

HAWKESBURY CITY COUNCIL

Woodbury Reserve

Plan of Management

hawkesbury.nsw.gov.au





This document contains important information.
If you do not understand it, contact the
Telephone Interpreter Service on 131 450.



Hawkesbury City Council

Address: 366 George Street
Windsor NSW 2756
Mailing Address: PO Box 146
WINDSOR NSW 2756
Phone: (02) 4560 4444
Fax: (02) 4587 7740
Email: council@hawkesbury.nsw.gov.au
Council Website: www.hawkesbury.nsw.gov.au
Office Hours: Monday to Friday 8.30am-5pm

Acknowledgement of Country

Hawkesbury City Council acknowledges the Darug and Darkinjung people as the traditional custodians of the Hawkesbury. We pay respect to all Elders past, present and emerging and acknowledge all Aboriginal and Torres Strait Islander peoples as the first people of this Country.

Executive Summary

Woodbury Reserve is a large district park owned and managed by Hawkesbury City Council. The reserve is made up of 3 contiguous land parcels which is bordered by Kentucky Drive to the north and west, Golden Valley Drive to the East and Spinks Road to the north. Woodbury Reserve would have originally been bushland which is located within the Country of the Darug peoples.

The park is approximately an hour drive north west of Sydney's CBD and a 15-minute drive north of Richmond. The park is in a largely peri urban residential area however notable land uses such as Glossodia Public School, the Glossodia Community Centre and the Glossodia Supermarket border the reserve on the east.

Woodbury Reserve provides a strong community focus offering a range of opportunities for active, organised sports and passive, nature-based recreation. Community and recreational facilities include a multi-purpose sportsground catering for club soccer, cricket and PSSA (Primary School Sports Association) sports, the Golden Valley Children's Learning Centre (near the school and shopping village) and Glossodia Bush Fire Brigade (building located in a fenced area on Spinks Road). Other facilities include car parking areas, children's playground, sports lighting, public amenities/changerooms, clubroom and canteen. These facilities generally cater for the local and broader district user catchment.

This Plan of Management provides general direction of the ongoing development and maintenance of Woodbury Reserve and should be used to guide its ongoing renewal and future management (in consistency with the Local Government Act 1993 requirements and the recommendations of the Hawkesbury Regional Open Space Strategy 2013). This Plan of Management references the 2009 Plan of Management (prepared by Landarc Ltd) throughout and provides an updated management action plan for the reserve. The Plan of Management seeks to identify and address the key issues recognised during the 2020 community engagement and site analysis process including the lack of accessible facilities and footpaths, formal car parking, informal (non-structured) sport and passive recreation opportunities.

The Masterplan document prepared as part of this Plan of Management communicates the vision for Woodbury Reserve as a district park that maximises the full potential of the site and the recreation opportunities it will provide as part of a broader park network. The Masterplan document prepared in conjunction with this Plan of Management responds to the community values and aspirations for the reserve identified during the community engagement phases and includes an implementation plan that has been developed to prioritise the future development based on community aspirations.

Table of Contents

1	Introduction	7
1.1	What is a Plan of Management	7
1.2	Plan of Management Structure	7
1.2.1	Plan of Management.....	7
1.2.2	Masterplan	7
1.3	Compliance with Local Government Act Requirements.....	8
2	Statutory and Strategic Framework.....	9
2.1	Biodiversity Conservation Act 2016	9
2.2	Local Government Act 1993.....	9
2.3	Community Land Categorisation	9
2.3.1	Natural area – Bushland	11
2.3.2	Natural area – Watercourse	11
2.3.1	Sportsground.....	11
2.3.2	Park	12
2.3.3	General Community Use.....	12
2.4	Hawkesbury Local Environmental Plan 2012	12
2.5	Rural Fires Act.....	15
2.6	Disability Inclusion Act 2014.....	15
2.7	Hawkesbury Local Strategic Planning Statement	15
2.8	Hawkesbury Community Strategic Plan 2036.....	16
2.9	Hawkesbury Regional Open Space Strategy 2012.....	16
3	Woodbury Reserve and its Context.....	17
3.1	Legal Definition and Site Description	17
3.2	Landscape Character	19
3.3	Existing Assets	22
3.3.1	Existing Uses	27
3.4	Environment and Biodiversity.....	27
3.4.1	Climate change	27
3.4.2	Geology and soil landscapes.....	27
3.4.3	Endangered ecological communities	28
3.4.4	Floristic composition and structural characteristics	28
3.4.5	Fauna habitat.....	29
3.4.6	Conservation significance.....	30
3.4.7	Weed management/ bush regeneration strategy	30
4	Community Engagement.....	31
4.1	Community Values	31
4.2	Community Workshop Sessions	31
4.3	Community Comments.....	31
4.3.1	Doing well	31
4.3.2	Needs improvement.....	32
5	Management Issues	33
5.1	Summary of Existing Management Issues.....	33
5.1.1	Inappropriate and unauthorised use of vehicles and bikes	33
5.1.2	Lack of passive recreation opportunities	33
5.1.3	Lack of youth recreation opportunities.....	33
5.1.4	Lack of family-based passive recreation	33

5.1.5	Lack of accessible infrastructure	34
5.1.6	Companion animal issues	34
5.1.7	Existing active recreation facilities	34
5.1.8	Bushfire management.....	34
5.1.9	Exotic weeds.....	35
5.1.10	Dams and water cycle management.....	35
6	Future Vision for Woodbury Reserve	36
7	Masterplan, Action Plan and Performance measurement	38
7.1	Masterplan.....	38
8	Action Plan and Performance Measurement	39
8.1	Natural area – Bushland.....	39
8.2	Natural area – Watercourse	41
8.3	Sportsground	42
8.4	Park	43
8.5	General Community Use	44
9	Leases and Existing Uses	45
9.1	Existing Leases at Woodbury Reserve	45
9.2	Future Development at Woodbury Reserve.....	45
Appendix	47
A - Masterplan	46
B - Masterplan and Implementation Plan	47
C – Community Engagement Summary.....		48
D – High Risk Weeds in the Sydney and Blue Mountains Area.....		49

1 Introduction

1.1 What is a Plan of Management

A Plan of Management (POM) is a document that is adopted by appropriate authorities to guide the management of a parcel of Community Land managed by Council. The process of writing a Plan of Management seeks to identify:

- The planning framework which broadly guides the land use of the site and then seeks to ensure this is adhered to
- The impact, if any, of existing uses and management regimes
- Key values the community hold for the site (culturally and recreationally) then seek to maintain and enhance them;
- Issues, current or anticipated, then seeks to give direction to address them; and
- Through the Master Plan, the layout and style of all the changes that are envisaged.

The objective and policies within the Plan of Management are written to ensure that any issues, opportunities, use or development proposals that arise are responded to in line with community values for the site and with the community agreed use of the site.

1.2 Plan of Management Structure

This POM is divided into two parts. Part 1 consists of this Plan of Management, which is a concise document to guide the management and future development of Woodbury Reserve and to manage ongoing operations based on identified issues. Part 2 consists of the proposed Masterplan for Woodbury Reserve which is a visual aid to be used to guide future development of the reserve.

1.2.1 Plan of Management

The first component of the document is the POM, a living document which can be amended regularly to maintain consistency with the ongoing development and evolution of Woodbury Reserve. This Plan of Management guides the management of Woodbury Reserve with the intent of managing usage, ongoing operations and future development of the Reserve.

1.2.2 Masterplan

The second component consists of a Masterplan document which accompanies this document and sets the long-term vision for the reserve as well as the priorities for future staged development as budgets become available for upgrades.

1.3 Compliance with Local Government Act Requirements

This Plan of Management has been prepared in accordance with the requirements of *the Local Government Act 1993* for reserves classified as Community Land. The requirements of the Local Government Act 1993 under Clause 36 and the appropriate reference of this POM are produced in Table 1 below.

Table 1: Compliance with Local Government Act Requirements

Local Government Act Clause	Clause Wording	POM Reference
36 (3) (a)	The category of the land,	2.3
36 (3) (b)	the objectives and performance targets of the plan with respect to the land	8
36 (3) (c)	the means by which the council proposes to achieve the plan's objectives and performance targets	8
36 (3) (d)	the manner in which the council proposes to assess its performance with respect to the plan's objectives and performance targets	8
36 (3A) (a) (i)	must include a description of the condition of the land, and of any buildings or other improvements on the land, as at the date of adoption of the plan of management, and	3.2 and 3.3
36 (3A) (a) (ii)	must include a description of the use of the land and any such buildings or improvements as at that date	3.2 and 3.3
36 (3a) (b) (i)	specify the purposes for which the land, and any such buildings or improvements, will be permitted to be used	9.1
36 (3a) (b) (ii)	specify the purposes for which any further development of the land will be permitted, whether under lease or licence or otherwise	9.1
36 (3a) (b) (iii)	describe the scale and intensity of any such permitted use or development	9.1

2 Statutory and Strategic Framework

Public parks such as Woodbury Reserve operate under a complex legal environment where a number of separate Acts of Parliament, Regulations and codes apply. The legislation most relevant to this Plan of Management are detailed below.

2.1 Biodiversity Conservation Act 2016

The purpose of this Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

2.2 Local Government Act 1993

The Local Government Act 1993 requires that all public land be classified as either *community* land or *operational* land. Woodbury Reserve is classified as community land, and as such is required to be managed in accordance with an adopted Plan of Management.

Section 36(3) of the Local Government Act states that a Plan of Management for community land must identify:

- a) the category of the land,
- b) the objectives and performance targets of the plan with respect to the land,
- c) the means by which the council proposes to achieve the plan's objectives and performance targets,
- d) the manner in which the council proposes to assess its performance with respect to the plan's objectives and performance targets,

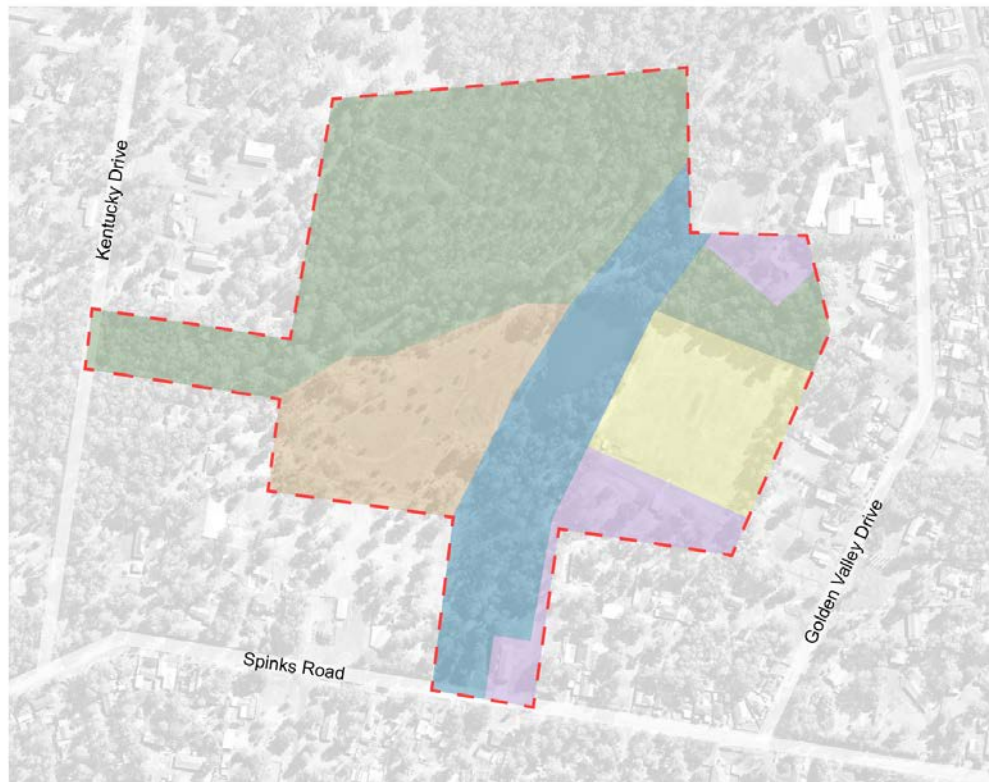
and may require the prior approval of the council to the carrying out of any specified activity on the land.

This Plan of Management has been prepared according to the requirements of the Local Government Act 1993.

2.3 Community Land Categorisation

This Plan of Management categorises Woodbury Reserve into the following:

- Natural area – Bushland;
- Natural area – Watercourse;
- Sportsground;
- Park and;
- General community use.



Legend

- Natural area – Bushland
- Natural area – Watercourse
- Sportsground
- Park
- General Community Use

Figure 1: Woodbury Reserve Community Land Categorisation Map

The objectives of these land categories as defined by the Local Government Act 1993 are as follows:

2.3.1 Natural area – Bushland

The core objectives for management of community land categorised as bushland are—

- a) *to ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land, and*
- b) *to protect the aesthetic, heritage, recreational, educational and scientific values of the land, and*
- c) *to promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion, and*
- d) *to restore degraded bushland, and*
- e) *to protect existing landforms such as natural drainage lines, watercourses and foreshores, and*
- f) *to retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term, and*
- g) *to protect bushland as a natural stabiliser of the soil surface.*

2.3.2 Natural area – Watercourse

The core objectives for management of community land categorised as a watercourse are—

- a) *to manage watercourses so as to protect the biodiversity and ecological values of the instream environment, particularly in relation to water quality and water flows, and*
- b) *to manage watercourses so as to protect the riparian environment, particularly in relation to riparian vegetation and habitats and bank stability, and*
- c) *to restore degraded watercourses, and*
- d) *to promote community education, and community access to and use of the watercourse, without compromising the other core objectives of the category.*

2.3.1 Sportsground

The core objectives for management of community land categorised as a sportsground are—

- a) *to encourage, promote and facilitate recreational pursuits in the community involving organised and informal sporting activities and games, and*
- b) *to ensure that such activities are managed having regard to any adverse impact on nearby residences.*

2.3.2 Park

The core objectives for management of community land categorised as a sportsground are—

- a) *to encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities*
- b) *to provide for passive recreational activities or pastimes and for the casual playing of games*
- c) *to improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.*

2.3.3 General Community Use

The core objectives for management of community land categorised as general community use are to promote, encourage and provide for the use of the land, and to provide facilities on the land, to meet the current and future needs of the local community and of the wider public—

- a) *in relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public, and*
- b) *in relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).*

2.4 Hawkesbury Local Environmental Plan 2012

The relevant LEP for Woodbury Reserve is the *Hawkesbury Local Environmental Plan 2012* (HLEP2012). Under the HLEP2012 Woodbury Reserve is RE1: Public Recreation and R2 Low Density Residential. The zoning of the Reserve is shown in Figure 1 on page 9.

The objectives of the RE1 zone under the HLEP2012 are:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To protect and enhance the natural environment for environmental purposes.*
- *To restrict development on land required for future open space purposes.*

The objectives of the R2 zone under the HLEP2012 are:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To protect the character of traditional residential development and streetscapes.*
- *To ensure that new development retains and enhances that character.*
- *To ensure that development is sympathetic to the natural environment and ecological processes of the area.*
- *To enable development for purposes other than residential only if it is compatible with the character of the living area and has a domestic scale.*
- *To ensure that water supply and sewage disposal on each resultant lot of a subdivision is provided to the satisfaction of the Council.*
- *To ensure that development does not create unreasonable demands for the provision or extension of public amenities or services.*

It is a recommendation of this Plan of Management that the land be rezoned to RE1 to better reflect the use of the land as a public park.



Figure 2: Woodbury Reserve Zoning Map

Parts of Woodbury Reserve is further identified by the HLEP2012 as Significant Vegetation. The objective of Significant Vegetation is to maintain terrestrial biodiversity by:

- a) *protecting native fauna and flora, and*
- b) *protecting the ecological processes necessary for their continued existence, and*
- c) *encouraging the conservation and recovery of native fauna and flora and their habitats.*



Figure 3: Woodbury Reserve Significant Vegetation Map

2.5 Rural Fires Act

Woodbury Reserve is defined for the purpose of the Rural Fire Act as having land classified as Vegetation Category 1 and is therefore considered Bushfire Prone Land. The extent of Bushfire Prone Land is detailed in Figure 4 below.



Figure 4: Woodbury Reserve Bushfire Map

2.6 Disability Inclusion Act 2014

The aim of the Disability Inclusion Act is to support people with disabilities in accessing services and the general community. To facilitate this inclusion, it is imperative that public spaces such as Woodbury Reserve continue to be accessible to individuals with a variety of abilities, particularly the key features of the park such as the sports fields, amenities block and playground.

2.7 Hawkesbury Local Strategic Planning Statement

The Hawkesbury Local Strategic Planning Statement has been prepared to comply with Clause 3.9 of the Environmental Planning & Assessment Act, 1979 (the EP&A Act). The planning statement identifies the basis for strategic planning in the area, having regard for social, economic and environmental matters and is awaiting formal endorsement from the Greater Sydney Commission at the time of writing.

Planning Priorities regarding Woodbury Reserve in the LSPS are detailed below:

- *Planning Priority 1 – Ensure infrastructure aligns with current needs and future growth*
- *Planning Priority 4 – Protect and promote Aboriginal and European heritage and its transition into innovative, creative and adaptive re-uses.*
- *Planning Priority 6 – Manage, enhance and celebrate the distinctive heritage character of*

out towns, villages and naturally landscaped environments.

- *Planning Priority 10 – An aware and resilient city that can adapt to natural hazards of flood, bushfire and climate change.*
- *Planning Priority 11 – Protect our rivers, creeks and areas of high biodiversity and environmental values.*

2.8 Hawkesbury Community Strategic Plan 2036

The Hawkesbury Community Strategic Plan 2035 identifies six key considerations for the management of Council owned assets. They are as follows:

- *Managing competing demands of over 50 Council services and facilities.*
- *Managing ageing assets.*
- *Improving transportation networks for people, cars and bikes.*
- *Working with the community and transport providers to improve transport services across the Hawkesbury.*
- *Building enduring partnerships to service delivery based on delegation of responsibility and developing shared ownership.*
- *Addressing intergenerational equity of opportunity*

Further management and development of Woodbury Reserve can assist in the delivery of these six key directions.

2.9 Hawkesbury Regional Open Space Strategy 2012

The Hawkesbury Regional Open Space Strategy 2012 is scheduled for review in 2020/2021 and the findings of the updated strategy should be incorporated into any future amendments to this Plan of Management to ensure consistency of documents across Hawkesbury City Council.

The existing strategy however acknowledges that Woodbury Reserve is well located at the heart of Glossodia township and adjoining the public school and that Woodbury Reserve provides a large, diverse and well embellished recreational resource for the local community. No further guidance is provided regarding the future use or development of Woodbury Reserve.

3 Woodbury Reserve and its Context

3.1 Legal Definition and Site Description

The legal land description of Woodbury Reserve and management details are summarised in Table 2 below.

Table 2: Woodbury Reserve Legal Description

Legal Description	Lot 457 DP214756	Lot 464 DP214756	Lot 514 DP 214756
Street Address	282 Spinks Road, Glossodia		
Ownership	Hawkesbury City Council		
Management	Hawkesbury City Council		
Area	17.16ha	1.01ha	1.01ha
Land Use Zoning	RE1 Public Recreation R2 Low Density Residential	R2 Low Density Residential	

Woodbury Reserve is a large district park owned and managed by Hawkesbury City Council. The reserve is made up of 3 contiguous land parcels with little street frontage and directly bound by privately owned 1 ha lots. Glossodia Public School, Glossodia Community Centre and Glossodia Shopping village surround the north west of the site. The reserve is surrounded by Kentucky Drive to the north and west, Golden Valley Drive to the East and Spinks Road to the south. Woodbury Reserve would have originally been bushland which is located within the Country of the Darug peoples. In more recent times, (prior to classification as a reserve), the land operated as rural farmland.

Woodbury Reserve provides a strong community focus offering a range of opportunities for active, organised sports and with limited passive, nature-based recreation such as dog walking. Community and recreational facilities include a multi-purpose sportsground catering for club soccer, cricket and PSSA (Primary School Sports Association) sports, the Golden Valley Children's Learning Centre (near the school and shopping village) and Glossodia Bush Fire Brigade (building located in a fenced area on Spinks Road).

