormwater management, infrastructure and open space
- increased bushfire risk and pressures for rural residential uses
- increased risk of flooding⁶.

The importance of treed areas of public land and water bodies for ameliorating the urban heat island effect is also likely to increase in Melbourne as urban densification increases.

Biodiversity

As our metropolitan areas become increasingly urbanised, green spaces are threatened, as is our biodiversity.

State Government policies aimed at maintaining or enhancing native vegetation in Victoria have been in operation for several decades and are a response to historical loss of native vegetation cover across Victoria since settlement.

Current policy, *Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines (2013)* provides guidelines for protecting and managing native vegetation in Victoria, including the principle that there should be 'No Net loss' to Victoria's

⁵ Black Dog Institute, *Facts and figures about mental health and mood disorders*, accessed 2 November 2013.

⁶ *The Victorian Climate Change Adaptation Plan 2013*, page 84.

biodiversity when removing native vegetation to make way for development.

The Guidelines seek to achieve No Net Loss through:

- avoiding adverse impacts on native vegetation, particularly through removal;
- minimising adverse impacts through planning and design; and
- offsetting vegetation removal that is deemed unavoidable.

Offsets are achieved by protecting and improving other existing areas of native vegetation (e.g. through weed control or preventing grazing) or by planting new native vegetation.

Key Directions

Vision, Goals, Objectives, Principles

Vision

Our vision is for an accessible and well connected *Open Space* network that supports a healthy community and a healthy environment.

Goal

Value, expand and enhance the *Open Space* network.

Goal

Make the most of existing *Open Spaces*.

Goal

Attract more people, more often, to *Open Space*.

Objectives

- 1.1 Improve links within the open space network to facilitate access to destinations and enhance the natural environment
- 1.2 Define open space provision standards to plan for the future population
- 1.3 Expand and improve open space in line with population increase
- 1.4 Ensure the financial viability of open space network expansion and enhancement

Objectives

- 2.1 Protect/ enhance the natural landscape within our open spaces
- 2.2 Support the establishment of a range of recreation activities in the most suitable locations
- 2.3 Ensure planning for future built infrastructure considers the values of the open space network
- 2.4 Take a balanced approach to risk management, safety and monitoring

Objectives

- 3.1 Celebrate our open spaces and encourage community life through tourism/cultural, arts and recreation activities
- 3.2 Better understand recreation trends, open space values and community expectations
- 3.3 Maximise community involvement in open space planning and management
- 3.4 Promote the municipality's open spaces and the health benefits of outdoor recreation
- 3.5 Develop equitable and transparent processes for commercial activities within open space

Open Space Principles

Diversity	• Take into account the diversity of our community, including cultural background, age, level of ability and general life choices and expectations
Biodiversity	• Protect and enhance locally indigenous flora and fauna in open space across the municipality
Heritage	• Respect and reflect the municipality's diverse natural and cultural heritage to protect and enrich our open spaces and experiences within them
Sustainability	• Employ new technologies and innovative planning to ensure our environmental, social and economic values are enhanced for future generations
Safety	• Ensure the safety of the community through careful design of open spaces, addressing natural events such as fire and flooding
Accessibility	• Connect Manningham's diverse community to the open space network via high quality path networks and signage
Economic Viability	• Ensure sustainable financial management of the open space network to maximise all open space values
Efficiency	• Ensure efficient asset management, protection of the environment and make the most of facilities and recreation opportunities
Advocacy	• Partner with land managers within the City to advocate for the best open space outcomes for the community

1. Goal – Value, expand and enhance the Open Space network

- 1.1 Improve links within the open space network to facilitate access to destinations and enhance the natural environment
- 1.2 Define open space provision standards to plan for the future population
- 1.3 Expand and improve open space in line with population increase
- 1.4 Ensure the financial viability of open space network expansion and enhancement

1.1 Objective – Improve links within the open space network to facilitate access to destinations and enhance the natural environment

Linear parks are long stretches of open spaces that usually run alongside waterways. Linear parks are highly valued due to their environmental values (particularly along rivers and creeks), as well as the opportunities they provide for walking, cycling and jogging in natural areas with connections to other amenities. Due to their popularity, linear parks often have infrastructure to support visitors, such as toilets, shelters and car parks.

Health promotion in recent years has focused on preventative measures, including physical exercise and social connectedness, to improve the health and wellbeing of the community. Similarly, there has been a push to encourage commuters to use healthier and more environmentally sustainable forms of transport, such as cycling, walking or public transport. Our linear parks provide multiple opportunities for these activities and are therefore a high priority for enhancement and improved access.

Parks Victoria manages a substantial area of linear parks within the City of Manningham along the Yarra River.

Future development/ protection priorities for linear parks are documented in the relevant Management Plans that have been developed and are reviewed periodically.

In order to achieve this objective it will be important to:

- improve trail connections along linear parks
- enrich bushland corridors along linear parks
- open up green walkways (drainage and other reserves) through urban subdivision to allow off-road pedestrian access to key destinations, including schools and activity centres
- improve pedestrian/ cycle connections to open space from residential areas, schools and activity centres.

Improve Trail Connections along Waterways/ Linear Parks

This strategy identifies key links that are high priorities to improve connections into and through the open space network and give the community better options for walking or cycling to and through their open spaces. Many of these links are also supported by the State Government's *Linking People and Spaces Strategy* (2002).

These key links are listed in Table 3. Some of these projects will involve planning and design phases to locate the optimum path of travel and provide the most accessible connections. Land acquisition may also be

necessary via purchase or future subdivision requirements. Land management agreements may be required where a proposed future trail alignment utilises private land or land managed by another authority, e.g. Melbourne Water. These projects are mapped and identified specifically in Part 2 of this document - *Precinct Analysis and Recommendations*.

Enrich Bushland Corridors along Waterways/ Linear Parks

Linear parks are also habitat corridors and play an important role in maintaining biodiversity. Riparian corridors are naturally species-rich and require protection and good management to ensure that these natural stretches can be maintained into the future. The rich qualities of a natural environment contribute to the enjoyment of visitors and their wellbeing.

Linear Parks often following drainage corridors or other infrastructure easements, such electrical transmission easements which contain overhead powerlines. Such infrastructure can place significant constraints on the location and provision of vegetation.

The *Healthy Habitats Bushland Management Strategy* (2012) recommends a number of potential revegetation sites along linear park corridors. This strategy supports these recommendations.

Open Up Green Links and Improve Pedestrian/ Cycle Connections to Open Space

Residential development across the municipality has occasionally required the establishment of narrow strips of land between properties to allow access to drainage infrastructure. These strips are often grassed and this strategy defines them as 'green links' as they have the potential to provide alternative walking paths through built up areas.

In some cases however, resident occupation of Council owned land within linear parks or along drainage reserves is restricting the potential to create green links through urban development and/ or to connect with parks or other destinations. Land needs to be reclaimed to give the whole community the

best options for walking or cycling through the municipality.

Pedestrian/ cycle connections to open space are a focus for this strategy, as easy access into parks improves visitor experience and encourages the community to use sustainable and healthy transport options when visiting Manningham's open spaces. These potential links are listed in Table 4.

Several Manningham strategies also aim to improve pedestrian and bicycle access to major destinations within the municipality, including the open space network.

These include:

- *Manningham Bicycle Strategy* (2013)
- *Walk Manningham Plan* (2011)
- *Manningham Principal Pedestrian Network* (2013)
- *Doncaster Hill Pedestrian and Cycling Plan* (2010).

Linear Park	Trail	Section	Future Works	Management Plan
Ruffey Creek	Ruffey Trail	Between Parker and James Streets, Templestowe Lower	Land acquisition Revegetation	<i>Ruffey Creek Linear Park Concept Plan (1995)</i>
Ruffey Creek	Ruffey Trail	Between Parker Street and Foote Street, Templestowe	Land acquisition Trail construction	<i>Ruffey Creek Linear Park Concept Plan (1995)</i>
Ruffey Creek	Ruffey Trail	King Street to Doncaster Hill	Trail construction	<i>Doncaster Hill Pedestrian and Cycle Plan (2010) revised 2004</i>
Mullum Mullum	Mullum Mullum Trail	Between Tindals and Park Road, Donvale	Trail construction (underway)	<i>Mullum Mullum Creek Linear Park Stage 4 Management Plan (2003)</i>
Mullum Mullum	Mullum Mullum Trail	Between Heads Road and Park Road, Donvale	Trail construction	<i>Mullum Mullum Creek Linear Park Stage 3 Management Plan (2008)</i>
Green Gully	Green Gully Trail	Between Glenville Court and Lawsons Court, Templestowe	Land proposed to be reserved for public purposes under PAO	<i>Green Gully Linear Park Management Plan (in preparation 2014)</i>
Green Gully	Green Gully Trail	Between Websters Road and Warrandyte – Heidelberg Road	Trail feasibility Trail construction	<i>Green Gully Linear Park Management Plan (in preparation 2014)</i>
Mullum Mullum Creek Linear Park, Tindals Wildflower Reserve, Lynette Reserve, Warrandyte Reserve, Warrandyte River Reserve	Main Yarra Trail	Between Mullum Mullum Creek and Warrandyte River Reserve	Trail feasibility Trail construction	<i>Warrandyte State Park Management Plan</i> <i>Tindals Wildflower Reserve Management Plan (2012)</i> <i>Warrandyte Reserve Management Plan (2009)</i>
Yarra Valley Parklands	Yarra Valley Parklands shared path	Birrarung Park - Thompsons Road, Lower Templestowe Heide Art Gallery - Birrarung Park (Behind Yarra Valley Country Club), Bulleen Former Bulleen Drive-in site	Land acquisition (Parks Victoria responsibility) ⁷ Trail and path construction	<i>Yarra Valley Parklands Management Plan (2008)</i>

Table 3 - Future Linear Park Expansion and Trail Extension Works

⁷ Proposed trail as set out in Yarra Valley Parklands Management Plan Nov 2008

Link	Suburb	Destinations	Affected Reserve	Future Works	Management Plan
Alder Link	Park Orchards	Mullum Trail to Alder Court	Mullum Mullum Creek Linear Park	Land acquisition Path construction	<i>Mullum Mullum Creek Linear Park Stage 3 Management Plan (2008)</i>
Yanggai Barring	Park Orchards	Yanggai Barring to 100 Acres Reserve	Yanggai Barring Linear Park 100 Acres Reserve	Land acquisition Path construction	<i>100 Acres Management Plan (2010)</i> <i>Yanggai Barring Linear Park Management Plan (2010)</i>
Porter Water Supply Reserve	Doncaster East, Warrandyte	Blackburn Road to Croydon Road	Mullum Mullum Creek Linear Park (Currawong Bush Park)	Link feasibility assessment	<i>Mullum Mullum Creek Linear Park Stage 1 Management Plan (2011)</i>
Koonung Trail to Yarra Valley Parklands	Bulleen	Yarra Valley Parklands	Koonung Creek Linear Park, Bulleen Park, Yarra Valley Parklands	Trail feasibility On road safety improvements	<i>Koonung Creek Linear Park Management Plan (2011)</i> <i>Yarra Valley Parklands Management Plan (2008)</i>

Table 4 - Future Works to Improve Pedestrian/ Cycling access to Open Space Network

Actions: Objective 1.1

- 1.1.1 Develop an *Open Space Future Needs Plan* for linear parks and other green connections to guide land purchases and reclaim strategic parcels of land to improve pedestrian access to the open space network.
- 1.1.2 Continue to develop path networks connecting to and through linear parks in line with Linear Park Management Plans and as identified in:
- *Table 3 – Future linear park expansion and trail extension works*
 - *Table 4 –Future works to improve pedestrian/ cycling access to the open space network*
- 1.1.3 Support the *Manningham Bicycle Strategy 2013* and in particular the upgrade and construction of the routes that connect pedestrians/ cyclists to the open space network.
- 1.1.4 Partner with Parks Victoria and advocate for linkages throughout the Yarra Valley Parklands.

1.2 Objective - Define open space provision standards to plan for the future population

Future Open Space Provision

Manningham's population is predicted to increase by 18,270 residents from 2016 to 2036, with the greatest growth in Doncaster Hill.

The Doncaster Hill Principal Activities Centre has been identified as the main focus for high density residential development in the municipality, with a large increase in apartments and units over the next twenty years. Improvements in transport infrastructure and urban design in the area will further underpin this growth.

Apart from Doncaster Hill, Manningham's *Residential Strategy* (2012) anticipates further residential development, particularly multi-unit and apartment development:

- around The Pines Major Activity Centre
- in and around the City's nine neighbourhood activity centres; and
- along designated main roads and public transport corridors.

With the increased population expected in these areas, there will be a greater demand for public open space, due both to the increased population and reduced access to private open space.

There are two main approaches to respond to this increased pressure: firstly to improve existing open space resources in line with higher usage levels, or secondly to expand the open space network.

Doncaster Hill

One of the roles of Council's *Doncaster Hill Strategy* 2002 is to provide a framework for higher density residential development within the Doncaster Hill Activity Centre.

