



Hawkesbury City Council

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Draft Hawkesbury  
Regional Open Space Strategy

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# HAWKESBURY REGIONAL OPEN SPACE STRATEGY FINAL DRAFT

S11-0043 R03 ISSUE E







# HAWKESBURY REGIONAL OPEN SPACE STRATEGY FINAL DRAFT



Client

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## EXECUTIVE SUMMARY

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### PROJECT SCOPE AND OBJECTIVES

The Regional Open Space Strategy (ROSS) is the guiding strategic document by which Council can plan and manage their recreational open space within the Hawkesbury Local Government Area (LGA). The document addresses the supply of and demand for the Hawkesbury's public open spaces and identifies ways of planning, managing and enhancing these places sustainably over the next 10 years.

The Objectives of the ROSS as defined by the project brief are to:

- improve open space provision in terms of quality, quantity, accessibility and safety
- improve linkages within and between the open space networks
- ensure open spaces meet the needs of the Hawkesbury community and promotes greater social inclusion
- ensure open spaces enhance the quality of the local environment
- provide a clear framework for investment priorities and action.

The project analyses the quantity and quality of existing open spaces, their function and whether they can meet the future needs of the community. It considers Council's wider corporate objectives to ensure that the ROSS can achieve Council's initiatives and programs.

### THE PLANNING CONTEXT OF THE ROSS

The urban and physical geography of the Hawkesbury region shows significant variation, with large areas of National Park and rural towns in the north, while in the south the greater part of the City's population resides in only 25% of the LGA area, in the towns bordering or close to the Hawkesbury River.

The Hawkesbury River is the dominant geographic feature in the City, being both the focus of Aboriginal life pre European settlement and influencing European settlement both from its capacity to generate food for the early days of the colony and in responding to the river's frequent flood cycling.

The river and its floodplain therefore set much of the pattern of urban fabric and public open space that we see in the City today, with the towns placed on ridges and many of the larger public reserves lying within the floodplain.

Transport is likewise influenced by the river geography and both Richmond and Windsor act as transport gateways to and from the Blue Mountains and the City, while many of the roads, particularly in the northern parts of the LGA are of a rural nature. Cycling and walking facilities are mostly confined to major roads in the south of the LGA.

## EXECUTIVE SUMMARY

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The growth rate of the Hawkesbury population slowed from 2001 – 2006. The key factors in this change include:

- Australia's ageing population
- slowing birth rates with families having fewer children and later in life
- migration of people from some localities in the Hawkesbury LGA.

Future growth is also likely to be limited with the forecast for growth up to 2031 population projects at total population of 72,995 (1.1% increase). According to Council's document 'Hawkesbury...A Social Atlas' the Hawkesbury population has the following characteristics:

- relatively young with 20% aged 14 years or younger
- almost 90% of all residents were Australian citizens and 81% of residents were born in Australia
- 16% of the total population were considered as having a disability
- gender division was roughly half (50.2% female) across all age groups
- the largest number of overseas born residents in descending order were from the United Kingdom, New Zealand, Malta, Netherlands and Germany
- the average weekly income of Hawkesbury residents (\$1,146) was slightly higher than the national average (\$1,027)
- unemployment of Hawkesbury residents (4.1%) was lower than the national average (5.2%).

The key implications of the foregoing demographic analysis includes:

- projected population growth is minimal and thus funds generated for open space provision through sources such as Section 94 will be limited
- there is a need to address opportunities for a significant proportion of school-aged children
- mobility is highly car dependent both between and within towns
- the southern part of the LGA, especially Richmond and Windsor being the most populated, call for a more integrated approach to open space provision
- there is a need to address the recreational needs of Hawkesbury's ageing population, both rural and urban, as well the significant numbers of those with disabilities.

### ANALYSIS OF OPEN SPACE TODAY

In summarising the findings in the investigation stage of the ROSS the following SWOT Analysis provides insights into the directions that the Strategy has subsequently taken:

#### Strengths

- Strong cultural heritage values in towns of Windsor, Richmond and Wilberforce
- Close proximity to major National Parks and World Heritage Area ie Blue Mountains National Park, Scheyville National Park, Colo Wilderness



## EXECUTIVE SUMMARY

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- Major road links giving access west to the Blue Mountains and north to the Hunter Valley
- The Hawkesbury River is of national significance
- High scenic values, especially from ridgelines and river foreshores
- Extensive water foreshores that can cater for more natural adventures and sports ie power boat leisure and racing activities, camping, orienteering, walking and cycling
- Strong tourism draw provided by extensive natural and cultural heritage, farmgate businesses and sporting and events on the river
- High natural values outside of designated National Parks also
- Strong community involvement in management of open space (eg Sport Council) and strategic organisations developing new directions (Heart of Hawkesbury)

### Weaknesses

- Annual open space budget is limited due to Hawkesbury's large LGA area and small population with limited projected growth
- Uneven distribution of reserves within 400-500 metres of all residents
- Significant barriers to walking/cycling are created by major transport corridors
- Many small parks are of limited size ie house block size, poorly located and little used
- Topography in LGA creates challenges for universal access
- Absence of classification and categorisation of reserve types leading to inadequate strategic decision making and priorities
- Absence of policies and strategies to guide management and development of recreation within the City
- Flooding has significant implications for open space planning, design and use, especially for sport facilities
- Funding base through Section 94 reducing due to limited population growth
- Limited liaison with adjoining Councils or development of partnerships that might be embraced

### Opportunities

- The Hawkesbury River remains a largely unrealised recreational asset with great potential to enhance the local economy
- Enhanced connectivity of reserves can be achieved within environmental corridors and roads with links to public transport
- Regional connections can be greatly enhanced by improving links to cycleways, trails, pathways, and creek/river corridors
- Creation of sport hubs especially within centres will assist functionality, planning and management

## EXECUTIVE SUMMARY

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- Opportunity to focus on improved passive recreation in centres of towns and villages that meet basic needs well
- Enhancement of environmental corridor links tied to improved access and connections
- Development of recreation strategy will create clearer focus for priorities and funding
- Stronger partnerships with other land managers (eg NSW National Parks and Wildlife Service, Schools, YMCA etc ) will create future recreation opportunities whilst managing impacts on the natural environment
- Liaison with adjoining Councils to ensure co-ordination of facility provision in the sub region will extend budget and achieve strategic connections

### Threats

- Increased development may place more pressure on existing open space with limited opportunities and resources to acquire land for future open space
- Funding base for maintenance is not matching upgrades
- Climate change may impact on river based reserves and microclimate of all open spaces
- Minimal population growth limits funding source such as through Section 94 contribution

### CONCLUSIONS FROM ANALYSIS BY TOWN

The ROSS contains a detailed analysis of the public open space within all of the major towns within the LGA. The general conclusions drawn from that analysis are as follows:

- while there are many high quality well-used parks in the City, open space provision across the LGA is highly random and in many cases bears little relationship to the quantum and density of population, to accessibility, to recreation need based on current projected demographics or to long term sustainability
- many reserves classified in the Open Space Inventory as Community Land and zoned for open space have minimal existing or potential recreational value (eg. road reserves, remote open space at significant distance from any current or potential population)
- open space provision and recreation opportunity is particularly inconsistent in the rural townships of the City, with a notable lack of public open space close to amenities such as shops and a dearth of even small level kickabout space or higher amenity passive space
- where there are clear deficits in open space, especially in the more rural towns, partnerships with other agencies such as schools and NPWS become particularly important in closing the local day-to-day recreation provision gap



## EXECUTIVE SUMMARY

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- the remarkable and striking scenic qualities of the Hawkesbury River landscape are major assets for the local community and visitors alike, they are however not well integrated into the open space network and tourism planning
- with some local notable exceptions (eg. Ham Common) walking and cycling are not well provided for in the City, with many residential communities having no dedicated footpaths on streets nor dedicated cycle paths on or off street
- topography and flooding are significant if not insurmountable constraints on enhancement and use of open space across the City.

In the future development of a detailed work plan for each township arising from the ROSS and the conclusions drawn above, would benefit from consultation with each community as the plan is developed.

### NEEDS AND DEMANDS

Council holds relatively little historical information on the community's expressed needs and demands for open space and recreation. Indeed the surveys prepared in 2009 and 2011 by Micromex Research for the Community Research reports suggested that roads, services and river health were of highest priority with the community placing open space and recreation as a much lower consideration.

In practice this is not uncommon in areas of larger rural populations where lifestyle priorities differ from inner city Council areas and where in many cases sports based recreation is of higher priority and is often well provided for as here in the Hawkesbury LGA.

There is however a rapidly shifting focus within such communities that recognises health and wellbeing benefits of regular exercise. In this regard a supply led rather than demand led approach is likely to promote and encourage such activity.

In summary from the data available and in consultation with stakeholders during the development of the ROSS, the following conclusions may be drawn on demand, needs and opportunities:

#### Demands

- broader community places greater emphasis on environmental conservation than on recreation as a priority for Council action
- high priorities are the health of the river, a rural lifestyle and the regions heritage and history
- low priorities are parks and reserves and sporting facilities and probably due to the perceived abundance of available open space
- the river and foreshores not immediately viewed as a major asset to the region.

EXECUTIVE SUMMARY



Figure ES.01 Open Space Structure Plan Concept

## EXECUTIVE SUMMARY

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### NEEDS AND OPPORTUNITIES

- greater level of linkages and accessibility (local and district)
- river and foreshore access and links to open up use of a major asset
- foster partnership with the NSW NPWS to open opportunity for the major towns to become the doorway into the National Parks
- review of sports strategy to open up new opportunities for future changes in sports trends
- increase of multi-functional recreation and open space in the smaller towns
- pursue regional sports/events/recreation to improve local tourism economy.

In general, with a community that does not consider open space to be a major issue, initial emphasis would be an approach based on 'making more of what we've got'.

A longer term strategic approach that addresses bigger picture moves may assist the community in elevating the importance of open space and recreation opportunities as drivers of an enhanced and local and regional economy.

### OPEN SPACE STRUCTURE PLAN

To provide a strategic framework for the ROSS, a simple Structure Plan is illustrated (see Fig ES.01) that encompasses the major moves for the future of open space and recreation in the City. The key elements of this Structure Plan, centred on a series of expanding recreational loops and connections, are focused on three key experiences:

#### The River Experience

The Hawkesbury River will lie at the heart of the LGA's recreational focus drawing in its significant environmental, cultural and social values. This approach entails riverside access and connections on both banks that are regional (The Great River Walk), as well as local (the Windsor/North Richmond Loop). Enhancements to the river corridor would include:

- improved visual connections between the town and the river
- improved access to and onto the water (kayaks, fishing etc)
- enhanced opportunities for river focused cultural and recreational events (Sand Sculpture Competition, Bridge to Bridge etc)
- enhancements to riparian native vegetation and river health as key part of improved access
- creating stronger recreational linkages and connections between the river and its creeks
- appropriate commercial activities and opportunities on and beside the water (boat hire, tours, eating places etc)

## EXECUTIVE SUMMARY

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It is recognised that much of the riverside land in this area is in private property ownership and that these strategies are necessarily predicated on mutually beneficial partnerships between public and private interests that may take some years to complete.

### **The Macquarie Town Loop**

This experience is focused on enhanced recreational linkages between the historic Macquarie towns that appeal at a local level (cycleways, walkways) at a tourist level (tourist drives, heritage and genealogy interests, farmgate experiences etc) and for sports (triathlon routes, orienteering, district sports facilities etc).

### **The National Park Experience**

This wider loop that also links to the two previous experiences provides for recreational connections by car, by cycle and walking from the more urban south to the extensive and highly scenic bushland in the north of the LGA. Importantly there also sport tourism opportunities here as the NPWS places a strong focus on opportunities for sports like Mountain Biking in this part of the Sydney network.

This experience also promotes the roles of Richmond and Windsor as the recreational gateways to the Blue Mountains National Park.

### **Parks and Open Spaces**

Core to this Structure Plan and forming pivotal elements in the experiences outlined above are the City's parks and open spaces. The major initiatives to be adopted here are as follows:

**Local and Neighbourhood Parks:** through a longer term strategic process (see Consolidation, Acquisition and Rationalisation below) all residences in the City would have access to a park or parkland network within a maximum of 400 metres of home (research varies on preferred distances between 400-500m, although most guidelines recommend 400m). However in more rural areas local parks are by their nature also often district parks given the travel distances within and between townships; for this purpose distances of up to 1 kilometre to local open space would seem more realistic.

Newly acquired or consolidated parks would generally be of no less than 0.3 Ha, preferably of compound shape and relatively level topography to provide maximum recreation opportunity and flexibility for a diversity of user types and needs over time, as well as to accommodate significant canopy vegetation.

**Sports Parks:** As part of the development of a Sports Plan proposed to be developed by Council and the Sports Council, a review of the hierarchy of sports facilities would be implemented. Flooding is a key issue with respect to location of sports fields and investment in sport infrastructure. As part of the Sports Plan, a review of long term options for relocation of sports facilities away from the most flood affected areas where it can be demonstrated, so that long term sports provision will benefit and the associated costs of flood damage repair can be amortised.

## EXECUTIVE SUMMARY

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All sports related parks would accommodate unstructured recreation needs such as play, seating, shade, BBQ, picnics, walking circuits. Note that while Local Parks may be suitable for informal kickabout, they would not generally form any part of a structured sports network.

**Urban Spaces:** allied to a green streets program would be street corner meeting places at key locations and crossings where neighbours are most likely to pass each other. Designed to encourage social interaction, or for seniors or parents with children to stop and rest or simply as a small incidental meeting space, these street corners would provide shade in the form of a significant tree or trees (that can also be a local wayfinding landmark) and seating that may simply be formed by a low wall or bench.

In town centres and in some larger neighbourhood centres at least one space is identified and designed to meet local leisure needs. This may range from a space that suits early morning Tai chi to local cultural events. Seating, shade, planting and public artwork would be typical elements. In larger centres spaces would be adaptable to local events and designed to accommodate temporary or permanent stages and built in infrastructure (eg. power, water, etc).

### IMPLEMENTATION PLAN

The ROSS contains a detailed Implementation Plan which provides recommended actions to enhance the City's recreation and open space qualities and opportunities, classifying these in priority, identifying roles and responsibilities for their realisation and identifying where they integrate with the Community Strategic Plan. In brief summary the core threads of this Implementation Plan encompass:

#### Focusing on the Basics First

- Providing more shade, seating, paths, planting and play
- Providing for basic kickabout in local parks
- Ensuring that sports parks also provide for passive recreation and spectator amenity
- Meeting changing trends in sport by greater facility flexibility and adaptability
- Addressing flood and climate change impacts through design and planning
- Focusing on enhanced natural environment health

#### Improving Access and Connectivity

- Better connecting residential areas to the park system by cycle and walking routes
- Improving access to and onto the rivers and creeks
- Improving universal access for all ages
- Promoting more walking and cycling through enhanced off road facilities



## EXECUTIVE SUMMARY

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### **Making More of What's There**

- Reviewing all open space for opportunities to consolidate, acquire and rationalise all with the focus on improved recreation access, quality and diversity
- Integrating urban spaces into the open space network
- Develop the Great River Walk concept through the LGA in concert with adjoining LGAs
- Extending data on actual open space use and community aspirations through ongoing surveys

### **Drawing on the City's Unique Character, Identity and Heritage**

- Placing the river at the heart of the city's open space and recreation network
- Enhancing natural health of the landscape as part of recreational upgrades (creeks, foreshores, bushland)
- Identify and protect significant views (to the river, to the mountains etc)
- Link the historic towns and cemeteries through the recreational network
- Conserving and interpreting the City's rich Aboriginal and Non-Aboriginal heritage
- Enhancing tourism opportunities through the open space system (sports, heritage, food, events, natural environment, river etc).

### **Developing Partnerships**

- Working with schools in rural towns to increase community access for active and passive recreation
- Working closely with the Sports Council to develop a Sports Plan for the City
- Continuing and extending the partnerships with not for profit providers (eg YMCA)
- Liaising with adjoining LGAs and NPWS on mutually beneficial open space and recreation opportunities
- Supporting community interests, programs and volunteering

The ROSS provides a strong foundation for delivering on these actions by incorporating a comprehensive and integrated open space inventory (tabulated and mapped).

## EXECUTIVE SUMMARY

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### FUNDING THE PLAN

Inherent in each of the major moves within the Implementation Plan outlined above is a strategic and creative approach to funding the plan in the short and longer; an essential consideration for Council in light of a relatively small rate base and limited projected growth.

This requires a multi-pronged approach that goes well beyond sourcing funds to an holistic financial plan for the City's public domain that integrates the cost/revenue equation through considerations such as:

- extending recreation capacity of existing reserves through multi-using, shared uses etc
- reduced maintenance by optimising Service Levels with planning and design (enhanced native vegetation, reduced mowing, recycling materials, lifecycle considerations etc)
- revenue opportunities through integrated planning (tourism links, events, commercial facilities, employment etc)
- grants applications across related and integrated themes (arts, culture, environment, tourism etc)
- partnerships that extend funding base (adjoining LGAs, business, community, private recreation providers, other government agencies).

INTRODUCTION



Figure IN.01: The Hawkesbury LGA - Regional Context  
Map Source: Google Earth 2010



## INTRODUCTION

CLOUSTON Associates, in association with OneEighty Sports & Leisure Solutions has been commissioned by Hawkesbury City Council to prepare a Regional Open Space Strategy (ROSS) for the Hawkesbury Local Government Area.

The ROSS is the guiding strategic document by which Council can plan and manage their recreational open space within the Hawkesbury Local Government Area (LGA). The document addresses the supply of and demand for the Hawkesbury's public open spaces and identifies ways of managing and enhancing them sustainably over the next 10 years.

### HISTORICAL BACKGROUND

Before 1788, the original land owners who occupied the Hawkesbury region were Aboriginal people from the Darug language group who had lived in the district 15,000 - 20,000 years before European settlement.

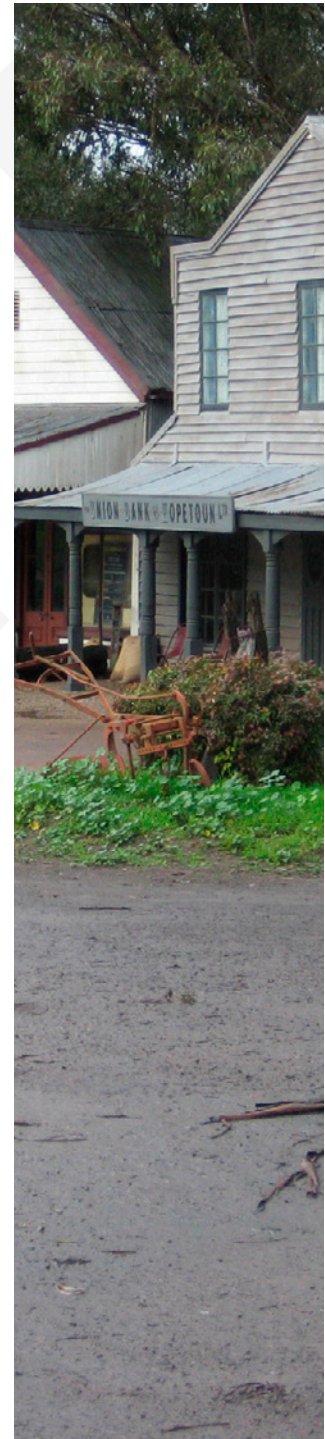
In 1789, the Hawkesbury area was settled by Europeans and is one of the earliest colonial settlements in Australia. In 1809, Lachlan Macquarie was appointed as Governor of New South Wales and the following year conducted a tour of the colony surrounding Sydney.

During this tour he named the five towns of Castlereagh, Windsor, Richmond, Pitt Town and Wilberforce. Four out of these five historic 'Macquarie Towns' are located in the Hawkesbury area (Castlereagh being in Penrith) with many of the original and extant heritage buildings a strong reminder and connection to their historic past.

The Hawkesbury LGA lies approximately 52 kilometres north west of the Sydney CBD (refer to Figure IN.01). It is the largest LGA in the Sydney Metropolitan region covering an area of nearly 2,800 square kilometres and surrounded by nine adjoining councils comprising of Lithgow, Singleton, Cessnock, Gosford City, Hornsby Shire, The Hills Shire, Blacktown City, Penrith City and Blue Mountains City councils (refer to Figure IN.02).

The topography of the Hawkesbury LGA is a combination of deep river valleys overlooked by high ridges and escarpments that offer sweeping views across wide river flood plains. The five rivers which includes the main river, the Hawkesbury River (are located in the east and south eastern section) provide a significant part of the regions open space.

The majority of the City of Hawkesbury's population live in the south eastern section of the LGA, predominantly in the 17 towns and villages which are situated across the river floodplain. The remaining two thirds of the LGA is comprised of agricultural land and extensive areas of National Park, managed by the NSW National Parks and Wildlife Services and which are predominantly located in the north of the LGA.



*The Australian Pioneer Village in Wilberforce provides a unique display of relocated colonial buildings and early artefacts collected from the surrounding area*

INTRODUCTION

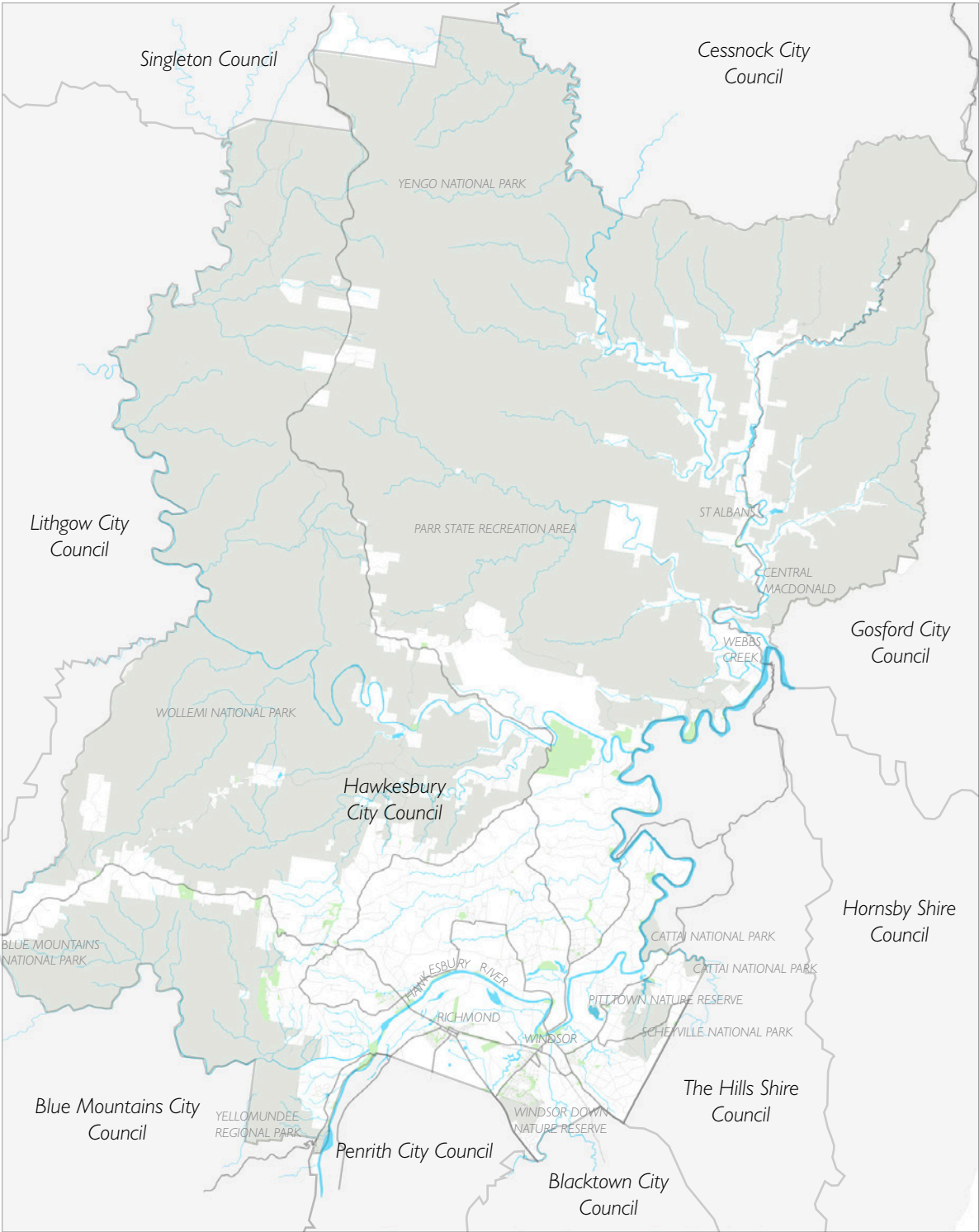


Figure IN.02: Hawkesbury LGA - Showing the nine surrounding Councils  
Map Source: adapted from Hawkesbury City Council



## INTRODUCTION

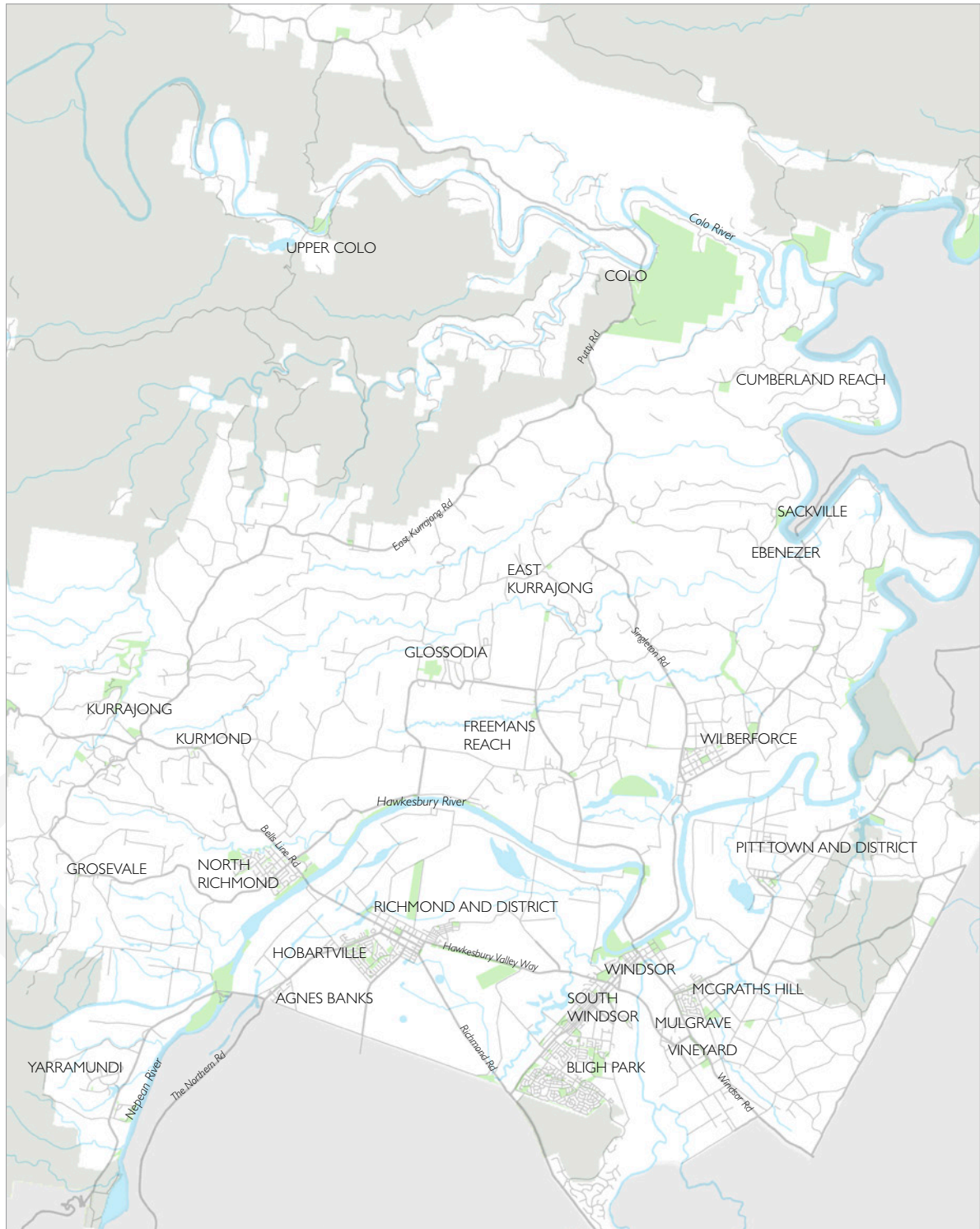


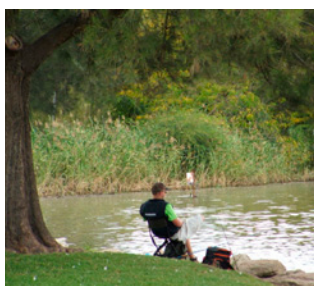
Figure IN.03: The Hawkesbury City Council southern area showing major urban townships

Map Source: adapted from Hawkesbury City Council

## INTRODUCTION



*The Hawkesbury LGA includes The Colo River and Wilderness north of the Blue Mountains; this area is World Heritage listed and draws large numbers of annual visitors.*



*One of the many benefits provided by the extensive natural systems in the Hawkesbury LGA includes five rivers which provide for kayaking and passive sports such as walking and fishing.*



*Sporting venues in the LGA include the Hawkesbury Oasis Aquatic & Fitness Centre in South Windsor where the local community and visitors can enjoy the benefits of physical exercise through the fitness programs and services provided.*

### SCOPE OF THE PROJECT

The scope of the project is to prepare a strategic document that addresses the open space needs for both existing and future residents, users of and visitors to the Hawkesbury's public open space.

The ROSS sets out the thematic framework for Council's provision of public open space and a future action plan that will assess the quantity and quality of recreational open spaces and identify the future needs of both the local community and visitors alike.

### AIMS AND OBJECTIVES

The Aims of the ROSS as defined by the project brief are to:

- establish a clear understanding of the types of open space and their distribution across the City
- recognise the recreational, environmental and social values of open space
- establish a clear understanding of stakeholder and community needs in relation to open space
- establish and enhance clear linkages and corridors between key points of interest, town centres and public transport nodes
- identify future actions to ensure that the values of open space are managed sustainably
- inform an open space enhancement program to improve facilities and to encourage their use.

The Objectives of the ROSS as defined by the project brief are to:

- improve open space provision in terms of quality, quantity, accessibility and safety
- improve linkages within and between the open space networks
- ensure open spaces meet the needs of the Hawkesbury community and promotes greater social inclusion
- ensure open spaces enhance the quality of the local environment
- provide a clear framework for investment priorities and action.

The project analyses the quantity and quality of existing open spaces, their function and whether they can meet the future needs of the community. It considers Council's wider corporate objectives to ensure that the ROSS can achieve Council's initiatives and programs.

A key component of the ROSS is the development of a 'Vision' and 'Implementation Plan' identifying aims, objectives and broad strategies based on the understanding of these needs to provide recreation and public open space for the local community and the wider regional context for the next 10 years and beyond.

## INTRODUCTION

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### STAKEHOLDER PARTICIPATION

Council has managed the consultation program for the project and following the consultant's review of available data and previous community surveys, Council has proposed the involvement of the following stakeholders as part of the consultation process:

- Project Reference Group (PRG): including Councillors, Council staff and community members who have expressed an interest to be involved in the project
- Community Advisory Committees: including members with specific interests associated with open space and recreation (eg. access, environment, cultural heritage, etc)
- Councillors: currently elected and serving the City of Hawkesbury.

Consultation with external stakeholders, Council proposed the involvement of the following:

- The Hawkesbury Sports Council
- YMCA
- Focus Groups: comprising workshops with key interested non-government stakeholders (eg. sports groups, play groups, walkers, cyclists, etc) at issues analysis/policy development and draft strategy stages
- Heart of the Hawkesbury Group.

Community feedback and project progress information is provided by Council through their website and associated media releases. The Draft Hawkesbury Regional Open Space Strategy will be reported to Council before being placed on public exhibition for comment and feedback. It is anticipated that the Plan will be finalised early 2013.

Consultation with major stakeholders and community representatives undertaken throughout the project includes:

- eight meetings, including teleconference meetings, with the Project Control Group (PCG): members represented by the Open Space and Recreation Staff of Hawkesbury City Council
- one meeting with the Project Reference Group (PRG): members represented by Councillors, Managers of the Hawkesbury City Council from Open Space Environment and Planning, the Hawkesbury Sports Council and the YMCA
- two workshops with Council Office Staff: represented by indoor staff with administrative and statistical knowledge of the City's open space
- two workshops with Council Field Staff: represented by outdoor staff with on the ground knowledge of the City's open space
- one on one meetings with major stakeholders: represented by the Hawkesbury Sports Council, the YMCA, the NSW National Parks and Wildlife and the Heart of the Hawkesbury Group.

## INTRODUCTION

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### PROJECT METHODOLOGY

The methodology for the ROSS has involved the following activities in its preparation and development:

- initial briefing by Council's Project Control Group (PCG) to review details of scope, program and consultation strategy
- review of all existing policies, mapping, data and documents provided by Council
- research of other current documents and strategies for open space and recreation, Government guidelines and policies, non-Government initiatives and funding opportunities
- site visits, accompanied by Council officers, to a selection of the major open space parks and reserves. Site visits included a range of the smaller reserves in the Local Government Area (LGA)
- SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) and Emerging Themes of the City's open spaces (refer to Appendix 2)
- community (PRG) and external stakeholder consultation and workshops held throughout the project.

The ROSS has been undertaken in stages over a period of eight months, during which time Council has undertaken related community consultation for the project. Stages building to the preparation of the Implementation Plan include:

- Stage 1: Project Initiation and Establishment
- Stage 2: Review and Evaluate
- Stage 3: Open Space Provision
- Stage 4: Open Space Needs & Demands and Themes
- Stage 5: Open Space Objectives
- Stage 6: ROSS Implementation Plan.

The above stages are combined to form the final ROSS Report.