The wider bushland area facilitates informal active and passive activities in the form of mountain bike riding, BMX, horse riding, dog walking, jogging etc. Other facilities include unsealed and unmarked car parking areas, a children's playground, sports lighting, public amenities/ changerooms, clubroom and canteen. These facilities generally cater for the local and broader district user catchment with a focus on active, organised sporting activities (soccer and cricket).

Vehicular access into the reserve is via Spinks Road with minimal active transport links or public transport links available for the site. Public pedestrian access is provided at three locations – Golden Valley Drive (shopping village car park near the Community Centre and Golden Valley Children's Learning Centre), Kentucky Drive and Spinks Road.



NORTH 

Figure 5: Woodbury Reserve Aerial (source: Nearmap, 2021). Not to scale.

3.2 Landscape Character

Woodbury Reserve has a diverse landscape character with more than half the site being bushland rich in ecology as well as a sportsfield, paddock areas and a large centrally located water body. As the landscape character has not changed significantly since the preparation of the 2009 Plan of Management (prepared by Landarc Ltd), some of the following descriptions (particularly vegetation communities and soils descriptions have been sourced from the 2009 Plan of Management (prepared by Landarc Ltd).

Prior to sub-division and residential development, most of this area was cleared rural farmland with remnant patches of bushland. Exotic pasture grasses and weeds are a dominant component of the regrowth communities and open south-western paddock. Much of the reserve's land would have been marginal for agricultural production. A constructed earth dam creates a central landscape feature of high visual and aesthetic significance in the reserve. Native wetland plants are colonising the margins.

The reserve's soils vary from shale derived clay loams (upper slopes and creek-line) to shale/sandstone derived soils with higher sandstone influence in the steep north-eastern gully. The reserve has two intermittent creeks, flowing north along the central axis and eastern boundary. These two creeks converge in the lower gully north of the dam and have been re-aligned and modified with piping to some sections.







Partially cleared and modified bushland extends along the central creek corridor from Spinks Road to the dam and links to the major contiguous area of bushland along the northern half of the site. Although the reserve is largely surrounded by residential development, this contiguous bushland creates a sense of wild open space. It forms the dominant visual and aesthetic character of the reserve. Much of this bushland has been affected by weed invasion, multiple tracking, rubbish dumping and erosion. These impacts are ongoing and concentrated in some areas, particularly near the dam.





Notably, the upper western ridgeline (ie. corridor connecting to Kentucky Drive) retains a relatively intact canopy of Ironbarks/ Rough-barked trees including Narrow-leaved Ironbark (*Eucalyptus crebra*) and Rough-barked Apple (*Angophora floribunda*). This area has a distinctive visual quality.

The eastern and south-eastern corner of the site has been graded and levelled to establish the playing fields. This is primarily a cultural landscape. Sporting facilities and amenities, a children's playground and car parking areas are located along the upper southern slopes overlooking the playing fields. Vehicular access is provided off Spinks Road. There has been minimal landscaping or further embellishment for passive recreation in these areas.

Much of the northern portion of the reserve (approximately half of the site) is a natural bushland character which has been classified by Council as priority 1 and 2 bushland in biodiversity framework mapping. Two endangered ecological communities are found on the site including: Shale Sandstone Transition Forest and Cumberland Plain Woodland. Dominant native canopy species include Forest Red Gum (*Eucalyptus tereticornis*), Rough-barked Apple (*Angophora floribunda*) and Narrow-leaved Ironbark (*Eucalyptus crebra*). The bushland provides habitat opportunities for a range of native fauna of birds, bats, reptiles and smaller invertebrates.

Table 3: Woodbury Reserve Site Character Photos






No.	Description	Image
1	Steep gullys and tracks have become significantly eroded as a result of motor bike and BMX riding	
2	Eroded tracks and visible erosion from motor bike and BMX riding near the large water body	
3	Large water body with native wetland plants colonising the banks	
4	Eroded banks on north edge of the large water body with some native wetland plants colonising the banks	
5	Golden Valley Children's Learning Centre at the north east of the reserve	
6	Children's playground and picnic shelter	







7	Informal walking and mountain bike tracks in western paddock	
8	Natural bushland character in the north of the reserve	
9	Open paddock with south west facing slope in the western part of the reserve	
10	Established sportsfields in the south-eastern corner of the reserve	




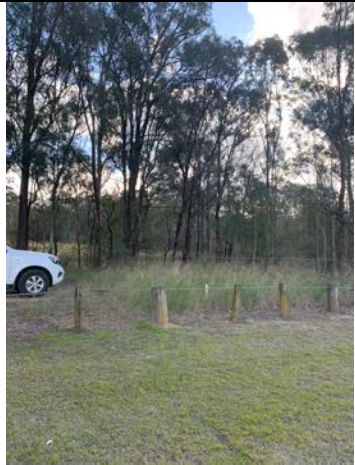

3.3 Existing Assets





The table below includes a summary of the existing assets of Woodbury Reserve. The condition of each asset has been reviewed and given a description of good, fair or poor.




Table 4: Woodbury Reserve Existing Assets

Community Land Categorisation	Existing Facilities/ Improvements	Condition	Fit for Purpose	Images July 2020
Sportsground	Terraced viewing area	Good	Yes	
	Concrete stairs and handrail from amenities building to sportsfield	Good	Yes	
	5 X metal frame and timber bench seats [undercover]	Good	No accessible seating available	
	Brick building change-rooms/ toilets, clubroom, store-room and canteen with metal security doors/ panels	Good	Yes	
	Senior, junior & mini soccer fields including goal posts	Good	Yes	

Sportsground	Turf cricket pitch [central]	Good	Yes	
	4 X floodlighting/ metal poles [twin fixtures]	Good	Yes	
	2 X cricket nets/ synthetic pitches/ metal fencing	Fair	Yes	
	Bin enclosure	Fair	Yes	
	Athletics area including concrete pad [discus/ shot-put]	Fair	Yes	
	Chain-wire perimeter fencing to sports field	Fair	Yes	

Natural Area Bushland	Service vehicle track [unsealed service roads]	Fair	Yes	
	Bushland trails	Poor	No	
	Unsealed tracks for walking	Poor	No	
	Timber posts and wire fencing protecting bushland from cars	Fair	No	
Natural Area: Watercourse	constructed earth dam/ lagoon, drainage channels [open/ piped], eroded steep banks	Poor	No	

	culverts/ piped drainage channels	Good	Yes	No image
Park	1 X junior platform/ shelter, slide & tunnels, 4 X swings [junior & senior sets/ strap seats], 1 X climbing frame/ spiral slide & platforms	Fair	Yes	
	Areas of attenuating artificial turf to protect children from injury	Fair	Yes	
	Shelter	Fair	Yes	
	Bitumen access road (access from Spinks Road)	Fair	Yes	

	Unsealed gravel parking [90°angle and parallel]	Poor	No	
General Community Use	Brick building	Good	Yes	
	Brick building	Good	Yes	

3.3.1 Existing Uses

Golden Valley Children's Learning Centre, located in the north-eastern corner of the reserve, has been operating for 29 years. The centre is licensed for a maximum of 40 children. It is a community based, non-profit operation offering a pre-school program and long day care between 7.00am-6.00pm. The programs are guided by a parent management committee. Council provides some maintenance services. There is currently a 3-year lease on the building. (1.7.2020 – 30.6.2023)

The Glossodia Bush Fire Brigade uses the building/ compound near Spinks Road. The brigade conducts regular hazard reduction and training exercises in the reserve. An existing agreement with RFS for the use of the building is in place but no formal lease.

The RFS is a Breathing Apparatus Brigade which means that they are a very active group – attending house fires and car accidents in the area.

The Sports Council licence the soccer club to use the grounds on a seasonal basis.

Covenants and easements

Lot 457 – Covenant J307525 – easements for drainage affecting the land shown as sites of proposed drainage easement 10 feet wide and 20 feet wide in DP 214756;

Lot 464 – Covenant J484095; and Lot 514 – Land Notation: 1. Easement for drainage see DP214756 for more information; 2. Covenant J307525 – easement for drainage affecting the piece of land shown as site of proposed drainage easement 20 feet wide in DP214756.

3.4 Environment and Biodiversity

Much of the following descriptions have been sourced from the 2009 Plan of Management (prepared by Landarc Ltd) and have been modified based on current (2020) site observations.

3.4.1 Climate change

The Hawkesbury River Valley has a warm temperate climate (ie. with a summer and winter season). Rain may occur at any time throughout the year. Median annual rainfall is 1000 millimetres. The catchment has recorded significant changing rainfall patterns, oscillating between periods of high and low rainfall. Climate change is tending to exacerbate these weather extremes, further affecting flood and drought regimes. Human release of greenhouse gases into the atmosphere has caused, and will continue to cause, global warming for many decades (IPCC Assessment Report, 2007). For New South Wales each decade since 1950 has recorded a 0.15°C increase in annual mean maximum temperature and a 14.3mm decrease in annual rainfall (Water Information System for the Environment, DE&CC, 2007).

In accordance with the latest CSIRO modelling our climate will continue to change over coming decades producing a range of impacts including the following:-

- increased risk of drought
- increased soil erosion and dry land salinity
- more hot days
- greater bushfire risk.

3.4.2 Geology and soil landscapes

The geology is described as Mittagong Formation which is characterised by alternating bands of shale and fine to medium grained quartz sandstones. Rock outcrops are minimal in this landscape. The soil

landscape is classified as Woodlands (wl) in accordance with “Soil Landscapes of the Penrith 1:100 000 Sheet” (Bannerman and Hazelton, 1990). The soils tend to be deep (150-300cm) ranging from leached sands (drainage lines) to brown sandy loam, clay loam and yellowish brown clay (slopes and benches). Topsoils are typically stony with a hard setting surface. Soil limitations include the following:-

- Fertility: low to very low nutrient status.
- Erodibility: generally low erodibility.
- Erosion Hazard: low to moderate erosion hazard.
- Landscape Limitations: localised rock outcrops and steep slopes.
- Urban Capability: generally low to moderate, subject to geo-technical engineering input.

3.4.3 Endangered ecological communities

Woodbury Reserve retains a high level of biodiversity, dynamic ecological processes, ongoing natural evolution and the ability for its ecosystems to be self-perpetuating. These are vital criteria defining the reserve’s natural heritage values. The reserve’s native vegetation has regional and state significance under the Biodiversity Conservation Act 2016. Two endangered ecological communities are present, albeit disturbed, fragmented and modified by past clearing, agricultural uses and urban development. These endangered ecological communities include:-

- Shale Sandstone Transition Forest (SSTF); and
- Cumberland Plain Woodland (CPW).

A Review of Environmental Factors for a Prescribed Hazard Reduction Burn (Conacher Travers Pty Ltd 2002) identified the transitional nature of the vegetation. The description of these communities is consistent with the Interpretation Guidelines for the Native Vegetation Maps of the Cumberland Plain, Western Sydney (NPWS, 2000). Together these endangered ecological communities form a subtle mosaic within the reserve reflecting the transitional nature of the underlying soils. Notably, they share many common floristic and structural characteristics and the boundaries between the two communities are somewhat blurred. Shale Sandstone Transition Forest (SSTF) forms the dominant community covering most of the northern portion of the reserve, including the upper and mid-slopes (lower sandstone influence) and north-eastern gully area (higher sandstone influence). Cumberland Plain Woodland (CPW) occurs along the upper western slopes and ridges (near Kentucky Drive) and upper drainage swale (between Spinks Road and central dam area). Some remnant trees of this community have been retained along the south-eastern ridge.

3.4.4 Floristic composition and structural characteristics

The reserve’s dominant native canopy species include Forest Red Gum (*Eucalyptus tereticornis*), Rough-barked Apple (*Angophora floribunda*) and Narrow-leaved Ironbark (*Eucalyptus crebra*). Other component species include Broad-leaved Ironbark (*Eucalyptus fibrosa*) and Grey Gum (*Eucalyptus punctata*) [mid-northern and southern slopes], Cabbage Gum (*Eucalyptus amplifolia*) [upper creek-line and slopes] and Thin-leaved Stringybark (*Eucalyptus eugenioides*) [north-eastern gully].

The native small tree and shrub stratum is dominated by dense regrowth of Sydney Green Wattle (*Acacia parramattensis*), Blackthorn (*Bursaria spinosa*), Tick Bush (*Kunzea ambigua*), Sally Wattle (*A. floribunda*) and Ball Everlasting (*Ozothamnus diosmifolium*). Narrow-leaved Apple (*Angophora bakeri*) is a sub-canopy component of the mid-slope. Typical native ground stratum species include *Themeda australis*, *Imperata cylindrica*, *Microlaena stipoides*, *Dichelachne micrantha*, *Lomandra longifolia*, *Entolasia marginata* and *E. stricta*, *Daviesia ulicifolia*, *Einadia trigonos* and *E. hastata*, *Aristida*,

Dianella and Wahlenbergia spp. Climbers include Clematis and Desmodium spp.

The upper western slope and ridge (near Kentucky Drive) retains a diverse floristic and structural composition up to 20 metres in height (upper, mid and lower stratum are present). The canopy trees range up to 50-60 years+ (av. 30-40 years). The Cumberland Plain Woodland along the upper creek-line forms a riparian corridor and visual buffer separating the sportsground (east) and open paddock (west). The vegetation condition gradually increases along a south to north gradient from fragmented remnants through to contiguous native canopy and diverse understorey in the northern portion of the reserve. Some remnant old growth Narrow-leaved Ironbarks (*Eucalyptus crebra*) are still present in the south-east corner near the amenities building.

The upper north-western slope has a relatively simplified floristic composition and structure. It is dominated by *Acacia parramattensis* regrowth with only a few immature canopy trees such as *Eucalyptus tereticornis* present.

The central drainage swale, wetland and open water of the dam contain a number of shallow water and semi-aquatic species. These species include Broad-leaved Cumbungi (*Typha orientalis*), Tall Sedge (*Carex appressa*), Spike-rush (*Eleocharis* sp.), Common Rush (*Juncus usitatus*), Slender Knotweed (*Persicaria decipiens*), Water Pepper (*P. hydropiper*) and Pale Knotweed (*P. lapathifolia*).

The south-western paddock, drainage lines/ dam, cleared boundaries and ancillary areas are heavily impacted by weeds. Exotic pasture grasses such as Paspalum (*Paspalum dilatatum*), African Love Grass (*Eragrostis* spp.), Rhodes Grass (*Chloris gayana*), Barnyard Grass (*Echinochloa crus-galli*) and Kikuyu Grass (*Pennisetum clandestinum*) dominate the open grassed areas. Exotic shrubs and vines such as Broad-leaved and Small-leaved Privet (*Ligustrum* spp.), Lantana (*Lantana camara*), Moth Vine (*Araujia hortorum*), Bridal Creeper (*Myrsiphyllum asparagoides*) and Trad (*Tradescantia albiflora*) are common understorey components along drainage lines, particularly the north-eastern gully area.

3.4.5 Fauna habitat

The reserve's bushland provides habitat opportunities for a range of native fauna particularly species with mobility (eg. birds and bats), reptiles and smaller invertebrates. There is currently no detailed assessment of the reserve's biodiversity. Many common bird species were observed during the 2009 Landarc Plan of Management study including Galah, King Parrot, Eastern Rosella, Australian Magpie, Australian Magpie-lark, Crested Pigeon, Masked Lapwing, Noisy Miner and Pied Currawong. Common reptiles such as Long-necked Tortoise (*Chelodina longicollis*), Eastern Water Skink (*Eulamprus quoyii*), Blue-tongued Lizard (*Tiliqua scincoides*), Copper-tailed Skink (*Ctenotus taeniolatus*), Red-bellied Black Snake (*Pseudechis porphyriacus*) and Eastern Brown Snake (*Pseudonaja textilis*) are likely to occur in the reserve. Common invertebrates may include the Striped Marsh Frog (*Eimnodynastes peronii*), Common Eastern Froglet (*Crinia signifera*) and Peron's Tree Frog. A detailed faunal assessment would be a useful tool for determining conservation significance and appropriate management strategies.

Feral animal populations including European foxes, cats and rabbits are likely to occur in the reserve. These feral animals have a significant impact on the recruitment of native faunal populations, particularly ground-dwelling species. Control and monitoring programs have been very successful in re-establishing native populations.

3.4.6 Conservation significance

The bushland is mapped as priority 1 and 2 land on Council's biodiversity mapping. The conservation significance of the reserve's native vegetation can be summarised as follows:-

- Cumberland Plain Woodland and Shale Sandstone Transition Forest are both scheduled as endangered ecological communities under the Biodiversity Act 2016;
- reserve retains vital habitat and acts as a storehouse of genetic diversity with important ecological, scientific, educational and natural heritage values;
- potential habitat for threatened fauna species such as the Squirrel Glider, Yellow-bellied Glider, Grey-headed Flying Fox, Eastern Free-tail Bat, Swift Parrot, Superb Parrot, Turquoise Parrot, Major Mitchell's Cockatoo, Barking Owl, Powerful Owl, Black-chinned Honeyeater, Regent Honeyeater, Square-tailed Kite, Bush Stone Curlew, Speckled Warbler, Eastern False Pipistrelle and Cumberland Plain Land Snail.
- opportunities to develop enhanced habitat values and bio-linkages.

3.4.7 Weed management/ bush regeneration strategy

The proposed weed management/ bush regeneration strategy aims to:-

- seek further funding assistance/ grants; and
- supplement program with contract bush regenerators.

A local volunteer BushCare group was established in October 2007. There was no mention at the community consultation as to whether this group is still active. There has been strong community interest in the program to assist in the rehabilitation of the reserve's bushland. The BushCare program is coordinated through Council staff. Volunteers are provided with direction and technical advice including training, tools, signage for work sites, rubbish removal, newsletters and use of a community nursery to propagate local native plants. The program is an integral part of managing Hawkesbury City's bushland. Local volunteer involvement in managing the reserve should help to establish a greater sense of community ownership and to gain a better understanding of the reserve's bushland and biodiversity values. Broader community use of the reserve will also improve the level of monitoring of anti-social behaviour, unauthorised and illegal uses.

NSW government youth training initiatives and natural heritage grant funding provide further opportunities. Additional funding should be allocated for contract bush regenerators to develop the program and provide further expertise in weed management and rehabilitation strategies.

The strategy should be structured in accordance with specific site conditions, level of disturbance and weed invasion, relative resilience and integrity of the reserve's ecological communities. It is envisaged that the program will focus on targeted weed species using a combination of bush regeneration and restoration strategies. This work should be integrated with improvements to passive recreational infrastructure (ie. pathway linkages/ signage and facilities) and the bushfire management strategy. As the program develops, areas such as the creek corridor and heavily impacted zones around the dam would be progressively rehabilitated. For areas requiring restoration and enhancement it is important that genetic integrity is maintained with the use of only locally-sourced indigenous species.

4 Community Engagement

4.1 Community Values

Values are the things that make a place important to the community. Along with Management issues they guide the management and day-to-day maintenance of the land. The community values have been defined through a process of community engagement outlined below.

4.2 Community Workshop Sessions

Community consultation played an important part in developing the Draft Masterplan and Draft Plan of Management for Woodbury Reserve. A series of workshops, drop in events and surveys were undertaken in order to engage the Woodbury community:

1. 17.08.20 – Community Drop in session 1
2. 17.08.20 – Community stakeholder meeting (Presentation and Discussion)
 - a. Stakeholders represented:
 - i. Glossodia Football Club
 - ii. Glossodia Netball Club
 - iii. Access and Inclusion Committee Representatives
 - iv. RFS
 - v. Hawkesbury Sports Council
 - vi. Golden Valley Children's Learning Centre
3. 31.08.20 – Glossodia Public School (student) Survey and feedback
4. 08.09.20 – Youth consultation via Zoom with Hawkesbury Highschool SRC

Throughout the consultation sessions, Council staff, key stakeholders and community members were shown detailed site analysis of the reserve and were engaged with to provide input and respond to the initial ideas for the reserve and their priorities (such as additional recreational activities). The responses have been summarised in the following section. This Plan of Management will further be placed on Public Exhibition for 42 days and subsequently revised if appropriate following feedback received from the broader Hawkesbury Community on the proposals identified.