The *Doncaster Hill Strategy* (2004) also provides a framework for open space to serve the future population of Doncaster Hill

(predicted population by 2036 - approximately 7,553 residents).

The strategy identifies four district level parks for Doncaster Hill. Due to the lack of sizeable parks in appropriate locations, the open space planning process identified private land for purchase to supplement the existing open space available. Public Acquisition Overlays (PAO) have been placed on these properties and some properties have already been acquired.

The passive open space reserves within Doncaster Hill range in size from 3,000 to 21,000m² and are within 400 metres of nearly all existing and future residences.

Refer *Open Space Strategy Part 2 - Ruffey Precinct*.

Future Open Space Provision: Manningham - wide

As the population increases, so does the pressure on open space reserves. Manningham City Council is renowned for its expansive open space network and to ensure that the municipality can maintain this level of open space provision, future strategic planning must include planning for new open space reserves.

Guidelines have been developed to assist in planning for adequate open space in the future (Refer *Guidelines 1 – Addressing future open space provision*).

These guidelines vary according to residential densities as described below:

A. Substantial Change Areas

In line with Doncaster Hill open space planning, specific guidelines should be applied to identify land for future open space within areas identified for higher density development, along main roads and surrounding activity centres.

The potential to be considered when assessing future open space reserves within these higher density areas includes DDO8/ DDO9 and an area of influence extending approximately 200 metres away from these areas.

B. Strategic Redevelopment Sites

Strategic redevelopment sites are large sites that offer urban consolidation opportunities in well serviced areas.

When considering proposals to develop strategic redevelopment sites, such as the Eastern Golf Course, specific guidelines should be applied in relation to the provision of open space.

C. Neighbourhood Residential Areas (Residential 3 Zone)

In the areas removed from activity centres, whilst some change is anticipated, the planning provisions encourage a limit of two storey residential developments, with a greater emphasis on providing spacing between homes, retaining existing trees and providing opportunities for new landscaping.

Open space located within these areas will not have the same population pressure placed on it, as planning provisions will continue to restrict larger multi-storey development. However, the loss of trees and associated canopy cover across the wider urban landscape may still be expected to continue as houses increase in size.

The existing open space within these areas is highly valued by the local community and should be maintained and upgraded in line with community expectations.

Manningham's *Public Open Space Strategy* (2004) stated that public open space of at least 2000m² should be provided within 400 metres of all urban households wherever possible. This 400 metre standard is derived from an industry standard that is based on the distance an average person is prepared to walk to access open space.

While in most instances this standard has been achieved, a few minor gaps still exist. Specific measures are needed to address these gaps and make the most of existing

open space in these areas. Refer to *Guidelines 1: Addressing Future Open Space Provision*.

D. Low Density Residential Areas

Low density residential areas include areas that have identified environmental or landscape features, areas within the Low Density Residential Zone and the non-urban areas in the municipality and are generally located in Donvale, Warrandyte, Park Orchards and Wonga Park.

A standard for the provision of open space in low density and rural areas has not been established.

Residential development in low density areas has not required Council acquisition of smaller scale public open space due to the large size of properties and significant private open space.

In most low density areas, Council has generally taken financial contribution in lieu of open space land contributions for subdivision, as the private open space within each lot was substantial. There are exceptions to this in Wonga Park where several small local parks exist.

Due to the lack of local parks in these areas, linear parks, conservation and sporting reserves are especially important to enable socialising and recreation activities on public land. These areas should continue to be upgraded and maintained with this in mind.

E. Activity Centres

The *Activity Centre Strategy* (2005), sets the framework for the planning of the neighbourhood activity centres in Manningham including:

- Bulleen Plaza
- Donburn
- Doncaster East/ Devon Plaza
- Jackson Court
- Macedon Square
- Park Orchards
- Templestowe Village
- Tunstall Square
- Warrandyte Goldfields and
- Yarra Street.

The aim of the *Activity Centre Strategy* (2005) is to provide an integrated strategic framework for the future planning of these centres over the next 20 years. It is important to ensure that open space provision, open space enhancement and connections to/ from open space are acknowledged as vital components of vibrant, cohesive and well – functioning activity centres.

Urban plazas are usually hard surface gathering spaces within activity centres and community hubs. Urban plazas provide space for respite from busy activity within a shopping precinct and allow for social interaction. Urban plazas should provide various options for seating and be aesthetically pleasing in order to encourage use. Urban plazas also have the ability to provide playful elements for children and shoppers alike.

When undertaking activity centre planning, the provision of new and upgrading of existing urban plazas should be seen as a priority.

Financial mechanisms for open space expansion are discussed under Objective 1.4.

Where	Guidelines
<p>A. Medium Density Residential Areas (DDO8/ DDO9 and Residential Zone 1)</p>	<ul style="list-style-type: none"> • Provide open space which offers quality recreational and open space values within 400 metres of dwellings • Ensure open space is a useable size (2000m² +) and not encumbered by slope, drainage, or infrastructure issues that limit its useability for recreation • Provide open space of sufficient size to allow for a wide range of recreation activities • Where open space provision gaps exist, seek new open space and recreation opportunities, including acquisition of new open space, expansion and/or upgrade of existing open space and improved access to Council or other open space. • Design open space to be well connected to the street/path network for pedestrian and cycling access, including safe road crossings • Increase tree canopy where possible to improve amenity within built up areas • Maximise passive surveillance of open space • Ensure open space can accommodate a variety of recreation options • Encourage developers to provide communal open space, including rooftop gardens
<p>B. Strategic Redevelopment Sites</p>	<ul style="list-style-type: none"> • Provide open space which offers quality recreational and open space values within 400 metres of dwellings • Ensure open space is a useable size (2000m² +) and not encumbered by slope, drainage, or infrastructure issues that limit its useability for recreation • Provide open space of sufficient size to allow for a wide range of recreation activities • Where open space provision gaps exist, seek new open space and recreation opportunities, including acquisition of new open space, expansion and/or upgrade of existing open space and improved access to Council or other open space • Design open space to be well connected to the street/path network for pedestrian and cycling access, including safe road crossings • Maximise tree retention and views through the landscape • Maximise passive surveillance of open space • Strengthen connections to and through planned and existing open space • Ensure open space can accommodate a variety of recreation options • Design open space to enable accessibility for the maximum number of residents i.e. positioning on main access roads and/or with multiple access points • Increase tree canopy where possible to improve amenity within built up areas • Encourage developers to provide communal open space, including rooftop gardens
<p>C. Neighbourhood Residential Areas (Residential 3 Zone)</p>	<ul style="list-style-type: none"> • Provide open space which offers quality recreational and open space values within 400 metres of dwellings. • Ensure open space is a useable size (2000m² +) and not encumbered by slope, drainage, or infrastructure issues that limit its useability for recreation. • Provide open space of sufficient size to allow for a wide range of recreation activities. • Where open space provision gaps exist, seek new open space and recreation opportunities, including upgrade of existing open space and

Where	Guidelines
	<p>improved access to Council or other open space.</p> <ul style="list-style-type: none"> • Improve access to open space where possible i.e. improved road crossing access • Increase tree canopy where possible to improve amenity within built up areas
<p>D. Low Density Residential Areas</p>	<ul style="list-style-type: none"> • Improve access to open space where possible i.e. improved road crossing access • Upgrade district open space to cater for the large catchment and including a variety of recreational options • Acquire land to improve biodiversity should it become available and if financially viable
<p>E. Activity Centres</p>	<ul style="list-style-type: none"> • Incorporate urban plazas where possible to improve amenity, and encourage socialisation • Provide and enhance cycling and walking links to all open spaces within activity centres • Increase tree canopy where possible to improve amenity within built up areas

Guidelines 1 - Addressing Future Open Space Provision

Actions: Objective 1.2

1.2.1 Refer to *Guidelines 1 - Addressing future open space provision guidelines* when preparing Structure Plans, Management Plans and considering amendments to the *Manningham Planning Scheme* and applications for planning permits

1.3 Objective - Expand and improve open space in line with population increase

Open Space Needs in Higher Density Areas

Although Manningham has a substantial open space network, the larger parcels with multiple recreation opportunities are not always positioned in areas of highest population density. This strategy identifies areas that will require additional open space, enhanced open space or improved access to open space to cater for the 19.5 per cent increase in population from 2011 to 2036.

Preliminary investigation has identified that five⁸ of the open space precincts are likely to require additional open space or as a minimum improved open space based on the guidelines outlined in Objective 1.2 (Refer *Guidelines 1 - Addressing future open space provision*). These include:

- Birrarung Precinct
- Finns Precinct
- Zerbes Precinct
- Boronia Precinct
- Westerfolds (improved open space)

These precincts have gaps in the provision of sizeable open space (at least 2000m²) within the *DDO8/ DDO9* (or the extended the area of influence), or within approximately 400 metres of all urban dwellings.

Where investigation shows that there is a shortfall of open space, specific sites have not been identified, as detailed Structure Plans will need to be developed to determine the most appropriate location in the context of future development. The following options could be adopted to help meet the shortfall:

- expand existing open space reserves

- upgrade existing open space reserves to a higher standard
- improve access to existing open space reserves
- encourage developers to provide communal open space including rooftop gardens for tenants
- investigate use of school open spaces (refer Objective 2.2).
- convert road reserve to open space.

The areas for further investigation have been identified in *Map 4 - Areas that require additional/enhanced open space 2013 – 2030*. It should be noted that the lower density area of the municipality, east of the Mullum Mullum Creek, has not been included as additional open space is not sought within these precincts for increased population, though land is sought for the purposes of vegetation protection.

Part 2 Open Space Strategy 2014 includes detailed maps of each of these areas within the relevant open space precincts.

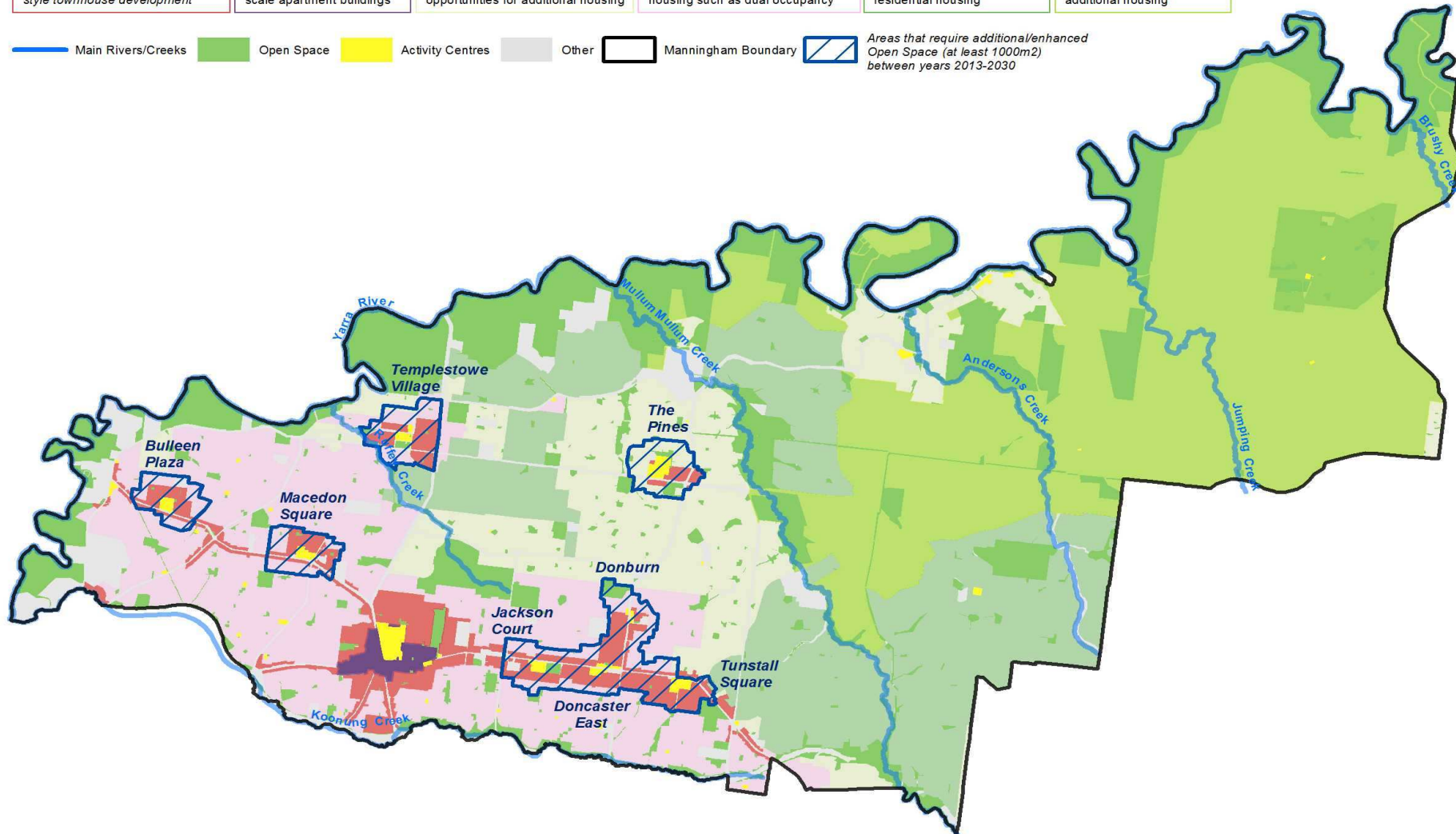
⁸ Doncaster Hill open space provision has not been included as it has been addressed as part of the Doncaster Hill Strategy and additional parcels have been identified and acquired .