## INTRODUCTION

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### DEFINITIONS AND TERMS

Definitions for a number of terms or phrases used in this document include the following:

- **Open Space:** is considered to include outdoor open space, land zoned as public open space and public land zoned for other purposes but where use may include permission for public recreational use
- **Demands:** a community's or members of a community's stated requirements for open space and recreation as established through consultation or survey
- **Unmet Demand:** the absence of facilities or opportunities for recreation that have been identified by the community as being in demand
- **Needs:** an evaluation of all aspects of a community's open space and recreation needs including demand as established through community survey or consultation
- **Satisfaction and Importance:** satisfaction relates to the degree that the community consulted believes the existing provision of open space meet their needs in regard to quantity and quality. Importance relates to the relative level of importance the community places on a facility or provision
- **Barriers to Participation or Access:** factors that prevent a person or community from accessing open space or participating in leisure or recreation activities, including physical (eg. roads or rail lines preventing access), perceptual (eg. concerns over safety or knowledge of what is available), social (eg. available time), cultural (facilities may not meet cultural needs) or economic (cost of participation or access)
- **Gap Analysis:** analysis of both unmet demand and need, with an assessment of facilities or opportunities that may require to be prioritised to meet shortfall between the two
- **Local Environmental Plan (LEP):** is a legal instrument that imposes standards to control development. The purpose of an LEP is to achieve the objects of the Environmental Planning and Assessment Act 1979
- **Voluntary Planning Agreement (VPA):** is an agreement entered into by a planning authority (such as Local Government or the Department of Planning and Infrastructure) and a developer where the developer agrees to provide or fund public amenities
- **Recreation:** in its broadest sense recreation is 'an activity done for pleasure or relaxation'. As such a broad description, would include activities such as watching television, reading and visiting friends, the ROSS limits recreation to those activities in the outdoors that fall within the responsibilities of Council's provision or facilitation (eg. sports, play, etc)



## INTRODUCTION

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- **Passive Recreation:** in the context of the ROSS this means generally non-sport and/or non-competitive related activity, such as picnicking, going for a walk, visiting a playground or a casual bike ride. Spectating at a sports event could also be included under this description as it is non-participatory
- **Active Recreation:** in the context of the ROSS this means active participation in all sports, usually on a competitive basis, be they individual or team related, usually implying some application
- **Size Comparisons:** The ROSS refers to two common sizes for small open space. For comparison purposes, 0.2 Ha is the equivalent of two traditional 'quarter acre house blocks' and 0.5 Ha is approximately the size of the playing area of a football field.

### ABBREVIATIONS USED IN THIS REPORT

Abbreviations used in this report are listed below:

HCC	Hawkesbury City Council
LEP	Local Environment Plan (1989, Draft 2011)
LGA	Local Government Area
NPWS	New South Wales National Parks and Wildlife Service
POM	Plan of Management
PCG	Project Control Group
PRG	Project Reference Group
ROSS	Regional Open Space Strategy
SWOT	Strengths,Weaknesses,Opportunities,Threats
VPA	Voluntary Planning Agreement



*The historic St John's Anglican Church in Wilberforce which is believed to have been constructed in 1856.*



Part 1: Background



*Innovative shade structure design in Macquarie Park initiated by Hawkesbury City Council demonstrates a sun and health aware approach to play*

## PART 1: BACKGROUND

### INTRODUCTION

This section provides an overview of the outcomes from the initiation phase of the project. The Introduction and Background sections outline the context of the ROSS and highlight the critical issues and opportunities that inform the final document. Tasks in this phase have included:

- Initial briefing by Council's Project Control Group
- Preliminary review of data and documents provided by Council
- Initial site visit to some of the smaller open spaces in the Local Government Area (LGA). The visits were attended and included input from Council officers
- Second visit to a selection of major reserves and sports venues in the LGA
- Second meeting with PCG to discuss initial data gaps, consultation strategy, revised program, administration of open space and recreation in the City, structure of open space categorisation and list of participants to be involved in the Project Reference Group.

The Background includes a 'SWOT Analysis and Emerging Themes' from the site visits conducted (see Appendix 2) that will be addressed as part of the final ROSS.

### HISTORY OF OPEN SPACE PLANNING IN THE CITY

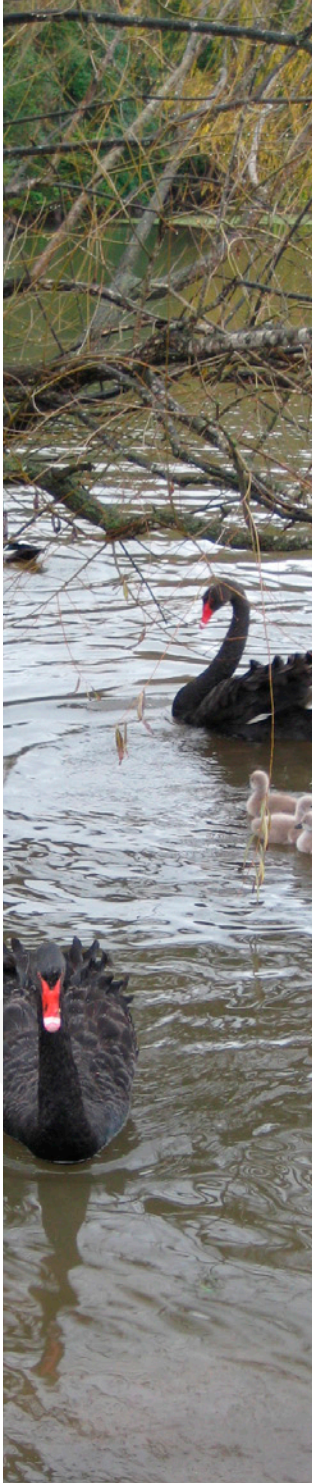
Council has prepared and adopted a number of strategies and plans over recent years relevant to the ROSS and while many of these reports supply general data and background information, a number of these documents are central to the development of the ROSS.

In particular the following documents, some of which are still in draft form and under review by Council, contain relevant data analysis and background information:

- Community Strategic Plan 2010 - 2030 (adopted 2010)
- Hawkesbury: A Social Atlas (2009)
- Hawkesbury: Community Research Survey (2009)
- Hawkesbury Local Environmental Plan 2011 - Draft (Gazetted 2011)
- Hawkesbury Land Zoning Maps
- Hawkesbury Residential Land Strategy (2010)
- Hawkesbury Mobility Plan 2010: Bike Plan and Pedestrian Access and Mobility Plan (P.A.M.P) (2010)
- Windsor Town Centre Masterplan - Draft (2004)
- Windsor Foreshore Parks Incorporating the Great River Walk: Plan of Management (Adopted 2009)
- Generic Plan of Management: General Community Use (Adopted 2011)
- Generic Plan of Management: Natural Areas (Adopted 2011)
- Generic Plan of Management: Parks (Adopted 2011)
- Generic Plan of Management: Sportsground (Adopted 2011).



## PART 1: BACKGROUND



### PLANNING DOCUMENTS INFORMING THE REPORT

Principal planning documents and strategies that inform the analysis and recommendations at the core of the ROSS are summarised below and include the following:

#### **Hawkesbury Community Strategic Plan 2010 - 2030**

The Hawkesbury Community Strategic Plan was adopted by Council in 2009. It was developed in close consultation with the community and documents the community's aspiration and goals for the future of the Hawkesbury.

The Community Strategic Plan will direct the future policies, programs and budgets of Council with measures in place that identify key milestones and deliverable actions. It will continue to be flexible and accommodate changing requirements over the next 20 years.

The Hawkesbury Community Strategic Plan incorporates five key vision statements which will set the direction for Council decision making. The Five Vision Statements have a strong correlation to open space and recreation and are outlined under the following headings:

#### *Looking After People and Place*

a community in which the area's character is preserved and lifestyle choices are provided with sustainable planned, well serviced development, within strongly connected, safe and friendly neighbourhoods

#### *Caring for Our Environment*

a community dedicated to minimising its ecological footprint, enjoying a clean river and an environment that is nurtured, healthy, protected and provides opportunities for its sustainable use

#### *Linking The Hawkesbury*

a community which is provided with facilities and services efficiently linked by well maintained roads and accessible and integrated transport and communication systems which also connect surrounding regions

#### *Supporting Business and Local Jobs*

new and existing industries which provide opportunities for a range of local employment and training options, complemented by thriving town centres

#### *Shaping Our Future Together*

an independent, strong and engaged community, with a respected leadership which provides for the future needs of its people in a sustainable and financially responsible manner.

It is noteworthy that while Council has developed a range of strategies, goals and measures that elaborate on these five visions, there is not a coherent suite of guidelines on aspects of open space, recreation and leisure. It is intended that the ROSS address this strategic planning gap.



## PART 1: BACKGROUND

### Hawkesbury Local Environment Plan 1989

The current Hawkesbury LEP 1989 is in the process of being updated with the amended Draft LEP 2011 publicly exhibited in 2010 with the most recent gazetted by the Department of Planning in July 2011.

### Hawkesbury: A Social Atlas

This document provides analysis of the Australian Bureau of Statistics 2006 Census of the population and housing, addressing expected population growth and demography of the whole Hawkesbury area.

### Plans of Management

Generic Plans of Management (POM) were adopted in May 2010 for Natural Areas, Parks, Sports Grounds and General Community Use. Specific Plans of Management have been written and adopted for Richmond Park, Yarramundi Reserve, Woodbury Reserve, Streeton Lookout, Pughs Lagoon, Ham Common, Windsor Foreshore Parks incorporating the Great River Walk and Charles Kemp Reserve.

### CURRENT OPEN SPACE MANAGEMENT FRAMEWORK

The residents of the Hawkesbury elect 12 Councillors to manage and direct the affairs of Hawkesbury City Council. Organisationally Council employs 250+ staff with 20 of these staff involved in the maintenance of public open space and recreation. In addition, Council has delegated the management of its sporting fields to the Hawkesbury Sports Council and has contracted with YMCA to operate the Hawkesbury Oasis Swim Centre and the Hawkesbury Sports Stadium. The National Parks and Wildlife Service manage a large proportion of the open space within the LGA.

The respective responsibilities of these entities are as outlined below:

#### Parks and Recreation Department

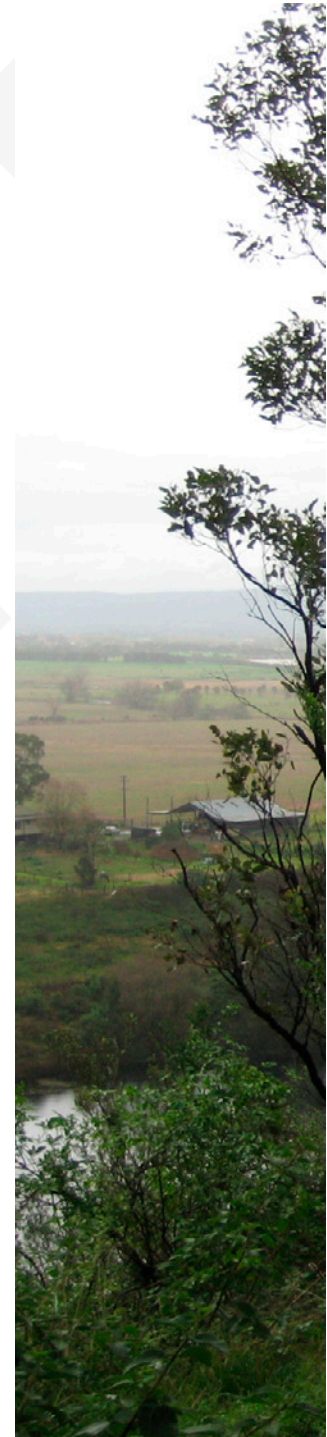
Hawkesbury City Council administers the open space and recreation through the Parks and Recreation Department. A Council Bushcare Officer provides training for volunteers who wish to participate in weed removal and bush regeneration. The department employs 20 field staff who maintain the 214 parks, reserves and natural areas. The Council field staff do not maintain the active sports venues which are currently managed by the Hawkesbury Sports Council.

#### Hawkesbury Sports Council

At a public meeting in 1990, the Hawkesbury Sports Council was formed and Hawkesbury City Council delegated the control, management and development of allocated sporting facilities in the LGA over to its care. The Sports Council was incorporated in 1992 and receives an annual budget from the Council for its operation. The Sports Council collects and retains all hire fees, applies for grants and employs its own staff to manage and maintain the sports facilities.

#### NSW National Parks and Wildlife Service

A large proportion of open space in the Hawkesbury region is dedicated National Park, out of Council's jurisdiction and managed by the NSW National Parks and Wildlife Service.



*According to the Australian Bureau of Statistics 28% of the Hawkesbury population live in rural areas. Access to these properties is usually made by private vehicles.*

## PART 1: BACKGROUND



*Richmond Park is a regional recreation facility performing multifunctional uses that include sports, childrens playground, weddings, markets and passive recreation whilst also retaining its heritage values*

### BENEFITS OF OPEN SPACE

In the early 21st Century the full benefits of providing public open space and recreation opportunities to our communities are still being explored and documented. The case for such public provision is however indisputable, with the combined values of places and opportunities for recreation meeting our needs for:

- physical health and mental wellbeing
- social engagement
- sport, play and relaxation
- conservation of and interaction with our natural environment
- conservation and appreciation of our cultural heritage
- scenic landscapes.

Parks and open spaces also provide opportunity as a resource for schools and universities in terms of education and research programs.

With a new century has come a renewed appreciation of these values and a corresponding growth in research and data to demonstrate the critical economic significance of high quality open space and recreation opportunity for all communities. There is now compelling evidence to show that access to and enjoyment of such environments can:

- assist prevention of lifestyle diseases
- aid recovery from disease and major surgery
- reduce anxiety and depression
- enhance national biodiversity
- reduce heat island effects in urban environments
- minimise environmental impacts of major natural events (flooding, bushfires, etc)
- enhance property values when in proximity.

### Benefits and Values of Open Space and Recreation

Great parks, squares and streets make for a better quality of life. A network of well-designed and cared-for open spaces adds to the character of places where people want to live, work and visit.

Open spaces also provide the vital green infrastructure that enables us to deal with storm water or mitigate and adapt to climate change while providing wildlife habitats, sporting facilities or beautiful parks and meeting spaces. The link therefore between a good park and open space system and a healthy and vibrant society is strong and along with the more 'obvious virtues', open space provides:

- escape from urban stress
- places and spaces for people to enjoy numerous outdoor activities
- areas for children to safely explore the natural environment
- environmental corridors

## PART 1: BACKGROUND

- buffers that divide (or integrate) mixed use areas
- water catchments
- hike and bike trails.

The summary of these benefits is outlined in the table below.

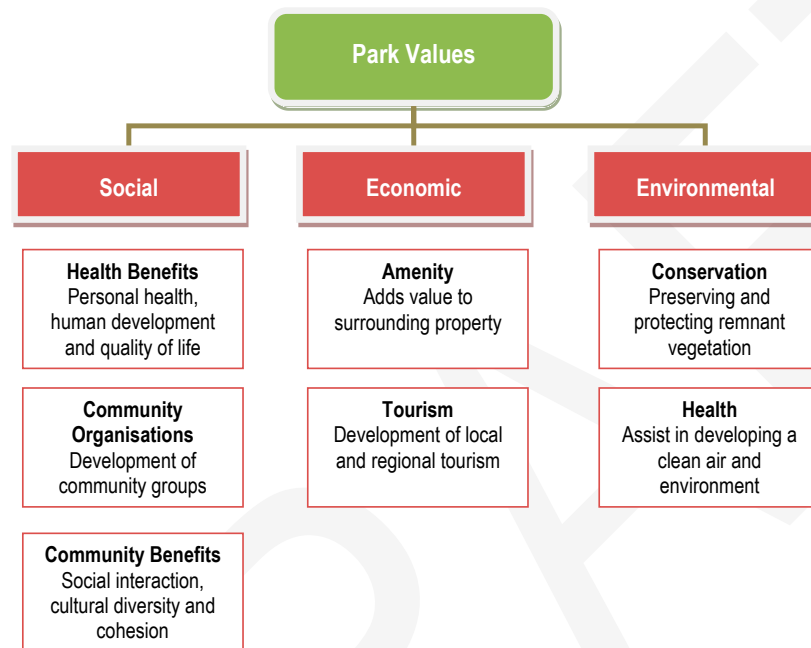


Table BA.01: Values of Parks

Source: Modified from the Sydney Urban Parks Education and Research Group Model

### IMPLICATIONS FOR THE HAWKESBURY LGA

In evaluating these benefits in the context of the Hawkesbury region, the following are considerations that are particular to the area:

- large geographic area with a relatively dispersed population
- population primarily in the southern half of the LGA, mostly in low density housing
- large properties with substantial landholdings often widely distributed
- numerous small historic townships with two significant urban centres (Richmond and Windsor)
- extensive National Parks providing accessible open space for tourists as well as the local community
- extensive road system (including many rural roads) with most public transport in the south and a high level of car dependency
- major river at the heart of the LGA providing significant recreational opportunity
- extensive low lying land prone to flooding.





*Provision of shade for children's play is a vital consideration, the more so with the potential long term implications of climate change. Hawkesbury City Council is progressively upgrading play across the City. This image shows Rutherglen Avenue Playground*



## PART 1: BACKGROUND

### PUBLIC OPEN SPACE IN THE REGION

In 2010, the NSW Department of Planning published the Metropolitan Strategy 2036 (updating the 2005 Strategy under the title of Sydney – City of Cities). The Strategy is laid out in ten subregional strategies and Hawkesbury falls within the North West Region which also includes Baulkham Hills, Blacktown, Blue Mountains and Penrith.

The Strategy to the year 2031 foresees an increased population for Sydney of 1.7 million, with the North West Region accounting for 130,000 new jobs and 140,000 new dwellings by 2031. The predicted employment growth, which is 24% of the employment target for Sydney is expected to occur in Strategic Centres of the North West Region with Penrith nominated as the Regional City. Growth predicted in housing represents 23% of the overall housing target for Sydney with 60,000 dwellings located in the North West Growth Centre and the remaining 80,000 dwellings located in other areas.

At the Metropolitan scale, the strategy recognises that Hawkesbury represents the lowest density of population within the subregion but has a role to play in the future development of the subregion by conserving and promoting the qualities of its extensive range of environmentally sensitive areas and valuable heritage significance.

Of most relevance to the ROSS are the two supporting documents to the Metropolitan Strategy entitled *Park, Public Places and Culture: Key Directions* and *Environment, Heritage and Resources: Key Directions*.

The sections of these documents that are focused on the North West Region and in particular Hawkesbury outline a suite of associated initiatives that are proposed to be adopted by both State and Local Government. The key focus most directly affecting Hawkesbury noted under *Park, Public Places and Culture* concern strategies to:

- improve access to quality parks and public places and community facilities
- improve the quality of regional and local open space
- improve access to waterways and links between bushland, parks and centres
- continue to co-ordinate and plan for the improvement of tourism precincts in Sydney to maximise the visitor experience.

Noted under *Environment, Heritage and Resources* are strategies that seek to:

- improve health of waterways, coasts and estuaries
- protect Sydney's unique diversity of plants and animals
- manage the environmental impacts of tourism
- maintain rural activities and resource lands
- interpret and promote Sydney's cultural heritage.

The North West subregion contains the largest area of bushland in comparison with the other subregions in Sydney, made up of National Parks and state recreation areas. The majority of bushland is located within the Blue Mountains and the Hawkesbury LGA.





## Part 2: Context



*The Hawkesbury LGA covers 2,800 square kilometres of predominantly natural environment comprising steep wooded hills surrounding a wide river floodplain. Most of the resident population live and work in the south east section of the LGA in urban townships along the Hawkesbury River. The image shows a view looking over the Hawkesbury River and river floodplain to distant views of the Greater Blue Mountains World Heritage Area.*



## PART 2: CONTEXT

### INTRODUCTION

This section sets the scene for the ROSS, establishing the planning, environmental, cultural and social context in which the strategy is set. Information analysed includes the following:

- the Hawkesbury LGA's population and demographics
- Strategic Planning
- Transport, Infrastructure and Movement
- Environment and Cultural Heritage
- Tourism.

### THE CITY AND ITS PEOPLE

The most recent population data available from the ABS National Regional Profile for the Hawkesbury LGA (see Table 1) states that as at 30 June 2010 the estimated population of the region stood at 64,030 persons. This indicates an 0.86% increase from the previous year (63,487 persons).

The table below shows the percentage growth variations over the ten preceding years, indicating very minor overall growth across the LGA in that period.

Estimated resident population, Hawkesbury City (Preliminary updated estimates based on 2006 Census data)	Annual change		
	number	number	Percent (%)
Year (ending June 30)			
2010	64,030	543	0.9
2009	63,487	383	0.6
2008	63,104	665	1.1
2007	62,439	334	0.5
2006	62,105	-3	0
2005	62,108	-353	-0.6
2004	62,461	-503	-0.8
2003	62,964	22	0
2002	62,942	128	0.2
2001	62,814	--	--

Table CO.01: Estimated resident population

Source: Australian Bureau of Statistics. Cat.No 3218.0 Regional Population Growth, Australia, 2009

Analysis of the age structure of Hawkesbury City in 2006 compared to the Sydney Statistical Division shows that there was a larger proportion of people in the younger age groups (0 - 17) but a smaller proportion of people in the older age groups (60+).

Overall, 28% of the population were aged between 0 and 17, and 13.9% were aged 60 years +, compared with 23.6% and 16.7% respectively for the Sydney statistical division.

Compared to Greater Sydney therefore, the Hawkesbury LGA has a younger population, dominated by parents in their 40s, with school-age children. This is common in areas with a larger quantum of rural residential housing.



## PART 2: CONTEXT

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Other statistics of relevance drawn from the Australian Bureau of Statistics (ABS) Census 2006 and Forecast.id profile include:

- total land area of Hawkesbury City is 277,586 Ha with a density of population of 0.22 persons per Ha, ie. very low density
- 86% of households own at least one car
- 70% of the working population use private vehicles to get to and from work
- 12.7% of population are born overseas which is lower than the NSW average of 23.2%.

### Population, Distribution and Growth

The document 'Hawkesbury: A Social Atlas' commissioned by Council in 2009 contains the following statistics on the population of Hawkesbury of relevance to the ROSS:

- just over 40% of the population live within the township boundaries of Windsor-Richmond (an area which includes Hobartville, South Windsor and Bligh Park), while a further 54% of the population live in townships and localities situated within a 15km radius of these centres
- 94% of the population live within the most south-easterly portion of the LGA
- 66% of the population of Hawkesbury live in urban townships. The remaining 34% live in rural areas (28%) and smaller more rural townships of less than 1,000 persons (6%)
- the highest population densities (over 3,000 persons per sq.km) are found in Bligh Park, South Windsor, Richmond and North Richmond
- in the 10 years between 1996-2006 the population of the Hawkesbury LGA grew by 5.5% showing a population growth below state and national averages - but above the Blue Mountains and slightly below Penrith
- in line with trends across Australia, the population of Hawkesbury is ageing with older people aged 65 years and above (6% in 1986 to 10% in 2001) projected to rise to 18% by 2026
- the proportion of young people aged between 25 - 34 years (12.7% in 2006) is projected to fall to 12% by 2026
- in national terms Hawkesbury has a relatively young population.

### Population Trends

The most significant changes to the Hawkesbury population from 2001 - 2006 has been the slowing of its growth rate, as recorded in the 2006 census. Population projections should be used with caution and are indicators only. The key factors in this change include:

- Australia's ageing population
- slowing birth rates with families having fewer children and later in life
- migration of people from some localities in the Hawkesbury LGA.

## PART 2: CONTEXT

The following population projections represent a view of the future based on ABS 2006 Census projection and birth rates. These trends should be viewed as indication only but they show a general increase to 2031 as follows:

– 2001 population actual	61,072
– 2006 population actual	60,938 (0.2% decrease)
– 2011 population projected	62,933 (3.2% increase)
– 2016 population projected	66,858 (6.2% increase)
– 2021 population projected	70,094 (4.8% increase)
– 2026 population projected	72,164 (2.9% increase)
– 2031 population projected	72,995 (1.1% increase)

### Demographic Profile

According to the 2006 Census and Council's 'Hawkesbury...A Social Atlas' under the City Planning Division - Strategic Unit 'the Hawkesbury population is indicated as the following:

- the population was relatively young with 20% aged 14 years or younger
- almost 90% of all residents were Australian citizens
- 81% of residents were born in Australia
- 1.9% of residents were Indigenous Australians
- 16% of the total population were considered as having a disability. Disability was defined as *'any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being'*
- gender division was roughly half (50.2% female) across all age groups
- the largest number of overseas born residents in descending order were from the United Kingdom, New Zealand, Malta, Netherlands and Germany
- English was the language spoken at home by the majority of Hawkesbury residents
- the average weekly income of Hawkesbury residents (\$1,146) was slightly higher than the national average (\$1,027)
- unemployment of Hawkesbury residents (4.1%) was lower than the national average (5.2%).

## PART 2: CONTEXT

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### TOWN CENTRES

Town centres with the greatest number of residents, business and commercial centres, services, centres of education and transport hubs are concentrated in the south east of the LGA.

The highest population densities in these centres (more than 3,000 persons per square kilometre) identified in the ABS 2006 Census were:

- Bligh Park - 6,494
- South Windsor - 5,629
- Richmond - 4,428
- North Richmond - 4,398.

Pockets of higher density also occur in Hobartville (2,534), McGrath's Hill (2,470), Wilberforce (2,961) and Glossodia (2,420).

### Implications for the ROSS

The key implications of the foregoing demographic analysis includes:

- projected population growth is minimal and thus funds generated for open space provision through sources such as Section 94 will be limited and pressure will be increased
- there is a need to address opportunities for a significant proportion of school-aged children
- mobility is highly car dependent both between and within towns
- the southern part of the LGA, especially Richmond and Windsor being the most populated, call for a more integrated approach to open space provision
- there is a need to address the recreational needs of a Hawkesbury and nation wide ageing population, both rural and urban, as well the significant numbers of those with disabilities.

### STRATEGIC PLANNING CONTEXT

During preparation of the ROSS a number of significant strategic planning initiatives are being developed which have bearing on this strategy. These include:

- implementation of the Community Strategy Plan, which drives the objectives of the ROSS
- initiatives being developed by Heart of the Hawkesbury - A Think Tank to promote the Hawkesbury area through business and activity. This has a direct bearing on the ROSS through links to the local economy and tourism
- the planning of a new cross river road bridge at Windsor and investigation of possible improvements to the North Richmond river crossing. This has implications for recreation across and along the Hawkesbury River
- plans to progress the Windsor Town Centre Master Plan. This will need to consider walkability and connectivity with opportunities to enhance recreation activities

## PART 2: CONTEXT

- the adoption of the Hawkesbury Residential Lands Strategy.
- Council is proposing to prepare a tourism plan. There will be direct links between tourism strategies (eg. for the river) and recreation opportunities.

The findings from these strategies and initiatives addressed in the ROSS.

### Key Implications for the ROSS

The key implications for the ROSS of this strategic context are:

- opportunity to bring best practice open space planning to new growth areas
- importance of linking open space to other initiatives (eg. tourism)
- opportunities to improve recreational access and connectivity through integration in pending and existing major projects (eg. new bridges).

## TRANSPORT AND INFRASTRUCTURE

The transport and infrastructure of the Hawkesbury LGA is highly diverse with a limited road network in the north of the area and a concentration of transport and infrastructure in the southern suburbs centred on Richmond and Windsor.

### Public Transport

#### *Bus*

Public bus transport in the Hawkesbury LGA is operated by two private bus companies, Westbus Bus Company and Busabout who both run regular services in and between the townships.

#### *Rail*

The State Rail Authority operates one railway line network to and from the Hawkesbury urban area. The Western Line railway service from Chatswood terminates at Richmond.

#### *Ferry*

The Hawkesbury Nepean River has four vehicular cross river ferries which run daily from Lower Portland, Wisemans Ferry, Webbs Creek and Sackville.

Most of the working population of Hawkesbury travel to and from work by private vehicle with 21,613 people recorded in 2006 using their own car or motorbike. The working population who travel to and from work either by walking or cycling is significantly higher than those who travel to work by bus. Other forms of transport used by commuters in 2006 were recorded as follows:

- 1,273 people caught public transport to work (train, bus or ferry)
- 3.8% of work trips were made by walking.

### State and Regional Roads

The Hawkesbury is served by four key roads (see Figure 3) which are:

- Singleton Road/Putty Road (69) - north west
- Windsor Road/Bells Line of Road (40) - west
- Wollombi Road/Old Northern Road (15) - tourist road north
- Blacktown/Richmond Road/Hawkesbury Valley Way - south west



## PART 2: CONTEXT

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The towns of Windsor and Richmond form a gateway to the Blue Mountains from Northern Sydney with Bells Line of Road being a significant tourist route.

A network of minor roads connect the many townships and settlements of the LGA.

### **Cycleways**

In May 2010, Hawkesbury City Council adopted the Hawkesbury Mobility Plan 2010: Bike Plan and Pedestrian Access and Mobility Plan (P.A.M.P.) The outcome was to identify a strategy for linking residents to the major centres by means of safe and accessible pathways and cycleways.

The chief findings of the P.A.M.P. were that in 2006, 1% of workers cycled to work and that bicycle parking was deemed to be inadequate for the existing and predicted increase in bicycle usage across the LGA.

The proposed cycleway network identified in the Hawkesbury Mobility Plan 2010 focuses on connecting the major commercial centres within the Hawkesbury, with surrounding regional routes. The plan identifies a hierarchy of cycleway connections including:

#### *Regional Routes:*

- Parramatta to Windsor
- Windsor to Richmond
- Richmond to North Richmond
- North Richmond to Kurmond
- Kurmond to Kurrajong
- Windsor to South Windsor, Bligh Park and Blacktown LGA
- Bligh Park to Windsor Downs and Blacktown LGA.

#### *Sub Regional Routes:*

- North Richmond to Glossodia
- Windsor to Wilberforce
- McGraths Hill to Pitt Town.

#### *Local Routes:*

- Windsor to Richmond (via Lowlands)
- Windsor to Freemans Reach
- Freemans Reach to Wilberforce
- Freemans Reach to North Richmond
- Pitt Town to McGraths Hill (via Pitt Town Bottoms)
- around town centres of Pitt Town, Bligh Park, Richmond and North Richmond.

During consultation for the ROSS cyclists have indicated that many rural roads are not edged and can be dangerous for cyclists.

## PART 2: CONTEXT

### Trails

The Hawkesbury region contains a number of trails and bushwalks with accompanying brochures. Given the great distances that need to be covered to reach historic sites or heritage items across the LGA many of the trails are self-drive and include:

- Macquarie Trail: self drive trail through Governor Macquarie's 'Five Towns', historic buildings and surrounding rural landscape
- historic cemeteries: self drive tour of historic churches and cemeteries in the southern part of the LGA
- self-guided bushwalks through the LGA's National Parks (NP) which includes the Blue Mountains NP, Wollemi NP, Mount Wilson, Scheyville NP, Cattai NP and Dharug NP
- reserve walks include Ebenezer - Swallow Reach Rock, Bilpin - Bowen Creek, Grose Vale - Woods Reserve, Kurrajong - McMahons Park and Bellbird Hill Reserve and Lookout
- unstructured walks can be made along foreshores of the Hawkesbury River.

### Barriers to Pedestrian, Bicycle and River Movement

Barriers to non-vehicular access across the LGA include physical constraints such as road and rail lines, water bodies, land zoning, land ownership and long distance between towns.

Topography can be a significant barrier in pedestrian environments, however, with much of the southern part of the LGA being in floodplain, this constraint tends to apply mostly to the northern parts of the LGA. The main barriers to pedestrian, bicycle and river movement in the Hawkesbury LGA have been identified as:

- major roads eg. Windsor Road, Hawkesbury Valley Way, Macquarie St
- crossing waterways, particularly Hawkesbury River and tributaries
- travelling on waterways as some sections of the river are not navigable by larger vessels or in some very shallow sections by kayak
- steep topography surrounding the river floodplain reducing easy access
- Richmond Western Line railway
- limited number of safe locations to cross road and rail barriers
- RAAF Base Richmond - no public access through the site.

### IMPLICATIONS FOR THE ROSS

The principal implications for the ROSS arising from the analysis of the transport system are:

- a very high level of car dependency driven by distances between towns
- limited transport opportunities
- poor recreational connectivity between towns and limited trail connectivity in creeks and wetlands
- opportunities to improve walking/cycling activities along the river and between towns.

PART 2: CONTEXT



Topography of the Hawkesbury LGA comprises steep wooded hills surrounding a wide river floodplain that is intersected by a significant network of river and creek systems. The photograph above shows a view from Ham Common looking down to the Hawkesbury River its largest source.



The Hawkesbury Heritage Farm located in Wilberforce contains, among other relocated historic buildings, 'The Rose Cottage' recognised as one of Australia's oldest known timber slab cottages. The cottage remains located on its original 1811 site.

## PART 2: CONTEXT

### NATURAL ENVIRONMENT

The Hawkesbury LGA covers almost 2,800 square kilometres with 70% of this contained in National Parks, Nature Reserves and State Recreation Areas managed by NSW National Parks and Wildlife Service (NSW NPWS). The remaining 30% comprises both formal and informal open space which is maintained and managed by Hawkesbury City Council.

The LGA is regarded by many, both regionally and nationally as amongst the most significant natural areas containing unspoilt bushland. It contains Cattai and Scheyville National Park in the south of the LGA and close to the urban townships. Whilst over two thirds of the northern section of the LGA is taken up by two significantly larger National Parks. Wollemi National Park, (the second largest National Park in NSW and the largest remaining wilderness area in NSW) and Yengo National Park (which runs north from Wisemans Ferry to the start of the Hunter Valley). Both these National Parks are part of the Greater Blue Mountains World Heritage Area.

As well as National Parks and Nature Reserves, the LGA contains large areas of natural environment, bushland and river foreshores. Opportunities are available for a variety of outdoor recreation activities that include bushwalking, rock climbing, camping, picnicking, bird watching, canoeing and cycling.

Community participation in the form of volunteer 'Bushcare' groups, are trained and supported by Council in the management of weed control and bush regeneration in the natural areas of open space in the care of Council.

### Topography and Geology

The Hawkesbury LGA extends from the escarpments and foothills of the Blue Mountains in the north and west to the Cumberland Plain in the south and east. The Wollemi-Colo Plateau is a high area of Hawkesbury sandstone eroded in the east by the MacDonald River and in the west by the Colo River and Wollemi Creek. The height of the plateau ranges from 200 metres in the east rising to 600 metres in the west where, in places, the sandstone is up to 250 metres thick.

The topography is highly varied ranging from 1:20 (5% slope) across the fertile river flood plains and wetlands of the river valleys to 1:8 (12.5% slope) on the steep sided escarpments and ridges and their associated deep valley gorges. The floodplains are characterised by a network of drainage channels, terraces and backwater swamps adjoining The Hawkesbury River.

The soils on the river floodplain consist of sedimentary clay overlaid with deposits of tertiary alluvial soils, mainly clays and silts collected from further upstream and the higher ridges and escarpments. The surrounding steeper slopes comprise Hawkesbury sandstone with its associated pockets of remnant Wianamatta Shale.

### Rivers, Creeks and Water Quality

The LGA is divided and dominated by the five major rivers of the Nepean, the Grose, the Colo, the MacDonald and the main and largest, the Hawkesbury River with its many creeks and tributaries that flow predominantly north.



## PART 2: CONTEXT

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According to the Hawkesbury Residential Lands Strategy adopted by Council (10 May 2011), these numerous rivers and creek systems across the floodplain are instrumental in the regular incidence of flooding in the LGA (at least 1:100 year). Most affected urban areas listed are around the centres of North Richmond, Richmond, Windsor, Wilberforce and Pitt Town (refer to Figure CO.1).

The creeks and tributaries across the LGA divide and intersect the fertile floodplain, where agriculture production is high, feeding into the larger rivers with potential to affect the water quality from various sources. Recognised impacts on water quality include run off from nutrients used in primary industry, agriculture, cars and roads, and gross pollutants.

As part of the Hawkesbury-Nepean River Recovery Program, Council is receiving Australian Government funding of \$9,138,500 towards the \$9.8 million Recycled Water Treatment and Distribution System to be located at the South Windsor Sewage Treatment Plant (STP).