4.3 Community Comments

The responses of the community consultation sessions have been summarised from the community consultation notes (full comments available in appendix). The responses are as follows:

4.3.1 *Doing well*

Items raised that are meeting the current community expectations:

- Field sports,
- Children's play space
- Space for walking and jogging

4.3.2 Needs improvement

Items that were raised that need improvement include:

- A major concern of the site was surrounding the condition of the car park and entry road. Respondents strongly commented on the poor state of the existing parking arrangements and requested that the car parking be formalised, and that accessible car parking be provided.
- The site is being used for a range of activities (i.e walking, jogging, dog walking, horse riding, mountain biking) which could be improved by formalisation and maintenance of the existing tracks across the reserve.
- The survey revealed dog walking to be a highly popular activity in the reserve with 58% of respondents performing this type of recreation.
- Respondents expressed the need for recreational opportunities for children and youth to be catered for in the park. 22% of respondents asked for bike riding areas and 10% of respondents asked for skate facilities including the creation of a permanent opportunity that caters for all ages as the existing ramp is not suitable.
- Other recreational opportunities which were suggested included, additional sport amenity (netball, basketball, rugby, touch football and oztag), athletics facilities and motorised sports.
- The reserve is used for several recreational activities (in addition to the organised sport on site). The most popular active recreation uses identified in the survey were jogging and mountain biking. There were also a number of 'other' uses specified with a high outcome of BMX riding and motor vehicle sports.
- The survey reveals the existing play space is being used often however there are concerns in relation to the maintenance, excitement, size and amenities of the playground.
- There was mention of illegal vehicle entry damaging the turf spaces and associated noise pollution.
- Rubbish and illegal dumping needs to be controlled.
- The respondents expressed concerns about the lack of universally accessible amenity and provided comments highlighting their desire for additional and/or upgrades to existing amenities and fixtures including:
 - Bubblers
 - Bins
 - Public toilets
 - Furniture
 - Pram access
 - Picnic shelters

5 Management Issues

5.1 Summary of Existing Management Issues

The following is a description of the major issues that affect the use and enjoyment of the reserve. The issues have been identified through the community consultation and site analysis stages.

5.1.1 Inappropriate and unauthorised use of vehicles and bikes

Motor bike and BMX riders continue to degrade and vandalise the reserve's natural bushland through multiple tracking and construction of jumps and hazards. These activities place riders and other members of the public at serious risk. These activities should be relocated to a more suitable and designated location within the reserve or another reserve in LGA.

There are reports of trucks using the access road to access private properties via the existing access road. This has been reported by the community as a safety risk and is causing significant damage to the existing access road.

5.1.2 Lack of passive recreation opportunities

The reserve's passive recreational opportunities are poorly integrated – the sports fields and associated facilities operate completely independently of the reserve's natural bushland setting. In this way, the focus on access to sporting facilities in the south-eastern corner of the reserve tends to limit visitor options for further enjoyment or interaction. Pedestrian access to other parts of the reserve and circulation are poorly defined. Furthermore, passive recreational opportunities are diminished by continuing anti-social behaviour, vandalism and other illegal activities. Safety issues (eg. motor bike riding along bushland tracks) remain a major concern. The quality of the natural bushland setting continues to be degraded by these activities. Much of the reserve remains alienated from broader community use and enjoyment.

5.1.3 Lack of youth recreation opportunities

It is important to recognise the recreational needs of older children and youth who may not be involved in organised sports. Negative attitudes towards youth and their needs for recreational spaces tend to foster negative youth behaviour. The problems are exacerbated in places which are allowed to become marginalised or isolated from other community activities. These issues were discussed at the public workshop (March 2007 and again in August 2020). There is a need by these user groups to find places to meet and to practice and improve skill levels in a range of activities. A non-organised multi-use sports area such as a skate/ BMX facility, hard-stand for ball games, basketball and/ or netball hoops (including a half-sized court) are options which could be considered in the context of existing recreational facilities (eg. within the south-eastern corner of the reserve).

5.1.4 Lack of family-based passive recreation

Poor public access and circulation are key issues. A shared pedestrian/ bike path (including a western circuit track) linking to existing access points and facilities would provide significant opportunities for passive recreation. Key linkages should be provided or upgraded to Spinks Road, the community centre/ shopping centre (Golden Valley Drive) and Kentucky Drive.

The installation of passive recreational facilities such as picnic shelters, picnic tables and seating, gas-fuelled BBQs and a shared pedestrian/ bikepath would attract broader community use and enjoyment of the reserve. This central location offers outstanding scenic opportunities with views over the dam to surrounding bushland. The facilities would create a new hub of visitor activity and point for departure along the bushland track system. Additional litter bins should be installed. Passive recreational infrastructure should remain low-key and typical of Hawkesbury City's bushland parks and reserves.

5.1.5 Lack of accessible infrastructure

The needs of people with disabilities and parents with young children also need to be addressed. Although visitors will generally drive or walk to the reserve, accessibility may involve the use of strollers, prams, walking frames and/ or wheelchairs. In addition, young siblings of various ages or groups of children with disabilities may seek to use the facilities. There needs to be provision for safe, easy access to existing accessible toilet facilities.

The existing children's play area is located near the internal access road, car parking area and amenities building. This conflict with traffic raises child safety issues. Upgrading play facilities is a further option to improve accessibility. Shade protection and opportunities for enhanced supervision (eg. picnic shelter/ seating) should also be considered as part of a more integrated approach to recreational uses.

5.1.6 Companion animal issues

Walking dogs in the reserve is one of the more popular local pastimes.

There is substantial demand for unleashed dog exercise areas throughout the Hawkesbury LGA. The south-western paddock provides an opportunity for such a designated area and should be further investigated in relation to the Masterplan suggestion. The installation of dog waste bins/ dog faeces bags for selected locations (eg. car parking areas/ entry points to the reserve) should also be considered.

5.1.7 Existing active recreation facilities

Active recreational facilities are currently focussed within the sportsground area in the south-eastern corner of the reserve. Some key issues identified include;

- a lack of sufficient car parking for RFS and general park uses
- pedestrian safety issues with the access road (particularly vehicles travelling between the playground and the sports pitches)
- lack of netball facilities and storage areas

5.1.8 Bushfire management

The Glossodia Bush Fire Brigade use the reserve for training activities. Much of the poorer quality bushland in the north east of the reserve consists of regrowth Acacias that are coming to the end of their life. The reserve's bushland has been modified through wildfire in 1993/94 summer season (RFS, 2002) and recurrent bushfire hazard reduction exercises (possibly 1997 and 2005).

RFS have identified the reserve as being a bushfire hazard and a hazard reduction is proposed in 2021. RFS recommend a 3m asset protection zone around the boundaries of the reserve and a minimum 6m asset protection zone behind the school and childcare centre. Hazard reductions are

driven by Bushfire and Assessment code and the minimum burn interval is likely to be 7-8 years.

5.1.9 Exotic weeds

In terms of native vegetation management, a weed is defined as any non-indigenous plant, including native species which may have been introduced from other genetic sources or geographical regions. Community consultation identified weed management as an important issue affecting the reserve. Woodbury Reserve has no current integrated weed management program.

Weeds tend to be fast-growing colonising species with highly aggressive reproductive strategies. The level of weed invasion has a close correlation with past clearing of native vegetation and soil disturbance (ie. highly disturbed/ modified areas tend to have high levels of weeds). The south-western paddock, drainage lines/ dam, cleared boundaries and ancillary areas are heavily impacted by weeds. Exotic pasture grasses such as Paspalum (*Paspalum dilatatum*), African Love Grass (*Eragrostis* spp.), Rhodes Grass (*Chloris gayana*), Barnyard Grass (*Echinochloa crus-galli*) and Kikuyu Grass (*Pennisetum clandestinum*) dominate the open grassed areas. Exotic shrubs and vines such as Broad-leaved and Small-leaved Privet (*Ligustrum* spp.), Lantana (*Lantana camara*), Moth Vine (*Araujia hortorum*), Bridal Creeper (*Myrsiphyllum asparagoides*) and Trad (*Tradescantia albiflora*) are common understorey components along drainage lines, particularly the north-eastern gully area. Although providing some protection and stability to banks and gullies introduced weed species have an overall negative impact on natural biodiversity values, native regeneration/ recruitment, scenic character and visual amenity. Refer to Appendix III – Schedule of Exotic Weed Species.

Some of the scheduled weeds are declared as Biosecurity Act High Risk weeds regional priority weeds under the Biosecurity Act 2015 (Hawkesbury River County Council control area). Refer to Appendix D: Sydney Weeds Committee – High Risk Weeds for required action).

5.1.10 Dams and water cycle management

The dam is currently silted up and the community have identified that large quantities of rubbish are present in the dam. This was clearly evidenced during the extended period of drought (2020) when the water level of the dam dropped significantly and the community identified large items (shopping trolleys etc) were visible in the dam.

6 Future Vision for Woodbury Reserve

The future development of Woodbury Reserve will be guided by nine key principles which form the future vision of the site. These nine principles are detailed below.

1. Improve accessibility & inclusion across the reserve
 - a. Provide equal access to sports fields from the amenities building and car parking areas
 - b. Provide accessible parking spaces close to the amenities building
 - c. Implement way finding & signage provision across the reserve
2. Protect and enhance the natural bushland setting
 - a. Protect existing bushland and regenerate sparse or damaged areas
 - b. Provide opportunity for interaction with wildlife
 - c. Use sustainable materials for new elements located in close proximity to bushland
 - d. Fire management - including maintaining the Asset Protection Zone around the perimeter of the reserve
 - e. Water management – including water quality management and maintenance of the riparian zone i.e weed removal and regeneration projects
3. Provide a diverse sporting and recreation hub for all
 - a. Provide additional diverse sporting activity such as netball and basketball.
 - b. Provide formalised structures for BMX, mountain biking and skateboarding.
 - c. Encourage informal use of the sporting fields (when not in formal sport use)
 - d. Provide spectator seating to cater for larger sporting events and everyday seating
4. Offer passive recreation through the reserve
 - a. Provide furniture such as picnic settings, BBQ's, seating and shade throughout the reserve to attract a wider variety of visitors
 - b. Upgrade the existing play space to provide for diverse ages and abilities
 - c. Provide safe and connected active transport routes (paths, cycleways, dog walking routes)
 - d. Retain open spaces for informal uses (Kick about area, picnicking, frisbee, kite flying)
 - e. Inclusion of a dog off lead area within the open paddock space
5. Provide additional youth recreation opportunities
 - a. Investigate upgrading and formalising the existing bike tracks to enhance the recreation offer and reduce conflict
 - b. Provide multi-use courts for informal activity
 - c. Integrate additional skate elements in any new hard scape areas
 - d. Provide a space for gathering and 'hang out' ensuring good passive surveillance

6. Improve connectivity within the reserve and to the surrounding areas
 - a. Provide a formalised main path network throughout the reserve connecting all key areas
 - b. Provide formal paths connecting to the Glossodia shopping village to the east
 - c. Implement an active transport link from Kentucky Drive and Spinks Road to Golden Valley Drive
7. Improve safety across the reserve
 - a. Improve natural surveillance by clearing of dense bushland around proposed activity areas
 - b. Consider lighting key pathways to improve night time use and user safety
 - c. Remove vehicular movement between the playground and the amenities building
 - d. Separate pedestrians and cars by providing dedicated parking bays and clearly marked walkways
8. Provide diverse play opportunities for all
 - a. Introduce inclusive and nature play equipment to any existing or new play spaces
 - b. Provide diverse and challenging play experiences for a wider variety of ages
 - c. Incorporate places for families and social gatherings next to play spaces
9. Implement sustainable storm water management across the reserve
 - a. Create passive filtration to garden beds for any new areas of hardstand
 - b. Introduce WSUD (swales) to reduce surface run off in peak flows

7 Masterplan

7.1 Masterplan

For all facilities included in the Masterplan, the final detail and location of facilities will be determined at detailed design stage. The location, number and extent of facilities may change during the detailed design stage; however the intent is described in the masterplan document.



Figure 6: Draft Masterplan

8 Action Plan and Performance Measurement

This action plan is structured as per the community land categorisation identified in section 2.9. Each category has an associated Action Plan (in table format) that includes performance targets, means of achievement and how Council will assess performance.

8.1 Natural area – Bushland

The land relating to this action plan consists of the land categorised as Bushland.

Table 5: Action Plan – Natural Area Bushland

Performance target	Means of achievement	Assessment of performance
Community engagement		
A local bush care group operating in Woodbury Reserve	Pursue partnerships with community members for the long-term regeneration and maintenance of the vegetation communities.	Annual audit of the vitality of bush care groups.
Bush regeneration		
The quality and sustainability of the bushland improves over time	Bush regeneration is undertaken to the extent outlined in Council's Operational Plan or maintenance works schedule.	Annual audit of program.
Weed management		
The number of weeds in the bushland reduces over time. The significant current weeds identified in the 2009 PoM include: <ul style="list-style-type: none"> Green Cestrum (<i>Cestrum parqui</i>) Fleabane (<i>Conyza bonariensis</i>) Lantana (<i>Lantana</i> spp.) Privet (Broad-leaf) (<i>Ligustrum lucidum</i>) Privet (Small-leaf) (<i>Ligustrum sinense</i>) 	Weed eradication is undertaken to the extent and frequency described in the Maintenance Works Schedule.	Annual audit of program.
Threatened flora and fauna		
Threatened flora and fauna species are protected	Record the occurrence of threatened species in the natural areas – bushland and identify any threats to their existence.	Evidence of invasive plant species and domestic animals regularly collected. Records updated to reflect occurrence of any threatened species. Action taken to address any threats to their existence.
Preserve endangered ecological communities and bushland setting.	All works undertaken to avoid where possible removal of native vegetation. Native vegetation to be identified and mapped.	Native vegetation retained wherever possible.

Domestic animal exclusion		
Domestic animals do not cause harm to flora and fauna	Clear signage explaining areas of conservation and dog off leash zones.	Annual audit of signage.
Bicycle exclusion		
Prevent erosion caused by cycling (BMX, Mountain biking) and motor bikes to prevent erosion and site degradation	Signage communicating the exclusion of activities within the bushland area (other than along the designated cycling routes).	Annual audit of signage and cycling tracks.
Recreation tracks		
Formalise BMX riding areas	Identify appropriate facilities for the management of these uses. Funding Identified.	Appropriate facilities provided and maintained.
Wayfinding and signage		
Enhance wayfinding on established tracks	Identify appropriate signage opportunities. Renewal Programmed Identified with the Asset Works Program.	New signage installed.
Bushfire risk reduction		
Reduce bushfire risk to lives and property	Asset protection zones identified and cleared along property boundaries.	Asset protection zones maintained and inspected regularly to ensure compliance.

8.2 Natural area – Watercourse

The land relating to this action plan is generally in the riparian zone consisting of the creek and dam.

Table 6: Action Plan – Natural Area Watercourse

Performance target	Means of achievement	Assessment of performance
Safety and risk management		
Any new recreation facilities including seats, structures, paths and the like shall be maintained in accordance with acceptable standards	Regular inspection and repair of all facilities.	Unsafe facilities are repaired prior to next scheduled regular inspection.
Community awareness		
The local community is aware of the importance of the riparian zone and the ongoing threats to the ecosystem	Signage provided that educates and promotes environmental education of the ecology of the reserve.	Annual audit of signage.
Community engagement		
A local bush care group operating in the reserve	Pursue partnerships with volunteers for the long-term regeneration and maintenance of the vegetation communities.	Annual audit of the vitality of bush care groups.
Bush regeneration		
The quality and sustainability of the riparian bushland improves over time.	Bush regeneration is undertaken to the extent and frequency described in the Maintenance schedule.	Annual audit of program completion.
Weed management		
The number of weeds in the riparian zone reduces over time		
Facilities development		
The recreation facilities and access paths meet the future needs of the community	Implementation of masterplan vision in relation to passive amenity around the large water body.	Capital works upgrades undertaken.
Public safety		
The public is safe from the threat of flooding and risks associated with water	Signage communicating the exclusion of activities within the water body and ensuring all capital works upgrades are undertaken with a risk assessment to ensure public safety around the large water body.	

8.3 Sportsground

The land relating to this action plan consists of the land categorised as Sportsground

Table 7: Action Plan – Sportsground

Performance target	Means of achievement	Assessment of performance
Safety and risk management		
Recreation facilities including playing facilities, seating, structures, amenities buildings and the like shall be maintained in accordance with relevant standards	Regular inspection and repair of all facilities. Car park and high volume access paths have appropriate surfacing and lighting for night time access and training.	Unsafe facilities are repaired prior to next scheduled regular inspection. Capital works upgrades undertaken.
Public Safety		
The health and safety of the community is not threatened by contact with dogs in the sportsground area	Maintenance of appropriate signage highlighting location of 'off-leash' facility and the fact dogs are not permitted on sportsgrounds.	Annual audit of signage.
Facilities development		
The sports and other facilities of the park meet the future recreational needs of the community	Capital works budgets identified and implemented as per detailed design as per the Woodbury Reserve Masterplan.	Audit against Masterplan at the time of determining the relevant Construction Certificate.
Vehicle access		
Motor Vehicles are prohibited from playing fields and general park areas	Vehicle prevention devices (gates, barriers) are in place and fully operational and additional signage is implemented.	Audit against Masterplan at the time of determining the relevant Construction Certificate.
Equal Access		
Provide equal opportunity access for all to sportsfields.	Funding Identified Renewal Programmed Identified with the Asset Works Program.	New ramp or walkway provided from the amenities building to the sports field.
Furniture		
Additional furniture near sports fields	Funding Identified Location for new furniture identified.	Additional Furniture provided at sports fields.
Sports surface management		
Maintain quality of existing sports field	Operate, maintain and provide budget to meet required standard.	Fields meet required playing field standard for district sport.
Improvements to sports amenities building		
Additional storage provided for netball club and upgrades to toilet facilities	Identify capital works budget for building upgrades.	Implementation of building alterations/upgrades.

8.4 Park

The land relating to this action plan consists of the land categorised as Park

Table 8: Action Plan – Park

Performance target	Means of achievement	Assessment of performance
Community engagement		
The community is involved in the recognition and reporting of the public risk	Prompt response to reports of hazards on community land.	Annual review of response times.
Facilities development		
The passive and active recreation facilities and access paths meet the future needs of the community	The recreation facilities and access paths be developed as per the masterplan.	The recreation facilities and access paths meet the future needs of the community.
Furniture		
Provide furniture for bird watchers and other passive recreation uses.	Identify appropriate locations for furniture. Renewal Programmed Identified with the Asset Works Program.	Provision of new furniture in bushland areas.
Safety and risk management		
Recreation equipment, carparks, fences and infrastructure is maintained in accordance with acceptable standards	Ensure damaged or dangerous equipment, fences and infrastructure is removed or replaced.	Quarterly inspections.
Access and circulation		
Establish formal pathways to all facilities.	Identify logical new pathways. Funding Identified Renewal Programmed Identified with the Asset Works Program.	New pathways installed.
Provide better connections to key sites outside reserve.	Identify future opportunities to link reserve (as per the Masterplan). Renewal Programmed Identified with the Asset Works Program.	Provision of new links to adjacent sites.
Enhance Spinks Road entry.	Funding Identified Renewal Programmed Identified with the Asset Works Program.	Provision of increased visual links provided.
Playground		
Upgrade existing playgrounds	Engage with stakeholders when designing any upgrades to the playground. Renewal Programmed Identified with the Asset Works Program.	Upgraded play spaces provided.
Car Parking		
Parking Formalised and re-laid.	Funding Identified Renewal Programmed Identified with the Asset Works Program.	Car Park Renewal undertaken.
Wayfinding and signage		
Enhance wayfinding for entries and directional links	Identify appropriate signage opportunities. Renewal Programmed Identified with the Asset Works Program.	New signage installed.

8.5 General Community Use

The land relating to this action plan consists of the land categorised as General Community Use

Table 9: Action Plan – General Community Use

Performance target	Means of achievement	Assessment of performance
Safety and risk management		
Recreation equipment, carparks, fences and infrastructure to all building is maintained in accordance with relevant standards.	Ensure damaged or dangerous equipment, fences and infrastructure is removed or replaced.	Quarterly inspections.
Community involvement		
The community is involved in the recognition and reporting of public risk.	Prompt response to reports of hazards on Community Land.	Annual review of response times.
Anti-social behaviour		
Discouragement of anti-social behaviour.	Removal of graffiti and clean-up of rubbish. Lock gates to car parks if anti-social behaviour is a problem.	Annual audit of clean up response times.