Map 4 - Areas Requiring Additional Open Space 2013-2030

Areas that require additional Open Space 2013-2030

DD08/09: Residential Areas	Doncaster Hill (PAC)	R1Z	R3Z	LDRZ	Green Wedge (RCZ)
Design & Development Overlay Substantial change - Apartment style townhouse development	Principal Activity Centre Substantial change - Large scale apartment buildings	Residential 1 Zone Minimal change - Fewer opportunities for additional housing	Residential 3 Zone Incremental change - Includes new housing such as dual occupancy	Low Density Residential Zone Few opportunities for residential housing	Rural Conservation Zone Very few opportunities for additional housing

— Main Rivers/Creeks
 Open Space
 Activity Centres
 Other
 Manningham Boundary
 Areas that require additional/enhanced Open Space (at least 1000m²) between years 2013-2030



Actions: Objective 1.3

- 1.3.1 Ensure that the Guidelines addressing open space provision in Activity Centres are considered in all planning for Activity Centres.
- 1.3.2 Ensure that the implementation of the following Structure Plans addresses all actions, recommendations and guidelines pertaining to open space and pedestrian/cycling access to open space:
- *Doncaster Hill Strategy 2004*
 - *Templestowe Village Structure Plan*
 - *Doncaster East Structure Plan*
 - *Jackson Court Urban Design Framework*
 - *Jackson Court Pedestrian/Cycle Plan*
 - *The Pines Structure Plan*
- 1.3.3 Ensure that the following individual Activity Centre Structure Plans address the shortfall of open space and document an acquisition process and/ or other actions where appropriate:
- *Bulleen Plaza Structure Plan*
 - *Donburn Structure Plan*
 - *Macedon Square/ Plaza Structure Plan*
 - *Tunstall Square Structure Plan* (currently in preparation)
-

1.4 Objective – Ensure the financial viability of open space network expansion and enhancement

Financial Plan

Recent annual spending on open space improvements and recreation facilities located within the open space network amounts to approximately \$10 million⁹. In recent years most of this spending has been funded through Council rates (approximately 80 per cent), but a large proportion has been supported through grants programs (14 per cent). A comparatively small amount of money is contributed by developers or through land sales (approximately 6 per cent). Refer Figure 5.

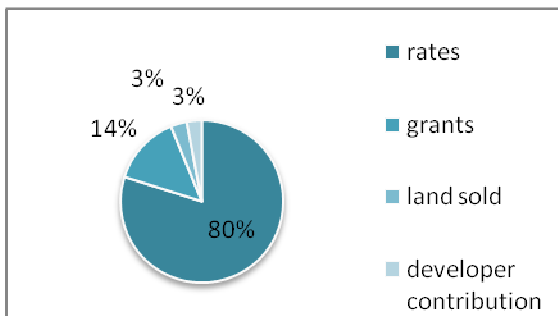


Figure 5 - Current Spending on Open Space Network

The expansion of the open space network, including the purchase of new land, is costly and it is predicted that the future population will require a significant increase in annual funding for open space, in line with population growth.

It is predicted that to provide for the increase in population within *DDO8/ DDO9* by 2030 Council will need to purchase 4,000m² - 10,000m² of open space. An additional approximately \$300,000 annually will be required to develop and upgrade open space in *DDO8* over 17 years (until 2030)¹⁰.

These figures do not include the ongoing maintenance costs required to maintain a high quality open space network. A sustainable funding model will need to include sufficient funds for maintaining our most valued asset.

This increase in spending is not able to be funded by rates alone. Therefore this Strategy also looks at other options to provide an open space network that meets the needs and expectations of the Manningham community, including innovative development solutions, such as roof top gardens.

Open Space Maintenance

The open space network requires significant landscape operations (maintenance) funding to ensure our highly valued open space network remains attractive, accessible, safe and environmentally healthy into the future.

Manningham City Council is currently finalising an asset creation and handover process that will capture 'whole of life' funding for capital projects including the operational, maintenance and renewal component for the asset. This process will assist officers in identifying the life cycle costs associated with a capital project and will ensure adequate funding is allocated for the life of the asset.

Grants

Grant funding provides a significant contribution to open space enhancement and development across the municipality. Grant funding has assisted in bushland management, trail development and sporting facility development. It is anticipated that the Open Space Strategy 2014 will assist in identifying priorities and strengthening funding applications in the future.

Developer Contributions

In accordance with *Clause 52.01* of the *Manningham Planning Scheme*, there is a requirement for a contribution to be made to Council for open space when land is

⁹ Figure based on 2012/13 *Capital Works Plan*.

¹⁰ This figure does not include improvements for Doncaster Hill as these costs have already been accounted for.

subdivided for residential, industrial or commercial purposes. That contribution is made as a percentage of the area of land to be subdivided, or as a percentage of the site value of that land (cash contribution), or a combination of both.

The amount of the contribution (the percentage) can be specified in a schedule to Clause 52.01, or, if it is not specified, the contribution may still be required under Section 18 of the *Subdivision Act 1988*.

In Manningham, the schedule to *Clause 52.01* specifies that in Doncaster Hill the specified amount of contribution for public open space is 5 per cent of the land value. However, in the remainder of the municipality, no amount of contribution is specified and therefore Council may only require contributions of up to a maximum of 5 per cent under the *Subdivision Act*.

Manningham's *Residential Strategy 2012*, Action 4.1 commits to introducing a public open space contribution rate across the municipality to facilitate a more strategic approach to the provision of public open space, in the short-medium term.

Based on population projections and the open space requirements identified in previous sections of this Strategy, it is proposed that the requirement for open space contributions be formalised in the *Manningham Planning Scheme*, in order to provide greater certainty about the supply of land and/or funds to support provision of open space.

In order to ascertain the appropriate developer contribution, it is recommended that a justification report be prepared that calculates the impact of increased population on Manningham's open space requirements.

Protect our Valued Open Spaces

Open space is critical in defining the character of Manningham, and all open space is valued.

Accordingly, this document aims to protect all open space that is valued by the community and/ or contributes to biodiversity and no open space reserves have been identified for future sale.

To ensure the protection of valued open space, Table 5 sets out a system for measuring the value of land within the open space network. The system recognises social, environmental and economic values and takes into account:

- existing level of use
- existing and proposed facilities
- size of the space
- topography and accessibility
- presence of mature trees
- distribution of local space within the surrounding area
- demographics of the local population
- drainage requirements
- biodiversity values (separate assessment mechanism).

While Council has the authority to determine decisions about sale of any of its assets, this Strategy focuses on valuing, enhancing and making the most of Manningham's open space.

Characteristic	Criteria
Level of Existing Use	<ul style="list-style-type: none"> Negligible - no record of visits (1 point) Low - up to 10 visits per week (2 points) Moderate - repeat visits or 10 + per week (3 points)
Recreation facilities (including playspaces):	<ul style="list-style-type: none"> None - (1 point) Limited - Ageing equipment/other limited infrastructure (2 points) Moderate - play equipment (3 points)
Reserve size restricting recreation activities:	<ul style="list-style-type: none"> Under 600 m2 (1 point) 600 - 1000 m2 (2 points) 1000 -1500 m2 (3 points) 1500 m2 + (4 points)
Walking distance to nearest alternative open space:	<ul style="list-style-type: none"> Less than 100 metres (1 point) 100 - 200 metres (2 points) 200 - 300 metres (3 points) 300 metres + (4 points)
Accessibility from connecting street/ path network:	<ul style="list-style-type: none"> Poor access or visibility to local street i.e. dead end (1 point) Limited - Single point of access from local street (2 points) Viable street access or open space links one street to another (3 points)
Topography limiting usable open space:	<ul style="list-style-type: none"> Steep - greater than 1 in 5 for more than 75 per cent of reserve (1 point) Mod - greater than 1 in 5 for between 50 per cent and 75 per cent of reserve (2 points) Less than 1 in 5 for more than 50 per cent of reserve (3 points)
Reserve appearance:	<ul style="list-style-type: none"> No existing trees or landscaped areas (1 point) Few trees or landscaped areas (2 points) Multiple established trees (3 points)
<p>This criteria does not take into account the environmental value of the parcel in question. A separate assessment is required to determine the environmental significance including the presence of remnant or environmentally significant vegetation, habitat values and biodiversity.</p>	

Table 5: Criteria to ascertain the comparative value of open space parcels

Actions: Objective 1.4

- 1.4.1 Prepare a report on Public Open Space Contributions to identify a recommended level of contribution/s based on open space needs and costs for new population in order to prepare an amendment to the *Manningham Planning Scheme* to amend the schedule to Clause 52.01.
 - 1.4.2 Prepare a business case for the annual allocation of resources required for maintenance and operational services.
 - 1.4.3 Further explore opportunities to expand the open space network, without relying on the purchase of new land, including:
 - after hours use of Department of Education land
 - encouraging developers in DDO8/ DDO9 areas to provide communal open space within their developments
 - reviewing the capital works program to prioritise projects that complement open space development/ improvement
-

2. Goal - Make the most of existing open spaces

- 2.1 Protect/ enhance the natural landscape within the open space network
- 2.2 Support the establishment of a range of recreation activities in the most suitable locations
- 2.3 Ensure planning for future built infrastructure considers the values of the open space network
- 2.4 Take a balanced approach to risk management, safety and monitoring

2.1 Protect/ enhance the natural landscape within the open space network

Protection of Biodiversity

The presence of natural and planted areas of vegetation has multiple benefits for Manningham residents and wider Melbourne in the form of ecosystem services and amenity benefits. Such vegetation acts as a carbon sink, provides shade, has a cooling effect in urban areas and provides visual diversity in the urban landscape. Its presence has a positive impact on mental health and provides habitat for native fauna.

The key threatening processes driving the on-going decline of remnant habitat are vegetation clearance (resulting from subdivision and other development), overgrazing by stock, pest plant and animal invasion, changes in burning regimes, soil erosion and changes in sub-catchment hydrology and climate change. These threats contribute directly and indirectly to the loss of local biodiversity, by impairing ecological processes, resulting in habitat loss and local species extinction.

Manningham's public open space network encompasses land managed for the protection of ecological values. This land, in conjunction with sympathetically managed private land, provides opportunities to maintain and create habitat corridors which allow movement for both plant and animal populations. In 2004, Manningham City Council completed a Sites of (Biological)

Significance Review to define, classify and describe all areas of biological or biodiversity significance within the municipality, in order to provide the baseline information on which strategic biodiversity protection and enhancement planning and implementation is founded.

These sites have been identified and mapped as part of this review and Part 3 of the Open Space Strategy describes each reserve within the Manningham Open Space Network, including the occurrence of biosites and/ or biosite buffer within the reserve boundary.

The preservation and enhancement of biodiversity values is considered a high priority for this strategy and recreational access and activities should be planned in keeping with biodiversity principles as outlined in the *Healthy Habitats: Bushland Management Strategy 2012*.

A further study '*Wildlife Movement and Habitat Needs in Manningham*' (Lorimer, Baker and Lockwood, 2009) identified Manningham's waterways as major corridors for migration of bird and animal life. It is recognised that quality habitat along these corridors will enhance the ability to attract and protect wildlife.

Table 6 below outlines future opportunities to enrich bushland corridors along linear parks. This strategy advocates for the purchase of open space parcels that have been identified as key contributors to maintaining and enriching biodiversity

Linear Park	Section	Future Works	Management Plan
Mullum Mullum Creek Linear Park	Between Tindals and Park Rd, Donvale	Land acquisition	<i>Mullum Mullum Creek Linear Park Management Plan Stage 4 (2003)</i>
Wittons Reserve	Wittons Reserve, Warrandyte (51 Reserve Rd)	Land acquisition	<i>Wittons Reserve Development Plan</i>

Table 6 - Future Linear Park Expansion to Enrich Bushland Corridor

Native Vegetation Offsets and Protection

Council has significant obligations under the Local Planning Scheme and Victoria's *Permitted Clearing of Native Vegetation - Biodiversity Assessment Guidelines*.

The Guideline's main objective is to ensure no net loss in the contribution of native vegetation to Victoria's biodiversity. The key strategies to achieve this are:

- avoid the removal of native vegetation;
- minimise impacts on Victoria's biodiversity from the removal of native vegetation; and
- where native vegetation is permitted to be removed, ensure it is offset with an equivalent contribution (e.g. protection/ planting) elsewhere.

