

Ku-ring-gai Council

Generic Natural Areas Draft Plan of Management March 2024 Community Land and Crown Reserves

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Table of Contents

Exe	ecutive	Summary	9
1.	Introd	uction	11
	1.1	Background	11
	1.2	What this Plan of Management does	11
	1.3	How to use this Plan	14
	1.4	Land covered by this Plan of Management	15
	1.5	Review of this Plan	17
	1.6	Community consultation	18
2.	Plann	ing context	19
	2.1	Local Government Act 1993n	21
	2.2	Crown Land Management Act 2016	21
	2.3	Native Title	22
3.	Categ	orisation of the Ku-ring-gai Natural Areas	23
	3.1	Bushland	23
	3.2	Wetland	25
	3.3	Escarpment	26
	3.4	Watercourse	27
	3.5	Foreshore	28
4.	Key m	nanagement issues for the Ku-ring-gai natural areas	30
	4.1	Biodiversity conservation	30
	4.2	Climate change adaptation and resilience	31
	4.3	Managing the natural area / urban interface	32
	4.4	Fire management for biodiversity conservation and minimising bushfire hazard	32
	4.5	Management of stormwater, sewerage and water quality	33
	4.6	Erosion control and prevention	33
	4.7	Biosecurity issues (weeds, pests and pathogens)	33
	4.8	Heritage issues (Aboriginal and Non-Aboriginal)	35
	4.9	Promoting community use and education	36
	4.10	Vehicle access	36
	4.11	Preventing unauthorised use	37
5.	Permi	ssible use and development within the Ku-ring-gai natural areas	37
	5.1	Permitted activities	38
	5.2	Unauthorised and prohibited activities	40
	5.3	Special uses, leases and licences	41
6.	Mana	gement strategy for the Ku-ring-gai natural areas	44
	6.1	Step 1 - prioritisation of the natural areas	44

	6.2	Step 2 – create and implement	45
	6.3	Step 3 – evaluate	45
7.	Mana	gement objectives and performance plan	46
	7.1	Objectives	46
	7.2	Performance plan and management programs	48
8.	Refer	ences	60
Арр	oendix .	A – Site including Further categorisation of the Ku-ring-gai Natural Areas	61
Арр	pendix	B – Ku-ring-gai Natural Areas further categorisation mapping	97
Арр	pendix	C – Advice from Councils Native Title Manager	98
Арр	pendix	D – Summary of biodiversity values within the Ku-ring-gai Natural Areas	99
Арр	pendix	E – Summary of Key Threatening Processes and SoS program areas	139
Арр	pendix	F – Bushland rating matrix and decision support tool	142
Арр	pendix	G – Values of the Ku-ring-gai Natural Areas	143
App	pendix	H – Plan of Management Legislative Framework	161

List of tables

Table 7	Alignment with Council Plans and Approaches1	175
Table 6	The objectives for the Natural Areas	.46
Table 5	The objectives for the Natural Area — Foreshore category	.29
Table 4	The objectives for the Natural Area — Watercourse category	.28
Table 3	The objectives for the Natural Area — Escarpment category	.26
Table 2	The objectives for the Natural Area — Wetland category	.26
Table 1	The objectives for the Natural Area — Bushland category	.24

List of figures

Figure 1	Council's aims and guiding principles for natural area reserve management13
Figure 2	Ku-ring-gai natural area bushland reserves subject to this Plan
Figure 3	Summary of Federal, State, Regional, and Council land use planning, strategies, and policies20

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Definitions

Term	Definition	
Biodiversity	Biodiversity is "the variety of life forms, the different plants, animals and micro-organisms, the genes they contain, and the ecosystems they form. It is usually considered at three (3) levels: genetic diversity, species diversity and ecosystem diversity (Commonwealth of Australia 1996).	
Biodiversity conservation	Ensuring that natural landscapes and ecosystems are maintained and that species, populations, genes, and the complex interactions between them, persist into the future.	
Biodiversity credits	Ecosystem credits or species credits that are developed at a Biodiversity Stewardship Site. The Biodiversity Credit Calculator (BCC) is the computer program that provides decision support to assessors and proponents by applying the Biodiversity Assessment Method, which calculates the number and class of biodiversity credits created at a biodiversity stewardship site.	
Biodiversity Stewardship Agreement	A biodiversity stewardship agreement made under Division 2 of Part 5 of the <i>Biodiversity Conservation Act 2016</i> .	
Biosecurity issues	Biosecurity issues applicable to this Plan include weeds, pests and pathogens. Biosecurity issues are managed by Council in accordance with the NSW <i>Biosecurity Act 2015</i> .	
Biodiversity Stewardship Site	Land that is designated by a biodiversity stewardship agreement to be a biodiversity stewardship site for the purposes of the <i>Biodiversity Conservation Act 2016</i> .	
Bushland	Land that contains primarily native vegetation. Bushland areas primarily contain the natural vegetation of the land, or the vegetation is still representative of the structure or floristics, or structure and floristics, of the natural vegetation in the locality. The land includes areas of mostly undisturbed bushland, moderately disturbed bushland, and areas of highly disturbed bushland that is still capable of being rehabilitated.	
Bushland Prioritisation Matrix	The Ku-ring-gai Bushland Prioritisation Matrix ranks each natural area subject to this Plan based on the significance of the vegetation community/species within the reserve, the resilience of the reserve and the extent of site impacts and pressures that need to be addressed to maintain the values the reserve contains. The Bushland Prioritisation Matrix prioritises the natural areas that will receive management funding.	
Climate change adaptation	Climate change adaptation helps individuals, communities, organisations and natural systems to deal with those consequences of climate change that cannot be avoided.	

Term	Definition
Corridors	Corridors are zones or areas that form a habitat link between two (2) or more natural areas. In this case, they may be contiguous bands of habitat or vegetation and will generally contain all structural layers of plant communities. In a wider sense, they can be areas or zones that form, or may be enhanced to form, links to other intact habitats via a series of smaller corridors or bio links.
	Vegetation and habitat corridors are areas designated to facilitate connection and maintenance of flora and fauna habitats within the urban landscape. Vegetation and habitat corridors provide an opportunity for a variety of local, migratory and transient species to exist, pollinate, move, forage, breed, roost and shelter. Within the urban environment Vegetation and habitat corridors may not necessarily form a direct physical connection between areas of fauna or flora habitat and may consist of remnant trees and associated native and exotic vegetation.
Ecological community	An ecological community is a naturally occurring group of native plants, animals and other organisms living in a unique location. Ecological communities can be listed as threatened under the EPBC Act and/or BC Act.
Ecologically sensitive lands	include lands containing:
	 national or state significant communities, populations or species areas of particular local significance cultural heritage items riparian zones slopes over 18 degrees; and known and suspected <i>phytophthora cinnamomi</i> locations.
Escarpment	Land that includes such features as a long cliff-like ridge or rock, and the land includes significant or unusual geological, geomorphological or scenic qualities. Areas used for recreational activities including climbing, bouldering and abseiling at Lovers Jump Creek Reserve (Cliff Oval climbing area), and Lindfield Soldiers Memorial Park (Lindfield Rocks) contain rocks and scenic qualities where safe community use and enjoyment is to be facilitated and the features are to be protected.
Fire management for biodiversity conservation	A key natural resource management tool used by Council to achieve ecosystem maintenance, restoration and resilience is the use of controlled burning. Fire has been fundamental in shaping current biodiversity resources and its exclusion can potentially lead to vegetation change and rapid species declines, even localised extinctions. The revitalisation of species richness in our natural areas and is dependent on appropriate fire intensity and frequency.
Foreshore	Land that is situated on the water's edge and forms a transition zone between the aquatic and terrestrial environment.
Habitat	An area or areas occupied, or periodically or occasionally occupied, by a species, population or ecological community, including any biotic or abiotic component.
Heritage	The Ku-ring-gai LGA contains areas of both Aboriginal heritage and non- Aboriginal (European) heritage significance, which are important for their historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value.

Term	Definition
Mitchell landscape	Landscapes with relatively homogeneous geomorphology, soils and broad vegetation types, mapped at a scale of 1: 250,000.
Natural area / urban interface	The boundary between housing and the natural areas. There is approximately 92 km of interface between private housing areas and Council natural area reserves.
Passive Recreation	Passive Recreation means recreation activities that require limited physical exertion on behalf of the participant. Examples of passive recreation activities include bird watching, walking or photography.
Plant community type	A NSW plant community type identified using the plant community type (PCT) classification system. The PCT classification was created in 2011 by consolidating two existing community-level classifications: the NSW Vegetation Classification and Assessment database; and the Biometric Vegetation Types database used in NSW regulatory programs. The PCT classification is now maintained in the BioNet Vegetation Classification application. It is a way to classify vegetation types.
Population	A group of organisms, all of the same species, occupying a particular area.
Provenance	Provenance (plant stock) is a term used to describe something's origin or source and in the case of seed as its "geographic place of origin or seed". This term is broadened to describe the patterns of variation exhibited by a species over its range reflecting its evolutionary history.
Threatened Ecological Communities	A community of different species associated with one another and sharing the same habitat, that is listed under the <i>Biodiversity Conservation Act 2016</i> , <i>Fisheries Management Act 1994</i> and/or <i>Environment Protection and</i> <i>Biodiversity Conservation Act 1999</i> . Threatened ecological communities are listed as endangered or critically endangered under the <i>Biodiversity</i> <i>Conservation Act 2016</i> , or may be listed as vulnerable, endangered or critically endangered under the <i>Environment Protection and Biodiversity</i> <i>Conservation Act 1999</i> .
Threatened species	A species listed under the <i>Biodiversity Conservation Act 2016</i> , <i>Fisheries Management Act 1994</i> or <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Track dependant recreation	Recreational activities that are undertaken within the Ku-ring-gai natural areas that are track dependant which include bush walking, running, dog walking, general access, bird watching, and horse riding.
Unauthorised use	Unauthorised use of the natural areas may include encroachment by adjoining properties into reserves, dumping, littering, arson and anti-social activities (see Section 6.2). The activities which are prohibited in specific natural areas are listed on regulatory signs at those natural areas. A person who fails to comply with the terms of the regulatory sign is guilty of an offence for which penalties apply under Section 6.3.2 of the <i>Local Government Act 1993</i> .

Term	Definition
Watercourse	Any stream of water, whether perennial or intermittent, flowing in a natural channel, or in a natural channel that has been artificially improved, or in an artificial channel that has changed the course of the stream of water, and any other stream of water into or from which the stream of water flows. The watercourse also includes associated riparian land or vegetation as identified in the riparian land mapping provided in the Ku-ring-gai Local Environment Plan 2015.
Wetland	Land that includes marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a waterbody that is inundated cyclically, intermittently or permanently with fresh, brackish or salt water, whether slow moving or stationary. For this Plan the State Vegetation Forms of Forested Wetland (Estuarine Swamp Oak Forest), Freshwater Wetland (Coastal Upland Damp Heath Swamp), and Saline Wetlands (Estuarine Saltmarsh and Estuarine Mangrove Forest) are classed as wetland.

Executive Summary

This Generic Natural Areas Plan of Management (the Plan) has been prepared to comply with the requirements of the *Local Government Act 1993*, *Environmental Planning and Assessment Act 1979*, *Crown Lands Management Act 2016*, and other relevant legislation. This Plan covers land owned by or under the care, control, and management of Ku-ring-gai Council, that is classified as Community Land and categorised as Natural Areas under the *Local Government Act 1993* (Sections 26 and 36). All Crown Land management in all the natural areas is included in the Plan to ensure a consistent approach to land management in all the natural areas in the Ku-ring-gai Local Government Area (LGA). This Plan provides an overview of the legislative context within which it sits.

The values of the Ku-ring-gai natural areas, including landscape character, biodiversity values, heritage values, and recreational values are described in this Plan to provide background and context to what is being managed by this Plan. The Ku-ring-gai natural areas are situated across a diversity of landscapes and contain several threatened ecological communities and threatened species. The Ku-ring-gai natural areas also contain several heritage sites and items. Sustained population growth in Ku-ring-gai and in neighbouring LGAs will continue to increase the demand for access to Ku-ring-gai's natural areas for recreational pursuits and the Ku-ring-gai natural areas offer a wealth of opportunities for active and passive recreation, which needs to be promoted and managed appropriately.

Section 36(5) of the *Local Government Act 1993* states that land that is categorised as a natural area is to be further categorised as one or more of the following:

- a) bushland,
- b) wetland,
- c) escarpment,
- d) watercourse,
- e) foreshore,
- f) a category prescribed by the regulations.

This Plan categorises and maps the Ku-ring-gai natural areas. Many of the natural areas have been assigned to more than one category and the separate categories are identified and mapped.

This Plan identified the key management issues facing the Ku-ring-gai natural areas and outlines permissible use and development. Permitted activities within the natural areas are outlined along with those that are unauthorised and prohibited. Special uses, leases and licences are also outlined.

This Plan contains a management strategy designed to meet the objectives of natural area management. Management of the Ku-ring-gai natural areas is based around a three-step process. Step 1 involves prioritisation of the natural areas using the Bushland Rating Matrix and Decision Support Tool that allows the condition of each reserve to be ranked against its value. Site Management Plans are then developed and implemented for each of the priority natural areas (Step 2) and the results are monitored using Specific Objective Monitoring (Step 3).

Section 36 of the *Local Government Act 1993* requires that Council must identify the objectives and performance targets of the Plan with respect to the land, how Council proposes to achieve the Plan's objectives and performance targets, and the way Council proposes to assess its performance with respect to the Plan's objectives and performance targets. Linked to this Plan is a 'performance plan' for management of the Ku-ring-gai natural areas which identifies specific performance targets and the means to achieve those targets. Implementation of this Plan will require ongoing consultation with stakeholders and regular reviews to ensure the recommended actions continue to meet the changing needs of natural area management within the Ku-ring-gai LGA.

1. Introduction

1.1 Background

Ku-ring-gai Council covers an area of 85 square kilometres and is located 16 kilometres north of the centre of Sydney, New South Wales (NSW). Council manages over 1,160 hectares of land identified as natural area reserves which cover a diverse and unique landscape due to its elevated position, high rainfall, alluvial soils, deep gullies, and 177 km of waterways and creeks. These reserves have an important role to play in the protection of the area's natural values and associated lifestyle.

The natural area reserves range from estuarine mangroves through to ridge top forests with 24 different vegetation communities recognised. This includes seven threatened ecological communities listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and four threatened ecological communities listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The vegetation communities within the Ku-ring-gai Local Government Area (LGA) provide habitat for over 700 native plant species and over 300 vertebrate species, including at least 21 threatened flora species and 35 threatened fauna species (13 mammal, 18 bird, 3 amphibian and 1 reptile species). Most of the Ku-ring-gai natural area reserves are accessible to the public and contain facilities and infrastructure supporting a range of recreational, cultural and educational activities. Many reserves are in good condition and contain a high variety of native plant and animal species and offer important protection for our endangered plants and animals. However, their size and location within the urban areas means that there is still a lot of work to be done addressing ongoing pressures and restoring these areas to their previous richness and enabling our natural assets to be more resilient in the future.

This Plan is a major revision of Ku-ring-gai's Bushland Reserves Plan of Management 2013, it addresses the significant legislative changes that relate to the natural area management and relies on data from past PoMs, strategies and mapping projects undertaken by Council and other government agencies. Both historic and current data has provided considerable advances in the management of Ku-ring-gai's public reserves and vegetation resources. This has and will lead to improvements in Council's ability to:

- assess the needs, state and resilience of bushland areas to a variety of pressures including recreational, environmental, infrastructure and bushfire management, and
- facilitate planning and implementation of the most effective management practices to protect and regenerate bushland ecosystems in Ku-ring-gai.

Therefore, this Generic Natural Areas Plan of Management has been developed to review what has been our approach to reserve management to date, reinforce what we already do, and propose new directions and added value for future sustainable management.

1.2 What this Plan of Management does

The Federal and NSW government, as well as local Council, set legislation, policies and plans to guide the management and protection of natural areas, including requirements for Plans of Management. A Plan of Management (PoM) is a document adopted by Council which guides the management of particular categories or specific areas of community land that are within the direct ownership of Council, or under the care and management of Council (such as Crown land).

Plan of Management documents typically have a strategic focus and intentionally do not provide specific details regarding how works or actions are to be performed or achieved in the future instead, they provide a framework for all projects that will be conducted and recommendations of how an area will be used, improved, maintained and managed into the future. This approach allows innovation and flexibility in the implementation of a PoM.

This Generic Natural Areas Plan of Management (the Plan) has been prepared to comply with the requirements of the NSW *Local Government Act 1993* (LG Act), NSW State *Environmental Planning and Assessment Act 1979* (EP&A Act), *Crown Lands Management Act 2016* (CLM Act), and other relevant legislation (refer Section 0). This Plan covers land owned by or under the care, control and management of Ku-ring-gai Council, that is classified as Community Land and is categorised as Natural Areas under the LG Act (Sections 26 and 36). Crown land is also included in the Plan to ensure a consistent approach to land management in all the natural areas in the Ku-ring-gai LGA.

Although this Plan must be consistent with the requirements of the LG Act and the CLM Act, the strategic directions and priorities of Council and the Ku-ring-gai community must also be taken into consideration. Therefore, this Plan responds to and is consistent with Ku-ring-gai's Community Strategic Plan (CSP) and related Delivery Program and Operational Plans. Council's aims and guiding principles for natural area reserve management are outlined in Figure 1. In general, the Plan:

- outlines the planning context within which the Plan sits,
- provides general information on ecological and cultural values found within these natural area reserves,
- describes the five natural area categories (Bushland, Wetland, Escarpment, Watercourse and Foreshore outlined in the LG Act, S36(3)) and assigns the individual reserves to these categories, which will simplify management planning,
- coordinates management programs and actions by providing overarching objectives and measurable performance targets with respect to the land which have been developed with extensive stakeholder input across Council,
- provides a performance achievement program (means to achieve the Plan's objectives and performance targets) based on goals that complement the six themes within Council's CSP and Council's generic environmental aims for natural area reserve management,
- outlines the way Council proposes to assess its performance with respect to the Plan's objectives and performance targets, and
- is guided by the principles of Ecological Sustainable Development (ESD) set out by the EP&A Act and the LG Act, as well as best practice methodologies which are the foundation for future reserve management.



Generic Aims

Protect and enhance biodiversity and strengthen ecosystem resilience and services

Manage natural, cultural, scientific and scenic values

Provide sustainable public access and recreation opportunities

Manage fire hazards in accordance with natural fire regimes

Promote community awareness and involvement and build biodiversity partnerships

Implement measures to minimise and manage impacts from threats and pressures

Build organisational knowledge and capacity for adaptive management

Guiding Principles

Promote the precautionary principle to prevent environmental degradation

Consider inter-generational equity to ensure the environment is maintained or enhanced for future generations

Manage conservation of biological diversity and ecological integrity as a fundamental consideration for all actions

Promote improved valuation, pricing and incentive mechanisms

Undertake decision-making processes that integrate both long-term and short-term considerations

Provide special protection for 'at-risk' biodiversity which is a statutory requirement for reserve managers

Engage stakeholders to ensure reserve management is meeting public expectations and to gain knowledge and innovative opportunities



Figure 1 Council's aims and guiding principles for natural area reserve management

1.3 How to use this Plan

This Plan sets out the management framework for Ku-ring-gai's natural area reserves. It outlines a number of broad issues, features, objectives, and actions that are directed by:

- legislative requirements and associated recovery strategies and mitigation measures
- location and context of ecologically sensitive lands including species, populations and vegetation communities
- the need for consistency with Council aims and guiding principles; and
- the needs and aspirations of the Ku-ring-gai community.

This Plan is to be read and implemented in conjunction with other Federal, State and local planning instruments, biodiversity strategies and management plans (including individual reserve management plans and detailed site management plans for council bush regeneration sites). Management is further informed through use of Council's GIS data, which is updated as needed and is made available to Council staff. This provides live data on the bushland reserves system and its management, including (but not limited to):

- land categorisation
- reserve groupings to aid reporting
- known and suspected *Phytophthora cinnamomi*¹ locations
- existing leases / licences
- riparian areas
- wildfire and hazard reduction history
- asset protect zones
- threatened species; and
- assets including fire trails and walking tracks

The purpose of this Plan is to describe the natural area reserve attributes and values, to provide a management framework and set performance targets for Council's reserves for a four-year period. The purpose of reserve management is to ensure the ecological, social, cultural and economic values are protected and maintained. This will include:

- compliance with statutory requirements relating to land management, environmental management and public safety
- consistency with Council's corporate policies, strategies and plans; and
- setting the direction for the effective management and future use of the natural area reserves, including conservation, education, and sustainable recreation.

The Plan is subject to a review schedule underpinned by a framework of performance targets relevant monitoring and evaluation strategies, and performance indicators.

¹ *Phytophthora cinnamomi* is a soil borne pathogen belonging to the water mould group (Oomycetes), which can lead to root rot in many plant species, potentially affecting entire habitats.

1.4 Land covered by this Plan of Management

The Ku-ring-gai Council LGA incorporates approximately 8,436 hectares (ha) of land, of which over 1,160 ha is comprised of natural areas categorised as bushland reserves under the care, control and management of Council. The location of the Ku-ring-gai natural area reserves is illustrated in Figure 2. Appendix C lists each natural area reserve and identifies Council's Crown reserve portfolio. The Crown land covered by this Plan is owned by the Crown and is managed by Ku-ring-gai Council as Crown Land Manager under the CLM Act. Crown land is identified in Appendix C.

Lands covered by site-specific plans of management are not included in this due to their unique and complex characteristic include but not limited to:

- Bicentennial Park Plan of Management
- St lves Showground and Precinct Plan of Management
- Ku-ring-gai Flying Fox Reserve Plan of Management
- Swain Gardens
- Echo Point Park

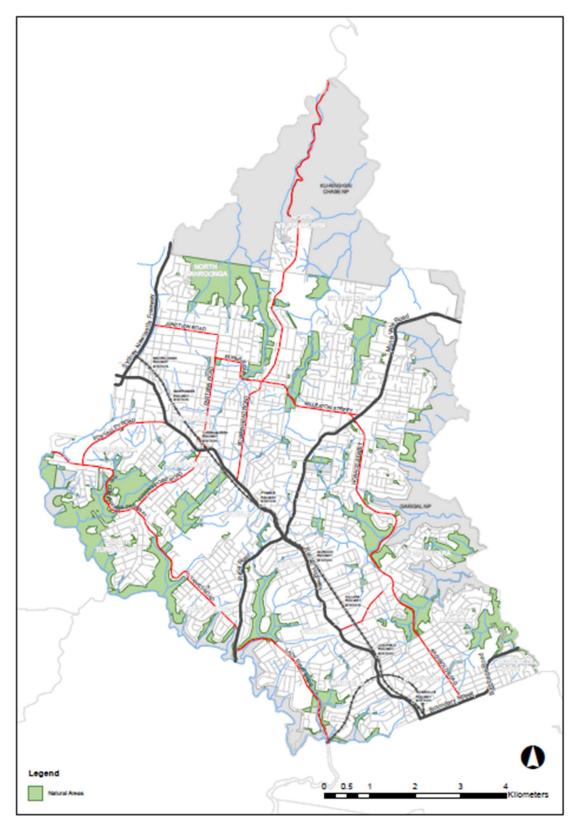


Figure 2 Ku-ring-gai natural area bushland reserves subject to this Plan

1.5 Review of this Plan

This Plan sets out the management framework for Ku-ring-gai's natural areas reserves. Implementation of this Plan will require ongoing consultation with stakeholders and regular reviews to ensure the recommended actions continue to meet the changing needs of natural area management within the Ku-ring-gai LGA.

To meet performance targets within this Plan, the natural areas will be prioritised for management actions based on the Ku-ring-gai Bushland Prioritisation Matrix with the natural areas ranked biennially. Council is currently implementing site management plans for the priority natural areas identified through the matrix. These site management plans sit beneath this Plan and provide detailed information on the individual natural area values, management zones, and management actions for each of the priority natural areas. The site management plans also incorporate a monitoring program, known as Specific Objective Monitoring, which provides a standardised but flexible monitoring framework directly linked to the specific management issue/s that have been identified and the subsequent management actions that are undertaken.

Under Council's Integrated Planning and Reporting Framework, prioritised and fully resourced management programs from this Plan may be included in Council's annual Operational Plans. This will ensure progress of the reportable actions for that year is monitored on a quarterly basis through Council's Performance Planning system and reported to Council and the community every six months. A summary of activities for the year will also be included in Council's Annual Report.

This approach will enable full transparency and accountability to be assigned for each program or action. The Plan will be reviewed every four years to ensure that priorities remain in line with community needs and Council objectives.

1.6 Community consultation

The Draft of this Plan will be advertised and publicly exhibited for the statutory periods required under the *Local Government Act 1993* and the *Crown Land Management Act 2016*. The Draft Plan of Management is to be placed on public exhibition for at least 28 days, with a further 14 days during which submissions were received from the community as required under the Local Government Act 1993, as well as the requirements for community engagement under the Crown Land Management Act 2016. A public hearing is only required for a change to Council owned land

Council will publicise the public exhibition and any required public hearing in accordance with the Ku-ring-gai Community Engagement Strategy on Council's website and Have My Say Ku-ring-gai. Copies of the Draft Plan of Management will be made available at:

- Customer Service Centre, 818 Pacific Highway, Gordon
- Ku-ring-gai Libraries (during branch hours)
- Online at www.kmc.nsw.gov.au.

A public hearing / information session may be held under Sections 40(a) and 47(G) of the Local Government Act 1993 because community land in this Plan requires to be either categorised or recategorised.

Council will also provide the opportunity to comment in accordance with Sections 24JB(6) and 24KA(7) of the Native Title Act 1993. As a requirement of the Crown Land Management Act 2016, advice from Council's Native Title Manager will be provided at the time of preparation of the Draft Plan of Management and finalisation of the Plan of Management. The advice is to address the effect that adopting the Plan of Management would have on native title over the land included in this Plan. Advice from the Native Title Manager helps to ensure that Council has complied with the requirements of the Crown Land Management Act 2016.

Crown reserves in the care and control of Councils are now exempt from public hearings under section 40A of the LG Act (the CLM Amendment Regulation, which commenced in June 2021, as sub-amended the CLM Regulation 2018

This PoM was placed on public exhibition from 13 November 2023 to 12 January 2024, in accordance with the requirements of section 38 of the Local Government Act 1993. A total of 2 submissions were received, Council considered these submissions before adopting the PoM.

2. Planning context

This section describes the wider legislative and policy framework which applies to parks in Ku-ringgai local government area.

Full versions of the legislation referred to below are on-line at www.legislation.gov.au and www.austlii.edu.au. Ku-ring-gai Council's website is www.krg.nsw.gov.au.

The relevant provisions of the Local Government Act 1993, Crown Land Management Act 2016 and Native Title Act 1993 are described below. Other relevant legislation, plans and policies at the Commonwealth, NSW, Sydney, regional and Ku-ring-gai levels are outlined in Appendix H.

This section outlines the planning context within which this Plan sits. A summary of Federal, State, Regional, and Council land use planning, strategies, and policies is provided in Figure 3.

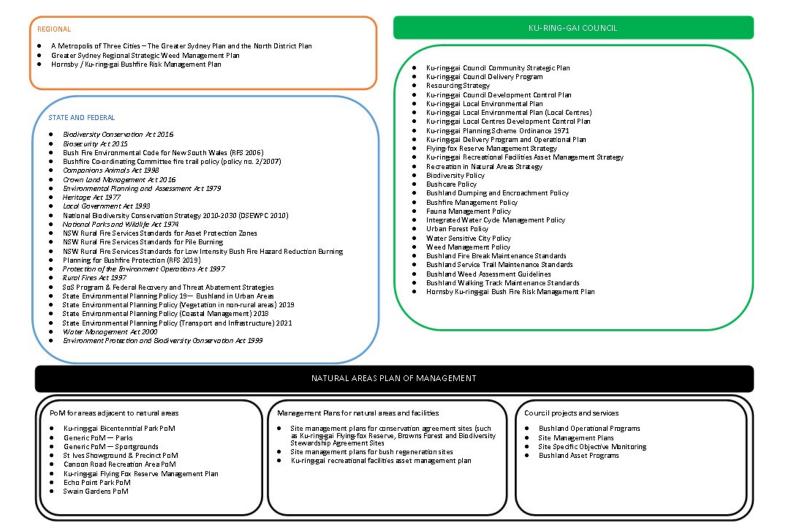


Figure 3 Summary of Federal, State, Regional, and Council land use planning, strategies, and policies

Ku-ring-gai Council

2.1 Local Government Act 1993n

The NSW *Local Government Act 1993* provides the legislative framework for Council's Day to day operations. The Act identifies a Council's responsibility to actively manage public land and to involve the community in developing a strategy for its management.

The framework for classification and categorisation of community and Crown land is shown in Figure 3.



Community land is defined as land which must be kept for the general use of the community. Council has no power to sell, exchange or otherwise dispose of community land, except for the purpose of enabling that land to become, or be added to, a Crown Reserve or land reserved or dedicated under the *National Parks and Wildlife Act 1974*.

Open space located on land owned by Ku-ring-gai Council and Crown land are subject to the *Local Government Act 1993*. Council owned and Crown land which is classified as 'community' land under the Act must be managed and used according to the provisions of the *Local Government Act 1993* and the *Local Government (General) Regulation 2021*.