9 Leases and Existing Uses

Under the Local Government Act 1993 a lease, licence, other estate or easement (use agreement) may be granted over all or part of community land. In accordance with Section 46A of the Local Government Act 1993 a Plan of Management for community land is to specify and authorise any purpose for which a lease, licence or other estate may be granted over community land during the life of a Plan of Management.

This Plan of Management authorises the leasing of/use of existing buildings for community functions (such as childcare) consistent with the requirements of the Local Government Act, 1993.

9.1 Existing Leases at Woodbury Reserve

The following list outlines the current leases and agreements within Woodbury Reserve:

- 3 year lease (1.7.2020 – 30.6.2023) on Golden Valley Children's Learning Centre
- An existing agreement with RFS for the use of the building (but no formal lease)
- The Sports Council licence the soccer club to use the grounds (on a seasonal basis)
- There is a proposal to lease part of the reserve for the purpose of installing a telecommunications tower (ongoing discussions with Telstra 2021)

9.2 Future Development at Woodbury Reserve

This plan of Management expressively authorises development of new buildings and structures, and future redevelopment/refurbishment of buildings and structures, which support the desired use of Woodbury Reserve for sporting, recreation and community/social activities and environmental protection. Such buildings and structures will be consistent with the adopted Masterplan.

Future permitted leases, licences or other estate in accordance with s.46A of the Local Government Act 1993 and cannot exceed a term of 5 years (including any period for which the lease could be renewed by the exercise of an option), unless it satisfies the requirements as scheduled in s.47, or is otherwise granted to a non-profit organisation (refer to Leases, licences and other estate in respect of community land – s.46, 46A, 47 and 47A Local Government Act 1993). Furthermore, leases, licences or other estate must not be granted in respect of land categorised as a natural area, unless it is for a purpose prescribed in s.47B of the Local Government Act 1993.

Appendices

A - Masterplan

Woodbury Reserve Master Plan

Prepared for Hawkesbury City Council

Project Reference: 2520034
March, 2021

REVISION:03



Australia
China
South East Asia

Follow us on



placedesigngroup.com

Project:	Woodbury Reserve Master Plan
Report title	Woodbury Reserve Draft Masterplan Report
Prepared for	Hawkesbury City Council
Authors	Emma La Coste, Baz Richards
Revision number	03
Revision issue date	March 2021
Approved	Nick Ison
Reviewed	Baz Richards
Reason for revision	Council Comments

Disclaimer: This report has been prepared in accordance with the scope of services described in the contract or agreement between Place Design Group Pty Ltd ACN 082 370063 and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and Place Design Group accepts no responsibility for its use by other parties.

Contents

Introduction

1 Site analysis

- 1.1 Site context analysis
 - 1.1.1 Local Government Area analysis
 - 1.1.2 Surrounding local context analysis
- 1.2 Detailed Site Analysis
 - 1.2.1 Access, circulation and buildings
 - 1.2.2 Vegetation, ecology and landscape features
 - 1.2.3 Existing recreation
 - 1.2.4 Consolidated opportunities and constraints

2. Community Engagement

- 2.1 Community engagement overview
 - 2.1.1 Community engagement stage 1 - Online
- 2.2 Community engagement stage 2 - Face to face
 - 2.2.1 Community engagement stage 3 - Consultation with young people

3. Objectives and Principles

- 3.1 Vision, objectives and Principles
 - 3.1.1 Vision and key objectives
 - 3.1.2 Principles for implementation

4. Functional diagram

- 4.1 Functional diagrams

5. Masterplan

- 5.1 High level concept masterplan
- 5.2 Detail plans and supporting imagery
 - 5.2.1 Detail plan 1
 - 5.2.2 Detail plan 2

6. Staging and implementation plan

- 6.1.1 Staging and implementation plan

1.0

INTRODUCTION + ANALYSIS

Introduction



Hawkesbury City Council is developing a Master Plan and Plan of Management to guide the future development and community use of Woodbury Reserve.

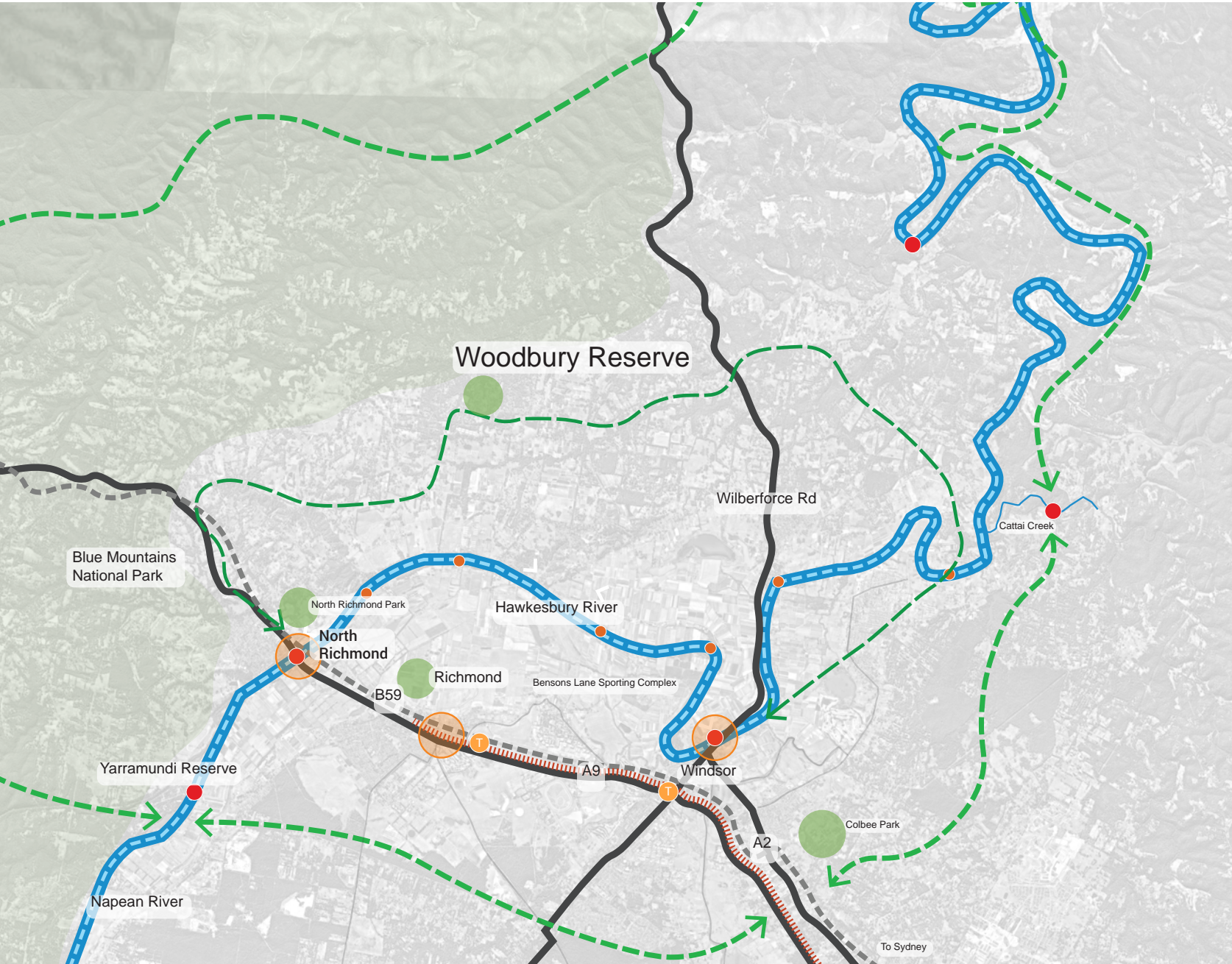
The new Master Plan vision will seek to enhance the Community’s interaction with the natural environment whilst providing functional sporting and recreation areas for the growing local community.

A master planning process is needed to create a long-term strategy for the site, supported by discussions with key stakeholders and the community. Council’s goal is to deliver a district park for the use of passive and active recreation.

The Master Plan will be supported by an implementation plan which will set out how Council and key stakeholders will act on the plan objectives. A detailed concept of one key area will also be developed as part of this project.

A thorough site analysis process has been undertaken for the project including a review of Council’s background documents, desktop studies and a detailed site inspection (undertaken in early July 2020). It is intended that this phase of the project will identify site context, existing site character and uses and provide a summary of the early constraints and opportunities identified to help guide the future development of the reserve.

Context Analysis



Hawkesbury City Local Government Area (LGA) is the largest LGA in the Sydney Metropolitan Region covering approximately 2800 km². The Hawkesbury River runs through the region with 17 towns and villages spread across the floodplain. The remaining land is comprised of agricultural land and national parks.

Site Location

- » Woodbury Reserve is located in the suburb of Glossodia in the Local Government Area of Hawkesbury City Council, approximately 18 km north west of Windsor and 74 km north west of the Sydney CBD.
- » The site is connected to surrounding bushland through biodiversity corridors including the Hawkesbury River and its tributaries. Glossodia sits between two main creeks including Howes Creek to the North and Currency Creek to the South.

Transport Connections

- » The nearest train stations are located in Richmond and Windsor.
- » The major road providing access to Sydney is the A2 (Windsor Rd).
- » The reserve is approximately a 1 hour drive north west of Sydney's CBD and a 15-minute drive north of Richmond.

Active Transport Connections

- » The Hawkesbury Regional Open Space Plan (2013) proposes various connections in the Hawkesbury LGA.
- » The Regional Open Space Strategy proposes active transport connecting public open space, National Parks and Town Centres, including the Hawkesbury River Great River Walk, The National Park Experience and the Macquarie Towns Loop.

Regional Open Space Context

- » The 3 other significant district parks in the Hawkesbury LGA include Colbee Park, North Richmond Park and Bensons Lane Sporting complex which all offer a range of sport and recreation facilities.
- » The Hawkesbury River is a significant recreational and natural asset of the area with existing access available at 5 different locations.
- » Significant National Parks in the Hawkesbury LGA including the Blue Mountains National Park (14kms). Wollemi National Park (8kms). Scheyville National Park (12kms). Cattai National Park (12kms).



(Source: Google Images)



Legend

- Town centers
- Existing river crossings
- Existing river access
- District parks
- Train station
- Train line
- Major River

Proposed Open Space Structure

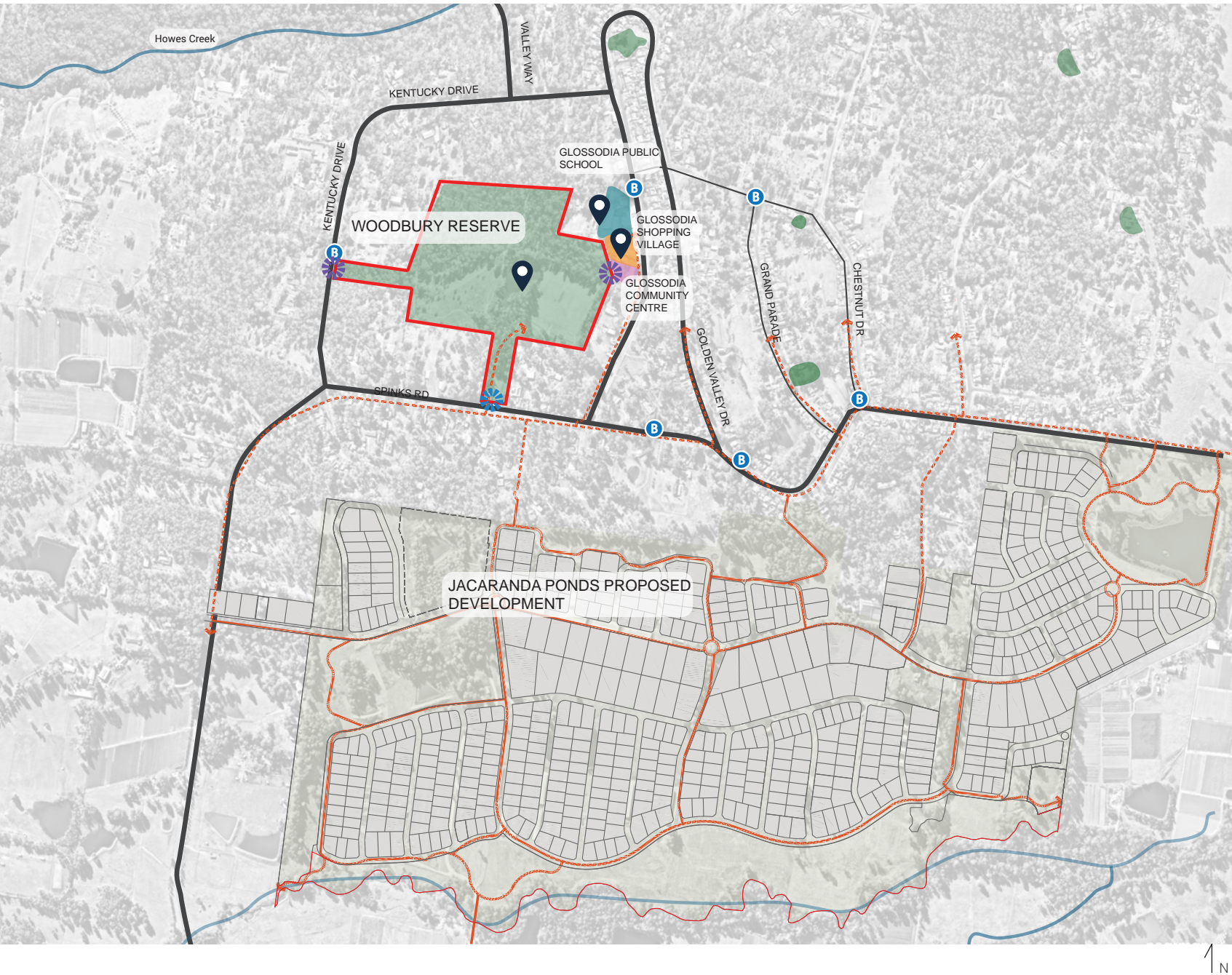
- Hawkesbury River Great River Walk
- The National Park Experience
- The Macquarie Towns Loop

(Source Hawkesbury Regional Open Space Plan 2013)

Images

- ① Hawkesbury River
- ② Windsor Historic Town
- ③ Hawkesbury lookout
- ④ Yarramundi Reserve
- ⑤ North Richmond Bridge

Surrounding Local Context



Woodbury Reserve is located in an area of semi rural character with significant residential growth proposed to the south (Jacaranda Ponds development)

Surrounding Proposed Development

- » In 2014 Hawkesbury City Council approved the Planning Proposal of Jacaranda Ponds to the south of Woodbury Reserve adjoining the village of Glossodia. Rezoning and subdivision of 185 ha of farmland with potential to provide approximately 580 rural residential blocks with an increase in population between 1600 - 1800 people.
- » Future cycle and pedestrian routes connecting the proposed future development to Woodbury Reserve are planned.

Surrounding Area

- » Woodbury Reserve has little street frontage and is directly bound by privately owned 1 ha lots.
- » Glossodia Public School, Glossodia Community Centre and Glossodia Shopping Village surround the north west of the site and are in walking distance to the reserve.

Nearby Open Space and Existing Connections

- » There is potential for Woodbury Reserve to form part of a wider open space and ecological network, particularly through active transport links to the proposed open space of the Jacaranda Ponds.
- » There are several smaller reserves located in Glossodia classified as public open space. However these spaces do not currently support the growing community's needs in terms of organised sport and passive recreation needs.
- » The northern portion of Woodbury Reserve is part of a larger bushland area extending to the north toward Howes creek.
- » The existing bus route (668) runs around the site stopping on Kentucky Drive, Spinks Road, Golden Valley Drive and Kentucky Drive.



(Image 2 & 4 Source: Google Images)

Legend

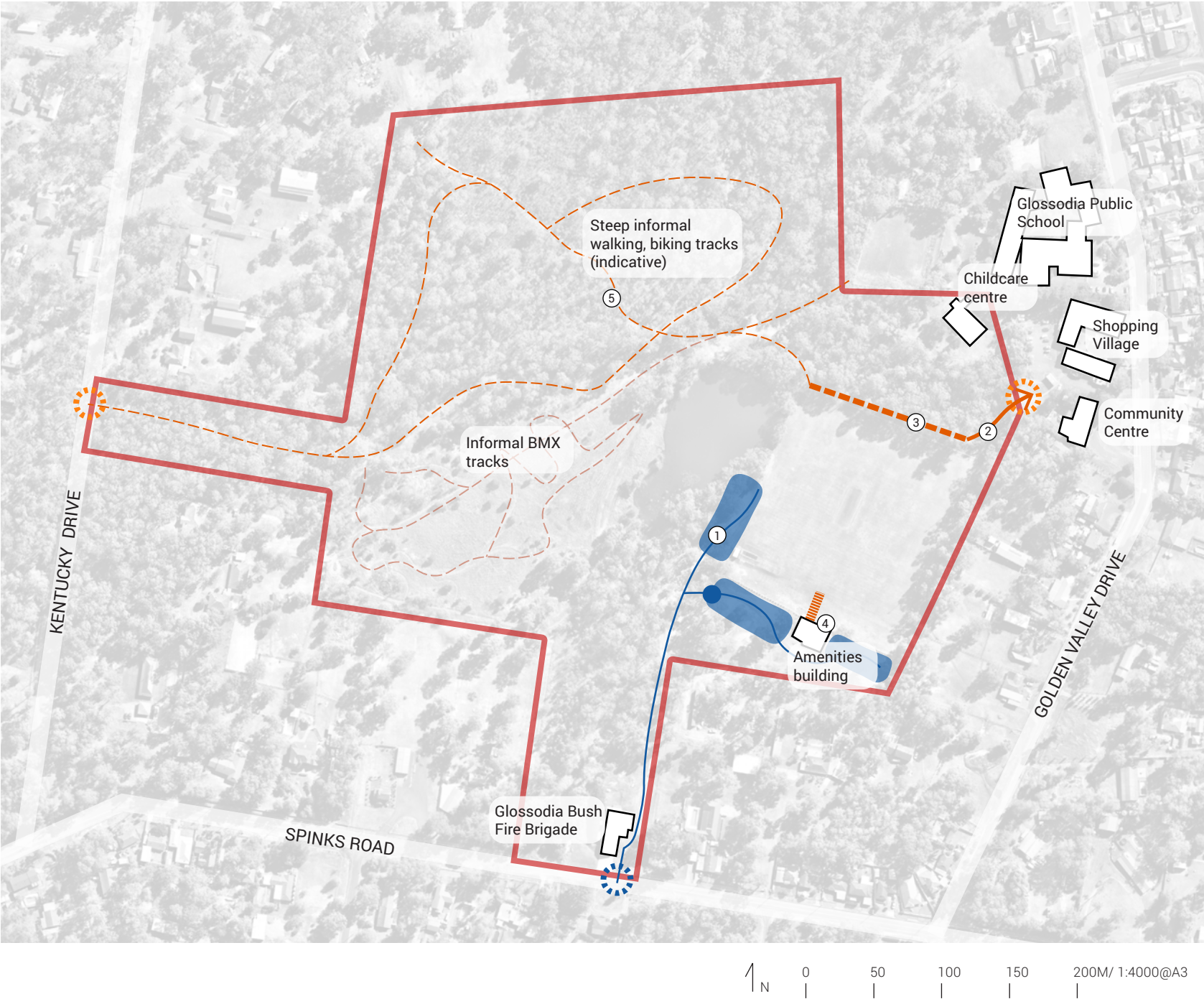
- Community Centre
- Schools
- Public open space
- Commercial centers
- Future cycle and pedestrian routes

- Site boundary
- Points of interest
- Bus stops
- Vehicle/pedestrian access
- Pedestrian access

Images

- ① Surrounding residences
- ② Properties on Kentucky Drive
- ③ Golden Valley Children's Learning Centre
- ④ Glossodia Shopping Village
- ⑤ Shopping Village car park

Access, Circulation and Buildings



Woodbury Reserve has a number of access and circulation challenges due to the site’s natural topography, limited existing path infrastructure and current management.