The Hawkesbury River and foreshores are a major part of Council's public open space with potential for extending its open space and recreational opportunities. The River Recovery Program provides Council with a direct response to the 2009 Community Survey regarding 'healthy and sustainable Hawkesbury River and waterways' which the community identified as a priority.

The program, funded through the Water for the Future Initiative, consists of seven projects and aims to improve river health below the major water supply dams by increasing the water available for environmental flows in the river and reducing nutrient loads of nitrogen and phosphorous being discharged.

Hawkesbury City Council has also been active in conducting educational programs and forums to inform and encourage both the local adult community and school children in caring for the health and protection of their waterways.



Flood Map here

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## PART 2: CONTEXT



*The Hawkesbury River and its tributaries offer an extensive and diverse range of recreation opportunities, both on and off the water. However, there remains ample untapped potential from this major waterway, not least through the extension of Great River Walk trail.*



*The Hawkesbury has large expanses of natural reserves and their associated plant communities. Wetlands and reed beds which can often be less accessible than much of the mixed use open bushland in the LGA have great potential as protected habitat for some of the threatened birdlife listed under the Threatened Species Conservation Act 1995.*

## PART 2: CONTEXT

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### Flora and Fauna

The Hawkesbury community is fortunate in having access to large areas of natural reserves which are diverse and complex and include areas of remnant bushland, riparian corridors, wetlands and river foreshore and contain valuable communities of biodiversity and active ecosystems. These existing communities and vegetated landscapes are important for a healthy environment and society and make Hawkesbury a desirable place to work and live.

The existing native vegetation of the Hawkesbury LGA can be categorised under three plant communities, one of which, Cumberland Plain Woodlands, is listed under the *NSW Threatened Species Conservation Act 1995* as Endangered Ecological Communities. The identified plant communities and their associated plant communities are:

- Cumberland Plain Woodlands
- Hawkesbury Nepean River Floodplain
- Hawkesbury Sandstone.

Bioregional case studies conducted by the NSW NPWS in 2002 indicate that areas of Cumberland Plain Woodlands within the Hawkesbury LGA and in particular wetlands and lagoons (sited: Longneck Lagoon, Pitt Town Lagoon, Bushells Lagoon and Baker's Lagoon) are home to over 20 endangered or vulnerable birds.

Threatening processes present at these sites are mainly restricted to feral animals including rabbits, rats, dogs and foxes and pollution in the form of runoff from urban areas.

### CULTURAL HERITAGE

The Hawkesbury LGA is an area rich in cultural heritage and conservation areas with Council identifying more than 500 heritage items and places of local heritage significance with, according to the Metropolitan Strategy, 99 local heritage items in the LEP and 10 items registered as State Significant Heritage with two listed as Commonwealth Heritage.

The character of the area has been greatly influenced by its natural, Aboriginal and non-Aboriginal culture and the Hawkesbury Regional Museum conserves and interprets the area's heritage to residents and visitors, many of whom have family links to the region.

### Aboriginal Heritage

Traditional ownership of the Cumberland Plain that covered the Hawkesbury region lies with the Mulgoa and Darkinjung clans of the Darug who occupied the land for up to 14,000 years before European settlement (Comber 2008). The Aboriginal name for the river, now known as the Hawkesbury River, is Deerubbin.

The flatter topography of the Cumberland Plain and its abundance of water systems would have provided a considerable number of resources for Aboriginal people including a wide range of animals, birds and fish for food and natural materials for making tools.

Aboriginal archaeological and cultural heritage assessments in NSW are carried out under the auspices of a range of State and Federal Acts and Guidelines which include The National Parks and Wildlife Act 1974 amended 2001 (NP&W Act) and Local Environmental Plans (LEPs).



## PART 2: CONTEXT

The Hawkesbury LEP 1989, produced in accordance with the EP&A Act, makes provision for the protection of Aboriginal heritage, archaeological sites and potential archaeological sites. A single reference to Aboriginal heritage is listed in the Hawkesbury LEP's Heritage items, namely;

*'Monument to Aborigines in the public recreational reserve off Holmes Drive' in Sackville.*

No other places or objects of Aboriginal significance are recorded in the Hawkesbury LEP's Heritage List.

However, archeological research conducted in the area has found a rich resource of Aboriginal archaeology with over 200 sites recorded in the Aboriginal Sites Register. These discoveries and the potential of more findings in the area will open the potential to understand more about the original custodians of the area, the Durag Aboriginal people, and their complex culture.

This being said, the repeated occurrence of heavy flooding throughout the area would greatly reduce the likelihood of insitu archeological findings. In the future should any such discoveries be made and after proper consultation process with Aboriginal elders and the Aboriginal community, there is an opportunity for interpretation as part of public open space and recreation strategies.

### Non-Aboriginal Heritage

The Hawkesbury LGA is considered to be one of the oldest European settlement areas, in Australia, the third in the colony, and was explored and developed to help feed the struggling Sydney colony. The city was named after the Hawkesbury River, it was thus named by Governor Phillip in honour of Charles Jenkinson, first Earl of Liverpool and Baron of Hawkesbury.

In 1789 Governor Arthur Phillip, the first governor of the British Colony of New South Wales, explored the Hawkesbury River and a settlement was established when Lieutenant Grose placed 22 families along the Hawkesbury River in 1794 - the settlement originally known as The Green Hills. These first European settlers were granted farms on Pitt Town Bottoms, then known as Bardenarang, and their development of agriculture in the area was essential to the survival of the new Sydney Town without which the colony would probably have had to be abandoned.

In 1810, Governor Lachlan Macquarie toured the district to take measures to ensure prevention of further losses to the food stores and buildings caused by the devastating and regular floods of the region. Macquarie had been given the power to lay out townships and he planned and established their location on higher ground but within convenient distance to the farm settlements.

Macquarie named the 'Five Towns', renaming The Green Hills as Windsor and naming the townships at Richmond, Pitt Town, Wilberforce and Castlereagh with four of these towns now being part of the Hawkesbury LGA. The street layout of these towns, their historic buildings and general character still reference Macquarie's tour of 1810 -1811.

## PART 2: CONTEXT



Burial grounds were established in the 'Five Towns' at this time and these existing historic cemeteries (there are over 30 historic cemeteries across the LGA) many with 'First Fleeters' interred in them, add significant heritage value to the Hawkesbury LGA.

### TOURISM

Given the expansive areas of natural environment in the Hawkesbury LGA's a range of attractions and tourist experiences are on offer to visitors and information is available at the Hawkesbury Visitor Inform Centre, Ham Common. Accommodation available in the LGA ranges from caravan parks and Bed & Breakfast's, to resorts, cottages and motels. Camping can also be found in many of the ten National Parks in the region.

The principal tourism attributes amongst others include:

- Hawkesbury Regional Gallery
- Hawkesbury Regional Museum
- Australian Pioneer Village, Wilberforce
- half day tours with aguide of the heritage 'Macquarie Towns'
- self guided walking/driving trails of heritage buildings/cemeteries/churches
- joy flights by helicopter
- river paddle boat tours on the Hawkesbury River
- bushwalking, rock climbing, canyoning, cycling, canoeing, bird watching and day visits to the National Parks.

Annual events that cater for large numbers of visitors include among others the following:

- Bridge to Bridge Power Boat Race - May
- Hawkesbury Show - March, April or May
- Hawkesbury Canoe Classic - October
- Hawkesbury Wine, Food and Music Festival - October
- St.Albans Folk Music Festival - October
- Bridge to Bridge Water Ski Classic - November
- International Sand Sculpture Competition - January
- Scarecrow Festival - October
- Hawkesbury 120 Ski Race Classic - August
- Powerboat Spectacular Windsor - September.

Many of these events are staged on or near the Hawkesbury River and their ongoing success would show that opportunities for incorporating the river and its environs into the Hawkesbury tourism economy should be investigated for future expansion.

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Part 3: Open Space Provision



*McQuade Park in Windsor was planned by Macquarie in 1810 and named after J M McQuade, Mayor of Windsor in 1872 and 1874.*



## PART 3: OPEN SPACE PROVISION

### INTRODUCTION

In this section information is provided on the existing provision and distribution of public open space. In particular it addresses:

- the amount of open space, its accessibility and connectivity
- the distribution of open space across the LGA
- the diversity of available recreation setting types and facilities
- the relationship of the open space to the population size and its demographic profile
- current recreational usage.

This stage also describes a draft inventory of all public open space across the LGA that has been compiled as part of the ROSS. The inventory is in a tabulated format that can be integrated into Council's Geographic Information System (GIS), The Asset Management System and assist fieldwork and entry of relevant information during maintenance and management operations.

At a wider context for open space planning the NSW Department of Planning (DoP) has recently released its guidelines entitled Recreation and Open Space Planning Guidelines for Local Government (2011) for the planning of open space and recreation, targeted at assisting local governments in preparing comprehensive and integrated open space and recreation plans to assist local government. The ROSS adopts and adapts these guidelines in compiling the inventory, the key elements of which are outlined in this section.

### OVERVIEW OF PUBLIC OPEN SPACE IN THE CITY

The net use of open space in the LGA is highly diverse, ranging from historic parks such as Richmond and Wilberforce Park, to linear spaces like Ham Common and many small reserves in various more recently developed sub divisions. The settings of open space in the LGA are also diverse, ranging from bushland to heritage parks, cemeteries, sportsfields and river foreshores, amongst others.

Council, through the Hawkesbury Sports Council, manages and maintains over 23 sporting complexes, fields and ovals. In addition other sporting venues such as aquatic centres are managed by the YMCA.

Active team sports currently provided for within the LGA include:

Cricket	Softball	Netball	Athletics
Soccer	AFL	BMX	Basket Ball
Baseball	Rugby Union	Tennis	Triathlon

The Hawkesbury River provides a major natural asset in the provision of open space and recreation with many reserves abutting the waterways with the river itself providing on water recreation opportunity for residents and visitors.

A more detailed analysis of the City's open space and recreation opportunities is provided later in this section.

## PART 3: OPEN SPACE PROVISION

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### OPEN SPACE INVENTORY

As a key step in the preparation of the ROSS the structure and contents of Council's existing Open Space Inventory has been updated to reflect the open space over which Council has care, control and management (refer to Appendix 3).

The draft inventory is set in a simple table format and gives a clear structure for establishing the Hierarchy and Setting type that will set the basis for the maintenance and service levels of all Council owned open space. Set out below is a brief description of the basic elements of the updated draft Inventory, the more detailed description of which is provided in Appendix 3.

#### Park Numbers and Reserve

To ensure that current and future data on population and open space can be compared at a local level all reserves in the inventory are grouped within collector areas. Boundaries of these areas do not necessarily match specific suburbs or service catchments but are aggregated from Census Collector Districts with the Hawkesbury City divided into 21 small areas.

#### Ownership, Location and Title

The inventory specifies the name of the park or reserve (where available), street address, and the suburb within which the reserve lies, the owner of the land and the Lot and DP details are also listed.

#### Area and Zoning

The area of each reserve is specified in hectares and square metres; the total area of public open space for each suburb is also identified. The zoning of the reserve under Council's LEP is included in the inventory.

#### Reserve Hierarchy

Three tiers of park/reserve hierarchy are proposed, being Local, District and Regional. While size is usually a key determinant of hierarchy, other factors such as the 'drawcard effect' (how far people are prepared to travel to visit the reserve or a particular facility that it offers, eg. a regional playground or an historic landscape) is also used to determine the park or reserve's hierarchy (refer to Appendix 4).

#### Classification

As required under the NSW Local Government Act 1993, the term 'classification' refers to land that is zoned for public open space as either Operational Land or Community Land. Most parks are classified as Community Land as this bestows more secure status on the land for recreation and leisure uses. 'Operational Land' usually applies to uses such as Council depots and the like that are not intended for public access and use. The other common classification is Crown Land where the ownership rests with the State Government.

## PART 3: OPEN SPACE PROVISION

### Settings (Categorisation)

The Local Government Act requires that all Community Land be categorised; this categorisation describes the setting type under a series of predetermined descriptors, eg. Natural Area. Since the Act was gazetted the description of settings has evolved to respond to best practice in open space planning.

Accordingly, the ROSS adopts the following setting types, based on the recently published 'Recreation and Open Space Planning Guidelines for Local Government', adapted to the specifics of the Hawkesbury City landscape:

- Passive Parklands: reserves managed for informal and unstructured leisure and recreation
- Outdoor Sports: reserves designed, managed and used for organised sports
- Civic and Urban Spaces: public domain in urban areas used for leisure and recreation (eg. plazas)
- Natural Areas/Bushland: reserves comprising physical features or flora and fauna of natural value
- Cultural Heritage: reserves with structures, landscapes or associations of heritage value
- River Foreshore: open space adjoining rivers (eg. Hawkesbury River)
- Creeks and Waterways: reserves principally comprising a narrow creek corridor
- Ancillary: spaces that may be zoned open space but the primary function of which is visual amenity rather than active use
- Informal: areas that may not be zoned open space but which are accessible to and used by the public with owners permission (eg. school grounds).

Many parks or reserves are comprised of more than one setting (ie. the same park or reserve might contain bushland and a sportsground) and thus the inventory identifies the primary setting type, whilst also listing the secondary and contributory settings.

To conform to the Local Government Act, the equivalent categorisation under the Act is cross referenced in the inventory. A full description of the objectives and intended uses for each setting is provided.

## PART 3: OPEN SPACE PROVISION

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### Status

The Status describes the extent to which the reserve has been enhanced through landscape design and the integration of facilities or actively managed for public access and enjoyment. The three categories are:

- embellished: the park is well developed
- unembellished: no significant enhancements have been undertaken or the reserve is not in active management
- proposed: an area of land that may be proposed for future open space but is not presently zoned as such.

Any natural areas that are actively managed for public access, even where enhancements are very minor (such as through provision of paths), are deemed embellished for the purposes of the inventory.

### Networks and Associations

This attribute relates to the broader connections that the reserve may have to other reserves, be it part of a corridor of reserves, a natural corridor such as a creek or a unique association with another reserve in the Hawkesbury City (eg. an historical connection or a shared unique flora).

### Assets, Functions and Comments

The assets within the parks are described under their relevant headings (eg. buildings, lighting, fences, play facilities, etc).

### Comments

The last column in the inventory provides space for specific comments about the reserve that are central to its management.

## QUANTUM AND SIZE OF RESERVES

The number and size of reserves across an LGA have a direct bearing on the community's access to open space and the capacity of that open space to meet a range of recreation and leisure activities and needs.

### Numbers, Sizes of Reserves

Council manages some 851 Ha of public open space (approximately 0.3% of the total LGA) across 214 reserves, within 21 suburbs in the City of Hawkesbury. For the purposes of locating open space, the LGA has been mapped in three major areas and two subsidiary rural areas (refer to Figures OS.01 - OS.07).

The reserves vary greatly in size ranging from the smallest at 0.012 Ha (an un-named park at 214 Green Road, Lower Portland) to the largest at 61 Ha (Morans Rock Reserve, Lower Portland).



## PART 3: OPEN SPACE PROVISION



*The Hawkesbury Oasis Aquatic Centre is part of the Hawkesbury Leisure Centre and is successfully managed by the YMCA. The opportunity to create improved indoor/outdoor connections is one to be explored.*



*The LGA has five river systems with the Hawkesbury River adding significant value to the regions open space. Recreation both on the river and its adjoining foreshores are open to opportunities although some shallow sections are not navigable by either larger vessels or kayaks. In many areas access to the River foreshore is limited by private land ownership.*



PART 3: OPEN SPACE PROVISION



Large areas of grass are mown in open space across the Hawkesbury LGA, many in areas of limited current use, such as here on the river bank.



There is a need for a higher level of connectivity and safer links to destinations for pedestrians and cyclists throughout the streetscapes of the Hawkesbury LGA. Many residential estates have no public footpaths on their streets, discouraging walking, cycling and non-vehicular access to parks.

## PART 3: OPEN SPACE PROVISION



*Many suburbs have significant areas of open space but these often include retention basins or stormwater channels, which are rarely used by residents or visitors for recreational purposes and which also lack high natural system values.*



*Formal sports are predominantly limited to traditional codes throughout the Hawkesbury LGA which matches current demand. However Council recognises that the demographics of the City are changing, requiring corresponding changes. Changes in demands and needs of open space should be carefully monitored and responded to over the coming years. Walking as seen here in McMahon Park is becoming an increasingly popular form of self motivated and individual fitness.*



PART 3: OPEN SPACE PROVISION



*The Colo Wilderness is World Heritage listed and part of Hawkesbury's regional recreation which draws international tourists and visitors. It forms part of the 70% area of the LGAs open space that is managed by NSW National Parks and Wildlife Service. Improved recreational links into the National Parks would enhance local visitation opportunities.*



*Water based recreation is gradually increasing on the Hawkesbury despite the relatively limited number of landing opportunities. Smaller informal launching sites would encourage greater use of kayaks and the like.*



## PART 3: OPEN SPACE PROVISION

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*Bensons Lane Sporting complex in Richmond has sports fields which can accommodate soccer, baseball and cricket but night lighting and facilities for teams and sporting audiences is minimal and restricted to a few areas. This is a major sports resource for the city, well used and managed. Like many sports facilities in the City it is however within an area prone to flooding periodically, which poses some limits on facility design.*



*Many pocket parks located on single house blocks with play equipment installed show little evidence of use. A more strategic approach to the provision of play and its design would ensure a more targeted resource for the community.*

## PART 3: OPEN SPACE PROVISION

Table OS.01 below summarises the total numbers of reserves in the suburbs, based on the three tier hierarchy of Local, District and Regional.

SUBURB	Local	District	Regional	Total Number
Bligh Park	9	3	0	12
Bowen Mountain	6	2	0	8
East Kurrajong	2	0	0	2
Ebenezer - Sackville	3	3	1	7
Freemans Reach	2	4	2	8
Glossodia	7	0	2	9
Grose Vale - Yarrumandi - Grose Wold	9	0	2	11
Hobartville	11	3	0	14
Kurmond - Tennyson - The Slopes	2	0	0	2
Kurrajong	5	3	0	8
Kurrajong Heights - Bilpin District	8	4	1	13
McGraths Hill	6	0	0	6
North Richmond	11	5	0	16
Oakville - Vineyard - Mulgrave	2	3	0	5
Pitt Town And District	3	3	0	6
Richmond And District	8	3	5	16
Rural North	26	5	1	32
South Windsor	12	4	2	18
Wilberforce	5	4	1	10
Windsor	6	2	3	11
Windsor Downs	0	0	0	0
<b>TOTAL</b>	<b>143</b>	<b>51</b>	<b>20</b>	<b>214</b>

Table OS.01: Total numbers of reserves across the LGA

As might be expected, the greatest number of reserves are located in or adjoining the major towns of Windsor and Richmond and North Richmond with their associated neighbourhoods of Bligh Park, South Windsor and Hobartville.

Nevertheless there are 32 reserves in the Rural North, which is described as a rural and National Park area. Rural North comprises small rural settlements in the north of the LGA (major features of the area include Wollemi National Park, Yengo National Park, Parr State Conservation Area, Comleroy State Forest, Colo Park, etc).

It is also notable that of the 214 reserves in the LGA, 143 (67%) are local reserves; this is a relatively common ratio across much of Sydney.

## PART 3: OPEN SPACE PROVISION

Table OS.02 below summarises the number of open space reserves within the major town centres of the LGA.

SUBURB	Local	District	Regional	Total Number
Bligh Park	9	3	0	12
Hobartville	11	3	0	14
McGraths Hill	6	0	0	6
North Richmond	11	5	0	16
Richmond And District	8	3	5	16
Rural North	26	5	1	32
South Windsor	12	4	2	18
Windsor	6	2	3	11
<b>TOTAL</b>	<b>143</b>	<b>51</b>	<b>20</b>	<b>214</b>

Table OS.02: Numbers of open space reserves in major towns

Of most note from this table is the presence of five regional parks in Richmond and District (including Ham Common, The Showgrounds, Bensons Lane Sporting Complex and Richmond Park). These are presently some of the most developed and well-used reserves in the LGA.

In order to examine the principal reserves in the major towns in more detail Table OS.03 summarises the amounts of open space within the major town centres, based on a series of size brackets ranging from 0.2 - 0.2 Ha to 10 Ha or more.

SUBURB	0.0 - 0.1 Ha	0.1 - 0.2 Ha	0.2 - 0.5 Ha	0.5 - 1.0 Ha	1.0 - 2.0 Ha	2.1 - 5.0 Ha	5.1 - 10 Ha	10 + Ha	No size recorded	Total Number of Parks	Ave Size of Parks Ha
Bligh Park	0	2	1	2	2	5	0	0	0	12	1.78
Hobartville	2	3	3	0	2	4	0	0	0	14	1.21
McGraths Hill	2	1	1	1	1	0	0	0	0	6	0.45
North Richmond	0	3	2	2	2	2	2	2	1	16	3.32
Richmond And District	1	0	0	2	1	2	2	4	3	16	11.76
South Windsor	2	1	1	3	3	3	0	1	4	18	1.63
Windsor	2	2	0	1	2	1	2	1	0	11	3.46
<b>TOTAL</b>	<b>9</b>	<b>12</b>	<b>8</b>	<b>11</b>	<b>13</b>	<b>18</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>33</b>	

Table OS.03: Sizes of open space reserves in major towns

Conclusions that can be drawn from Table OS.03 include that:

- 21 of the reserves are of less than 0.2Ha in size (best practice suggests that reserves of less than 0.3Ha tend to provide limited opportunity for activities such as kickabout)
- Richmond and District has a preponderance of larger parks on average (four are greater than 10Ha in size) and no reserves are less than 0.5Ha
- Reserves in McGraths Hill are predominantly very small in area with no reserves over 2.0Ha
- South Windsor has an even distribution of reserve sizes across the suburb.

When assessed in concert with Figures OS.02 - OS.14, it is clear that while reserve sizes vary greatly across the LGA, most towns have access to a reasonable number of public open spaces within walkable distance (400-500 metres) of most residences. This is less than the situation in some rural towns.

## PART 3: OPEN SPACE PROVISION

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### OPEN SPACE DISTRIBUTION AND CONNECTIVITY

When considering the community's ability to access open space as part of their daily lives, the distribution of public open space is of equal, if not more importance than the size and area of reserves. An overview of Figure OS.02 - OS.07 and OS.08 (Council map showing town areas in the LGA) reveals some important characteristics of open space distribution across the City of Hawkesbury, including:

- heavy concentration of open space in the south
- distribution across the LGA is inconsistent
- walking opportunities are not consistent in towns with large distances between destination points (eg. schools, shops, stations, etc) in some rural towns and very few dedicated on-street footpaths or dedicated cycleways.
- there are few non-road based links between towns for safe access of open space
- public links to access the river and its foreshore are limited in many places.

### SETTING TYPES AND RECREATIONAL USES

Open space setting types specific to the Hawkesbury LGA with its predominantly rural and natural setting are mapped on Figures OS.09 - OS.15. The following summary is an overview of the recreational dimension of these settings:

- Passive Parklands: These are widely distributed within towns including historic reserves as well as open space corridors often for stormwater drainage
- Outdoor sports: there is a high level of organised sport across the City reflected in the many sports reserves
- Civic and urban spaces: there are presently no reserves designated as such but there are many places where people gather in towns
- Conservation of Natural and Cultural Heritage: in terms of reserves in Council ownership these are limited
- River Foreshore: most of these reserves are focused on the Hawkesbury River in towns like Windsor. Elsewhere, access to the water from public open space is limited
- Creeks and Wetlands: most of these lie in private land ownership
- Ancillary: the principal setting types here are cemeteries
- Informal: there are no specific reserves identified as such in the LGA

Over and above the setting based recreation it is clear from consultation with stakeholders that the landscape of the City is seen as a major attraction in the north west of Sydney for sports and events such as cycle training, trail running, kayaking, triathlon and field based sports.



## PART 3: OPEN SPACE PROVISION

Recreation opportunities include:

- providing better access to the river to make fuller use of the LGA's major asset
- creating a greater variety of formal sports and improved facilities for participators and sporting audience that reflect any changing future demand
- investigating stronger partnerships and connections between townships and the National Parks within the LGA
- increasing draw card sports events-based activities
- strengthening links with tourism economy.

### Sports Facilities

Sports facilities comprise a significant proportion of the City's public open space and reflect a longstanding and healthy level of participation across the community, further confirmed through an equally significant provision of privately owned and run facilities across the LGA.

The City has 23 sporting fields, reserves and ovals which include:

- Richmond Oval, Icely Park, Tamplin Field, Pound Paddock, Bensons Complex, McQuade Park, Don't Worry Oval, Deerubbin Park, Mileham Netball, Berger Reserve, Bounty Reserve, Colonial Reserve, Vineyard Park, Oakville Oval, Brinsley Park, Colbee Park, Glossodia Park, Woodlands Park, Woodbury Estate, Turnbull Oval, Breakaways, Peel Park, Powell Park, McMahon Park, Cougar Parks Inalls Lane, Hannah Park.

The sporting grounds are located in Richmond, Hobartville, Windsor, South Windsor, Bligh park, Vineyard, Oakville, Pitt Town, McGraths Hill, Glossodia, Wilberforce, North Richmond, Freemans Reach, and Kurrajong Heights.. All of these sports facilities are identified in the Draft Inventory in Appendix 3 and illustrated in the Open Space Settings Maps OS.09 - OS.15.

In terms of their significance to the local sporting community and their scale and level of use, the three major sports reserves in the City would comprise Bensons Lane (Richmond), Colbee Park (Vineyard) and North Richmond Park (North Richmond).

The principal summer season sports include Cricket, Athletics, Softball and Baseball Triathlon, Touch, Netball, BMX and Tennis. Some facilities are also used for dog training.

The principal winter season sports include Soccer, Aussie Rules, Softball, Baseball, Rugby Union, Rugby League, Triathlon, Netball, BMX and Tennis. Users of these facilities include community users, state sporting associations, defence forces and schools.

Since 1990 outdoor sports in the LGA have been managed with and for Council by the Hawkesbury Sports Council. The Sports Council manages all aspects of administration including field allocation, fees and charges, maintenance and co-ordination with Council officers concerning facility upgrades as and when required.

## PART 3: OPEN SPACE PROVISION

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This model of sports management has worked well for Council, reducing the workload on Council officers in what is a small organisation and providing autonomy to a range of codes to manage their sports to match their needs and growth scenarios; the latter is particularly critical given the LGAs large youth demographic and the ageing population (especially given a trend to increasing participation in sport in later years).

In developing the ROSS and in reviewing best practice in sports management across Australia and overseas it will be important for Council to ensure that the Sports Council model continues to respond to wider changes in active recreation growth and demand and that it is in a position, both financially and organisationally, to meet future sports needs.

In this respect, the ROSS provides an opportunity to facilitate a review of roles, responsibilities and strategic directions between Council and the Sport Council. Topics that should be considered in this review include:

- changes in active sports participation and use of Council facilities over recent years (both in numbers, age profile and code)
- anticipated future changes in participation and facility use (growth or changes in participation, new codes, changes in facilities requirements, etc)
- suitability of existing facilities to match current and future scenarios (ie. quality of fields and amenities, carrying capacity, implications of flooding, etc)
- wider recreational opportunities at sports reserves that ensure optimum use and encourage healthy, active lifestyles (eg. play, circuit paths, shade and shelter, amenity, planting, etc)
- administration of sports including allocation processes (especially in relation to new and growing codes), tenure arrangements, liability responsibilities, fees and charges, maintenance responsibilities, work health and safety requirements, facility upgrades, etc.

A specific Sports Plan that builds on the strategic directions set in the ROSS would draw on the findings from this review and might reasonably include a brief user survey that involves both clubs and associations.

### **Play and Youth Facilities**

As with many Councils, the history of play provision in the Hawkesbury LGA has not always evolved to a clear strategic direction. While there are examples of quality playgrounds across the LGA these do not evidently relate directly to any over-arching strategy that establishes parameters for factors such as:

- playground hierarchy (regional, district and local)
- diversity of play opportunity (adventure, imaginative, natural, physical development, etc)
- integration with other recreation and leisure activities (sport, social and urban)
- design, equipment and materials.

## PART 3: OPEN SPACE PROVISION

A Play Implementation Plan is required to ensure a long term, sustainable strategy for play that meets the community's current and forecast. The key steps in such a plan would include:

- a playground audit of the numbers, distribution, nature and condition of play facilities
- community consultation (including with children) and possibly a brief user survey
- play policy
- implementation plan.

Such a strategy needs to be focused on the specifics of the Hawkesbury context, especially in relation to play needs and sustainable provision in the smaller rural towns and settlements.

In the same vein, a strategy for youth activities can be developed that addresses recognised needs. Existing BMX and skateboard facilities are already provided and are clearly well used. However a broader survey of youth needs may well elicit the need for identified hangout spaces that are designed for youth needs and that are not simply seen as problematic by the broader community.

### OPEN SPACE PROVISION RELATIVE TO THE CITY POPULATION

The Hawkesbury LGA is the largest government area in the Sydney Metropolitan Region (north west) covering 2,793 square kilometres. Of this total area approximately 70% is National Parks, (forming part of the World Heritage Area) under the care and management of the NSW National Parks and Wildlife Service.

Hawkesbury City Council manages a total of 851 Ha of open space that includes 1,982 Ha of public open space across 214 parks, reserves and natural areas which are divided into 100 Ha of sports grounds, 252 Ha of parks and 1,626 Ha of natural bushland.

The estimated resident population of the Hawkesbury in June 2008 was 62,828 persons. On the basis of the above open space quantum, this would provide approximately 31 Ha of public open space per 1000 persons. However 1,626 Ha of this public open space is classified bushland. If this bushland is excluded, the ratio of open space to population equals 5.6 Ha of public open space per 1000 persons.

The most significant changes to the Hawkesbury population from 2001-2006 showed a slowing of its growth rate with a population loss by 2006 of 134 people (-0.22%). Data taken from Australian Bureau of Statistics (Census 2006) shows population projections as shown below will only increase by 3% from 2011 to 2031:

2001	actual population	61,072
2006	actual population	60,938
2011	projected population	62,933
2016	projected population	66,858
2021	projected population	70,094
2026	projected population	72,164
2031	projected population	72,995

## PART 3: OPEN SPACE PROVISION

A significant prediction included in these population trends is that the Hawkesbury community, in line with the national trend, is ageing but living longer with the result that passive recreation, easy access to open space with a more individual approach to fitness will be an increasing demand.

Table OS.04 below shows the distribution of the different hierarchy and setting types in the 214 reserves across the Hawkesbury LGA in relationship to public open space provision for the existing and future population of the main towns in the Hawkesbury.

SUBURB	Total Population 2006 Census (% of Total)	Total Ha	Total Ha/1000 Population 2006 Census	Total Ha per Hierarchy			Ha/1000 of current 2006 Local Open Space
				L	D	R	
Bligh Park	6,487	21.35	3.29	9	3	0	2.07
Hobartville	2,655	16.94	6.38	11	3	0	2.63
McGraths Hill	2,473	2.72	1.10	6	0	0	1.10
North Richmond	4,529	53.08	11.72	11	5	0	1.61
Richmond And District	5,808	188.44	32.44	8	3	5	2.34
South Windsor	5,781	29.30	5.07	12	4	2	1.62
Windsor	1,667	38.02	22.81	6	2	3	3.68
<b>TOTAL</b>	<b>29,400</b>	<b>349.85</b>	<b>84.81</b>	<b>63</b>	<b>20</b>	<b>10</b>	<b>15.05</b>

Table OS.04: Amounts of open space relative to population per main towns  
Abbreviation L = Local D = District R = Regional

Conclusions that can be drawn from this analysis concerning day-to-day recreation access at local parks (when regional and district open space is deducted) include that:

- general local open space provision in most towns is moderate to high
- McGraths Hill, North Richmond and South Windsor's provision is lowest (however North Richmond and South Windsor have higher areas of district open space)
- Windsor is well serviced with local open space.

Importantly, this analysis must also be considered in concert with the other factors of connectivity and setting types to draw the fullest conclusion on provision (See Analysis by Town).