The Manningham Open Space Network has a number of sites that may be suitable as 'offset sites' to be managed or revegetated in line with these principles. These sites are under investigation as part of the implementation of the *Healthy Habitats: Bushland Management Strategy 2012*.

Increasing Tree Canopy Cover in Urban Areas

Manningham's reputation for rolling tree-covered hills where trees, rather than buildings, define the landscape is changing. This is a result of the loss of trees planted in the 1960s and 1970s which are not being replaced by large trees, due to urban development and changing landscaping trends.

The urban heat island effect is a major contributor to these warmer temperatures. It occurs when densely built urban areas become warmer than nearby suburban or rural areas. Trees and vegetation keep urban temperatures down, day and night, mitigating the urban heat island effect and increasing canopy cover can bring temperatures down by up to 4 degrees in the summer¹¹.

¹¹ Victorian Centre for Climate Change Adaptation Research (VCCCAR) website, accessed 5 May 2010.

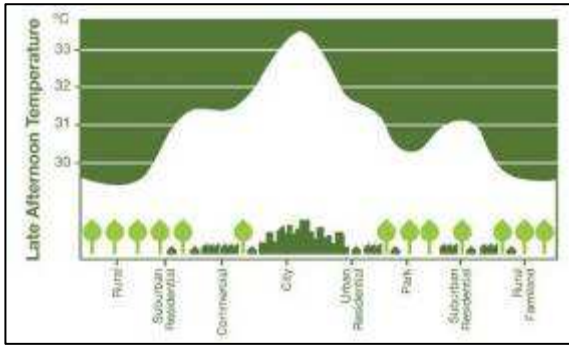


Figure 6 - Urban Heat Island Effect¹²

Manningham's public open spaces are potential sites for increased carbon sequestration, while canopy cover in our open space network also provides shade, aesthetic values and offsets the incremental loss of large trees in private open space.

Protecting and expanding canopy cover is central to ensuring that the municipality is resilient to the impacts of climate change and remains a healthy and enjoyable place for people to live and work.

Within the urban areas of Manningham, there are a number of open space reserves that have minimal tree cover. A program of tree planting across all urban open spaces is required to mitigate the heat island effect, create shade and improve the aesthetic qualities of the urban landscape.

When planting medium to large trees within our reserves, there are a number of considerations relating to impact on adjoining residents and services that should be taken into account, including placement and species selection.

Protecting Cultural Heritage Values

Manningham has retained many links to its cultural heritage with a large number of heritage places, buildings, trees and landscapes, reflecting the area's habitation by local indigenous people, early gold mining settlements and orcharding past.

Many culturally significant buildings, precincts, trees, landscapes and sites of archaeological significance have been identified and documented through heritage studies prepared for the municipality. These heritage sites demonstrate the various phases of the municipality's development, from Aboriginal habitation, through to early European settlement and the subsequent influence of gold mining and orcharding to the influences of architectural and artistic trends.

The *Victorian Heritage Act 1995* is administered by Heritage Victoria and is the Victorian Government's key piece of cultural heritage legislation. The Act identifies and protects heritage places and objects that are of significance to the State of Victoria including:

- historic archaeological sites and artefacts
- historic buildings, structures and precincts
- gardens, trees and cemeteries
- cultural landscapes.

A *Heritage Overlay* is contained within the *Manningham Planning Scheme* to protect the heritage of the municipality. The *Heritage Overlay* includes places of local significance, as well as places included in the Victorian Heritage Register. The following sites are listed on the register and are located within public open space:

- Pontville Homestead, Templestowe (Parks Victoria)
- Evelyn Tunnel, Pound Bend Warrandyte (Parks Victoria)
- Heide Museum of Modern Art
- Heide I & II

A diverse range of heritage elements may be found in public open space, including cemeteries, gold mining relics, historic buildings such as schools houses and halls, war memorials, trees and registered aboriginal sites.

Many sites within the open space network hold Aboriginal cultural heritage values, particularly in close proximity to our rivers and creeks. Areas that hold such values have been mapped to comply with the *Aboriginal Heritage Act 2006* and are identified as culturally sensitive areas. When upgrading open space within these areas, Council must

¹² Victorian Centre for Climate Change Adaptation Research (VCCCAR) Website, accessed 5 May 2010.

investigate the need to develop a Cultural Heritage Management Plan (CHMP). A Cultural Heritage Management Plan is a way of protecting and managing Aboriginal cultural heritage, with the involvement of Registered Aboriginal Parties.

Within the open space network there are also a number of heritage sites with opportunities for better promotion to encourage visitors and improve knowledge of the local environment. For example, Manningham Council is currently investigating a collaborative project with the Wurundjeri Elders to better share the Wurundjeri stories of the Manningham environment with the local community, by developing interpretative signage and storytelling opportunities. Projects such as this should be supported and encouraged to engage the local community and develop a deeper understanding of the cultural heritage and our open space network.

Heritage Pine Trees in Manningham

Manningham's public open spaces currently contain over 10,000 Monterey Pine trees. Some of these have heritage value as remnants of former orcharding activities in the area, but many are reaching the end of their useful lives.

Under the *Manningham Planning Scheme a Significant Landscape Overlay Schedule 7 (SLO7)* applies to a number of areas in the municipality where the landscape value of pine and cypress trees is recognised and protected. Several open space reserves are affected by that overlay and have been identified as locations where replacement Pine trees will be planted. These reserves are identified in Part 3 of this document.

Actions: Objective 2.1

- 2.1.1 Identify, register and purchase as required offset sites within the open space network in line with the implementation of the *Healthy Habitats Bushland Management Plan 2012*.
 - 2.1.2 Carry out a tree planting program in open space reserves to increase tree canopy across urban Manningham.
 - 2.1.3 Continue to protect biodiversity in line with *Healthy Habitats Bushland Management Plan 2012*.
 - 2.1.4 Continue to manage Aboriginal Heritage Sites of Significance in Manningham in line with the Reconciliation Action Plan 2012-2014.
 - 2.1.5 Protect and interpret Heritage Sites in Council's open space reserves.
-

2.2 Objective – Support the establishment of a range of recreation activities in the most suitable locations

Recreation Activities

It is important that Council is aware of and demonstrates best practice planning, design, construction and management of the municipality's open spaces with regard to facility provision and leisure opportunities.

Changing recreational trends need to be taken into account to ensure our public open spaces remain appealing, relevant and inclusive.

Manningham's *Active for Life Recreation Strategy* 2010 identifies a range of emerging trends which will have significant implications on the provision and development of public open space. Council is investigating how to provide a range of new facilities and programs in coming years.

Some of the themes that have come out of the *Active for Life Recreation Strategy* and through further consultation include:

- increasing community interest in the provision of public exercise equipment for adults, and particularly for the elderly
- advantages of multi-use venues to minimise infrastructure investment and maximise use
- a rise in personal training, both in gyms and outside in open space reserves
- increasing community interest in community gardening
- a need to provide flexible and low cost active and passive recreation options to increase accessibility
- demand for greater comfort in open space reserves, such as seating, shade, sealed paths and refreshments
- increasing demand for new and improved skate, bmx and mountain bike facilities
- a need to provide park infrastructure to cater for dog socialising, walking and training
- growing interest in new passive/informal recreation activities which have minor

infrastructure demands and do not require joining a sports club e.g. Disc Golf.

In planning for recreation facilities, Council needs to ensure the infrastructure does not impact negatively on the enjoyment of natural spaces.

Table 7 identifies the future recreation needs required to maintain and improve the health and wellbeing of the community and lists the most appropriate sites for these activities and associated infrastructure.

Most of these sites have previously been set aside for significant sporting infrastructure by preceding Councils, due to their topography, large size, or position within the municipality. Since the *Public Open Space Strategy* (2004), some of these sites have been developed and others have plans for development. The final column in Table 7 identifies the sites that have previously been set aside for significant sporting infrastructure.

The only site previously set aside for sporting infrastructure not identified in Table 7 is Landscape Reserve. This reserve has recently had fitness equipment installed. The site is limited for future development due to constrained access via local streets, drainage and topography.

Community Gardens

Community Gardens have multiple benefits for the local community including:

- local food production/reduced carbon footprint
- opportunities to socialise
- improved mental/physical health
- community development.

Manningham City Council is home to a large community garden (136 plots) currently situated in Wetherby Road on land owned by SP AusNet and leased to Council. The lease is due to expire in 2017 and this Strategy identifies the need to develop alternative sites

to ensure the gardening community can have access to plots in the future. It is unlikely that site of this size will be available for a similar development, so a number of alternative options will be considered as part of Community Garden Plan including relocation (as required) and the development of smaller community plots in several locations across the municipality.

The possibility of other themed gardens, such as culturally specific gardens or butterfly habitat gardens could also be considered as ways of attracting and engaging a diverse cross-section of the community.

Ageing Population Needs

Manningham is an ageing community, and the location, extent, accessibility and maintenance of our open spaces and related facilities will be vital in allowing residents to 'age in place', to maintain their health and quality of life. Considerations include:

- Environmental health and amenity
- Provision of green spaces and walkways
- Outdoor seating, shade and shelter

- Signage and safety
- Age friendly pavements and roads
- Provision of public toilets
- Accessibility to major facilities and destinations, including social and community events.

The World Health Organisation's *Global Age-friendly Cities: A Guide* provides useful information, including a checklist which should be considered in the planning and design of public open space.

Future Recreation Infrastructure

Within the municipality there is very little developable space left. All available space has been reserved for specific uses as described in Table 6. Any development listed beyond that in Table 6 would be on existing open space and would represent a change of use. Recent examples of this include the conversion of a Pony Club to a soccer field at Petty's Reserve. Further detail on active sporting facilities can be found in the *Active for Life: Recreation Strategy*.

Activity	Infrastructure	Reserve Name	Suburb/ Area	Status
General Active Recreation	Fitness equipment Potential for future recreation infrastructure	Jenkins Park (Green Gully Linear Park)	Templestowe	Reserved for future recreation infrastructure
Multi-use (Basketball, Netball, Table tennis, volley ball & futsal)	Highball facility	Mullum Mullum Reserve	Donvale	Reserved for future recreation infrastructure. Highball facility (5-7 court) identified in <i>Highball Infrastructure Plan (2013)</i>
Basketball, Netball, Futsal, Badminton	Highball facility extension	Sheahans Reserve	Bulleen	Highball facility expansion identified in <i>Highball Infrastructure Plan (2013)</i> and <i>Sheahans Reserve Development Plan (2011)</i>
Gymnastics/ Basketball	Highball facility extension	Manningham DISC	Donvale	Highball facility expansion identified in <i>Highball Infrastructure Plan (2013)</i>
Netball	Highball facility extension	Manningham Templestowe Leisure Centre	Templestowe	Highball facility expansion identified in <i>Highball Infrastructure Plan (2013)</i>
Multi-sport field training (baseball & soccer)	Baseball pitch/ soccer training pitch	Mullum Mullum Creek Linear Park (Tikalara Sporting Precinct)	Templestowe	<i>Tikalara Sporting Precinct Development Plan (2012)</i>
Training (football)	Level grassed area	Zerbes Reserve (east section)	Doncaster East	<i>Zerbes Reserve Management Plan (2011)</i>
Kevin Heinze Garden Centre	Educational garden centre	Rieschiecks Reserve	Doncaster East	<i>Rieschiecks Reserve Management Plan (2012)</i>
Canoeing/ Kayaking	Yarra River access infrastructure	Fitzsimons Lane Reserve	Templestowe	Potential cooperation with Parks Victoria on river slalom course identified in <i>Active for Life Recreation Strategy (2010)</i>
Nature Play	Interpretative signage, Natural landscaping	Various	Various	Refer to <i>Part 3 – Open Space Inventory</i>
Skate/ BMX	Skate infrastructure	Refer <i>Guideline 2</i>	Medium Density area	Specific location not yet identified
Community Gardens	Garden Plots/ storage/ vehicular access/ loading area	Refer <i>Guideline 2</i>	Proximity to Medium Density area (preferred)	Specific location not yet identified
Regional Playspace for people of all ages and abilities	Landscaping/ play equipment/ seating/ fencing/ toilets	Refer <i>Guideline 2</i>	Doncaster/ Doncaster East area (central part of municipality)	Specific location not yet identified

Table 7 - Recreation Activities in Open Space Network

Facility	Location Guidelines	Reserve Hierarchy (size)
A. Community Gardens	<ul style="list-style-type: none"> Proximity to Medium density residential area Access to toilets Walking distance to community centre/ activity centre Public transport accessibility 	Regional/ District
B. Regional play space for people of all ages and abilities	<ul style="list-style-type: none"> Access to car parking Including disabled parking infrastructure Access to toilets 	Regional/ District
C. Skate/ BMX	<ul style="list-style-type: none"> Medium density residential area Entry from main road Walking distance to activity centre Walking distance to toilets High visibility from main road Public transport accessibility 	Regional/ District
D. Fitness Equipment	<ul style="list-style-type: none"> Demographics to suit style of equipment Complementary with other reserve uses Co-located with other recreational opportunities Accessible to target users Accessibility by pedestrian/shared paths 	Regional/District

Guidelines 2 - Guidelines for Locating Sport/Recreation Infrastructure with Open Space Network

Open Space within Public School Grounds

Schools typically provide hard court and foundation level sports facilities and in many instances they are under-utilised after school hours and on weekends, and provide opportunities for children to learn skills such as bike riding and basketball in familiar surrounds. Public school grounds were once open to the public after school hours for recreational use and were valued as part of the open space network in most areas. Many schools now lock their gates after hours in an attempt to reduce crime, graffiti and maintenance costs and rule out the possibility for being found liable for any injury obtained on Department of Education and Early Childhood Development (DEECD) land.