Vehicular Access and Parking

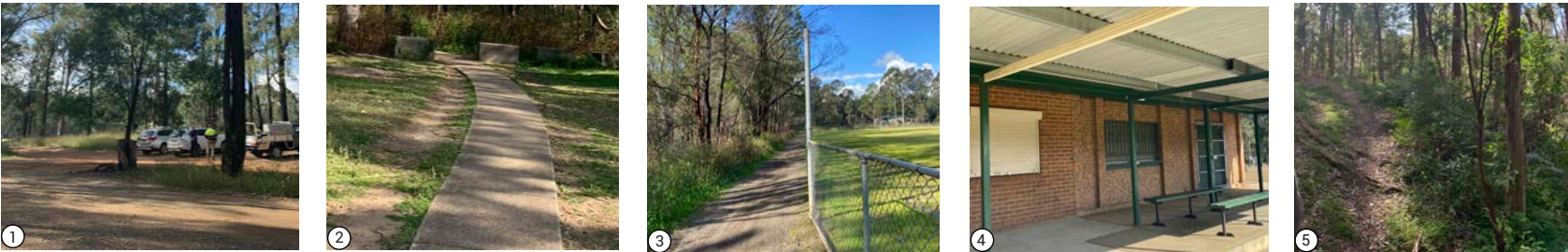
- » The only vehicular access to the reserve is located off Spinks Road. This entry also provides pedestrian access and is the main entrance to the reserve.
- » Vehicular movement is restricted to the west of the sports fields by a gate and bollards however this is frequently vandalised and is easily negotiated by trail bikes. There is a gate near the south west of the sports field that is opened only during sport events allowing vehicular movement to the eastern and western side of the amenities building.
- » There are 3 informal car parking areas on the site (to the west and south of the sports field). The southern car park (either side of the club house) is the main parking area on sporting days. This car park is not accessible on non-sporting events days. The western car park is permanently open to the public. There are no sealed parking surfaces, dedicated parking bays or accessible parking spaces.

Circulation

- » Pedestrians can enter the site from Spinks Road however it lacks formal footpaths and any separation from vehicular movement.
- » There is a formal pedestrian entry and concrete footpath from the north east of the site (shopping village car park). The entry is not clearly identifiable from within or outside of the reserve. A third (informal) pedestrian entry is located from Kentucky Drive to the reserve lacking visibility.
- » Access from the amenities building to the sports field is limited. There is one flight of stairs and no accessible ramp providing access to the sports field.
- » There are various informal tracks through the bushland and open paddock which have been established by users over time. Some tracks are observed to be used by motorbikes and quad bikes. Informal tracks through the bushland are evidently used for walking, jogging and mountain biking and horse riding. Numerous steep tracks connect the northern portion of the park and are being used as informal bike jumps.
- » One internal track has been repaired for fire vehicle access.

Buildings

- » The existing clubhouse provides amenity for sporting events including a canteen, two small change rooms for male and female, an undercover viewing area and a meeting room for existing sporting clubs.
- » Additional male and female public toilets (which are locked outside of sporting events) are located to the rear (southern side) of the amenities building.
- » The childcare centre is located to the north of the sports fields, with fenced play area and shade structures.



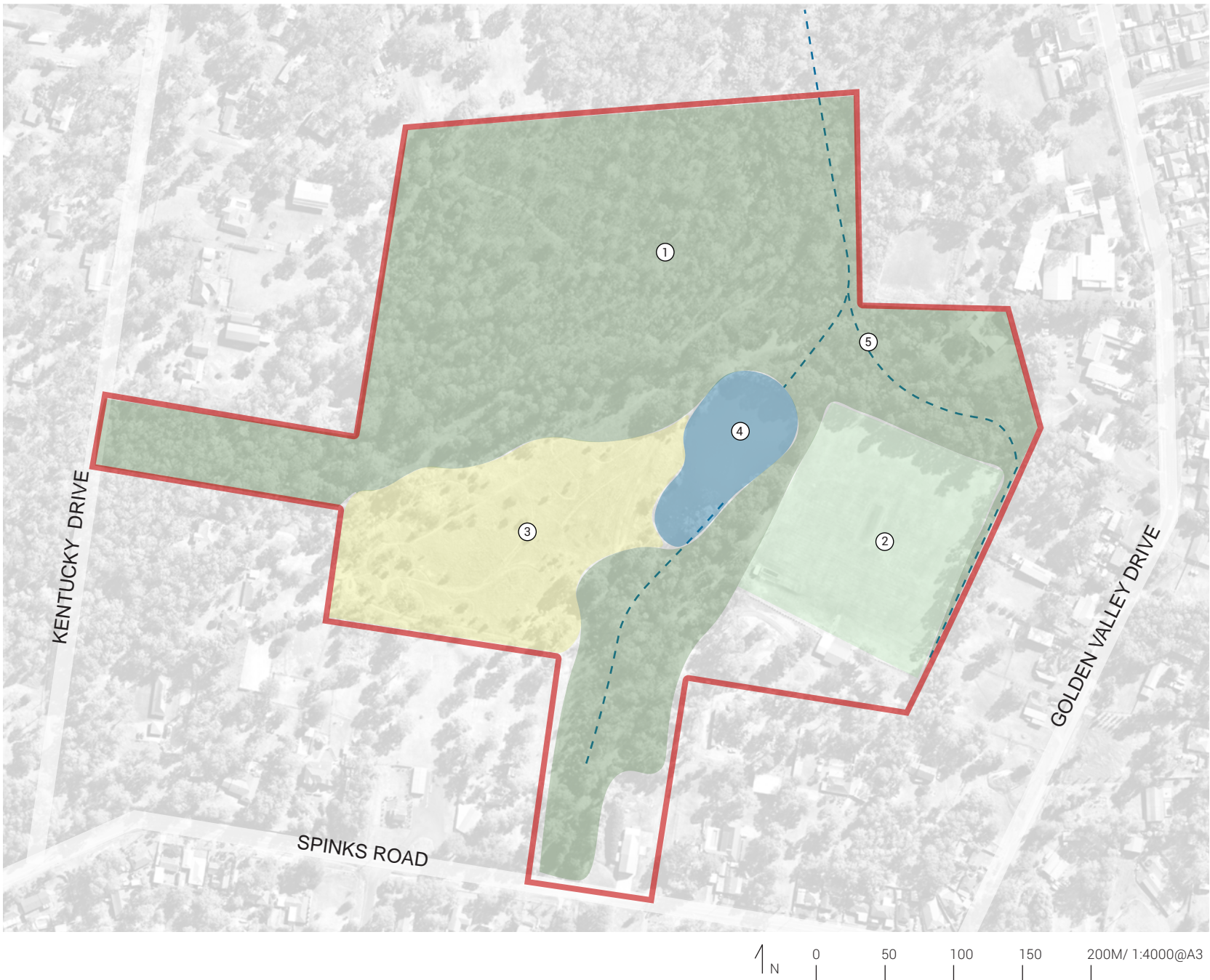
Legend

- Vehicle and pedestrian entry (unsealed)
- Pedestrian entry
- Formal pathway (concrete)
- Informal paths (unsealed gravel)
- Informal tracks (dirt path)
- Vehicle and pedestrian entry (unsealed)
- Stairs to field
- Masterplan boundary
- Parking area
- Building

Images

- ① Parking area
- ② Concrete footpath
- ③ Informal footpath
- ④ Amenities building
- ⑤ Informal tracks

Vegetation, Ecology and Landscape Features



Woodbury Reserve has a diverse landscape character with more than half the site being bushland rich in ecology as well as sportsfield, paddock areas and a large water body (dam).

Bushland

- » Much of the northern portion of the reserve (approximately half of the site) is a natural bushland character which has been classified by Council as priority 1 and 2 bushland in recent biodiversity framework mapping.
- » Two endangered ecological communities are found on the site including: Shale Sandstone Transition Forest and Cumberland Plain Woodland.
- » Dominant native canopy species include Forest Red Gum (*Eucalyptus tereticornis*), Rough-barked Apple (*Angophora floribunda*) and Narrow-leaved Ironbark (*Eucalyptus crebra*).
- » The bushland provides habitat opportunities for a range of native fauna of birds, bats, reptiles and smaller invertebrates. (Woodbury Reserve Plan of Management, 2009).

Sportsfield

- » The sportsfield is used for soccer and cricket and is surrounded by mature trees.

Open Paddock

- » The open paddock area includes native grasses and some regrowth.
- » Vegetation growth in this area has been significantly impacted by informal BMX and motorbike usage.

Dam

- » The open water body is surrounded by some mature riparian vegetation.
- » The dam is approximately 100m long and 50m wide and water is used to irrigate the adjacent sports fields.

Natural Watercourse

- » Ephemeral drainage lines run either side of the sports field, flowing north.



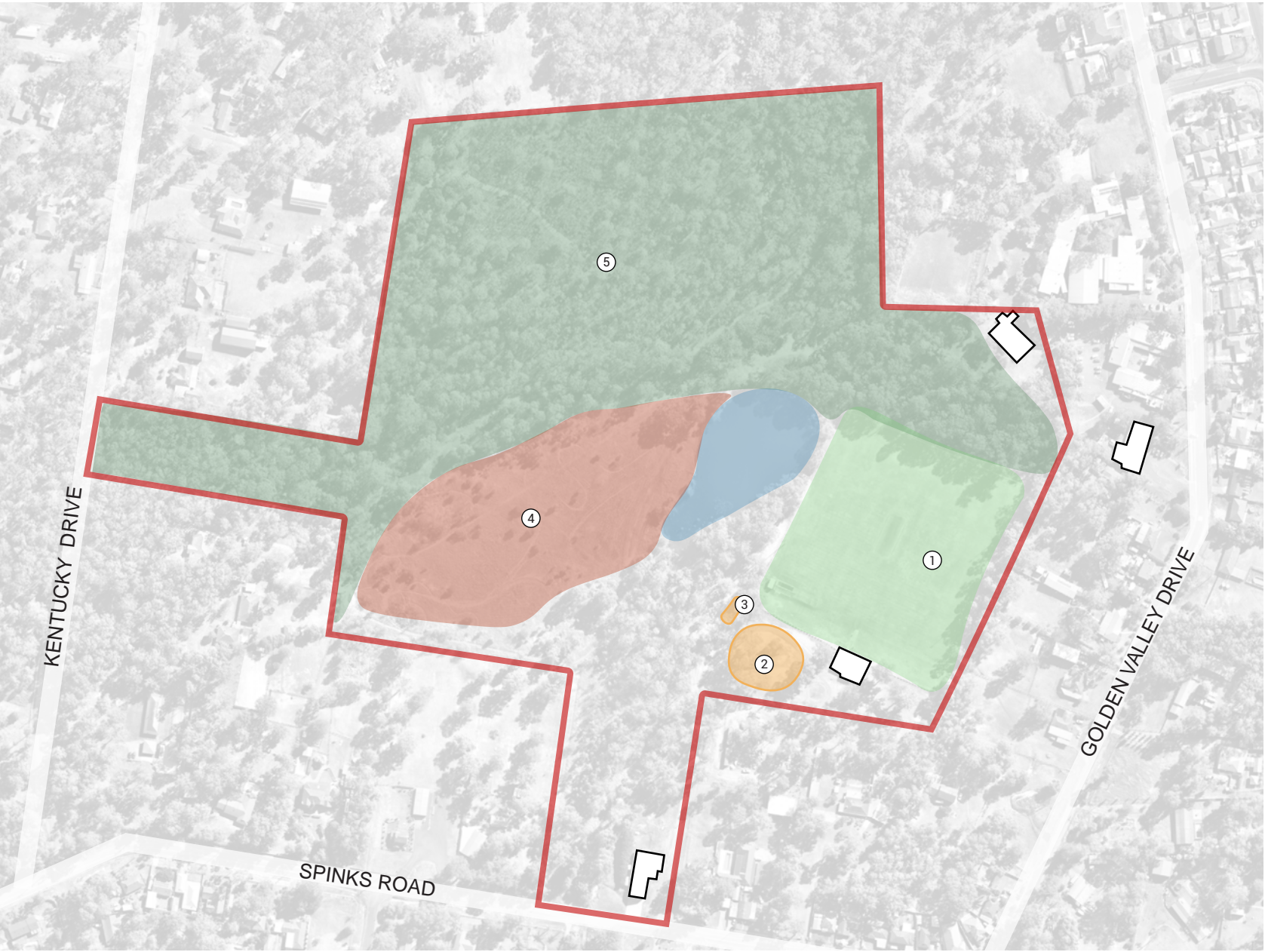
Legend

- Bushland
- Sportsfield
- Open Paddock
- Dam
- - Natural Watercourse
- Site boundary

Images

- ① Bushland
- ② Sportsfield
- ③ Open Paddock
- ④ Dam
- ⑤ Natural Watercourse

Existing Recreation



Woodbury Reserve provides dedicated sporting fields and a play area. The site is also used for passive and informal recreation.

Active Recreation

- » The sports field provides 2 x soccer fields, a cricket field and informal activities such as athletics.
- » Cricket nets located to the southern end of the field are used for practice and informal uses.
- » There is a portable skate ramp located to the west of the sports field.
- » The existing playground provides activities including climbing, sliding and rocking and is used by the local residents as well as the near by schools and childcare centres.
- » Informal tracks through the reserve are used for jogging and mountain biking.

Passive Recreation

- » The site is positioned in a natural setting surrounded by bushland which offers an ideal setting for passive recreation activities.
- » There is one picnic shelter located adjacent to the playground which provides shade for informal use.
- » The dam and surrounding natural setting offers passive activities such as birdwatching and other wildlife spotting activities.
- » Various informal tracks through the reserve and open fields are used for dog walking.
- » There are limited opportunities for seating, picnicking or gathering.
- » There is a lack of facilities to support a trip to the reserve (water bubblers, bins).

Additional Activities

- » Site observations reveal motor sports activities are occurring across the reserve.
- » Horse tracks are present across the western part of the site indicating horse riding is a common occurrence.



Legend

- Bushland
- Sportsfield
- Play/Skate
- Dam
- Open Paddock
- Site boundary

Legend

- ① Sports fields (soccer and cricket)
- ② Playground and picnic shelter
- ③ Portable skate ramp
- ④ Informal motorbike and horse riding tracks
- ⑤ Mountain biking tracks

Consolidated Opportunities & Constraints

Amenities

- » 1. The existing toilet block is locked out side of sporting events in the park and there are no other public toilets available on site. The existing toilet block could be upgraded to a more modern facility (which will appeal to a wider variety of people).
- » 2. Furniture in the reserve is limited to spectator seating (in front of the clubhouse). There is an opportunity to provide additional informal spectator seating and terracing which will greater utilise the slope. There is an opportunity to provide additional furniture across the reserve including around the dam and around the sports fields which will support both spectating and passive recreation.
- » 3. The existing 3 areas of parking constrain park usage with the western carpark being an unsealed surface and containing numerous pot holes. The southern parking areas provide more attractive parking spaces however these are limited to sporting events as a gate prohibits access on other days. There is an opportunity for parking to be formalised with sealed bitumen surfacing and to provide dedicated accessible parking to improve the inclusivity of the reserve.

Circulation and access

- » 4. Access and circulation across the reserve is currently limited due to the site's topography and lack of infrastructure. The connection between the sports fields and club house/southern car park is restricted to stairs only and their is no accessible ramp or walkway. There is an opportunity to provide equal access to the sports fields by providing a ramp/accessible walkway.
- » 5. The site lacks a formalised pathway structure which limits access and connectivity across site. There is opportunity to provide a pathway hierarchy which will better connect the sports fields to the rest of the reserve and surrounding context.
- » 6. The site lacks visibility from the surrounding context and entries are informal, poorly signed or inaccessible, with only one vehicular access point. There is an opportunity to enhance the connections of the reserve to the local shopping village, school and childcare centre to the north west by providing way finding signage. Similarly the pedestrian entry on Kentucky Drive could be made more visible for park users.
- » 7. The southern entry (Spinks Road) currently provides both pedestrian and vehicular access however is not clearly delineated making it less safe for pedestrians. This entry could be upgraded to enhance the reserve's connection to the wider area, the future Jacaranda Ponds development and support the proposed active transport links.
- » A telecommunications tower is proposed to be located at the northern end of the western parking area. The tower will require access and constrains the extent of the parking area and will provide a visual challenge to the reserve due to its size and location.

Recreation

- » 8. Sports fields provide opportunity for active recreation including organised sports like soccer and cricket as well as being utilised for practice and informal kick about and exercise. The sport fields should continue to be maintained and provide opportunity for additional activities such as athletics and school sports.
- » 9. The playground provides opportunity for local families, Glossodia Public School and Golden Valley Childcare Centre to utilise the reserve but is constrained by a lack of access (locked gate on non-sport days). There is opportunity for the playground to be upgraded to provide more inclusive and sensory play opportunities in a bushland setting and appeal to a wider variety of users.
- » 10. The steep topography and bushland setting lends itself well to informal recreation such as mountain biking, BMX riding , motor bike riding, horse riding, running and walking tracks and jumps have been established through the bushland. These activities could be further formalised and enhanced to ensure the occurrence of conflicts are reduced and all activities are safely provided for.
- » 11. The reserve offers lots of opportunities for passive recreation such as bird watching, utilising the access to bushland and views across the dam. Passive recreation could be further encouraged through placement of furniture and amenities such as seating, shade structures picnic settings, water bubblers etc.
- » 12. The existing tracks have established over time and provide various routes for passive recreation and bushwalking and connections to nature. These tracks could be further enhanced by wayfinding measures and provision of designated walking tracks.
- » 13. Opportunities exist to enhance and expand the existing bushland including conservation of the existing endangered ecological communities.

The site analysis and Community Engagement has revealed a number of opportunities for further active and passive recreation uses in Woodbury Reserve, whilst still maintaining the sites sporting function.

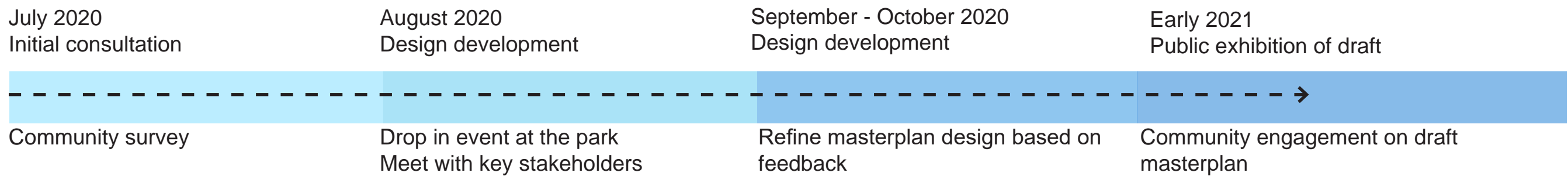


2.0

COMMUNITY ENGAGEMENT

Community Engagement

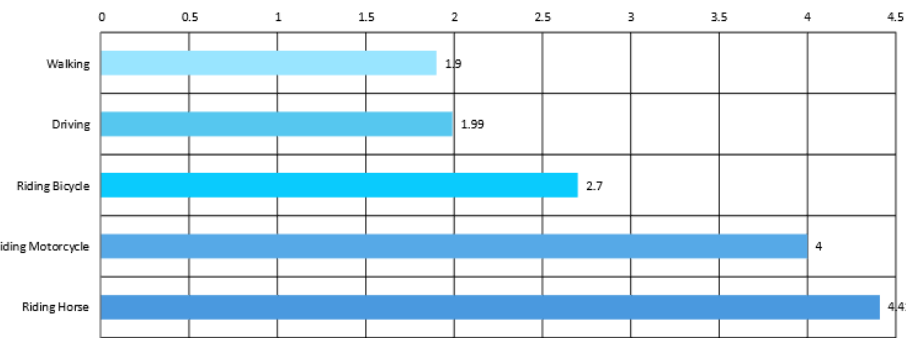
Community engagement forms an important part of the masterplanning process for the reserve. The wider community has been engaged via council’s online ‘Have Your Say’ page and surveys, community drop in sessions on site, key stakeholder workshops and online consultation with the local youth generating valuable insights to inform the masterplan development.