2.2 Crown Land Management Act 2016

As some of the open space included in this Plan are located either fully or partially on Crown land, the requirements of the *Crown Land Management Act 2016* which governs the management of Crown land in NSW have been considered in preparing this Plan.

Councils are Crown land managers for Crown reserves. The Act authorises local Councils that are appointed to manage their dedicated or reserved Crown land as if it were public land under the provisions of the *Local Government Act 1993*. Such Crown reserves will be managed in the same way that Council-owned community land is managed.

Council undertakes the management of Devolved Lands. These reserves can't be categorised, and do not require a PoM, Council is unable to issue tenure and is limited in activities that can be undertaken on the reserve, Including the basic maintenance e.g., lawn mowing, weeding tree management for safety.

2.3 Native Title

Council must manage Crown land in accordance with the provisions of the Commonwealth Native Title Act 1993 and Part 8 of the Crown Land Management Act 2016 (which relates to native title).

Plans of Management are a critical tool to ensure that any authorisation or restriction on the use of a reserve is consistent with the Native Title Act 1993.

On Crown land the impact of any act on Native title rights and interests must be considered unless the land is excluded land for the purposes of the Crown Land Management Act 2016.

Some examples of acts which may impact native title on Crown land or Crown reserves managed by *Council include:*

- The construction of new buildings and other facilities such as toilet blocks, walking tracks, tennis courts, grandstands and barbecues,
- The construction of extensions to existing buildings,
- The construction of new roads or tracks,
- Installation of infrastructure such as powerlines, sewerage pipes, etc.,
- The creation of an easement
- The issue of a lease or licence,
- The undertaking of major earthworks.

When proposing any act that may impact native title on Crown land or Crown reserves the act must be authorised through Part 2 Division 3 of the Native Title Act 1993 (Cwlth)

Where it is proposed to construct or establish a public work on reserved or dedicated Crown land (which is not excluded land), prior to approval Council will notify and give an opportunity to comment any representative Aboriginal/Torres Strait Islander bodies, registered native title bodies corporate and registered native title claimants in relation to the land or waters covered by the reservation as required under the Native Title Act 1993.

Any leases, licences, easements and other estates on crown land (a use agreement) on Crown land may impact native title rights and interests. Any use agreement issued on Crown land must be issued in accordance with the future act provisions of the Native Title Act 1993 and in accordance with Part 8 of the Crown Land Management Act 2016 unless native title is extinguished.

Council has received written advice from its native title manager that this Plan of Management complies with the appropriate native title legislation, as required under Section 8.7(1)(d) of the Crown Land Management Act 2016

3. Categorisation of the Ku-ring-gai Natural Areas

Section 36(5) of the LG Act outlines that land that is categorised as a natural area is to be further categorised as one or more of the following:

- (a) bushland,
- (b) wetland,
- (c) escarpment,
- (d) watercourse,
- (e) foreshore,
- (f) a category prescribed by the regulations.

The LG Regulation Part 2A, Division 1, 6G-JA, sets the guidelines for the categorisation of the six natural area further categories outlined above. This Plan categorises community land, or parts of an area of community land, in one or more category and further category. Further details of Kuring-gai natural areas including assigned sub categorisation are listed within Appendix C, with mapping within Appendix D.

The following guidelines were applied for categorisation of the Ku-ring-gai natural areas.

3.1 Bushland

Land that is categorised as a natural area should be further categorised as Bushland under section 36 (5) of the Act if the land contains primarily native vegetation and that vegetation:

(a) is the natural vegetation or a remainder of the natural vegetation of the land, or

(b) although not the natural vegetation of the land, is still representative of the structure or floristics of the natural vegetation in the locality.

(2) Such land includes:

(a) bushland that is mostly undisturbed with a good mix of tree ages, and natural regeneration, where the understorey is comprised of native grasses and herbs or native shrubs, and which contains a range of habitats for native fauna (such as logs, shrubs, tree hollows and leaf litter), or

(b) moderately disturbed bushland with some regeneration of trees and shrubs, where there may be a regrowth area with trees of even age, where native shrubs and grasses are present in the understorey even though there may be some weed invasion, or

(c) highly disturbed bushland where the native understorey has been removed, where there may be significant weed invasion and where dead and dying trees are present, where there is no natural regeneration of trees or shrubs, but where the land is still capable of being rehabilitated.

Most of the Ku-ring-gai natural area reserves are further categorised as Bushland (See Appendix C and D). The natural area reserves primarily contain the natural vegetation of the land or the vegetation is still representative of the structure or floristics, of the natural vegetation in the locality. The land includes areas of mostly undisturbed bushland, moderately disturbed bushland, and areas of highly disturbed bushland that is still capable of being rehabilitated.

3.1.1 Status of bushland

Urbanisation represents the major pressure on Ku-ring-gai's biodiversity. The Bushland reserves are situated within an urbanised environment and are subject to a range of pressures including illegal clearing and backyard encroachment, stormwater runoff, increased nutrient loads, weeds and pest species, unauthorised recreational use, rubbish dumping, removal of features such as soil, litter, plants and bushrock, air pollution, and climate change.

3.1.2 Objectives and purpose of the Bushland category

The core objectives for the Natural Area - Bushland category (as outlined in the LG Act and Regulation) are outlined in Table 1.

The Bushland areas within the Ku-ring-gai LGA are highly valued by the community for their natural values and these areas contain several TECs and threatened species listed under the NSW BC Act and/or the Commonwealth EPBC Act. The bushland is also valued by the community for the recreation opportunities that it provides. Activities including bush walking, running and general access, mountain biking, rock climbing, abseiling and bouldering, and orienteering and rogaining, which are the key recreational activities supported by Council that occur within and/or adjacent to bushland areas. The bushland areas are also valued for the landscape amenity that they provide, educational and scientific opportunities, and heritage values.

Table 1 The objectives for the Natural Area — Bushland category

Bushland - Core objectives LG Act 36J

- 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,
- protect the aesthetic, heritage, recreational, educational and scientific values of the land,
- 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,
- restore degraded bushland,
- protect existing landforms such as natural drainage lines, watercourses and foreshores,
- 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
- protect bushland as a natural stabiliser of the soil surface.

Bushland - Additional objectives

- restoration of fire regimes to the Bushland areas as appropriate,
- to protect and enhance the scientific and educational values of the Bushland areas,
- prepare for the predicted impacts of anthropogenic climate change on the Ku-ring-gai Bushland areas,
- engage the Ku-ring-gai community in understanding the intrinsic values of their Bushland areas and facilitate community involvement in management and rehabilitation works.
- assist in and facilitate the implementation of any provisions relating to the use and management of the land that are set out in the Saving Our Species program under the BC Act.

3.2 Wetland

Land that is categorised as a natural area should be further categorised as Wetland under section 36 (5) of the LG Act if the land includes marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a waterbody that is inundated cyclically, intermittently or permanently with fresh, brackish or salt water, whether slow moving or stationary.

Natural areas containing PCTs from the State Forms of Forested Wetland (Estuarine Swamp Oak Forest), Freshwater Wetland (Coastal Upland Damp Heath Swamp), and Saline Wetlands (Estuarine Saltmarsh and Estuarine Mangrove Forest) have been assigned to this further category. Many of these mapped areas are also mapped as a Coastal Wetland area subject to State Environmental Planning Policy (Resilience and Hazards) 2021. Sections of the following natural areas have been assigned to the Wetlands further category:

- Ku-ring-gai Creek Reserve due to the presence of Freshwater Wetland (Coastal Upland Damp Heath Swamp).
- Old She Oak Reserve and Moores Creek Reserve due to the presence of Forested Wetland (Estuarine Swamp Oak Forest).
- Roseville Bridge Bush, Old She Oak Reserve, and Moores Creek Reserve due to the presence of Saline Wetland (Estuarine Mangrove Forest).
- Moores Creek Reserve due to the presence of Saline Wetland (Estuarine Saltmarsh).

In addition to naturally occurring wetlands there are several Water Sensitive Urban Design (WSUD) devices that have been installed within the natural areas. These include three constructed wetlands (Chisolm Road/ B2 Wetland at Halls Reserve, Barra Brui Oval at Barra Brui Bush, and Du Faur St in Du Faur Reserve). There are also several Bio-filter gardens and sediment basins / ponds within the natural areas that provide some wetland values.

3.2.1 Status of wetlands

The Wetland areas within the Ku-ring-gai LGA are limited in size and distribution and are situated within an urbanised environment. The wetland areas contain TECs and habitat for threatened species listed under the NSW BC Act and/or the Commonwealth EPBC Act. Mangroves and Saltmarsh are protected marine vegetation under the FM Act. The constructed wetlands and sediment basins / ponds within the natural areas that provide some wetland values where these would otherwise not be present and provide valuable ecosystem services. The constructed wetlands also provide an opportunity for community involvement and engagement of the community in understanding the intrinsic values of their Wetland areas.

The wetland areas are subject to a range of pressures including illegal clearing, stormwater runoff, increased nutrient loads, weeds and pest species, unauthorised recreational use, rubbish dumping, air pollution, and climate change.

3.2.2 Objectives and purpose of the Wetland category

The core objectives for the Natural Area - Wetland category (as outlined in the LG Act and Regulation) are outlined in Table 2.

The wetland areas within the Ku-ring-gai LGA, while limited in size and restricted in location, are highly valued by the community for their natural values. These areas are also valued for the landscape amenity that they provide, educational and scientific opportunities, and the ecosystem services that these wetlands provide.

Table 2 The objectives for the Natural Area — Wetland category

Wetland - Core objectives LG Act 36K

- to protect the biodiversity and ecological values of wetlands, with particular reference to their hydrological environment (including water quality and water flow), and to the flora, fauna and habitat values of the wetlands,
- to restore and regenerate degraded wetlands, and
- to facilitate community education in relation to wetlands, and the community use of wetlands, without compromising the ecological values of wetlands.

Wetland - Additional objectives

- to support ecosystem services including storm water capture, water filtration and sediment retention in constructed wetlands while providing ecological value,
- to protect and enhance the scientific, natural, cultural, heritage and recreational values of the Wetland areas,
- prepare for the predicted impacts of anthropogenic climate change on the Ku-ring-gai Wetland areas,
- engage the Ku-ring-gai community in understanding the intrinsic values of their Wetland areas and facilitate community involvement in management and rehabilitation works,
- assist in and facilitate the implementation of any provisions relating to the use and management of the land that are set out in the Saving Our Species program under the BC Act.

3.3 Escarpment

Land that is categorised as a natural area should be further categorised as an Escarpment under section 36 (5) of the Act if:

(a) the land includes such features as a long cliff-like ridge or rock, and(b) the land includes significant or unusual geological, geomorphological or scenic qualities.

Portions of Lovers Jump Creek Reserve (Cliff Oval climbing area), and Lindfield Soldiers Memorial Park (Lindfield Rocks) are assigned to the Escarpment further category as they contain rocks and scenic qualities where safe community use and enjoyment is to be facilitated and the features are to be protected (See Appendix C and D).

The Ku-ring-gai natural areas that have been assigned to the escarpment further category are listed in Appendix C.

3.3.1 Status of escarpment

The Escarpment areas within the Ku-ring-gai LGA are limited in size and distribution but are popular areas enjoyed by the community. Jump Creek Reserve (Cliff Oval climbing area), Lindfield Soldiers Memorial Park (Lindfield Rocks) are popular rock climbing, abseiling and bouldering areas. The rock features in these two areas are to be protected and enjoyed by the community.

3.3.2 Objectives and purpose of the Escarpment category

The core objectives for the Natural Area - Escarpment category (as outlined in the LG Act and Regulation) are outlined in Table 3.

While limited in size and restricted in location, are highly valued by the community for their natural values, amenity, and recreational opportunities.

Table 3 The objectives for the Natural Area — Escarpment category

Escarpment - Core objectives LG Act 36L

- to protect any important geological, geomorphological or scenic features of the escarpment, and
- to facilitate safe community use and enjoyment of the escarpment.

Escarpment - Additional objectives

- to protect and enhance the scientific, natural, cultural, heritage and recreational values of the Escarpment areas,
- actively work with the Heritage NSW to improve our understanding of issues associated with Escarpment areas and continue to report on, protect and promote these areas within the LGA.

3.4 Watercourse

Guidelines for categorisation of land as escarpment as outlined in Division 1 6J of the LG Reg:

Land that is categorised as a natural area should be further categorised as a Watercourse under section 36 (5) of the Act if the land includes:

- (a) any stream of water, whether perennial or intermittent, flowing in a natural channel, or in a natural channel that has been artificially improved, or in an artificial channel that has changed the course of the stream of water, and any other stream of water into or from which the stream of water flows, and
- (b) associated riparian land or vegetation, including land that is protected land for the purposes of the *Rivers and Foreshores Improvement Act 1948* or State protected land identified in an order under section 7 of the *Native Vegetation Conservation Act 1997* (repealed by sec 52 of the *Native Vegetation Act 2003*, which was in turn repealed by sec 3 of the *Local Land Services Amendment Act 2016*).

To apply the Watercourse further category to the natural areas and identify associated riparian land and vegetation, the riparian land mapping in the Ku-ring-gai LEP 2015 and Ku-ring-gai LEP (Local Centres) 2012 was used. The riparian lands mapping was created to guide land management and development, to highlight areas of riparian importance and provide triggers for consideration of riparian provisions within the planning assessment process. The mapping is based on buffers placed around a 'core riparian zone' based on stream order (Strahler 1952) and adjusted based on a merit assessment of site-specific features. The riparian width categories within Council's mapping are based on classifications developed in the DIPNR's Riparian Corridor Management Study. The 'core riparian zone' is measured from the distance from the top of each bank or, in the case of category 3a, the centre line as follows:

- Category 1 40 metres
- Category 2 20 metres
- Category 3 10 metres and
- Category 3a 10 metres from the centreline.

Category 1 and 2 areas have an additional 10m vegetated buffer to protect the 'core riparian zone' from development. The riparian categories included with Councils LEP and DCP are outlined in detail in the Ku-ring-gai Biodiversity and Riparian Lands Study (Ku-ring-gai Council, 2016a).

The natural areas subject to this Plan contain watercourses or watercourse buffers with a mix of perennial or intermittent streams and natural and artificial channels. The watercourses vary from small intermittent unnamed first and second order streams, to larger perennial third order streams such as Blackbutt Creek (Blackbutt Reserve), Coups Creek (Browns End), High Ridge Gully (Governor Phillip Reserve - East Gordon Park), Rocky Creek (Governor Phillip Reserve - East

Gordon Park), and part of the Lane Cove River (Browns End). Two fourth order streams are present including Lane Cove River (Bradley Park) and Rocky Creek (Governor Phillip Reserve - East Gordon Park). The largest watercourses are the Lane Cover River (Comenarra Creek Reserve) and Middle Harbour (Boatshed Bush, Roseville Bridge Bush, Moores Creek Reserve and Old She Oak Reserve).

3.4.1 Status of Watercourse

The Watercourse areas within the Ku-ring-gai LGA are subject to a range of pressures given the urbanised environment. The watercourses within the LGA are subject to a range of pressures including illegal clearing, encroachment, dumping, stormwater runoff, erosion, increased nutrient loads, weeds and pest species, unauthorised recreational use, rubbish dumping, air pollution, and climate change.

3.4.2 Objectives and purpose of the Watercourse category

The core objectives for the Natural Area - Watercourse category (as outlined in the LG Act and Regulation) are outlined in Table 4.

The Watercourse areas within the Ku-ring-gai LGA are highly valued for their natural values and the ecosystem services that they provide. These areas are also valued for the landscape amenity that they provide, educational and scientific opportunities, and heritage values.

Table 4 The objectives for the Natural Area — Watercourse category

Watercourse - Core objectives LG Act 36M

- 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,
- to manage watercourses so as to protect the riparian environment, particularly in relation to riparian vegetation and habitats and bank stability,
- to restore degraded watercourses, and
- to promote community education, and community access to and use of the watercourse, without compromising the other core objectives of the category.

Watercourse - Additional objectives

- to protect and enhance the scientific, natural, cultural, heritage and recreational values of the Watercourse areas,
- prepare for the predicted impacts of anthropogenic climate change on the Ku-ring-gai Wetland areas,
- engage the Ku-ring-gai community in understanding the intrinsic values of their Wetland areas and facilitate community involvement in management and rehabilitation works.,
- recognise that there may be downstream impacts to sensitive ecosystems outside of the LGA including seagrass meadows and to minimise these impacts, activities in Watercourse areas must be managed appropriately,
- assist in and facilitate the implementation of any provisions relating to the use and management of the land that are set out in the Saving Our Species program under the *Biodiversity Conservation Act 2016*.

3.5 Foreshore

Land that is categorised as a natural area should be further categorised as Foreshore under section 36 (5) of the Act if the land is situated on the water's edge and forms a transition zone between the aquatic and terrestrial environment.

Sections of Moores Creek Reserve include the water of Middle Harbour and this area has been assigned to the Foreshore further category.

Some natural areas assigned to the Wetland category such as Estuarine Mangrove Forest (at Roseville Bridge Bush, Old She Oak Reserve, Moores Creek Reserve) and Estuarine Saltmarsh (at Moores Creek Reserve) could also be placed in the Foreshore further category as these areas are Saline Wetlands and they are situated on the water's edge and form a transition zone between the aquatic and terrestrial environment (located in the habitat niche below the highest astronomical tide level). However, the Wetland further category was considered most appropriate for these areas as they are wetlands and managed as such.

Further detail on the Ku-ring-gai natural areas that have been assigned to the Foreshore further category is provided in Appendix C. In most cases, parts of a natural area have been allocated to the foreshore further category and another category as outlined in the Section 36(5) of the LG Act.

3.5.1 Status of foreshore

Council recognises that there may be downstream impacts to sensitive ecosystems outside of the LGA, including seagrass meadows within Middle Harbour, and to minimise these impacts activities in Foreshore areas must be managed appropriately.

3.5.2 Objectives and purpose of the Foreshore category

The core objectives for the Natural Area - Foreshore category (as outlined in the LG Act and Regulation) are outlined in Table 5.

The Foreshore areas within the Ku-ring-gai LGA, while limited in size, are highly valued by the community for their natural values. These areas are also valued for the landscape amenity that they provide, educational and scientific opportunities, and heritage values.

Table 5 The objectives for the Natural Area — Foreshore category

Foreshore - Core objectives LG Act 36N

- to maintain the foreshore as a transition area between the aquatic and the terrestrial environment, and to protect and enhance all functions associated with the foreshore's role as a transition area, and
- to facilitate the ecologically sustainable use of the foreshore, and to mitigate impact on the foreshore by community use.

Foreshore - Additional objectives

- to protect and enhance the scientific, natural, cultural, heritage and recreational values of the Foreshore areas,
- prepare for the predicted impacts of anthropogenic climate change on the Ku-ring-gai Foreshore areas,
- engage the Ku-ring-gai community in understanding the intrinsic values of their Foreshore areas and facilitate community involvement in management and rehabilitation works.,
- recognise that there may be downstream impacts to sensitive ecosystems outside of the LGA including seagrass meadows, and to minimise these impacts activities in Foreshore areas must be managed appropriately,
- assist in and facilitate the implementation of any provisions relating to the use and management of the land that are set out in the Saving Our Species program under the *Biodiversity Conservation Act 2016*.

4. Key management issues for the Ku-ring-gai natural areas

The maintenance and enhancement of the Ku-ring-gai natural areas is dependent on appropriate policy and on ground activities to manage existing and future pressures. A number of management issues have been identified for the natural areas in the LGA through detailed analysis of data, literature review, consultation with staff and residents, and on-ground observations (outlined below in Sections 5.1 to 5.11).

The key environmental concerns raised by the community in Council's Sustainability Vision Report emphasised the conservation of natural areas as they give Ku-ring-gai character and make it a 'sanctuary' that people come home to. The key environmental concerns raised by the community include the following:

- That future generations will be able to experience this same environment and fearing future loss future due to increasing urban development and population growth
- Loss of bushland and wildlife
- Climate change including loss of resilience through isolation and loss of genetic diversity
- Need for tree protection and increase in tree cover.

The key management issues for the Ku-ring-gai natural areas are as follows:

- Biodiversity conservation
- Climate change adaptation and resilience
- Managing the natural area / urban interface
- Fire management for biodiversity conservation and minimising bushfire hazard
- · Management of stormwater, sewerage and water quality
- Erosion control and prevention
- Biosecurity issues (weeds, pests and pathogens)
- Heritage issues (Aboriginal and Non-Aboriginal)
- Promoting community use and education
- Vehicle access
- Preventing unauthorised use.

4.1 Biodiversity conservation

Ku-ring-gai Council recognises the importance of biodiversity conservation. Biodiversity is the variety of all species on earth including the different plants, animals and micro-organisms, their genes, and the terrestrial, marine and freshwater ecosystems of which they are a part (Commonwealth of Australia, 2019). Biodiversity is essential for human existence and is intrinsically valuable. Council recognises the services that nature provides, known as ecosystem services. These ecosystem services include food, drinking water, fibre, building and manufacturing materials, and other less direct services like carbon storage, air and water filtration, temperature control, disease control, nutrient cycling, pollination, protection from storms and floods, places for rest and recreation, and cultural benefits (Commonwealth of Australia, 2019). Biodiversity is essential to the health, wellbeing and quality of life of the Ku-ring-gai community. Conserving biodiversity is key so that future generations will be able to experience the natural environment as our Ku-ring-gai residents do today.

The Ku-ring-gai LGA contains a wealth of biodiversity and is known as the 'Green Heart' of Sydney due to the diverse natural habitats that are regarded as the last remaining areas of biodiversity significance in the Sydney metropolitan area. The established tree canopy in Ku-ring-gai is a defining characteristic and essential to the 'look and feel' of Ku-ring-gai. The variable landscape (broad shale ridges, sandstone plateau and slopes, steep sandstone gullies, and volcanic diatreme) contributes to the diversity of vegetation types within the LGA and the types of flora and

fauna which inhabit these areas. The natural areas subject to this Plan are known to contain several threatened ecological communities and threatened species (with others also likely to occur). In many cases threatened biodiversity (particularly threatened ecological communities) is the most conspicuous part of a natural area. As such these aspects of biodiversity need to be conserved and enhanced to retain the biodiversity values of the LGA and to retain ecosystem function. Conservation and enhancement of native flora and fauna is a therefore key issue for the natural areas subject to this Plan and is a key objective of the Ku-ring-gai Council Biodiversity Policy (Ku-ring-gai Council, 2016b).

Biodiversity conservation is enhanced and supported by a range of measures, including bush regeneration, pest management, and fire management programs, the provision of quality recreational infrastructure, and in some cases by limiting permitted activities in environmentally sensitive areas. For example, dogs and cats are not permitted in reserves designated as Wildlife Protection Areas (under the Companion Animals Act 1998) and permitted recreational activities are restricted within Biodiversity Stewardship Sites.

Preventing the loss of bushland and wildlife is key to biodiversity conservation in the LGA, as is improving the quality of existing bushland. The natural areas ensure that bushland will be retained but vegetation clearing is an important consideration for land outside of the natural areas (supporting land) that may be subject to development in the future. Land clearing is a key threatening process listed under both the BC Act and the EPBC Act. Clearing of remnant trees (live and dead), shrubs, groundcovers, rocks and litter results in the direct loss of habitat for vegetation communities, flora and fauna. It also results in several indirect impacts such as erosion, sedimentation and water quality impacts, air quality impacts, and contribution to climate change. Fragmentation and isolation of remaining habitats is another related issue that must be managed within the LGA to conserve biodiversity.

The natural areas ensure that future generations will be able to experience this same environment as they will not be lost due to increasing urban development and population growth. The conservation of natural areas ensures that bushland and wildlife are conserved.

4.2 Climate change adaptation and resilience

Climate change is a growing social and environmental issue, and warming climate can impact biodiversity both directly through loss of climatic habitat or indirectly through changes to species composition or ecological communities. Human induced climate change is a key threatening process listed under the BC Act and the EPBC Act. Changes in Australian species and ecological communities consistent with climate change that are already being seen include (Biodiversity and Climate Change Expert Advisory Group, 2009):

- changes in genetic constitution of species (e.g., shifts in genetic composition of some insects)
- altered geographic ranges of species (e.g., changes in bird migration patterns)
- changed life-cycles (e.g. earlier flowering, earlier mating seasons)
- population changes (e.g., reduced reproduction in some sea birds associated with higher sea temperatures)
- ecosystem changes (e.g., expansion of rainforest at the expense of eucalypt woodland and grassland)
- altered disturbance regimes (e.g., changing fire regimes consistent with a drier and hotter climate).

As part of Council's commitment to climate change responsiveness an objective of the Ku-ring-gai Council Biodiversity Policy (Ku-ring-gai Council, 2016b) is to protect and enhance the carbon reservoir in Ku-ring-gai's ecosystems to mitigate against climate change and implement adaptive management responses to address the impacts of climate change on Ku-ring-gai's biodiversity. The Ku-ring-gai Council Biodiversity Policy (Ku-ring-gai Council, 2016b) recognises that climate

change and biodiversity are interconnected and whilst biodiversity is at risk from climate change, it plays a crucial role in sequestering and storing carbon dioxide from the atmosphere, making an important contribution to climate change mitigation.

The management of the Ku-ring-gai natural areas plays an important part in climate change adaptation and building resilience.

4.3 Managing the natural area / urban interface

There is approximately 92 km of interface between private housing areas and Council bushland reserves, with approximately 2,450 properties directly adjacent to Council bushland reserves, including National Parks and Nature Reserves. Additionally, Council manages several developed open spaces including golf courses, tennis courts, sports grounds, parks that adjoin the natural areas subject to this Plan. Council also works with utility providers to manage and provide infrastructure to metro Sydney and the interface of utilities, and the natural areas must be managed appropriately.

The natural areas adjacent to the urban interface are subjected to a variety of impacts depending on the nature of the interface, and include issues such as:

- increased weed infestation
- · impacts to biodiversity from domestic animals and pest species
- littering and illegal dumping
- changes to fire regimes
- changes to microclimate
- changes in hydrology due to increased infrastructure and impervious surfaces and tree clearing
- removal of woody debris and damage to plants
- encroachment from adjoining residences.

These impacts can be managed by implementing good design measures, adhering to maintenance standards, monitoring and managing encroachment and illegal dumping, and public education efforts. The Ku-ring-gai Council Bushland Dumping and Encroachment Policy (Ku-ring-gai Council, 2020b) applies to the natural areas subject to this Plan and provides the management framework for Council to address issues including dumping and encroachments faced at the urban interface.

Statutory encroachment - <u>**R41399**</u> – Lindfield Soldiers Memorial Park is identified to include the public road that runs directly through the reserve. Eastern Arterial Road is a gazetted regional road under the Schedule of classified roads and State and Regional Roads, Gazetted Road Number 2043, *Gazettal GG7 22/1/93 DSD 90M1533*.

4.4 Fire management for biodiversity conservation and minimising bushfire hazard

A key natural resource management tool used by Council to achieve ecosystem maintenance, restoration and resilience is the use of controlled burning. Fire has been fundamental in shaping current biodiversity resources and its exclusion can potentially lead to vegetation change and rapid species declines, even localised extinctions. The revitalisation of species richness in our bushland areas and smaller reserves is dependent on appropriate fire intensity and frequency.

High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition is listed as a Key Threatening Process (KTP) under the BC Act. Fire management within the natural areas subject to this Plan aims to reduce the threat of this KTP on threatened species.

Although fires are an important natural process in Australian ecosystems, bush fires in urban areas poses potential risks to life, property, and native flora and fauna. The Ku-ring-gai Council Bushfire Management Policy (Ku-ring-gai Council, 2020c) and the Hornsby Ku-ring-gai Bushfire Risk Management Plan 2016-2021 both govern fire management within the LGA. Council has an

obligation under Section 63 of the *Rural Fires Act 1997* to mitigate bushfire hazard on property under its management. Therefore, proactive community education and fuel management programs have been established to improve community awareness and resilience along the urban-bushland interface, which are renewed and endorsed annually by the Hornsby Ku-ring-gai Bush Fire Management Committee.

Private properties on bushfire prone lands are also responsible for undertaking hazard reduction clearing, on their properties, which must be approved by the NSW Rural Fire Service. or Fire and Rescue NSW as relevant.

4.5 Management of stormwater, sewerage and water quality

Stormwater, sewerage, and associated infrastructure required to support residential and community establishments require a high level of maintenance and management and can affect the surrounding natural areas if not planned and managed diligently.

Urban stormwater systems alter the quantity, quality and frequency of water flows in reserves and adjacent areas. Construction involving tree removal and addition of pavements and hardstand areas can significantly alter hydrology of the landscape, by decreasing water uptake and holding capacity of surrounding vegetation and soils and therefore increasing surface water runoff.

Poorly managed stormwater systems, overflowing, and increased surface water runoff can carry weeds into bushland areas, carry increased nutrient runoff into bushland areas that help weeds to proliferate, introduce pollutants to vegetation and waterways particularly during sewer overflows, and degrade bank and bed stability.

Similarly, the resulting increase in soil erosion can cause increased sedimentation, turbidity, nutrient load and pollution levels in surrounding bushland, wetlands, waterways and catchments. Erosion can also lead to the deterioration of tracks, which leads to increase maintenance costs and increased risk of personal injuries due to slips trips and falls. Erosion and sedimentation also pose a risk to infrastructure such as damage to sewer mains.