Joint use agreements can be negotiated between Manningham City Council and the DEECD to encourage schools to open their gates to their communities. This is especially important where there is a lack of local open space generally, and a lack of accessible play opportunities specifically. Manningham City Council has already established relationships with a number of schools with joint use

agreements for stadiums. An extensive survey carried out in March 2012 of school facilities that have the potential to be used by the general community outside of school hours. The findings from that research and partnerships will be applied to the potential shared use of school grounds.

Plan Melbourne contains a short term action to work with government agencies to prepare shared-use plans of open space and recreation facilities for government schools.

Play in the Open Space Network

Playspaces

Playspaces are important facilities within the open space network as they provide a wide range of opportunities for children and families, including grandparents, to socialise, participate in physical exercise, have fun and be creative.

Within the open space network Manningham currently has 151 playspaces of different sizes and catering to different age groups. The playspace hierarchy is defined below:

Catchment	Description
Regional	A large playspace with a variety of play opportunities that cater to all ages and abilities and attract visitors from all areas of Manningham and beyond. Manningham has four regional playspaces: <ul style="list-style-type: none"> • Wombat Bend • Ruffey Lake Park Victoria Street • Ruffey Lake Park – The Boulevard • Warrandyte Federation Playspace
District	Medium to large playspace usually found in large areas of open space including linear parks and sporting reserves. Caters for a large number of visitors within the municipality.
Large	Small to medium size generally within local parks with a larger catchment (approximately 10 minute walk/ ride).
Small	Usually located within local parks with limited infrastructure. Easily accessible to local streets or courts (within a 5 minute walk/ride).

Table 8 - Playspace Hierarchy

Principles for Playspace Provision

There are several playspace principles that help guide the distribution and design of playspaces. These are listed as guidelines below.

Guidelines for Playspace Provision
<ul style="list-style-type: none">A playspace should be within a 400 meters walking distance of residents living in Residential 1 and 3 zoned areas of Manningham.
<ul style="list-style-type: none">Playspaces should be designed in accordance with the Manningham Urban Park Design Guidelines.
<ul style="list-style-type: none">Playspace density within Residential 1¹³ and 3 zoned areas should be approximately one playspace for every 800 residents.
<ul style="list-style-type: none">Playspace density within Lower Density Residential zoned areas should be approximately one playspace for 2,500 residents.
<ul style="list-style-type: none">Playspaces within a Lower Density Residential zoned area should cater for the larger catchment and a range of play and socialising opportunities.

Guidelines 3 - Guidelines for Playspace Provision

Playspace Distribution

Manningham residents are well provided for, with 151 high quality playspaces across the municipality with nearly 90 per cent (135 playspaces) of these located in the precincts that are predominantly Residential 1 and 3 zoned areas.

There are currently 16 playspaces (12 per cent) in the precincts that are predominantly Low Density Residential zoned areas.

The variation in provision exists for the following reasons:

- playspace provision corresponds with residential density and practical catchment size

¹³ This principal may not apply to all Residential 1 zones within Manningham. E.g. Wembley Gardens, Donvale and Warrandyte township have larger lot sizes and therefore larger catchments may apply

- private open spaces are much larger in lower density residential areas
- playspace provision corresponds with open space availability.

It is recommended that 17 playspaces on new open space sites be developed over the next 17 years until 2031. Of the 17 playspaces, seven of these will serve the new population within the Doncaster Hill catchment (refer to Ruffey Precinct in Part 2).

These playspaces will fill existing gaps, provide for our increasing population and ensure our families have a wide range of play opportunities within the municipality.

Part 2 identifies the potential locations of proposed playspaces within each precinct.

Playspace Gaps

This Open Space Strategy aims to ensure that every resident living in a residential area (Residential Zone 1 or 3) has a good quality playspace within walking distance. Walking distance has been assessed as being approximately 400 metres.

The recommended distribution has largely¹⁴ been met with only some small pockets remaining that have some properties further than 400 metres from a playspace.

Several new sites for playspaces have been identified to fill some of these gaps including:

- Ruffey Lake Park (Church Road), Doncaster
- Swilk Reserve, Templestowe
- Hepburn Reserve, Doncaster
- St Clems Reserve (southern section), Doncaster East

¹⁴ An exception to the rule is around Warrandyte township residential area where the extent of sensitive bushland and the steep topography is not conducive to infrastructure development.

Once these proposed playspaces have been developed, some small gaps will still exist in the Bolin Bolin precinct in the suburb of Bulleen. Unfortunately, areas of open space do not exist in these areas to allow playspace development. To ensure that the residents in

this precinct are not disadvantaged, this strategy recommends the upgrade of existing playspaces to a high standard to cater for a slightly larger catchment. This area should also be prioritised for pedestrian and cycle improvements.

Actions: Objective 2.2

- 2.2.1 Refer to *Table 7 - Recreation Activities in the Open Space Network* and *Guidelines 2 - Guidelines for locating sport/ recreation infrastructure within the open space network* when planning for recreation facility development.
 - 2.2.2 Develop an 'Opening public school gates for community recreation' discussion paper that explores the existing barriers to joint use of school outdoor recreation facilities and suggests a way forward to expand the open space opportunities for the Manningham community.
 - 2.2.3 Develop 17 new playspaces (not including replacement) until 2031 to cater for the increasing population and to continue to provide high quality play opportunities for the community.
 - 2.2.4 Upgrade playspaces within the Bolin Bolin Precinct to a high standard to compensate for slightly larger catchments.
 - 2.2.5 Develop a Community Garden Plan, incorporating the Wetherby Road Community Gardens relocation plan, as well as issues such as governance, land identification and funding.
 - 2.2.6 Where recreational development is proposed, consider and protect the passive open space and 'local' park function of all reserves.
-

2.3 Objective – Ensure that planning for future built infrastructure considers the values of the open space network

As detailed in the Background to this Strategy, open space has a myriad of benefits and values, however there are also a great variety of ways in which these spaces may be used, developed and maintained. It is vital that these uses do not impact on open space values; the careful planning, design and location of built infrastructure in public open space is particularly important.

Drainage Systems in Open Space

Some of Manningham's public open space coincides with overland flow paths and natural valleys, and accommodates associated drainage and flood mitigation infrastructure.

Manningham City Council is responsible for the majority of local public drainage infrastructure throughout the municipality, while Melbourne Water is generally responsible for the installation and maintenance of trunk main drains and drainage systems where the upstream catchment area exceeds 60 hectares.

Drainage infrastructure can include:

- underground pipes
- inlet/ outlet pits
- retarding basins
- overland flow paths
- stormwater quality infrastructure, such as wetlands and rain gardens.

Local flood mapping is currently being carried out to supplement existing regional Melbourne Water flood mapping to ascertain flood levels in local catchments. Local flood mapping is currently underway for five catchments: Bulleen North, Ruffey Creek, Mullum Mullum Creek, Koonung Creek and Andersons Creek. This information will also assist in targeting future drainage works to mitigate property flooding within the City of Manningham.

This mapping will also inform the extent of the *Special Building Overlay (SBO)* that will be proposed for the *Manningham Planning Scheme* and would apply to land affected by overland flow paths created when rainfall exceeds the capacity of underground drains. The SBO would require new buildings to respond to the flood risk by implementing onsite detention and/or water harvesting systems. These systems will offset some of the expected increases in flood risk due to climate change and urban densification, but would not be expected to completely remove the need for drainage infrastructure improvements in (or under) public open spaces to mitigate community flood risks.

The current *Manningham Drainage Strategy 2004-2014* acknowledges that open space often coincides with natural watercourses and is suitable for the location of drainage services; however, the primary function of open space reserves should not be adversely compromised by any proposed drainage project.

This strategy recommends that through consultation, the effect of drainage improvement projects on the primary function of open space be minimised.

In the future, alternative solutions may be implemented that both address drainage requirements and protect or enhance open space values. Examples of this may include:

- incorporating water bio treatment systems into existing landscaped areas,
- converting ditch drains to landscaped water course features,
- extension of underground drainage infrastructure,
- subsurface stormwater harvesting and reuse systems,
- recognising that community benefits can be maximised by utilising public open spaces for multiple purposes (such as recreation, flood retention and stormwater treatment)

- implementation of allotment and local streetscale water detention systems to compliment catchment scale detention systems located in public open space areas.

The *Guidelines for Civil, Community and Recreational Infrastructure in Public Open Space* (Guidelines 3) have been developed to assist in developing drainage solutions.

Water Cycle Management and Water Sensitive Urban Design

Water Cycle Management (WCM) is an important consideration for urban development that contributes to an ecologically sustainable city. Water cycle management covers drinking water, stormwater run-off, waterway health, sewage treatment and recycling.

Water Sensitive Urban Design (WSUD) is about integration of water cycle management into urban planning and design. WSUD stormwater treatment facilities that are usually located within open space include:

- wetlands
- bio-retention systems
- rain gardens
- retarding basins
- water capture and reuse systems, such as rainwater tanks

Council is currently preparing a Water Cycle Management Strategy, which in particular is investigating:

- WSUD treatments that may be retrofitted to existing urban streets and require 'Zero Additional Maintenance'
- Catchment scale stormwater treatment systems, typically comprising constructed wetlands at the end of a catchment prior to its entering the adjacent waterway
- Increased local scale rainwater catchment and reuse.

While the Water Cycle Management Strategy is currently being developed and not yet endorsed, Council reserves which are considered as potential locations for additional WSUD treatment infrastructure include Koonung Creek Linear Park, Mullum Mullum Creek Linear Park, Tikalara Park, the

proposed Eastern Golf Course development, and St Clems Reserve.

The development of such facilities may have positive and/ or negative outcomes for open space use and enjoyment. For example wetlands may create an attractive natural environment that increases biodiversity for local birds; however, the same wetlands may reduce the available open space for recreation.

This strategy supports the development of these facilities, provided that planning occurs in consultation to take into account Guidelines 3.

Community Facilities

Public open space is sometimes seen as an acceptable and affordable location to house important community facilities. The *Community Facilities Access and Allocation Policy 2013* outlines the process for the allocation of these facilities to community organisations. There are many community buildings that exist within the Manningham open space network. These include:

- Neighbourhood Houses
- Kindergartens
- Scout and Guide Halls
- Council Services
- Community Groups, e.g. Kevin Heinze Garden Centre
- Community Halls
- Recreational Infrastructure such as sporting fields, clubrooms and carparking.

These buildings house important functions and services and may be complementary to open space values, but equally their construction reduces the land available for outdoor recreation and may compromise open space values.

Where open space use is being contemplated to service multiple outcomes, there needs to be a balance between the desired outcomes and ensuring that sufficient open space is retained for recreation and biodiversity. This decision making process requires a localised understanding of open space requirements, available land area and potential options to manage potentially competing uses. It also requires an appreciation for the true values of

open space, including recognition that almost all open spaces provide a passive open space function for local residents. The following guidelines will assist in decision make processes when community or civil

infrastructure, as well as recreational infrastructure, is proposed within our open space network.

Where	Guidelines
<p>Civil, community or recreational infrastructure in public open space</p>	<ul style="list-style-type: none"> • Identify the specific values of the open space in question (refer Figure 2) and advocate for a solution that minimises impact on these values <ul style="list-style-type: none"> ○ social values – physical/ mental/ social wellbeing/recreational potential ○ environmental values – biodiversity and ecosystem services ○ economic values – property values/ tourism/ general amenity • Minimise loss of vegetation and in particular, remnant native vegetation • Consolidate community facilities and plan to remove any redundant buildings and return land to the open space network • Ensure that the introduction of infrastructure within a section of open space does not leave a gap in the open space network and/ or distribution of recreation opportunities available • Ensure that the introduction of infrastructure is minimised in areas where a future shortage of open space has been identified • Ensure that the introduction of infrastructure is minimised in Low Density Residential zoned areas with minimal public open space provision. • Minimise hard surfaces such as carparking and maintenance access infrastructure • Recognise that all open spaces provide a passive open space function for local residents which should continue to be provided wherever possible.

Guidelines 4 - Guidelines for Civil, Community and Recreational Infrastructure in Public Open Space

Actions: Objective 2.3

- 2.3.1 Refer to *Guidelines 4 – Guidelines for civil, community and recreational infrastructure in public open space* when considering proposals for new civil and community infrastructure within the open space network.
- 2.3.2 Develop an internal working group with representation from relevant units to assess future proposals to locate drainage or other infrastructure in the open space network and develop site specific responses that maintain the values of open space.