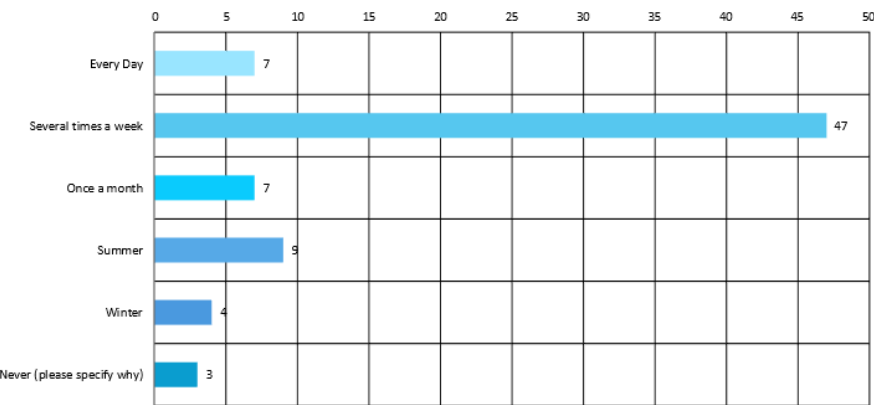
(Hawkesbury City Council Have Your Say Page, Community Update)

Community Engagement - Online

Preferred travel method to the park



How often the community uses the reserve



As of July 2020, Stage 1 Engagement has taken place including online Community surveys.

Stage 1 Engagement Completed including:

- » Council's online 'Have Your Say' page updated including survey and FAQ's.
- » Council's 'Have Your Say' page visited by 95 community members.
- » Online survey was made available to the public for a total of two weeks (14/7/20 - 26/7/20).

Respondents

- » A total of 71 community members responded to the survey available on council's 'Have Your Say' page.
- » Majority of respondents were aged 35 to 45 years of age (55%) followed by 23-34 (29%) and (14%) above the age of 50.
- » 65% of the respondents were female and 34% male.
- » The most common suburb respondents live in is Glossodia (87%). Other suburbs include:
 - Freemans Reach
 - Schofields
 - East Kurrajong
 - Bligh Park
 - Riverstone
 - Richmond

Key Findings

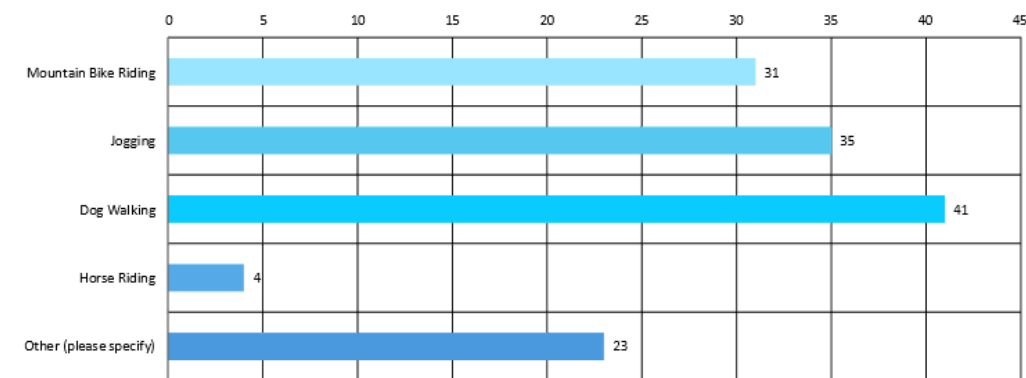
- » The community values the reserve for its bushland setting and access to nature (as well as the sports fields).
- » There is a sugar glider colony present on site which feeds in the northern bushland.

Issues and Comments Raised by Respondents

- The current condition of carpark and roads are poor and require upgrades and formalising.
- Safety concerns of the existing skate ramp were raised.
- Poor condition of the playground.
- Lack of maintenance of the grass and fields.
- Rubbish and poor condition of the dam requiring cleaning up.

Community Engagement - Online

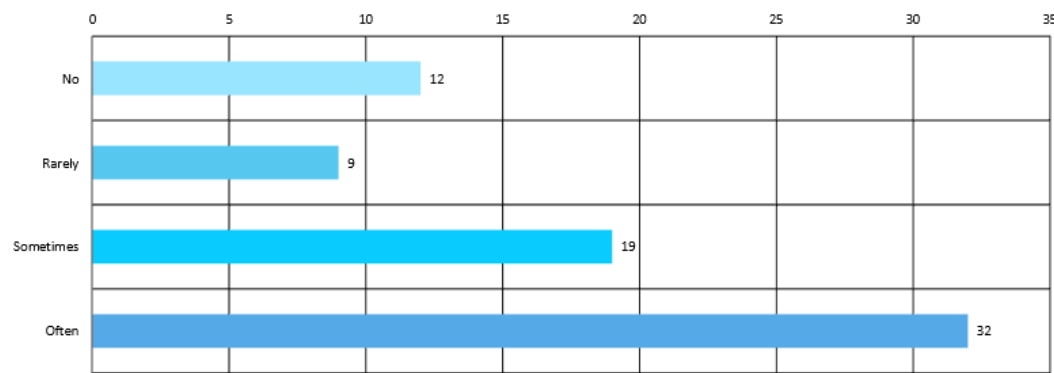
Current recreation uses in the park



Other activities on site mentioned by respondents:

- » Motorbiking, quad biking
- » Athletics practice (Discuss throwing)
- » BMX riding
- » Bush regeneration

Use of playground outside of sporting days



Additional comments about playground from respondents:

- » Weeds to be maintained in the play area
- » Playground could be bigger and additional activities for children such as skating and bmx and bike riding/ learn to ride (for all ages) could be implemented
- » Accessibility and safety concerns to the park and access to public toilets limits families use of the playground

The Stage 1 Online Community Engagement reveals the community values of the reserve and raises issues and concerns about the existing site.

Current Use of the Reserve

- » The reserve is used for a number of recreational activities (in addition to the organised sport on site).
- » The most popular active recreation uses identified in the survey were jogging and mountain biking. There were also a number of ‘other’ uses specified with a high outcome of BMX riding and motor vehicle sports.
- » The survey revealed dog walking to be a highly popular activity in the reserve with 58% of respondents performing this type of passive recreation.
- » The survey reveals the existing play space is being used often however there are concerns in relation to the maintenance, excitement, size and amenities of the playground.

Community Feedback- Amenities

- » The respondents expressed concerns about the lack of accessible amenity and provided comments highlighting their desire for additional/ upgrades to existing amenities including:
 - Bubblers
 - Bins
 - Public toilets
 - Furniture
 - Pram access
 - Picnic shelters
- » A major concern of the site was surrounding the car parking conditions. Respondents strongly commented on the poor state of the existing parking arrangements and requested that the car parking be formalised and that accessible car parking be provided.

Community Feedback- Recreation

- » The site is being used for a range of activities which could be improved by formalisation and maintenance of the existing tracks across the reserve.
- » Respondents expressed the need for recreational opportunities for children and youth to be catered for in the park. A high percentage of respondents suggested the addition of a BMX track and an all ages skate park.
- » Other recreational opportunities which were suggested included, additional ball sports such as netball, basket ball, rugby, touch football and oz-tag, athletics facilities and motorised sports.

Community Engagement - Face to Face

The general community was engaged via two drop in sessions held on site. The community were asked for their input on potential inclusions in the reserve, discussed general comments and provided priorities by ranking masterplan elements through various activities.



(Community Drop in Session on site)

What the community told us

- » The inclusion of netball provision. A marked court which can be multi use for Glossodia netball club training as well as informal activity and youth hangout area
- » Introduce a ramp from amenities to the sports field to provide equal access for all
- » Improvements to passive recreation by providing seating, picnic settings and BBQ's
- » Improve circulation, upgrading paths and connectivity across the reserve
- » Upgrades to the entry road
- » Inclusion of entry signage and way finding
- » Car parking provision, parking layout strategy to maximise space
- » Facilitate youth recreation through formalising bike tracks and jumps on site, providing skate elements, multi-use courts and hangout areas
- » Consider lighting for safety on paths and within carpark
- » Refurbishment of toilets and management to allow use outside of sporting events
- » Improvements to vehicular circulation ensuring two-way entry to parking
- » Area for dogs and management/ decisions on provisions of dogs on or off

The community was generally unhappy with the current provision of the following recreational facilities:

- » Skating
- » BMX riding
- » Toilets
- » Picnic shelters and quiet zones

Popular inclusions for the Masterplan recognised by the community included:

1. Picnic Settings
2. Marked Courts
3. Additional fields
4. Outdoor Gym
5. BBQ's/ Terraced Spectator Seating
6. Practice hoop
7. Athletics facilities

Community Engagement With Young People

As part of the consultation Process Place Design Group and Hawkesbury City Council engaged with the young people of the Hawkesbury LGA. A survey was provided to the students at Glossodia Public School to understand their priorities for Woodbury Reserve and its current usage. An online ‘zoom’ consultation session was held with Place Design Group, Hawkesbury City Council and Hawkesbury High school SRC to understand their priorities for the reserve.

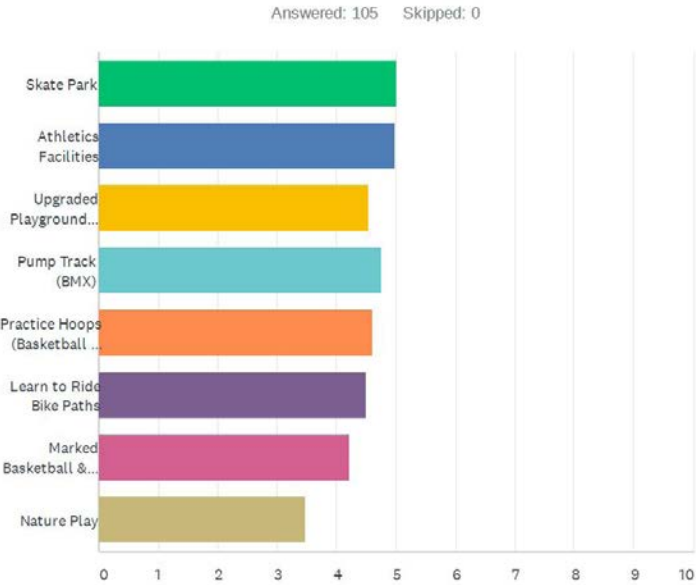
Glossodia Primary School Key Findings:

- » BMX riding is very popular current use of the reserve use of the informal dirt tracks and jumps
- » Additional skate ramp/ skate park was a popular outcome. The current skate ramp is not enough and usually taken over by the teens
- » Kids saying they like motorbike riding in the park however there are comments suggesting the damage to fields from the motorbikes
- » Additional play areas for older kids

Youth Consultation Key Findings:

- » The youth would benefit from places in the park to hangout such as seating and shelters
- » Stronger circulation through connecting paths around the reserve would enhance the use of the reserve
- » Multi – use courts would be highly used by a range of users both youth who play ball sports as well as those wanting informal recreation area to be active and hangout
- » Bike riding and BMX is popular for youth and could be enhanced by formalising tracks and making use of the open paddock area or bushland
- » Skate is currently not provided for in the area some skate elements integrated with other recreation areas would be appreciated

Q5 Rank these from 1 (Top Priority) to 8 (Least Priority)



(Priority Graph from online survey completed by Glossodia Primary School)

3.0

KEY OBJECTIVES AND PRINCIPLES

Key Objectives & Guiding Principles

The following objectives and principles have been developed following the detailed site analysis and community engagement process during July and August 2020.

1 Improve accessibility & inclusion across the reserve

- Provide equal access to sports fields from the amenities building and car parking areas
- Provide 1-2 accessible parking spaces in all car parks as well as priority parking close to the amenities building
- Implement way finding & signage provision across the reserve

2 Protect and enhance the natural bushland setting

- Protect existing bushland and regenerate sparse or damaged areas
- Provide opportunity for interaction with wildlife
- Use sustainable materials for new elements located in close proximity to bushland

3 Provide a diverse sporting and recreation hub for all

- Provide additional diverse sporting activity such as netball, basketball and athletics
- Encourage informal use of the sporting fields (when not in formal sport use)
- Provide spectator seating to cater for larger sporting events and everyday seating

4 Offer passive recreation through the reserve

- Provide furniture such as picnic settings, BBQ's, seating and shade throughout the reserve to attract a wider variety of visitors
- Provide safe and connected active transport routes (paths, cycleways)
- Retain open spaces for informal uses (Kick about area, picnicking, frisbee, kite flying)

5 Provide additional youth recreation opportunities

- Investigate upgrading and formalising the existing bike tracks to enhance the recreation offer and reduce conflict
- Provide multi-use courts for informal activity
- Integrate additional skate elements in any new hard scape areas
- Provide a space for gathering and 'hang out' ensuring good passive surveillance

6 Improve connectivity within the reserve and to the surrounding areas

- Provide a formalised main path network throughout the reserve connecting all key areas
- Provide formal paths connecting to the Glossodia shopping village to the north
- Implement an active transport link from Kentucky Drive and Spinks Road to Golden Valley Drive

7 Improve safety across the reserve

- Improve natural surveillance by clearing of dense bushland around proposed activity areas
- Consider lighting key pathways to improve night time use and user safety
- Separate pedestrians and cars by providing dedicated parking bays and clearly marked walkways
- Ensure asset protection zone is accounted for as per RFS guidelines

8 Provide diverse play opportunities for all

- Introduce inclusive and nature play equipment to any existing or new play spaces
- Provide diverse and challenging play experiences for a wider variety of ages
- Incorporate places for families and social gatherings next to play spaces

9 Implement sustainable storm water management across the reserve

- Create passive filtration to garden beds for any new areas of hardstand
- Introduce WSUD (swales) to reduce surface run off in peak flows

4.0

FUNCTIONAL DIAGRAM

Functional Diagram



Design Principles

- Provide a formal carpark around the amenities building and two parking areas (one near the dam and one in existing paddock).
- Create an “active hub” with play, skate and multi use courts all located in one place at the southern end of the sports fields.
- Provide terraced spectator seating with access down to the sports fields from the amenities building and an accessible ramp for equal access from the car park to the sports fields.
- Retain dam size and enhance the dam area with passive recreation including picnic settings and BBQ’s around the dam.
- Strengthen connection from Kentucky Drive through the reserve to Golden Valley Drive and Spinks Road through an active transport link.
- Provide a integrated active and passive recreation hub in the open paddock with a separate fenced dog park to the south of the path and a BMX track and passive recreation and picnic areas to the north of the path.
- Provide a secondary BMX track where existing jumps are located to enhance bike experience.
- Provide a cross country loop through the bushland with links to surrounding context.
- Provide upgraded formal footpaths and active transport links to improve connectivity and safety across the reserve.

Legend

- Passive recreation areas
- Dog park
- Pump track
- Dam
- Play
- Multi-use courts
- Vehicle routes
- Informal tracks
- Formal paths
- Accessible ramp

5.0

MASTERPLAN

Masterplan

KENTUCKY DRIVE

GLOSSODIA PUBLIC SCHOOL

CHILDCARE CENTRE

GLOSSODIA SHOPPING VILLAGE

LEGEND

- | | |
|------------------------------------|---|
| 1. Sportsfields (soccer + cricket) | 15. Skate facilities |
| 2. Practice cricket nets | 16. Pump track |
| 3. Spectator terrace | 17. Picnic and BBQ area |
| 4. Accessible ramp with seating | 18. Passive lawn |
| 5. Priority car park | 19. Dog park |
| 6. Car park 2 (East Reserve) | 20. Active Transport Link |
| 7. Car park 3 (West Reserve) | 21. Walking/running tracks |
| 8. Car park 4 (RFS) | 22. Multi use half courts |
| 9. Causeway | 23. Multi age playground |
| 10. Rest area | 24. Shelters/hangout areas |
| 11. Stepping stones to deck | 25. Potential location for future optus tower |
| 12. Passive recreation loop | 26. Remediated riparian vegetation |
| 13. Dam picnic and lookout area | |
| 14. Secondary Amenities Building | |