Rectification of such issues can be costly and time consuming, therefore considering these issues at the planning and maintenance stages is the most efficient form of management. Ku-ring-gai Council's Water Sensitive City Policy 2016 provides guidance for the implementation of integrated urban water management within the LGA. Sewer and water infrastructure repairs are the responsibility of Sydney Water.

4.6 Erosion control and prevention

While erosion is a natural process, it is accelerated by various land use activities. Most significantly, overland flow and altered stream flow have led to a widening and deepening of many creeks. Surface erosion also occurs on tracks and trails. Erosion can lead to the following issues in the natural areas:

- increased nutrient loads within bushland
- sedimentation and silting of creeks, which can in turn affect creek health and lead to degradation or deterioration of water quality and loss of native aquatic life forms and invasion by non-native species
- deterioration of tracks leads to increased maintenance costs, increased risk of personal injury (slips, trips and falls)
- risk to infrastructure such as damage to sewer mains.

4.7 Biosecurity issues (weeds, pests and pathogens)

4.7.1 Weed management

Weed management is an essential activity on all land in respect to state legislation, common law, the community's desire to maintain local landscape and Council's commitment to the principals and practices of Ecologically Sustainable Development. The Ku-ring-gai Weed Management Policy (Ku-ring-gai Council, 2018) outlines Council's weed management responsibilities and philosophy concerning its obligations under the *Biosecurity Act 2015* in respect of responding to legislation and community concerns and provides guidance for various Council programs. Ku-ring-gai Council is a Local Control Authority (weeds only) under the *Biosecurity Act 2015*.

Under the *Biosecurity Act 2015*, Ku-ring-gai Council as a Local Control Authority has a legal obligation to manage the biosecurity risk posed or likely to be posed to human health, the economy, community and environment by Priority Weeds. If a State or Regional Priority Weed, as listed under the *Biosecurity Act 2015* or the Greater Sydney Regional Weed Management Plan, is identified on public land, Council will set about to undertake control and or eradication of the priority weed species in accordance with the prescribed measures as set out in the *Biosecurity Act 2015*, Regulations and the Greater Sydney Regional Weed Management Plan, as amended. In addition, Council will control Weeds of Local Priority within the natural areas subject to this Plan and the Weed Risk Assessment in accordance with the following priorities, where weeds impact on:

- biodiversity (threatened species and communities)
- management burn areas (pre and post-fire weeding)
- natural areas in good condition
- areas maintained by Bushcare volunteers
- health and safety of recreational users
- aesthetic values.

If a weed is not listed in the *Biosecurity Act 2015*, the Greater Sydney Regional Strategic Weed Management Plan or listed as a Weed of Local Priority, it is not considered to warrant the priority attention and resources of the Council. However, it may still be deemed a biosecurity risk by an Authorised Officer and control, education or enforcement action may be taken.

Weed management within natural areas subject to this Plan will work towards reducing the impacts to threatened species caused by the following KTPs listed under the BC Act:

- invasion and establishment of exotic vines and scramblers
- invasion and establishment of Scotch Broom (Cytisus scoparius)
- invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.
- invasion of native plant communities by Chrysanthemoides monilifera
- invasion of native plant communities by exotic perennial grasses
- invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat)
- loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants.

4.7.2 Pest management

The Ku-ring-gai Council Fauna Management Policy (Ku-ring-gai Council, 2016c) focuses on the management of non-indigenous pest fauna within the LGA which aims to control the spread of non-indigenous pest species and reduce their impacts. Council will control pest species within the natural areas subject to this Plan in accordance with the Ku-ring-gai Council Fauna Management Policy (Ku-ring-gai Council, 2016c) and regional pest management strategy. Pest species of concern in the Ku-ring-gai LGA include, but not limited tofoxes, feral cats, rabbits and red imported fire ants.

Ku-ring-gai Council collaborates with other Council's and the NSW State Government (including National Parks and Greater Sydney Local Land Services) to conduct fox control across the natural areas subject to this Plan (i.e., the through the multi-agency landscape-wide Sydney North Regional Fox Control Program). Fox baiting is conducted twice per year during which times dogs are not permitted in the natural areas (notification is given to residents prior to baiting).

Council ran a trial feral cat trapping program for three months from May 2019 as part of an integrated management approach to this species which also includes continued education programs relating to responsible cat ownership and the hosting of a cat mini expo that promotes registration, desexing and showcasing suitable cat containment systems that can be erected in backyards.

Council is partnering with Greater Sydney Local Land Services, other Councils on Sydney's North Shore, and private land owners, to release the RHDV calicivirus to control rabbits. RHDV calicivirus include many of the natural areas subject to this Plan.

To compliment baiting, trapping and biocontrol programs and to implement an integrated pest management strategy, Council is investigating the implementation of shooting program to target vertebrate pest species within the natural areas subject to this Plan.

Red Imported Fire Ants were detected in Sydney in 2014 and an eradication program is underway. The spread of this species is being monitored.

Pest management within the natural areas subject to this Plan will work towards reducing the impacts to threatened species caused by the following KTPs listed under the BC Act:

- competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)
- competition from feral honey bees, Apis mellifera L.
- predation and hybridisation by Feral Dogs, Canis lupus familiaris
- predation by *Gambusia holbrooki* Girard, 1859 (Plague Minnow or Mosquito Fish)
- predation by the European Red Fox *Vulpes Vulpes* (Linnaeus, 1758)
- predation by the Feral Cat Felis catus (Linnaeus, 1758)
- importation of Red Imported Fire Ants Solenopsis invicta Buren 1972.

4.7.3 Pathogen management

Pathogen management within the natural areas subject to this Plan will work towards reducing the threats to threatened species caused by the following KTPs listed under the BC Act:

- infection of native plants by Phytophthora cinnamomi
- introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae
- infection of frogs by amphibian chytrid causing the disease chytridiomycosis
- infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations.

Council is monitoring known occurrences of pathogens, incorporating appropriate community education, and implementing appropriate hygiene protocols with staff, contractors and volunteers.

4.8 Heritage issues (Aboriginal and Non-Aboriginal)

Ku-ring-gai contains several areas of cultural significance, of both Aboriginal and non-Aboriginal (European) heritage. Management issues for areas of cultural significance include:

- inappropriate management of culturally sensitive areas
- deterioration or vandalism of heritage objects or sites.

In 2019, two previously unrecorded rock art sites were re-discovered in Ku-ring-gai, along with red hand stencils and shell midden sites that have also been recently discovered within the LGA. Although these Aboriginal places and objects are protected under State legislation, Council and local land owners share the obligation to protect and maintain these sites, as well as manage newly discovered places and objects of cultural significance in the future. Inappropriate management of cultural heritage areas may result in unintentional damage from maintenance activities, fire or vandalism, or damage or loss of places or objects due to development. Ku-ring-gai Council continues to collaborate with the AHO and other local councils, to ensure the protection and ongoing discovery of places of Aboriginal cultural significance. Training and education programs include the Volunteer Site Monitoring Program, as well as educational walks and talks for school groups and the public run by the AHO.

Non-Aboriginal heritage items are protected under the NSW State *Heritage Act 1977* and managed in accordance with principles of the 'Burra Charter'. These assets include places such as pre-1920's walking tacks, early stone structures, World War I trenches used for military training, and World War II rifle range and Italian prisoner of war camp. These and other assets are part of over 1000 heritage item and 45 heritage conservation areas that contribute to the rich history of Ku-ring-gai and are important considerations in the management of natural areas.

4.9 Promoting community use and education

The Ku-ring-gai natural area reserves offer a wealth of opportunities for active and passive recreation, focused around the use and access provided by various trails. The Ku-ring-gai Council Recreation in Natural Areas Strategy 2020 (Ku-ring-gai Council, 2020a) applies to the natural areas within the Ku-ring-gai LGA and provides a management framework for the provision and support of a diverse and accessible range of recreation opportunities in the natural areas subject to this Plan in a way that protects and enhances the environment.

Council supports a variety of community groups that use, work in or support the reserves in many ways. These include the variety of Bushcare and environmental groups, dog walkers, bush walkers, rock climbing clubs, bicycle riders and many others.

Many people using the natural areas for recreational purposes do not belong to a group but may be interested in becoming involved in management projects, community stewardship and projects that are occurring throughout the reserves. There are already mechanisms in place to make the community aware of activities undertaken in reserves, including newsletters, signage near the activity or by letterbox notification.

Community education campaigns build relationships between the community and Council and provide the community with an opportunity to learn more about natural areas and their management (such as no mow areas, no dog walking) whilst participating in the management of a bushland reserve.

Material that may be considered by Council include, information displays in Council Chambers and libraries, species profile sheets, bird identification pamphlets, weed information and identification as well as guides on planting native plants, appropriate approaches to weed control and looking after wildlife. Important educational information regarding dog walking, encroachment, littering and dumping have been mentioned elsewhere in this Plan and are regarded as primary actions for the specific issues.

This Plan seeks to continue and expand existing community participation activities scheduled under the Environmental Levy including Bushcare.

4.10 Vehicle access

Inappropriate vehicle uses within the natural areas subject to this Plan, have the potential to cause erosion, soil compaction, damage vegetation, disturb fauna and other reserve users as well as

cause injury. Authorised vehicles gain access to the reserves for fire management works, service and maintenance of infrastructure (e.g., sewer and stormwater pipes) and bushland. Locked security gates control vehicular access to the fire trails. Under the LG Act, Council may grant access for legitimate purposes over bushland reserves where there is no alternative, and no environmental damage will be caused.

4.11 Preventing unauthorised use

Many of the natural areas subject to this Plan are situated on the urban interface. It is in this interface area that there is a greater likelihood of unauthorised use including encroachment by adjoining properties into reserves, dumping, littering, arson and anti-social activities.

Council acknowledges that a balance must be found between protecting the bushland within the natural areas and facilitating public enjoyment of the land. This Plan of Management incorporates a combined management strategy, including education, barriers to access, signage, monitoring and regulatory action, to address the issue of unauthorised use and their associated impacts. It also includes measures to investigate options to restrict access at current key locations as well as working with key recreation groups and others to manage and promote the use and maintenance of bushland areas, tracks and other infrastructure for recreational purposes. Further detail on unauthorised activities is provided in Section 6.3.

5. Permissible use and development within the Ku-ring-gai natural areas

The Ku-ring-gai Local Environmental Plan 2015 (LEP) applies to most of the land within Ku-ringgai. The LEP came into effect on 2 April 2015. Within the LEP, the Ku-ring-gai natural areas are grouped into the C2 (Environmental Conservation) Zone. The objectives of the C2 Zone are:

- to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- to prevent development that could destroy, damage or otherwise have an adverse effect on those values.

Environmental protection works are permitted within the C2 Zone without consent. Activities that are permitted with consent include environmental facilities, flood mitigation works, oyster aquaculture, roads, and water storage facilities.

Permissible uses and development within the Ku-ring-gai natural areas subject to this Plan will be consistent with:

- the values, roles and objectives for the natural areas set out in this document
- the guidelines and core objectives for natural areas in the LG Act, and any other additional objectives Council proposes to place on that category in this plan
- uses listed in the Local Government (General) Regulation 2021
- the requirements of the CLM Act and CLM Regulation 2018
- the Native Title Act 1993 (specifically in the case of Crown Land)
- uses permitted on community and Crown land without consent under the State Environmental Planning Policy (SEPP) (Transport and Infrastructure) 2021
- the objectives for and permissible uses listed under the relevant land zoning in the LEP
- authorised leases, licences, permits or easements, and other estates in respect of Community Land
- relevant Council Policies, Strategies, Regulations or Local Laws.

Use of Crown Land and permits on Crown Land will be issued in accordance with the *Native Title Act 1993.*

On Crown Land where it is proposed to construct or establish a public work, where native title is not determined extinguished or to no longer exist, prior to approval Council will notify and give opportunity to comment to any representative Aboriginal/Torres Strait Islander bodies, registered native title bodies, corporate and registered native title claimants in relation to the land or waters as required under the *Native Title Act 1993*.

While a Plan of Management expressly authorises and enables certain functions such as the issuing of leases and licences, any development in these areas would still require the relevant planning approvals to be undertaken. Planning controls established in the EP&A Act and the LEP set the framework for approving permissible activities in the Ku-ring-gai natural areas (C2 Zones).

In addition, Section 3.39 of the CLM Act requires that Council approval of activities on dedicated or reserved Crown land under Part 1 of Chapter 7 of the LG Act must comply with the Plan of Management for the land.

Section 68 of the LG Act specifies activities which may be carried out on Community Land with prior approval of the Council, except when the regulations or a local policy adopted under Part 3 allows the activity to be carried out without approval. Sections 69 to 74 of the LG Act deal with approvals required for activities on Crown land.

No development is permitted on Lot 7072 DP 1060396 (part of Acron Oval) or Lot 7065 DP94233 (part of East Gordon Park) unless the land becomes excluded land for the purposes of Part 8 of the CLM Act or it satisfies the requirements of Section 24KA of the *Native Title Act 1993*.

5.1 Permitted activities

Section 68, Part D, of the LG Act requires Council to issue approvals for certain activities on Community Land. In some instances, individuals and community organisations wishing to undertake activities on Community Land must obtain Council approval before commencing that activity. The list of permitted activities below does not constitute approval from Council.

Note that nothing within this Plan can be used as a defence against prosecution for an offence under the BC Act or NPWS Act. The permitted activities within the natural areas subject to this Plan are as follows:

- track dependent recreational activities including sightseeing, bushwalking, running and general access, mountain biking, rock climbing, abseiling and bouldering, orienteering and rogaining in line with the Ku-ring-gai Council Recreation in Natural Areas Strategy 2020
- dog walking on a leash on established tracks, unless prohibited by a sign
- horse riding on designated trails within the natural areas subject to this Plan, where the trail links to a National Park trail, subject to compliance with conditions and restrictions
- vehicle access via established roadways and car parking areas
- access to natural areas through 'access handles' that are managed as part of the natural area
- specific community orientated non-commercial events that do not compromise the core objectives of natural areas
- regulated commercial activities that are compatible with the principles of this Plan and consistent with specific reserve management plans, such as filming (Council permission may be required, and fees may also apply)
- flying of drones in accordance with the Ku-ring-gai Council Drone (Remotely Piloted Aircraft) Policy (Ku-ring-gai Council, 2019) to take aerial photographs or videos of the natural areas subject to this Plan, or aerial surveys of natural areas that have limited

access due to terrain, or to take photographs and videos at Council events within the natural areas

- educational events run by or on behalf of Council including informative open days and internal staff training
- environmental management works undertaken by Council or on behalf of Council for the purpose of avoiding, reducing, minimising or managing the environmental effects of development (including effects on water, soil, air, biodiversity, traffic or amenity), or environmental protection works
- any work undertaken by Council to prevent or rectify encroachment or dumping in line with the Ku-ring-gai Council Bushland Dumping and Encroachment Policy
- activities undertaken by Council, contractors, or community volunteer groups authorised by Council consistent with the management requirements for threatened biodiversity and threat abatement as outlined for specific species and ecological communities in the SoS program
- bushland restoration and regeneration work and activities by Council or contractors or community volunteer groups authorised by Council
- integrated weed and pest management (weed, pathogen and pest animal control) in accordance with Council policies
- collection of seeds and other plant propagules for Council's plant nursery, or by other bodies or persons who have Council approval and appropriate permits or licences where necessary. Collection of seeds and propagules will be carried out according to industry best practice guidelines in relation to biodiversity, provenance and in sustainable quantities
- scientific research and specimen collection, including citizen science, with appropriate ethics approval, permits or licences where necessary and with Council approval. Temporary hide structures may be installed within the natural areas with Council approval for professional fauna monitoring purposes. Nest box (or other artificial roosting structure) installation may be installed and monitored within the natural areas with Council approval
- implementation of strategic fuel management works, including controlled burning in bushland and maintenance of identified Asset Protection Zones, in accordance with the current Hornsby/Ku-ring-gai Bush Fire Risk Management Plan prepared by the Hornsby/Ku-ring-gai Bush Fire Management Committee. Implementation of all form of hazard reduction works is permitted
- maintenance of existing roads, tracks, trails, drainage, stormwater works, and construction
 of new strategic tracks and trails, or asset protection zones (firebreaks). Closure and
 rationalisation of tracks and trails as necessary. Audits and mapping of the formal and
 informal trail network and unauthorised tracks and trails
- Council is permitted to close any natural area subject to this Plan and prevent public access when required, for example in times when the Rural Fire Service announces catastrophic fire danger for the Greater Sydney area
- installation and maintenance of fencing, gates and signage (including signage protection shelters where required) for the purpose of environmental education, limiting human disturbance, facilitating the regeneration of native flora and the protection of native flora
- replacement/upgrading of existing facilities in their current locality, allowing for relocation if required, that does not compromise the core objectives of the natural areas. Installation of

and maintenance of park furniture such as seating, minor recreational amenities and /or shelters as required along existing walking tracks or specifically identified areas

- construction and maintenance of strategic sediment and pollution control devices in waterways in accordance with the Water Sensitive Cities Policy. Water sensitive urban design projects and catchment remediation projects
- use of registered easements and maintenance of utilities network as required. Infrastructure providers must attempt to give written notice to Council before entering the site
- the grant of a lease or licence or other estate (including entering into a Biodiversity Stewardship Agreement) in respect of the land to which this plan applies is expressly authorised for any purpose for which the land was used at the date of adoption of this plan. This does not exempt future use review and modifications
- any human activity reasonably considered necessary to remove or reduce an imminent risk of serious personal injury or damage to property.

5.2 Unauthorised and prohibited activities

The activities which are prohibited in specific natural areas are listed on regulatory signs at many natural areas. A person who fails to comply with the terms of the regulatory sign is guilty of an offence for which penalties apply under Section 6.3.2 of the LG Act.

Prohibited uses also include any land uses that are not permitted in the LEP. Activities that are prohibited in the natural areas subject to this Plan (C2 Zone) include Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Senior's housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; and any other development not specified as permitted without consent or permitted with consent.

Prohibited uses also include those that are contrary to the provisions of the *Native Title Act 1993* where such legislation applies to any specific parcel of land, or proposals that are inconsistent with any agreements or approvals that are established.

The Ku-ring-gai natural areas are open to a number of uses by the residents and general public and are situated in close proximity to the residential areas of Ku-ring-gai in an urban-bushland matrix. The use of the natural areas is incorporated into the day to day activities of the public. However, not all activities are well intentioned or authorised. This Plan incorporates a combined management strategy, including education, barriers to access, signage, monitoring and regulatory action to address the impacts associated with unauthorised activities. It also includes measures to investigate options to restrict access at key locations as well as working with community recreation groups and others to manage use and maintenance of bushland areas, tracks and other infrastructure.

Examples of inappropriate and prohibited use of the natural areas subject to this Plan include:

- any activity contrary to a notice on the land
- walking of dogs when not effectively controlled on a leash in any natural area subject to this Plan
- leaving dog faeces in natural areas
- walking of dogs within Wildlife Protection Areas
- cats are prohibited within Wildlife Protection Areas
- unattended free ranging dogs in natural areas

- dogs and cats are prohibited from entering all baited natural areas for the duration of pest control programs and a mandatory exclusion period following cessation of the baiting program
- any act or thing that will disturb or endanger any person or native fauna or flora (e.g., discharging of firearms, damage or removal of plants, animals, rocks, soil or timber) that would compromise the core objectives of the natural areas
- wilfully or negligently injure or unnecessarily disturbing and/or removing plants (including vegetation clearing), animals, rocks or soil without approval
- wilfully removing, destroying, defacing, damaging or otherwise interfering with any item, notice or sign
- wilfully removing, destroying, defacing, damaging or otherwise interfering with any heritage object or site
- camping or staying overnight

lighting fires anywhere in other than a designated constructed barbecue or fireplace and/or specifically approved by Council

- driving, riding or parking any unauthorised motor vehicle, including motorbikes (trail bikes, quad bikes, etc.) or any other off-road recreational vehicle, in any part of a natural area other than designated driving, riding or parking areas
- construction of unauthorised tracks or trails and the use of unauthorised tracks or trails (for walking, running, bike riding, horse riding, etc.) in natural areas
- engaging in unauthorised trade or business including sale of motor vehicles
- creating a public nuisance or do anything likely to endanger the safety of or cause injury to any person or animal
- the lighting of fireworks / amateur fireworks displays
- wilfully breaking, throwing, placing or leaving any bottle, glass, glass receptacle or syringe, foreign material or litter within the natural areas
- dumping of any waste or item, including items such as garden waste, grass clippings, household waste, and building materials including fill material
- creation of new Asset Protection Zones without approval
- encroachments such as garden extensions, structures, or any private use of public, community or Crown land is prohibited.
- use of cleared areas for the purpose of private convenience (for example children play equipment, storage sheds, fire pits, compost bins, storage of lumber and building materials, vegetable or ornamental gardens etc)

5.3 Special uses, leases and licences

The LG Act (Section 46) and the CLM Act allow Councils to grant leases, licences and other estates over community and Crown land. The LG Act clearly defines restrictions and authority with which the Council can grant leases, licences and other estates over Community Land. The Act requires the Council to maintain the intended purpose of the land by ensuring any authorised activity is consistent with the core objectives of natural areas and the purpose listed in the LG Act and uses must also be consistent with the Reserve Purpose for Crown land areas.

Any lease, licence or permit issued on Crown land must be issued in accordance with the provisions of the *Native Title Act 1994* and in accordance with Part 8 of the CLM Act unless native title is extinguished. For Crown land, which is not excluded land, this will require written advice from Council's Native Title Manager that it complies with any applicable provisions of the native title legislation. Appendix F provides a summary of the advice of Council's Native Title Manager, at the time this Plan of Management was adopted. Where Crown land is not excluded land, then no lease is permitted, and the issue of a licence or permit is restricted subject to assessment and agreement under the legislation. To undertake a future act (including the adoption of a Plan of Management) on Crown land, Council must comply with the future act provisions of the *Native Title Act 1993* and meet the requirements of Section 8.7 the CLM Act. Generally, Section 24JA of the *Native Title Act 1993* allows most actions that a Council would be wanting to undertake. To utilise Section 24JA the reservation must have been validly created prior to 23 December 1996.

Section 47(1) of the LG Act requires that any proposed lease, licence or estate of Council community land and Crown Land (where Council is the Crown Land Manager), is publicly notified. Any comment received must be considered prior to granting such interests. Under Sections 46 and 47, where a lease or licence exceeds five years and objections are received via public notification, Ministerial consent is required prior to granting such interest.

Council must not grant the lease, licence or other estate except with the Minister's consent, if in the case of a lease or licence, the period (including any period for which the lease or licence could be renewed by the exercise of an option) of the lease or licence exceeds 21 years.

Council policy supports a multi-use approach to community assets and prefers user agreements that allow for a broad range of uses of facilities. Licences allow multiple and non-exclusive use of an area. Several licences for different users can apply to the same area at the same time, provided there is no conflict of interest. Leases will be considered in exceptional circumstances, such as instances where there is a significant capital contribution by a user, or the arrangement is commercial in nature.

In accordance with the LG Act, this Plan of Management authorises the Council to:

- Grant easements for authorities, organisations or individuals in favour of private lands over lands identified in this Plan. Council must, however, be satisfied there is no reasonable alternative and that appropriate benefits are obtained for the community land and any adverse impacts on the bushland is remedied at the cost of the holder of the easement.
- This Plan of Management expressly authorises Council to consider and to approve or to refuse, as it deems appropriate, the granting of any easements, leases, licences, or other estate (including entering into a Biodiversity Stewardship Agreement under the BC Act) over community land subject to this Plan:
 - which would not compromise the nature of the land as a community asset and
 - o pursuant to LG Act 1993 (Sections 45, 46, 46A, 47, 47A, 47AA, 47B & 47C).
- Assess potential impacts (ecological, cultural, fire hazard, built assets) and ongoing
 management requirements when approving special uses, leases or licences. Conditions of
 use may be applied to specify permissible uses and restrictions in use in accordance with
 the context, ecological values, built assets and fire hazard of the area.
- Adopt the 'user pays' principle for special uses, leases or licences. Where contribution (either cash or in-kind) may be required, including maintenance requirements across the full life cycle of impacts.

Currently, there are a number of Council authorised special uses of Ku-ring-gai bushland reserves, including:

- bookings for commercial / organised activities including filming, events, adventure activities, research, bushwalking and access over land for construction
- leases and licences for use of built assets within bushland; and
- licences for temporary access to private dwellings

All short-term casual uses, and occupation would be subject to Council's standard conditions for hire, approval processes, and booking fees. A temporary licence would be issued by Council as part of the approval process prior to the community land being used for these activities. Organisers of the activity are subject to conditions of hire.

Fees for short term, casual bookings will be in accordance with the fees and charges as published in Ku-ring-gai Council's annual Operating Plan and Budget. On Crown land, subject to the Native Title Act 1994, any secondary interest or short-term licences may be considered, subject to the provisions described in Division 2.5 and 3.3 of the CLM Act. Short term temporary occupation of Crown land is subject to native title manager advice.

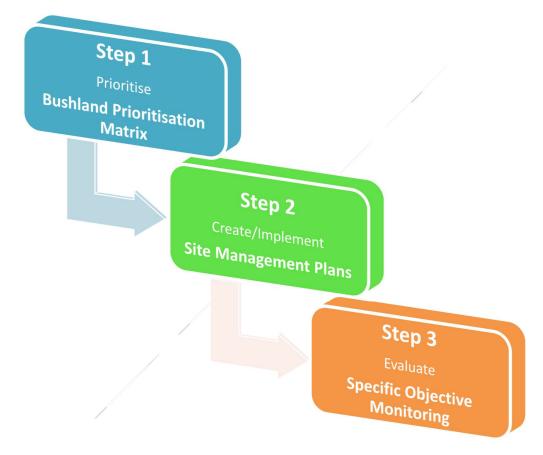
No lease or other exclusive use agreement is permitted on Lot 7072 DP 1060396 (part of Acron Oval) or Lot 7065 DP94233 (part of East Gordon Park) unless the land becomes excluded land for the purposes of Part 8 of the CLM Act.

Currently there are no leases licence over the Crown reserve/reserves.

6. Management strategy for the Ku-ring-gai natural areas

All of Ku-ring-gai's natural areas receive baseline maintenance as dictated by legislative requirements (such as weed/pest management) and existing infrastructure asset maintenance. Vegetation management of Ku-ring-gai's natural areas is undertaken through a combination of the volunteer Bushcare program and council's bush regeneration program.

Management of council's bush regeneration program is based around a three-step process to prioritise available funding. Step 1 involves prioritisation of the natural areas using the Bushland Rating Matrix and Decision Support Tool. This allows the condition of each reserve to be ranked against its value. Site Management Plans are then developed and implemented for each of the priority natural areas (Step 2) and the results are monitored using Specific Objective Monitoring (Step 3). Each of the steps involved are discussed below.



6.1 Step 1 - prioritisation of the natural areas

The Ku-ring-gai Bushland Prioritisation Matrix ranks each natural area subject to this Plan based on the significance of the vegetation community/species within the reserve, the resilience of the reserve and the extent of site impacts and pressures that need to be addressed to maintain the values the reserve contains. The Bushland Prioritisation Matrix prioritises the natural areas that will receive vegetation management funding. The 34 highest priority sites have been prioritised for management funding within the available budget from July 2023 to July 2025, with the priority sites are updated biennially The updated scorecards, published in Council's website, provide an outline of the priority natural areas. Appendix F provides an example of the scorecard information provided.

6.2 Step 2 – create and implement

Council has commenced the implementation of site management plans for its priority natural areas. These plans will sit beneath this Plan and provide detailed information on the individual natural area values, management zones, and management actions, and will outline a monitoring program (see Step 3).

6.3 Step 3 – evaluate

Running alongside Step 2, Specific Objective Monitoring provides a standardised but flexible monitoring framework for a bushland reserve depending on the management issue/s that have been identified and the subsequent management actions that are undertaken. The Specific Objective Monitoring allows Council to collate data on specific objectives related to weed control, improvements to native vegetation structure and/or diversity, protection or recovery of threatened species, or any other specific objective related to the protection or enhancement of Ku-ring-gai's natural areas and measures the success of our management program.

7. Management objectives and performance plan

Section 36 of the LG Act requires that Council must identify the objectives and performance targets of the Plan with respect to the land, how Council proposes to achieve the Plan's objectives and performance targets, and the way Council proposes to assess its performance with respect to the Plan's objectives and performance targets.

7.1 Objectives

This section of the Plan identifies the core objectives for management of the natural areas as outlined in the LG Act and additional objectives identified for the Ku-ring-gai LGA. The specific objectives for each of the natural area further categories (Bushland, Wetland, Escarpment, Watercourse, Foreshore) are outlined in Section 4.

Table 6The objectives for the Natural Areas

Core objectives for Natural Areas *LG Act* 36E

- conserve biodiversity and maintain ecosystem functions in respect of the land, or the feature or habitat in respect of which the land is categorised as a natural area,
- maintain the land or that feature of habitat, in its natural state and setting,
- provide for the restoration and regeneration of the land,
- provide for community use of and access to the land in such a manner as will minimise and mitigate any disturbance caused by human intrusion, and
- assist in and facilitate the implementation of any provisions restricting the use and management of the land that are set out in a recovery plan or treat abatement plan prepared under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*.