## PART 3: OPEN SPACE PROVISION

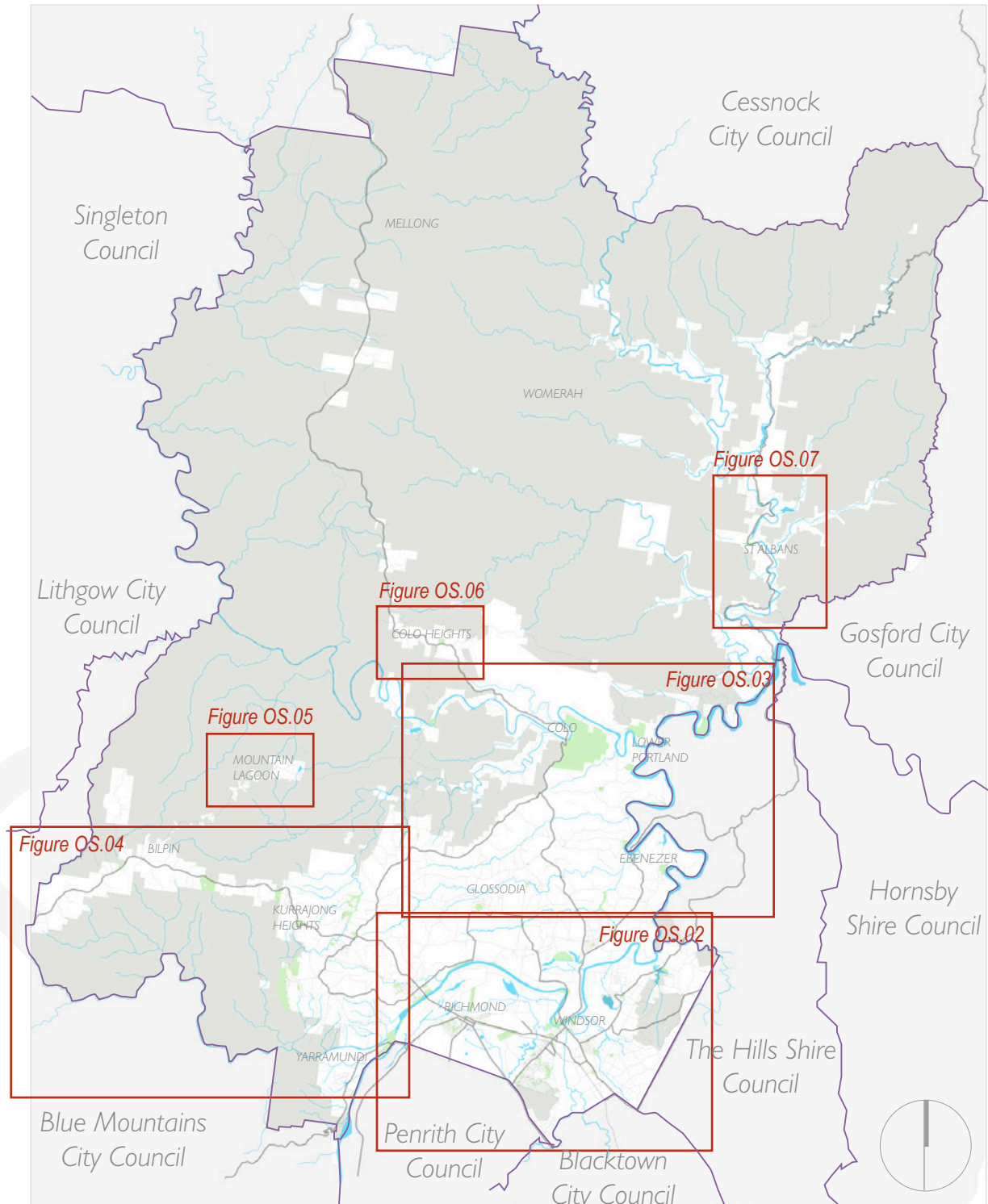


Figure OS.01 Overall Map of Existing Open Space Inventory

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OS.02 - OS.07 Inventory A3 maps insert from here

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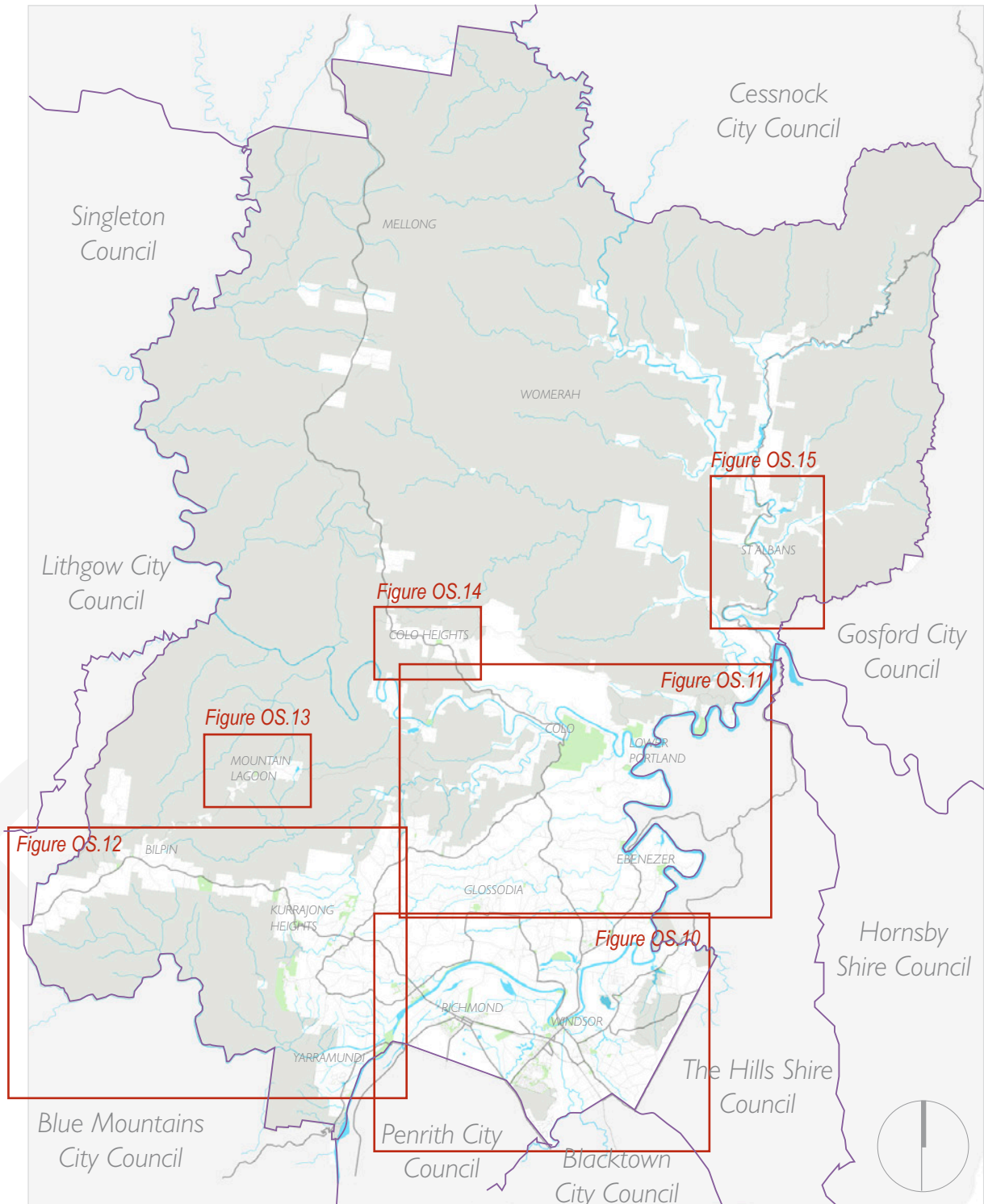


Figure OS.08 Overall Map of Existing Open Space Settings

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OS.09 - OS.14 O.Space Settings A3 maps to go here

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OS.10 Space Settings A3 map to go here

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OS.11 Space Settings A3 map to go here

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OS.12 - OS.14 Space Settings A3 map to go here

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## PART 3: OPEN SPACE PROVISION

### MANAGEMENT OF OPEN SPACE

Aside from the National Parks within the LGA (which are managed by the NPWS), responsibility for the management of public open space across the City is divided between the Hawkesbury City Council and its delegated managing agent the Hawkesbury Sports Council.

Maintenance of the widespread reserves over such a large area as the Hawkesbury LGA places great pressure on Council's 20 field staff. As part of the information gathering process the ROSS conducted workshops with both Council field and office staff. Both Council staff groups identified the need to:

- ensure design and planning of future open space incorporates multi-function purpose in its design
- ensure design and planning of open space incorporates a manageable approach to issues surrounding maintenance (eg. mowing strips, bin location, etc)
- improve communication between Council departments to avoid duplication of work and to better manage its resources
- increase available access onto the river with more public boat ramps that will enable greater usage of the LGA'S major asset of the Hawkesbury River
- improve access to the river by ensuring road/path easements are maintained and upheld
- investigate consolidation rationalisation of small, often unused and widespread reserves to ensure play meets local needs helping to overcome additional time pressure placed on field maintenance staff
- upgrade and build larger regional playgrounds within major town centres to act as a visitor drawcard whilst ensuring greater use value of time by field maintenance staff
- reduce the amount of mowing as Council field staff resources are very stretched
- where small reserves include play equipment, investigate usage rate and where necessary remove when life of equipment is over or redesign to meet expressed needs
- investigate partnerships with other funded bodies to ensure a progressive approach is taken in the development of both traditional and new sport.

A meeting was held between the consultants, Council officers and the Sports Council to discuss aspects of current and future planning of management of sports across the City. The meeting noted that:

- all sports within the LGA identify their future needs to the Sports Council and the Sports Council seeks to meet these needs where ever practical
- there are no significant demands that have not been met across any sports within the LGA to the Sports Council's knowledge

## PART 3: OPEN SPACE PROVISION

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- Council and the Sports Council have a strong working relationship, although communication on wider strategic goals or specific actions could be improved by including Hawkesbury Sports Council in broader planning
- the Sports Council model has proven successful over many years
- legislative changes require updating of the Sports Council Constitution
- some facilities (eg. Richmond Park) require clearer definitions of user type to ensure use meets the capacity of the reserve
- the development of a Sports Plan for the City, providing a clear strategic framework and responding to changing demographics, would assist both Council and the Sports Council in meeting future demand for sports.

### SUMMARY OF OPEN SPACE PROVISION BY TOWNSHIP

Drawing together all of the foregoing analysis of the quantum, size, distribution, diversity, accessibility and amounts per head of population Table OS.16 and Figures 17-31 on the following pages summarises these findings and identifies implications of these findings for the development of the Hawkesbury ROSS.

Given the concentration of the larger towns in the half of the LGA and the highly dispersed nature of a small number of reserves in rural towns in the centre and north of the LGA, this analysis has been provided by town rather than suburb. In each case these are observations made in the field. Consultation with the residents of each township will be central to any proposed improvements.

Note that with the quantum and sizes of reserves identified in these tables include both the whole suburb (see Inventory), as well as those of the towns illustrated in each map.

## PART 3: OPEN SPACE PROVISION

### BOWEN MOUNTAIN

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Bowen Mountain	Total of eight reserves across the township. Six of which are local reserves and three district regional reserves. The largest reserve in the township is Devils Hole Creek Reserve which covers an area of approximately 321 Ha.	Bowen Mountain is surrounded by significant amounts of natural bushland reserves (Devils Hole Creek Reserve and Blue Mountains National Park). Setting diversity is limited and park embellishment is mostly very limited across the township with only two reserves for passive recreation located in centre of township including Bowen Mountain Park.	Bowen Mountain has the highest total amount of open space to existing population (246 Ha/1000 persons), however with respect to local reserves this ratio drops to 4.60 Ha/1000 persons.	Bowen Mountain Road is the only arterial road to township; access is therefore relatively car dependant. The two local reserves located centrally are more than 1km in distance from many residents, given the dispersed nature of township. In addition steep topography limits access and there are few if any footpaths on streets. Blue Mountains National Park and Devils Hole Creek Reserve most significant natural and recreational corridor in township.	Improved footpath access on main roads and a clear distinction of the settings and use of the two local reserves would assist in meeting wider needs.

Table OS.16 Summary of open space provision status by township

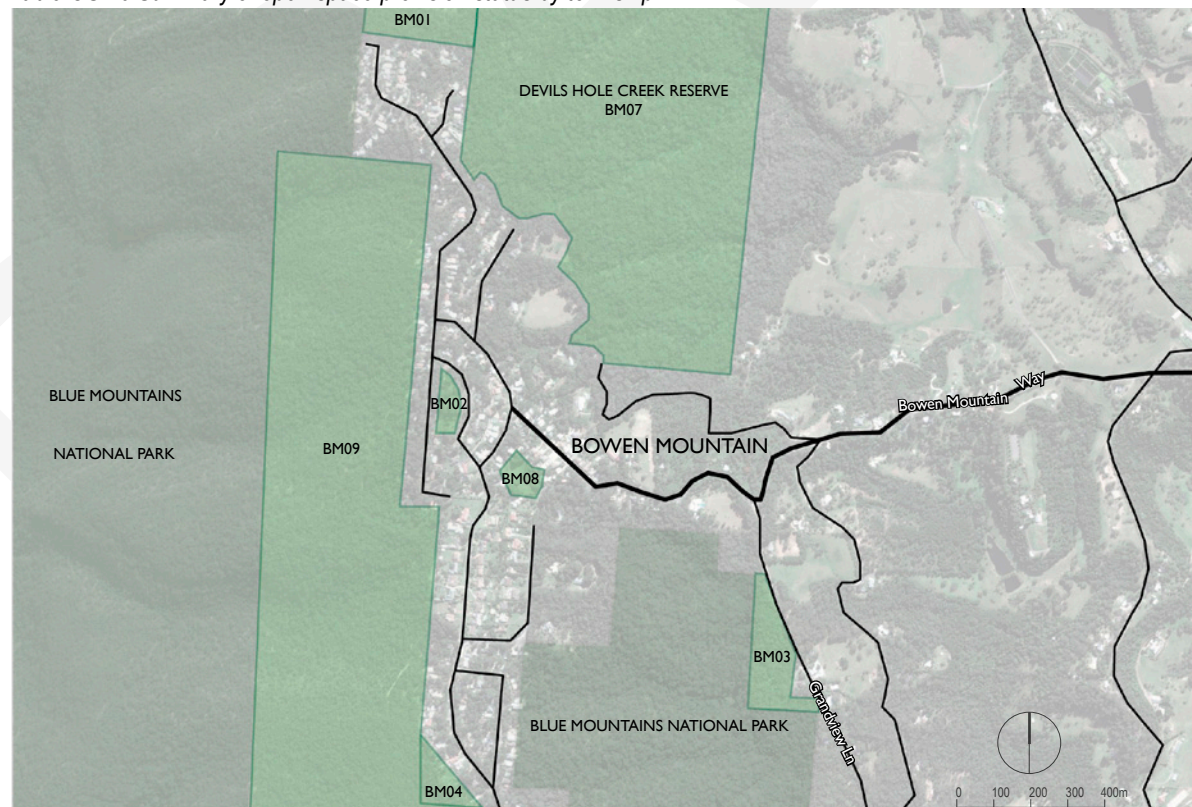


Figure OS.17 Township of Bowen Mountain showing accessibility and connectivity of Open Space

## EAST KURRAJONG

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
East Kurrajong	Total of two local reserves across the township, comprise Stanley Park, a 2 Ha soccer and cricket field, surrounded by trees adjoining East Kurrajong Road. Finally a 0.3 Ha area of open space at 96 Bull Ridge Road, an area of mown grass with no facilities or enhancements.	Distribution is low as there are only two open spaces in the township (Stanley Reserve and council owned parcel of land that is not developed). A distance of 2.6km separates the two reserves. The amenity of Stanley Park is not high, although the surrounding tree canopy is significant.	East Kurrajong has a low total amount of open space to existing population (1.20 Ha/1000 persons), although the population is highly dispersed.	The two reserves are located at distance from the principal population centre of East Kurrajong.	Consultation with the local community should consider whether enhancement of Stanley Park to include better play and passive recreation amenity would meet needs rather than enhancing Reserve EK02.



Figure OS.18 Township of East Kurrajong showing accessibility and connectivity of Open Space



**EBENEZER (INCLUDING SACKVILLE)**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Ebenezer (including its associated neighbourhood of Sackville)	Total of seven reserves across the township. Three local reserves, four district and one regional reserve.	Distribution is uneven with the majority of reserves located along the Hawkesbury River (Kent Beach, Charles Kemp Recreation Reserve and Churchills Wharf Reserve). This open space is mostly bush with tracks or open rough ground and little or no embellishment or level kickabout space.	Ebenezer has one of the lowest total populations of all the townships. However, it has a large total amount of open space to existing population (44.23 Ha/1000 persons).	Accessibility and connectivity to reserves is limited to arterial roads and Hawkesbury River, with no continuous path systems to connect them.	While most properties in this area are large in land area providing private recreation opportunity, publicly accessible linkages of riverfront reserves would enhance visitor experience. Consultation with the local community would elicit whether a level and mown kickabout area would be needed.

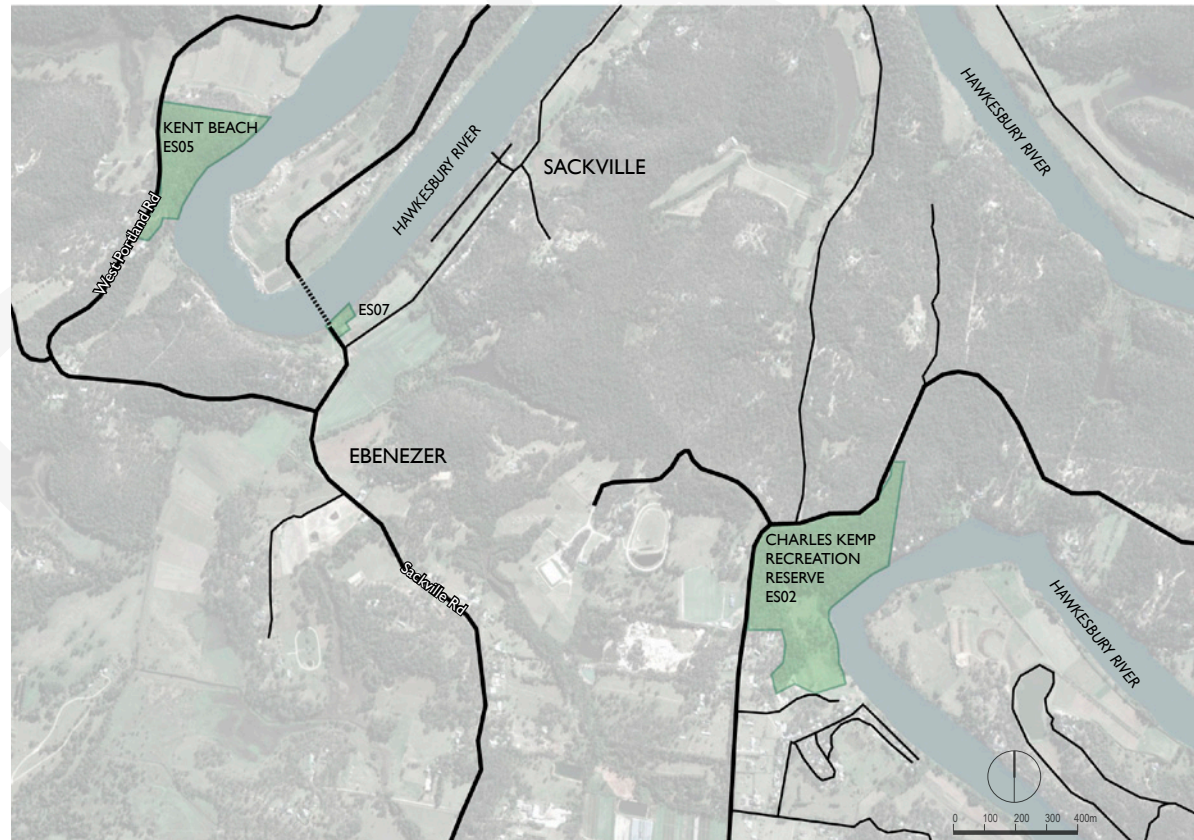


Figure OS.19 Township of Ebenezer showing accessibility and connectivity of Open Space



## FREEMANS REACH

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Freemans Reach	Total of eight reserves across the township. Two of which are local reserves, four district and two regional reserves.	Reserves are dispersed broadly across the township. The main reserve in centre of township is Freemans Reach Reserve which contains bushland, two tennis courts and a small single lot playground on Panorama Crescent. Other reserves in the suburb include Breakaway Park, Streeton Lookout, Glossodia Park, Macquarie Park and Bushells Lagoon. Hawkesbury High School contains a sports field and three multi-use courts.	The suburb of Freemans Reach has a large amount of open space to existing population (44.82 Ha/1000 persons). However the township has two reserves neither of which offer kickabout space.	Kurmond Road is the main arterial road that bisects the township. Therefore access is predominantly car dependant.	The township of Freemans Reach offers limited recreational diversity. Consultation with the local community and long term planning might include discussion on extended recreational partnerships with the school for both passive and active recreation.

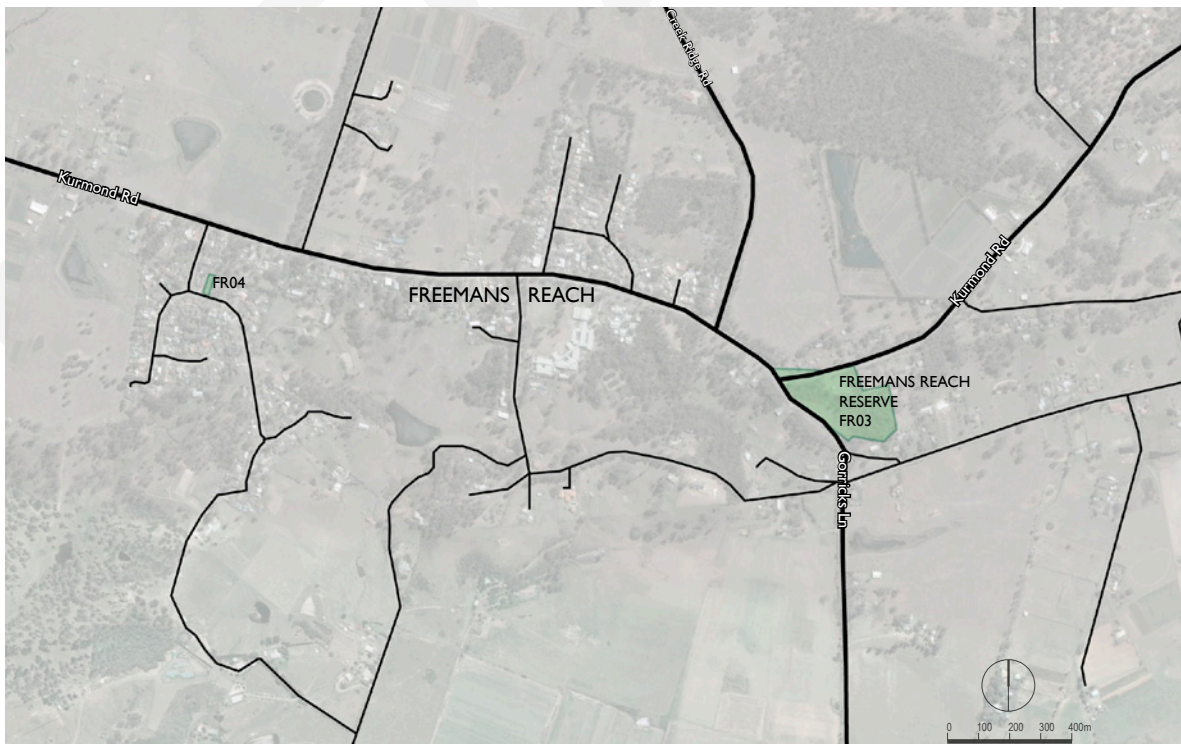


Figure OS.20 Township of Freemans Reach showing accessibility and connectivity of Open Space

**GLOSSODIA**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Glossodia	Total of nine reserves across the township of Glossodia. Seven of which are local reserves and two regional reserves.	Reserves are distributed unevenly across the township. Woodbury Reserve is the main reserve in centre of township. At 19 Ha in size it offers a wide range of passive and active recreation with sports fields, ponds, play, trails and bush. The 0.5 Ha reserve in Golden Valley Drive is unembellished. Other small reserves many being only one house lot in size offer limited recreational diversity. Other reserves are scattered throughout the township (Boundary Road Reserve).	Medium to high amount of overall open space to existing population in Glossodia across the suburb and in the town (8.42 Ha/1000 persons).	Woodbury Reserve is well located at the heart of the township and adjoining the public school. Other reserves are very scattered and the absence of footpaths or many roads makes access difficult except by car.	Woodbury Reserve provides a large, diverse and well embellished recreational resource for the local community. However the numerous other reserves offer limited opportunity other than play for smaller children with limited kickabout.

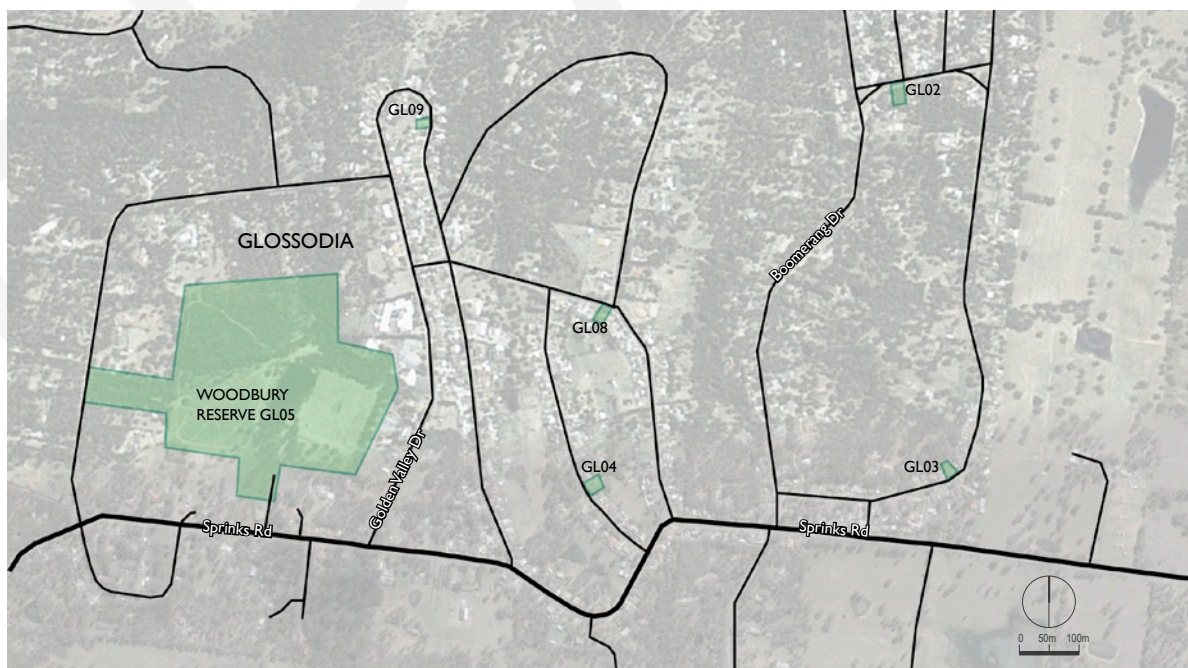


Figure OS.21 Township of Glossodia showing accessibility and connectivity of Open Space

**GROSE VALE (INCLUDING YARRAMUNDI AND GROSE WOLD)**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Grose Vale (including its associated neighbourhood of Yarramundi and Grose Wold)	Total of nine reserves across the township. Seven of which are local reserves and two regional reserves. Only one reserve lies in the township of Grose Vale itself while the remainder lie in the Yarramundi locality on Riverside Drive.	Distribution is highly dispersed and diversity very limited.	Grose Vale has a large amount of open space to existing population (35.71 Ha/1000 persons) across the suburb. However there is only one reserve close to the settlement of Grose Vale at Grose Vale Road.	The population of this suburb is highly dispersed, mostly on large properties. There are no reserves in the village of Grose Vale.	In general the suburb and the town of Grose Vale is not well provided for in terms of local parks. The multiplicity of small reserves with the embellishment in Yarramundi requires review.

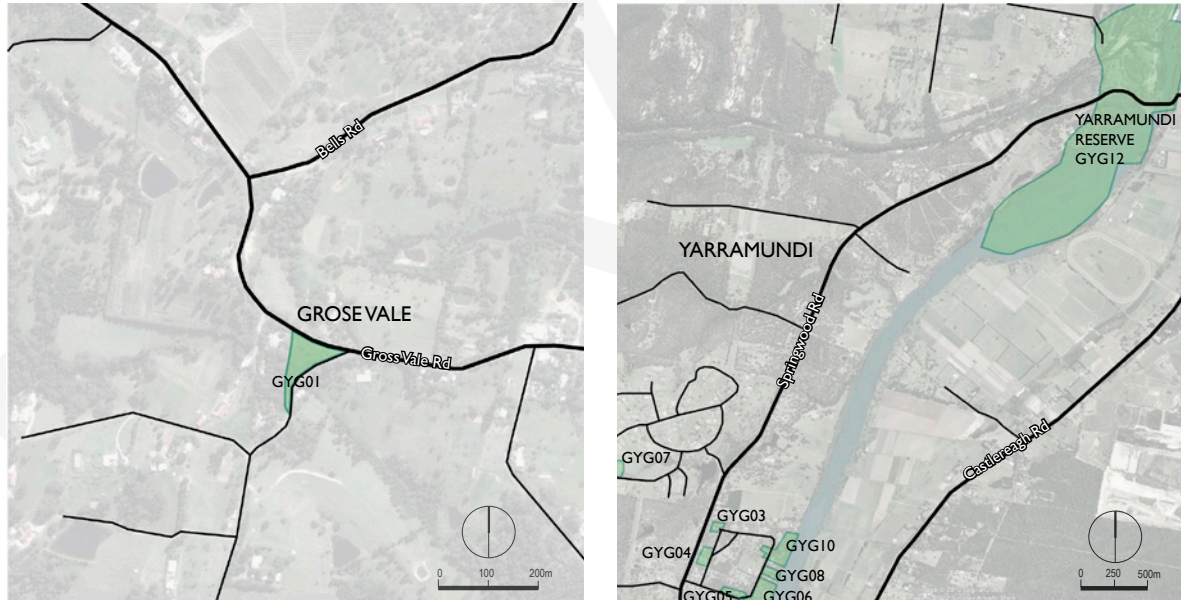


Figure OS.22 Township of Grose Vale showing accessibility and connectivity of Open Space



**KURMOND**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Kurmond	Total of two local reserves across the township. Jacqueline Place Reserve comprises steep ground at the end of a cul-de-sac with trees and rough ground with no facilities. There is also a reserve of bushland fronting Bells Line of Road.	There is very limited open space distribution or diversity in Kurmond.	Kurmond has one of the lowest existing open space to existing populations in the Hawkesbury (0.65 Ha/1000 persons) yet the township has a reasonably concentrated population.	The two reserves are connected by a path but other than direct access to the reserve fronting Bells Line of Road, the topography and cul-de-sac nature of these reserves provides limited accessibility.	The residents of Kurmond would appear to have little of if any access to structured recreation in the township, although Kurmond Public School has one playing field and a multi-use court.



Figure OS.23 Township of Kurmond showing accessibility and connectivity of Open Space



KURRAJONG					
TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Kurrajong	Total of eight reserves across the suburb of Kurrajong. Five of which are local reserves and three district reserves. There are four reserves within or close to the township of which McMahon's Park and Matherson Park are the largest, the former is a sports park including athletics and the latter bushland.	The township enjoys a broad diversity of passive and active recreation from its four reserves.	Kurrajong suburb has a medium to high amount of overall open space to existing population (16.34 Ha/1000 persons) and the township has significant larger reserves for its population.	Access to Memorial Park is excellent being located opposite shops. McMahon's Park is within 400 metres of the town centre. Matherson Park is less than a kilometre away.	The Kurrajong township is reasonably well provided for with diverse recreational facilities, particularly when compared with other townships.

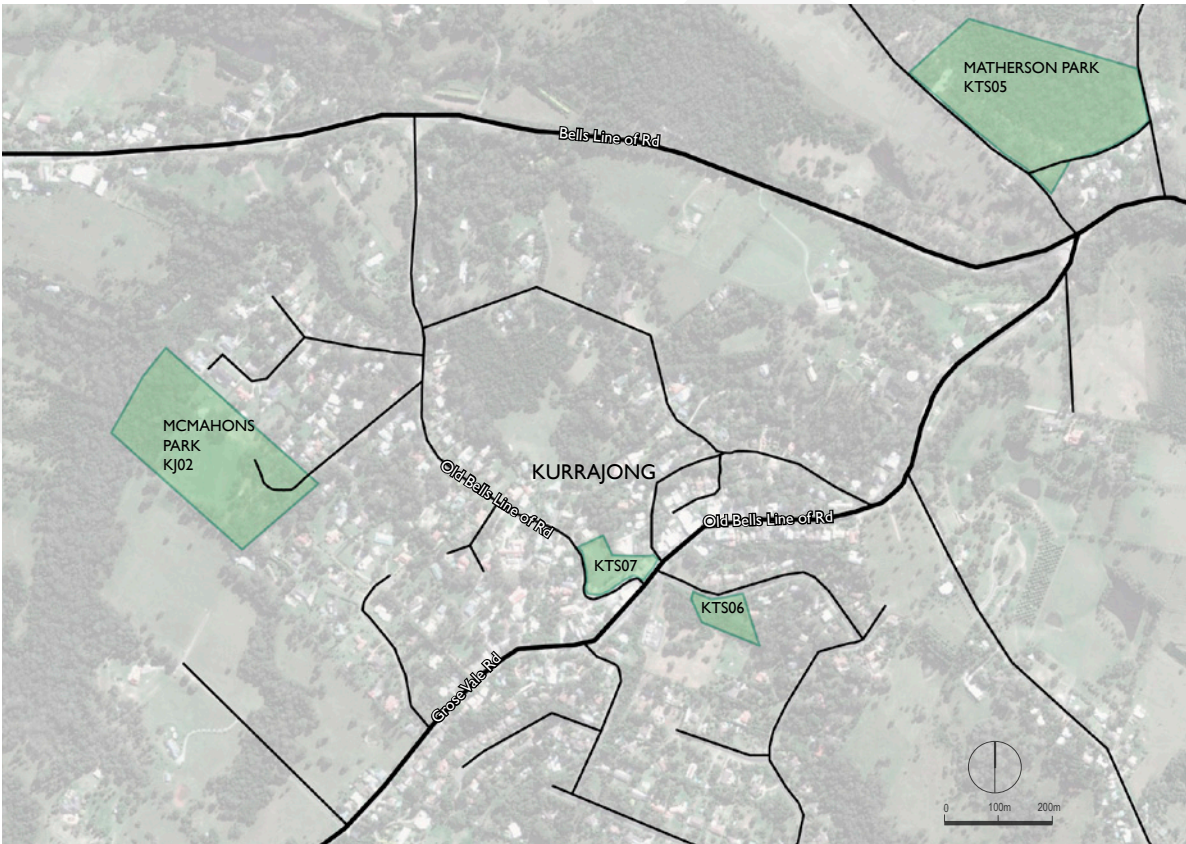


Figure OS.24 Township of Kurrajong showing accessibility and connectivity of Open Space

**KURRAJONG HEIGHTS (INCLUDING BILPIN)**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Kurrajong Heights (including its associated neighbourhood of Bilpin)	Total of thirteen reserves across the suburb. Eight of which are local reserves, four district and one regional reserve. In the township there are five reserves of which Kurrajong Heights Park is the largest. The four other reserves are small with little or no embellishment.	While there are several reserves distributed around the town, the diversity of opportunity is limited.	Kurrajong Heights suburb has a high total amount of open space to existing population (39.03 Ha/1000 persons). However, local open space suitable for day to day needs is more limited for the population.	Kurrajong Heights Park is readily accessed by Bells Line of Road. Most of the other smaller reserves can only be accessed through cul-de-sacs.	The tracks throughout Kurrajong Heights provide for adventure play but no other reserves offer space for kickabout. Of these only the reserve in Shane Place is clear of vegetation.



Figure OS.25 Township of Kurrajong Heights showing accessibility and connectivity of Open Space



### McGRATHS HILL

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
McGraths Hill	Total of six local reserves across the suburb with an average reserve size of 0.45 Ha, however many are linear in form, effectively roadside nature strips. Colbee Park lies in the Oakville suburb.	McGraths Hill has a low diversity of open space which consisting of passive parklands of limited embellishment. Colbee Park is only significant reserve in locality.	McGraths Hill has a low total amount of open space to existing population (1.10 Ha/1000 persons).	McGraths Hill is easily accessible (few residences more than 500m away from a park). However, there are few footpaths on streets and cul-de-sacs limit accessibility with many reserves not easily visible from streets.	Much of the open space in the township is of limited opportunity being either roadside planting or unembellished reserves within the residential area, with bicycle and walking access with few paths. Colbee Park is large and with much future potential, it presently lacks amenity and structure.