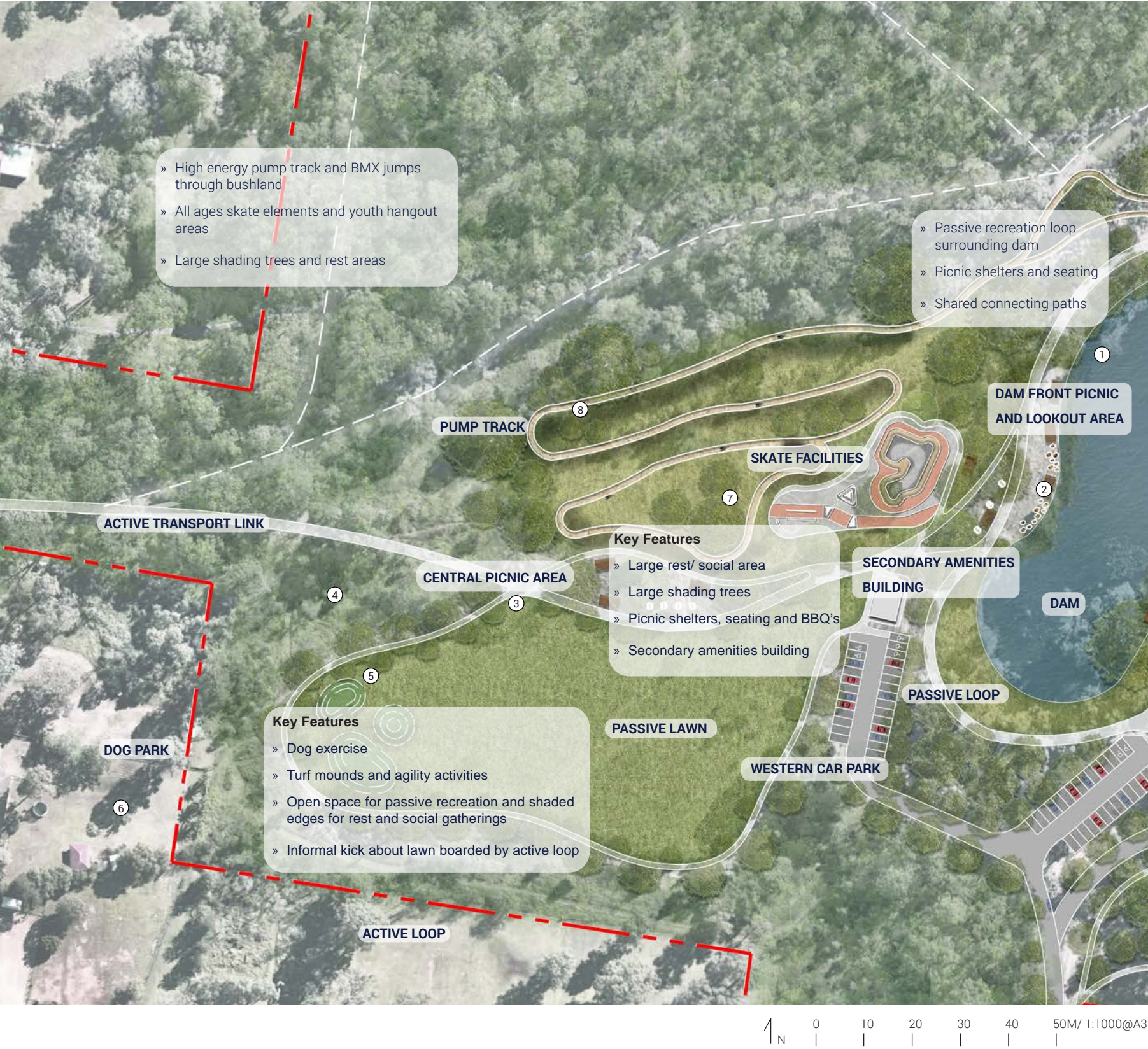
SPINKS ROAD

RFS

GOLDEN VALLEY DRIVE

0 20 40 60 80 100M/1:2000@A3

Detail Plan 1 and Supporting Imagery



Supporting Imagery

Shelters and seating next to dam



Picnic tables and social gathering spaces



Picnic and rest areas



Shared connecting paths



Open lawn for dogs to exercise



Dog activities



All ages skate facilities



Formalised pump track



Detail Plan 2 and Supporting Imagery



Supporting Imagery



Picnics and rest areas



Formal parking and entry signage



Spectator terrace



Accessible ramp on slope



Multi use courts



Skate elements integrated with courts



Inclusive play elements



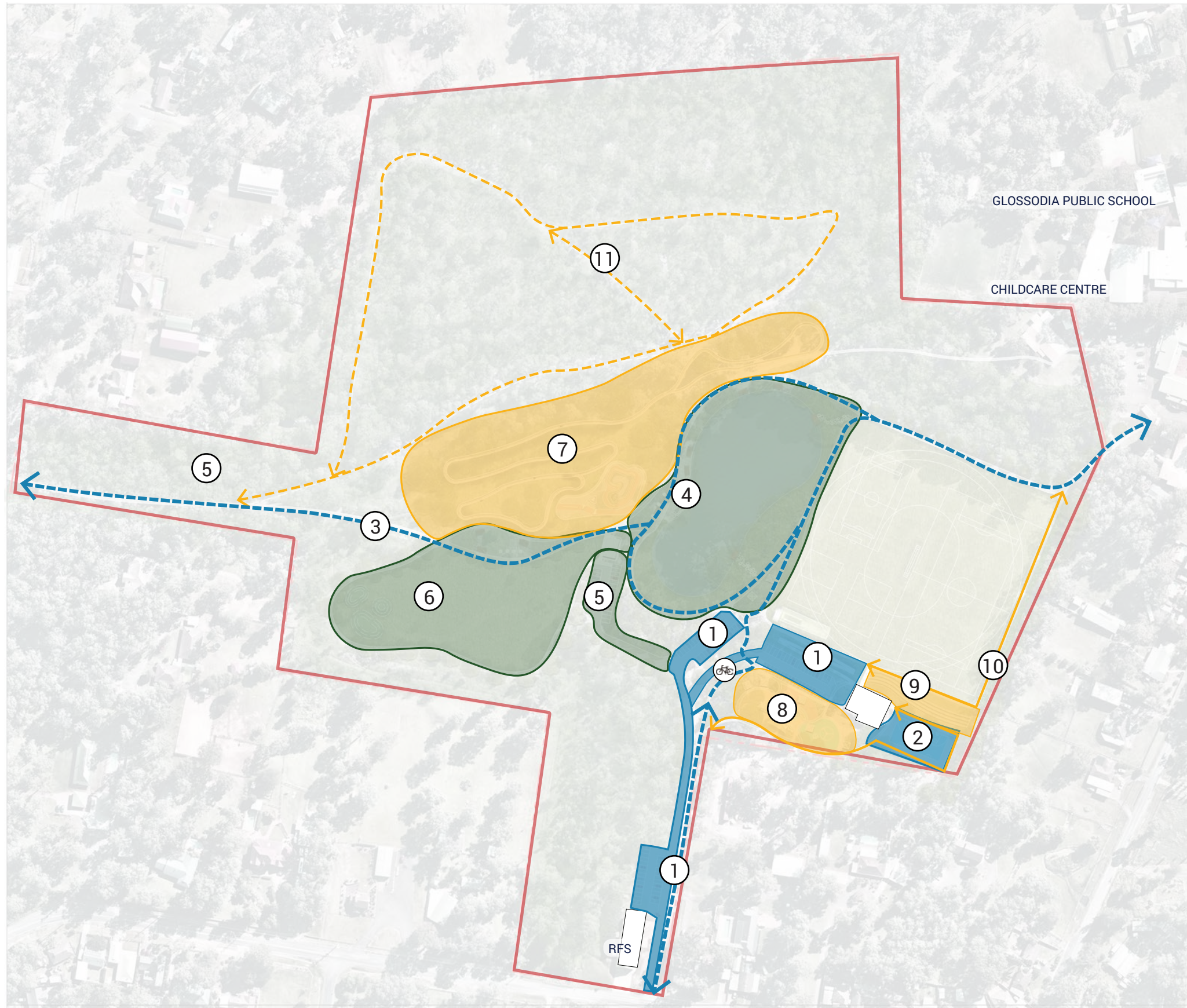
High energy play for diverse ages



6.0

**STAGING AND
IMPLEMENTATION
PLAN**

Implementation and Staging Plan



Implementation

- **Short Term (1-5 Years)**

1. Upgrade the existing entry road including traffic calming measures, formalise site parking (including accessible parking) and provide an accessible ramp from the amenities building to the sportsfields.
2. Establish an active recreation hub for youth including multi-use courts, skate elements and shaded hangout areas.
3. Create an active transport link through the reserve and around the dam

- Medium Term (5-10 Years)

4. Implement a passive recreation loop around the dam including picnic shelters and BBQ's.
5. Add a new car park west of the dam. Construct causeway to create access to the new parking area.
6. Implement a passive lawn and dog park.

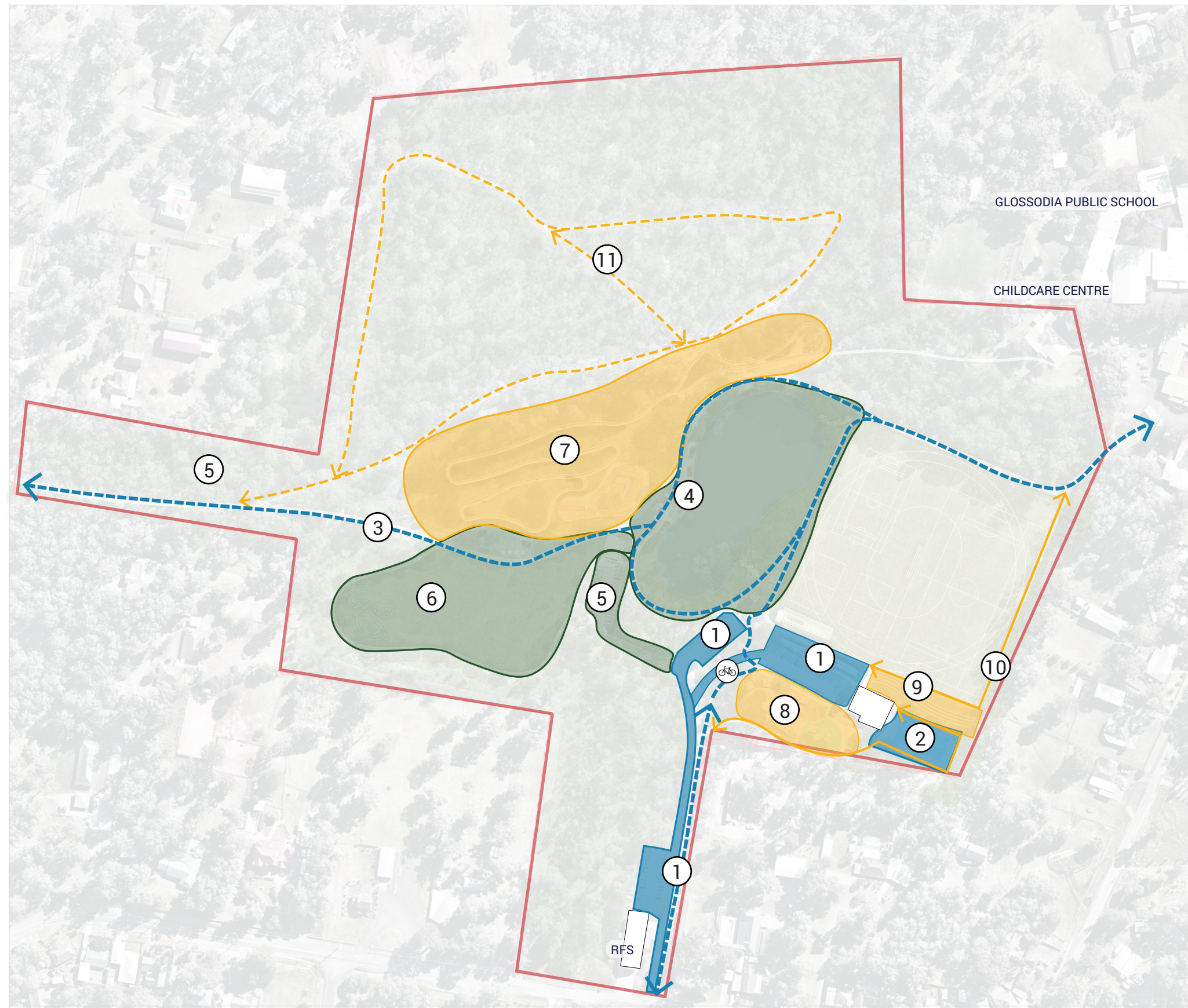
- Long Term (10-20 Years)

7. Establish a second active recreation hub with the addition of a formal pump track and skate elements that caters for the growing local community.
8. Upgrade the existing playground to provide more inclusive design elements and activities for a range of ages.
9. Provide additional spectator seating with terracing on eastern slope of amenities building.
10. Provide secondary paths around sportsfield and in southern active recreation hub
11. Formalise and upgrade tracks throughout bushland including wayfinding signage

Appendix

B - Masterplan and Implementation Plan

Implementation and Staging Plan



Implementation

● Short Term (1-5 Years)

1. Upgrade the existing entry road including traffic calming measures, formalise site parking (including accessible parking) and provide an accessible ramp from the amenities building to the sportsfields.
2. Establish an active recreation hub for youth including multi-use courts, skate elements and shaded hangout areas.
3. Create an active transport link through the reserve and around the dam

● Medium Term (5-10 Years)

4. Implement a passive recreation loop around the dam including picnic shelters and BBQ's.
5. Add a new car park west of the dam. Construct causeway to create access to the new parking area.
6. Implement a passive lawn and dog park.

● Long Term (10-20 Years)

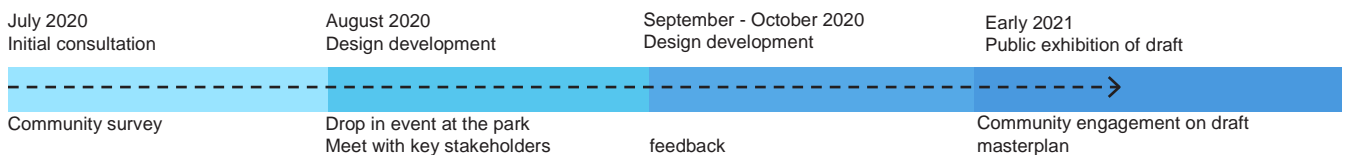
7. Establish a second active recreation hub with the addition of a formal pump track and skate elements that caters for the growing local community.
8. Upgrade the existing playground to provide more inclusive design elements and activities for a range of ages.
9. Provide additional spectator seating with terracing on eastern slope of amenities building.
10. Provide secondary paths around sportsfield and in southern active recreation hub
11. Formalise and upgrade tracks throughout bushland including wayfinding signage

Appendix

C – Community Engagement Summary

Community Engagement

Community engagement forms an important part of the masterplanning process for the reserve. The wider community has been engaged via council's online 'Have Your Say' page and surveys, community drop in sessions on site, key stakeholder workshops and online consultation with the local youth generating valuable insights to inform the masterplan development.



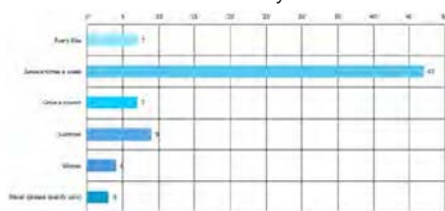
Community Engagement - Online

As of July 2020, Stage 1 Engagement has taken place including online Community surveys.

Preferred travel method to the park



How often the community uses the reserve



Stage 1 Engagement Completed including:

- » Council's online 'Have Your Say' page updated including survey and FAQ's.
- » Council's 'Have Your Say' page visited by 95 community members.
- » Online survey was made available to the public for a total of two weeks (14/7/20 - 26/7/20).

Respondents

» A total of 71 community members responded to the survey available on council's 'Have Your Say' page.

» Majority of respondents were aged 35 to 45 years of age (55%) followed by 23-34 (29%) and (14%) above the age of 50.

» 65% of the respondents were female and 34% male.

» The most common suburb respondents live in is Glossodia (87%). Other suburbs include:

- Freemans Reach
- Schofields
- East Kurrajong
- Bligh Park
- Riverstone
- Richmond

Key Findings

» The community values the reserve for its bushland setting and access to nature (as well as the sports fields).

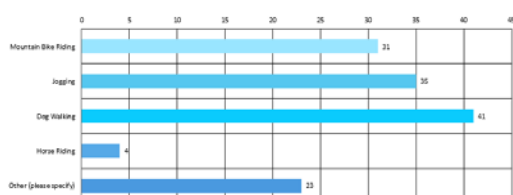
» There is a sugar glider colony present on site which feeds in the northern bushland.

Issues and Comments Raised by Respondents

- The current condition of carpark and roads are poor and require upgrades and formalising.
- Safety concerns of the existing skate ramp were raised.
- Poor condition of the playground.
- Lack of maintenance of the grass fields.
- Rubbish and poor condition of the dam requiring cleaning up.

Community Engagement - Online

Current recreation uses in the park



Other activities on site mentioned by respondents:

- » Motorbiking, quad biking
- » Athletics practice (Discus throwing)
- » BMX riding
- » Bush regeneration

Use of playground outside of sporting days



Additional comments about playground from respondents:

- » Weeds to be maintained in the play area
- » Playground could be bigger and additional activities for children such as skating and bmx and bike riding/ learn to ride (for all ages) could be implemented
- » Accessibility and safety concerns to the park and access to public toilets limits families use of the playground

The Stage 1 Online Community Engagement reveals the community values of the reserve and raises issues and concerns about the existing site.

Current Use of the Reserve

- » The reserve is used for a number of recreational activities (in addition to the organised sport on site).
- » The most popular active recreation uses identified in the survey were jogging and mountain biking. There were also a number of 'other' uses specified with a high outcome of BMX riding and motor vehicle sports.
- » The survey revealed dog walking to be a highly popular activity in the reserve with 58% of respondents performing this type of passive recreation.
- » The survey reveals the existing play space is being used often however there are concerns in relation to the maintenance, excitement, size and amenities of the playground.

Community Feedback- Amenities

- » The respondents expressed concerns about the lack of accessible amenity and provided comments highlighting their desire for additional/ upgrades to existing amenities including:

- Bubblers
- Bins
- Public toilets
- Furniture
- Pram access
- Picnic shelters

- » A major concern of the site was surrounding the car parking conditions. Respondents strongly commented on the poor state of the existing parking arrangements and requested that the car parking be formalised and that accessible car parking be provided.

Community Feedback- Recreation

- » The site is being used for a range of activities which could be improved by formalisation and maintenance of the existing tracks across the reserve.
- » Respondents expressed the need for recreational opportunities for children and youth to be catered for in the park. A high percentage of respondents suggested the addition of a BMX track and an all ages skate park.
- » Other recreational opportunities which were suggested included, additional ball sports such as netball, basket ball, rugby, touch football and oz-tag, athletics facilities and motorised sports.

Community Engagement - Face to Face

The general community was engaged via two drop in sessions held on site. The community were asked for their input on potential inclusions in the reserve, discussed general comments and provided priorities by ranking masterplan elements through various activities.



(Community Drop in Session on site)

What the community told us

- » The inclusion of netball provision. A marked court which can be multi use for Glossodia netball club training as well as informal activity and youth hangout area
- » Introduce a ramp from amenities to the sports field to provide equal access for all
- » Improvements to passive recreation by providing seating, picnic settings and BBQ's
- » Improve circulation, upgrading paths and connectivity across the reserve
- » Upgrades to the entry road
- » Inclusion of entry signage and way finding
- » Car parking provision, parking layout strategy to maximise space
- » Facilitate youth recreation through formalising bike tracks and jumps on site, providing skate elements, multi-use courts and hangout areas
- » Consider lighting for safety on paths and within carpark

The community was generally unhappy with the current provision of the following recreational facilities:

- » Skating
- » BMX riding
- » Toilets
- » Picnic shelters and quiet zones

Popular inclusions for the Masterplan recognised by the community included:

1. Picnic Settings
2. Marked Courts
3. Additional fields
4. Outdoor Gym
5. BBQ's/ Terraced Spectator Seating
6. Practice hoop
7. Athletics facilities

Community Engagement With Young People

As part of the consultation Process Place Design Group and Hawkesbury City Council engaged with the young people of the Hawkesbury LGA. A survey was provided to the students at Glossodia Public School to understand their priorities for Woodbury Reserve and its current usage. An online 'zoom' consultation session was held with Place Design Group, Hawkesbury City Council and Hawkesbury High school SRC to understand their priorities for the reserve.

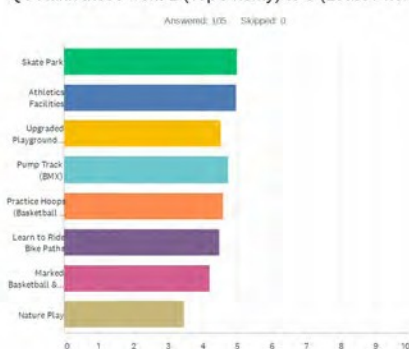
Glossodia Primary School Key Findings:

- » BMX riding is very popular current use of the reserve use of the informal dirt tracks and jumps
- » Additional skate ramp/ skate park was a popular outcome. The current skate ramp is not enough and usually taken over by the teens
- » Kids saying they like motorbike riding in the park however there are comments suggesting the damage to fields from the motorbikes
- » Additional play areas for older kids

Youth Consultation Key Findings:

- » The youth would benefit from places in the park handout such as seating and shelters
- » Stronger circulation through connecting paths around the reserve would enhance the use of the reserve
- » Multi – use courts would be highly used by a range of users both youth who play ball sports as well as those wanting informal recreation area to be active and hangout
- » Bike riding and BMX is popular for youth and could be enhanced by formalising tracks and making use of the open paddock area or bushland
- » Skate is currently not provided for in the area some skate elements integrated with other recreation areas would be appreciated

Q5 Rank these from 1 (Top Priority) to 8 (Least Priority)



(Priority Graph from online survey completed by Glossodia)

Appendix

D – High Risk Weeds in the Sydney and Blue Mountains Area



Sydney Weeds Committees

- Sydney Central • Sydney South West
- Sydney North • Sydney West – Blue Mountains

High Risk Weeds in the Sydney & Blue Mountains region

List at February 2013

LIST A: ERADICATION

The aim is to eradicate these weeds from the Sydney and Blue Mountains region.

Strategy	Common name	Botanical Name	Plant Type
Eradicate Class 1 in NSW	Eurasian Water Milfoil	<i>Myriophyllum spicatum</i>	Aquatic
	Kidney Leaf Mud Plantain	<i>Heteranthera reniformis</i>	Aquatic
	Horsetail	<i>Equisetum</i> species	Aquatic
	Mexican Feather Grass	<i>Nassella tenuissima</i> (or <i>Stipa tenuissima</i>)	Grass
	Senegal Tea Plant	<i>Gymnocoronis spilanthoides</i>	Aquatic
Eradicate Class 2 in NSW	Boneseed	<i>Chrysanthemoides monilifera</i> subspecies <i>monilifera</i>	Shrub
Regional Concern	Bitou Bush (eradicate west of Holsworthy land)	<i>Chrysanthemoides monilifera</i> ssp. <i>rotundata</i>	Shrub
Regional Concern	Kudzu	<i>Pueraria lobata</i>	Vine
Regional Concern	Japanese Knotweed	<i>Fallopia japonica</i>	Groundcover
Regional Concern	Sicklethorn	<i>Asparagus falcatus</i>	Vine
Eradicate where it's Class 2	Hygrophila / Glush Weed	<i>Hygrophila costata</i>	Aquatic
	Salvinia	<i>Salvinia molesta</i>	Aquatic
	Water Hyacinth	<i>Eichhornia crassipes</i>	Aquatic
Eradicate outside of Sydney wide containment lines	African Olive	<i>Olea europaea</i> ssp. <i>cuspidata</i>	Tree
Blue Mountains LGA only	Alligator Weed (Class 1) Cat's Claw Creeper (Class 2)	<i>Alternanthera philoxeroides</i> <i>Dolichandra unguis-cati</i>	Aquatic Vine

(LIST A: PENDING)

Other new weeds that have been seen in Sydney for the first time.