Additional objectives identified for the Ku-ring-gai LGA Natural Areas

- restoration of fire regimes to the Ku-ring-gai Natural Areas as appropriate,
- to protect and enhance the scientific, natural, cultural, heritage and recreational values of the Natural Areas,
- prepare for the expected impacts of anthropogenic climate change on the Ku-ring-gai Natural Areas,
- engage the Ku-ring-gai community in understanding the intrinsic values of their Natural Areas and facilitate community involvement in management and rehabilitation works,
- ensure the conservation and appropriate management of items and sites of cultural heritage significance (Aboriginal and Non-Aboriginal),
- enter into conservation agreements, covenants, and strategic partnerships with government agencies and NGOs to facilitate biodiversity conservation

Note: The *Threatened Species Conservation Act 1995* has been replaced by the *Biodiversity Conservation Act 2016*. Recovery plans and Treat Abatement Plans were replaced by the Priorities Action Statements which were then transferred into the Saving Our Species program under the *Biodiversity Conservation Act 2016*.

7.1.1 Alignment of objectives with LG Act categories

To ensure the overarching objectives of the LG Act are captured and to provide a framework for ongoing and future management programs, Council developed nine management priorities, under

which natural area management issues and performance targets could be set. The nine management priorities are comprised of the following:

- **PRIORITY 1**: Protect and enhance biodiversity, strengthen ecosystem resilience, and facilitate landscape linkages
- **PRIORITY 2**: Protect and enhance waterways and riparian areas, improving aquatic health and connectivity
- **PRIORITY 3**: Manage bushfire hazards and fire regimes in accordance with regulatory requirements and to meet ecological needs where appropriate
- **PRIORITY 4**: Promote community awareness and collaboration, building partnerships and knowledge
- **PRIORITY 5**: Conserve and manage natural, cultural and aesthetic landscape values including Aboriginal and non-aboriginal heritage items and places
- **PRIORITY 6**: Implement measures to minimise and manage impacts to natural areas from threats and pressures
- **PRIORITY 7**: Provide sustainable public access and recreational opportunities in appropriate locations
- **PRIORITY 8**: Strengthen planning and development processes to improve biodiversity outcomes and build organisational capacity for adaptive management
- **PRIORITY 9**; Authorise leases, licences and other estates that provide sustainable outcomes, sympathetic to biodiversity and environmental condition

The nine management priorities respond to the LG Act further categories as outlined in Table 9.

Table 9 Objective management priorities for Natural Areas

Natural Area Management Priorities	LG Act Category and further catego (Section 36)			ory		
	Core Objectives 36E	Bushland 36J	Wetland 36K	Escarpment 36L	Watercourse 36M	Foreshore 36N
PRIORITY 1 : Protect and enhance biodiversity, strengthen ecosystem resilience, creation of habitat, corridors and stepping stones	√	✓	~		•	
PRIORITY 2 : Protect and enhance waterways and riparian areas, improving aquatic health and connectivity	√	1	1		•	✓
PRIORITY 3 : Manage bushfire hazards and fire regimes in accordance with regulatory requirements and to meet ecological needs and indigenous regimes where appropriate	~	✓				

PRIORITY 4 : Promote community awareness and collaboration, building partnerships and knowledge	✓	 ✓ 	•		 ✓ 	
PRIORITY 5 : Conserve and manage natural, cultural and aesthetic landscape values including Aboriginal and non-aboriginal heritage items and places	1	•		•		
PRIORITY 6 : Implement measures to minimise and manage impacts to natural areas from threats and pressures	1	√	1	•	1	•
PRIORITY 7 : Provide sustainable public access and recreational opportunities in appropriate locations	~	√	~	1	~	•
PRIORITY 8 : Strengthen planning and development processes to improve biodiversity outcomes and build organisational capacity for adaptive management	1	•	1		•	•
PRIORITY 9 : Authorise leases, licences and other estates that provide sustainable outcomes, sympathetic to biodiversity and environmental condition	•	✓				

7.2 Performance plan and management programs

7.2.1 Past and ongoing management programs

Past and current management programs in the natural areas focused on bush regeneration works, biodiversity surveys and monitoring, education, managing encroachments, track and trail improvements and mapping, bushfire hazard management, water sensitive urban design projects, catchment remediation, and managing biosecurity issues (weed, pests and pathogens).

The past and ongoing programs in the natural areas include:

- An annual bush regeneration program at a number of sites on environmentally sensitive lands, funded by the Environmental Levy.
- Ongoing recurrent bush regeneration at numerous priority sites that are monitored and worked by Council staff.
- Bush regeneration through external funding through grants (Department of Planning, Industry and Environment; NSW Environmental Trust; Commonwealth Government Grants; Paddy Pallin Foundation).
- A Volunteer for Nature program to encourage residents to participate in Bushcare and Parkcare activities (872 individual and 80 group sites with over 680 volunteers participating).
- Vegetation condition surveys to measure vegetation change and regeneration success.
- Weed program targeting priority species in accordance with regional programs and funding (e.g. Greater Sydney Regional Weed Committee).
- Education including the GreenStyle Program, informative open days and internal staff training.
- Identification and management of bushland encroachment at urban-bushland interfaces.

- Track and trail improvement and maintenance program, track and trail mapping, and illegal track closure.
- Ecological burn and bushfire hazard management program (an annual program set by Council and the Hornsby Ku-ring-gai District Bushfire Committee informed by the Hornsby Ku-ring-gai Risk Management Plan) involving service trail maintenance and strategic bushfire hazard reduction and maintenance of fuel reduced zones around houses.
- Covenants and Wildlife Protection Areas (a Voluntary Conservation Agreement and Wildlife Protection Area has been created at Browns Forest).
- Fauna condition surveys in all catchments.
- Water sensitive urban design projects to compliment the roads and infrastructure and sports field programs.
- Catchment remediation (creek stabilisation and revegetation projects and stormwater outlet protection).
- Aquatic macroinvertebrate / water quality survey including continued participation in AUSRIVAS sampling at selected creeks.
- Phytophthora cinnamomi control and mapping.
- Pest animal program as directed by the Sydney North Vertebrate Pest Plan.

7.2.2 Performance plan and management programs for natural areas

This section presents the performance plan for Council's objectives and management priorities, the means by which Council proposes to achieve the performance targets and the manner in which Council proposes to assess its performance with respect to the stated objectives and performance targets.

The following tables frame Council's broad performance plan to management issues in natural areas. The tables are divided into the nine management priorities outlined previously (Tables 10.1 to 10.9) and identify performance targets for each priority, the means of achievement, performance assessment measures and the Council team responsible for achieving the targets.

To address performance targets within this Plan, the natural areas will be prioritised for management actions based on the Ku-ring-gai Bushland Prioritisation Matrix with the natural areas ranked biennially. Council is currently developing and implementing site management plans for its priority natural areas. These plans will sit beneath this Plan and provide detailed information on the individual natural area values, management zones, and management actions for each of the priority natural areas and will outline a monitoring program, known as Specific Objective Monitoring, which provides a standardised but flexible monitoring framework directly linked to the specific management issue/s that have been identified and the subsequent management actions that are undertaken.

Under Council's Integrated Planning and Reporting Framework, prioritised and fully resourced management programs from this Plan may be included in Council's annual Operational Plans. This will ensure progress of the reportable actions for that year is monitored on a quarterly basis through Council's Performance Planning system and reported to Council and the community every six months. A summary of activities for the year will also be included in Council's Annual Report.

This approach will enable full transparency and accountability to be assigned for each program or action. The Plan will be reviewed every four years to ensure that priorities remain in line with community needs and Council objectives.

Table 10 Performance plan to achieve the objectives of the Natural Areas PoM

Table 10.1 PRI	ORITY 1: PROTECT AND ENHANCE BIODIVERSITY, STRENGTHEN E		
Performance Target	CREATION OF HABITAT, CORRIDORS AND STEPPING	STONES Performance Assessment	Responsible Team
1.1 Habitat condition and biodiversity values in Ku-ring-gai's 122 natural area bushland reserves are protected and enhanced with no loss of biodiversity or resilience in high priority reserves	Undertake ongoing bush regeneration program in natural areas as guided by the Bushland Prioritisation Matrix to achieve long term reduction in maintenance requirements for selected bush regeneration sites Support the objectives of the Biodiversity Policy 2022 including implementing site based management plans to guide priority actions within selected bush regeneration sites Manage and mitigate urban interface, invasive species and recreational access impacts through ongoing bushland, asset maintenance and dumping and encroachment programs	Bushland Prioritisation Matrix updated every two years and bush regeneration program reflects changing priorities Site management plans developed for all priority reserves and Bushcare volunteer sites that document aims, objectives and site condition assessments Bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with improved ecosystem resilience and no net loss of habitat	Operations Environment & Sustainability
1.2 Endangered/threatened and locally significant flora and fauna are protected with no loss of endangered ecological communities or high value habitat or species	Identify and map threatened flora and fauna in Council's Biobase system and the NSW BioNet Atlas Identify and map significant habitat features in Council's 'Habitat Features' database Undertake conservation management actions as outlined by NSW Department of Planning, Industry and Environment for identified EECs and Saving Our Species program Undertake fauna survey and monitoring within and adjacent to natural area reserves on an annual basis	Biobase, BioNet and Habitat Features database updated quarterly or when new species identified Bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with improved ecosystem resilience and no net loss of habitat	Environment & Sustainability Operations
1.3 Biodiversity Conservation Agreement and Biodiversity Stewardship Agreement sites are maintained and enhanced with no loss of biodiversity or resilience	Implement management plans to undertake bush regeneration and necessary threat mitigation measures as per Conservation or Biodiversity Stewardship Agreement	Regular reporting on management activities and outcomes to Agreement parties as required Bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with improved ecosystem resilience and no net loss of habitat	Operations Environment & Sustainability
1.4 Potential areas for Conservation Agreements, Wildlife Protection Areas or Biodiversity Stewardship Agreement Sites are identified for future action	Undertake appropriate site studies and research of potential natural areas suitable for establishing a Conservation Agreement, Biodiversity Stewardship Agreement sites or Wildlife Protection Areas and commence process for establishment	A natural area suitable for establishing a Conservation Agreement, Biodiversity Stewardship Agreement site or Wildlife Protection Areas is identified and established within five years	Environment & Sustainability
1.5 Greenweb linkages and wildlife corridors are protected and maintained with no loss of connectivity	Manage and mitigate invasive species and recreational access impacts on Greenweb linkages and wildlife corridors through ongoing bushland and asset maintenance programs	Bush regeneration reporting by contractors, staff and Bushcare volunteer teams are reviewed annually to ensure contract objectives are met with no loss of linkages or wildlife corridors connections within or adjoining natural areas reserves	Operations

Table 10.2							
PRIORITY 2: PROTECT AND ENHANCE WATERCOURSES AND RIPARIAN ZONES, IMPROVING AQUATIC HEALTH AND CONNECTIVITY							
Performance Target	Means of Achievement	Performance Assessment	Responsible Team				
2.1 The condition of our watercourses, bank stability, and water quality are protected and enhanced to increase aquatic biodiversity and support natural flow regimes	 Develop, design and implement site strategies before or at the urban/natural area interface as per the Water Sensitive Cities Policy 2016 to minimise stormwater impacts by installing: a) water sensitive urban design approaches (such as use of vegetation lined drainage channels instead of concrete) b) appropriate pollution control devices (sediment detention basins, litter baskets and filter gardens); and c) erosion control devices (swales, low flow pipes) Ensure relevant staff are trained in emergency response procedures and maintain spill response kits and equipment to mitigate pollution incidents and chemical spills 	 WSUD infrastructure and GPTs are installed where possible and are included in Council's asset maintenance register WSUD infrastructure and GPTs are maintained on a regular basis as required and relevant data capture in Council's asset maintenance register Undertake regular assessment of watercourses in natural areas and continue to carry out the water quality and stream health monitoring program, reporting on condition changes through the water quality card system on a yearly basis 	Environment & Sustainability Operations				
2.2 The condition of riparian zones is maintained and enhanced with no loss of riparian area or resilience	Undertake bush regeneration and necessary threat mitigation measures in riparian zones including asset maintenance programs	Bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with no loss of riparian zone condition	Operations Environment & Sustainability				
2.3 Wetlands and associated hydrological regimes are protected and maintained to improve condition and maximise water infiltration	Undertake bush regeneration and necessary threat mitigation measures in wetland areas including asset maintenance programs	Bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with no loss of wetland condition	Operations Environment & Sustainability				

AND INDIGENOUS REGIMES WHERE APPROPRIATE						
Performance Target	Means of Achievement	Performance Assessment	Responsible Team			
3.1 Bushfire hazards in asset protection zones (APZs) and strategic fire advantage zones are maintained in accordance with relevant standards and approval conditions	Undertake regular hazard reduction works in APZs at the urban/natural area interface to mitigate bushfire risk and fire intensity Prepare required documentation for hazard reduction works, including burns, and maintain relevant NSW RFS information systems (Guardian) Support NSW Fire & Rescue and NSW RFS during on-ground works and burns if required with appropriately trained staff Undertake community education programs targeting bushfire hazard management on urban interface properties in conjunction with the RFS and as identified within the Bushfire Risk Management Plan	APZ works reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met by maintaining low or reduced fuel loads Hazard reduction documentation completed and RFS information systems are updated as required to ensure no delay in on ground works Council bushfire mitigation activities are reported annually through Council's IP&R process including relevant data such as numbers of hazard reductions, ecological burns and APZs worked	Operations Environment & Sustainability			
3.2 Best practice knowledge regarding appropriate ecological and indigenous fire regimes is incorporated into land management practices	Participate in Hornsby – Ku-ring-gai District Bushfire Management Committee and Sub-committee meetings and Hornsby – Ku-ring-gai District Bushfire Risk Management Plan to help develop more natural sustainable fire regimes Review past fire history and species / community fire requirements to determine current fire threshold and to help inform future burn proposals Identify and implement low intensity ecological burns using fully trained staff with relevant qualifications or NSW Fire & Rescue and NSW RFS or appropriately licenced contractors Continue application of pre and post fire weeding treatments according to the adopted strategy, including consideration of site values, weeds and type of proposed fire treatment Relevant staff to keep up to date with latest research on fire regime needs for biodiversity conservation (species & community level)	Regular attendance by staff at the quarterly Hornsby – Ku-ring-gai District Bushfire Management Committee and Sub-committee meetings Fire monitoring program developed further Research conducted into fire ecology & fire regimes for fragmented landscapes, through partnerships with educational institutions Knowledge on fire thresholds for biodiversity conservation & ecosystem functioning is incorporated into the specific Site Management Plans. Monitor impact of fire on threatened species populations and inform DPIE/ RFS/ local government agencies regarding relevant data	Operations Environment & Sustainability			
3.3 Fire trails, access points and tracks, and bushfire related signage is maintained in accordance with relevant guidelines	Undertake actions from the Hornsby - Ku-ring-gai Bushfire Operations Plan and from the Hornsby – Ku-ring-gai Fire Access and Fire Trail Plan and maintain fire trails at their stated category level Restricted vehicular access on fire trails to service, maintenance and emergency vehicles only by installation of gates and signage	Monitor and review fire trail conditions through the Bushfire Risk Management Committee on a yearly basis	Operations Environment Sustainability			

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Table 10.4 PRIORITY 4: PRO	DMOTE COMMUNITY AWARENESS AND COLLABORATION, BUILDIN	G PARTNERSHIPS AND KNOWLEDGE	
Performance Target	Means of Achievement	Performance Assessment	Responsible Team
4.1 The Ku-ring-gai community, including residents, businesses and visitors, are aware of their potential impacts on natural area biodiversity and do not take actions that adversely impact natural areas	 Continue to implement and deliver promotion / education programs for residents, businesses and general public regarding: flora and fauna values of the natural areas threats to native wildlife (including hollow and rock removal, and domestic cats and dogs) feeding of native wildlife protection from threats such as urban stormwater runoff, illegal dumping, pollution from industrial activities and construction sites community stewardship walking track and trail network appropriate recreational use of Council reserves and specific information for dog walking, horse and mountain bike riding. Install co-ordinated signage (interpretative, educational, advisory) including: vegetation type, wildlife species and habitat permissible recreational use prohibited activities (regulatory signage) and signs for remote supervision (danger, warning and advice signs) 	Promotion / education programs are reported annually through Council's IP&R process including relevant data such as numbers attended, or residents/businesses reached Number of signs installed and included in Council's asset maintenance register Out-of-date signs are removed or updated to meet current guidelines or standards	Environment & Sustainability Operations
4.2 Residents located on the urban interface boundary of natural area reserves are aware of their potential impacts on natural area biodiversity and take positive actions to reduce their impacts	 Continue to educate and assist residents living adjacent to the natural areas, including: weed education ecologically sensitive lands promotion of fauna and flora habitat appropriate plantings (local natives, water wise gardens, fire considerations including species selection, location, ongoing maintenance) ClimateWise community education responsible pet ownership impact of lights on fauna encroachment and water cycle management, including filtration, capture and re-use strategies, such as water tanks and increased use of permeable surfaces 	Education programs and assistance provided to residents living adjacent to the natural areas on an ongoing basis and are reported annually through the Council IP&R process Increase in residents engaging in opportunities to join backyard bush friendly programs such as Greenstyle and ClimateWise Number of multi-language welcome packs distributed to residents adjacent to natural areas Number of water smart and creek smart programs targeted to urban interface properties of natural areas where water impacts are greatest	Environment & Sustainability Operations
4.3 Residents are actively engaged in actions to improve biodiversity outcomes within natural area reserves	Continue to promote and support Council's Volunteer for Nature program through staff supervision, volunteer training, materials and plants	Number of active Volunteer for Nature members and/or groups are maintained or increased Volunteer hours and retention rates are maintained or increase	Environment & Sustainability
4.4 Partnerships to improve biodiversity outcomes with adjoining landholders, government agencies, regional Councils, and other stakeholders are promoted and maintained	 Continue to partnership and work with adjoining landholders, regional Councils, government agencies and other stakeholders to coordinate: weed control, mitigation and education through the Greater Sydney Regional Weeds Committee invasive animal species control through the Sydney North Vertebrate Pest Committee management issues such as recreational access through the North Sydney Regional Land Managers Group 	Number of committees or groups that Council actively manage to provide networking and knowledge are maintained or increased Staff attend joint or regional Committee meetings on a regular basis as required	Environment & Sustainability Operations

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	 relevant catchment management issues through the Hawkesbury-Nepean Catchment Management Authority recreational user groups/networks, engaging and partnering in activities to sustainably maintain appropriate assets 		
4.5 Co-operative arrangements and engagement with educational institutions such as schools and universities are developed to deliver educational programs or carry out research within natural areas	Seek opportunities to engage educational institutions in research and educational programs related to the natural areas	Council actively offers use of the natural areas as a natural laboratory to PhD and other research students from Sydney universities Natural areas actively promoted as natural classrooms to local schools	Environment & Sustainability
4.6 Co-operative arrangements and engagement with industry groups and not-for-profit organisations are encouraged to sponsor Council in achieving sustainable outcomes for natural areas	Seek opportunities to engage industry groups and not-for-profit organisations to sponsor programs to enhance natural areas	Sponsorship for environmental programs from industry groups and not- for-profit organisations delivered	Environment & Sustainability

Table 10.5 PRIOR	ITY 5: CONSERVE AND MANAGE NATURAL, CULTURAL AND AESTH INCLUDING ABORIGINAL AND NON-ABORIGINAL HERITAGE ITE		
Performance Target	Means of Achievement	Performance Assessment	Responsible Team
5.1 Aboriginal objects and/or Aboriginal places are protected and conserved as part of the living landscape and potential damage prevented	 Aboriginal objects or Aboriginal places are protected from activities within natural areas by: restricted access to Aboriginal heritage data Council works consider impacts to Aboriginal relics, with potential Aboriginal heritage sites referred to the Aboriginal Heritage Office for assessment implementing measures to restrict or otherwise manage public access to prevent impact to heritage items and culturally sensitive areas and install signage to inform and educate where appropriate 	No loss or damage to Aboriginal heritage items and culturally sensitive areas occurs in natural areas	Environment & Sustainability Operations
5.2 Non-aboriginal heritage items are protected and conserved as part of the living landscape and potential damage prevented	 Non-aboriginal heritage items are protected from activities within natural areas by: referral of potential heritage items to the Council's Heritage Officer for assessment implementing measures to restrict or otherwise manage public access to prevent impact to heritage items; and install signage to inform and educate where appropriate 	No loss or damage to non-aboriginal heritage occurs in natural areas	Environment & Sustainability Operations
5.3 Council considers Aboriginal peoples' rights and interests in land and waters, held in accordance with their traditional laws and customs through the Crown Land Management Act 2016 and the Native Title Act 1993	Council works address Native Title requirements under the Crown Land Management Act 2016 and the Native Title Act 1993	Native Title assessments are undertaken for all relevant proposals	Environment & Sustainability Operations
5.4 Aesthetic landscape values including geomorphic, geological and scenic features are conserved and are not adversely affected	Landscape values are protected from activities within natural areas by implementing visitor management measures (e.g., access management, education and interpretation) as necessary to help protect valuable features Undertake baseline mapping of features to gain current condition information	Monitoring of valuable features such as geological sites on a biannual basis to ensure no adverse damage from baseline conditions	Environment & Sustainability Operations

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Table 10.6 PRIORITY 6: IMPLEME	ENT MEASURES TO MINIMISE AND MANAGE IMPACTS TO NATURAL	AREAS FROM THREATS AND PRESSURES	
Performance Target	Means of Achievement	Performance Assessment	Responsible Team
6.1 Natural area reserves are subjected to integrated pest management for invasive species of flora and fauna to reduce the impact on biodiversity and ecosystems	Continue targeted removal of State or Regional Priority Weeds, as listed under the NSW <i>Biosecurity Act 2015</i> or the Greater Sydney Regional Weed Management Plan and the Local Priority Weed List. Ecological restoration programs and bush regeneration activities will assess and treat all weed species present within natural areas based on their threat to site values Continue to manage feral and domestic animals in accordance with the Fauna Management Policy 2016 and the objectives specified in the OEH Threat Abatement Plans	Weed control and bush regeneration reporting by contractors and staff teams are submitted monthly and reviewed annually to ensure contract objectives are met with improved ecosystem resilience and no net loss of habitat Feral animal control reporting by contractors and staff are submitted regularly and reviewed annually to ensure contract objectives are met	Operations
6.2 Natural area reserves are protected from new incursions of pathogens and current pathogen infected areas are maintained to prevent further spread	Council to assess suspected pathogen infected areas, with testing results mapped within Council's corporate GIS system, informing Council land management Council staff, volunteers and contractors are to be aware of current pathogen infected areas and comply with pathogen hygiene protocols Implementing measures to restrict or otherwise manage public access pathogen affected areas to prevent further spread including signage or barriers where appropriate	Number of pathogen affected areas investigated and mapped, including positive and no-positive target pathogen ID Pathogen affected areas are monitored with no importation or spread of pathogens within the natural areas that is attributable to Council staff or volunteers or public	Operations Environment & Sustainability
6.3 Natural area reserves are managed on the urban interface boundary to reduce the human impact on the natural environment and improve the condition of Council's bushland and waterways	Continue to manage the urban interface in accordance with the Bushland Dumping and Encroachment Policy Plant native vegetation as a buffer or 'exclusion zone' to delineate boundaries and protect natural bushland at the periphery of open space areas such as sports grounds and parks Install fencing or bollards at hotspots where littering and dumping have become a problem or to prevent unauthorised access to tracks Ensure Council's mowing activities and contracts within and along the bushland interface do not conflict with the management of adjoining bushland Implement strategies in accordance with the Water Sensitive Cities Policy 2016 to minimise stormwater and overland flow impacts Fire management areas and asset protection zones are maintained for access by relevant agency personnel and vehicles	Dumping and encroachments in Council's bushland reserves are monitored and resolved through Council's request management system and incidents are managed to reduce or remove impacts and the results reported Illegal dumping hotspots are monitored, and dumped material is cleaned up quickly. Further action is taken if appropriate and cost effective Dumping and encroachment actions are reported annually through Council's IP&R process	Environment & Sustainability Operations
6.4 Natural area reserves are protected from inappropriate access for cultural, recreational and management purposes that may impact on environmental values	Continue to manage recreational impacts in accordance with the Recreation and Natural Areas Strategy 2020 including implementing reserve booking processes and templates Identify and monitor the number and severity of illegal tracks and remove unauthorised tracks and jumps as soon as practically possible on a priority basis to discourage further activity Where necessary, undertake regulatory patrols and action to address unauthorised activities in bushland reserves, including: unauthorised recreational activities (e.g., trail bikes, off leash dog walking); dumping; and	Unauthorised tracks and jumps are identified, assessed and prioritised as soon as practically possible and logged in Council's request management system for action	Operations Environment & Sustainability

constructions (unauthorised tracks and jumps within Council reserve)		
Identify and monitor the least resilient natural areas that may be impacted by climate change including increased heat and drought, fire intensity and flooding	Natural areas most vulnerable to climate change impacts are identified and plans and resources are allocated to these areas within three years	Operations Environment & Sustainability

Table 10.7 PRIORITY 7: PROV	IDE SUSTAINABLE PUBLIC ACCESS AND RECREATIONAL OPPORT	UNITIES IN APPROPRIATE LOCATIONS	
Performance Target	Means of Achievement	Performance Assessment	Responsible Team
7.1 Natural area reserves are managed to provide sustainable public access with no loss of habitat and biodiversity vales	Continue to manage public access in accordance with the Recreation and Natural Areas Strategy 2020 All new tracks, trails and relevant maintenance activities on existing tracks comply with Australian Standard on Walking Track Classification and Signage and RFS Fire Trail Standards Maintain Council's track and trail asset register (linked to Council's GIS) including locations, erosion and sedimentation control devices, permissible use and condition	All new tracks, trails and relevant maintenance activities on existing tracks are compliant with relevant standards Unauthorised tracks and jumps are identified, assessed and prioritised as soon as practically possible and logged in Council's request management system for action	Operations Environment & Sustainability
7.2 Natural area reserves are managed to provide sustainable recreational opportunities and activities with no loss of habitat and biodiversity vales	Continue to manage recreational activities in accordance with the Recreation and Natural Areas Strategy 2020 Develop and manage booking procedures and guidelines for recreational activities in natural area reserves including orienteering, rogaining, rock climbing, abseiling, and mountain biking Investigate the feasibility of providing some basic visitor infrastructure (e.g., installation of shelter and interpretive facilities) to cater for activities such as cultural ecotourism and wildlife appreciation if visitor demand increases and as resources allow	Booking procedures and guidelines for recreation activities are developed and activities monitored on an annual basis to ensure they are undertaken in accordance with guidelines	Environment & Sustainability
7.3 Natural area reserves are managed to ensure commercial tourism and recreational activities are compatible with the purpose of the reserve and have minimal impact on habitat or biodiversity values	Ensure commercial tourism activities are subject to appropriate leases or licence conditions that protect environmental values	Commercial guidelines are developed, and activities monitored to ensure they are undertaken in accordance with guidelines	Environment & Sustainability

Performance Target	Means of Achievement	Performance Assessment	Responsible Team	
8.1 Natural area reserves are protected from new development within and on adjoining lands by environmental planning instruments and policies that contain biodiversity controls and mitigation measures that lead to minimal environmental impacts within natural areas	 Include and enforce compliance with biodiversity controls and pollution mitigation measures on development sites adjacent bushland reserves Where relevant include the following options as part of conditions of consent: require identification and removal of existing weeds require an integrated weed management strategy for treatment of weeds on the site in perpetuity landscaping, pollution and erosion control measures offsetting either in-situ or off site Bushfire Protection Measures (i.e., APZs) are located on/within the development footprint unless agreed upon by Council Ensure that the design of built areas, access roads and paths, within and adjoining bushland, include water sensitive urban design, appropriate erosion and sedimentation controls and consist of sympathetic construction materials where feasible 	Developments adjacent to bushland reserves incorporate adequate control measures that are monitored and enforced by Council	Environment & Sustainability Development Assessment	
8.2 The use of current buildings, property and organised activities within natural area reserves are sustainable and lead to minimal environmental impacts	Ensure that, new and where possible renovated buildings in bushland reserves are assessed and if approved, are consistent with relevant bushfire requirements as well as other regulatory building codes and sustainable building practices Consider relocation of built assets to areas outside bushland where appropriate and carry out where resources permit	New and renovated buildings in bushland reserves are consistent with the requirements of Planning for Bushfire Protection 2006 Relocation of built assets to areas outside bushland where resources permit	Environment & Sustainability Property	
8.3 Natural area reserves benefit from Council's increased capacity for good quality decision making and adaptive management processes	Council staff continue assessing environmental programs and actions (learning by doing) to measure continuous improvement in ecological outcomes Staff direct resources to the management actions that are most likely to be effective at achieving specified objectives Provision of staff training by either external or in-house trainers on effective environmental management actions and monitoring results to increase staff knowledge and capacity	Staff training on relevant environmental issues and management techniques undertaken on a yearly basis as required	Environment & Sustainability Operations	

Table 10.9 PRIORITY 9	AUTHORISE LEASES, LICENCES AND OTHER ESTATES THAT PRO SYMPATHETIC TO BIODIVERSITY AND ENVIRONMENTAL		
Performance Target	Means of Achievement	Performance Assessment	Responsible Team
9.1 The policies for use of current buildings, property and organised activities within natural area reserves are sustainable and result in minimal environmental impacts	Develop standard and contextualised guidelines for lease agreements and licence conditions that require lessees in bushland to minimise physical impacts and where relevant to manage bushland on each site and its surrounds Develop and provide an information package for user groups giving advice on the requirements of their permits/lease and how to minimise impact on surrounding bushland. Undertake compliance inspections of lessee / licence as required by lease conditions	Standard and contextualised guidelines to minimise environmental impact is developed and included in new and renewed lease agreements Environmental information package for user groups is developed and distributed to user groups when new leases are granted or renewed Regular lease inspection regime undertaken on a three year cycle	Environment & Sustainability Property