2.4 Objective – Take a balanced approach to risk management, safety and monitoring

Risk Management

It is Council's role to manage risk appropriately within all public spaces. Council processes ensure that risk management is undertaken methodically and thoroughly across the municipality.

Risk management is becoming more stringent as public injury claims become more frequent and community expectations increase. It is vital that risk management is balanced with the provision of rich recreational opportunities and protection of open space values. However, risk adverse planning, design and management have the potential to compromise recreation opportunities, ecological health and open space diversity.

Playing in Open Space

There is a growing body of research that highlights the benefits for children when play environments provide risk and challenge. There is also corresponding evidence of negative outcomes when children are not given such opportunities. Striving for 'risk free' playgrounds can diminish learning and development opportunities.

Playgrounds give children opportunities to play and have fun and they are often one of the few places children can play freely without adult direction. Playgrounds can also help children to learn about themselves - their strengths, abilities, achievements and their limitations; and about how to assess risk, problem solve, communicate, collaborate and get along with others. Children and young people will naturally test their physical limits through play and risk management within a play environment must consider the broader impacts of overemphasised risk mitigation.

Skateboarding and BMX riding are also activities that give children and adults an opportunity to develop and master skills; engage in physical exercise and activity; and socialise in a constructive environment.

These sports are appealing to a large segment of youth who are not otherwise drawn to more traditional (team) sports. When assessing risk associated with providing such infrastructure, it is important to acknowledge the health benefits to the participants and the community.

Personal Safety and Crime

The design of public open space and adjacent land can have a significant influence on the actual or perceived safety of these places. Open spaces with minimal street frontages and a high proportion of boundary dominated by side and rear fences are an example of this, resulting in poor passive surveillance and a feeling of isolation. Council should seek to conform to the State Government's *Safer Design Guidelines for Victoria* to maximise the safety of public open space. Design of public open space for safety is covered in more detail in Manningham's *Urban and Park Design Guidelines* (2010).

Perceptions of safety risks, whether real or perceived, can reduce usage of public open space. Council needs to work to make public open spaces feel and appear safe, to dispel safety myths and encourage use.

Fire

Manningham's bushland is typical of the Eucalypt woodlands that dominate south-eastern Australia. The vegetation, coupled with the temperate climate, creates one of the most fire-prone landscapes in the world. Thus as urban development occurs within and around our bushland areas; the need to prevent and suppress fire is a major priority.

However fire is also an ecological process that encourages the germination or regeneration of a range of species that otherwise would be unable to survive over the long term. One of the objectives of Manningham's *Healthy Habitats: Bushland Management Strategy* (2012) is to reintroduce prescribed fire at appropriate

locations, controlling its intensity and frequency to mimic this natural process, in order to enhance biodiversity values and contribute to increased community safety.

In addition to the *Municipal Fire Prevention Plan 2010-2015*, Council has commissioned a series of Wildfire Prevention and Preparedness Plans (WPPPs) for those reserves considered most at risk from bushfire, specifically:

- 100 Acres Reserve
- Mullum Mullum Creek Linear Park
- Stintons Reserve
- Tindals Wildflower Reserve.

Manningham Council will work with residents to balance community safety and biodiversity within the open space network.

Water Bodies

Manningham Council has more than 30 formal retarding basins, dams or wetlands of various sizes, as well as natural waterways

such as rivers and creeks, within the Council open space network, each of which contain various levels of water at different times of the year. When managing risk around water bodies it is important that the risk is visually obvious. Signage may be appropriate in some circumstances, however, often risk is better averted by ensuring that vegetation or physical features do not obscure vision through to the water body.

Water bodies are monitored as part of Council's asset monitoring procedures and in accordance with Department of Environment and Primary Industries Guidelines, where relevant.

Swimming is a popular activity in the Yarra River in Warrandyte and Wonga Park. Whereas Parks Victoria oversees the recreational use of the River itself, Council is involved in access to the water from Council managed land.

Monitoring Risk

Manningham has a duty of care to monitor risk within the open space network to ensure community health and wellbeing. The following table sets out key monitoring programs within our open space network:

Open Space	Program	Council Unit Responsibility	State Government Governing Authority/ Guidelines	Monitoring
Water bodies, Dams, Retarding Basins (included in Reserve descriptions – Part 3)	Asset Maintenance	Engineering Operations	Department of Environment and Primary Industries	Ongoing
Water quality	Water watch Water Monitoring	EEP Health and Local Laws	EPA Melbourne Water	Ongoing
Former Tip Sites Stintons Reserve Bulleen Park	Water Quality Monitoring Soil Quality Monitoring	Health and Local Laws Engineering Operations	Environmental Protection Agency	Ongoing
Playground	Playground Safety Audit	Parks and Recreation Economic and Environmental Planning	Australian Safety Standards	Ongoing (Audit every 3-4 years)
Trees	Arborist Tree Assessment	Parks and Recreation	Australian Safety Standards	Ongoing
Paths	Asset Maintenance	Engineering Operations	Australian Safety Standards	Ongoing
Fire	Fire Management	Parks and Recreation Municipal Emergency Management	Department of Environment and Primary Industries Country Fire Authority Metropolitan Fire Brigade	Ongoing (2010–2015 Municipal Fire Prevention Plan)

Table 9 - Monitoring Risk in the Open Space Network

Managing User Conflict in our Open Spaces

It is important to recognise that increased park use and diversity of recreational opportunities will at times result in conflicts between users. This does not represent a failure but is a symptom of the increasing popularity and use of public open space. These risks need to be managed through a mixture of infrastructure provision, regulation, signage, education and behavioural change.

It is also important to bear in mind that separating out activities to avoid conflict may encourage communities to become less tolerant of others and their differing needs, lead to increasing conflict.

Dogs and Cats

Owning a pet has many health benefits and this strategy aims to ensure that these health benefits can be achieved while ensuring that Manningham's public open spaces can be enjoyed by all members of our community.

Conflict usually arises due to irresponsible pet ownership including: lack of awareness or obeying of regulations, people not controlling their dogs, failure to pick up dog droppings and dogs getting in the way of cyclists and pedestrians on shared paths.

Some residents have very passionate feelings regarding the risks associated with dogs, while others feel equally strongly about the value of visiting open space reserves to exercise and socialise their dogs.

The *Domestic Animals Act 1994* exists to promote animal welfare, the responsible ownership of dogs and cats and the protection of the environment. Section 26 provides the ability for Council to specify places of prohibition, to develop terms and conditions, as well as providing offences for contravention which can be enforced by law. The current order under Section 26 (Order No.3 Dog and Cat Control 2013) has recently been updated to provide a number of amendments that align it with recent Management Plans for open space which have been adopted by Council. These changes have been made to ensure sensitive landscapes are protected and improved safety along commuter trails.

Council has 95 reserves in which dogs are permitted off-leash in all or part of the reserve; and three open space reserves¹⁵ in which dogs are prohibited due to the ecological values and dogs are also not permitted on the Rieschiecks athletics track. Dogs must also be on a lead within 15 metres of a playground.

Unrestrained dogs and cats also have a major impact on native flora and fauna. The impacts include:

- 'direct' predation on native fauna
- 'indirect' disturbance of habitat for native fauna caused by the noise, scent and visual impact of roaming animals; and
- impact of faeces, including scent marking/ spraying and increased nutrients.

This strategy supports the *Healthy Habitats - Bushland Management Strategy (2012)* including:

- continued education programs with schools etc regarding responsible cat and dog ownership,
- investigation of appropriate methods and techniques to avoid or minimise the negative impacts of domestic animals on Green Wedge natural values, including feasibility and desirability of a cat curfew that concurs with Local Law controls.

Cyclists

Cyclist issues have also been identified as a key cause of conflict. This relates to the speed of travel, failure to ring bells on approach, and occasionally to a perceived lack of courtesy to other users on shared paths. This also reflects a significant increase in the popularity of cycling.

Some residents have requested separation of pedestrian and cyclists on dedicated trails, which could assist in reducing conflicts but would have major cost, amenity and maintenance implications. A separation

¹⁵ Currawong Bush Park, 100 Acres Reserve (part of), Tindals Wildflower Reserve

approach also goes against the principles of shared community use of spaces for all ages and all abilities.

The *Manningham Bicycle Strategy Review 2013* has explored these issues and makes recommendations to improve the cycling experiences of Manningham residents.

Mountain bike riding can also become a cause of conflict as trails are often located in bushland areas with sensitive ecosystems. Manningham has one permitted mountain bike area at Candlebark Park in Yarra Valley Parklands.

Horses

Manningham's diverse landscape and its spread of population allow horse riding to be a popular recreation activity in the eastern part of the municipality, to the east of the Mullum Mullum Creek. Due to continuing urban development and population increase, there is increasing pressure on the roads and trails that exist for vehicles, pedestrians and cyclists alike. This pressure increases the likelihood of potential conflict between competing uses and expectations. There has been recent documented conflict between dogs and horses on the Warrandyte Walk.

Although this strategy does not support a separation approach, managing horses in an increasingly built up environment can become problematic.

Work is currently being undertaken to complete horse trail circuits that link to the existing horse riding facilities at the following reserves:

- Buck Reserve
- Husseys Reserve
- Coleman Park.

These trails were identified in the *Horse Riding Strategy 2001*.

Horse riding can also damage native vegetation and have a detrimental effect on sensitive environments including soil compaction and fertility and weed dispersal issues through horse manure. For this reason, horse riders have limited access to the open space network in the Green Wedge. This is documented in Manningham's *Green Wedge Action Plan 2010*.

Actions: Objective 2.4

- 2.4.1 Continue to ensure that the local laws pertaining to dog, cat and horse controls reflect current priorities for park use, management and protection.
- 2.4.2 Ensure open space design follows the principles of the *Safer Design Guidelines for Victoria 2005*.
- 2.4.3 Ensure the new shared paths through open space are designed to allow safe shared use by pedestrians and cyclists.
- 2.4.4 Continue to develop horse riding specific trails in line with the *Horse Riding Strategy 2001*.
- 2.4.5 Support recommendation 25, *Healthy Habitats - Bushland Management Strategy 2012* - Investigate and implement, as appropriate, methods and techniques to avoid or minimise the negative impacts of domestic animals on Green Wedge natural values, including feasibility and desirability of a cat curfew, that concur with Local Law controls.
- 2.4.6 Continue to partner with other land managers/ state government authorities and advocate for a safe and well managed open space network.

3. Goal - Attract more people, more often to public open space

- 3.1 Celebrate our open spaces and encourage community life through tourism/ cultural, arts and recreation activities
- 3.2 Better understand recreation trends, open space values and community expectations
- 3.3 Maximise community involvement in open space planning and management
- 3.4 Promote the municipality's open spaces and the health benefits of outdoor recreation
- 3.5 Develop equitable and transparent processes for commercial activities within open space

3.1 Objective - Celebrate our open spaces and encourage community life through tourism/ cultural and arts and recreation activities

Community Activity in Open Space

The Manningham open space network is an ideal setting for a multitude of social, cultural and recreation events and programs.

Knowing the multitude of benefits that socialising and being active and creative outdoors in green spaces brings, encouraging such activity has become a key objective for this Strategy.

There are a number of ways that increased community activity in the open space network can be achieved:

- encourage recreation programs to take place in open spaces (no permanent infrastructure required)
- link tourist attractions to open space
- encourage and support social/ cultural/ community events in the open space network
- encourage and support public art/ community art in the open space network.

Recreation Programming

Council's *Active for Life Recreation Strategy* 2010 has a strong emphasis on programming with the view that simply providing recreation

facilities does not necessarily encourage increased use.

Demonstrating activities can inspire interest in an activity, while connecting residents to the local community.

Unstructured Recreation Programs (no permanent infrastructure required)

Active outdoor programs have wide ranging health benefits and encourage people to use open space reserves and become physically and socially active, and improve their physical and mental health. The *Active for Life Recreation Strategy* 2010 initiated a number of activities that do not require specific infrastructure. The Open Space Strategy supports and promotes all activities in our open spaces provided that the activity does not compromise the values of open space as set out in Figure 2.

Such programs may include:

- casual sport i.e. soccer in an open space outside of formal facility (temporary goals i.e. witches hats)
- walking groups
- nature play and exploration programs that encourage children to explore and enjoy the natural environment

- neighbourhood park parties that assists residents in setting up their own community gathering.

It is important to consider appropriate locations for such activities. Guidelines have been developed to assist in determining appropriate sites for recreation programs that require an area of open space and no fixed infrastructure to operate. Refer Guideline 5.

Nature Play

Spending time in nature improves physical and mental wellbeing, reduces stress, promotes creativity and is a welcome alternative to a fast paced technologically focused world for people of all ages.

The growing research literature identifies the critical significance of play in nature for children's health, wellbeing and development. Increasingly opportunities for play outdoors, particularly in nature, are missing from the daily lives of young children in Western countries. The detrimental effects of this trend are now documented in rising obesity rates and longer-term health, wellbeing and developmental concerns.