Keep on the List A until a Weed Risk Assessment is completed and we know more about their threats.

Reported New Incursions in Sydney	Angel's Trumpet	<i>Maurandya barclayana</i>	Vine
	Kei Apple	<i>Dovyalis caffra</i>	Tree
	Monkey Comb	<i>Pithecoctenium cynanchoides</i>	Vine
	Mysore Thorn	<i>Caesalpinia decapetala</i>	Tree
	Wild Onion / Asphodelus	<i>Asphodelus fistulosus</i>	Herb

LIST B: LOCAL CONTROL, CONTAINMENT & ASSET PROTECTION

The aim is to strategically control, contain and educate about these weeds to protect our most important assets.

Strategic local control, asset protection and education	African Boxthorn	<i>Lycium ferocissimum</i>	Shrub
	African Olive (strategic control inside containment lines)	<i>Olea europaea ssp. cuspidata</i>	Tree
	Asparagus Fern	<i>Asparagus scandens</i>	Vine
	Asparagus (Climbing)	<i>Asparagus plumosus</i>	Vine
	Asparagus (Ground)	<i>Asparagus aethiopicus</i>	Vine
	Asparagus (Climbing)	<i>Asparagus africanus</i>	Vine
	Bitou Bush (asset protection east of Holsworthy land)	<i>Chrysanthemoides monilifera ssp. rotundata</i>	Shrub
	Blackberry	<i>Rubus fruticosus</i>	Vine
	Box Elder (targeted control in south west)	Acer Negundo	Tree
	Bridal Creeper	<i>Asparagus asparagoides</i>	Vine
	Broom (Montpellier/Cape)	<i>Genista monspessulana</i>	Shrub
	Cats Claw Creeper	<i>Dolichandra unguis-cati</i> (previously classified as <i>Macfadyena unguis-cati</i>)	Vine
	Chilean Needle Grass	<i>Nassella neesiana</i>	Grass
	Chinese Celtis/ Chinese Hackberry	<i>Celtis sinensis</i>	Tree
	Coolatai Grass	<i>Hyparrhenia hirta</i>	Grass
	Broom (Flax-leaf)	<i>Genista linifolia</i>	Shrub
	Glory Lily	<i>Gloriosa superba</i>	Herb
	Gorse	<i>Ulex europaeus</i>	Shrub
	Green Cestrum (strategic control on ag land)	<i>Cestrum parqui</i>	Tree
	Honey Locust	<i>Gleditsia triacanthos</i>	Tree
	Lantana	<i>Lantana camara</i>	Shrub
	Madeira Vine	<i>Anredera cordifolia</i>	Vine
	Pampas Grass	<i>Cortaderia jubata</i>	Grass
	Prickly Pear	<i>Opuntia</i> (except <i>O.ficus indica</i>)	Succulent
	Broom (Scotch/English)	<i>Cytisus scoparius</i>	Shrub
	Serrated Tussock	<i>Nassella trichotoma</i>	Grass
	Tussock Paspalum/ Blue Grass	<i>Paspalum quadrifarium</i>	Grass
	Yellow Bells / Golden Bells	<i>Tecoma stans</i>	Tree
Emerging weeds and the more widespread: Protect assets, education and containment (aquatic)	Alligator Weed (strategic control where Class 3)	<i>Alternanthera philoxeroides</i>	Aquatic
	Leafy Elodea	<i>Egeria densa</i>	Aquatic
	Long Leaf Willow Primrose	<i>Ludwigia longifolia</i>	Aquatic
	Primrose Willow / Water Primrose	<i>Ludwigia peruviana</i>	Aquatic
	Red Ludwigia	<i>Ludwigia repens</i>	Aquatic
	Salvinia (strategic control where Class 3)	<i>Salvinia molesta</i>	Aquatic
	Water Hyacinth (strategic control where Class 3)	<i>Eichhornia crassipes</i>	Aquatic

HRCC PRIORITY WEEDS LIST December 2019



AQUATIC OR TERRESTRIAL	COMMON NAME	BOTANICAL NAME	OBJECTIVE	LISTING	WRA
Terrestrial	African boxthorn	<i>Lycium ferocissimum</i>	ASSET	STATE	YES
Terrestrial	African milk bush	<i>Synadenium grantii</i>	ERADICATION	LOCAL	YES
Terrestrial	African olive	<i>Olea europaea subsp. cuspidata</i>	CONTAINMENT (Exclusion zone west of Nepean River in PENRITH LGA)	REGIONAL	YES
Aquatic	Alligator Weed	<i>Alternanthera philoxeroides</i>	CONTAINMENT	STATE	YES
Aquatic	Alligator weed	<i>Alternanthera philoxeroides</i>	CONTAINMENT	REGIONAL	YES
Aquatic	Anchored water hyacinth	<i>Eichhornia azurea</i>	PREVENTION	STATE	YES
Aquatic	Arrowhead	<i>Sagittaria calycina</i> var. <i>calycina</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Asparagus fern	<i>Asparagus virgatus</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Asparagus fern	<i>Asparagus virgatus</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Asparagus weeds	<i>Asparagus aethiopicus</i> , † <i>A. africanus</i> , <i>A. asparagoides</i> including the Western Cape form*, <i>A. plumosus</i> , and <i>A. scandens</i>	ASSET	STATE	YES
Terrestrial	Athel pine	<i>Tamarix aphylla</i>	ASSET	STATE	YES
Terrestrial	Bellyache bush	<i>Jatropha gossypifolia</i>	ASSET	STATE	YES
Terrestrial	Bitou Bush	<i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i>	CONTAINMENT	STATE	YES
Terrestrial	Black knapweed	<i>Centaurea x moncktonii</i>	PREVENTION	STATE	YES
Aquatic	Black willow	<i>Salix nigra</i>	ERADICATION	REGIONAL	YES
Terrestrial	Blackberry	<i>Rubus fruticosus</i> agg. (Blackberry except the varieties Chester Thornless, Dirksen Thornless, Loch Ness, Silvan, Black Satin, Murrindindi, Smooth Stem, Thornfree and Chehalem)	ASSET	STATE	YES
Terrestrial	Boneseed	<i>Chrysanthemoides monilifera</i> subspecies <i>monilifera</i>	ERADICATION	STATE	YES
Terrestrial	Bridal veil creeper	<i>Asparagus declinatus</i>	PREVENTION	STATE	YES
Terrestrial	Broadleaf pepper tree	<i>Schinus terebinthifolius</i>	ERADICATION	LOCAL	YES
Terrestrial	Broomrape	<i>Orobancha</i> spp. (all species except the native <i>O. cernua</i> var. <i>australiana</i> and <i>O. minor</i>)	PREVENTION	STATE	YES
Aquatic	Cabomba	<i>Cabomba caroliniana</i>	ASSET	REGIONAL	YES

HRCC PRIORITY WEEDS LIST December 2019



AQUATIC OR TERRESTRIAL	COMMON NAME	BOTANICAL NAME	OBJECTIVE	LISTING	WRA
Aquatic	Cabomba ‡	<i>Cabomba caroliniana</i>	ASSET	STATE	YES
Terrestrial	Cape/Montpellier broom	<i>Genista monspessulana</i>	ASSET	STATE	YES
Terrestrial	Cat's claw creeper	<i>Dolichandra unguis-cati</i>	ASSET	REGIONAL	YES
Terrestrial	Cat's Claw Creeper ‡	<i>Dolichandra unguis-cati</i>	ASSET	STATE	YES
Terrestrial	Chilean needle grass	<i>Nassella neesiana</i>	ASSET	STATE	YES
Terrestrial	Chinese celtis	<i>Celtis sinensis</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Chinese knotweed	<i>Persicaria chinensis</i>	ERADICATION	REGIONAL	YES
Terrestrial	Chinese violet	<i>Asystasia gangetica</i>	ERADICATION	STATE	YES
Terrestrial	Climbing asparagus	<i>Asparagus africanus</i>	ERADICATION	REGIONAL	YES
Terrestrial	Coolatai grass	<i>Hyparrhenia hirta</i>	ERADICATION	LOCAL	YES
Terrestrial	Coral creeper	<i>Barleria repens</i>	PREVENTION	REGIONAL	YES
Terrestrial	Corky passionfruit	<i>Passiflora suberosa</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Crofton weed	<i>Ageratina adenophora</i>	ASSET	LOCAL	YES
Aquatic	East Indian hygrophila	<i>Hygrophila polysperma</i>	PREVENTION	REGIONAL	YES
Aquatic	Eurasian water milfoil	<i>Myriophyllum spicatum</i>	PREVENTION	STATE	YES
Terrestrial	Fireweed	<i>Senecio madagascariensis</i>	ASSET	STATE	YES
Terrestrial	Flax-leaf broom	<i>Genista linifolia</i>	ASSET	STATE	YES
Aquatic	Frogbit / Spongeplant	<i>Limnobium spp. (all species)</i>	PREVENTION	STATE	YES
Terrestrial	Gamba grass	<i>Andropogon gayanus</i>	PREVENTION	STATE	YES
Terrestrial	Giant devil's fig	<i>Solanum chrysotrichum</i>	PREVENTION	REGIONAL	YES
Terrestrial	Giant rats tail grass	<i>Sporobolus pyramidalis</i>	PREVENTION	REGIONAL	YES
Terrestrial	Giant reed	<i>Arundo donax</i>	ASSET	REGIONAL	YES
Terrestrial	Glory lily	<i>Gloriosa superba</i>	ERADICATION	REGIONAL	YES
Terrestrial	Gorse	<i>Ulex - europaeus</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Gorse ††	<i>Ulex europaeus</i>	ASSET	STATE	YES
Terrestrial	Green cestrum	<i>Cestrum parqui</i>	ASSET	REGIONAL	YES
Aquatic	Grey sallow	<i>Salix cinerea</i>	ERADICATION	REGIONAL	YES
Terrestrial	Groundsel bush	<i>Baccharis halimifolia</i>	ERADICATION	REGIONAL	YES
Terrestrial	Hawkweed	<i>Hieracium spp (all species)</i>	PREVENTION	STATE	YES
Terrestrial	Holly-leaved senecio	<i>Senecio glastifolius</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Honey locust	<i>Gleditsia tricanthos</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Horsetails	<i>Equisetum spp.</i>	CONTAINMENT	REGIONAL	YES
Aquatic	Hydrocotyl/Water pennywort	<i>Hydrocotyle ranunculoides</i>	PREVENTION	STATE	YES
Aquatic	Hygrophilla	<i>Hygrophilla costata</i>	ERADICATION	REGIONAL	YES
Terrestrial	Hymenachne	<i>Hymenachne amplexicaulis</i>	PREVENTION	REGIONAL	YES
Terrestrial	Hymenachne #	<i>Hymenachne amplexicaulis</i>	ASSET	STATE	YES

HRCC PRIORITY WEEDS LIST December 2019



AQUATIC OR TERRESTRIAL	COMMON NAME	BOTANICAL NAME	OBJECTIVE	LISTING	WRA
Terrestrial	Karoo acacia	<i>Vachellia karroo</i> (syn. <i>Acacia karroo</i>)	PREVENTION	STATE	YES
Terrestrial	Kei apple	<i>Dovyalis caffra</i>	ERADICATION	REGIONAL	YES
Aquatic	Kidney leaf mud plantain	<i>Heteranthera reniformis</i>	ERADICATION	REGIONAL	YES
Terrestrial	Kochia	<i>Bassia scoparia</i> (excluding subsp. <i>trichophylla</i>)	PREVENTION	STATE	YES
Terrestrial	Koster's curse	<i>Clidemia hirta</i>	PREVENTION	STATE	YES
Terrestrial	Kudzu	<i>Pueraria lobata</i>	ERADICATION	REGIONAL	YES
Aquatic	Lagarosiphon	<i>Lagarosiphon major</i>	PREVENTION	STATE	YES
Terrestrial	Lantana	<i>Lantana camara</i>	ASSET	STATE	YES
Terrestrial	Leaf cactus	<i>Pereskia aculeata</i>	ERADICATION	REGIONAL	YES
Aquatic	Leafy elodea	<i>Egeria densa</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Lippia	<i>Phyla canescens</i>	ERADICATION	LOCAL	YES
Aquatic	Long leaf willow primrose	<i>Ludwigia longifolia</i>	CONTAINMENT	LOCAL	YES
Terrestrial	Madeira vine	<i>Anredera cordifolia</i>	ASSET	STATE	YES
Terrestrial	Mesquite	<i>Prosopis spp.</i>	ASSET	STATE	YES
Terrestrial	Mexican feather grass	<i>Nassella tenuissima</i> (syn. <i>Stipa tenuissima</i>)	PREVENTION	STATE	YES
Terrestrial	Miconia	<i>Miconia spp. (all species)</i>	PREVENTION	STATE	YES
Terrestrial	Mikania vine	<i>Mikania micrantha</i>	PREVENTION	STATE	YES
Terrestrial	Mimosa	<i>Mimosa pigra</i>	PREVENTION	STATE	YES
Terrestrial	Ming fern	<i>Asparagus macowanii</i> var. <i>zuluensis</i>	ERADICATION	REGIONAL	YES
Terrestrial	Mother of millions	<i>Bryophyllum species</i>	ASSET	LOCAL	YES
Terrestrial	Mysore thorn	<i>Caesalpinia decapetala</i>	ERADICATION	REGIONAL	YES
Terrestrial	Nodding thistle	<i>Carduus nutans</i>	PREVENTION	REGIONAL	YES
Terrestrial	Opuntia	<i>Opuntia spp., Cylindropuntia spp., Austrocylindropuntia spp. (Excludes O. ficus-indica)</i>	ASSET	STATE	YES
Terrestrial	Ox eye daisy	<i>Leucanthemum vulgare</i>	ERADICATION	LOCAL	YES
Terrestrial	Pampus grass	<i>Cortaderia jubata and spp</i>	ASSET	STATE	YES
Terrestrial	Paper mulberry	<i>Broussonetia papyrifera</i>	PREVENTION	LOCAL	YES
Terrestrial	Parkinsonia	<i>Parkinsonia aculeata</i>	ERADICATION	STATE	YES
Terrestrial	Parthenium Weed	<i>Parthenium hysterophorus</i>	PREVENTION	STATE	YES
Terrestrial	Pond apple	<i>Annona glabra</i>	PREVENTION	STATE	YES
Terrestrial	Prickly acacia	<i>Vachellia nilotica</i> (syn. <i>Acacia nilotica</i>)	PREVENTION	STATE	YES
Terrestrial	Rattlepods	<i>Crotolaria lunata</i>	ASSET	LOCAL	YES
Terrestrial	Rubber vine	<i>Cryptostegia grandiflora</i>	PREVENTION	STATE	YES
Aquatic	Sagittaria	<i>Sagittaria platyphylla</i>	ASSET	STATE	YES
Aquatic	Salvinia	<i>Salvinia molesta</i>	CONTAINMENT	REGIONAL	YES
Aquatic	Salvinia ††	<i>Salvinia molesta</i>	ASSET	STATE	YES
Terrestrial	Scotch/English broom	<i>Cytisus scoparius</i>	ASSET	REGIONAL	YES

HRCC PRIORITY WEEDS LIST December 2019



AQUATIC OR TERRESTRIAL	COMMON NAME	BOTANICAL NAME	OBJECTIVE	LISTING	WRA
Terrestrial	Scotch/English broom ‡	<i>Cytisus scoparius subsp. scoparius</i>	ASSET	STATE	YES
Aquatic	Sea spurge	<i>Euphorbia paralias</i>	CONTAINMENT	REGIONAL	YES
Aquatic	Senegal tea	<i>Gymnocoronis spilanthoides</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Serrated tussock	<i>Nassella trichotoma</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Serrated tussock ††	<i>Nassella trichotoma</i>	ASSET	STATE	YES
Terrestrial	Siam weed	<i>Chromolaena odorata</i>	PREVENTION	STATE	YES
Terrestrial	Sicilian sea lavender	<i>Limonium hyblaeum</i>	ERADICATION	REGIONAL	YES
Terrestrial	Sicklethorn	<i>Asparagus falcatus</i>	ERADICATION	REGIONAL	YES
Terrestrial	Silver-leaf nightshade	<i>Solanum elaeagnifolium</i>	ASSET	STATE	YES
Terrestrial	Singapore daisy	<i>Sphagneticola trilobata</i>	ASSET	REGIONAL	YES
Terrestrial	Skunk vine	<i>Paederia foetida</i>	ERADICATION	REGIONAL	YES
Terrestrial	Spanish broom	<i>Spartium junceum</i>	PREVENTION	REGIONAL	YES
Terrestrial	Spotted knapweed	<i>Centaurea stoebe subsp. australis</i>	PREVENTION	STATE	YES
Terrestrial	Tiger Pear	<i>Opuntia aurantiaca</i>	CONTAINMENT	REGIONAL	YES
Terrestrial	Tropical soda apple	<i>Solanum viarum</i>	ERADICATION	STATE	YES
Aquatic	Water caltrop	<i>Trapa spp. (all species)</i>	PREVENTION	STATE	YES
Aquatic	Water hyacinth	<i>Eichhornia crassipes</i>	CONTAINMENT	STATE	YES
Aquatic	Water hyacinth	<i>Eichhornia crassipes</i>	ASSET	REGIONAL	YES
Aquatic	Water lettuce	<i>Pistia stratiotes</i>	PREVENTION	REGIONAL	YES
Aquatic	Water poppy	<i>Hydrocleys nymphoides</i>	CONTAINMENT	REGIONAL	YES
Aquatic	Water soldier	<i>Stratiotes aloides</i>	PREVENTION	STATE	YES
Aquatic	Water star grass	<i>Heteranthera zosterifolia</i>	PREVENTION	REGIONAL	YES
Terrestrial	White blackberry / Mysore raspberry	<i>Rubus niveus</i>	PREVENTION	REGIONAL	YES
Terrestrial	Velvety tree Pear	<i>Opuntia tomentosa</i>	ERADICATION	LOCAL	YES
Terrestrial	Willow-leaf primrose/ Water primrose	<i>Ludwigia peruviana</i>	ASSET	REGIONAL	YES
Terrestrial	Willows †	<i>Salix spp. (excludes S. babylonica, S. X calodendron & S. X reichardtiji)</i>	ASSET	STATE	YES
Terrestrial	Witchweed	<i>Striga spp. (except the native S. parviflora)</i>	PREVENTION	STATE	YES
Terrestrial	Yellow bells	<i>Tecoma stans</i>	ERADICATION	LOCAL	YES
Terrestrial	Yellow burrhead	<i>Limnocharis flava</i>	PREVENTION	STATE	YES



A1.1 State level determined priority weeds

State Priority Weed Objective – PREVENTION

The following weeds are currently not found in the state, pose significant biosecurity risk and Prevention of the biosecurity risk is a reasonably practical objective.

State Priority Weed Objective – ERADICATION

The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

State Priority Weed Objective – CONTAINMENT

These weeds are widely distributed in some parts of the state. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed these weeds is reasonably practicable.

State Priority Weed Objective – ASSET PROTECTION (Whole of State)

These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.

A1.2 Regional priority weeds

Regional Priority Weed Objective – PREVENTION

The following weeds are currently not found in the Greater Sydney region, pose significant biosecurity risk and prevention of the biosecurity risk posed by these weeds is a reasonably practical objective

Regional Priority Weed Objective – ERADICATION

The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Regional Priority Weeds objective – CONTAINMENT

These weeds are widely distributed in the region. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.

Regional Priority Weed Objective – ASSET PROTECTION

These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.

Regional Strategic Response:

Identify priority assets for targeted management.

Refer Appendix 1.2 Prevention.

†† Refer Appendix 1.2 Containment.

† Refer Appendix 1.2 Eradication.

‡ Refer Appendix 1.2 Asset Protection.

A1.3 Local priority weeds

Local Priority Weed Objective – PREVENTION

The following weeds are currently not found in the Greater Sydney region, pose significant biosecurity risk and prevention of the biosecurity risk posed by these weeds is a reasonably practical objective

Local Priority Weed Objective – ERADICATION

The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Local Priority Weeds objective – CONTAINMENT

These weeds are widely distributed in the region. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.

Local Priority Weed Objective – ASSET PROTECTION

These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.