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Appendix A – Site including Further categorisation of the Ku-ring-gai Natural Areas

 Table A1
 Sub categorisation of the Ku-ring-gai Natural Areas

Site Name	LMU No	LMU Name	Location	Natural area further category	Lot No.	Plan No.	Crown reserve No.	Crown reserve name	Crown reserve purpose	Owners	Crown land management
Acron Oval	93	Douglas Street Reserve	cnr. Acron Road and Douglas Street	Bushland	Part 567	752031	88492	Acron Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Acron Oval	93			Bushland	815	752031	88492	Acron Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Acron Oval	93			Bushland	Part 483	752031	88492	Acron Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Acron Oval	93			Bushland, Watercourse	Part 7011	1058598	88492	Acron Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Acron Oval	93			Bushland	7072	1060396	88492	Acron Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Airman's Park	234	Airman's Bush	adjacent to no.138 Bradfield Road east to Lady Game Drive	Bushland, Watercourse	2	216379				Council	
Albert's Bush	312	Albert's Bush	between nos.69-73 Albert Drive	Bushland, Watercourse	61	31533				Council	
Aleta End	337	Aleta End	no.20 Morona Avenue	Bushland, Watercourse	482	14590				Council	
Aleta End	337		/	Bushland, Watercourse	488	14590				Council	
Ashley Grove Reserve	343	Ashley Grove Reserve	cnr. Mt. William Street and Ashley Grove	Watercourse	13	17166				Council	
Bannockburn Oval	72	Bannockburn Bush	cnr. Station Street and Birubi Avenue	Watercourse	67	17108				Council	
Barra Brui Oval	135	Barra Brui Bush	cnr. Hunter Avenue Yarrabung Road and south towards Burraneer Avenue	Bushland, Watercourse	Part 7318	1158573	88493	Barra Brui Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM

Barra Brui Oval	303	Burraneer Avenue	2A Burraneer Avenue	Bushland	Part 825	752031	86634	Barra Brui Community Centre	Community Centre	Crown	Ku-ring-Gai Council CLM
Barra Wood	104	Barra Wood	next to no.43 Yarrabung Road	Bushland, Watercourse	56	29999				Council	
Billy Hughes Park	63	Billy Hughes Park	between Forde Place and Scullin Place	Bushland			89535	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Blackburn Street Reserve West	85	Blackburn Street Reserve West	12A Blackburn Street	Bushland, Watercourse	40	228699				Council	
Blackbutt Park	78	Blackbutt Park	nos.5b and 5c Ganmain Road	Bushland	7	248260				Council	
Blackbutt Park	78			Bushland	69	255536				Council	
Blackbutt Reserve	299	Blackbutt Reserve	cnr. Ryde Rd and Lady Game Dr to Craiglands Ave and to St Johns Ave and behind Spencer St	Bushland, Watercourse	1	33934				Council	
Blackbutt Reserve	299			Bushland, Watercourse	1	1115862				Council	
Blackbutt Reserve	299			Bushland, Watercourse	5	242522				Council	
Blackbutt Reserve	299			Bushland, Watercourse	9	807335				Council	
Blackbutt Reserve	299			Bushland, Watercourse	13	24333				Council	
Blackbutt Reserve	299			Bushland, Watercourse	16	239314				Council	
Blackbutt Reserve	299			Bushland, Watercourse	25	12853				Council	
Blackbutt Reserve	299		/	Bushland, Watercourse	29	807335				Council	
Blackbutt Reserve	299			Bushland, Watercourse	35	239198				Council	

Blackbutt Reserve	299			Bushland, Watercourse	260	27290	Council
Blackbutt Reserve	299			Bushland, Watercourse	263	585205	Council
Blackbutt Reserve	299			Bushland, Watercourse	В	434024	Council
Blue Gum Creek Reserve	334	Blue Gum Creek Reserve	behind Alison Street and Bluegum Place along Blue Gum Creek	Bushland, Watercourse	1	525223	Dept of Planning
Blue Gum Creek Reserve	334			Bushland, Watercourse	5	240691	Council
Blue Gum Creek Reserve	334			Bushland, Watercourse	15	15267	Council
Blue Gum Creek Reserve	334			Bushland, Watercourse	441	663390	Council
Blue Gum Creek Reserve	335	Blue Gum Creek Reserve	behind nos.23 25 and 27 Glen Road along Blue Gum Creek	Watercourse	15	17798	Council
Boatshed Bush	204	Boatshed Bush	end of Normac Street cnr. Boundary Street	Bushland, Watercourse	1	311962	Council
Boatshed Bush	204			Bushland, Watercourse	87	13450	Council
Boatshed Bush	204			Bushland, Watercourse	88	13450	Council
Boatshed Bush	204		/	Bushland, Watercourse	89	13450	Council
Bradfield Road Public Reserve	1051	Bradfield Road Public Reserve	100 Bradfield Road Lindfield	Bushland	31	1088187	Council
Bradley Park	236	Bradley Park	Western end of Kissing Point Rd north to end Aleta Cl east to Comenarra and north to Terrell Ave	Bushland, Watercourse	1	220332	Council
Bradley Park	236			Bushland, Watercourse	1	217243	Council
Bradley Park	236			Bushland	1 sec 1	1791	NPWS

Bradley Park	236			Bushland, Watercourse	1	1193230		Council
Bradley Park	236			Bushland	2	747126		NPWS
Bradley Park	236			Bushland	2	747125		NPWS
Bradley Park	236			Bushland, Watercourse	2	211679		Council
Bradley Park	236			Bushland, Watercourse	2 sec 1	1791	~	Council
Bradley Park	236			Bushland	3 - 35	1791		Council
Bradley Park	236			Bushland, Watercourse	3	1193230		Council
Bradley Park	236			Bushland, Watercourse	4	1193230		Council
Bradley Park	236			Bushland, Watercourse	4	747125		Council
Bradley Park	236			Bushland, Watercourse	12	240284		Council
Bradley Park	236			Bushland, Watercourse	14	752031		Council
Bradley Park	236			Bushland, Watercourse	21 sec 2	1791		Council
Bradley Park	236			Bushland	266 - 485	14590		Council
Bradley Park	236		/	Bushland, Watercourse	363	235338		Council
Browns Bush	220	Browns Bush	behind nos.76-90 Browns Road	Bushland, Watercourse	3	229636		Council
Browns End	219	Browns End	end of Browns Road north to behind nos.93-109 and south to end of Beltana Place	Bushland, Watercourse	17	224915		Council
Browns End	219			Bushland, Watercourse	0	752031		Council

Browns Field	224	Lower Campbell Reserve	cnr. Bogan Place and Campbell Drive south to Nerang Street	Bushland, Watercourse	127	224722				Council	
Browns Field	224			Bushland, Watercourse	128	224722				Council	
Browns Field	224			Bushland, Watercourse	96	222612				Council	
Browns Forest	111	Browns Forest	no.119A Mona Vale Road northern side of Dalrymple-Hay Nature Reserve	Bushland, Watercourse	12	17431				Council	
Browns Forest	111			Bushland, Watercourse	6	17431				Council	
Bryce Bush	119	Bryce Bush	end of Torrens Street	Bushland	27	215821				Council	
Bryce Bush	119			Bushland	Part 818	752031	87271	Bryce Oval	Public Recreation	Crown	Ku-ring-Gai Council CLM
Burrows Grove	274	Burrows Grove	8A Grayling Road West Pymble	Bushland	191	15639				Council	
Bushranger Reserve	137	Bushranger Reserve	no.102 Eastern Arterial Road south-west to Birdwood Avenue	Bushland, Watercourse	480	752031	63623	Koola Reserve	Public Recreation	Crown	Ku-ring-Gai Council CLM
Bushranger Reserve	137			Bushland	Part 477	752031	63623	Koola Reserve	Public Recreation	Crown	Ku-ring-Gai Council CLM
Bushranger Reserve	137						73323	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Bushranger Reserve	137		/				73323	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Bushranger Reserve	137		/	Bushland	7312	1153922	63623	Koola Reserve	Public Recreation	Crown	Ku-ring-Gai Council CLM
Cambourne East Reserve	150	Cranbourne Path	Next to no.36 Cambourne Avenue	Bushland			89050	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Cambourne North Reserve	87	Cambourne North Reserve	next to no.2 Cambourne Avenue	Bushland			89049	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council

Cardigan Reserve	359	Cardigan Reserve	between Cardigan Road and Chase Avenue	Bushland, Watercourse	115	1153781	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Cardigan Reserve	359			Bushland, Watercourse	116	1153781	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Cardigan Reserve	359			Bushland	Part 7318	1163995	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Clive Evatt Reserve	49	Clive Evatt Reserve	cnr. Eastern and Burns Roads	Bushland, Watercourse	6	8831				Council	
Clive Evatt Reserve	49			Bushland, Watercourse	7	8831				Council	
Clive Evatt Reserve	49			Bushland, Watercourse	8	8831				Council	
Clive Evatt Reserve	49			Bushland, Watercourse	5	8831				Council	
Comenarra Creek Reserve	261	Comenarra Creek Reserve	between 44 and 46 Comenarra sw to Wallalong Cr then west to southern end of Kissing Point Rd	Bushland, Watercourse	1	445496				Council	
Comenarra Creek Reserve	261			Bushland, Watercourse	1	443820				Council	
Comenarra Creek Reserve	261			Bushland, Watercourse	2	876378				Council	
Comenarra Creek Reserve	261			Bushland, Watercourse	9	30642				Council	
Comenarra Creek Reserve	261		/	Bushland, Watercourse	3	815999				Council	
Comenarra Creek Reserve	261		/	Bushland, Watercourse	281	228604				Council	
Comenarra Creek Reserve	261			Bushland, Watercourse	2	445496				Council	
Comenarra Creek Reserve	261		/	Bushland, Watercourse	14A	26062				Council	
Comenarra Creek Reserve	261			Bushland, Watercourse	34	203481				Council	

Comenarra Creek Reserve	261			Bushland, Watercourse	63	665141	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	A	17300	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	56	220784	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	16	18318	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	11	18318	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	109	222236	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	251	225067	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	275	16943	Council
Comenarra Creek Reserve	261			Bushland, Watercourse	1	343196	Council
Comenarra Playing Field	253	Comenarra Bush	cnr. Forwood Avenue and Nimbrin/Unnamed Rds to behind nos.21-31 Carina Road	Bushland	280	228604	Council
Comenarra Playing Field	253			Bushland	82	28082	Council
Comenarra Playing Field	253		/	Bushland, Watercourse	47	232372	Council
Cowan Creek Reserve	35	Cowan Creek Reserve	north side of Burns Road between Killeaton Street and Spurwood Road north to end of Dalton Road	Bushland, Watercourse	1	714943	Council
Cowan Creek Reserve	35			Bushland, Watercourse	1	525311	Council
Cowan Creek Reserve	35			Bushland, Watercourse	1	518270	Council

Cowan Creek Reserve	35		Bushland, Watercourse	1	507667		Council
Cowan Creek Reserve	35		Bushland, Watercourse	1	325887		Council
Cowan Creek Reserve	35		Bushland, Watercourse	1	184498		Council
Cowan Creek Reserve	35		Bushland, Watercourse	2	554066	~	Council
Cowan Creek Reserve	35		Bushland, Watercourse	2	211716		Council
Cowan Creek Reserve	35		Bushland, Watercourse	3	550001		Council
Cowan Creek Reserve	35		Bushland, Watercourse	4	550001		Council
Cowan Creek Reserve	35		Bushland, Watercourse	4	220563		Council
Cowan Creek Reserve	35		Bushland, Watercourse	6	220562		Council
Cowan Creek Reserve	35		Bushland, Watercourse	6	232219		Council
Cowan Creek Reserve	35		Bushland, Watercourse	9	211531		Council
Cowan Creek Reserve	35		Bushland, Watercourse	12	237567		Council
Cowan Creek Reserve	35	1	Bushland, Watercourse	17	222571		Council
Cowan Creek Reserve	35		Bushland, Watercourse	22	809361		Council
Cowan Creek Reserve	35		Bushland, Watercourse	22	253514		Council
Cowan Creek Reserve	35		Bushland, Watercourse	31	555798		Council

Cowan Creek Reserve	35			Bushland, Watercourse	33	214568				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	35	218785				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	62	15578				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	210	616965		/		Council	
Cowan Creek Reserve	35			Bushland, Watercourse	327	752031				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	344	752031				Council	
Cowan Creek Reserve	35			Watercourse	876	721541	100093	Turramurra North Public Recreation	Public Recreation	Crown	Ku-ring-Gai Council CLM
Cowan Creek Reserve	35			Bushland, Watercourse	В	404977				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	С	384164				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	С	378272				Council	
Cowan Creek Reserve	35			Bushland, Watercourse	Zero	72482				Council	
Cowan Creek Reserve	35		/	Bushland, Watercourse	A	414735				Council	
Crown Land - Holt Avenue	709	Crown Land - Holt Avenue	2A Holt Avenue North Wahroonga	Bushland	27	41042	100128	Wahroonga Park	Community purposes	Crown	Ku-ring-Gai Council CLM
Deburghs Drop	297	Deburghs Drop	Ryde Road near end of Lady Game Drive	Bushland	7300	1148529	1001359		Public Recreation	Crown	Ku-ring-Gai Council CLM
Deburghs Drop	297			Bushland	7301	1148529	1001359		Public Recreation	Crown	Ku-ring-Gai Council CLM
Delaney's Island	348	Delaney's Island	cnr. Burns Road Ellalong Road and Bedford Avenue	Bushland	2	534338				Council	

Derwent Reserve	64	Derwent Reserve	next to no.116 Boundary Road through to between 19 and 21 Derwent Avenue	Watercourse			97010	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Dingly Dell	101	Dingly Dell	no.16A Yarrabung Road east to Paul Avenue north of end of Grevillea Avenue	Bushland, Watercourse	97	16414				Council	
Drainage Reserve - Laurence Avenue	488	Drainage Reserve - Laurence Avenue	24 Laurence Avenue Turramurra	Watercourse	102	533073				Council	
Drainage Reserve - Wonga Drain	501	Drainage Reserve - Wonga Drain	8A Morona Avenue Wahroonga	Bushland, Watercourse	481	14590				Council	
Du Faur Reserve	8	Du Faur Reserve	end Du Faur Street	Bushland, Watercourse	27	710498				Council	
Duff Reserve	229	Duff Reserve	next to no.52 Duff Street	Watercourse	28	206712				Council	
Florey Avenue Reserve	75	Florey Avenue Reserve	2 Florey Avenue Pymble	Bushland	32	252197				Council	
Follies Park	188	Follies Park Scrub	corner Canberra Crescent and Melbourne Road	Bushland	657	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Follies Park	188			Bushland	658	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Follies Park	188			Bushland	659	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Founders Way	122	Founders Way	no.79A Hunter Avenue	Bushland			88802	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Fraser Park	362	Fraser Park	34 Boundary Road Wahroonga	Bushland, Watercourse	449	752031				Council	
Gearys Way	149	Gearys Way	corner of Wattle Street and Tasman Crescent Killara	Bushland, Watercourse	6	17967				Council	
Gibran Place Reserve	117	Gibran Place Reserve	cnr. Torokina Avenue and Gibran Place	Bushland	10	259286				Council	

Gibran Place Reserve	117			Bushland	13	584526	Council
Glengarry Annexe	342	Glengarry Annexe	cnr. Milton and Miowera Rds to next to no.10 Camden Gardens	Bushland, Watercourse	1	178980	Council
Golfers Glen	267	Golfers Glen	corner Greenway Drive and Courallie Avenue	Bushland	29	224474	Council
Golfers Glen	267			Bushland	48	224474	Council
Golfers Glen	267			Bushland	21	234342	Council
Gordon Glen	306	Gordon Glen Bush	behind park between nos.55-63 Dumaresq Street	Bushland, Watercourse	4	303309	Council
Gordon Glen	306			Bushland, Watercourse	3	303309	Council
Governor Phillip Reserve - East Gordon Park	132	Governor Phillip Reserve - East Gordon Park	next no.77 Rosedale Rd south- east to Eastern Arterial Road then west to Taylor Street	Bushland, Watercourse	2	613730	Council
Governor Phillip Reserve - East Gordon Park	132			Bushland, Watercourse	2	204102	Council
Governor Phillip Reserve - East Gordon Park	132			Bushland, Watercourse	7	1132073	Council
Governor Phillip Reserve - East Gordon Park	132			Bushland, Watercourse	9	24677	Council
Governor Phillip Reserve - East Gordon Park	132			Bushland, Watercourse	17	30011	Council
Governor Phillip Reserve - East Gordon Park	132			Bushland, Watercourse	18	30011	Council
Governor Phillip Reserve - East Gordon Park	132		/	Bushland, Watercourse	18	211114	Council

Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	21	233042				Council	
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	23	207230				Council	
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	36	226375		,		Council	
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	159	17131				Council	
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	167	17131				Council	
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	7015	93820	40655	East Gordon Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	7065	94233	40655	East Gordon Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	7015	1059446	40655	East Gordon Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132	/	Bushland, Watercourse	31 Sec 22	758058	40655	East Gordon Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	Part 386	752031	40655	East Gordon Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	7016	93774	87097	Gordon East Public Reserve	Public Recreation	Crown	Ku-ring-Gai Council CLM
Governor Phillip Reserve - East Gordon Park	132		Bushland, Watercourse	163	17131				Council	

Grannys Springs	227	Grannys Springs	rear 1380 Pacific Highway between Duff Street and Kissing Point Road west to no.22A Duff Street	Bushland, Watercourse	1	807766	Council
Grannys Springs	227			Bushland, Watercourse	2	550866	Council
Grannys Springs	227			Bushland, Watercourse	2	215790	 Council
Grannys Springs	227			Bushland, Watercourse	10	538564	Council
Grannys Springs	227			Bushland, Watercourse	9	538564	Council
Grannys Springs	227			Bushland, Watercourse	102	714988	Council
Grannys Springs	227			Bushland, Watercourse	11	738462	Council
Gwydir Trail	458	Gwydir Trail	between no.25 and no.32 Gwydir Avenue through to reserve	Bushland	-	213027	Council
Halls Reserve	41	Halls Reserve	cnr Barwon and Nancy Bird Avenue South Turramurra	Bushland, Watercourse	27	1178913	Council
Hammond Reserve	270	Hammond Reserve	Ryde Road between Nadene Place and West Street behind Penryhn Avenue	Bushland, Watercourse	2	319653	Council
Hammond Reserve	270		/	Bushland, Watercourse	2	617139	Council
Hammond Reserve	270			Bushland, Watercourse	2	585648	Council
Hammond Reserve	270			Bushland, Watercourse	3	599947	Council
Hammond Reserve	270			Bushland, Watercourse	51	633275	Council
Hammond Reserve	270			Bushland, Watercourse	212	1073391	Council

Hayle Street Reserve	88	Hayle Street Reserve	no.65 Athena Avenue	Bushland			88010	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Hassall Park	868, 869	Hassall Bush North	corner Hassel and Palm Streets St lves	Bushland	7010	93761	28761	Hassell Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Harry Seidler Reserve	965			Bushland, Watercourse	1	317938				Council	
Harry Seidler Reserve	965		/	Bushland, Watercourse	21A	4886				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	34	16006				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	9	1094751				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	8 Sec 5	3400				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	7 Sec 5	3400				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	6 Sec 5	3400				Council	
Harry Seidler Reserve	965			Bushland, Watercourse	3	1104627				Council	
Harry Seidler Reserve	965			Bushland	2	1104627				Council	
Harry Seidler Reserve	965	Harry Seidler Reserve	Wattle Street between Kylie and Kalang Avenues north to no 35 Illeroy Avenue	Bushland, Watercourse	1	1104627				Council	
Hampshire Bush	293	Hampshire Bush	behind end of Hampshire Avenue	Bushland, Watercourse	228	220751				Council	
Hammond Reserve	270			Bushland, Watercourse	1	319653				Council	
Hammond Reserve	270			Bushland, Watercourse	В	327474				Council	

Holmes Street Reserve	226	Holmes Street Reserve	between Holmes Street and Finlay Road behind no.45-57 Monteith Street	Bushland, Watercourse	11	14173				Council	
Holmes Street Reserve	226			Bushland, Watercourse	18	229779				Council	
Huntleys Forest	108	Huntleys Forest	behind nos.12-18 Dorset Drive	Bushland, Watercourse	45	31011				Council	
lvor Wyatt Reserve	96	Ivor Wyatt Reserve	no.259 Mona Vale Road cnr. Link Road	Bushland	7	27216		/		Council	
Jacana Reserve	53	Jacana Reserve	9 Jacana Close Wahroonga	Bushland	16	700720				Council	
Jacana Reserve	53		76 Clissold Road Wahroonga	Bushland	9	700720				Council	
Kalang Reserve	140	Kalang Reserve	Illeroy Avenue Killara	Bushland, Watercourse	104	17647				Council	
Killara Park	368	Killara Park Bush	72A Springdale Road Killara	Bushland	Part 236	752031	15419	Killara Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Kimberly's Way	160	Kimberly's Way	between No.118 and No 120 Koola Avenue	Bushland			88700	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Kinkell Brae	205	Kinkell Brae	19 Allard Road Roseville Chase	Bushland, Watercourse	16	13450				Council	
Kinkell Brae	205			Bushland, Watercourse	17	13450				Council	
Kinkell Brae	205		/	Bushland, Watercourse	15	13450				Council	
Kissing Park	260	Kissing Park	Kissing Point Road opposite nos.338-344	Bushland, Watercourse	5	229165				Council	
Ku-ring-gai Creek Reserve	27	Ku-ring-gai Creek Reserve	junction of Toolang and Ayres Rds north to Ku-ring-gai Wildflower Garden	Bushland, Watercourse, Wetland	3	235543				Council	
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse			74029	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council

Ku-ring-gai Creek Reserve	27		Bushland, Watercourse			74029	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse			74029	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse			68222	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	2	505480				Council	
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	1	121246				Council	
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	37	226849				Council	
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	5	32763				Council	
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	x	416958				Council	
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	23	232489				Council	
Ku-ring-gai Creek Reserve	27		Bushland	689	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27	/	Bushland, Watercourse	688	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27	/	Bushland	7058	1123915	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27		Bushland, Watercourse	1	235543				Council	
Ku-ring-gai Creek Reserve	27		Bushland	7057	1123915	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27		Bushland	628	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM

Ku-ring-gai Creek Reserve	27			Bushland, Watercourse	604	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse	627	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse	605	752031	100070	St Ives North Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse	626	752031		<u></u>		Council	
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse	6	231585				Council	
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse			68222	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Ku-ring-gai Creek Reserve	27			Bushland, Watercourse			68222	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Kylie Walk	357	Kylie Walk	between nos.9-11 Illeroy Avenue	Watercourse	33	16006				Council	
Lady Blaxland Reserve	785	Lady Blaxland Reserve	adjacent to no.1 Blaxland Road	Bushland	1	1115862				Council	
Laura Houison Osborne Sanctuary	217	Laura Houison Osborne Sanctuary	between 28 and 30 Marshall Avenue through to between 29 and 37 Blytheswood Avenue	Bushland, Watercourse	2	502979				Council	
Lennox Street Reserve	356	Lennox Street Reserve	1 Taylor Street Gordon	Bushland, Watercourse	158	17131				Council	
Lindfield Soldiers' Memorial Park	162	Lindfield Soldiers' Memorial Park	Eastern Arterial Rd opp. Clarke Pl east to end Springdale Rd sth to Loombah Ave sw to Tryon Rd	Bushland, Watercourse, Escarpment	200	17450	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lindfield Soldiers' Memorial Park	162			Bushland, Watercourse	217	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lindfield Soldiers' Memorial Park	162			Bushland, Watercourse	7039	93845	41399	Lindfield Soldiers	Public Recreation	Crown	Ku-ring-Gai Council CLM

						Memorial Park			
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	234	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
∟indfield Soldiers' Memorial Park	162	Bushland, Watercourse	235	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	216	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	7316	1157421				Council	
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	215	752031				Council	
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	1	1180328				Council	
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	172	752031				Council	
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	3	182465				Council	
Lindfield Soldiers' Memorial Park	162	Bushland, Watercourse	Part 156	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
∟indfield Soldiers' Memorial Park	162	Bushland, Watercourse	Part 155	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM

Lindfield Soldiers' Memorial Park	162			Bushland, Watercourse	Part 154	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Linigen Reserve	84	Linigen Reserve	no.7A Linigen Place	Bushland, Watercourse	27	225666				Council	
Linigen Trail	481	Linigen Trail	between no.4 and no.6 Linigen Place through to Garigal National Park	Bushland	-	-				Council	
Little Digger Park	189	Amarna Reserve	Roseville Avenue between Luxor Parade and Amarna Parade north-west to Roseville Golf Club boundary	Watercourse	PARK	12083				Council	
London Reserve	136	London Reserve	between 86 and 88 Arterial Road through to Burraneer Avenue	Bushland	862	752031				Council	
Lovers Jump Creek Reserve	1	Lovers Jump Creek Reserve	next 158 Burns Rd north to end Clissold Rd west to cnr. Boundary Rd and Lister Street	Bushland, Watercourse, Escarpment	7311	1158394	500217	Golden Jubilee Field	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lovers Jump Creek Reserve	1			Bushland, Watercourse	1	509676				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	540	752031				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	545 - 549	752031				Council	
Lovers Jump Creek Reserve	1		/	Bushland, Watercourse	Part 7312	1158394	91141	Wahroonga Recreation	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lovers Jump Creek Reserve	1		/	Bushland	Part 478	752031	91141	Wahroonga Recreation	Public Recreation	Crown	Ku-ring-Gai Council CLM
Lovers Jump Creek Reserve	1			Bushland, Watercourse	8	253642				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	1	617020				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	1	616513				Council	

Lovers Jump Creek Reserve	1		Bushland, Watercourse	2	617020		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	27	219479		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	10	229108		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	5	229108	/	Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	7	223918		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	12	223364		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	29	208832		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	27	30833		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	В	383272		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	43	8831		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	42A	326799		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	42B	326799		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	2	200952		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	21	224353		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	9	224639		Council
Lovers Jump Creek Reserve	1		Bushland, Watercourse	2	231949		Council

Lovers Jump Creek Reserve	1	Bushland, Watercourse	7	251746	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	1	500227	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	2	503531	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	11	578126	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	D	326332	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	103	233941	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	7	260372	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	5	23571	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	3	613354	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	1	705813	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	1	706794	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	52	774948	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	7	559751	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	59	580696	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	61	581446	Council
Lovers Jump Creek Reserve	1	Bushland, Watercourse	63	630391	Council

Lovers Jump Creek Reserve	1			Bushland, Watercourse	321	595957				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	Y	414698				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	41	617188				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	43	594819				Council	
Lovers Jump Creek Reserve	1			Bushland, Watercourse	3	502606				Council	
Lower CSIRO Bush	341	Lower CSIRO Bush	corner Lady Game Drive and Somerset Road	Bushland, Watercourse	2	114681	/			Council	
Lower CSIRO Bush	341			Bushland, Watercourse	1	114681				Council	
Lower Dam Forest	264	Lower Dam Forest	between nos.49 and 51 The Comenarra Parkway north-east to and including Unnamed Road	Bushland, Watercourse	250	225067				Council	
Lower Paddys Forest	329	Lower Paddys Forest	between Highfield Road and Polding Road adjacent to no.1 Polding Road	Bushland, Watercourse	101	564479				Council	
Lower Paddys Forest	329			Bushland, Watercourse			70014	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Loyal Henry Park	786	Loyal Henry Park	end Bayswater Road	Bushland, Watercourse	2	217493				Council	
Lynbara Avenue Reserve	109	Lynbara Avenue Reserve	no.37A Lynbara Road south to next to no.41 Eucalyptus Close	Bushland, Watercourse	51	226823				Council	
Lynbara Avenue Reserve	109			Bushland, Watercourse	57	225260				Council	
Lynbara Avenue Reserve	109			Bushland, Watercourse	111	230979				Council	

Lynbara Avenue Reserve	109			Bushland, Watercourse	86	230999	Council
Lynbara Avenue Reserve	109			Bushland, Watercourse	108	517837	Council
Lynbara Avenue Reserve	109			Bushland, Watercourse	109	517837	Council
Maddison Common	68	Merrivale Bush	no.95A Merrivale Road	Bushland, Watercourse	5 Sec 5	13451	Council
Maddison Common	68			Bushland, Watercourse	13	25070	Council
Maddison Common	68			Bushland, Watercourse	15	26429	Council
Mashmans Quarry Reserve	110	Mashmans Quarry Reserve	next to no.21 Horace Street north to behind no.49 Alvona Avenue	Bushland	58	246138	Council
McIntosh Park	83	McIntosh Park	eastern end of Richmond Avenue	Bushland, Watercourse	18	14679	Council
Middle Campbell Reserve	223	Middle Campbell Reserve	between nos.50-68 Campbell Drive excluding nos.56 and 62	Watercourse	583	230814	Council
Milkmaids Reserve	37	Milkmaids Reserve	no.19A Ellalong Road	Bushland, Watercourse	A	36774	Council
Drainage Reserve - Minns Road	762	Minns Road - Drainage Reserve	8A Minns Road Gordon	Watercourse	6	242900	Council
Drainage Reserve - Minns Road	762			Watercourse	1	115175	Council
Drainage Reserve - Minns Road	762			Watercourse	2	115175	Council