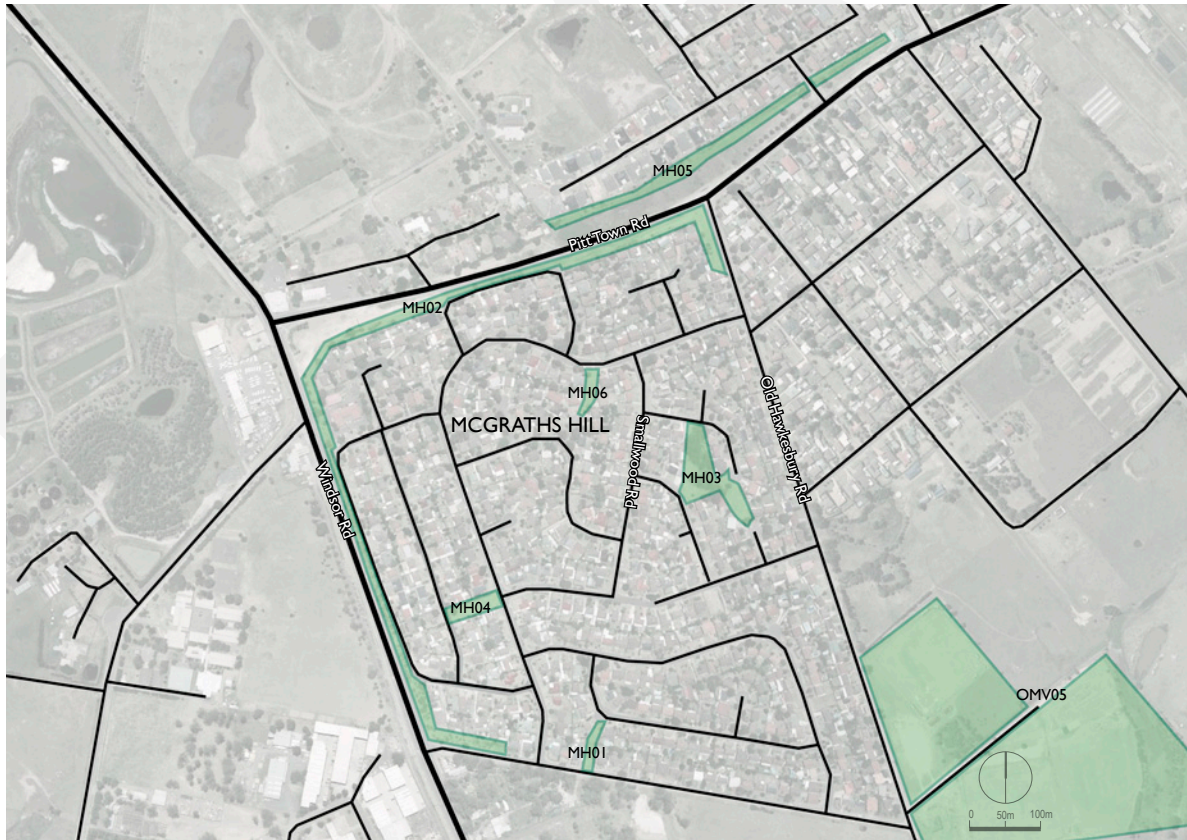


Figure OS.26 Township of McGraths Hill showing accessibility and connectivity of Open Space

**NORTH RICHMOND**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
North Richmond	Total of sixteen reserves across the suburb of which the majority lie in the township. Eleven of which are local reserves and five are district reserves. The average size of reserves within North Richmond is 3.32 Ha.	Distribution of open space is wide spread and combines passive and active recreation, the latter provided extensively predominantly at Peel Park, Turnbull Oval and North Richmond Park. River foreshore access is provided at Hawkesbury Park.	Medium to high amount of overall open space to existing population in North Richmond (11.72 Ha/1000 persons).	Open space in North Richmond is predominantly located along the periphery of the township along Hawkesbury River and Redbank Creek. Most residences lie within a 400m distance of the town's major parks.	For the most part North Richmond is well served with recreational opportunity, despite the major parks lying on the town periphery. Physical access to the water on the River foreshore is limited.

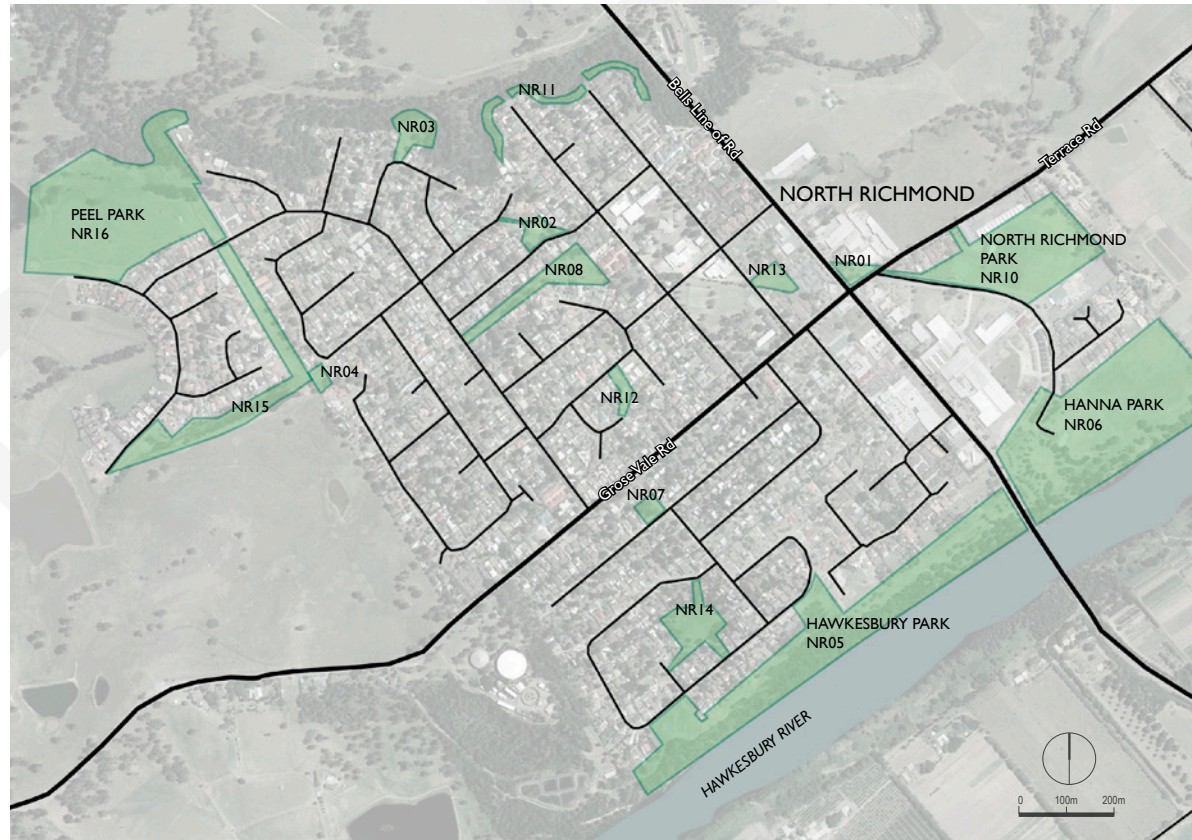


Figure OS.27 Township of North Richmond showing accessibility and connectivity of Open Space



**OAKVILLE (INCLUDING VINEYARD AND MULGRAVE)**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Oakville (including its associated neighbourhoods of Vineyard and Mulgrave)	Total of five across the suburb and township. Two of which are local reserves and three are district reserves. Colbee Park is most significant reserve in area by way of facilities and development.	Distribution is highly scattered and diversity is very limited with provision being almost entirely sports based, excepting the bushland part of Vineyard Park.	Oakville has a open space to existing population ratio of 4.79 Ha/1000 persons, however local open space provision especially for passive recreation is very low.	Access to reserves in these townships is almost entirely independent given the highly dispersed open space. Most residents would live more than 2km's from reserves.	With the exception of the nearby Scheyville National Park, open space in these townships is very limited, with sports reserves also lacking amenity.



Figure OS.28 Township of Oakville showing accessibility and connectivity of Open Space

**PITT TOWN AND DISTRICT**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Pitt Town and District	Total six reserves across the suburb. Three of which are local reserves and three are district reserves. There are only two reserves within the township being War Memorial Park and Brinsley Park (sports).	While both reserves in the town cover active and passive recreation, facilities are limited and amenity is poor.	Pitt Town and District has a relatively moderate overall open space to existing population (4.84 Ha/1000 persons).	Poor reserves lie well within 400 metres of residences in town, however virtually none of the town's streets have dedicated footpaths.	Need for amenity and provision of some dedicated footpaths and cycle paths.

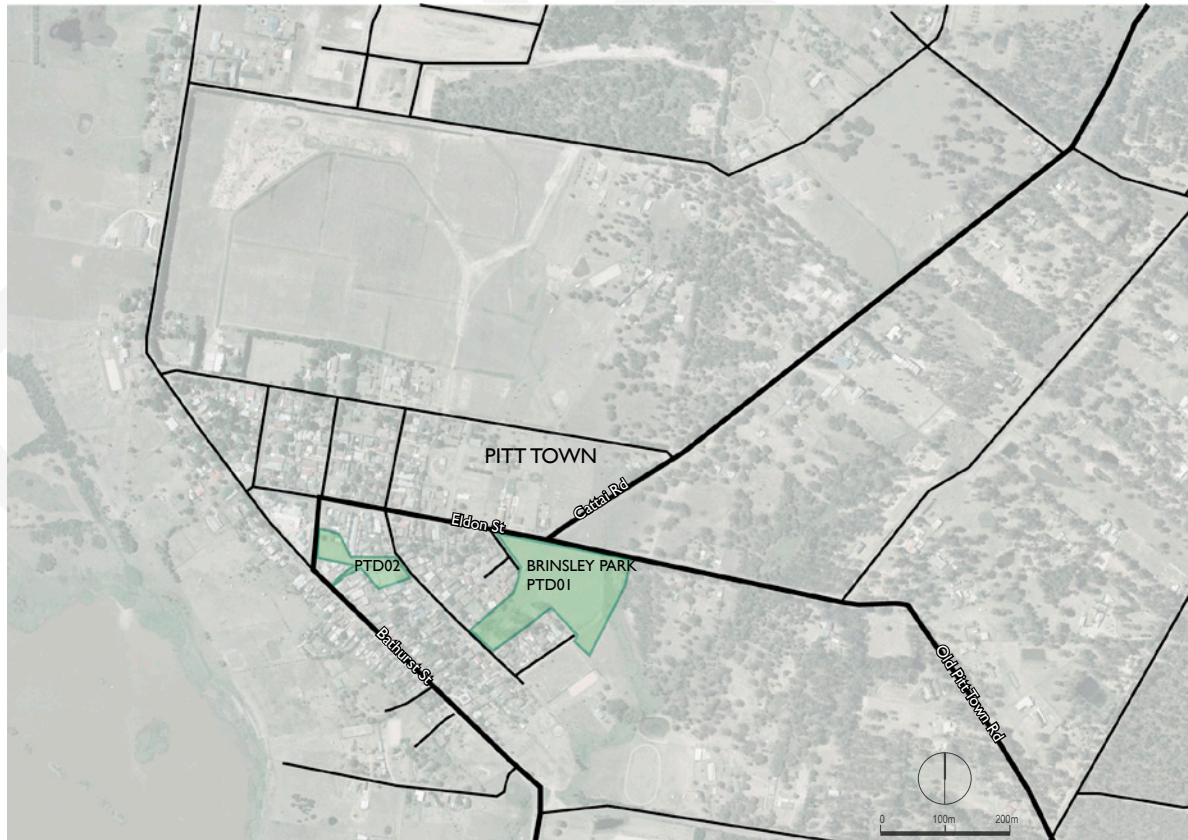


Figure OS.29 Township of Pitt Town and District showing accessibility and connectivity of Open Space



### RICHMOND (INCLUDING HOBARTVILLE)

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Richmond (including its associated neighbourhood of Hobartville)	Total of 30 reserves across the suburb (Richmond and District 16, Hobartville 14). Richmond and District has larger reserves on average with four greater than 10 Ha in size. In contrast, Hobartville has only an average reserve size of 1.21 Ha and many of these are linear in form being stormwater easements.	Richmond and District has several regional parks (including Ham Common, The Showgrounds, Bensons Lane Sporting Complex, and Richmond Park). Distribution of open space is widespread and balanced between passive recreation and outdoor sports. Open space in Hobartville is distributed evenly and concentrated within centre of the township. Diversity is balanced between passive recreation and outdoor sports.	High amount of overall open space to existing population in Richmond and District (32.44 Ha/1000 persons). Hobartville has relatively high amount of overall open space to existing population (6.38 Ha/1000 persons).	Hawkesbury Valley Way is a major barrier that divides Richmond in the north and Hobartville in the south. Within Richmond town, Richmond Park is the major reserve while many residents to northeast and southwest of the town lie more than 400m from any reserve. Open Space within Hobartville is easily accessible (few residences more than 400m away from a park). Ham Common provides link between Richmond and Windsor.	For the most part residents in Richmond and Hobartville are reasonably well serviced by open space, particularly for sport. However gaps in Richmond town make access less easy for some. The extensive stormwater easements in Hobartville lack either recreation opportunity or natural values.



Figure OS.30 Township of Richmond showing accessibility and connectivity of Open Space

**WILBERFORCE**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Wilberforce	Total of ten reserves across the suburb. Five of which are local reserves, four are district and one is a regional reserve. There are four reserves within the township and the main sports reserve (Woodlands Park) lies 2km's to the west of the town.	While recent upgrades to the historic Wilberforce Park have extended recreational opportunity, the other 3 parks are largely unembellished and offer limited diversity or opportunity.	High amount of overall open space to existing population in Wilberforce (18.33 Ha/1000 persons in the suburb). In the town, Wilberforce Park provides most useable open space.	Residents on the peripheries of the town lie outside 500m from Wilberforce and the steep topography and absence of dedicated street footpaths limits accessibility to local open space.	The town relies largely on Wilberforce for its local open space while there is limited level kickabout space available.



Figure OS.31 Township of Wilberforce showing accessibility and connectivity of Open Space



**WINDSOR (INCLUDING SOUTH WINDSOR AND BLIGH PARK)**

TOWNSHIPS	QUANTUM AND SIZE	DISTRIBUTION AND DIVERSITY	RATIO TO POPULATION	ACCESSIBILITY/ CONNECTIVITY	CONCLUSIONS AND IMPLICATIONS
Windsor (including its associated neighbourhoods of South Windsor and Bligh Park)	Total of 41 reserves across the suburb (Windsor 11, South Windsor 18 and Bligh Park 12). Windsor has the second largest average reserve size in LGA of 3.46 Ha. South Windsor has an even distribution of reserve sizes across the township with an average size of 1.63 Ha. Similarly, Bligh Park has an average park size of 1.78 Ha. However, many of these reserves are linear in nature.	Windsor is well serviced with a diversity of open space settings including passive parklands, outdoor sports, conservation and heritage and foreshore reserves. South Windsor has an even distribution of passive parklands and outdoor sports. Bligh Park has a series of connected reserves that distributed widely across the township.	Windsor has a low population but high total amount of open space to existing population (22.81 Ha/1000 persons). South Windsor's provision of open space to existing population is moderate (5.07 Ha/1000 persons). Bligh Park has one of the highest population for LGA but a lower provision of open space to existing population (3.29 Ha/1000 persons).	Open space through Windsor and South Windsor is widespread and does not appear as part of a wider park network nor is the town or reserves well connected to the River. Access is therefore relatively car-dependent. Open space connectivity from South Windsor to Bligh Park is concentrated and presents greater opportunity for walkability.	There are many significant reserves within Windsor but the absence of recreational links between them and to the River limits opportunities for a greater recreation spectrum in the town.



Figure OS.31 Township of Windsor showing accessibility and connectivity of Open Space

## PART 3: OPEN SPACE PROVISION

### CONCLUSIONS FROM ANALYSIS BY TOWN

From the foregoing analysis the following are the key findings and conclusions on open space and recreation facility provision across the LGA :

- while there are many high quality well-used parks in the City, open space provision across the LGA is highly random and in many cases bears little relationship to the quantum relative population density, accessibility, need based on current or projected demographics or sustainability
- many reserves classified in the Open Space Inventory as Community Land and zoned for open space have minimal existing or potential recreational value (eg. road reserves, remote open space at significant distance from any current or potential population)
- open space provision and recreation opportunity is particularly inconsistent in the rural townships of the City, with a notable lack of public open space close to amenities such as shops and a dearth of even small level kickabout space or higher amenity passive space
- where there are clear deficits in open space, especially in the more rural towns, partnerships with other agencies such as schools and NPWS become particularly important in closing the local day-to-day recreation provision gap
- the Hawkesbury River and its tributaries are a major recreational resource that are as yet not extensively exploited
- the remarkable and striking scenic qualities of the Hawkesbury landscape are major assets for the local community and visitors alike, they are however not well integrated into the open space network and tourism planning
- with some local notable exceptions (eg. Ham Common) walking and cycling are not well provided for in the City, with many residential communities having no dedicated footpaths on streets nor dedicated cycle paths on or off street
- topography and flooding are significant if not insurmountable constraints on enhancement and use of open space across the City.

As identified in the introduction to this section the development of a detailed work plan for each township arising from the ROSS and the conclusions drawn above, would benefit from consultation with each community as the plan is developed.

## PART 3: OPEN SPACE PROVISION

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### SUMMARY OF ALL OPEN SPACE PROVISION ISSUES

From the analysis of the open space provision resource in this section the following conclusions can be drawn:

#### *Quantum, Distribution and Accessibility*

- high percentage of open space provision, per 1000 persons, compared to much of Sydney but accessibility is predominantly made by private vehicle
- very uneven distribution of public open space across the entire LGA, with 63% comprised of local open space and 22% of this less than 0.2Ha in size
- newer suburbs have greater provision of open space but these are often retention basins or stormwater channels and little used by residents or visitors
- walking opportunities and links to destination points are not consistent in towns (evaluating footpath quality and quality will be important here)
- non-road based and safer links between towns and to/along river are few and many road edges are not cycle-safe
- open space provision in rural towns is highly variable.

#### *Settings*

- there is a high level of sports provision which matches high current demand
- passive parklands have a limited range of layouts and offer little in the way of amenities (many reserves are flood prone)
- play equipment is mostly generic in design requiring little imagination of the user
- Ham Common, Richmond Park and Wilberforce set new benchmarks for multi-functional open space that is popular and well used by both residents and visitors alike
- many medium and smaller parks have poor provision of amenity and do not encourage the visitor to stay due to lack of shade, planting, seating, etc
- the high natural values of the LGA are not well integrated into open space provision, especially in the flood plain (creeks, corridors, etc)
- large areas of grass are mown in open space across LGA, many in areas of limited current use.

#### *Recreation Opportunity*

- Recreation offer and diversity can be very limited in smaller towns
- growth in ageing population is not strategically addressed in open space
- whilst numerous sports grounds assist in meeting the large youth population's needs there is not a diversity of passive recreation on offer
- formal sports are predominantly limited to traditional codes at present,

## PART 3: OPEN SPACE PROVISION

however changing demographics suggest the need for a broader strategic plan for sport and increasing popularity of individual fitness recreation

- Hawkesbury River provides a great recreation opportunity that is not fully exploited (foreshore paths and access to water)
- the majority of the River foreshores and creeks are in private land ownership, limiting public access for recreation
- connection and partnerships between the major towns and National Parks is not fully realised
- there are no evident links with recreation and tourism taking more advantage of the river and its foreshores adjacent to town centres
- the landscape lends itself well to events based activities such as adventure sport, triathlon, water focused team events but there is limited safe opportunities to link/loop around main townships, rivers and creeks
- the major historic town's proximity to the river, such as at Windsor opens opportunities for exciting and different annual events such as the recently inaugurated International Sand Sculpture Competition.

### *Landscape Character*

- floodplain and surrounding escarpments are a major scenic asset not fully realised
- promotion of the Hawkesbury River and its landscape values is very limited, with poor visual access and little or no directional or interpretive signage
- a relationship of the landscape with the regions demography both historically with its rural agricultural background and the growing new population requires more local identity in open space design.

### **Implications for the ROSS**

From all of the foregoing analysis of existing open space provision in the Hawkesbury, the following implications for the ROSS can be drawn:

- while overall open space provision is high across the LGA, distribution and access constraints often limit capacity and usage
- current setting types and provision is not always relevant to the local demographic, requiring more integration and multi-using
- there is a need for higher level of connectivity (walking, cycling at a local level)
- the Hawkesbury River is a major recreational resource that is currently under-exploited
- the high quality natural environment of much of the Hawkesbury is a key to enhanced recreation opportunity
- partnerships with other agencies and private landowners will be critical to improving recreational and environmental connectivity.



## Part 4: Needs & Demands



*Howe Park viewing platform offers magnificent views across the Hawkesbury River and its associated river floodplain*



## PART 4: NEEDS & DEMANDS

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### INTRODUCTION

In this section a review and summary of available community consultation surveys previously carried out by Council are analysed to identify perceptions and expectations of the residents in the LGA with respect to open space and recreation issues.

This section evaluates the way forward for public open space in the Hawkesbury while considering both the available feedback of the community and the economy of the Hawkesbury and how the City is placed in the future within the Metropolitan Strategy.

Elements of this phase include:

- review of available community consultation results and identification of aspirations, themes and trends
- summary of the results of community consultation
- existing usage and participation patterns
- gap analysis.

This analysis seeks to establish current and future needs of the community both for local residents and visitors that will inform the Implementation Plan that follows.

### BACKGROUND DOCUMENTS AND DATA

Background data from previous community consultation or research on the needs and aspirations of the Hawkesbury community is minimal in relation to open space topics but documents that have informed the project include the following:

- Shaping Our Future: Hawkesbury Community Strategy Plan 2010-2030, March 2010
- Hawkesbury City Council Community Research, December 2009
- Hawkesbury City Council Community Research, September 2011
- Windsor Foreshore Parks Incorporating the Great River Walk POM, September 2009
- Hawkesbury City Council Recreation Plan, September 1991

Of the above-mentioned previous documents only the HCC Community Research Report (2009 and 2011) and the Windsor Foreshore Parks POM (2009) recorded results from community consultation.

Information gathered from the above sources and recorded in the following pages identify the concerns and aspirations of the members of the Hawkesbury community who took part in any of the consultation processes or surveys.

## PART 4: NEEDS & DEMANDS

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### CONSULTATION OUTCOMES

The Hawkesbury City Council Community Research (2009) conducted by Micromex Research surveyed community satisfaction across a number of criteria with a ranking from 1-50 (1 being ranked most important down to 50 ranked of least importance).

The key findings for importance and satisfaction in 50 services and facilities related to public open space showed the following community response:

- Value and protection of the Hawkesbury's heritage areas (6)
- Protection of bushland Open space and natural habitats (14)
- Parks and Reserves (35)
- Sporting and recreational facilities (47).

The community response in regard to satisfaction across the area of services and facilities supplied by Council and in descending order of importance stated the following areas they considered of most importance:

- road maintenance
- healthy and sustainable Hawkesbury River and waterways
- improving services and infrastructure (generally)
- lobbying State and Federal government for funding and improved service levels
- road safety
- engaging the community in making decisions
- stormwater management and re-use
- reducing energy consumption.

From the above items it would appear that from the 400 responses of the resident community surveyed they regard maintenance of services, the environment and sustainable practices the most important. In comparison with the 2007 survey, general satisfaction of Council's performance was higher.

In regard to what the community felt portrayed the character of the Hawkesbury LGA the rural lifestyle (1st) received 53% of the response with open spaces (6th at 10.3%) and the River (8th at 6.5%).

The 2011 community research also numbered 400 responses with the survey again based on the communities feelings about current and future services and facilities provided by Council but not specific to open space provision.

## PART 4: NEEDS & DEMANDS

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The 2011 survey linked directly to Council's Five Vision Statements from the Hawkesbury Community Strategy Plan with the following responses under those five headings and having the greatest performance gaps:

*Looking After People and Place:*

- road safety
- public toilets
- crime prevention
- emergency service for flood or fire response.

*Caring for Our Environment:*

- healthy and sustainable Hawkesbury River and waterways
- reducing energy consumption.

*Linking the Hawkesbury:*

- road maintenance
- supporting a wider communications network ie. mobile coverage
- train services.

*Supporting Business and Local Jobs:*

- helping to create thriving town centres
- promoting local employment opportunities
- supporting training and career opportunities.

*Shaping Our Future Together:*

- improving services and infrastructure (generally)
- lobbying State and Federal Government for funding and improved service levels
- engaging the community in making decisions
- providing transparent accountable and respected leadership
- valuing and protecting the Hawkesbury's heritage areas.

Although the survey was directed more towards service levels and infrastructure and not directly related to open space needs the responses received gave indication of how the community felt towards its provision.

Overall, the survey responses showed that although parks and reserves, sporting and recreational facilities, public swimming pools and playgrounds were considered of high importance the community were generally satisfied with how Council managed them.

### **The Great River Walk**

In 2009, the Windsor Foreshore Parks incorporating the Great River Walk POM was



## PART 4: NEEDS & DEMANDS

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prepared for Council, the preparation for which included a Community Workshop attended by 15 community representatives. Although this number is too low to be considered a representative of the broader community perspective, the following general responses to the Hawkesbury River and its foreshores were recorded:

- additional access to foreshore could have detrimental environmental impacts
- existing views and character of the river should be protected
- additional foreshore paths may cause erosion of river banks and be unsafe during flood events
- the river was important as a historic connection to the heritage towns
- universal access and improved exclusive cycle/pedestrian paths for safer access and linkages between parks and destination points
- anti-social behaviour in foreshore reserves identified as a problem eg. drinking alcohol
- maintenance of new infrastructure would place added pressure on Council resources
- roads and parking although necessary were seen as having significant impact on the foreshore areas.

It is clear from these previous community responses that although there is great value placed on the open space assets of the Hawkesbury LGA the community are satisfied with their needs towards provision of open space and demand for improvement is in the majority directed towards general maintenance and safety.

Given the generous amount of public open space available in the Hawkesbury LGA, including the unembellished natural areas managed by Council and the surrounding extensive areas of National Park the community do not feel access to open space is at risk.

### GAP ANALYSIS

Gap Analysis is the difference between the community's expressed demand and the needs as assessed through wider analysis. Local Councils frequently use this information to determine what additional facilities or resources it may need to supply to bridge this gap.

With the relatively limited current data available on the specific responses by the community concerning its perspectives on and aspirations for open space and recreation in the LGA, any conclusions drawn must necessarily depend on a higher level of commentary and from observation from Council staff, those consulted during the ROSS and the consultant team's analysis. Accordingly basic gap analysis would indicate the need for:

- better access to the river through clearer wayfinding and path linkages
- improved promotion of river uses linking to the major townships
- more extensive and safer (exclusive) cycle/pedestrian connections between townships
- focus on upgrading existing district and regional parks in the townships

## PART 4: NEEDS & DEMANDS

- focus maintenance resources on parks and reserves within the townships where most use of public open space is found
- ensure regional and district open space is multi-functional in design that will be a draw card for outlying residents and visitors to the main towns
- upgrading of regional sports grounds to improve spectators facilities
- review of sport management and maintenance to ensure liability is covered adequately.

On the face of it, the community surveys to-date might suggest that the status quo of open space in the LGA is satisfactory when compared to higher priorities such as roads. Thus prima facie Council should not need to focus on significant future enhancement and expenditure.

In reality, care needs to be exercised in drawing such conclusions as:

- the survey is of a global nature and does not explore open space provision in any detail
- data on actual usage is limited, thereby limiting understanding on whether needs are being met
- raising the profile of open space can and will do much to improve healthy active lifestyles which are often poorest in rural areas
- a more strategic approach to open space planning will assist Council in better targeting expenditure
- open space particularly in the case of Hawkesbury has significant value in tourism generation and associated benefits to the local economy.

### SUMMARY OF NEEDS AND DEMANDS ANALYSIS

Based on information gathered regarding the Needs and Demands of Hawkesbury City the following analysis has been found:

#### *Demands*

- broader community places greater emphasis on environmental conservation than on recreation as a priority for Council action
- very limited data available from community on their demands for open space
- high priorities are the health of the river, a rural lifestyle and the regions heritage and history
- low priorities are parks and reserves and sporting facilities and probably due to the perceived abundance of available open space
- the river and foreshores not immediately viewed as a major asset to the region.

## PART 4: NEEDS & DEMANDS

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### *Needs and Opportunities*

- greater level of linkages and accessibility (local and district)
- river and foreshore access and links to open up use of a major asset
- foster partnership with the NSW NPWS to open opportunity for the major towns to become the doorway into the National Parks
- review of sports strategy to open up new opportunities for future changes in sports trends
- increase of multi-functional recreation and open space in the smaller towns
- pursue regional sports/events/recreation to improve local tourism economy.

In general, with a community that does not consider open space to be a major issue, initial emphasis would be an approach based on 'making more of what we've got'. A longer term strategic approach that addresses bigger picture moves may assist the community in elevating the importance of open space and recreation opportunities as drivers of an enhanced and local and regional economy.

### **Implications for the ROSS**

The core implications for the ROSS from the foregoing Needs and Demands Analysis are:

- the need for more targeted surveys to elicit clearer understanding of open space needs and satisfaction
- the importance of raising the profile and value of open space to the community as a critical diversion of the local economic health of the Hawkesbury.
- the need to promote the waterways recreational usage as a key to improving river health (ie. increased awareness of environmental status by virtue of more people seeing and using the river).

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Part 5: Objectives



*Shared access paths for pedestrians and cyclists provides a safer connectivity between townships than using the faster moving traffic on the main roads. the surface of paths, however, need to be suitable to all user types including the disabled*



## PART 5: OBJECTIVES

### INTRODUCTION

This section draws on the findings of Parts 1-4 of the ROSS to set the framework for the Implementation Plan that follows. It establishes the direction and goals for the City's future provision and management of open space and recreation and includes the following:

- Five Vision Statements: the vision for the City's future as expressed in the Five Vision Statements of the Community Strategic Plan forms the framework for the Objectives of the ROSS
- Objectives: these statements of intent (defined by the drive of the Vision and act as the reference point for the development of the Open Space Structure Plan and act as the anchor for any subsequent refinements required of the Implementation Plan when future circumstances change the context of the ROSS over time
- Open Space Structure Plan: this mapped component of the document is the illustrated expression of the Vision and Objectives. It summarises the main themes and directions of the ROSS at a Citywide level and informs the more detailed Implementation Plan that follows.

### FIVE VISION STATEMENTS OF THE COMMUNITY STRATEGIC PLAN

To ensure that the Objectives of the ROSS are compatible with the community's wider vision and aspirations for the future of the City of Hawkesbury, the Five Vision Statements of the Community Strategic Plan 2011 are set out below:

#### *VS1 - Looking After People and Place*

a community in which the area's character is preserved and lifestyle choices are provided with sustainable planned, well serviced development, within strongly connected, safe and friendly neighbourhoods

#### *VS2 - Caring for Our Environment*

a community dedicated to minimising its ecological footprint, enjoying a clean river and an environment that is nurtured, healthy, protected and provides opportunities for its sustainable use

#### *VS3 - Linking The Hawkesbury*

a community which is provided with facilities and services efficiently linked by well maintained roads and accessible and integrated transport and communication systems which also connect surrounding regions

#### *VS4 - Supporting Business and Local Jobs*

new and existing industries which provide opportunities for a range of local employment and training options, complemented by thriving town centres

#### *VS5 - Shaping Our Future Together*

an independent, strong and engaged community, with a respected leadership which provides for the future needs of its people in a sustainable and financially responsible manner.

## PART 5: OBJECTIVES

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### OBJECTIVES

Set out below are the Objectives for the ROSS, under five themes that are also referenced to the relevant Five Vision Statements of the Community Strategic Plan 2011.

#### Recreation and Leisure (VS1, VS3 and VS4)

- provide a sustainable open space system that equitably reflects population scale, distribution and demography across the Hawkesbury LGA
- maintain a recreation framework that integrates and balances complimentary passive and active recreation opportunities
- incorporate flexibility for multiple uses in parks and reserves
- position the Hawkesbury River and its tributaries and creeks at the heart of the City's waterways and foreshore recreation network
- promote healthy active lifestyles through readily accessed open space linked to home, work, school, transport and shops
- offer recreation opportunities for play and youth that reflect all ages and interests
- integrate open space resources with all related tourism strategies (eg. river use, access to National Parks, Farm Gate program, self-guided tours, etc)
- foster an event-based recreation program as a metropolitan, regional and national drawcard.

#### Access and Circulation (VS3)

- provide a recreation network that encourages walking and cycling within and between all towns and rural areas across the City
- seek optimal day-to-day access to public open space for all residents (ie. within 400-500 metres in towns)
- identify the Hawkesbury River as the hub and principal focus of the City's walking network
- integrate the City's cycle network into a recreation and transport system, both on and off road
- optimise opportunities for disability access to all parks and reserves
- enable simple wayfinding and provide accessible information and interpretation.

#### Cultural Heritage and Natural Environment (VS2 and VS5)

- manage the City's open spaces as a primary component of the ecological systems network across the LGA
- conserve, integrate and interpret all heritage items that lie within public open space
- enhance natural values, habitat connectivity and viability in all recreation corridors
- protect all major open space assets by location or adaptation to minimise flood damage across the Hawkesbury floodplain
- adapt parks to meet the potential impacts of climate change (eg. flood, high temperatures, storm)
- tell the story of Aboriginal custodianship, European first contact and non-European heritage as an integrated narrative
- express the City's rich Aboriginal and non-Aboriginal heritage through park design
- employ Water Sensitive Design Principles (WSUD) to stormwater in all open spaces.

## PART 5: OBJECTIVES

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### **Landscape Character and Identity (VS1)**

- establish and maintain the open space character that reflects the particulars of each urban township or rural locality
- draw on the City's rich history and natural environment in creating local identity for each park
- identify, enhance and conserve all significant views and vistas across the City from open space
- enhance basic amenity in all parks (eg. seating, paths, shade, shelter, play)
- employ public art to express the identity and culture of the City.

### **Management and Maintenance (VS1 and VS5)**

- manage the City's open space system in a manner that meets Quadruple Bottom Line values (eg. economic, cultural, social and environmental)
- operate Service Level Agreements for maintenance to meet the structure proposed in the ROSS
- administer sports in the City to optimise recreation opportunity, involvement of community and provide equity of opportunity
- foster partnerships with all other agencies related to recreation and open space provision (eg. universities, tourism agencies, Heart of Hawkesbury, adjoining Councils, NPWS, YMCA, etc)
- develop and maintain parks to meet the principles of Crime Prevention Through Environmental Design (CPTED)
- integrate community participation in all planning and design of the City's open spaces
- promote and foster volunteers in the management and delivery of active and passive recreation across the City.



Part 6: Open Space Structure Plan



Information board displaying the work of Sir Arthur Streeton who painted landscapes of the Hawkesbury during his visit to the area in 1896

## PART 6: OPEN SPACE STRUCTURE PLAN

### OPEN SPACE STRUCTURE PLAN

In realising the Objectives for the City's open space, the Structure Plan and the Concept realised illustrated overleaf (Refer to Figure OB.01) form the basic framework of the ROSS. Key elements of the Structure Plan (including those not illustrated but central to its realisation) include:

#### The River Experience

The Hawkesbury River forms an integral part of the total recreation experience across the City, acting as a recreation corridor, a key to the natural systems health of the region and the principal source of water based recreation.

The River Experience seeks to greatly enhance this role through the creation of a walking loop on both sides of the river with crossings at Windsor and North Richmond. Integral to this experience is enhanced access to the foreshore and water at key points where road easements and other public access ways exist, as are also the improvement of the foreshore natural habitat.

The river based connections are also intended to link with the extensive creek system to enhance the natural values of the floodplain and escarpments and act as recreation corridors where these relate to publicly owned land.

Comprehensive consultation with key private landowners, particularly those with river foreshore and creek landholdings is inherent in the delivery of these objectives.