Promoting and facilitating nature play in Manningham's open spaces requires identification of 'natural' sites with rich opportunities for play, as well as programming opportunities to introduce and reconnect the community with natural spaces and nature play.

Manningham has recently introduced a 'cubby building' activity into festivals and events where children and families have access to a range of natural materials to build cubbies and interact with nature. Playfulness in, and exploration of, the natural environment, are to be encouraged in all park users; it is hoped that by facilitating these activities through young people, people of all ages will realize new possibilities in how they engage with and enjoy open space.

Open Space and Tourism

The existence and quality of our open space network, and in particular our recreation trail networks, are a key draw card for visitors to Manningham.

The Open Space Strategy recognises the importance of connecting tourist destinations

and open space and Objective 1.1 – '*Improve links within our linear parks to streamline access to destinations and enhance the natural environment*', takes into account the importance of these connections, recognising that some of Manningham's open spaces are themselves tourist destinations.

The completion of the Yarra Valley Parklands Trail will improve access to a number of major attractions, including Heide Museum of Modern Art, Bolin Bolin Billabong and Petty's Orchard, while extension of the Main Yarra Trail to Warrandyte will also allow visitors to walk/ cycle to the historic township.

Social/ Cultural Events and Activities

Public open space can act as a dynamic setting for performing arts and other cultural events, including cultural festivals, culturally specific activities, outdoor cinema and plays. There is an opportunity to increase these kinds of events, and to provide supporting infrastructure such as an amphitheatre or informal sports/games facilities such as table tennis or badminton facilities, or alternative recreation infrastructure such as a 'Little Free Library.'

The 'Know Your Neighbour' program was established in response to changing lifestyles impacting on our neighbourhoods and leaving some members of our communities socially isolated. The program aims to inspire residents to meet their neighbours and organise local community gatherings. Local open spaces are ideal spaces to meet and become connected with the local community and these events/ programs should be promoted and supported where appropriate. Examples include:

- Manningham Healthy Lifestyle Week
- Spring Outdoors (Manningham, Nillumbik, Banyule Councils)
- Manningham Know Your Neighbour Program
- Manningham Community Grants Program
- Manningham Nature Walks
- Heart Foundation Walk Program
- Boomers on Bikes
- Aged and Disability Services, Walks Program

The following guidelines have been developed to guide the placement of social/ cultural events within the open space network.

Where	Guidelines
Community Programs (no permanent infrastructure required)	<ul style="list-style-type: none"> • Open space venue should be within easy access to public toilets • Any activity must not interfere with pedestrian access along shared paths or endanger any users not taking part in the activity • Open space venue should be as accessible and visible as possible to allow as many people as possible to take part • Activity must not impact on remnant or sensitive vegetation • Activity complies with Manningham Festivals and Events Information Kit.

Guidelines 5 - Guidelines for Community Programs

Public Art/ Community Art

Public art has the capacity to transform places. It is used as a tool to reflect and promote a strong sense of belonging and local identity. Public art enhances, invigorates and ‘humanises’ the built environment and open space. It can facilitate a bridge between past and present and is a symbol of a healthy urban environment. Carefully conceived public art installations and environments, rich with connections to our history, the natural world or the ephemeral quality of life, help make places of meaning within a community. The best of public art can challenge, delight, educate, illuminate, orientate and foster ownership.

Public art creates a sense of civic vitality in the cities, towns and communities we inhabit and visit. It strongly complements open space by encouraging visitation, exploration, creativity and playfulness.

Community art is a further form of public art that allows the general community to be involved in the planning and creation of art. Community art has the added benefit of

connecting the community and teaching new skills, while creating art for the local environment.

Manningham’s public open space network supports a number of public art pieces, from large scale landmark works by major artists, to small scale and ephemeral works of community art.

Manningham’s Cultural Strategy 2013 – 2017 has a number of objectives and actions relevant to public open space, including the creation of local conditions in which arts and cultural activities can thrive and increasing opportunities for people to experience and participate in arts and cultural activities.

The *Doncaster Hill Public Art Masterplan 2003* sets out specific recommendations for public art within Doncaster Hill and Doncaster Hill open space.

This Strategy supports public art and community art within the open space network, provided that the artwork does not detract from the identified recreation activities currently operating at the site or the natural values of the area.

Actions: Objective 3.1

- 3.1.1 Develop an Open Space Activation Plan consisting of a series of arts/ cultural and recreation programs bringing the community into their local parks and enhancing existing recreation activities. This plan will identify links with existing programs.
 - 3.1.2 Develop a nature play working group with representatives from across Council to identify nature play sites and opportunities to promote connection with nature for children and families.
 - 3.1.3 Encourage community interest in local parks, through events at local parks, such as playspace upgrade celebrations.
 - 3.1.4 Support and encourage public art/ community art where it complements current recreational values and does not impact on the natural values of the area.
-

3.2 Objective - Better understand recreation trends, open space values and community expectations

Understanding Our Community

Given the essential role our open spaces play in community wellbeing, it is important to ensure that Manningham's community has easy access to open space, with recreation facilities that cater to their needs. To achieve this goal, the Strategy recommends additional targeted consultation and research to better understand the attractors and barriers to open space and improve our open spaces and access to them.

Since the 2004 Public Open Space Strategy, community involvement in caring for the open space network has been decreasing. This is reflected in the folding of 'friends of parks' groups and reduced numbers at tree planting events, such as National Tree Day. The Strategy recommends reinvigorating community involvement in our open spaces.

The strategy also identifies the need to communicate effectively with our community regarding the benefits of open space visitation. New means of communication are constantly emerging and should be explored to most effectively promote those benefits in a clear, coherent and engaging way.

Open Space Community Consultation

Community consultation underpins the planning for open space provision as a whole through this Strategy, as well as the planning for individual open spaces.

The review of the Open Space Strategy is the key vehicle for community comment on higher level open space planning issues as well as more targeted issues relating to local open spaces.

Management and Development Plans are the mechanism by which Council strategically plans individual open spaces. They provide a guide for the future use, development, maintenance and management of a particular open space.

Management Plans are developed for reserves that have a range of uses and for which the planning is complex, such as sporting reserves, conservation reserves, and reserves of municipal significance and linear parks.

Development Plans are prepared for reserves that require a simpler level of planning and can be shown on one diagrammatic plan with notations, for example local parks.

Engagement with the community is sought throughout the development of each plan. Management and Development plans are generally reviewed five years after the implementation of capital works recommendations.

Open Space Research

It will be important to understand not only the local environment and community, but also national/ international trends that may impact on the future use and development of open space. The relevance of these trends to the Manningham community needs to be tested and explored prior to developing strategies to address them.

Some current trends that require further investigation include:

- children's use of open space for informal play activity and nature play
- fitness/ exercise equipment in parks for adults
- low cost, flexible park based fitness/ recreation programs as an alternative to organised sport or indoor facilities
- varying expectations of cultural groups and patterns of open space usage
- the role of Manningham's open space in biodiversity conservation
- changing needs and patterns of open space use in young people
- New forms of interactive consultation.

Government grants may assist in funding specific research questions that relate to

State and national health and wellbeing priorities.

Manningham Council also provides an important role as a research support partner to a number of agencies, including State Government research agencies, universities and community groups.

Recent examples have included:

- input into the Victorian Environmental Assessment Council *Metropolitan Melbourne Investigation 2011*
- a research partnership with Deakin University to examine the refurbishment of an open space reserve located in a low socio-economic area of Melbourne, its impact on usage and park-based physical activity. (Westerfolds Park is used as the control site)

- Manningham linear parks have been used to assist VicRoads in trialing luminous line marking on Ruffey Trail
- environmental research has been carried out by various universities at Ruffey Lake Park, including native turtle and bat studies.

Open Space Usage Monitoring

Manningham does not have a history of closely monitoring usage of the municipality's public open space. This is a highly resource-intensive activity, but adds value in understanding how patterns of usage change over time and where the greatest pressure is occurring on our open space resources.

Trail counters are currently installed on the Koonung and the Mullum Mullum Trails and the data will be used to record usage trends over time.

Actions: Objective 3.2

- 3.2.1 Develop targeted consultation and research plans to better understand recreation trends, open space values and community expectations.
- 3.2.2 Develop a monitoring program for open space reserves that responds to the consultation and research plans identified above.
- 3.2.3 Continue to be proactive in partnering with research organisations to improve our knowledge of open space values, usage and benefits.

3.3 Objective - Maximise community involvement in open space planning and management

Community Involvement & Volunteering

Community groups play a vital role in community education, maintenance, surveillance and stewardship of Manningham's public open spaces with ecological values. These groups also provide broader community benefits in terms of positive impacts on land management on private land, social connectedness and health and wellbeing.

Volunteering also has other positive effects, including better physical health and enhanced social skills. For example, volunteering for environmental causes via outdoor work can provide individuals with the recommended daily amount of physical activity.

Friends Groups

The following groups have operated within the Manningham open space network since the 2004 Public Open Space Strategy:

- Friends of Currawong (now disbanded)
- Friends of Ruffey Lake Park (not currently in operation)
- Friends of Alan Moreton Reserve
- Friends of the Yarra Valley Parks
- Friends of Manningham Cats and Dogs
- Friends of Mullum Mullum Valley
- Friends of Warrandyte State Park
- Friends of 100 Acres Reserve.

Unfortunately, many community groups have disbanded over the last 8 years, which

indicates that community engagement needs to be improved to welcome more community members into groups that support or rely on our open space network.

Council currently provides limited support for friends groups. In order to increase community engagement and raise the profile of our valuable open space network it is imperative that Council provides additional resources in order to support the establishment of friends groups, including ongoing assistance and to encourage community volunteering in managing and maintaining local open spaces.

Advisory Groups

Two of Council's advisory committees play a role:

- Open Space and Streetscape Advisory Committee (OSSAC)
- Ruffey Lake Park Advisory Group (RLPAG).

The Open Space and Streetscape Advisory Committee plays an important role in open space planning for the municipality and include both community representatives and Councillors. This committee provides valuable input into planning, design, development, management and maintenance of the open space network generally, and the development of this Strategy specifically.

The RFPAG's role in overseeing the implementation of the Ruffey Lake Park Management Plan will be reviewed in 2014

Actions – Objective 3.3

- 3.3.1 Provide additional resources to support the establishment of friends groups including ongoing assistance and to encourage community volunteering in managing and maintaining local open spaces.
- 3.3.2 Investigate the opportunities for more community participation in activities related to open space development such as National Tree Day, Parks Week and other community initiatives.

3.4 Objective - Promote our open spaces and the health benefits of outdoor recreation

Increased Awareness

There is an opportunity to educate and engage the wider community in the understanding, appreciation and respect for the diverse values of our public open spaces, through information, interaction and experiential learning.

As well as more traditional means of advertising and promotion such as event presence, on-site signage, newspapers, newsletters and post, technological advances have significantly expanded the ability to promote Manningham's public open space network and the values and leisure opportunities it offers, through media such as email, internet, podcasting, apps and social media. There is a great deal of scope to provide engaging and comprehensive information to ignite interest, attract visitors and educate our community.

Directional Signage

As Manningham's recreation trails continue to expand and walking and cycling are encouraged as an alternative to car use, it is crucial that clear directional signage is provided to ensure that users can easily navigate to their destination. A program of installation of directional signage has commenced to ensure that paths in Manningham's open space network are legible and attractive for users.

Interpretative Signage

These are many opportunities to promote the natural values and recreation opportunities in Manningham's open spaces by designing and installing interpretative signage. For example, interpretative signage could explore the natural and cultural values of the local environment or encourage physical activity along a path.

Identified projects could have the added benefits of involving local artists, schools or community groups.

Digital Marketing/Promotion

As technology advances, information is increasing accessed digitally, most commonly using smart phones and tablets. Along with increasing use of digital technology, is the expectation that information can be available anytime, anywhere.

With these advances comes a multitude of opportunities to provide digital information about the open space network and the recreation opportunities that exist within it. Such opportunities may include the development of 'apps' or the use of QR codes (matrix barcode) to provide instant information and to encourage the use and enjoyment of open spaces in Manningham.

Actions: Objective 3.4

- 3.4.1 Continue to implement a directional signage program to streamline the planning and installation of directional signage where identified along all open space.
- 3.4.2 Support the use of interpretive signage to encourage open space users to explore and learn about the outdoor environment.
- 3.4.3 Explore opportunities to improve access to information regarding the open space network and recreation opportunities available via digital technology.

3.5 Objective - Develop equitable and transparent processes for commercial and non-commercial organised activities within open space

Organised Activities in Open Space (Non-Council)

The open space network provides a venue for a number of activities, both commercial and non-commercial.

Council has traditionally not sought to generate significant income from its public open space network, although it does receive a small income from:

- hiring of sports grounds for sports events
- hiring of sports grounds for personal training
- hiring of open spaces for events and businesses i.e. dog trainers etc.

Figure 7 (below) outlines the scope of activities undertaken.