Moonas End	241	Moonas End	cnr.Fox Valley Road and The Broadway	Bushland	477	14590	Council
Moores Creek Reserve	183	Moores Creek Reserve	eastern end of Wellington Road south to Chase Road and Ormonde Road west to end of Carnarvon Road	Bushland, Watercourse, Wetland, Foreshore	1	304774	Council
Moores Creek Reserve	183			Bushland, Watercourse	2	304774	Council
Moores Creek Reserve	183			Bushland, Watercourse	3	304774	Council
Moores Creek Reserve	183			Bushland, Watercourse	4	304774	Dept of Planning
Moores Creek Reserve	183			Bushland, Watercourse	5	304774	Council
Moores Creek Reserve	183			Bushland, Watercourse	1	7299	Council
Moores Creek Reserve	183			Bushland, Watercourse	2	7299	Council
Moores Creek Reserve	183			Bushland, Watercourse	3	7299	Council
Moores Creek Reserve	183			Bushland, Watercourse	4	7299	Dept of Planning
Moores Creek Reserve	183			Bushland, Watercourse	5	7299	Dept of Planning
Moores Creek Reserve	183		/	Bushland, Watercourse	6	7299	Council
Moores Creek Reserve	183			Bushland, Watercourse	7	7299	Dept of Planning
Moores Creek Reserve	183			Bushland, Watercourse	8	7299	Dept of Planning
Moores Creek Reserve	183		/	Bushland, Watercourse	9	7299	Dept of Planning
Moores Creek Reserve	183			Bushland, Watercourse	10	7299	Council

Moores Creek Reserve	183			Bushland, Watercourse	11	7299				Council	
Moores Creek Reserve	183			Bushland, Watercourse	185	752031				Council	
Moores Creek Reserve	183			Bushland, Watercourse	17	11064				Council	
Moores Creek Reserve	183			Bushland, Watercourse	18	11064				Council	
Moores Creek Reserve	183			Bushland, Watercourse	19	11064				Council	
Moores Creek Reserve	183			Bushland, Watercourse	20	11064				Council	
Moores Creek Reserve	183			Bushland, Watercourse	21	11064				Dept of Planning	
Moores Creek Reserve	183			Bushland, Watercourse	2	132600				Council	
Moores Creek Reserve	183			Bushland, Watercourse	1	132600				Council	
Moores Creek Reserve	183			Bushland, Watercourse	117	652632				Dept of Planning	
Moores Creek Reserve	183			Bushland, Watercourse	2	204100				Council	
Moores Creek Reserve	183			Bushland, Watercourse	109	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183		1	Bushland, Watercourse	110	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	Part 111	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183		/	Bushland, Watercourse	Part 112	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	115	1153781	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM

Moores Creek Reserve	183			Bushland, Watercourse	116	1153781	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland	119	752031	15420	Roseville Chase Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	Part 121	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	122	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	146	752031	15420	Roseville Chase Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	145	752031	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	147	752031	15420	Roseville Chase Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Moores Creek Reserve	183			Bushland, Watercourse	7319	752031	15420	Roseville Chase Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Mt Pleasant Reserve	215	Mt Pleasant Reserve	Lot 13 Mount Pleasant Avenue	Bushland	13	834969				Council	
Neil Place	186	Neil Place	corner Crana Avenue and Namoi Place	Bushland, Watercourse	13 Sec 30	758373	85490	Neil Place	Public Recreation	Crown	Ku-ring-Gai Council CLM
North Turramurra Recreation Area	9	Bobbin Head Road Bushland	359A Bobbin Head Road	Bushland, Watercourse	313	752031				Council	
Nungara Reserve	181	Nungara Reserve	between 19-21 Sylvan Avenue	Bushland,	9 Sec 9	758373	85557	Nungara Reserve	Public Recreation	Crown	Ku-ring-Gai Council CLM
Old She Oak Reserve	156	Old She Oak Reserve	no.18B Saiala Rd opp. Savoy Ave east to Middle Harbour and Garigal N/P then north to Koola Ave	Bushland, Watercourse, Wetland	9	231797				Council	
Old She Oak Reserve	156			Bushland, Watercourse	31	28795				Council	
Old She Oak Reserve	156			Bushland, Watercourse	8	978755				Council	

Old She Oak Reserve	156			Bushland, Watercourse	1	514750				Council	
Old She Oak Reserve	156			Bushland, Watercourse			89045	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Old She Oak Reserve	156			Bushland, Watercourse			89045	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Old She Oak Reserve	156			Bushland, Watercourse			89045	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Old She Oak Reserve	156			Bushland, Watercourse	1	179688				Council	
Old She Oak Reserve	156			Bushland, Watercourse	21 - 50	14154				Council	
Orana Reserve	79	Orana Reserve	cnr. Orana Avenue and Church Street	Bushland, Watercourse	17	17526				Council	
Poa Park	77	Poa Park	between nos.102-122 Mona Vale Road behind end of Ganmain Road	Bushland	71	255536				Council	
Poa Park	77			Bushland	70	255536				Council	
Princes Park	340	Princes Park	cnr. Polding and Ignatius Roads	Bushland, Watercourse	1	215722				Council	
Princes Park	340			Bushland, Watercourse	3	226203				Council	
Quarry Creek Reserve	292	Quarry Creek Reserve	Wallalong Crescent behind Boronga Avenue	Bushland, Watercourse	290	222055				Council	
Quarry Masons Forest	139	Quarry Masons Forest	northern end of Kalang Avenue east side of street	Bushland	2	610396				Council	
Randy Reserve	269	Randy Reserve	Livingstone Avenue opposite Rand Avenue	Bushland, Watercourse	8	16396				Council	
Redfield Bush	159	Redfield Bush	next no.14 Redfield Road	Bushland	32	28795				Council	
Richmond Park	143	Richmond Park	cnr. Minns and Rosedale Roads north to opposite Darnley Street	Bushland, Watercourse	8	17020				Council	

Richmond Park	143			Bushland, Watercourse	12	17166				Council	
Richmond Park	143			Bushland, Watercourse	1	518650				Council	
Richmond Park	143			Bushland, Watercourse	2	518650				Council	
Richmond Park	143			Bushland, Watercourse	14	17166				Council	
Richmond Park	143			Bushland, Watercourse	1	723220				Council	
Richmond Park	143			Bushland, Watercourse	19	3666				Council	
Richmond Park	143			Bushland, Watercourse	X	362390				Council	
Richmond Park	143			Bushland, Watercourse	1	784617				Council	
Richmond Park	143			Bushland, Watercourse	1	173251				Council	
Rofe Park	248	Rofe Park	between Warragal Rodd and Albion Avenue to Mimosa Road and Avondale Golf Club	Bushland, Watercourse	2	549143				Dept of Planning	
Rofe Park	248			Bushland, Watercourse	3	549143				Council	
Rofe Park	248		/	Bushland, Watercourse	32	752031				Council	
Roseville Bridge Bush	194	Roseville Bridge Bush	adjacent to no.40 Babbage Road	Bushland, Watercourse, Wetland	7319	1163995	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Roseville Bridge Bush	194			Bushland, Watercourse	7317	1163995	15425	Roseville Chase Park	Access; Public Recreation	Crown	Ku-ring-Gai Council CLM
Roseville Bridge Bush	194			Bushland, Watercourse	A	13450				Council	

Roseville Bridge Bush	194			Bushland, Watercourse			77604	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Rudder Creek Reserve	295	Rudder Creek Reserve	behind Kooloona Crescent	Bushland, Watercourse	227	220751				Council	
Rushall Street Reserve	71	Rushall Street Reserve	57A Station Street Pymble	Bushland, Watercourse	66	17108				Council	
Seven Little Australians	165	Seven Little Australians	cnr.Eastern Arterial Road and Tryon Road west side north to next no.108 Stanhope Road	Bushland, Watercourse	2	1134198				Dept of Planning	
Seven Little Australians	165			Bushland, Watercourse	2	399827				Dept of Planning	
Seven Little Australians	165			Bushland, Watercourse	4	449586				Dept of Planning	
Seven Little Australians	165			Bushland, Watercourse	1	611692				Dept of Planning	
Seven Little Australians	165			Bushland, Watercourse	200	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165			Bushland, Watercourse	215	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165		/	Bushland, Watercourse	216	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165			Bushland, Watercourse	217	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165			Bushland, Watercourse	7061	93836	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM

Seven Little Australians	165			Bushland, Watercourse	7316	1157421	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165			Bushland, Watercourse	154	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Little Australians	165			Bushland, Watercourse	155	752031	41399	Lindfield Soldiers Memorial Park	Public Recreation	Crown	Ku-ring-Gai Council CLM
Seven Wives Wood	100	Seven Wives Wood	next to no.19 Richard Road St Ives	Bushland, Watercourse	39	29300				Council	
Sheldon Forest	231	Sheldon Forest	between Northern Railway and Rofe Park	Bushland, Watercourse	2	219147				Council	
Sheldon Forest	231			Bushland, Watercourse	33	15544				Council	
Sheldon Forest	231			Bushland, Watercourse	11	210103				Council	
Sheldon Forest	231			Bushland, Watercourse	A	373018				Council	
Sheldon Forest	231			Bushland, Watercourse	В	373018				Council	
Shinfields End	106	Shinfields End	no.20 Lynbara Avenue	Bushland, Watercourse	36	30909				Council	
Shoppers Wood	276	Shoppers Wood	no.3 Binalong Street	Bushland	3	207894				Council	
Sir David Martin Reserve	257	Sir David Martin Reserve	next to no.231 Kissing Point Road	Bushland	2	222070				Council	
Sir David Martin Reserve	257			Bushland	4	788994				Council	
Sir David Martin Reserve	257			Bushland	5	788994				Council	

Sir David Martin Reserve	257			Bushland	6	788994	Council
Sir David Martin Reserve	257			Bushland	7	4870	Council
Sir David Martin Reserve	257			Bushland	7	29705	Council
Sir David Martin Reserve	257			Bushland	8	455666	Council
Sir David Martin Reserve	257			Bushland	13	214390	Council
Sir David Martin Reserve	257			Bushland, Watercourse	20	538546	Council
Sir David Martin Reserve	257			Bushland, Watercourse	21	538546	TNSW
Sir Phillip Game Reserve North	320	Sir Phillip Game Reserve North	between nos.96 and 98 Highfield Road south to Grosvenor Road east to 10A-18 Ivey Street	Bushland, Watercourse	1	455845	Council
Sir Phillip Game Reserve North	320			Bushland, Watercourse	1	434087	Council
Sir Phillip Game Reserve North	320			Bushland, Watercourse	1	433161	Council
Sir Phillip Game Reserve North	320		/	Bushland, Watercourse	2	133160	Dept of Planning
Sir Phillip Game Reserve North	320			Bushland, Watercourse	2	437721	Dept of Planning
Sir Phillip Game Reserve North	320			Bushland, Watercourse	2	183995	Council
Sir Phillip Game Reserve North	320			Bushland, Watercourse	1	133160	Dept of Planning

Sir Phillip Game Reserve North	320			Bushland, Watercourse	4	133160	Dept of Planning	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	8	16246	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	7	13408	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	9	16246	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	10 - 14	16246	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	14	24119	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	18	16246	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	18	22014	Council	
Sir Phillip Game Reserve North	320		/	Bushland, Watercourse	142	17129	Council	
Sir Phillip Game Reserve North	320			Bushland, Watercourse	A	358191	Council	
Sir Phillip Game Reserve South	324	Sir Phillip Game Reserve South	eastern side of Lady Game Drive south of Grosvenor Road	Bushland, Watercourse	60	29240	Council	
Sir Phillip Game Reserve South	324			Bushland, Watercourse	61	29240	Council	

South Campbell Reserve	222	South Campbell Reserve	no.59 Campbell Drive	Watercourse	59	222034				Council	
Sugarbag Creek Reserve	331	Sugarbag Creek Reserve	behind Abingdon Road end of Kimo Street	Bushland, Watercourse	119	13028				Council	
Sugarbag Creek Reserve	331			Bushland, Watercourse	Access	13028				Council	
Sugarbag Creek Reserve	331			Bushland, Watercourse	В	356743				Council	
Surgeon White Reserve	102	Surgeon White Reserve	eastern end of Lawson Parade south to eastern end of Grevillea Avenue	Bushland, Watercourse	Part 7012	1058598	79206	Surgeon White Reserve	Children's Playground	Crown	Ku-ring-Gai Council CLM
Terrum-bine Reserve (Atholbrose Glen)	141	Illeroy Forest	no.2A Illeroy Avenue near Arthur Street end	Bushland, Watercourse	36	16006				Council	
Terrum-bine Reserve (Atholbrose Glen)	141			Bushland, Watercourse	5	16006				Council	
The Broadway	238	The Broadway	between The Broadway and Muttama Street opposite Eurong Street	Bushland	476	14590				Council	
The Glade Reserve	212	The Glade Reserve	opposite nos.2-14 Koora Avenue	Bushland, Watercourse	1	511683				Council	
The Glade Reserve	212		/	Bushland	1	1134005				Council	
The Glade Reserve	212			Bushland, Watercourse	1	1133930				Council	
The Glade Reserve	212			Bushland, Watercourse	1	1133751				Council	
Travis Park	66	Travis Park	south side of Burns Road between Killeaton Street and Spurwood Road sth to next no.137 Merrivale Lne	Bushland, Watercourse	1	232031				Council	
		İ			2	211716		1		Council	

Troon Creek Reserve	249	Troon Creek Reserve	between nos.1 and 3 Troon Place	Bushland, Watercourse	107	812283				Council	
Turiban Reserve	51	Turiban Reserve (north)	next to no.42 Water Street north to Burns Road	Bushland, Watercourse			70957	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Turiban Reserve	50	Turiban Reserve (south)	cnr. Water and Mona Streets south to cnr. Billyard Avenue	Watercourse	49	12371				Council	
Turiban Reserve	966	Council Land - Water Street	46 Water Street Wahroonga	Bushland, Watercourse	1	1128187		je.		Council	
Turpentine Forest	97	Turpentine Forest	no.3 Gillott Way	Bushland	1	834234				Council	
Turpentine Forest	97			Bushland	104	825945				Council	
Turramurra Memorial Park	876	Upper Lovers Jump Creek	between 22 Laurence Avenue and adjacent 4 Karuah Road Turramurra	Bushland, Watercourse	1	169926				Council	
					1	1170660				Council	
Twin Creek Reserve	233	Twin Creek Reserve	cnr. Nerang St and Comenarra P'way east to behind Kissing Point Road sth to no.141A Comenarra P'way	Bushland, Watercourse	7	259858				Council	
Twin Creek Reserve	233			Bushland, Watercourse	15	31336				Council	
Twin Creek Reserve	233			Bushland, Watercourse	4	231727				Council	
Twin Creek Reserve	233			Bushland, Watercourse	364	235338				Council	
Twin Creek Reserve	233			Bushland	212	223610				Council	
Twin Creek Reserve	233			Bushland, Watercourse	46	221650				Council	
Twin Creek Reserve	233			Bushland, Watercourse	A	391589				Council	

Twin Creek Reserve	233			Bushland, Watercourse	17	1005730				Council	
Upper Cardigan Reserve	332	Upper Cardigan Reserve	cnr. Ormonde and Cardigan Roads	Bushland, Watercourse	115	1153781	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Upper Cardigan Reserve	332			Bushland, Watercourse	7318	1163995	90898	Roseville Chase	Public Recreation	Crown	Ku-ring-Gai Council CLM
Upper Echo	196	Upper Echo	No 92 Babbage Road	Bushland, Watercourse	118	13444				Council	
Upper Minnamurra Reserve	338	Upper Minnamurra Reserve	cnr. Minnamurra Avenue and Minnamurra Place	Watercourse	1	223288				Council	
Upper Moores Creek	180	Upper Moores Creek	between Karoo Avenue and Carlyle Road adjacent no.65 Carlyle Road	Bushland, Watercourse	Part 127	1150075	85662	Upper Moores Creek	Public Recreation	Crown	Ku-ring-Gai Council CLM
Upper Moores Creek	180			Bushland	126	1150075	85662	Upper Moores Creek	Public Recreation	Crown	Ku-ring-Gai Council CLM
Vista Street Reserve	126	Vista Street Reserve	cnr. Kulgoa Road and Vista Street (north side)	Watercourse	1	209742				Council	
Vista Street Reserve	126			Bushland, Watercourse	45	209742				Council	
Vista Street Reserve	126			Watercourse	32	16670				Council	
Waipori Street Reserve	121	Waipori Street Reserve	Cnr Waipori Street and Kapiti Street	Bushland			89309	Not named	Public Recreation	Crown	Devolved to Ku-ring-Gai Council
Warrawee Park	887	Warrawee Park	2A Borambil Street, Warrawee	Bushland	1	182009				Council	
Willian Lewis Park	873	Willian Lewis Bush	corner Fox Valley and Lucinda Avenue South	Bushland	С	372320				Council	
Wombin Reserve	167	Wombin Reserve	opposite 50A-56 Nelson Road	Bushland	1	507500				Council	
Wombin Reserve	167			Bushland, Watercourse	2	403719				Council	

Wombin Reserve	167			Bushland	5	547142		Council	
Wombin Reserve	167			Bushland	47	5289		Council	
Wombin Reserve	167			Bushland, Watercourse	48	5289		Council	
Yarran Street Reserve	272	Yarran Street Reserve	between nos.6 and 8 Kiparra Street and Yarran Street	Bushland, Watercourse	90	12830		Council	

Note: Council undertakes the management of Devolved Lands. These reserves can't be categorised, and do not require a PoM, Council is unable to issue tenure and is limited in activities that can be undertaken on the reserve, Including the basic maintenance e.g.; lawn mowing, weeding tree management for safety.

Appendix B – Ku-ring-gai Natural Areas further categorisation mapping

Appendix C – Advice from Councils Native Title Manager

Appendix D – Summary of biodiversity values within the Ku-ring-gai Natural Areas

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Dry Sclerophy	/II Forests				
Coastal Enriched Sandstone Dry Forest	-	-	-	Amarna Reserve, Blue Gum Creek Reserve, Bradley Park, Browns End, Bushranger Reserve, Comenarra Bush, Comenarra Creek Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Halls Reserve, Kissing Park, Lindfield Soldiers' Memorial Park, Lower Dam Forest, Rofe Park, Seven Little Australians, Seven Little Australians Park, Sheldon Forest, Sir Phillip Game Reserve North, Sir Phillip Game Reserve South, Sugarbag Creek Reserve, The Broadway, Troon Creek Reserve, Twin Creek Reserve	NA
Coastal Sandstone Foreshores Forest	-	-	-	Boatshed Bush	NA
Coastal Sandstone Riparian Forest	-	-	-	Comenarra Creek Reserve, Ku-ring-gai Creek Reserve, Linigen Reserve, Lovers Jump Creek Reserve, Old She Oak Reserve	NA

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Coastal Sandstone Gully Forest		-	-	Airman's Bush, Blackbutt Reserve, Bobbin Head Road Bushland, Bradfield Road Public Reserve, Bradley Park, Browns Bush, Browns End, Bryce Bush, Bushranger Reserve, Cambourne East Reserve, Cardigan Reserve, Comenarra Bush, Comenarra Creek Reserve, Cowan Creek Reserve, Deburghs Drop, Derwent Reserve, Dingly Dell, Douglas Street Reserve, Fraser Park, Gibran Place Reserve, Glengarry Annexe, Governor Phillip Reserve - East Gordon Park, Hampshire Bush, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Linigen Reserve, London Reserve, Lovers Jump Creek Reserve, Neil Place, Old She Oak Reserve, Quarry Creek Reserve, Roseville Bridge Bush, McIntosh Park, Moores Creek Reserve, Neiver CSIRO Bush, Rudder Creek Reserve, Seven Little Australians, Sir Phillip Game Reserve North, Surgeon White Reserve, Twin Creek Reserve, Upper Cardigan Reserve, Upper Echo, Upper Moores Creek, Waipori Street Reserve	NA
Hornsby Enriched Sandstone Exposed Woodland	-	-	-	Airman's Bush, Blue Gum Creek Reserve, Bradfield Road Public Reserve, Bradley Park, Browns End, Bushranger Reserve, Comenarra Creek Reserve, Governor Phillip Reserve - East Gordon Park, Hampshire Bush, Lindfield Soldiers' Memorial Park, Lower CSIRO Bush, Moores Creek Reserve, Nungara Reserve, Quarry Creek Reserve, Rofe Park, Seven Little Australians, Sir Phillip Game Reserve North, Surgeon White Reserve, The Broadway, Twin Creek Reserve	NA
Sydney North Exposed Sandstone Woodland	-	-	-	Billy Hughes Park, Bobbin Head Road Bushland, Cambourne East Reserve, Cambourne North Reserve, Cardigan Reserve, Cowan Creek Reserve, Douglas Street Reserve, Glengarry Annexe, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Linigen Trail, Lovers Jump Creek Reserve, McIntosh Park, Moores Creek Reserve, Old She Oak Reserve, Surgeon White Reserve, Upper Cardigan Reserve	NA

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Sydney Ironstone Bloodwood- Silvertop Ash Forest				Douglas Street Reserve, Hassall Bush South, Ku-ring-gai Creek Reserve, Surgeon White Reserve	 There is a proposed priority management site for the Duffys Forest Ecological Community within the Ku-ring-gai LGA and defined as "St Ives Showground and Acron Oval being Smith and Smith mapped areas 4 and 5, and Hassell Park identified in CVA mapping". The mapping of this site includes sections of the Ku-ring-gai Wildflower Garden (St Ives Showground – subject to a site-specific plan of management), Douglas Street Reserve (Acron Oval), and Hassall Bush (Hassell Park). The DPIE has identified 7 conservation management actions that need to be undertaken on this site: Management action: Disturbance from recreational users - Minimise impacts of recreational activities through barrier/fence maintenance Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through barrier/fence installation Management action: Inappropriate fire regime - Maintain suitable drainage / hydrological regime through land manager negotiation Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through land manager co- ordination Management action: Mixed weeds - Reduce and maintain weed densities at low levels through site- based weed control
				Ecological community monitoring action: Track species abundance / condition over time through Ecological Community monitoring https://www.environment.nsw.gov.au/savingourspeciesap	
					p/ManagementSite.aspx?SiteID=2462

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Forested Wetla	ands				
Estuarine Swamp Oak Forest	EEC - Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	EEC - Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	-	Moores Creek Reserve, Old She Oak Reserve	Currently, no management sites have been identified for this ecological community within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesap</u> p/project.aspx?ProfileID=10945
Freshwater We	etlands				
Coastal Upland Damp Heath Swamp	EEC - Coastal Upland Swamps in the Sydney Basin Bioregion	EEC - Coastal Upland Swamp in the Sydney Basin Bioregion	-	Ku-ring-gai Creek Reserve	Currently, no management sites have been identified for this ecological community within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesap</u> <u>p/project.aspx?ProfileID=20261</u>
Heathlands					
Coastal Sandstone Heath-Mallee	-	-	-	Lovers Jump Creek Reserve, Surgeon White Reserve	NA
Coastal Sandstone Rock Plate Heath	-	-	-	Lovers Jump Creek Reserve	NA
Rainforests		•			

Ku-ring-gai Council

Page 102 of 178

Vegetation	EPBC Act	BC Act	FM Act	Locations for management	Areas subject to the BC Act Saving our Species
Community	Conservation Status	Conservation Status	Conservation Status		program or FM Act Priorities Action Statement
Coastal Sandstone Gallery Rainforest	-	-	-	Blackbutt Reserve, Blue Gum Creek Reserve, Bradley Park, Browns End, Comenarra Creek Reserve, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Moores Creek Reserve, Rofe Park, Seven Little Australians, Seven Little Australians Park, Sheldon Forest, Sugarbag Creek Reserve, Troon Creek Reserve, Twin Creek Reserve	NA
Coastal Warm Temperate Rainforest	-	-	-	Lower Campbell Reserve	NA
Saline wetland	ls				
Estuarine Mangrove Forest	-	-	Protected marine vegetation Type 2	Moores Creek Reserve, Old She Oak Reserve, Roseville Bridge Bush	NA
			Moderately sensitive key fish habitat		
Estuarine Saltmarsh	VEC - Subtropical and Temperate Coastal Saltmarsh	EEC - Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Protected marine vegetation Type 1 highly sensitive key fish habitat	Moores Creek Reserve	Currently, 3 management sites have been identified for this ecological community. These management sites are not within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesap</u> p/project.aspx?ProfileID=10866

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Seagrass Meadows	EEC - <i>Posidonia</i> <i>australis</i> seagrass meadows of the Manning- Hawkesbury ecoregion (potential)	-	Posidonia australis populations in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie are listed under the FM Act as endangered populations Protected marine vegetation Type 1 highly sensitive key fish habitat	Middle Harbour – downstream of the LGA. Natural Areas subject to this Plan are managed to minimise downstream impacts to seagrass in Middle Harbour.	The Priorities Action Statement - Actions for the endangered populations of <i>Posidonia australis</i> in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie does not outline measures specified for this species to be taken by Ku- ring-gai Council on or in respect of the land. <u>https://www.dpi.nsw.gov.au/fishing/species- protection/what-current/endangered- populations2/posidonia-australis/priorities-action- statement-actions-for-the-endangered-populations-of- posidonia-australis-in-port-hackingbotany-bay,-sydney- harbour,-pittwaterbrisbane-waters-and-lake-macquarie</u>
Wet Scleroph	yll Forests	-			
Blue Gum High Forest	CEEC - Blue Gum High Forest of the Sydney Basin Bioregion	CEEC - Blue Gum High Forest in the Sydney Basin Bioregion	-	Bannockburn Bush, Barra Wood, Blackbutt Park, Browns Forest, Clive Evatt Reserve, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Grannys Springs, Hammond Reserve, Huntleys Forest, Laura Houison Osborne Sanctuary, Lower Campbell Reserve, Loyal Henry Park, Lynbara Avenue Reserve, Mashmans Quarry Reserve, Merrivale Bush, Orana Reserve, Poa Park, Randy Reserve, Seven Little Australians, Sheldon Forest, Sir Phillip Game Reserve North, Sugarbag Creek Reserve, The Glade Reserve, Travis Park, Turiban Reserve (north), Turiban Reserve (south), Twin Creek Reserve, Upper Lovers Jump Creek, Upper Minnamurra Reserve, Vista Street Reserve, Willian Lewis Bush	Currently, six management sites have been identified for this ecological community. There are three proposed priority management sites for the Blue Gum High Forest in the Ku-ring-gai LGA including the Burns Rd Sites, Dalrymple / Browns Forest Site, and the Sheldon Forest and Warrawee Public School Site. The Burns Rd Sites Clive Evatt Reserve and Wahroonga Public school and surrounds (including Turiban Reserve North and South). The DPIE has identified 13 conservation management actions that need to be undertaken on this site: Management action: Chemical pollution / eutrophication - Minimise habitat/species exposure to pollution through land manager negotiation

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
					 Management action: Disturbance from recreational users - Minimise impacts of recreational activities through managing human disturbance Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through managing native vegetation Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through seed banking Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through liaison with government agency Management action: Mixed weeds - Reduce and maintain weed densities at low levels through seed control Management action: Rural/residential/industrial development - Minimise impacts of development through land manager negotiation Management action: Rural/residential/industrial development - Minimise impacts of development through managing native vegetation Management action: Rural/residential/industrial development - Minimise impacts of development through managing native vegetation Management action: Rural/residential/industrial development - Minimise impacts of development through managing native vegetation Management action: Inzeral/residential/industrial development - Minimise impacts of development through managing native vegetation Management action: Uncertainty of future land management practices - Ensure land management is sympathetic to the long-term requirements of the species through liaison with government agency Research action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through linvestigation of species ecology Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels through monitoring pest/weed threat.