#### The Macquarie Towns Loop

Four of the five historically significant Macquarie Towns centre around the Hawkesbury River and all offer a part in the story of pre-settlement land uses, early European settlement, their role in feeding the colony, early confrontation with Aboriginal communities, the impacts of flooding and subsequent development of agriculture in the region.

The relative isolation of the smaller Macquarie Towns (Wilberforce and Pitt Town) from Richmond and Windsor can be addressed by placing them as punctuation points in a recreation trail that connects them all (see the Concept realised map overleaf). The trail would be oriented to cycling and walking but would also be linked in to a tourist drive route and be the focus of special events such as cycling, triathlon or cultural festivals (Refer to Figure OB.02).

#### The National Park Experience

The regional, national and international drawcard of the combined 10 National Parks and Nature Reserves are evident through the level of annual visitation received.

The opportunity for Council to partner with NPWS to create a National Parks circuit linked to Windsor and Richmond as part of an integrated Open Space, Recreation and Tourism Plan would greatly enhance local and regional recreation opportunity and could link to initiatives that NPWS already explore for sports such as mountain bike riding, orienteering and trail running.

## PART 6: OPEN SPACE STRUCTURE PLAN

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### **Sports Parks**

As part of the development of a Sports Plan proposed to be developed by Council and the Sports Council, a review of the hierarchy of sports facilities would be implemented (see Implementation Plan).

Flooding is a key issue with respect to location of sports fields and investment in sport infrastructure. As part of the Sports Plan, a review of long term options for relocation of sports facilities away from the most flood affected areas where it can be demonstrated, so that long term sports provision will benefit and the associated costs of flood damage repair can be amortised.

All sports related parks would accommodate unstructured recreation needs such as play, seating, shade, BBQ, picnics, walking circuits. Note that while Local Parks may be suitable for informal kickabout, they would not generally form any part of a structured sports network.

### **Local and Neighbourhood Parks**

Through a longer term strategic process (see Consolidation, Acquisition and Rationalisation below) all residences in the City would have access to a park or parkland network within a maximum of 400 metres of home (research varies on preferred distances between 400-500m, although most guidelines recommend 400m). However in more rural areas local parks are by their nature also often district parks given the travel distances within and between townships; for this purpose distances of up to 1 kilometre to local open space would seem more realistic.

Newly acquired or consolidated parks would generally be of no less than 0.3 Ha, preferably of compound shape and relatively level topography to provide maximum recreation opportunity and flexibility for a diversity of user types and needs over time, as well as to accommodate significant canopy vegetation.

### **Urban Spaces**

Allied to the green streets program would be street corner meeting places at key locations and crossings where neighbours are most likely to pass each other.

Designed to encourage social interaction, or for seniors or parents with children to stop and rest or simply as a small incidental meeting space, these street corners would provide shade in the form of a significant tree or trees (that can also be a local wayfinding landmark) and seating that may simply be formed by a low wall or bench.

In town centres and in some larger neighbourhood centres at least one space is identified and designed to meet local leisure needs. This may range from a space that suits early morning Tai chi to local cultural events. Seating, shade, planting and public artwork would be typical elements. In larger centres spaces would be adaptable to local events and designed to accommodate temporary or permanent stages and built in infrastructure (eg. power, water, etc).

## PART 6: OPEN SPACE STRUCTURE PLAN

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### CONSOLIDATION, ACQUISITION AND RATIONALISATION

To achieve the goals of meeting current and future recreation needs a strategic approach to more targeted provision of open space would be based on three actions undertaken in the following order:

- Consolidation: identifying properties or spaces that are not currently zoned as public open space either within reserves or adjoining reserves, the consolidation of which would extend the capacity of that reserve; an example would include identifying residences adjoining or interjecting into park spaces for acquisition when they come to market, that would permit extension of an existing reserve or joining of two separated parks
- Stand Alone Acquisitions: identification of areas of open space deficit relative to existing or future population densities with a view to acquiring land for new reserves
- Rationalisation: improvement of local open space and recreation opportunity by sale of selected small open spaces where there is high level of duplication with very limited recreation value or identifying areas where excising land from existing reserves and selling to adjoining property owners (especially narrow corridors with limited open space functionality) funds acquisition or consolidation of a more substantial local park or parks.

This latter process necessarily entails detailed site analysis, community consultation and a public inquiry process as required under the Local Government Act 1993. The ROSS will provide guidance on the specifics of this process.

The need to review land holdings with respect to better targeted provision is particularly urgent in the rural townships, where in some cases serious under provision of local open space is metered by unembellished reserves located at distance from communities with little or no current or potential recreation opportunity.





Figure OB.01 Open Space Structure Plan Concept

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Part 7: Implementation Plan



## PART 7: IMPLEMENTATION PLAN

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### INTRODUCTION

The Implementation Plan sets out the actions by which the ROSS will be realised, founded on the Objectives and illustrated through the Open Space Structure Plan. The Implementation comprises two parts, namely:

- The Action Plan
- Delivering the Plan.

Both sections refer where applicable to further detail of implementation provided in the listed appendices.

### The Action Plan

Set out in a series of tables, the Action Plan identifies the works to be undertaken, detailed under the five headings that relate directly to the Objectives namely:

- Recreation and Leisure
- Access and Circulation
- Cultural Heritage and Natural Environment
- Landscape Character and Identity
- Management and Maintenance.

The actions include planning, design and management proposals and identify what further detailed studies or related strategies may need to be undertaken for the full delivery of the ROSS.

For each action there are four related details of their implementation which are:

- Outcomes: identifies the related Outcome Goal and Strategy in the Community Strategic Plan
- Priority: proposes the relative priority in implementing the action being High, Medium, Low or Ongoing
- Responsibility: identifies the team within Council responsible for delivering that action
- Key Performance Indicators: identifies the KPI that will apply to the realisation of that action.

Explanation, details and abbreviations of each of the above is provided below.

### Delivering The Plan

This second section of the Implementation Plan expands on the means by which the proposals in the Action Plan should be delivered and includes further details of:

- Sequence of Delivery
- Sports Plan Scope and Implementation
- Acquisition, Consolidation and Rationalisation
- Funding The Plan
- Monitoring, Reviewing and Updating the Plan.



## PART 7: IMPLEMENTATION PLAN

### OUTCOMES

The Five Vision Statements are listed in Part 5: Objectives with their corresponding prefix letters and numbers. In the Action Plan tables the relevant Outcome is listed for each action using these prefixes.

### RESPONSIBILITY

Hawkesbury City Council has identified the Service Units within the Council organisation charged with delivery of the City Outcomes. The Action Plan tables the relevant Service Unit or Units responsible for implementing of the action is identified, using the following abbreviations:

Code	Accountability	Service Unit
SPO	Sportsground development and management	<i>Open Space</i>
PAS	Passive recreation development and management	<i>Open Space</i>
NAD	Natural bushland development and management	<i>Open Space</i>
NAM	Natural bushland delivery management	<i>Open Space</i>
OSP	Open space planning development	<i>Open Space</i>
PUD	Public domain development and management	<i>Urban Planning</i>
SUT	Sustainable transport development	<i>Environment</i>

### PRIORITY OF IMPLEMENTATION

For each action in the Action Plan, a corresponding priority for its implementation is assigned as follows:

- **H** = High: top priority. Where there are no impediments to its delivery this action should be achieved in the short to medium term
- **M** = Medium: second tier priority with implementation due in the medium term
- **L** = Low: not an urgent implementation action but important nonetheless and should be planned for the medium to long term
- **O** = Ongoing: a recurrent action that may be regularly repeated.

## PART 7: IMPLEMENTATION PLAN

### KEY PERFORMANCE INDICATORS

To determine when a specific action has been satisfactorily implemented, a Key Performance Indicator (KPI) needs to be identified. Of the numerous forms of KPIs that are typically applied to strategic planning, the most common KPIs used in open space planning are listed below and will be applied to the ROSS. Abbreviations identified in the Action plan denote the relevant KPI for that action:

- QS = Questionnaire Survey: this may be an omnibus telephone survey of the community carried out regularly to elicit community satisfaction on all Council services or a targeted open space survey such as Council currently runs through ROSS. Such surveys may also include organisations such as sports clubs.
- ES = Exit Survey: this survey is carried out as a one-on-one questionnaire of open space users as they are leaving the park, to determine their experience and satisfaction levels of their visit, including perceptions of safety
- US = Usage Survey: this comprises a count of users of open space or recreation facilities, carried out at specific and consistent times of the year to establish changes in usage levels over time
- PS = Photographic Survey: this is most commonly used to identify changes in the landscape, associated with targets for enhancement of landscape character or natural and cultural conservation
- FS = Field Survey: field investigations are most commonly used to determine environmental changes such as bushland management, species diversity and water quality; in the case of the ROSS this applies particularly to monitoring natural and recreational corridors and safety audits
- AP = Aerial Photography: this is frequently used to establish changes in the landscape and when compared over a period of years can identify critical changes. The 'Near Maps' historical sequence tool bar is particularly helpful in this regard
- CC = Community Correspondence: communications received from the community, collated under specific topics can identify trends in satisfaction.
- CW = Consultation Workshops: where Council may need focused qualitative feedback on the success or otherwise of implementation it may choose to convene a workshop of relevant stakeholders, internal staff and/or external experts to establish the nature of performance on key actions
- FA = Financial Audit: some actions can be most readily measured by economic and financial indicators. Typically this might include actions where cost reductions are being sought or where cost benefit ratios are needed.

In many cases several KPI measures can be applied at the same time; for instance for an action that requires both quantitative data gathering (eg. usage) and qualitative feedback (eg. park experience and satisfaction) a combined exit survey, usage survey and photographic survey can be carried out in the same place over a period of a few hours.

## RECREATION AND LEISURE

Progressively implement upgrades to the quantum and diversity of open space within the Hawkesbury City Council local government area:

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
R1	<b>AMOUNT AND DISTRIBUTION</b>				
	<b>Upgrade the quantum and distribution of open space to match current and future population needs including:</b>				
a	<b>Optimisation</b>	VS1	H	OSP	QS/ES/US/CC
	<p>Extend capacity of existing open space as the first priority through:</p> <ul style="list-style-type: none"> <li>– more efficient layouts of reserves that make better use of the space and increase user capacity</li> <li>– clearer definition of spaces and uses (through planting and the like)</li> <li>– designing and planning for multi-using (eg. shared amenities, flexible spaces).</li> </ul> <p>In particular, complete a wholesale review of passive open space in rural towns (see Analysis by Towns) with a view to improved recreation opportunity for:</p> <ul style="list-style-type: none"> <li>– play</li> <li>– walking</li> <li>– seating in shade</li> <li>– level kickabout space</li> <li>– improved amenity.</li> </ul>				
b	<b>Acquisition and Consolidation</b>	VS5	M	OSP	CC/FA
	<p>Address identified shortages of public open space across the City through a program of acquisition and consolidation. Priorities include:</p> <ul style="list-style-type: none"> <li>– areas within larger towns (especially in the south of the LGA) where residents are not within 400 metres or 10 minutes walk of any open space</li> <li>– connections that assist access to open space where current distribution is limited or where on-road access is dangerous or where crossing times and opportunities hinder access</li> <li>– small, but level kickabout space in remoter towns and villages (minimum 0.3 Ha) where none is currently present.</li> </ul>				
c	<b>Rationalisation</b>	VS5	M	OSP	US/CC/FA
	<p>During Acquisition and Consolidation program review areas of multiple small reserves with a view to achieving fewer larger local reserves (within a 400m walking distance of all residences) for better recreation opportunity. Areas to consider for rationalisation include localities where there are multiple small reserves (eg. under 0.2 Ha) where consolidation to fewer, larger reserves extends recreational opportunity and flexibility at a local level.</p> <p>See Delivering the Plan for details of the processes required to achieve Optimisation, Acquisition, Consolidation and Rationalisation.</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
R2	<b>OPEN SPACE SETTINGS</b>				
	<b>For each of the proposed open space settings, both for the existing reserves and for the future, planning, management and design include:</b>				
a	<b>Passive Parklands</b>	VS1	H	OSP	QS/ES/CC/CW
	<p>Implement a program that greatly extends opportunities for all members of the community to enjoy access to quality passive parklands that meet their day-to-day recreational needs. Priorities should focus on:</p> <ul style="list-style-type: none"> <li>– meeting local recreation needs within a maximum of 400m walking distance of all residences (this may necessarily need to be extended in rural townships to 500m-1000m due to the dispersed nature of settlements and larger landholdings. However non-vehicular access ie. by bicycle or on foot must be safe and amenable)</li> <li>– targeting areas of open space deficit and areas of densest population first (ie. in southern towns and suburbs)</li> <li>– integrating passive recreation space and facilities within all sports reserves to optimise opportunity and recreational integration</li> <li>– addressing most fundamental needs first (eg. paths, shade, planting, play and kickabout space)</li> <li>– improving connections and access to all parks (eg. footpaths and shared cycleways) on streets (see also Access and Circulation).</li> </ul> <p>At an LGA wide level, establish and progressively upgrade the open spaces as the principal Regional and District Level passive parklands for the City that will ensure that all urban residents are within 2km distance from a major passive park.</p> <p>In rural and dispersed settlement areas where public open space is limited initial focus should be on provision of places for informal level kickabout and play (particularly for younger residents) embellished as a focal meeting place for residents. Consider long term opportunities to improve public social spaces close to shops/post offices. Liaise with schools on sharing of both passive and active recreation facilities.</p> <p>Of these parklands, those that are presently best embellished should be early priorities for further enhancement of their informal recreation opportunities.</p> <p>Liaise with adjoining Councils to co-ordinate making good any shortfalls in district level passive parklands close to the Hawkesbury City Council boundaries (see also Partnership Development).</p>				



Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
b	<b>Outdoor Sports</b>	VS1	H	SPO	QS/ES/CC
	<p>Prepare a comprehensive Sports Plan in liaison with the Sports Council which will:</p> <ul style="list-style-type: none"> <li>– relate sport provision and opportunity in the City to existing and projected population needs</li> <li>– establish a clear hierarchy of sports reserves and associated objectives, functions and facilities to be applied to new reserves and to be progressively retrofitted to existing reserves over time.</li> <li>– review flood impacts and evaluate options for mitigation.</li> <li>– review and where necessary update all administrative aspects of sports including: <ul style="list-style-type: none"> <li>– roles and responsibilities of all parties (City Council, Sports Council, Clubs and Associations)</li> <li>– legal obligations and compliance</li> <li>– tenure and allocation arrangements</li> <li>– Service Level Agreements</li> <li>– sportsground design and maintenance standards.</li> </ul> </li> </ul> <p>Integrate passive recreation opportunity and facilities into all levels of sports reserves (ie. at minimum basic needs would include circuit paths around the park, ample seating in shade, planting with emphasis on native species, play from toddler to 10 years typically, picnic/BBQ and informal kickabout space).</p> <p>For non-field/court based Sports Council should review opportunities to provide for:</p> <ul style="list-style-type: none"> <li>– river based sports (kayak, fishing etc.)</li> <li>– event sports (including triathlon, cycling, marathons, trail running)</li> <li>– mountain bike venues.</li> </ul>				
c	<b>Civic And Urban Spaces</b>	VS1	M	PUD	QS/CC
	<p>Integrate civic and urban spaces into the public open space as part of the wider public realm that the community uses for recreation and leisure including:</p> <ul style="list-style-type: none"> <li>– upgrade existing civic spaces in each major town centre to accommodate a range of uses including general relaxation/watching the world go by, cultural events, entertainment, ceremonies. Typical examples include Windsor Mall</li> <li>– introduce new civic spaces where these do not exist in major centres</li> <li>– integrate small scale gathering and meeting spaces associated with all minor urban centres and clearly distinguishable as public space as distinct from privately run outdoor eating areas.</li> </ul> <p>See Ancillary below for streetscape strategy associated with civic spaces.</p>				
d	<b>Natural Areas/Bushland</b>	VS2	H	NAD/NAM	QS/FS/AP
	<p>Plan and manage all reserves of all setting types to conserve, integrate and enhance natural values into their recreational use and appreciation. In particular focus on:</p> <ul style="list-style-type: none"> <li>– optimising recreation access to and along rivers and creeks</li> <li>– establishing recreational links at local and regional level between Council controlled open space and National Parks</li> </ul> <p>(see Cultural Heritage and Natural Environment).</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
e	<b>Cultural Heritage</b>	VS1	M	OSP	QS/CC/CW
	Plan and manage all reserves of all setting types to conserve, integrate and enhance cultural heritage values into their recreational use and appreciation (See Cultural Heritage and Natural Environment).				
f	<b>River Foreshore and Creeks And Waterways</b>	VS2/VS5	H	PAS/NAD/NAM	QS/FS/FA
	<p>Integrate the Hawkesbury City Council's rivers and many creeks into the public open space network as a core component of the community's recreational and leisure experience through:</p> <ul style="list-style-type: none"> <li>– extending the existing network of foreshore paths along the Nepean River including local and regional loops, corridors and connections (see Structure Plan)</li> <li>– identifying the preferred short and long term route for the Great River Walk through the Hawkesbury LGA along the Nepean River connecting to the Penrith and Baulkham Hills reaches</li> <li>– liaison with landowners to extend public access along creeks in private ownership (this may entail reciprocal assistance to landowners with revegetation of native habitat)</li> <li>– integrating best practice Water Sensitive Urban Design (WSUD) into all design, planning and management of the City's creeks</li> <li>– enhancing visibility of the river from critical view locations where not presently visible (eg. major roads, recreation spaces, etc).</li> </ul> <p>(See Cultural Heritage and Natural Environment).</p>				
h	<b>Ancillary</b>	VS1/VS3	H	PUD	QS/CC/CW
	<p>Review all existing spaces identified as Ancillary in the open space inventory for their contribution to the community's leisure and recreation experience or aesthetic values. Upgrade those spaces to achieve the objectives set out in the Hierarchy and Settings Table and also add the following to Ancillary in the inventory;</p> <ul style="list-style-type: none"> <li>– Streetscapes: identify 'green grid streets' in towns that are most suitable to accommodate major walking and cycling routes that links to urban centres and connect with the recreation corridor 'web' network of rivers and creeks (see Walking and Cycling)</li> <li>– Street corner gathering spaces: identify where such gathering spaces can be readily integrated into the existing street and urban fabric. Larger gathering spaces should coincide with the 'green grid streetscapes' identified as the principal walking and cycling streets.</li> </ul>				
i	<b>Informal Spaces</b>	VS1	L	OSP	QS/CC/FA
	<p>Add all informal spaces that have recognised and permitted free public uses to a secondary inventory of all spaces that are not zoned as Open Space or classified as Community Land or Operational Land. Typical informal spaces may include:</p> <ul style="list-style-type: none"> <li>– retail plazas and malls</li> <li>– car parks for court games when not in use at weekends</li> <li>– roof tops of buildings and car parks</li> <li>– community gardens</li> <li>– temporary uses of private or government owned land pending future development.</li> </ul> <p>Where necessary, liaise with third party landowners and recreational users to assist in agreeing terms and periods of use (see Management and Maintenance for details on co-ordination and liaison).</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
R3	<b>RECREATION OPPORTUNITY</b>				
	<b>Develop a range of Action Plans for specific recreation needs including:</b>				
a	<b>Children's Play Plan</b>	VS1	H/O	PAS	QS/ES/US/CC
	<p>Develop a Children's Play Implementation Plan that meets the needs of all ages, backgrounds and abilities and which results in a roll-out of contemporary play facilities. The Plan should include:</p> <ul style="list-style-type: none"> <li>– a full audit of all existing play facilities in the LGA's public spaces, the equipment present and its condition</li> <li>– a clear hierarchy of play spaces and facilities that meet the needs for daily play within 400m of home in urban areas (especially for toddlers and infants), play spaces for longer visits by car or public transport (District) and major play destinations for all ages (Regional). The plan should entail consultation with local residents in rural towns to establish their particular needs.</li> <li>– plans and designs that address all age ranges, abilities and cultural backgrounds including promotion of imaginative, creative and adventure play, development of motor skills and interaction with nature and accessibility of play for older children by off-road walking and cycling wherever practical</li> <li>– strategies to address the specific needs of play in rural and remote villages and settlements.</li> </ul> <p>Progressively retrofit play facilities matching this strategy to a priority program and in line with the proposed park hierarchy and setting types.</p>				
b	<b>Skate and BMX Plan</b>	VS1/VS3	M	OSP	QS/US/CC/FA
	<p>Develop a Skate and BMX Plan for Hawkesbury City Council that addresses the need for:</p> <ul style="list-style-type: none"> <li>– permanent skate facilities that meets the needs of varied ages and skill level and location of facilities close to public transport and with ample natural surveillance</li> <li>– temporary facilities that can be relocated on a rotational basis (particularly for small towns and villages in remote and/or rural areas)</li> <li>– skateable spaces that may have other uses (stages for bands, temporary art installations, event spaces, etc).</li> <li>– permanent skate facilities should be located close to public transport, safely accessible by cycle and open to passive surveillance.</li> <li>– provision of BMX cycling opportunities.</li> </ul>				
c	<b>Youth Plan</b>	VS1/VS3	M	OSP	QS/CC/CW
	<p>Undertake specific consultation with youth groups from a range of backgrounds and youth inter-agencies to gain a clearer picture of the recreation and leisure needs of the City's youth. In particular, address issues such as:</p> <ul style="list-style-type: none"> <li>– preferred social gathering spaces and places (including specific locations in the Hawkesbury)</li> <li>– means of access to meet friends at parks or urban spaces (walking, cycling, car, public transport)</li> <li>– range of passive recreation needs and design issues with respect to parks and urban spaces to meet their needs</li> <li>– specific needs of youth in remote and rural areas and townships</li> </ul> <p>Integrate the findings into Plans of Management, Masterplans and urban design guidelines.</p>				
d	<b>CALD Communities</b>	VS1/VS3	M	OSP	QS/CC/CW
	<p>Integrate any recreational and leisure needs that may be specific to CALD communities into all planning and design for public spaces, places and reserves, such as:</p> <ul style="list-style-type: none"> <li>– multi-use indoor facilities that can accommodate social, dance, performance or sporting activities</li> <li>– shade and shelter for large social groups and gatherings</li> <li>– facilities and management that recognises specific cultural or religious practices (eg. Halal BBQs).</li> </ul>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
e	<b>Seniors</b>	VS1/VS5	H/O	OSP	QS/US/CC/ CW
	<p>Plan and design all open space to meet the recreational, social and leisure needs of seniors, recognising the growing level of physical activity into older age. Specific responses should include:</p> <ul style="list-style-type: none"> <li>– a variety of walking paths and circuits close to home that can be readily undertaken in 30 minutes to meet daily physical activity needs</li> <li>– ample shade and bench seats (especially at local parks, playgrounds and sportsfields)</li> <li>– ease of access to parks from public transport stops</li> <li>– ample nature walks</li> <li>– community gardens for those with little or no access to private gardens</li> <li>– optimised disability access.</li> </ul> <p>In general, planning for seniors and those with disabilities will also meet the needs of the broader community.</p>				
f	<b>Exercising Dogs</b>	VS1	L/O	PAS	ES/US/CC
	Review and update all dog off-leash parks that meet local needs and demands including time allocated reserves where appropriate.				
R4	<b>RECREATION FACILITIES</b>				
	<b>Prepare guidelines for all future provision or replacement of facilities, structures and infrastructure in reserves as part of the Open Space Design Guidelines (see Management and Maintenance) addressing:</b>				
a	<b>Facility Priorities</b>	VS5	M	SPO/OSP/ PUD	FA
	Establish priorities for facility provision that meet the criteria of high functionality, multi-using, value for money, ease of ongoing supply, adaptability to customisation, strong design aesthetic and ESD criteria.				
b	<b>Seating and Shelter</b>	VS1	H	SPO/NAD/OSP	QS/FA
	Provide ample seating in shade, in social arrangements and especially at park entries and path crossings. Sheltered tables suitable for larger groups in larger parks and always suitable for wheelchair access. Optimise use of shelters (eg. minimum necessary shade over BBQs to ensure use for cooking only). Incorporate lawn areas with ample tree shade for picnic uses and for larger gatherings.				
c	<b>Toilets</b>	VS1	M/O	OSP	FA
	Audit existing toilets in reserves with the goal of roll-out of strategic locations for improved facilities, designs and locations that limit anti-social use, offer strong natural surveillance, are scaled to the size of reserve/user numbers and provide universal access.				
d	<b>Cafes, Kiosks and Mobile Refreshments</b>	VS1	L	OSP	CC/FA
	<p>Identify locations and facilities suitable for refreshments in all public spaces that can be demonstrated to show direct association with and benefit to recreation users.</p> <p>Avoid locating permanent facilities in close proximity to existing and established private outlets adjoining and addressing the public space. Ensure that Plans of Management provide clear directions on the nature of operations.</p>				



Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
R5	<b>AMENITY AND SAFETY</b>				
	<b>Upgrade amenity and safety in all open space across the City through planning and design with a particular emphasis on:</b>				
a	<b>Public and Personal Safety</b>	VS1/VS5	H	OSP	QS/CC
	As part of access audit (see Universal Access) review safety of existing reserves through criteria addressed in Crime Prevention Through Environmental Design (CPTED) principles enshrined in the Safer By Design Guidelines (refer to Reference A1).				
b	<b>Microclimate</b>	VS1	M	PAS	FA
	Integrate amenable microclimates to design and layout of all reserves including elements such as: <ul style="list-style-type: none"> <li>– summer shade (large trees and shelter, especially at playgrounds)</li> <li>– summer sea breezes (especially close to rivers and on ridges)</li> <li>– winter solar access (sheltered from westerly/southerly winds)</li> <li>– cooling summer temperatures (eg. water and mist features especially in urban spaces).</li> </ul>				
c	<b>Lighting</b>	VS1	M	PAS	FA
	Progressively upgrade all lighting in reserves. Selecting where and how to light reserves to follow the principles of: <ul style="list-style-type: none"> <li>– encouraging evening use of passive parklands and sports facilities</li> <li>– limiting lighting in areas that may impact on native fauna</li> <li>– discouraging anti-social behaviour</li> <li>– using latest technology to limit power use (eg. LED, solar, etc).</li> </ul>				
d	<b>Planting</b>	VS1	H	PAS	FS/CC/FA
	Develop planting design guidelines as part of the Open Space Design Guidelines (see Appendix) with a particular emphasis on: <ul style="list-style-type: none"> <li>– tree planting strategy that integrates with the City's street tree planting strategies</li> <li>– the typical locations suitable for use of native, exotic or mixed planting</li> <li>– use of planting to enhance habitat and define spaces, especially along rivers and creeks</li> <li>– planting guidelines that identify intensity of maintenance and associated service levels required</li> <li>– limiting high maintenance planting to key locations, with associated irrigation from recycled sources</li> <li>– reducing mown grass and irrigation requirements through design of defined higher and lower maintenance turf areas and native grass zones with associated hydrozones (ie. levels of intensity of irrigating) for each park type and setting.</li> </ul>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
R6	<b>LANDSCAPE DESIGN</b>				
	<b>Continue the improvements to landscape design quality of the City's parks and open spaces that are evident across park upgrades over recent years. To optimise park usage, capacity and appeal particular focus should be placed on:</b>				
a	<b>Defined Spaces</b>	VS1	H	OSP	QS/ES/CC/FA
	Enhance park use and capacity by defining spaces within parks more clearly through design elements such as: <ul style="list-style-type: none"> <li>– path layouts and circuits that also act as borders for differing maintenance regimes</li> <li>– tree and shrub grouping to define open spaces or linear corridors and provide backdrop to gathering spaces</li> <li>– defined mown and native grass areas (see planting above)</li> <li>– park buildings with both major elevations having active uses/access.</li> </ul>				
b	<b>Local Character</b>	VS1/VS2	M/H	NAD/OSP	ES/US/FA
	Apply more local identity to local parks through a range of design opportunities including: <ul style="list-style-type: none"> <li>– park layout (reflective of local culture or history)</li> <li>– retention or adaptive reuse of local heritage fabric</li> <li>– use of materials that may be common in the neighbourhood</li> <li>– local plant species (both native local genotype where viable as landscape planting and exotic species where they have historically been planted in the locality)</li> <li>– park or suburb logos integrated into signage and furniture</li> <li>– public art addressing local culture, landscape and/or heritage.</li> </ul>				
R7	<b>OTHER RECREATION PROVIDERS</b>				
	<b>Optimise recreation opportunities for all residents in the City in partnership with other recreation providers through:</b>				
a	<b>Liaison</b>	VS1/VS5	M/H	OSP	QS/CC/FA
	Liaise with all other owners of public open space and private recreation providers to maximise public access to leisure and recreation, to minimise duplication and achieve cost effective provision and agency by the City (see Management and Maintenance for details on co-ordination, liaison and potential partners). Typical Providers would include: <ul style="list-style-type: none"> <li>– Schools: relating to community access (ie. highest priorities in areas of current under-provision of open space), particularly in rural towns where public open space provision may be low</li> <li>– National Parks: relating to liaison with NPWS of connecting open spaces to and from all of the National Parks in the LGA (see Structure Plan)</li> <li>– Golf Courses: relating to boundary areas where these can form part of wider corridor network.</li> </ul>				

## ACCESS AND CIRCULATION

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
A1	<b>ACCESSIBILITY</b>				
	<b>Link accessible, viable transport, cycleways and pathways to the major growth and commercial centres within and beyond the Hawkesbury through:</b>				
a	<b>Public Transport</b>	VS1/VS3	M/H	SUT	QS/CC/CW
	<p>Review accessibility to all reserves by public transport as part of Council's Transport Plan of reducing car dependency and pursue actions such as:</p> <ul style="list-style-type: none"> <li>– locating bus stops close to entries of major parks</li> <li>– improving walkability of paths between bus stops, stations and major parks (as part of wider audit, see Walkability)</li> <li>– ensuring bus route links optimise connectivity between stations and major sports reserves.</li> </ul>				
b	<b>Private Vehicle</b>	VS1/VS3	M	OSP	QS/ES/CC
	<p>Ensure access and parking at reserves is efficient in circulation and adequate for needs, especially where public transport access is presently poor. Actions should include:</p> <ul style="list-style-type: none"> <li>– designing entries, circulation and parking to optimise use of space, minimise footprint (see also Sustainability) and limit impacts on local residential amenity</li> <li>– use on-street parking for Local parks wherever possible</li> <li>– identify overflow parking areas for major events in District and Regional parks, especially major sports parks (such spaces should have another primary function eg. training, kickabout areas).</li> <li>– review impacts of moto-cross on natural systems and landscape amenity. Ensure appropriate locations are identified.</li> </ul>				
c	<b>Walking and Cycling</b>	VS1/VS3	H	OSP	QS/FS/CC/ CW/FA
	<p>Prepare a combined Walking and Cycling Plan for the Hawkesbury that integrates all aspects of recreational, fitness and commuter cycling and walking. Actions to promote and accommodate more cycling should include:</p> <ul style="list-style-type: none"> <li>– implement a bike and pedestrian mobility plan to integrate the recreational walking and cycling objectives in the ROSS with any proposed or existing commuter cycling routes</li> <li>– integrating the proposed recreational and street based walking and cycling corridors</li> <li>– reviewing new opportunities for shared paths in parks and recreational corridors with respect to capacity, suitability and context</li> <li>– incorporating children's cycle circuits in identified parks to encourage cycling.</li> <li>– defining and marking dedicated on-street cycle paths in rural towns that link major destinations with parks (school, work, transport etc).</li> </ul> <p>The Plan should also address the significance of horse riding in the LGA and in what way it may be better and more safely integrated into recreation provision, especially in rural towns.</p> <p>Actions to promote and cater for more walking in Hawkesbury City Council should include:</p> <ul style="list-style-type: none"> <li>– preparation of walkability audit across the Hawkesbury City Council, including provision levels of dedicated footpaths on both sides of the street in residential areas, urban and rural</li> <li>– integration of parks and open space into a walking network for the city that links paths with generators and attractors (eg. shops, public transport, education facilities, employment areas and community facilities, etc)</li> <li>– establish a walking 'web' in urban areas (related to bushland and creeks) with a walking 'grid' of streets identified from the walkability audit as best suited to walking and which also link the corridors to generators and attractors (as above).</li> </ul>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
A2	<b>UNIVERSAL ACCESS</b>				
	<b>Optimise access for all abilities and backgrounds to the City's open space, including through:</b>				
a	<b>Access Audit</b>	VS1	H	OSP	QS/ES/FA
	<p>Update access audits of all public open space across Hawkesbury City Council to determine where improvements can be achieved towards universal access to public space. Key outcomes with respect to parks and recreational corridors include:</p> <ul style="list-style-type: none"> <li>– ease of access to park entries off streets (especially street crossings close to entries and bus stops; safe, even paths, etc for wheelchairs and mobility scooters)</li> <li>– provision of circuit paths that can be easily walked or wheeled for prams, wheelchairs or children's bikes</li> <li>– ample seating with shade and shelter</li> <li>– disabled car park spaces close to park entries and exploiting views of the park (especially important at sports venues) or lookouts for those not able to leave the car or where park topography is steep</li> <li>– optimised access to play facilities for all abilities</li> <li>– In areas of steeper topography the NPWS track classes should be applied to assist visitors in route selection.</li> </ul>				
A3	<b>CONNECTIVITY</b>				
	<b>Enhance open space connectivity across the Hawkesbury for all of the community through an integrated strategy that links recreational, cultural heritage and natural values:</b>				
a	<b>Recreational Corridor Network Plan</b>	VS3	H	OSP	FS/CW/FA
	<p>Prepare a detailed Recreational Corridor Network Plan, based on the proposed network identified in the Open Space Structure Plan. The Plan should include:</p> <ul style="list-style-type: none"> <li>– determination of routes that optimise use of the physical geography (eg. ridges and valleys) and natural environment (eg. bushland, creeks and rivers) of Hawkesbury City Council.</li> <li>– Analysis of linkages in the network that cannot be achieved solely as above (ie. using streets, rail corridors, etc) that align as closely as possible with catchment and sub-catchment geography</li> <li>– design parameters for the corridors such as path design, natural habitat conservation, planting, shade and amenity</li> <li>– identification of third parties that may be critical to achieving each section of the network (ie. State Government agencies, other private and public landowners)</li> <li>– priority for implementation (see below)</li> </ul> <p>Criteria for highest priorities of implementation should include:</p> <ul style="list-style-type: none"> <li>– completing local missing links in existing corridors that would significantly extend open space access and connect major circuits and walks eg. Great River Walk (see Figures OB.01 and OB.02)</li> <li>– enhancing links in areas with limited open space and high populations</li> <li>– creating links where this would enhance natural values</li> <li>– overcoming major barriers (eg. roads, etc)</li> <li>– establishing links that would benefit children (eg. off-road paths to school or sports venues).</li> </ul>				



Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
b	<b>Barriers</b>	VS3	H	OSP	AP/PS/FA
	<p>Analyse and prioritise action to address major barriers to walking and cycling across the City including:</p> <ul style="list-style-type: none"> <li>– major arterial road crossings</li> <li>– access for disabled persons (see Universal Access)</li> <li>– footpath design and quality (see Walking and Cycling Plan).</li> </ul> <p>The highest priorities to removal of barriers are in areas where residences are more than 400m from any open space.</p>				
A4	<b>WAYFINDING</b>				
	<b>Enhance wayfinding around Hawkesbury City Council, particularly to promote walking and cycling as both recreation and a daily part of the lives of the local community through:</b>				
a	<b>Wayfinding Strategy</b>	VS3	H	OSP	QS/CC/FA
	<p>Prepare a Wayfinding Plan in keeping with the Walking and Cycling Strategy (as above) with particular emphasis on:</p> <ul style="list-style-type: none"> <li>– off-road routes that link school, work and home through the public open space network</li> <li>– recreational circuits with distances and walking times identified</li> <li>– routes that can be readily undertaken by those with a disability</li> <li>– links between walking routes and public transport stops.</li> </ul> <p>The Plan should draw on all media in an integrated fashion including in-field maps, signage, brochures, phone enabled GPS and web (including Council's website) and the like.</p>				

## CULTURAL HERITAGE AND NATURAL ENVIRONMENT

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
E1	<b>INTEGRATION OF NATURAL VALUES</b>				
	<b>Be a place where community value, protect and enhance the cultural and environmental character of Hawkesbury's towns, villages and rural landscapes through:</b>				
a	<b>Topography and Hydrology</b>	VS2/VS5	H	NAD/OSP	PS/FS/AP
	Integrate the natural geography of Hawkesbury City Council into the planning, design and management of open space including through: <ul style="list-style-type: none"> <li>– extending recreational corridors along existing and pre-existing creek alignments as part of open space network</li> <li>– capitalising on natural ridges for walking routes and to exploit district views (see Landscape Character below)</li> <li>– adapting to climate change generated flooding with use of natural systems management and minimal necessary built form (see Climate Change below)</li> <li>– integrating best practice stormwater management through WSUD techniques into reserve design, maximising Green Infrastructure assets (vegetation, natural materials).</li> </ul>				
b	<b>Bushland Management</b>	VS2/VS5	H	NAD/OSP	QS/PS/FS/CC
	Plan and manage open space and recreation to compliment, conserve, extend and promote the appreciation and enjoyment of bushland throughout Hawkesbury City Council, in particular through: <ul style="list-style-type: none"> <li>– incorporating bushland conservation, restoration and fabrication in all levels of reserve as a key part of the Open Space Planning and Design Guidelines (see Management and Maintenance)</li> <li>– employing an extended open space corridor network to enhance bushland viability, diversity and connectivity across the whole of the Hawkesbury City Council</li> <li>– enhancing native fauna habitat connectivity (and thus reducing habitat isolation and fragmentation) through extending the natural and recreational corridors (green web), linking to a network of selected streets for walking and cycling routes that provide continuous native tree canopy in urban areas (green grid)</li> <li>– using native trees in streets that connect to creeks and river foreshores</li> <li>– identifying locations for exotic species planting and species selection that does not compromise natural bushland values as part of design guidelines</li> <li>– promoting awareness and enjoyment of bushland through publicly available maps (on Council website) of the existing and proposed natural/recreational corridors. Identify short, medium and long walks in all localities, with an emphasis on circuits and routes that link to day-to-day destinations (eg. schools, work, shops, transport)</li> <li>– increasing community knowledge of their natural environment through targeted interpretation and wayfinding signage within reserves (not just bushland reserves)</li> <li>– providing ongoing technical and resources support to bushcare groups including assistance with promotion and information distribution.</li> </ul>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
c	<b>Natural Corridors, Rivers and Creeks</b>	VS2	H	NAD/OSP	PS/FS/FA
	<p>Continue to upgrade all river and creek open spaces to enhance recreational and natural systems connectivity including through:</p> <ul style="list-style-type: none"> <li>– optimising riparian vegetation along river foreshores and creek corridors (ensuring key views to creeks and rivers are identified and maintained). This will require long term liaison with private landowners where such creeks lie in private property.</li> <li>– maintaining or restoring natural river banks and creek profiles wherever practical</li> <li>– encouraging access to the water's edge and recreation by and on the water (boating, fishing where safe, paddling, etc)</li> <li>– minimising wave damage to river banks from recreational vessels (eg. ski boats)</li> <li>– monitoring and interpreting water quality changes to increase community awareness of the value of natural waterways (eg. Streamwatch)</li> <li>– conserving and promoting the natural hydrology of the sub-catchments (including reforming channelised creeks to natural profile where practical) even where it may be hidden in pipes and under streets (eg. naming trails after the creeks that they follow)</li> <li>– interpreting the natural and cultural heritage of the waterways as an integrated narrative.</li> </ul> <p>The order of priority for delivery should be based on the following in order of importance:</p> <ul style="list-style-type: none"> <li>– missing links in already heavily used corridors</li> <li>– links that assist in developing longer routes into the heart of the City</li> <li>– links to major destinations (eg. Regional parks, town centres, major employment areas).</li> </ul> <p>Highest priorities should include:</p> <ul style="list-style-type: none"> <li>– Great River Walk future alignment and revegetation</li> <li>– Natural corridor linkage improvements between rivers, creeks and town centres (see Structure Plan).</li> </ul>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
E2	<b>SUSTAINABILITY</b>				
	<b>Plan, design and manage all open space using best practice sustainability including through:</b>				
a	<b>Quadruple Bottom Line</b>	VS1/VS5	H	OSP	CC/FA
	<p>Review and audit all planning, design and management actions in open space using Quadruple Bottom Line (QBL) criteria to ensure optimum sustainability, those values being:</p> <ul style="list-style-type: none"> <li>– environmental</li> <li>– social</li> <li>– cultural</li> <li>– financial.</li> </ul> <p>Key outcomes in open space include:</p> <ul style="list-style-type: none"> <li>– optimising the ecology of all open space, no matter how urbanised</li> <li>– minimising built form footprint (car parks, buildings, etc)</li> <li>– using materials and design with low embodied energy</li> <li>– conserving and re-using water</li> <li>– creating spaces and opportunities that encourage social interaction and cultural inter activity (eg. seating, dog parks, children play areas, kiosk, etc)</li> <li>– consider whole of life cycle costs in all design, planning and management.</li> </ul> <p>Plans of Management, Master Plans and Acquisition/Rationalisation actions in particular should be prepared and audited with these values integrated in preparation and delivery (refer to Reference B3).</p>				
b	<b>Climate Change Adaptation</b>	VS1/VS5	M	OSP	QS/FA
	<p>Prepare strategies to adapt the Hawkesbury's open space to forecast climate change in line with Council's current studies and analysis including:</p> <ul style="list-style-type: none"> <li>– addressing flooding related climate change with minimal necessary built form (eg. river walls) and through long term planning (eg. facility relocation, extending flood capacity and retention of creeks through natural re-profiling.</li> <li>– increasing available shade to combat temperature increases in all reserves</li> <li>– exploiting breezes to reduce temperatures, especially close to the rivers and on ridges</li> <li>– using recycled water for play and temperature amelioration in urban spaces</li> <li>– extending tree planting in reserves, streets and urban open spaces to combat heat island effect</li> <li>– planning for more indoor recreation opportunities, particularly for summer sports.</li> </ul>				



Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
E3	<b>CULTURAL HERITAGE</b>				
	<b>Promote the awareness and recognition of the City's cultural heritage through open space planning, design, consultation and integration of:</b>				
a	<b>Aboriginal Heritage</b>	VS1/VS2	M	PAS/OSP	QS//CC/CW
	<p>Liaise with the Aboriginal community to establish the means through which their cultural heritage can best be recognised within the City's open space. This should typically be a multi-faceted approach that includes:</p> <ul style="list-style-type: none"> <li>– conservation of sites and potential sites (PADs) as required through the National Parks and Wildlife Act 1984</li> <li>– interpretation through landscape design, planting, public art and performance in open space</li> <li>– participation in implementing works and managing landscapes with cultural associations and/or natural values</li> <li>– education programs for schools and the community</li> <li>– telling the story of Aboriginal heritage in co-ordination with interpretation of non-Aboriginal heritage.</li> </ul>				
b	<b>Non-Aboriginal Heritage</b>	VS1/VS2	M	PAS/OSP	QS//CC/CW
	<p>Consult with the broader community on the means by which the City's non-Aboriginal heritage can best be integrated and promoted within the City's open space including:</p> <ul style="list-style-type: none"> <li>– recognising and interpreting the City's agricultural, horticultural, industrial, social and maritime history within appropriate reserves and open spaces across the City</li> <li>– focusing on the post European reflecting local history and heritage in each suburb and locality through specific responses in the associated reserves (eg. planting original species where these are still viable, customising street furniture such as through logos, themed creative play, use of locally available materials, local interpretation, etc)</li> <li>– identifying and categorising any open spaces with strong heritage associations and related uses that as such come under the Inventory Settings</li> <li>– exploring enhanced leisure and cultural opportunities of the City's historic cemeteries (eg. genealogy, interpretation of major historical figures buried at each cemetery).</li> </ul> <p>For both Aboriginal and non-Aboriginal heritage consider common threads of interpretation through themes such as:</p> <ul style="list-style-type: none"> <li>– the role of the river and flooding</li> <li>– a major source of food and sustenance</li> <li>– recreational use and enjoyment of the landscape</li> <li>– a meeting place.</li> </ul> <p>These themes should also be considered in the development of the proposed tourism plan for the City.</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
E4	<b>CULTURAL DIVERSITY</b>				
	<b>Reflect the Hawkesbury's cultural diversity through the planning, design and management of open space including through:</b>				
a	<b>Recreation Opportunity and Facilities</b>	VS1/VS4	H/O	PAS/OSP	QS/CC/CW/FA
	<p>Provide facilities and opportunities that meet the widest community needs, but tailored to local cultural needs and lifestyles. Typical responses should include:</p> <ul style="list-style-type: none"> <li>– accommodating cultural practices and lifestyles (eg. contemplative spaces and places that suit activities such as Tai chi, meditation, outdoor prayer, quiet celebration)</li> <li>– facilities that respond to family/social culture such as shaded lawn areas or larger shelters for bigger gatherings</li> <li>– open spaces linked to indoor facilities that accommodate social sports</li> <li>– locations for performance, cultural events and temporary art installations (especially in urban spaces)</li> <li>– tailored interpretation to promote greater awareness and appreciation of the City's natural environment</li> <li>– developing river based cultural events that bring new perspectives to engagement with water (eg. Sand Sculpture Competition in 2012)</li> <li>– develop clear guidelines as part of Plans of Management where and how cultural gifts, exchanges and memorials (trees, park benches, etc) will be located and managed.</li> </ul> <p>Priorities should include:</p> <ul style="list-style-type: none"> <li>– creation of more extensive shaded areas through tree planting and shade structures in major open spaces</li> <li>– urban plazas, focus on shade and formal and informal seating (eg. Low walls), interactive public art</li> <li>– more extensive passive recreation opportunities at Regional and District Sportsgrounds.</li> </ul>				
b	<b>Art and Interpretation</b>	VS1/VS4	M/O	PUD/OSP	QS/CC/CW/FA
	<p>Engage communities from differing backgrounds in developing permanent or temporary public art installations (eg. Art in the Park) and performance in open spaces that reflect their cultural background.</p> <p>Public Art in open space should avoid simple themes of single cultures but reflect that community's culture and relationship with other communities and the landscape.</p>				

## LANDSCAPE CHARACTER AND IDENTITY

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
C3	<b>LANDSCAPE CHARACTER</b>				
	<b>Ensure the Hawkesbury is an area in which its landscape character is preserved and lifestyle choices are provided with sustainable, planned, well serviced development, within strongly connected, safe and friendly neighbourhoods.</b>				
a	<b>Local Landscape Character</b>	VS2	M	OSP	PS/FS/AP
	<p>Identification of the unique elements of the Hawkesbury's landscape character and how these qualities will be conserved for example:</p> <ul style="list-style-type: none"> <li>– the ecology of the floodplain and hills/escarpments</li> <li>– endangered or threatened species</li> <li>– river foreshore and natural sandstone landscape</li> <li>– post-industrial landscape</li> <li>– ridgeline canopy trees</li> <li>– critical views (see below).</li> </ul>				
b	<b>Views, Vistas and Landmarks</b>	VS2	H	OSP	PS/FS/AP
	<p>Identification, conservation and enhancement of the visual and scenic qualities of open space including:</p> <ul style="list-style-type: none"> <li>– major views from high river banks and escarpments (eg. Streeton Lookout)</li> <li>– views to the Nepean and Colo Rivers from major roads and other places where large numbers of local residents and visitors could gain a better understanding of their scale and geography</li> <li>– clear views to historic plantings and associated buildings</li> <li>– ensuring periodic views to Hawkesbury River from adjoining roads are not totally obscured by vegetation (especially in flood plain).</li> </ul> <p>Ensure that such views are recorded and that maintenance strategies are put in place to ensure vegetation does not obscure those views.</p>				

## MANAGEMENT AND MAINTENANCE

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
M1	<b>ADMINISTRATION, PLANNING &amp; MANAGEMENT</b>				
	<b>In line with proposals detailed in the ROSS Action Plan, review and upgrade planning and administration of open space across the Hawkesbury City Council.</b>				
a	<b>Administration and Co-ordination</b>	VS1	H	OSP	FA
	<p>During internal administrative re-organisations and upgrades of the open space and related teams in Council, ensure the following can be achieved:</p> <ul style="list-style-type: none"> <li>– regular forum with related departments and teams on implementation of the ROSS, especially in urban planning, environmental management, social policy, landscape design, stormwater management and urban design</li> <li>– regular review with field and operational staff to plan and monitor implications and results of implementation of the ROSS on the ground, especially with respect to Service Levels, maintenance techniques, recurrent costs and assistance in development of the Open Space Planning and Design Guidelines (see below).</li> </ul>				
b	<b>Open Space and Public Realm Inventory</b>	VS1	M	OSP	
	<p>Continue to update and integrate the inventory of all open space into the ROSS including:</p> <ul style="list-style-type: none"> <li>– mapping all open space in GIS and linking directly with the inventory database</li> <li>– preparing a Public Realm inventory as the subset of the upgraded open space inventory, recording all public spaces not zoned as public open space or classified Community Land but which are actively used for leisure and recreation (eg. urban plazas, malls, civic spaces, streetscapes)</li> <li>– establishing the principal inventory definition of the City's cemeteries</li> <li>– applying more consistency to naming of reserves (many reserves have no name).</li> </ul>				
c	<b>Open Space Planning and Design Guidelines</b>	VS1	H	OSP	
	<p>Prepare Open Space Planning and Design Guidelines for Hawkesbury City Council based on the principles outlined in the Hierarchy and Settings Strategy. The guidelines should preferably be in a simple table and diagram format (see typical example in Appendix). The guidelines should be used to inform:</p> <ul style="list-style-type: none"> <li>– Council or consultant generated Master Plans and Plans of Management</li> <li>– Service levels for each hierarchy and setting</li> <li>– Co-ordination within Council when reviewing acquisition, consolidation and rationalisation strategies</li> <li>– Open space requirements form development (Section 94 and VPAs)</li> <li>– Liaison with other Government agencies.</li> </ul>				



Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
d	<b>Recreation and Leisure Program</b>	VS1/VS4	H	SPO/OSP	QS/CC/CW
	<p>Develop a Recreation and Leisure Program that extends current programs and compliments the delivery of the ROSS, with the goal of promoting and fostering more use and enjoyment of the City's open space and the encouragement of healthy, active lifestyles in Hawkesbury City Council. Typical existing and potential programs include:</p> <ul style="list-style-type: none"> <li>walking programs (eg. Heart Foundation programs)</li> <li>'Try' programs to introduce people to sports</li> <li>community gardens/city farm initiatives</li> <li>holiday activities programs</li> <li>partnering recreation based corporate, charity or community events in parks (fun runs, fun cycle rides, triathlons, etc)</li> <li>partnering local community events in parks (ie. Christmas, Australia Day, local celebrations, arts events, fairs, evening food markets, greeting new communities, etc)</li> <li>guidance for personal training in parks</li> <li>supporting volunteer groups in sports, bushland management, community gardens, etc.</li> </ul> <p>Communicate an annual calendar of such programs with monthly updates through Council's website and other media.</p>				
e	<b>Plans of Management and Masterplans</b>	VS1/VS5	M	SPO/OSP	
	<p>Review and upgrade where necessary any current Plans of Management in concert with Master Plans (where Plans of Management are site specific) to correspond with the open space structure, hierarchy, settings and quality as outlined in the ROSS and after completion of the Open Space Planning and Design Guidelines. For existing plans the recommended priorities for action include:</p> <ul style="list-style-type: none"> <li>updating generic Plans of Management (eg. Bushland, Sports, Waterways and Foreshores)</li> <li>updating site specific Plans of Management for any major reserves identified in the ROSS Action Plan as principal parklands at Regional and District Level.</li> </ul> <p>Identify priority parks for new Master Plans/Plans of Management including those identified in the Open Space Structure Plan including District or Regional level reserves for:</p> <ul style="list-style-type: none"> <li>passive parklands and outdoor sports (Sports Hubs)</li> <li>natural and bushland areas</li> <li>cultural heritage reserves.</li> </ul>				
f	<b>Acquisition, Consolidation and Rationalisation</b>	VS1/VS5	H	OSP	FA
	<p>Prepare an Open Space Future Provision Plan to establish in detail the locations, size and nature of future open space acquisitions, consolidations and rationalisations as outlined in the Open Space Structure Plan. Principles to be followed in this process include:</p> <ul style="list-style-type: none"> <li>improvement of open space quantity and quality in relation to current and future community needs is the underpinning purpose of the whole strategy</li> <li>evaluation and refinement of acquisitions and additions (ie. extensions to existing open space) should precede any consolidations and rationalisations disposals</li> <li>funds generated by rationalisations and disposals are returned to improvement of open space in the locality in which they are generated</li> <li>transparency of objectives, process and evaluation is central to stakeholder and community involvement.</li> </ul> <p>Further details of the process are provided in the following section (Delivering The Plan).</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
g	<b>Service Levels</b>	VS1/VS5	H	OSP	FA
	<p>In line with the ROSS proposals, review and update all current Service Levels that relate to management and maintenance of open space, following an audit and cost review. In particular, consider maintenance intensity levels relative to setting type and park hierarchy, which can be further expanded on through the Open Space Planning and Design Guidelines outlined above.</p> <p>Typical landscape maintenance elements that would relate to varying intensity levels would include:</p> <ul style="list-style-type: none"> <li>– sports turf (highest quality at Sports Hubs with second tier at District Level and third tier at Neighbourhood level, etc)</li> <li>– passive parkland lawn areas (high intensity cutting in critical locations eg ceremonial, civic spaces, heritage, etc); second tier for major kickabout spaces with defined edges; longer interval cutting regimes in less formal or active spaces and Local parks. Native grasses in all boundary areas, adjoining bushland and creeks, etc</li> <li>– planting: highest intensity annuals/perennials at key locations only (eg. entries to major parks and civic spaces, heritage spaces) ornamental shrubs in defined beds to de-mark entries and spaces for special events (wedding and ceremonial areas or historical contexts); Australian native shrubs in all general parkland areas; locally native shrubs and grasses adjoining within all natural areas, river foreshore and creek corridors</li> <li>– Irrigation regimes; to similar principles for planting and turf practices above.</li> </ul> <p>Liaise as necessary with field staff when developing Service Levels to ensure optimum practical delivery on the ground and to evaluate implications for field staff skills required, changes to practice and plant/machinery updates and refinements.</p>				
h	<b>Maintenance Review</b>	VS1/VS5	H	SPO/OSP	FA
	<p>Carry out a review of current maintenance practices and techniques with operational staff to establish potential changes required in implementing the ROSS:</p> <ul style="list-style-type: none"> <li>– update Service Levels as above</li> <li>– review maintenance reduction options (eg. grass mowing, irrigation, etc as per Service Levels)</li> <li>– review plant and equipment required and review resources and staff required</li> <li>– initiate trials of new products, techniques, etc</li> <li>– seek to increase lifecycles of materials and recycling/reuse options</li> <li>– review amendments required to maintenance responsibilities of sports clubs</li> <li>– establish targets, KPI's, measurement techniques and monitoring intervals (seasonal).</li> </ul> <p>Where practical introduce new products, techniques, etc as part of any Master Plan/Plan of Management or re-design works to facilities.</p>				

Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
i	<b>Lease, Licenses and Allocations</b>	VS1/VS5	H/O	SPO	FA
	<p>Review all current leasing and licensing arrangements. Establish generic guidelines associated with the objectives outlined in the Hierarchy and Settings Strategy and in line with the proposed typical Open Space Planning and Design Guidelines (refer to Reference B5). Core principles, in line with the Local Government Act 1993 are:</p> <ul style="list-style-type: none"> <li>– longer term leases should generally only apply to facilities in Regional and District open spaces</li> <li>– short term leases may apply to facilities at District open spaces</li> <li>– annual allocations of facilities, field and court uses should apply to Local open spaces</li> <li>– licenses may apply to a range of uses (eg. refreshments, personal training, ceremonies, recreation equipment hire, one-off special events) and should be user friendly in format.</li> </ul> <p>Implementation of these guidelines will necessarily be progressive over time as existing leases and licenses become renewable.</p>				
J	<b>Integrated Tourism Plan</b>	VS1/VS3/VS4/ VS5	M/L	SPO	FA
	<p>Liaise with Tourism planning department in Council and with external tourism partners to ensure that the proposed tourism related open space strategies in the Structure Plan are fully integrated into City's Tourism Plan with a focus on:</p> <ul style="list-style-type: none"> <li>– the river economy (river based events both on and adjoining water)</li> <li>– Aboriginal Heritage</li> <li>– the Macquarie Towns</li> <li>– farm visitation</li> <li>– National Park experience.</li> </ul>				
M2	<b>PARTNERSHIP DEVELOPMENT</b>				
	<p><b>Develop a partnering strategy for ongoing engagement with a range of open space and recreation stakeholders within Hawkesbury City Council to extend the reach and capacity of the open space network, including with:</b></p>				
a	<b>Public Sector</b>	VS1/VS3/VS4/ VS5	H	OSP	CC/FA

	<ul style="list-style-type: none"> <li>– National Parks and Wildlife Service regarding natural and recreational corridor links into the various National Parks (eg. Scheyville, Cattai, etc)</li> <li>– University and TAFE (sharing sports facilities and research and monitoring, see Education)</li> <li>– adjoining Councils especially in relation to shared major recreation facilities and recreation trail and natural area links and corridors</li> <li>– schools - indoor and outdoor facilities for active and passive recreation, particularly those located close to railway stations and near major bus stops for ease of out-of-hours public transport</li> <li>– road and rail authorities regarding cycling, walking and public transport corridors and access to open space as well as utilities authorities, in relation to recreational use and planting in easements.</li> </ul> <p>Private Sector</p> <ul style="list-style-type: none"> <li>– private recreation providers (eg. golf courses, gyms, health and fitness clubs, personal trainers, etc)</li> <li>– private businesses and commercial organisations and interests including tourism providers</li> <li>– developers - working with developers to establish voluntary agreements for the creation of public open space with direct nexus for the development.</li> </ul> <p>Community</p> <ul style="list-style-type: none"> <li>– services groups (eg. Rotary, RSL, etc)</li> <li>– sports clubs and associations especially clubs which are active in the community</li> <li>– volunteers (eg. bush care, disability recreation, etc).</li> </ul>				
b	<b>Revenue and Expenditure</b>	VS5	H/O	SPO/PAS/ NAD/OSP	FA
	In preparing budgets for delivering the ROSS consider the full spectrum of revenue and expenditure including grants, developer contributions, pay for use and sponsorship (see Funding the Plan).				
Ref	Topic/Action	Outcome	Priority	Responsibility	KPI
M3	<b>COMMUNICATION, CONSULTATION AND PARTICIPATION</b>				
	<b>Employ a comprehensive communications and consultation program in implementing the ROSS including:</b>				
a	<b>Communications/Consultation</b>	VS5	H	SPO/PAS/OSP	QS/ES/US/CC/ CW
	<p>Use all current digital and print media employed by Council, post-adoption of the ROSS to continue to inform the community on the priorities and delivery of implementation. In particular:</p> <ul style="list-style-type: none"> <li>– prepare a communications strategy for the delivery of the ROSS</li> <li>– continue to post summaries and updated documents on Council's high quality updated website</li> <li>– establish community consultation groups around the ROSS town/suburb and rural area structure to assist in localising inputs</li> <li>– seek direct feedback on upgrades to parks through social media as well as through ongoing annual surveys</li> <li>– upgrade park user information on Councils' website to user friendly maps, especially in relation to trails, corridors, play, ceremony locations</li> <li>– employ best practice consultation processes (as per Council's Consultation Policy) for all Plans of Management and Masterplans.</li> </ul> <p>Specifically, ensure that the Acquisition/Rationalisation process is communicated transparently and the underpinning goal of improvement of open space is evident and inherent in its communication and delivery.</p>				



b	Community Participation	VS5	H/O	SPO/PAS/OSP	QS/CC/CW
	<p>Review and update all aspects of active involvement of the community in the care and stewardship of open space in the City including:</p> <ul style="list-style-type: none"> <li>– volunteer engagement and support strategy</li> <li>– schools engagement strategy</li> <li>– sports forums</li> <li>– community monitoring and reporting system (eg. Park Watch)</li> <li>– volunteer awards programs.</li> </ul> <p>Where applicable liaise with adjoining Councils or other government agencies to co-ordinate.</p> <p>In delivering the ROSS, establish priorities for consultation that will be key to finalising planning, detailed design and delivery such as:</p> <ul style="list-style-type: none"> <li>– development of the Sports Plan with Sports Council</li> <li>– consultation of residents in rural townships to improve recreation opportunities</li> <li>– consultation with businesses, event promoters and tourism providers to enhance recreation diversity.</li> </ul>				
c	Education and Awareness	VS5	M/O	SPO/PAS/OSP	QS/CC/CW
	<p>Involve all levels of formal education in the care, monitoring and appreciation of open space in the City including through:</p> <ul style="list-style-type: none"> <li>– schools involvement in environmental education in the parks, planting events, monitoring of systems (eg. Streamwatch)</li> <li>– Colleges such as TAFE and Western Sydney University; field based research in parks and waterways, natural habitat monitoring, park user surveys and the like</li> <li>– University; use of technology in promoting park usage (eg. 'My Parx' application) and remote management systems.</li> </ul> <p>Continue dialogue with individual school principals to seek reciprocal benefits from shared community use of school recreation facilities and school use of Council facilities.</p>				

## DELIVERING THE PLAN

The final section of the ROSS addresses the means by which the Implementation Plan can be delivered now and in the future. It identifies an approach to specific aspects of delivery under the following headings:

- Sequence of Delivery
- Acquisition, Consolidation and Rationalisation: provides a guide as to the process on how these elements can be identified and achieved
- Funding the Plan: identifies the opportunities for future funding of the City's public open space.

### Sequence of Delivery

The following diagram (on page 147) provides an outline of the hierarchy of strategies and plans across the City's planning and administration that identifies the suggested sequence of actions proposed in the Implementation Plan.

## PART 7: IMPLEMENTATION PLAN

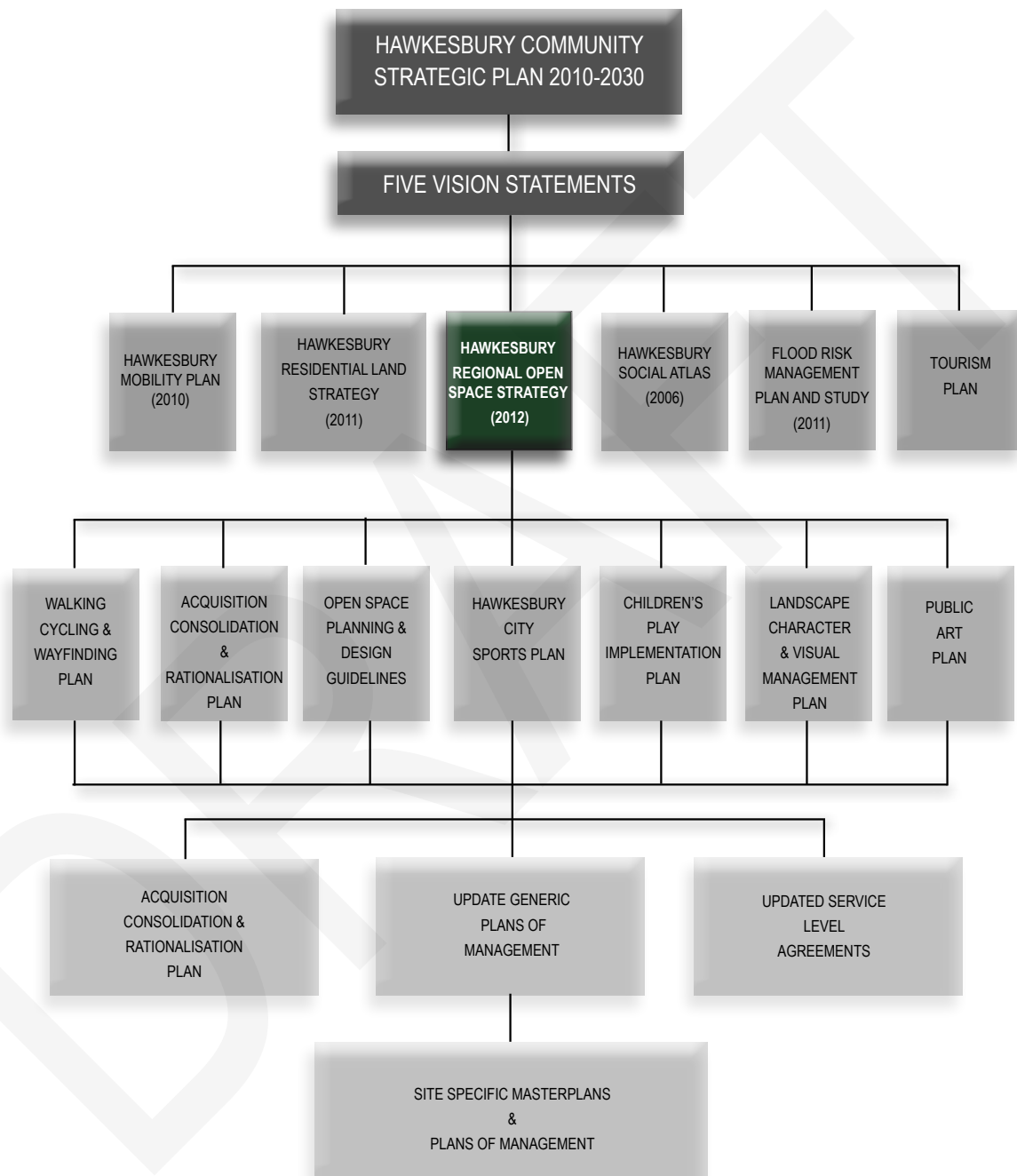


Table IP.02 Planning and Implementation Hierarchy

## PART 7: IMPLEMENTATION PLAN

### **Acquisition, Consolidation and Rationalisation**

The Open Space Structure Plan identifies areas of open space deficit and duplication. To address these discrepancies in provision the following is a brief guide to the core elements of acquisition, consolidation and rationalisation.

#### *Further Investigation*

Potential means of identifying and acquiring further Open Space available to Council include:

- opportunities to augment the existing Council-owned open space resource by purchase of land parcels coming up for sale or reuse (eg. old industrial areas) in areas of identified shortfall at the neighbourhood hierarchy and in order to increase the size of existing open space areas (to improve useability/viability)
- review of land zoned but not yet acquired for open space (if applicable)
- acquisition through redevelopment projects ie. land acquired through VPAs
- negotiation to acquire critical land links along existing or potential linked systems as part of major new developments
- funding for acquisition to include possible use of Section 94 contributions monies and external funding sources.

#### *Checklist for Acquisition and Consolidation*

As a means of optimising the usefulness of land parcels acquired for open space it is recommended that each parcel be carefully assessed prior to purchase. The following checklist provides a starting point for assessment. Land should be purchased for dedication and use as open space if it satisfies the following criteria:

- Ability to function independently as open space in the short term
- If the parcel has a limited capability to function as open space in the short-term (for reasons of small size for example) does it have realisable potential to function as open space in the future (eg. through acquisition of adjoining land parcels)?
- What is the condition of built features on site? Do they have potential for reuse as recreation facilities?
- The land adjoins an existing area of open space and can readily and desirably be consolidated into that existing area immediately or at a later date
- The land has an area of at least 0.5 Ha (a minimum of 0.3 Ha in dense urban areas) and is considered as being suitable for open space purposes by Council
- Dedication and long term management and maintenance will not place an unreasonable burden on the existing or future community
- The land does not contain access barriers or other major impediments to open space use such as easements and drainage lines
- The land contains items or features of natural or cultural significance such as bushland or historical associations where these would enhance the park user experience.

## PART 7: IMPLEMENTATION PLAN

The following points summarise recommendations regarding possible disposal of open space land parcels in the Hawkesbury City Council. The following checklist is a suggested starting point. Land parcels suitable for possible divestment should:

- be Council owned, preferably classified as 'operational'
- be of minimal importance strategically in terms of quantity, quality and distribution eg. located in area of high provision or duplication of numerous small reserves
- have minimal potential for improvement by acquisition of adjoining parcels or consolidation eg. small in size/at a distance from other parcels, isolated from easy access
- be based on economic feasibility on cost benefits for parcels to be potentially divested
- involve identification of alternative land use and zoning for areas to be divested
- be subject to legislative processes and community consultation.

For areas of Council-owned land to be divested which are classified as 'Community Land', Council will need to have the land reclassified to the appropriate classification to allow divestment. This entails a Public Inquiry process as set out in the Local Government Act.

### *Transparent Consultation*

The need for comprehensive local community consultation from the outset of any of the above initiatives is not only important but actively required through the Local Government Act.

All of these initiatives are commonly very sensitive issues in urban communities and whilst broad support may be achieved across a locality it is common for there to be significant resistance amongst property owners directly adjoining existing open space to be mooted for divestment. The community concerned must therefore be in no doubt that the primary motive is improvement of public open space in their locality, if the initiative is to have any chance of success.

Transparency and accountability are key success factors as is an active engagement program with the community that goes beyond meeting legal requirements.

### **Funding The Plan**

There is a range of funding mechanisms available to Council in providing for open space and community facilities including:

- Section 94 contributions
- Council rates/loans/revenue
- State and Federal Government programs and funding
- levies and special charges
- joint venture arrangements with private organisations and other authorities
- sponsorship.



## PART 7: IMPLEMENTATION PLAN

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Each mechanism is appropriate to different strategies. For example, maintenance of open space is traditionally funded through Council rates, whilst the acquisition or embellishment of open space to meet the demand of future residents/land uses is often funded through Section 94 Contributions.

The balance between funding for acquisition/embellishment and that for maintenance is best established as part of a total financial management plan for the City's open space and community facilities.

### *Grants*

There are a range of State and Federal Government grants available to assist in the funding of open space, recreation and community facility works. These funds are usually only for capital works and may include professional planning and documentation fees. Grants usually have to be matched by Council, with a commitment to carry out ongoing maintenance of constructed works.