Figure 7 - Organised Activities in Open Space (Non-Council)

Commercial Activities

Fitness

Outdoor fitness programs have become increasingly popular in Manningham's open spaces. Currently, these private businesses pay a fee to run their programs within sporting reserves on Council land. Council does not currently have guidelines regarding the use of non-sporting reserves by fitness businesses and in some cases this discrepancy is inequitable.

Templestowe Reserve and Rieschiecks Reserve are currently the only sporting fields on which fitness training occurs under a formal arrangement with Council, and our sporting facilities are now at capacity. Other fitness training occurs informally in passive open space.

No formal guidelines exist for use of reserves by fitness businesses. While healthy activities are supported in principle, these activities need to be managed sustainably and for-profit activities using public open space may need to consider a fee for use.

Refreshments

General leisure trends, compounded by Melbourne's renowned cafe culture, has resulted in an expectation that refreshments will be available in or near major public open spaces and recreational destinations.

Mobile food vendors have become a popular option for providing refreshments without the need for permanent infrastructure. There are opportunities for mobile vendors to provide refreshments at popular destinations within the open space network provided they do not impact negatively on the open space values. It will be essential that vendors operate according to benchmarked regulations developed on an individual site basis.

In multiple use and commercial use facilities, food outlets such as a cafe may be appropriate; MC² and Aquarena are examples of such a space. The provision of a cafe or similar will be considered on a case by case basis.

Markets

There are several markets that run periodically with the City of Manningham open space network. These include:

- Fine Design Market (MC²)
- Westerfolds Park Regional Farmers Market (Parks Victoria)
- Warrandyte Community Market (Stiggant Reserve/ Warrandyte River Reserve)

A service agreement is required for markets operating on Council land to ensure the community's safety and the protection of each reserve's environmental and recreational values. A licence agreement with DEPI is required for markets and other events operating on crown land.

There is a need for clear standards and guidelines for markets in public open space to ensure open space values are protected; proposals for new or expanded markets will be considered on a case by case basis.

Dog Training

Dog training is a popular activity in the open space network and currently takes place at Westerfolds Park (Parks Victoria) and Boronia Grove.

There is a need for clear standards and guidelines around activities such as dog training; factors to consider include size, environmental impacts, access, other user groups and usage levels.

Circus

Historically, circuses have been allowed to operate on selected Council reserves provided they meet the conditions set out in the Policy Manual Section 5 – CD13.1 *Circus Performances on Council Reserves*.

Fun Runs

Fun runs are popular events that may be held within the open space network. The Policy Manual Section 3 – CSD5.4 *Approval to Conduct Fun Runs*, outlines the conditions that organisers must comply with to ensure the community's safety and the protection of the environment.

Other Commercial Activities

New forms of commercial activity in public open space may emerge over the life of this document. As guidelines or policies are developed regarding commercial activities in public open space, these will need to detail how a proposal should be developed and assessed, including benefit to the community and impact on public open space values and users.

Non Commercial Activities

Community and school events are encouraged and often held in open spaces, such as community parties/ gatherings, weddings and tai-chi.

Booking Open Space Facilities

Community gatherings usually take place within the largest open space reserves with appropriate infrastructure including shelters, BBQs, tables, playspaces and toilets. Ruffey Lake Park and Wombat Bend are the most popular party venues.

Currently, picnic facilities are not able to be pre-booked and are available to those that arrive first. Securing a facility, therefore, cannot be guaranteed. This system is usually adequate, due to the large number of picnic facilities available; however, on popular celebration days conflict has arisen.

Signs have recently been installed at Ruffey Lake Park to ensure that users are aware of the no-booking procedure in order to minimise conflict on busy days.

Wedding celebrations are usually permitted in the open space network free of charge, provided that an event management plan is provided. People organising such events are made aware that usual recreation activities cannot be interrupted.

Regulating Open Space Activities

Clear policies and standards need to be developed to manage organised activities in public open space, including but not limited to:

- Council's Festival and Events Information Kit
- types of activities allowed
- maximum land area required (scale)
- numbers attending
- siting
- frequency of activity
- pricing structure
- environment protection
- parking/traffic management
- pedestrian management
- risk management
- indemnity and insurance requirements
- Rubbish removal/maintenance

It is important to also acknowledge that economic development activities can create negative impacts such as:

- vegetation trampling and soil compaction in sensitive landscape areas
- conflict with other park activities
- increased noise
- parking and traffic pressures in surrounding streets.

Actions: Objective 3.5

3.5.1 Develop guidelines to promote and regulate organised activities (Non-Council) within Council owned and or managed open spaces.

Glossary

Active Open Space

Space which is dedicated to the function of active recreation, such as sporting fields, courts, clubrooms and carparking.

Active Recreation

Also called formal or structured recreation, Active Recreation can loosely be defined as organised sporting activities. Active recreation typically requires specific infrastructure in terms of sporting fields or courts, as well as supplementary facilities such as club rooms, change rooms, toilets and carparking. This infrastructure can be described as 'active open space.' Due to its more formal nature, active recreation requires exclusive use of sporting facilities/active open space for the duration of training or sporting events. Formal fitness activities, such as group and personal training could be defined as active recreation, however these may also make use of passive open space.

Biosite

A Biosite is a physical area of land or water containing biological assets with particular attributes, such as the presence of rare or threatened flora, fauna or habitat required for their survival and/ or rare or threatened vegetation communities.

Cultural Heritage

Cultural heritage is the legacy of physical artifacts (cultural property) and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Cultural heritage includes tangible culture (such as buildings, monuments, landscapes, books, works of art, and artifacts) and natural heritage (including culturally significant landscapes, and biodiversity).

Development Plan

A Development Plan is prepared for reserves which require a simpler level of planning and can be shown on one diagrammatic plan with notations, for example local parks.

Green Link

Residential development across the municipality has required the establishment of narrow strips of land between properties to allow access to drainage infrastructure. These strips are often grassed and this strategy defines them as 'green links' as they have the potential to provide alternative walking paths through built up areas.

Green Wedge

The non urban areas of metropolitan Melbourne that lie outside the Urban Growth Boundary are known as Green Wedges. There are 12 designated Green Wedge areas that collectively form a ring around Melbourne.

Major Activity Centre

Activity Centres that occupy a similar role to Principal Activity Area, but service a smaller catchment. These centres are proposed to have a significant mix of business, retail, services, entertainment and residential. Importantly, they are to supplement the network of Principal Activity Centres, e.g. The Pines Shopping Centre is Council's only major Activity centre.

Management Plan

A Management Plan is a document which provides a written explanation of the history, uses, objectives and proposals for a reserve, as well as one or more diagrammatic plans showing proposed development for the reserve.

Management Plans will typically be required for reserves which have a range of uses and for which the planning is complex. Management Plans would generally be required for sporting reserves, conservation reserves, reserves of municipal significance, community recreation reserves and linear parks. Manningham Planning Scheme

All land in Manningham is affected by the *Manningham Planning Scheme*. The *Manningham Planning Scheme* is a legal document which outlines policies and controls for the use, development and protection of land in Manningham. At its most basic, the Planning Scheme includes maps showing the zones and overlays which apply to all land in the municipality. The Planning Scheme also has a set of requirements for each zone and overlay establishing whether uses and development are prohibited, can occur without a permit or with a permit.

Nature Play

Free, open-ended play in a natural environment without specific infrastructure.

Neighbourhood Activity Centres

Smaller shopping centres that are vital in catering to the local convenience needs of neighbourhood areas. An important emphasis is accessibility to the centre, particularly by walking, cycling and public transport.

No Net Loss

An application to removal Victorian native vegetation must be assessed under the Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines (the Guidelines; DEPI 2013a). Where native vegetation is proposed to be removed as part of a land use or development proposal, planning and responsible authorities should achieve a 'No Net Loss' outcome, as defined in the Guidelines. This is achieved by minimising native vegetation impacts through appropriate consideration in planning processes and expert input into project design or management; and identifying appropriate offset actions to compensate for the loss of vegetation where required.

In applying the No Net Loss approach to vegetation clearance, the "Guidelines" (DEPI 2013a) requires that an appropriate *offset* to compensate for the loss of native vegetation to be achieved. This is calculated in a manner whereby the *offset* provides a contribution to Victoria's biodiversity that is equivalent to the contribution made by the native vegetation being removed (DEPI 2013a).

Offset

Offsets are achieved by protecting and improving other existing areas of native vegetation (e.g. through weed control or preventing grazing) or by planting new native vegetation. Actions to achieve offset requirements include any works or other actions to make reparation for the losses arising from the removal of native vegetation. An offset may be achieved on:

- an area of existing remnant vegetation;
- an area that is revegetated;
- an area that is set aside for regeneration or restoration; or
- a combination of the above

Open Space

Refer to the definition on page 8.

Outdoor Fitness Area

A site within an open space reserved for adults to exercise using purpose built equipment.

Equipment may include:

- static standard equipment i.e. chin up bars, sit up bench
- gym style equipment i.e. hydraulic stepper, bike, weights
- fitness/ therapeutic equipment for adults to improve flexibility, balance, coordination and dexterity, e.g. Adult exercise equipment at The Pines

Passive Open Space

Open Space which supports passive recreation functions. These include typical 'local park' facilities such as paths, seating, play facilities, open grassed areas, trees and other vegetation. Passive open space also encompasses land which supports environmental functions such as natural drainage/waterways, habitat and biodiversity protection and enhancement.

Passive Recreation

Also called informal or unstructured recreation, Passive Recreation encompasses a wide range activities which occur in public open space outside of formal sporting events or activities. These include such activities as walking, dog walking, picnicking, play, informal ball play, kite flying, fishing, nature appreciation or just enjoyment of the restorative effects of green open space. Depending on the nature of the activity, these can have physical, social and emotional wellbeing benefits. These uses are typically non-exclusive, meaning multiple users and types of activities can occur in a space simultaneously; with careful design it can also exist concurrent with environmental functions such as bushland and waterways. Open space which facilitates passive recreation is termed 'passive open space.'

Planning Overlay

As well as zones, some pieces of land have one or more overlay/s applying to them. An overlay is applied to land which is recognised as having a special feature such as a heritage building, significant vegetation or flood risk.

Planning Zone

The *Manningham Planning Scheme* zones land for particular uses such as residential, industrial, business, rural or other and states whether a planning permit is required.

Playspace

Outdoor areas set aside for recreation and play for children and families. A playspace refers to the entire play site, including any equipment, landscaping, seating etc.

Principal Activity Area (PAA)

An Activity Centre that provides an extensive mix of activities with a focus on those that are undertaken often, such as business, retail, services and entertainment. The PAA services a large catchment covering several suburbs, and attracting activities that meet metropolitan needs. PAAs also have a transport interchange role allowing people to interchange between routes and sometimes modes of travel. These areas are seen as having significant potential to grow and support higher levels of development, in particular housing within and around the centres, e.g. Doncaster Hill is Council's only PAA.

Public Acquisition Overlay (PAO)

The Public Acquisition Overlay seeks to identify land which is proposed to be acquired by a public authority. It also aims to reserve land for a public purpose and to ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired. The schedule to the Public Acquisition Overlay sets out which authority the land is intended to be acquired by and the proposed purpose of acquisition.

Public Open Space

Refer to the definition on page 8.

Schedule 8/9 to the Design and Development Overlay (DDO8/ DDO9)

Applies to areas around The Pines Major Activity Centre,

Neighbourhood Activity Centres and major public transport routes where a substantial level of residential change is proposed. These overlays allow multi-unit development and 3 storey apartment buildings.

Structure Plan

A document, often comprising a combination of text and maps that sets out an integrated vision for the desired future development of a place, and establishes a planning and management framework to guide development and land use change in order to achieve stated environmental, social and economic objectives.

Urban Plaza

Urban plazas are usually hard surface gathering spaces within activity centres and community hubs. Urban plazas provide space for respite from busy activity within a shopping precinct and allow for social interaction. Urban plazas should provide various options for seating and be aesthetically pleasing in order to encourage use.

Abbreviations

CHMP	Cultural Heritage Management Plan
CVD	Cardiovascular Disease
CKD	Chronic Kidney Disease
DEECD	Department of Education and Early Childhood Development
DEPI	Department of Environment and Primary Industries
DTPLI	Department of Transport, Planning and Local Infrastructure
DDO8	Design and Development Overlay 8
DDO9	Design and Development Overlay 9
LDRZ	Low Density Residential Zone
MCC	Manningham City Council
OSSDAC	Open Space and Streetscape Design Advisory Committee
PAA	Principal Activity Area
PAO	Public Acquisition Overlay
PPRZ	Public Park and Recreation Zone
PCRZ	Public Conservation and Resource Zone
PUZ	Public Use Zone
RLPAG	Ruffey Lake Park Advisory Group
RZ1	Residential 1 Zone
RZ3	Residential 3 Zones
SBO	Special Building Overlay
SLO7	Significant Landscape Overlay Schedule 7
VCCCAR	Victorian Centre for Climate Change Adaptation Research
VEAC	Victorian Environmental Assessment Council
WSUD	Water Sensitive Urban Design
WPPP	Wildfire Prevention and Preparedness Plans

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