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
					The Dalrymple / Browns Forest Site contains Dalrymple Hay Nature Reserve / Browns Forest. Browns Forest is Council land. The SoS site mapping also covers Blackbutt Reserve, Browns Forest and Vista Street Reserve. The DPIE has identified 13 conservation management actions that need to be undertaken on this site:
					 Management action: Chemical pollution / eutrophication - Minimise habitat/species exposure to pollution through management of drainage Management action: Disturbance from recreational users - Minimise impacts of recreational activities through managing human disturbance Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through managing native vegetation
					 Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through seed banking Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through liaison with NGO or other group Management action: Mixed weeds - Reduce and maintain weed densities at low levels through community education Management action: Mixed weeds - Reduce and maintain weed densities at low levels through steb based weed control Research action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through investigation of species ecology Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels through nonitoring pest/weed threat.
					The Sheldon Forest and Warrawee Public School Site is identified as "Council reserves surrounding Dalrymple-Hay Nature Reserve extending to southern side of Pacific Highway, includes Sheldon Forest, Warrawee PS and golf

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
					course – as well as reserve below Turramurra shops, areas along creek-lines and road reserves on southern side of highway. Includes a number of council reserves". The mapping shows that this site includes Sheldon Forest, Bannockburn Bush, Barra Wood, Governor Phillip Reserve - East Gordon Park Merrivale Bush, Orana Reserve, Travis Park, Huntleys Forest, Lynbara Avenue Reserve, and Mashmans Quarry Reserve. The DPIE has identified 13 conservation management actions that need to be undertaken on this site:
					 Management action: Chemical pollution / eutrophication - Minimise habitat/species exposure to pollution through management of drainage Management action: Disturbance from recreational users - Minimise impacts of recreational activities through managing human disturbance Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through managing native vegetation
					 Management action: Habitat fragmentation - Improve and maintain connectivity and extent of available habitat through seedbanking Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through investigation of species
					 ecology Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through liaison with government agency
					 Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through testing germination / pollination Management action: Mixed weeds - Reduce and maintain weed densities at low levels through

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
					 Management action: Mixed weeds - Reduce and maintain weed densities at low levels through site- based weed control Management action: Overabundant native herbivores - R Minimise the impacts of native browsers through Population and threat assessment Management action: Rural/residential/industrial development - Minimise impacts of development through targeted survey Management practices - Ensure land management is sympathetic to the long-term requirements of the species through liaison with government agency Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels through monitoring pest/weed threat. https://www.environment.nsw.gov.au/savingourspeciesap p/project.aspx?ProfileID=10094
Coastal Enriched Sandstone Moist Forest	-	-	-	Aleta End, Amarna Reserve, Ashley Grove Reserve, Barra Brui Bush, Blackbutt Reserve, Blue Gum Creek Reserve, Bradley Park, Browns End, Bushranger Reserve, Comenarra Creek Reserve, Cowan Creek Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Hammond Reserve, Harry Seidler Reserve, Holmes Street Reserve, Huntleys Forest, Illeroy Forest, Kylie Walk, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Lower Campbell Reserve, Lower Dam Forest, Lynbara Avenue Reserve, Middle Campbell Reserve, Moores Creek Reserve, Mt Pleasant Reserve, Richmond Park, Rofe Park, Seven Little Australians, Seven Little Australians Park, Sheldon Forest, Sir Phillip Game Reserve North, South Campbell Reserve, Sugarbag Creek Reserve, Travis Park, Twin Creek Reserve, Upper Minnamurra Reserve	NA

Ku-ring-gai Council

Page 108 of 178

Vegetation Community	EPBC Act Conservation Status	BC Act Conservation Status	FM Act Conservation Status	Locations for management	Areas subject to the BC Act Saving our Species program or FM Act Priorities Action Statement
Coastal Shale- Sandstone Forest	-	-	-	Aleta End, Barra Brui Bush, Blackbutt Reserve, Bobbin Head Road Bushland, Burraneer Avenue, Bushranger Reserve, Comenarra Creek Reserve, Cowan Creek Reserve, Duff Reserve, Gibran Place Reserve, Governor Phillip Reserve - East Gordon Park, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Milkmaids Reserve, Mt Pleasant Reserve, Quarry Creek Reserve, Rofe Park, Sheldon Forest, Sir David Martin Reserve, Sir Phillip Game Reserve North, Sugarbag Creek Reserve, Travis Park, Troon Creek Reserve, Twin Creek Reserve	NA
Sydney Turpentine- Ironbark Forest	CEEC - Turpentine- Ironbark Forest of the Sydney Basin Bioregion	CEEC - Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion	-	Ashley Grove Reserve, Barra Brui Bush, Blackbutt Reserve, Bradley Park, Browns Forest, Comenarra Creek Reserve, Cowan Creek Reserve, Dingly Dell, Fraser Park, Gearys Way, Golfers Glen, Gordon Glen Bush, Governor Phillip Reserve - East Gordon Park, Hammond Reserve, Harry Seidler Reserve, Holmes Street Reserve, Huntleys Forest, Illeroy Forest, Kylie Walk, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Lower Paddys Forest, Lynbara Avenue Reserve, Mashmans Quarry Reserve, Princes Park, Richmond Park, Rofe Park, Seven Wives Wood, Sheldon Forest, Shinfields End, Shoppers Wood, The Glade Reserve, Travis Park, Turiban Reserve (north), Turpentine Forest, Upper Minnamurra Reserve, Wombin Reserve, Yarran Street Reserve	Key management sites for this ecological community are being identified by the NSW Government and other program partners, where feasible, cost-effective and beneficial management actions can be undertaken. Currently, no management sites have been identified for this ecological community. https://www.environment.nsw.gov.au/savingourspeciesap p/project.aspx?ProfileID=10789
Coastal Flats Tall Moist Forest	-	-	-	Sir Phillip Game Reserve North	NA

Key: CEEC = Critically Endangered Ecological Community; EEC = Endangered Ecological Community; VEC = Vulnerable Ecological Community.

Table A2 Summary of threatened plant species found within the Ku-ring-gai natural areas

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
Acacia bynoeana	Vulnerable	Endangered	Not currently recorded in the natural areas subject to this plan	Acacia bynoeana is known to occur in the Ku-ring-gai Chase NP and Garigal NP and there are old records of this species from Killara. Potential habitat is present in the Sydney North Exposed Sandstone Woodland, Hornsby Enriched Sandstone Exposed Woodland, Heath and Sydney Ironstone Bloodwood-Silvertop Ash Forest habitats in natural areas including Douglas Street Reserve, Hassall Bush South, Ku- ring-gai Creek Reserve, Surgeon White Reserve, Bobbin Head Road Bushland, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, McIntosh Park, Moores Creek Reserve, Old She Oak Reserve and others.	This is a site managed species. None of the proposed key management sites for this species are located within the Ku- ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/proje</u> <u>ct.aspx?ProfileID=10006</u>
Acacia pubescens	Vulnerable	Vulnerable	Bradley Park	Only one record exists in the natural areas subject to this Plan. Identification of this plant was confirmed by the Royal Botanic Gardens, and the plant is likely a hybrid between <i>A.</i> <i>pubescens and A. jonesii.</i> A possible garden escape from cross breeding. Located in a disturbed site with possible importation of soil from elsewhere. Other records exist outside the natural areas at North Turramurra.	This is a site managed species. None of the proposed key management sites for this species are located within the Ku- ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/proje</u> <u>ct.aspx?ProfileID=10023</u>
Callistemon linearifolius	Not listed	Vulnerable	Lovers Jump Creek Reserve	Only one record exists in the natural areas subject to this plan. This species is likely to be more widespread in the north of the LGA in reserves such as Cowan Creek Reserve, Bobbin Head Road Bushland, Glengarry Annexe, and Ku- ring-gai Creek Reserve.	This species has been assigned to the Data-deficient species management stream under the SoS program. Its taxonomy needs to be reviewed and little is known about its ecology. Currently, no management sites have been identified for this threatened species. https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10129
Cryptostylis hunteriana	Vulnerable	Vulnerable	Cowan Creek Reserve	Only one record exists in the LGA and it is located within a natural area subject to this plan. This species is potentially more widespread within the north of the LGA in reserves such as Lovers Jump Creek Reserve, Bobbin Head Road Bushland, Glengarry Annexe, and Ku-ring-gai Creek Reserve.	This is a site managed species. The three priority management sites that have been identified for this species are not within the Ku-ring-gai LGA. As such, the management actions identified under the SoS program for this species do not apply to the LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/proje</u> <u>ct.aspx?ProfileID=10187</u>

Generic Natural Areas Plan of Management – February 2024 – Community Land and Crown Reserves

Version 1 – <Enter effective date here>

Darwinia biflora	Vulnerable	Vulnerable	Bradley Park, Comenarra Bush, Comenarra Creek Reserve, Dingly Dell, Hampshire Bush, Lovers Jump Creek Reserve, Rofe Park	One of the more commonly recorded threatened plant species within the Ku-ring-gai natural areas subject to this Plan with 64 individual records having been made. Habitat is located at the north west and west of the LGA. Potentially more widespread in potentially suitable habitats in Blackbutt Reserve, Bradfield Road Public Reserve, Lower CSIRO Bush, Sir Phillip Game Reserve North, Browns End, Twin Creek Reserve, Cowan Creek Reserve, Ku-ring-gai Creek Reserve, Governor Phillip Reserve – East Gordon Park, and Old She Oak Reserve.	This is a site managed species. One management site for this species has been proposed in the Ku-ring-gai LGA (Berowra / Cowan) defined as "located in the western section of Ku-ring-gai Chase National Park, including the Berowra Valley National Park and surrounding private land to the west. Mougamarra Nature Reserve to the north and private urban land to the south past Hornsby". The mapping of this site is coarse but includes the northern section of Lovers Jump Creek Reserve. The DPIE has identified 12 conservation management actions that need to be undertaken on this site to ensure the population of threatened species is sustained:
					 Management action: Disturbance due to infrastructure - Ensure land management is sympathetic to the long-term requirements of the species through negotiating land management agreements Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through fire planning Management action: Mixed weeds - Reduce and maintain weed densities at low levels through land manager consultation Management action: Mixed weeds - Reduce and maintain weed densities at low levels through site-based weed control Management action: Road / motorway development - Minimise impacts of road development through land manager consultation Management action: Rural/residential/industrial development - Minimise impacts of development by providing advice to land manager Threat monitoring action: Disturbance due to infrastructure - Ensure land management is sympathetic to the long-term requirements of the species by monitoring habitat condition
					 Threat monitoring action: Inappropriate fire regime - Maintain appropriate fire regime for the species by monitoring habitat condition Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels by monitoring pest/weed threat

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
					 Threat monitoring action: Road / motorway development - Minimise impacts of road development by monitoring disturbance impacts Threat monitoring action: Rural/residential/industrial development - Minimise impacts of development by monitoring disturbance impacts Species monitoring action: Track species abundance / condition over time through flora monitoring https://www.environment.nsw.gov.au/savingourspeciesapp/Proj ect.aspx?results=c&ProfileID=10202
Deyeuxia appressa	Endangered	Endangered	Governor Phillip Reserve - East Gordon Park (potentially)	Recorded from "Killara" in 1941, the record may potentially from Governor Phillip Reserve - East Gordon Park but the record is inaccurate. This species has not been seen in over 60 years. Could occur in the dry and wet sclerophyll forests within the LGA.	This species has been assigned to the Data-deficient species management stream under the SoS program as there is no known extant population in NSW. Currently, no management sites have been identified for this threatened species. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10220</u>
Epacris purpurascen s var. purpurascen s	Not listed	Vulnerable	Blackbutt Reserve, Comenarra Creek Reserve, Rofe Park, Sir David Martin Reserve	Known from six separate records within the natural areas subject to this Plan. All records are in the western section of the LGA in enriched or shale-sandstone transition habitats. Potential habitat also exists in Browns End, Sheldon Forest, Bradleys Reserve, Lower Dam Forest, Governor Phillip Reserve - East Gordon Park, Lindfield Soldiers' Memorial Park, Seven Little Australians, Seven Little Australians Park, Dingly Dell, Travis Park, Cowan Creek Reserve, Lovers Jump Creek Reserve.	This is a site managed species. One management site for this species has been identified in the Ku-ring-gai LGA (Ku-ring-gai High School). The mapping of this site includes private land and the adjacent Ku-ring-gai Chase National Park and does not include any of the natural areas subject to this Plan. As such, the site as identified in the SoS program is not relevant to this Plan. https://www.environment.nsw.gov.au/savingourspeciesapp/Proj ect.aspx?results=c&ProfileID=10273

Generic Natural Areas Plan of Management – February 2024 – Community Land and Crown Reserves

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
Eucalyptus camfieldii	Vulnerable	Vulnerable	Governor Phillip Reserve - East Gordon Park, Old She Oak Reserve	Known from four separate records within the natural areas subject to this Plan in East Killara and East Gordon. May also be present in other dry sclerophyll, enriched sandstone forest, or heath habitats such as at Lovers Jump Creek Reserve, Moores Creek Reserve, Lindfield Soldiers Memorial Park, Bushranger Reserve, Surgeon White Reserve, Douglas Street Reserve, Cowan Creek Reserve, and Ku-ring-gai Creek Reserve.	 This is a site managed species. One management site for this species has been proposed in the Ku-ring-gai LGA (Ku-ring-gai Chase National Park), defined as the "population located on the eastern side of West Head road, Ku-ring-gai Chase National Park". The mapping of this site is coarse, but it includes Council reserves including Billy Hughes Park, Lovers Jump Creek Reserve, Fraser Park, Derwent Reserve, Bobbin Head Road Bushland, Glengarry Annexe, Gwydir Trail, Cowan Creek Reserve, Waipori Street Reserve, Ku-ring-gai Creek Reserve, and Ku-ring-gai Wildflower Garden (subject to a site-specific management plan). The DPIE has identified 5 conservation management actions that need to be undertaken on this site to ensure the population of threatened species is sustained: Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through fire planning Management action: Myrtle rust - Minimise the impacts of disease on the species by treating disease Threat monitoring action: Myrtle rust - Minimise the impacts of disease on the species by monitoring for evidence of disease Species monitoring action: Track species abundance / condition over time through flora monitoring.
					disease Species monitoring action: Track species abundance /

Genoplesiu m baueri	Endangered	Endangered	Cowan Creek & Middle Harbour catchments	Exact records aren't available, but this species is known from six separate records within the natural areas subject to this Plan. Potential habitat is present in Ku-ring-gai Creek Reserve, Lovers Jump Creek Reserve, and Cowan Creek Reserve where there are heathy and exposed sandstone habitats. This species is very small and inconspicuous and continues to be found in new areas in the greater Sydney region.	This is a site managed species. One management site for this species has been identified in the Ku-ring-gai LGA which is the Ku-ring-gai Wildflower Garden (subject to a site-specific management plan). Due to the sensitive nature of the species or the site, the exact location cannot be identified. The DPIE has identified 10 conservation management actions that need to be undertaken on this site to ensure the population of threatened species is sustained:
					 Management action: Disturbance due to infrastructure - Minimise the impact of on-site infrastructure through land manager advice - sign installation Management action: Disturbance from recreational users - Minimise impacts of recreational activities through Re-
					 routing/maintaining walking tracks Management action: Disturbance from recreational users - Prevent access of recreational users to site through access barrier(s)
					Management action: Mixed weeds - Reduce and maintain weed densities at low levels through site-based weed control
					 Management action: Overabundant native herbivores - Restrict access to native browsers by fencing - exclude macropods
					 Threat monitoring action: Disturbance due to infrastructure - Minimise the impact of on-site infrastructure by monitoring disturbance impacts
					Threat monitoring action: Disturbance from recreational users - Prevent access of recreational users to site by
					 monitoring disturbance impacts Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels by monitoring pest/weed threat
					Threat monitoring action: Overabundant native herbivores - Restrict access to native browsers by monitoring habitat condition
					Species monitoring action: Track species abundance / condition over time through flora monitoring
					https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10875

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
Grammitis stenophylla	Not listed	Endangered	Rofe Park	There are five records of this species within the natural areas subject to this Plan, limited to Rofe Park. May be present in other natural areas with Coastal Enriched Sandstone Dry Forest and/or Coastal Sandstone Gallery Rainforest habitats including Comenarra Creek Reserve, Browns End, Seven Little Australians, Lindfield Soldiers Memorial Park, Moores Creek Reserve, Blackbutt Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Sir Phillip Game Reserve North, Sir Phillip Game Reserve South, Blue Gum Creek Reserve, and Sugarbag Creek Reserve.	This species has been assigned to the Keep-watch species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. https://www.environment.nsw.gov.au/savingourspeciesapp/proje ct.aspx?ProfileID=10356

Ku-ring-gai Council

Page 115 of 178

Haloragode	Endangered	Endangered	Cowan Creek	There are five records of this species within the natural	This is a site managed species. Two management sites for this
ndron lucasii	-	-	Reserve,areas subject to this Plan. It is also known from the GarigalGovernor PhillipNP adjacent to Barra Brui Bush. May be present in other	species have been identified in the Ku-ring-gai LGA: North Turramurra and Ku-ring-gai Chase and Garigal National Parks.	
			Reserve - East Gordon Park,	natural areas with suitable sandstone gully habitats such as Lovers Jump Creek Reserve, Cowan Creek Reserve, Ku- ring-gai Creek Reserve, Lindfield Soldier's Memorial Park, Bushranger Reserve, Old She Oak Reserve.	The Ku-ring-gai Chase and Garigal National Parks site is located in the "southern end of Ku-ring-gai National Park and Garigal National Park" so is not on Council land.
			The North Turramurra site is specified as "Council lands in North Turramurra". The mapping of this site indicates that it includes Cowan Creek Reserve and Bobbin Head Road Bushland. The DPIE has identified 10 conservation management actions that need to be undertaken on this site to ensure the population of threatened species is sustained:		
					Management action: Crofton weed (<i>Ageratina adenophora</i>) - Reduce and maintain weed densities at low levels. Involves implementing fine-scale sensitive weed removal
					 Management action: Disturbance from recreational users - Ensure land management is sympathetic to the long-term requirements of the species. Involves installing informative signs
					Management action: Disturbance from recreational users - Prevent access of recreational users to site. Involves installing stock fencing
					Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community. Involves fire planning
					Research action: Feral herbivores: Exclude feral herbivores from the site. Involves monitoring habitat condition
					 Threat monitoring action: Crofton weed (Ageratina adenophora) - Prevent weed invasion of the site. Involves monitoring pest/weed threat
					Threat monitoring action: Disturbance from recreational users - Minimise impacts of recreational activities. Involves
					 monitoring disturbance impacts Threat monitoring action: Feral herbivores - Exclude feral herbivores from the site. Involves monitoring pest/weed
					 threat Threat monitoring action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community. Involves flora monitoring
					Species monitoring action: Track species abundance / condition over time. Involves flora monitoring.

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
					https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10394
Hibbertia puberula	Not listed	Endangered	Not currently recorded in the natural areas subject to this plan	Hibbertia puberula is a widespread but uncommon species and it is known to occur in the nearby Ku-ringgai Chase NP and Garigal NP in Sydney North Exposed Sandstone Woodland and Sydney Ironstone Bloodwood-Silvertop Ash Forest habitats. Habitat for this species is likely to be present in Douglas Street Reserve, Hassall Bush South, Ku-ring-gai Creek Reserve, Surgeon White Reserve, Bobbin Head Road Bushland, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, Moores Creek Reserve, Old She Oak Reserve, and others.	This is a site managed species. No management sites for this species have been identified in the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10402</u>

Generic Natural Areas Plan of Management – February 2024 – Community Land and Crown Reserves

 Minimise threat by assessing threat status Threat monitoring action: Disturbance due to infrastructure - Minimise the impact of on-site infrastructure by monitoring disturbance impacts Threat monitoring action: Disturbance from recreational users - Minimise impacts of recreational activities by monitoring disturbance impacts Threat monitoring action: Herbaceous weeds - Reduce and maintain weed densities at low levels by monitoring 	<i>Hibbertia</i> <i>spanantha</i>	Critically Endangered	Critically Endangered	Lane Cove catchment	This species is known to occur at South Turramurra in the Coastal Shale-Sandstone Forest habitat. Potentially suitable habitat also occurs in Aleta End, Barra Brui Bush, Blackbutt Reserve, Bobbin Head Road Bushland, Burraneer Avenue, Bushranger Reserve, Comenarra Creek Reserve, Cowan Creek Reserve, Duff Reserve, Gibran Place Reserve, Governor Phillip Reserve - East Gordon Park, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Milkmaids Reserve, Mt Pleasant Reserve, Quarry Creek Reserve, Rofe Park, Sheldon Forest, Sir Phillip Game Reserve North, Sugarbag Creek Reserve, Travis Park, Troon Creek Reserve, Twin Creek Reserve.	 Threat monitoring action: Disturbance due to infrastructure Minimise the impact of on-site infrastructure by monitoring disturbance impacts Threat monitoring action: Disturbance from recreational users - Minimise impacts of recreational activities by monitoring disturbance impacts Threat monitoring action: Herbaceous weeds - Reduce and
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Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
					 Threat monitoring action: Inappropriate fire regime - Maintain appropriate fire regime for the species by monitoring habitat condition Threat monitoring action: Phytophthora - Minimise threat through investigation of disease susceptibility Threat monitoring action: Rabbits - Prevent pest species invasion to the site by monitoring pest/weed threat Threat monitoring action: Small population size - Minimise threat by assessing threat status Species monitoring action: Track species abundance / condition over time through flora monitoring https://www.environment.nsw.gov.au/savingourspeciesapp/Proj ect.aspx?results=c&ProfileID=20279
Lasiopetalu m joyceae	Vulnerable	Vulnerable	Comenarra Creek Reserve	This species is known from Comenarra Creek Reserve. There are also other spatially inaccurate records of this species within the Ku-ring-gai LGA.	This species has been assigned to the Site-managed species management stream under the SoS program. Currently, 3 management sites have been identified for this threatened species, but they are not within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10451</u>

Ku-ring-gai Council

Page 119 of 178

Generic Natural Areas Plan of Management – February 2024 – Community Land and Crown Reserves

Version 1 – <Enter effective date here>

Leptosperm um deanei	Vulnerable	Vulnerable	Lovers Jump Creek Reserve (inaccurate record)	There is one inaccurate record of this species from Lovers Jump Creek Reserve. This species is known from a population on Bare Creek in Garigal NP and could be present in similar Coastal Sandstone Riparian Forest habitats within the Ku-ring-gai Natural areas including Comenarra Creek Reserve, Ku-ring-gai Creek Reserve, Linigen Reserve, Lovers Jump Creek Reserve, Old She Oak Reserve.	 This is a site managed species. Two proposed management sites for this species have been identified in the Ku-ring-gai LGA. While the site mapping is coarse, the mapping of the proposed Upper Lane Cove Catchment site includes Browns End, Aleta End, and Bradley Park. The Upper Lane Cove Catchment site is described as "Lane Cove Catchment-upper river". The DPIE has identified nine conservation management actions that need to be undertaken on this site to ensure the population of threatened species is sustained: Management action: Erosion / sedimentation - Minimise levels of erosion and/or sedimentation by providing advice to planning authorities Management action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community through fire planning Management action: Wixed weeds - Reduce and maintain weed densities at low levels through site-based weed control Management action: Vegetation clearing for agricultural purposes - Minimise impacts of development though providing advice to planning authorities Threat monitoring action: Erosion / sedimentation - Minimise levels of erosion and/or sedimentation by monitoring disturbance impacts Threat monitoring action: Inappropriate fire regime - Maintain appropriate fire regime for the species/community by monitoring disturbance impacts Threat monitoring action: Logication clearing for agricultural purposes - Minimise impacts of development though providing advice to planning authorities Threat monitoring action: Mixed weeds - Reduce and maintain weed densities at low levels by monitoring pest/weed threat Threat monitoring action: Vegetation clearing for agricultural purposes - Minimise impacts of development by monitoring disturbance impacts Species monitoring action: Track species abundance / condition over time through flora monitoring.
Melaleuca deanei	Vulnerable	Vulnerable	Bradley Park, Comenarra Creek Reserve,	This species is known from 14 different records within the natural areas subject to this plan in the north and west of the LGA. Other natural areas with the Sydney North Exposed	This is a site managed species. No management sites for this species have been identified in the Ku-ring-gai LGA.

Generic Natural Areas Plan of Management – February 2024 – Community Land and Crown Reserves

Version 1 – <Enter effective date here>

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
			Governor Phillip Reserve - East Gordon Park, Ku- ring-gai Creek Reserve, and Rofe Park	Sandstone Woodland and Hornsby Enriched Sandstone Exposed Woodland habitats including Browns End, Hampshire Bush, Bradfield Road Public Reserve, Lower CSIRO Bush, Lindfield Soldiers' Memorial Park, Moores Creek Reserve, Old She Oak Reserve, Surgeon White Reserve, Douglas Street Reserve, Cowan Creek Reserve, Lovers Jump Creek Reserve, and Twin Creek Reserve may be suitable for this species.	https://www.environment.nsw.gov.au/savingourspeciesapp/proje ct.aspx?ProfileID=10515
Persoonia hirsuta	Endangered	Endangered	Not currently recorded in the natural areas subject to this plan	Recorded in Wahroonga in 1944 and Turramurra in 1954 there have been no recent records of this species in the Ku- ring-gai LGA. However, this species is known to occur sporadically as individual plants throughout suitable habitats. Suitable habitat is likely to be present in the Sydney North Exposed Sandstone Woodland, Hornsby Enriched Sandstone Exposed Woodland, Heath, and Sydney Ironstone Bloodwood-Silvertop Ash Forest habitats in natural areas including Douglas Street Reserve, Hassall Bush South, Ku-ring-gai Creek Reserve, Surgeon White Reserve, Bobbin Head Road Bushland, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, McIntosh Park, Moores Creek Reserve, Old She Oak Reserve and others.	This is a site managed species. No management sites for this species have been identified in the Ku-ring-gai LGA. https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10595
Rhizanthella slateri	Endangered	Vulnerable	Lane Cove catchment	This species has been recently discovered within the natural areas subject to this plan. The location of this species is sensitive.	This species has been assigned to the Site-managed species management stream under the SoS program. A key management site has not yet been established for this species within the Ku-ring-gai LGA. However, Council are managing the habitat to secure the species at the site and ensure the population's viability in the long term in line with the objectives of the SoS program.
					There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/proje

Species	EPBC Act Conservation Status	BC Act Conservation Status	Locations for management	Notes	Areas subject to the Saving our Species program
Rhodamnia rubescens	Not listed	Critically Endangered	Browns Forest	There is one record of this species from Browns Forest. There is potential habitat in the form of wet sclerophyll forest and rainforest present in many of the natural areas subject to this Plan, particularly areas such as Lower Campbell Reserve.	This species has been assigned to the Landscape species management stream under the SoS program. <i>Rhodamnia</i> <i>rubescens</i> has a widespread distribution and the key threat to this species is the landscape scale, wind dispersed pathogen, Myrtle Rust (<i>Austropuccinia psidii</i>). <i>Rhodamnia rubescens</i> is managed statewide and management includes the statewide distribution of the species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/Man</u> <u>agementSite.aspx?SiteID=2988</u>
Syzygium paniculatum	Vulnerable	Endangered	Browns Forest, Sheldon Forest, also likely in other natural areas	Syzygium paniculatum only occurs naturally in Littoral Rainforests and would not naturally occur in the Ku-ring-gai LGA. However, this species has established through plantings and subsequent seed dispersal by animals (e.g. Grey-headed Flying-fox) and is likely to be naturalised in many of the natural areas subject to this Plan, particularly areas with wet sclerophyll forest and rainforest habitats.	This is a site managed species. No management sites for this species have been identified in the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10794</u>
Tetratheca glandulosa	Not listed	Vulnerable	Bradley Park, Governor Phillip Reserve - East Gordon Park, Ku- ring-gai Creek Reserve, Lovers Jump Creek Reserve, Rofe Park, Twin Creek Reserve	There are 29 separate records of this species within the natural areas subject to this Plan. However, there is the possibility that some of these records are misidentified <i>Tetratheca ericifolia</i> as this is a known issue with BioNet records for this species. Potential habitat is widespread in natural areas with the Sydney North Exposed Sandstone Woodland, Hornsby Enriched Sandstone Exposed Woodland, and Coastal Sandstone Heath-Mallee habitats including Browns End, Hampshire Bush, Bradfield Road Public Reserve, Lower CSIRO Bush, Lindfield Soldiers' Memorial Park, Moores Creek Reserve, Old She Oak Reserve, Surgeon White Reserve, Douglas Street Reserve, Cowan Creek Reserve. These areas may be suitable for this species.	This is a site managed species. One management site for this species has been identified in the Ku-ring-gai LGA (Berowra Valley Regional Park). This site is identified as the "entire Berowra Valley Regional Park and South west corner of Ku-ring-gai Chase National Park. Occurs on ridge lines and upper slopes only within the park". The mapping of this site is in the Ku-ring-gai Chase National Park and does not include any of the natural areas subject to this Plan. As such, the site as identified in the SoS program is not relevant to this Plan. https://www.environment.nsw.gov.au/savingourspeciesapp/Project.aspx?results=c&ProfileID=10798

Table A3 Summary of threatened animal species found within the Ku-ring-gai natural areas

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Amphibians						
Heleioporus australiacus	Giant Burrowing Frog	Vulnerable	Vulnerable	Not recorded from any of the natural areas but it may occur.	This species is known from the Ku-ring-gai Chase NP from Sydney North Exposed Sandstone Woodland north of the Lovers Jump Creek Reserve. Potential habitat is present in reserves with Sydney North Exposed Sandstone Woodland and Coastal Sandstone Heath-Mallee including Lovers Jump Creek Reserve, Cowan Creek Reserve, Ku-ring-gai Creek Reserve, and Ku-ring-gai Wildflower Garden, Old She Oak Reserve, and Surgeon White Reserve.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, two active priority management sites where important populations exist have been identified for this threatened species, but these are not within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10398
Litoria aurea	Green and Golden Bell Frog	Endangered	Vulnerable	Not recorded from any of the natural areas.	There is one record of the Green and Golden Bell Frog from the Cook Trig Area, off Grosvenor St, Nth Wahroonga, recorded in 1998. There were four observed individuals confirmed at this location. The record appears to be legitimate but there are no other records from the LGA.	This species has been assigned to the Site-managed species management stream under the SoS program. There are eight active priority management sites have been identified for this threatened species. These sites are not within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10483</u>