Where external funding sources are concerned, Council should establish a more concerted and co-ordinated programme of State and Federal funding applications.

Liaison with adjoining Councils for joint funding for regional open space, recreation and community facilities across boundaries (eg. Metropolitan Greenspace Program or Sharing Sydney harbour Access Plan) is likely to be successful if well planned and co-ordinated.

Such funding support is obviously limited and there is considerable competition for grants. Nevertheless, applications that clearly demonstrate a strong long-term commitment from both Council and the community and which are closely aligned to the purpose of the grant have the most chance of success.

Community facilities funding will need to engage the full spectrum of options for achieving the capital required, ie. refurbishment, joint venture partners for new developments, specific capital assistance applications to government, property realisation and in-kind assistance through existing property options.

In this respect, this Plan should be seen as an important support document in any application, providing the rationale behind and justifying any project.

### *Cost Minimisation*

The implications of future trends in open space, recreation and community facilities planning include:

- a greater quantity and quality of facilities to manage and maintain within existing open space areas
- greater user pressure on open space requiring higher levels of maintenance at key sites
- the need for co-location of community facilities and open space to reduce capital and recurrent costs

## PART 7: IMPLEMENTATION PLAN

- level of budgets and staff allocated to the management of Council's open space and community facility resources should be reviewed annually and tested against performance indicators.

Options for future cost minimisation therefore include:

- revised maintenance practices (eg. reduced mowing)
- risk assessment and liability insurance reduction through regular design and maintenance checks (particularly with regard to playgrounds)
- development and management strategies and principles to reduce life cycle costs (materials, maintenance implications, etc)
- disposal of land not suited to an open space, recreation or community facility function (see Rationalisation).

Other means by which best value can be achieved include:

- encouraging the development of public/private partnerships in public recreation and community facility provision, particularly in areas of specialist services where high capital or recurrent costs are involved and where "user pays" is commonly an accepted practice (eg. gymnasiums, child care, swimming pool management by agencies such as YMCA, etc)
- community use of school facilities for recreation and community facilities such as room hire
- recreational use of public facilities not specifically zoned for open space uses including 'out of hours' use of car parks and multi-storey car parks for courts/skateboards
- improved walking routes in the vicinity of community facilities and public open space to encourage higher and more frequent use.

### *Revenue Generation Opportunities*

Much debate surrounds the degree to which it is acceptable to use public open space as a means of generating revenue. Purists will argue that public open space should remain free from commercial interests of any sort.

In practice, the application of this approach, precludes opportunities to enhance the appreciation of open space and the option to use funds where appropriately generated to improve or maintain the resource itself.

The core principal for any commercial activity in public open space is the activities direct relationship to aid enhancement of the recreational experience.

Two traditional strategies for revenue generation are:

- commercial activities in open space areas
- sponsorship.

## PART 7: IMPLEMENTATION PLAN

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Both require discreet planning, awareness of appropriateness to context and an established policy which sets controls to ensure the clearly stated objectives are achieved.

In relation to the former, Council should give serious consideration to a range of commercial opportunities over which it can maintain control through leases and licenses, rather than directly operating. These might include cafes/kiosks, bicycle hire, weddings, filming and major party bookings in large parks.

The nature of sponsorship of recreation has changed markedly in recent years with a shift away from sports orientation to a more global recreation and leisure market, particularly facilities or events with an environmentally friendly or family orientated bias.

Council should give serious consideration to sponsorship in the following areas in particular:

- sponsorship of major events/festivals and corporate events
- approaching major local industries for sponsorship or contribution of materials towards some of the more environmentally directed programs such as cycleways, walking trails, wetlands, bushland rehabilitation.

In any such sponsorship, clear rules of the process should ensure discreet signage.

Revenue generated from these sources must be clearly understood, and evidently shown, to be returned to open space, recreation community facilities improvement and/or maintenance, or the running of the associated events preferably in the locality from which it is generated.

In the case of newly developed community facility buildings, the management plan at the feasibility stage will need to establish the level of revenue or cost recovery required or available.

### *Cost Recovery*

This is effectively related to a 'user pays' philosophy. In applying user pays it is crucial that Council sees this facet of financial planning in its widest possible planning and management context. A strategic approach must be applied and the Council's Pricing Policy refined to ensure that it reflects a number of factors including:

- purpose of levy and financial justification
- frequency of levy (per annum, per season, per session, per hour, etc)
- means and economy of collection (ie. special Council rate, site fee, license, etc)
- equity and ability to pay
- establishing net benefit and to whom (does the policy value add?)
- possible fall-out effects (additional pressure on other unlevied settings/activities) or lack of take-up

## PART 7: IMPLEMENTATION PLAN

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- user attitudes (will the levy induce positive or negative user attitudes?)
- targeting (is the levy appropriately targeted? eg. resident, non-resident)
- administration (degree to which Council wish to administer, eg. lease, license, Council/commercial partnership)
- cross-border implications for local authorities;
- acceptability of levy to community
- ability to monitor progress and appraise performance and achievement of objective (eg. exit surveys, financial reports, improvement to resource, etc).

These factors should be seen in the context of low income groups within the Hawkesbury City Council and the community's widely held view that access to public open space should be free of charge at all times and that charges for use of community facilities where required be limited.

Where such issues have equity implications for the wider community, appropriate consultation techniques (eg. user group workshops, public exhibition, etc) will be crucial to the long term acceptance and success of the policy.



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# Appendix 1 : Preliminary Site Visit Observations

## PRELIMINARY SITE VISITS OBSERVATIONS

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First impressions are always important. Consequently the following observations and commentary, recorded by the consultant team in the first few weeks of the project, provide insights into some of the core issues and opportunities that have been further explored in the ROSS.

### *Open Space Provision*

- The Hawkesbury LGA, although one of the largest in the Sydney Metropolitan Region, has 70% of its open space comprised of National Parks that are under the care control and management of the NPWS in the north with the remaining public open space is concentrated in the south of the City.
- Given its relatively rural location and character, the total quantum of open space does not seem to be creating any more pressure for use, but the manner in which it is managed and maintained will be a challenge for Council given the need to focus resources to areas of greatest need/demand.
- Many residential properties have use of and access to their own large private open space reducing the demand on public open space for passive recreation on a day-to-day basis.
- The many heritage cemeteries and churches create additional and interesting public open space.

### *National Parks*

- The National Parks add to the overall fabric of open space in the region and whilst Council has no direct jurisdiction over the way the parks are managed, the community will access these areas for nature based and outdoor recreation opportunities and there is clearly a positive implication of tourism visitation to the area. The open space plan therefore provides opportunity and an avenue for Council to work with the State Government to identify and enhance recreation opportunities whilst managing conflicts of use and impact on the natural environment.

### *Bushland*

- Areas of natural bushland, other than the many National Parks, abound throughout the LGA, and are used for both active and passive recreation which includes walking, cycling, picnicking and birdwatching. Access is usually made to these locations by private vehicle.

### *Aquatic Reserves*

- The Hawkesbury, Colo Rivers and other smaller rivers and creeks form a significant part of the Council's foreshore reserve system and are well used but most require access by private vehicle.
- The foreshores of the Hawkesbury rivers and creek systems offer great opportunities for ongoing improvements for connectivity especially for cycling and walking recreation.
- The Hawkesbury River provides a major natural asset in the provision of open space with many reserves abutting the waterway and the river itself providing a recreation opportunity for residents and visitors. Management strategies and aquatic reserves should be identified and managed to ensure optimal use whilst minimising impact on the natural and social environments.



## PRELIMINARY SITE VISITS OBSERVATIONS

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### *Playspace*

- There seems to be a large number of playspaces throughout the council area that are either under utilised due to design or are not being used due to lack of interest or demand. Anecdotal evidence suggests that due to larger than average house block sizes, and the rural location of council, many homes have home based play equipment or the natural landscape is used for natural and explorative play. A complete overview of the type and location of playspaces is therefore recommended.
- Play equipment is often homogenous in nature, providing little opportunity for imaginative play.
- Many of the smaller reserves with play equipment installed are evidently little used.

### *Sport*

- Council's existing arrangement with the Sports Council, which undertakes the care, control, management and development of sporting facilities in the LGA has been in place for a number of years. Whilst anecdotally the model seems to be embraced by the community, the time seems right to review its operations if sports grounds and open space are to be managed in the most effective manner for current and future generations. Additionally the roles and responsibilities of the Sports Council should be clearly defined and the development of sport (amongst other things) considered along with KPI's agreed between both Council and the Sports Council.
- Sports reserves are of mixed quality – some are of high quality, many are limited in capacity with the two largest sporting complexes located at Bensons Lane Sporting Complex in Richmond and Hawkesbury Sports Stadium in South Windsor.

### *Design*

- Many reserves have been developed over the years in the absence of a structured masterplan, resulting in reduced design intent and poor access and circulation.
- Given its mix of urban living in the south east corner of Council plus the many smaller townships scattered throughout the council area, designing open space will need to consider both the natural and formalised form expected in such areas.
- There seems to be a wide range of open space opportunity throughout Council with centralised 'village greens' and parks in some of the more urbanised areas. There is also a number of road reserves which are costly to maintain and manage. An assessment of road reserves and buffers is therefore recommended and strategies developed to minimise maintenance costs of such land.
- The ridge and river valley topography of the Hawkesbury LGA adds significantly to the difficulty of creating larger level spaces (except closer to the rivers) and adds significantly to construction costs with the need for retention walls and embankments.

### *Cultural Heritage*

- The many items of cultural heritage that are found in the historic early colonial towns of Richmond, Windsor and Wilberforce are seen as a valuable asset by

## PRELIMINARY SITE VISITS OBSERVATIONS

the local community whilst also attracting large numbers of annual visitors who undertake the self guided walking tours of the sites.

- The Hawkesbury has a strong relationship with the past with its numerous early cemeteries, many dating back to the arrival of the first fleet, located throughout the southern part of the LGA.

### *Access*

- Due to the great distances required to access public open space and in many instances a lack of footpath infrastructure travel to them is frequently undertaken by private vehicle.
- Universal access to and within many reserves is often difficult, due to the topography of much of the Hawkesbury LGA.
- In combination with topography and the river and creek systems the major transport routes across the LGA create significant barriers to connectivity of reserves and their relationship to other day-to-day destinations (schools, shops, work) limiting inducement for walking.

### *Management Agreements*

- Roles and responsibilities of both clubs and council need to be clearly defined on open space that has management agreements in place. Liability is a key consideration with some activities such as formalised BMX tracks being managed by clubs but accessible by the broader community out of club hours. Whilst this in itself may be justifiable, the need to clearly define levels of responsibility and maintenance should be a key principle of open space management.

### *Partnerships*

- Responsibilities for open space management in the City seem to be varied with the sports committee, schools and state government all having roles in the provision and management of open space. The ROSS will therefore provide opportunity to foster partnerships to ensure open space is optimised and roles and responsibilities clarified.

### *Planning and Administration*

- There is evidently no structured framework for categorising the hierarchy or setting types for open space across the LGA resulting in facility provision often being mismatched to the size, nature or access to the reserve.
- Given its physical size, location and mix of urban and rural living, it is suggested that the open space plan provide broad overarching principles for management and use of space combined with targeted localised plans of action for townships and residential areas of council. This will ensure open space is planned in accordance with a common set of principles whilst localised themes and opportunities are captured.

# Appendix 2 : SWOT Analysis of Hawkesbury's Open Space & Recreation

## SWOT ANALYSIS OF HAWKESBURY'S OPEN SPACE & RECREATION

From the foregoing first impressions the consultant team prepared a SWOT Analysis (strengths, weaknesses, opportunities and threats) to set the scene for the preparation of the ROSS. The following was the outcome of that exercise:

### Strengths

- Strong cultural heritage values in towns of Windsor, Richmond and Wilberforce
- Close proximity to major National Parks and World Heritage Area ie Blue Mountains National Park, Scheyville National Park, Colo Wilderness
- Major road links giving access west to the Blue Mountains and north to the Hunter Valley
- High scenic values, especially from ridgelines and river foreshores
- Extensive water foreshores that can cater for more natural adventures and sports ie power boat leisure and racing activities, camping, orienteering, walking and cycling
- Strong tourism draw provided by extensive natural and cultural heritage
- High natural values outside of designated National Parks

### Weaknesses

- Annual open space budget is limited due to Hawkesbury's large LGA area and small population with limited projected growth
- Uneven distribution of reserves within 400 metres of all residents
- Significant barriers to walking/cycling created by major transport corridors
- Many small parks of limited size ie house block size, poorly located and little used
- Topography in LGA creates challenges for universal access
- Absence of classification and categorisation of reserve types leading to inadequate strategic decision making and priorities
- Absence of policies and strategies to guide management and development of recreation within the City
- Funding base through Section 94 reducing due to limited population growth
- Limited liaison with adjoining Councils

### Opportunities

- Enhanced connectivity of reserves can be achieved within environmental corridors and roads with links to public transport
- Regional connections by improving links to cycleways, trails, pathways, and creek/river corridors



## SWOT ANALYSIS OF HAWKESBURY'S OPEN SPACE & RECREATION

- Creation of sport hubs especially within centres will assist functionality, planning and management
- Focus on improved passive recreation in centres of towns and villages that meet basic needs well
- Enhancement of environmental corridor links tied to improved access and connections
- Development of recreation strategy will create clearer focus for priorities and funding
- Partnerships with other land managers (eg NSW National Parks and Wildlife Service) will create future recreation opportunities whilst managing impacts on the natural environment
- Liaison with adjoining Councils to ensure co-ordination of facility provision in the sub region

### Threats

- Increased development may place more pressure on existing open space with limited opportunities and resources to acquire land for future open space
- Funding base for maintenance is not matching upgrades
- Climate change may impact on river based reserves and microclimate of all open spaces
- Minimal population growth limits funding source such as through Section 94 contributions

## SWOT ANALYSIS OF HAWKESBURY'S OPEN SPACE & RECREATION

### EMERGING THEMES

From the foregoing preliminary analysis, discussions with Council officers and site visits some of the key issues that the ROSS will need to address include:

- Understanding the values, needs and aspirations of the Hawkesbury community and its visitors
- Updating of Parks and Reserve Inventory
- Definition of park hierarchy and setting types
- Establishing a guideline framework for open space
- Reviewing of major gaps in reserve distribution across the LGA and recommend strategy for long term acquisition and/or connectivity
- Overviewing of access and connectivity of reserve system by foot and cycle (including roads and rail lines) linked to other destinations (work, school, shops etc)
- Reviewing and potential rationalisation or consolidation of smaller reserves to improve accessibility and use
- A more integrated approach to environmental values and sustainable management and maintenance practice
- Development of core guidelines (play, sport, environment, access etc)
- Optimising capacity of reserves through design and specification, especially for sportsfields (eg lighting, drainage, surfaces etc)
- Building on cultural heritage and natural values
- Making more of the river and foreshores
- Review and refinement of administration of open space and recreation

Appendix 3 : Draft Open Space Inventory

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TABLE 2 A3 here



TABLE 3 A3 here



TABLE 4 A3 here





TABLE 5 A3 here



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# Appendix 4 : Open Space Hierarchy and Settings



Hierarchy and Objectives	Preferred Uses/Functions/Facilities	Accessibility	Preferred Size (Ha)	Parks
<b>Local</b>				
Local spaces provide convenient access to passive and some active recreation opportunities for nearby residents of all age groups within walking distance.  (Local categorisation dependent on township location and accessibility in the City of Hawkesbury LGA)	<ul style="list-style-type: none"><li>- accessible to all residents within their immediate locality</li><li>- passive un-irrigated area</li><li>- low key planting</li><li>- shade</li><li>- seating (natural or bench)</li><li>- play equipment catering primarily for junior play opportunities (0-6yrs) and not all parks</li><li>- Paths only as required to access park and seats/play play spaces</li><li>- some isolated sports facilities</li><li>- some picnic / low key BBQ facilities and shade/tables</li><li>- informal active areas with passive elements for family recreation including small kickabout areas</li><li>- potentially toilets but preferably these would be in adjoining building in street</li><li>- dog off leash exercise areas</li></ul>	<p>Within 1 km actual walk or 15-20 minutes</p> <p>Very little on site parking but preferably close to public transport e.g. nearby bus stop</p>	Min 0.2 Ha and usually up to 2Ha	

Hierarchy and Objectives	Preferred Uses/Functions/Facilities	Accessibility	Preferred Size (Ha)	Parks
<b>District</b>				
<p>District open spaces are larger and provide for a variety of active and passive recreation needs of the residents of Hawkesbury City</p> <p>These open spaces can accommodate large group activities, organized sports and offer opportunities for cultural expression and environmental education.</p>	<ul style="list-style-type: none"> <li>- play spaces for all ages</li> <li>- sports facilities that accommodate multiple sports and hard courts with supporting infrastructure such as floodlighting, seating, change rooms and canteens</li> <li>- cultural and civic spaces for events and or ceremonies</li> <li>- specific areas of interest including natural areas, bushland and beaches and riverside settings.</li> <li>- single and group picnic areas</li> <li>- park amenity buildings</li> <li>- other possible uses may include: <ul style="list-style-type: none"> <li>- community gardens and nursery</li> <li>- community / public art and other interpretative items</li> <li>- youth spaces including multi use areas and skate facilities</li> <li>- dog off leash exercise areas</li> <li>- on and off street car parking areas</li> <li>- boat ramps, river jetties and access to the River for water sports</li> </ul> </li> </ul>	<p>Within 5kms or 10-15 min drive from all residents.</p> <p>Readily accessed by public transport and with some limited on site parking to reduce day to day too day impact on adjoining streets</p>	<p>Min 2.0 Ha and usually up to 5 - 10 Ha</p>	

Hierarchy and Objectives	Preferred Uses/Functions/Facilities	Accessibility	Preferred Size (Ha)	Parks
<b>Regional</b>				
<p>Regional space provides a variety of active and passive recreation opportunities for the residents of Hawkesbury City and visitors to the City.</p> <p>These open spaces can accommodate large community activities, organized sports and offer opportunities for cultural expression and environmental education.</p> <p>These spaces may provide unique recreation opportunities or landscape settings that are considered a regional attraction.</p>	<ul style="list-style-type: none"> <li>- large children's play areas that may include adventure play and inclusive play</li> <li>- regional sports facilities that accommodate multiple sports and hard courts with supporting infrastructure such as floodlighting, grandstands, change rooms and canteens.</li> <li>- cultural and civic spaces for large community events and or ceremonies</li> <li>- areas of natural significance</li> <li>- areas of open space for specific events that attract local and regional tourism.</li> <li>- single and group picnic areas</li> <li>- other possible uses may include: <ul style="list-style-type: none"> <li>- community and sports centres</li> <li>- food and beverage opportunities that may include kiosks, cafes and or restaurants</li> <li>- community / public art and other interpretative items</li> <li>- youth spaces including multi use areas and skate facilities</li> <li>- dog off leash exercise areas</li> <li>- on and off street car parking areas</li> <li>- boat ramps, river jetties and access to the River for water sports</li> </ul> </li> </ul>	<p>Between 30 and 90 minutes travel by car or public transport.</p> <p>Access by public transport should be practical and site will contain significant on site parking, often in more than one car park</p>	<p>Usually 10 Ha or more, but if a particular feature (eg Heritage Property, Destination area) could be much smaller</p> <p>(Dependent on township location and accessibility)</p>	

## NETWORK AND LINKAGE

Attribute	Examples	Accessibility	Preferred Size
<p>This relates to areas where the primary role may not be public open space but where recreation can occur and is often associated with movement oriented recreation (walking and cycling) eg creek lines, storm water channels, linear trails, native vegetation corridors, river foreshores, rail corridors etc</p> <p>These areas are significant and serve as supplementary greenlinks between existing parks and reserves and are particularly important in suburbs identified as deficient in open space.</p> <p>In many cases these networks and corridors are comprised of a number of linked but discrete reserves often of different settings</p>	<ul style="list-style-type: none"> <li>- river or coastal walks</li> <li>- regional trails (as per Sydney Regional Recreation Trails Framework 2011)</li> <li>- wildlife corridors with trails</li> <li>- network of linked local reserves forming a recreation corridor</li> </ul>	<p>Could be anything from a few minutes to an hour from residences</p>	<p>No formal size, usually anything from neighbourhood to regional in scale</p>

Category/Setting Type	Description/Function/Use	Facilities/Assets	NSW Local Gov Act Equivalent
Passive Parklands	reserves which have had their physical character and/or vegetation modified to support community recreation, community development and wellbeing uses	play, paths, fencing, gardens, lighting, public art, interpretation ornamental gardens, play facilities, stages and amphitheatres, toilets, amenity buildings, café/kiosk shade structures community gardens, formal or informal lawns, tree and shrub planting (both native and ornamental) dog facilities, youth spaces	36G – Park 36A 36B 36C 36D
Outdoor Sports	venues designed to support organized sports, including training and competition . Such reserve settings may include buildings where these have a recreation function (eg swimming pools or sports halls)	formal fields, courts, buildings (change rooms, toilets, amenities, café), swimming pools (indoor and outdoor), sports halls, club rooms, scout halls, grandstands etc. Includes lighting, irrigation, fencing, car parks and associated passive rec facilities (play, access and circuit paths, seating kiosk etc).	36F - Sportsground
Civic and Urban Spaces	plazas, squares, public building and shopping centre forecourts which accommodate social gatherings or special events	forecourts, Steps, lighting, public art, interpretation, visitor information, structures, monuments, gardens, lawns, historic features, banners and flags, youth spaces	36H –Cultural Significance 36 I – Community Use
Conservation of Natural and Cultural Heritage	reserves created to protect and enhance natural and cultural resources, but which also have a quiet/passive recreation//leisure dimension eg walking, cycling, tourism visitation	native bushland or grasslands, ephemeral creek, salt marshes	36J – Bushland 36K – Wetland 36L – Escarpment 36E
River Foreshore	river foreshores, includes immediate foreshore eg within tideline or for access to waterway itself. May include an open water body itself where this has recreation use (eg sailing/rowing	beaches, launching ramps, buoys, pontoons, defined sailing/rowing areas, protected wildlife areas	36M – Watercourse 36N – Foreshore
Creeks and Wetlands	lake, pond, permanent or ephemeral creek	shoreline, creek bank, boardwalks, water treatment infrastructure, pipes and weirs	36M – Watercourse 36N – Foreshore



Category/Setting Type	Description/Function/Use	Facilities/Assets	NSW Local Gov Act Equivalent
Ancillary	spaces not zoned for public open space with a minor recreation use but primarily with an amenity function, eg road reserves and wide medians, reservoirs, rail corridors, service easements, stand-alone ornamental garden beds, LGA gateways etc	aside from infrastructure itself these are usually planted or grassed only or remnant natural vegetation exists or they are especially planted for civic or visual amenity	36 I – Community Use
Informal	spaces not zoned for public open space with another primary function but which are used periodically by the public for recreation with permission of the owner (eg school grounds, community gardens, car parks and building roofs)	may have no recreation infrastructure (eg car parks) or be fully developed (eg school)	36 I – Community Use
<b>STATUS</b>			
Embellished	actively in use and fully accessible	any of the above categories or hierarchy	N/A
Unembellished	no specific facilities provided and/or setting/hierarchy not defined. Often not accessible but with intention to be developed May also be identified for disposal/rezoning if demonstrated to be unsuitable for open space and recreation	Few or no facilities but may have hierarchy and setting identified as goal for future development of the reserve	N/A
Proposed	zoned or identified for future acquisition/designation for public open space and recreation	in other land use at present, may require demolition of existing facilities before being developed for open space but may have hierarchy and setting identified in strategy that identified its acquisition	N/A

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## Appendix 5 : Typical Planning, Design & Management Guidelines

## DEVELOPMENT AND MANAGEMENT PRINCIPLES FOR: SPORTSGROUNDS

DEVELOPMENT LEVEL	OPEN SPACE & LINKS	RECREATION RANGE & OPPORTUNITY	NATURAL SYSTEMS	LANDSCAPE CHARACTER	MANAGEMENT & MAINTENANCE
<b>LEVEL 2</b> <b>(District)</b> <i>Boggabilla Reserve</i>	<p><b>ACCESS:</b> On or close to major trunk road and within 10 minutes walk of regular bus stop or railway station. Accessible by foot and bicycle. Access positive.</p> <p><b>AREA &amp; TOPOGRAPHY:</b> Min 5ha. Topography: principally 1 in 10 gradient or less.</p> <p><b>NUMBERS &amp; DISTRIBUTION:</b> Adequate coverage throughout City for max 10 minutes drive by private vehicle or 20 minutes by bus/rail.</p>	<p><b>FACILITIES:</b> Opportunity to provide for:</p> <ul style="list-style-type: none"> <li>• 4 fields (2 floodlit) permitting 1 cricket pitch</li> <li>• 6-8 multi-purpose courts all floodlit</li> <li>• Clubhouse, changing module toilet</li> <li>• Playground (fenced)</li> <li>• Link to local cycleway</li> <li>• Ample shaded seating under trees</li> </ul> <p><b>CARPARKING:</b> Min 50 car spaces on site</p>	<p><b>PLANTING:</b> As for above with street front tree planting compatible with local street tree planting.</p> <p><b>DRAINAGE:</b> Stormwater discharge to street through natural filter.</p>	<p><b>SCENIC QUALITY:</b> As for above.</p> <p><b>VIEWS:</b> As for above.</p> <p><b>HERITAGE:</b> As for above.</p> <p><b>SCREENING:</b> As for above.</p>	<p><b>MANAGEMENT:</b> By Council. Maintenance of fields and leased courts by lessee.</p> <p><b>LICENCES/LEASES:</b> Max lease 5 years by open tender. Typical leases/licenses include 2 floodlit fields, 4 multi-purpose courts, clubhouse (joint lease Winter and Summer codes). Multi-use encouraged.</p> <p><b>MAINTENANCE:</b> Mowing by Council, medium frequency. Initial line marking by Council. Irrigation on 2 fields/cricket pitch. Additional mowing, subsequent line marking and other work by lessee.</p> <p><b>SPONSORSHIP:</b> Acceptable but confined to buildings or fences.</p>

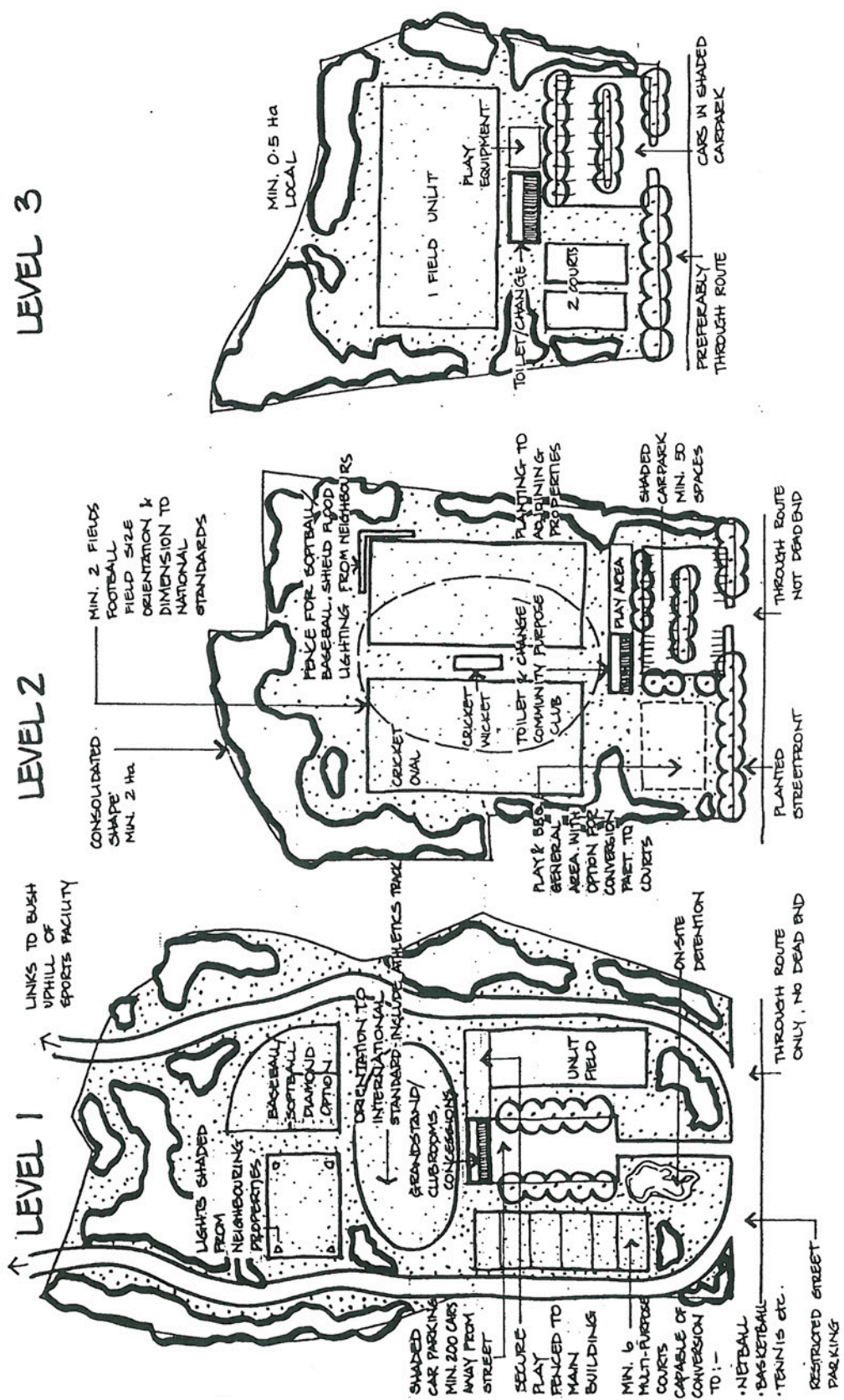
## DEVELOPMENT AND MANAGEMENT PRINCIPLES FOR: SPORTSGROUNDS

DEVELOPMENT LEVEL	OPEN SPACE & LINKS	RECREATION RANGE & OPPORTUNITY	NATURAL SYSTEMS	LANDSCAPE CHARACTER	MANAGEMENT & MAINTENANCE
<b>LEVEL 3</b> <b>(Neighbourhood)</b> <i>Johnstone Reserve</i>	<p><b>ACCESS:</b> On local through route and visible from road where possible. No more than 15 minutes walk from bus stop/railway station. Access positive.</p> <p><b>AREA &amp; TOPOGRAPHY:</b> Min 2ha. Topography: as above.</p> <p><b>NUMBERS &amp; DISTRIBUTION:</b> Adequate coverage throughout City for max 5-10 minute drive or 20 minute cycle ride.</p>	<p><b>FACILITIES:</b> Opportunity to provide for:</p> <ul style="list-style-type: none"> <li>• 2 fields with cricket wicket between</li> <li>• 4 multi-purpose courts (preferred)</li> <li>• toilet/changing module</li> <li>• play equipment</li> <li>• link to local cycleway</li> </ul> <p><b>CARPARKING:</b> Min 25 car spaces on site, room for on-street parking without detriment to local residents.</p>	<p><b>PLANTING:</b> As above, but emphasis on endemic species.</p> <p><b>DRAINAGE:</b> Stormwater discharge to street.</p>	<p><b>SCENIC QUALITY:</b> Provide shade for spectators by tree planting.</p> <p><b>VIEWS:</b> Emphasise location by distinctive street-front planting.</p> <p><b>HERITAGE:</b> As for above.</p> <p><b>SCREENING:</b> As for above.</p>	<p><b>MANAGEMENT:</b> Principally by Council.</p> <p><b>LICENCES/LEASES:</b> None.</p> <p><b>MAINTENANCE:</b> mowing by Council. Tree planting programmes by local committees and schools.</p> <p><b>SPONSORSHIP:</b> None that involves major signage.</p>

## DEVELOPMENT AND MANAGEMENT PRINCIPLES FOR: SPORTSGROUNDS

DEVELOPMENT LEVEL	OPEN SPACE & LINKS	RECREATION RANGE & OPPORTUNITY	NATURAL SYSTEMS	LANDSCAPE CHARACTER	MANAGEMENT & MAINTENANCE
<b>LEVEL 1</b> <b>Regional or City Wide</b> <i>The Crest</i>	<p><b>ACCESS:</b> On or close to major arterial/distributor road. Close to railway station or regular bus route. Easy bicycle access. Access positive.</p> <p><b>AREA &amp; TOPOGRAPHY:</b> No less than 10ha. Topography: principally 1 in 10 gradient or less. Site development should not entail major cut and fill exercise.</p> <p><b>DISTRIBUTION:</b> Adequate coverage across City to ensure 15-20 minute drive in private car, 30 minutes by public transport (non rush hour). Ideally, close to major adjoining passive recreation area (eg. park), and sited generally within urban area.</p>	<p><b>FACILITIES:</b> Opportunity to provide for as minimum:</p> <ul style="list-style-type: none"> <li>• Athletics track around major field with grandstand / clubhouse / food outlet</li> <li>• 4 outlying fields, all floodlit, minimum area to permit full range of field sports including baseball diamond and cricket pitch</li> <li>• 2 fields unlit</li> <li>• 10 consolidated multi-purpose all weather courts, all floodlit</li> <li>• fenced playground</li> <li>• off-road cycle circuit, ideally linked to off-site cycleway</li> <li>• ideally linked to regional walking/trail</li> </ul> <p><b>CARPARKING:</b> Min 80 car spaces on site. Restricted car parking in adjoining streets.</p>	<p><b>PLANTING:</b> Site selection should entail minimum clearing of native vegetation.</p> <p>Boundary area and corners of site substantially planted with endemic tree/shrub species.</p> <p>Exotic species acceptable for entrance and feature areas.</p> <p>Native shade trees dividing fields and shading carparking.</p> <p>Passive recreation areas predominantly native to minimum 40% cover.</p> <p><b>DRAINAGE:</b> On site detention and natural filter for irrigation water/recycle. All drainage into basin/creek and away from adjoining bushland if possible.</p>	<p><b>SCENIC QUALITY:</b> Well planted boundaries to screen neighbours, particularly for night lighting.</p> <p><b>VIEWS:</b> Retain existing middle distant views where possible.</p> <p><b>HERITAGE:</b> Preserve Aboriginal sites, retain/refurbish heritage buildings, retain listed trees.</p> <p>Do not develop on sites where landscape has heritage significance that may be damaged or obscured.</p> <p><b>SCREENING:</b> Minimise impact on surrounding residents through screening of facilities.</p>	<p><b>MANAGEMENT:</b> By Council. Maintenance of major field/oval and leased courts by lessee.</p> <p><b>LICENCES/LEASES:</b> Max. lease on any facility 21 years by open tender. Typical leases: major oval, grandstand, multi-purpose courts (but Council/ community rights to some allocations). Multi-use of facilities encouraged.</p> <p><b>MAINTENANCE:</b> High intensity mowing regime by Council. Initial line marking by Council. Irrigation on major oval and 4 outlying fields. Additional mowing, subsequent line marking and other work by lessee.</p> <p><b>SPONSORSHIP:</b> Acceptable and visible on major facilities.</p>





SITE LAYOUT AND MANAGEMENT PRINCIPLES FOR SPORTSGROUNDS