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Pseudophryne australis	Red- crowned Toadlet	Not listed	Vulnerable	Bradley Park, Comenarra Creek Reserve, Cowan Creek Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Lovers Jump Creek Reserve, Moores Creek Reserve, Old She Oak Reserve, Surgeon White Reserve, Twin Creek Reserve	This species is widespread in the LGA recorded from many of the natural areas with sandstone geology. Some of the natural areas (e.g. Lovers Jump Creek Reserve) are within the Priority Management Area for this species identified in the Saving Our Species program. Any natural area on sandstone that has ephemeral drainage lines should be managed for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10692</u>
Birds						
Anthochaera phrygia	Regent Honeyeate r	Critically Endangered	Critically Endangered	Not recorded from any of the natural areas but it may occur on occasion as a vagrant.	There are four records of this species from the LGA with the latest from 2016. The remaining records are much older and from Wahroonga and Roseville Chase. This species is likely to visit the natural areas sporadically.	This species has been assigned to the Site-managed species management stream under the SoS program. There are five active and one proposed management sites have been identified for this threatened species. These sites are not within the Ku-ring-gai LGA. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10841</u>
Artamus cyanopterus cyanopterus	Dusky Woodswall ow	Not listed	Vulnerable	Browns Forest, but likely flies across the LGA and would use most natural areas	This species is likely to fly across the LGA and is unlikely to be restricted to a single natural area.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=20303</u>

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Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Botaurus poiciloptilus	Australasi an Bittern	Endangered	Endangered	Not recorded from any of the natural areas but it may occur.	Known from a record on the Lane Cove River within the Ku-ring-gai LGA. Natural areas with drainage lines holding permanent water are likely to be suitable for this species.	This species has been assigned to the Landscape species management stream under the SoS program. There are two management sites that have been identified for this threatened species where important populations exist, but they are not within the Ku-ring- gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10105

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Callocephalon fimbriatum	Gang- gang Cockatoo Gang- gang Cockatoo population in the Hornsby and Ku- ring-gai Local Governme nt Areas	Not listed	Vulnerable Endangered population	Bradley Park, Comenarra Creek Reserve, Sir David Martin Reserve	This species and the endangered population are known to be present in the LGA. All records of this species are concentrated in the west of the LGA in natural areas that adjoin or are near the Lane Cover NP. The most observation of this species in BioNet is from Sir David Martin Reserve in 2011. Natural areas including Bradley Park, Comenarra Creek Reserve, and Sir David Martin Reserve are the priority areas for this species.	 This species has been assigned to the Landscape species management stream under the SoS program. Currently, two priority management sites have been identified for this threatened species where important populations exist, but they are not within the Ku-ring-gai LGA. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10975 The Gang-gang Cockatoo population in the Hornsby and Ku-ring-gai Local Government Areas is an endangered population. Currently, no management sites have been identified for this endangered population. A number of state-wide conservation actions have been identified for this endangered population. A number of state-wide conservation actions have been identified for this endangered population, which include: Develop fire management options within forested habitat areas that give priority to minimising loss of habitat trees. Produce a community awareness strategy that provides advice on how to carry out actions that will benefit the population of the species. Provide supplementary hollows/nest boxes within the primary habitat areas. Develop a strategy that includes street tree or other planting, browse plant species within reserves and private residences. Monitor utilisation of the relevant forested areas as to nesting, foraging and other habitat uses. Investigate movement patterns within and between areas occupied by individuals from the opportunities exist to further facilitate migrations to and from the designated endangered population area. Provide map of known occurrences to Rural Fire Service and seek inclusion of mitigative measures on Bush Fire Risk Management Plan(s), risk register and/or operation map(s). There are no measures specified for this species or endangered population or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10133

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Calyptorhynch us lathami	Glossy Black- Cockatoo	Not listed	Vulnerable	Ku-ring-gai Creek Reserve, Lovers Jump Creek Reserve	The records of this species from within the LGA are from the north and east in natural areas that have connectivity to Garigal NP or Ku-Ring-Gai Chase NP. Natural areas including Ku-ring-gai Creek Reserve, and Lovers Jump Creek Reserve are the priority areas for this species but any natural areas containing foraging resources (i.e. large stands of Casuarina or Allocasuarina) should be managed for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, seven priority management sites (three active and four proposed) have been identified for this threatened species where important populations exist, but they are not within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10140
Climacteris picumnus victoriae	Brown Treecreep er (eastern subspecie s)	Not listed	Vulnerable	Ku-ring-gai Creek Reserve	There is only one record of this species from within the LGA and it was made at the Warrimoo Downhill Mountain Bike track within the Ku-ring-gai Creek Reserve in 2018. It is an unusual record for the area.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, seven priority management sites (one active and six proposed) have been identified for this threatened species where important populations exist, but they are not within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp
Daphoenositta chrysoptera	Varied Sittella	Not listed	Vulnerable	Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park	There are only three records of this species from within the Ku-ring-gai natural areas. This species is potentially more widespread and larger natural areas with connectivity to adjacent National Parks such as Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, Moores Creek Reserve, Old She Oak Reserve, Lindfield Soldiers' Memorial Park, Browns End, Bradley Park, etc. should be managed for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=20135

Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Glossopsitta Little busilla Lorikeet		Vulnerable	Vulnerable Hassall Bush North, Hassall Bush South	There are records of this species within the LGA from Dalrymple Hay NR, Wahroonga, Turramurra, and Hassall Park. Likely to forage widely throughout the LGA and may breed in the natural areas.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, six management sites have been identified for this threatened species, but they are not within the Ku-ring-gai LGA.
					There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land.
					https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=20111
White- bellied Sea-Eagle	Not listed	Vulnerable	Fraser Park, Governor Phillip Reserve - East Gordon Park, Lovers	The natural areas that adjoin Middle Harbour (Moores Creek Reserve, Old She Oak Reserve) are known to be used by this	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species.
Moores Creek	Moores Creek	es Creek	There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land.		
			Reserve		https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=20322
Little Eagle	Not listed	Not listed Vulnerable	Vulnerable Sir David Martin Reserve	There are six records of this species from the LGA from areas including Wahroonga, Turramurra and St Ives. The records are from the 1980s and early 2000s.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species.
					There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land.
					https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=20131
White- throated Needletail	Vulnerable, Migratory	Not listed	Browns End, Browns Forest, Grannys Springs, Ku-ring-gai Creek Reserve,	This species is known to frequent the Sydney area during the non-breeding season. It is likely to fly over the natural areas subject to this Plan.	A Commonwealth Recovery Plan is not required for this species as the approved Conservation Advice for the species provides sufficient direction to implement priority actions, mitigate against key threats and enable recovery.
	Re Bu Si Re Gi		Lovers Jump Creek Reserve, Merrivale Bush, Sheldon Forest, Sir David Martin Reserve, Sir Phillip Game Reserve South, The Glade Reserve,		There are no measures specified for this species in the approved Conservation Advice for the species (see Threatened Species Scientific Committee, 2019) to be taken by Ku-ring-gai Council on or in respect of the land. <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/6</u> 82-conservation-advice-04072019.pdf
	name Little Lorikeet White- bellied Sea-Eagle Little Eagle White- throated	nameConservation StatusLittle LorikeetNot listedWhite- bellied Sea-EagleNot listedLittle EagleNot listedLittle FagleNot listedLittle FagleNot listedVwhite- throatedVulnerable, Migratory	nameConservation StatusConservati on StatusLittle LorikeetNot listedVulnerableWhite- bellied Sea-EagleNot listedVulnerableLittle EagleNot listedVulnerableLittle EagleNot listedVulnerableWhite- bellied Sea-EagleNot listedVulnerableLittle EagleNot listedVulnerableLittle EagleNot listedVulnerableWhite- throatedVulnerable, MigratoryNot listed	nameConservation StatusConservati on StatusmanagementLittle LorikeetNot listedVulnerableHassall Bush North, Hassall Bush SouthWhite- bellied Sea-EagleNot listedVulnerableFraser Park, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, Moores Creek Reserve, Old She Oak ReserveLittle EagleNot listedVulnerableSir David Martin ReserveWhite- throated NeedletailVulnerable, MigratoryNot listedSir David Martin Reserve, Creek Reserve, Dovers Jump Creek Reserve, Reserve, Creek Reserve, Not listedWhite- throated NeedletailVulnerable, MigratoryNot listedBrowns End, Browns Forest, Grannys Springs, Ku-ring-gai Creek Reserve, Merrivale Bush, Sheldon Forest, Sir David Martin Reserve, Sir Phillip Game Reserve, Sir Phillip	nameConservation StatusConservati on StatusmanagementLittle LorikeetNot listedVulnerableHassall Bush North, Hassall Bush SouthThere are records of this species within the LGA from Dalrymple Hay NR, Wahroonga, Turramurra, and Hassall Park. Likely to forage widely throughout the LGA and may breed in the natural areas.White- bellied Sea-EagleNot listedVulnerableFraser Park, Governor Phillip Reserve - East Gordon Park, Lovers Jump Creek Reserve, Moores Creek Reserve, Old She Oak Reserve, Old She Oak ReserveLittle EagleNot listedVulnerableSir David Martin ReserveThere are six records of this species from the LGA from areas including Wahroonga, Turramurra and St Ives. The records are from the 1980s and early 2000s.White- throated NeedletailVulnerable, MigratoryNot listedBrowns End, Browns Forest, Grannys Spring, Ku-ring-pai Creek Reserve, Lovers Jump Creek, Reserve, Sir Phillip Game Reserve, South, The Glade Reserve, South, The Glade Reserve, South, The Glade Reserve

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Ixobrychus flavicollis	Black Bittern	Not listed	Vulnerable	Moores Creek Reserve, Troon Creek Reserve	Known from two records within the Ku-ring-gai LGA. Natural areas with drainage lines holding permanent water are likely to be suitable for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10441
Lathamus discolor	Swift Parrot	Critically Endangered	Endangered	Not recorded from any of the natural areas but it may occur.	There are eight records of the Swift Parrot from the LGA. This species is likely to visit the natural areas when on the mainland.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, four management sites have been identified for this threatened species. The Ku-ring-gai LGA is within one of the identified broader priority management areas for this species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10455
Lophoictinia isura	Square- tailed Kite	Not listed	Vulnerable	Douglas Street Reserve, Lovers Jump Creek Reserve, Moores Creek Reserve, Seven Little Australians, Sheldon Forest	There are 14 records of this species in the Ku- ring-gai LGA mostly from the north and eastern areas but also Sheldon Forest. The natural areas are likely to be widely used by this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10495

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Ninox connivens	Barking Owl	Not listed	Vulnerable	Bobbin Head Road Bushland, Old She Oak Reserve, Sir Phillip Game Reserve South, Blackbutt Reserve	This species is known to occur in the natural areas subject to this Plan including Bobbin Head Road Bushland, Old She Oak Reserve, Sir Phillip Game Reserve South, Blackbutt Reserve and in adjacent areas including Garigal NP and Lane Cove NP. Likely to be more widespread in the LGA than currently known.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, four management sites have been identified for this threatened species. The Ku-ring-gai LGA is within one of the identified broader priority management areas for this species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10561

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Ninox strenua	Powerful Owl	Not listed	Vulnerable	Blackbutt Reserve, Blue Gum Creek Reserve, Bradley Park, Browns Forest, Comenarra Creek Reserve, Cowan Creek Reserve, Golfers Glen, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Lower Campbell Reserve, Merrivale Bush, Moores Creek Reserve, Old She Oak Reserve, Quarry Creek Reserve, Richmond Park, Rofe Park, Seven Little Australians, Sheldon Forest, Sir David Martin Reserve, Sir Phillip Game Reserve South, Troon Creek Reserve, Twin Creek Reserve	This species is widespread within the LGA. Most natural areas provide suitable habitat for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, one management site has been identified for this threatened species. The Ku-ring-gai LGA is within one of the identified broader priority management areas for this species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10562

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Ptilinopus superbus	Superb Fruit-Dove	Not listed	Vulnerable	Not recorded from any of the natural areas but it may occur.	There are six records of this species from the LGA. It is known to occur on occasion, but the birds are likely to be dispersing juveniles and the species is unlikely to be resident in the LGA.	This species has been assigned to the Partnership (widespread) management stream under the SoS program because less than 10% of the species occurs within NSW. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10709
Tyto novaehollandi ae	Masked Owl	Not listed	Vulnerable	Clive Evatt Reserve	The remains of a dead bird were found in Clive Evatt Reserve in 2019. Likely to be very uncommon in the LGA but may also be under- reported as this species is hard to survey for and is superficially similar in appearance to the Barn Owl. Potential habitat is widespread in natural areas with dry sclerophyll forest, wet sclerophyll forest, heath, and rainforest.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, six management sites have been identified for this threatened species. The Ku-ring-gai LGA is within one of the identified broader priority management areas for this species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10820
Mammals		1		1		
Cercartetus nanus	Eastern Pygmy- possum	Vulnerable	Not listed	Cowan Creek Reserve, Dingly Dell, Douglas Street Reserve, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Lovers Jump Creek Reserve, Old She Oak Reserve, Surgeon White Reserve	Records of this species within the LGA are common in the north and eastern sections. Natural areas containing the Sydney North Exposed Sandstone Woodland, Coastal Sandstone Heath-Mallee, and Sydney Ironstone Bloodwood-Silvertop Ash Forest habitats are likely to contain this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10155

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Chalinolobus dwyeri	Large- eared Pied Bat	Vulnerable	Vulnerable	Douglas Street Reserve	There are records of this species from Turramurra, North Turramurra, St Ives and Douglas Street Reserve. This indicates that the species at least forages within the natural areas subject to this Plan.	This species has been assigned to the Data-deficient species management stream under the SoS program. Insufficient information is available on the species' distribution and ecology to guide effective management. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10157</u>
Dasyurus maculatus	Spotted- tailed Quoll	Vulnerable	Endangered	Cowan Creek Reserve	Records of this species are uncommon but have been made from bushland and urban areas of the LGA. This species is likely to be in low densities but is likely to inhabit many of the natural areas subject to this Plan.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, six management sites have been identified for this threatened species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10207</u>
Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not listed	Browns Forest, Sir Phillip Game Reserve North	Most records of this species within the LGA have been made at Pymble and Lindfield. Suitable habitat is most likely to be wet sclerophyll forests (e.g. Blue Gum High Forest).	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10331</u>

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Isoodon obesulus obesulus	Southern Brown Bandicoot	Endangered	Endangered	Douglas Street Reserve	The Ku-Ring-Gai Chase NP is known to be a stronghold for this species and the adjacent natural areas also contain suitable habitats (particularly the Sydney North Exposed Sandstone Woodland). This species is known from the Ku-ring-gai Wildflower Garden but may also occur in the Ku-ring-gai Creek Reserve, Cowan Creek Reserve, Lovers Jump Creek Reserve, and natural areas adjacent to Garigal NP including Douglas Street Reserve, Old She Oak Reserve, and Surgeon White Reserve.	This is a site managed species. One management site within the Ku- ring-gai LGA has been identified for this species (Garigal / Ku-ring-gai). This site is identified as "Ku-ring-gai Chase and Garigal National Parks" so does not include any Council land. The mapping of the site is coarse and includes Council natural areas including Ku-ring-gai Wildflower Garden (subject to a site-specific plan of management), McIntosh Park, Linigen Trail, Linigen Reserve, Cambourne North, Reserve Cambourne East Reserve, Douglas Street Reserve, Surgeon White Reserve, London Reserve, Kimberly's Way, Old She Oak Reserve. The site is however restricted to the National Parks. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/Manageme ntSite.aspx?SiteID=328</u>
Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	Vulnerable	Not listed	Browns Forest, Cowan Creek Reserve, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Richmond Park, Sheldon Forest	Records of this species are widespread in the LGA and this species is likely to inhabit most of the natural areas subject to this Plan.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, six management sites have been identified for this threatened species but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10544</u>
Miniopterus australis	Little Bent- winged Bat	Vulnerable	Not listed	Bradley Park, Halls Reserve, Ku-ring-gai Creek Reserve, Lovers Jump Creek Reserve, Moores Creek Reserve, Princes Park, Sheldon Forest, Sir Phillip Game Reserve North, Twin Creek Reserve	The Ku-ring-gai Council annual microbat monitoring program indicates that this species is relatively widespread in the LGA. This species is likely to inhabit most of the natural areas subject to this Plan.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10533</u>

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Miniopterus orianae oceanensis	Large Bent- winged Bat	Vulnerable	Not listed	Blackbutt Reserve, Bradley Park, Browns Forest, Comenarra Creek Reserve, Cowan Creek Reserve, Du Faur Reserve, Du Faur Reserve, Grannys Springs, Halls Reserve, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Lower Paddys Forest, Merrivale Bush, Moores Creek Reserve, Princes Park, Sheldon Forest, Sir Phillip Game Reserve North, Twin Creek Reserve	Records of this species are widespread in the LGA and this species is likely to inhabit most of the natural areas subject to this Plan. Roosts are known in culverts under the Comenarra Parkway at Wahroonga (Bradley Park / Twin Creek Reserve).	This is a site managed species. Currently, seven management sites have been identified for this threatened species. but there are no identified management sites within the Ku-ring-gai LGA. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10534
Myotis macropus	Southern Myotis	Vulnerable	Not listed	Cowan Creek Reserve, Lovers Jump Creek Reserve, Moores Creek Reserve	Known from natural areas with larger drainage lines or dams in close proximity. Likely to use other natural areas to move between foraging grounds.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. <u>https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp</u> <u>x?ProfileID=10549</u>

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Phascolarctos cinereus	Koala	Vulnerable	Vulnerable	Bradley Park, Lovers Jump Creek Reserve.	There are 12 records of this species from the LGA with the most recent records being from 2017 where an animal was seen at George Christie Oval and another location in South Turramurra (both from Bradley Park). There is an old record (1970) from Lovers Jump Creek Reserve). This species is likely to occur in the natural areas subject to this Plan at low density.	This species has been assigned to the Iconic species management stream under the SoS program based on high levels of community engagement and interest. Currently, 12 management sites have been identified for this threatened species, but none are located in the Ku- ring-gai LGA. NSW State wide is recognised as a "contributing site". There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10616

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Pteropus poliocephalus	Grey- headed Flying-fox	Vulnerable	Vulnerable	Amarna Reserve, Blackbutt Reserve, Bobbin Head Road Bushland, Bradley Park, Browns End, Browns Forest, Clive Evatt Reserve, Comenarra Creek Reserve, Cowan Creek Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Grannys Springs, Ku-ring-gai Creek Reserve, Lindfield Soldiers' Memorial Park, Lovers Jump Creek Reserve, Lower CSIRO Bush, Merrivale Bush, Moores Creek Reserve, Richmond Park, Rofe Park, Seven Little Australians, Sheldon Forest, Sir Phillip Game Reserve North, Sir Phillip Game Reserve, The Glade Reserve, Twin Creek Reserve	This species is very widespread within the Ku- ring-gai LGA. The Ku-ring-gai Flying Fox Reserve / Gordon Park is home to the Nationally important Gordon camp. This natural area has a site-specific management plan.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, four priority management sites have been identified for this threatened species which includes a "State wide" site. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10697

Scientific name	Common name	EPBC Act Conservation Status	BC Act Conservati on Status	Locations for management	Notes	Areas subject to the Saving our Species program
Saccolaimus flaviventris	Yellow- bellied Sheathtail- bat	Vulnerable	Not listed	Browns Forest, Sheldon Forest	There are few records of this species form the LGA, but it is known to occur. May occur in most natural areas.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10741
Scoteanax rueppellii	Greater Broad- nosed Bat	Vulnerable	Not listed	Not recorded from any natural areas but likely to occur.	This species is known from the LGA and has been recorded in Lindfield, Turramurra, Pymble and Wahroonga. It is likely to occur in most natural areas.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10748
Reptiles						
Varanus rosenbergi	Rosenber g's Goanna	Vulnerable	Not listed	Cowan Creek Reserve, Dingly Dell, Governor Phillip Reserve - East Gordon Park, Ku-ring- gai Creek Reserve, Lovers Jump Creek Reserve, Moores Creek Reserve	There are 23 records of this species from the LGA. Natural areas with the Sydney North Exposed Sandstone Woodland and Coastal Sandstone Heath-Mallee are likely to be most suitable for this species.	This species has been assigned to the Landscape species management stream under the SoS program. Currently, no management sites have been identified for this threatened species. There are no measures specified for this species in the SoS program to be taken by Ku-ring-gai Council on or in respect of the land. https://www.environment.nsw.gov.au/savingourspeciesapp/project.asp x?ProfileID=10826

Appendix E – Summary of Key Threatening Processes and SoS program areas

 Table E1
 Summary of KTPs and areas subject to the SoS program

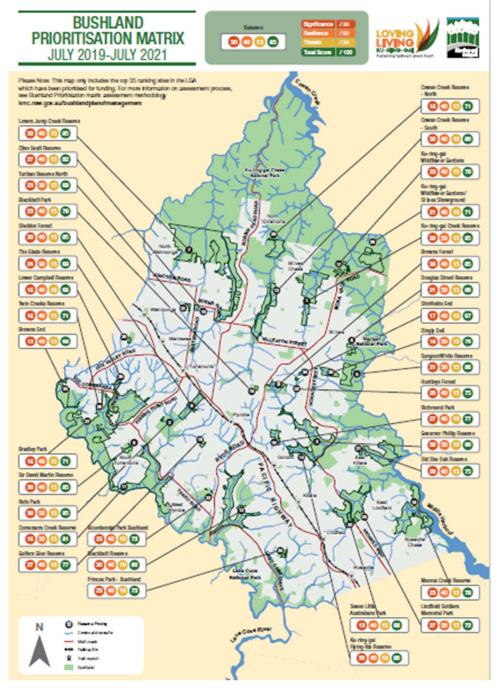
Key Threatening Process	Areas subject to the SoS program
Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephala (Latham, 1802)	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Alteration of habitat following subsidence due to longwall mining	This KTP is not applicable to this Plan.
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Anthropogenic Climate Change	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Bushrock removal	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Clearing of native vegetation	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Competition from feral honey bees, Apis mellifera L.	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Death or injury to marine species following capture in shark control programs on ocean beaches	This KTP is not applicable to this Plan.
Entanglement in or ingestion of anthropogenic debris in marine and estuarine environments	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.

Key Threatening Process	Areas subject to the SoS program
Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758	A SoS strategy is being developed for this KTP.
Herbivory and environmental degradation caused by feral deer	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Infection of native plants by Phytophthora cinnamomi	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Introduction of the Large Earth Bumblebee Bombus terrestris (L.)	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion and establishment of exotic vines and scramblers	The Draft SoS strategy for this KTP indicates that the SoS strategy for Blue Gum High Forest ecological community is implementing actions to manage the threat of exotic vines and scramblers at priority SoS sites including the Burns Road Sites, Dalrymple / Browns Forest, Sheldon Forest and Warrawee Public School.
Invasion and establishment of Scotch Broom (Cytisus scoparius)	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion and establishment of the Cane Toad (Bufo marinus)	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion of native plant communities by Chrysanthemoides monilifera	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.

Key Threatening Process	Areas subject to the SoS program
Invasion of native plant communities by exotic perennial grasses	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat)	The Draft SoS strategy for this KTP indicates that the SoS strategy for Blue Gum High Forest ecological community is implementing actions to manage the threat of exotic vines and scramblers at priority SoS sites including the Burns Road Sites, Dalrymple / Browns Forest, Sheldon Forest and Warrawee Public School.
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	The Draft SoS strategy for this KTP indicates that the SoS strategy for Blue Gum High Forest ecological community is implementing actions to manage the threat of this KTP at priority SoS sites including the Burns Road Sites, Dalrymple / Browns Forest, Sheldon Forest and Warrawee Public School. The SoS strategy for Duffys Forest Ecological Community in the Sydney Basin Bioregion is implementing actions to manage this KTP at the Ku-ring-gai site priority SoS site.
Loss of Hollow-bearing Trees	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Loss or degradation (or both) of sites used for hill-topping by butterflies	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Predation and hybridisation by Feral Dogs, Canis lupus familiaris	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish)	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Predation by the European Red Fox <i>Vulpes vulpes</i> (Linnaeus, 1758)	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Predation by the Feral Cat Felis catus (Linnaeus, 1758)	There are no measures specified in the Draft SoS strategy for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Predation by the Ship Rat Rattus rattus on Lord Howe Island	This KTP is not applicable to this Plan.
Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa Linnaeus 1758	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.
Removal of dead wood and dead trees	A SoS strategy is being developed for this KTP. There are no measures specified in the old PAS for this KTP to be taken by Ku-ring-gai council on or in respect of the land.

Appendix F – Bushland rating matrix and decision support tool

Council's Bushland Prioritisation Matrix results and assessment methodology is provided on Council's website (<u>https://www.krg.nsw.gov.au/Environment/Bushland-and-</u>



wildlife/Bushland/Bushland-plans-and-policies/Bushland-plan-of-management).

Appendix G – Values of the Ku-ring-gai Natural Areas

8.1 Landscape character

Ku-ring-gai LGA is located within the Sydney Basin bioregion with the major central ridge on which the North Shore railway line and Pacific Highway runs being located within the Cumberland subregion, and the slopes either side of the central ridge being in the Pittwater subregion (see Thackway and Cresswell, 1995). A minor ridge runs from Telegraph Road, Pymble north-east through St Ives.

The Ku-ring-gai LGA can be further divided into 'NSW landscapes' also known as 'Mitchell landscapes (see Department of Environment & Climate Change, 2008). This mapping was undertaken to provide a meaningful framework for the NSW Ecosystems Database and by creating a consistent state-wide map using the best available data also provide the means for developing conservation priorities and tracking conservation progress across NSW. The Ku-ring-gai LGA covers the following NSW landscapes:

- Pennant Hills Ridges Rolling to moderately steep hills on horizontal Triassic shales and siltstones. General elevation 10 to 90m, local relief 60m. Deep red texture-contrast soils on narrow hillcrests, red and brown to yellow texture-contrast soils on slopes becoming slightly harsher in drainage lines. Examples of natural areas within this landscape include Browns Forest, Huntleys Forest, Blackbutt Park, Merrivale Bush, Dingly Dell, Bannockburn Bush, Clive Evatt Reserve, Turiban Reserve (north and south), The Glade Reserve, Grannys Springs, Sheldon Forest (in part), Richmond Park, and Hammond Reserve.
- Belrose Coastal Slopes Benched hill slopes and deep valleys of the coastal fall on horizontal Triassic quartz sandstone, lithic sandstone and shales. High proportion of rock outcrop with discontinuous cliffs to 5m high. General elevation 0 to 180m, local relief 80m. Shallow uniform or gradational sands and earthy sands on ridges, deeper sands, loamy sands and organic sands on wet benches and in hanging swamps, grey or yellow texture-contrast soils on shale benches. Accumulations of deeper sand and occasional podsols in depositional sites and along streams. Examples of natural areas within this landscape include Roseville Bridge Bush, Upper Cardigan Reserve, Moores Creek Reserve, Lindfield Soldiers' Memorial Park, Seven Little Australians, Old She Oak Reserve, Bushranger Reserve, Governor Phillip Reserve – East Gordon Park, Barra Brui Bush, and Surgeon White Reserve.
- Hornsby Plateau Benched hill slopes and steep hills with narrow flat-topped ridges and broader plateau tops on horizontal Triassic quartz sandstone with occasional conglomerate and thin discontinuous shales. Isolated thicker shales and areas of 'laterite' development on plateaus. General elevation 0 to 220m, local relief 30 to 120m. Shallow uniform sands amongst rock outcrops. Deep gradational yellow earths on some plateau areas, yellow texture-contrast soils on benches, deep uniform sands, organic sands and limited podsols in depositional areas. Examples of natural areas within this landscape include McIntosh Park, Ku-ring-gai Creek Reserve, Cowan Creek Reserve, Travis Park, Bobbin Head Road Bushland, Lovers Jump Creek Reserve, Fraser Park and Billy Hughes Park.
- Port Jackson Basin Deep elongated harbour with steep cliffed margins on horizontal Triassic quartz sandstone. Small pocket beaches and more extensive Quaternary estuary fill of muddy sand at the head of most tributary streams. General elevation 0 to 80m, local relief 10 to 50m. Sandstone slopes and cliffs have patches of uniform or gradational sandy soil on narrow benches and within joint crevices. Examples of natural areas within this landscape include Browns End, Bradley Park, Twin Creek Reserve, Sheldon Forest (in part), Rofe Park, Sir David Martin Reserve, Comenarra Bush, Comenarra Creek Reserve, Blackbutt Reserve, Sir Phillip

Game Reserve North and South, Lower CSIRO Bush, Blue Gum Creek Reserve, and Sugarbag Creek Reserve.

Sydney Basin Diatremes - Diatremes are circular volcanic vents filled with layered, brecciated country rock cemented by a fine-grained basaltic matrix. Some contain a core of basalt. In sandstone country the volcanic breccia weathers and erodes more rapidly than the sandstone and the landform is a deep circular with the appearance of a crater. Soils in the crater are dominated by sandstone detritus from the surrounding slopes but the subsoils are a fertile well, structured clay derived from the breccia and these protected sites carry more mesic variants of the local vegetation. General elevation varies considerably across the basin with negative landforms ('craters') 180m. Lower Campbell Reserve is the only natural area within the LGA situated within this landscape making it unique.

The two major catchments within the LGA are the Hawkesbury and the Port Jackson / Georges River (Lane Cover River and Middle Harbour). There are over 177 km of waterways and creeks in the LGA with a large proportion remaining in semi-natural to natural condition in private easements, parkland and bushland reserves. This is a significant benefit to the Ku-ring-gai's riparian ecosystems and the receiving environments of Sydney Harbour and the Hawkesbury Estuary.

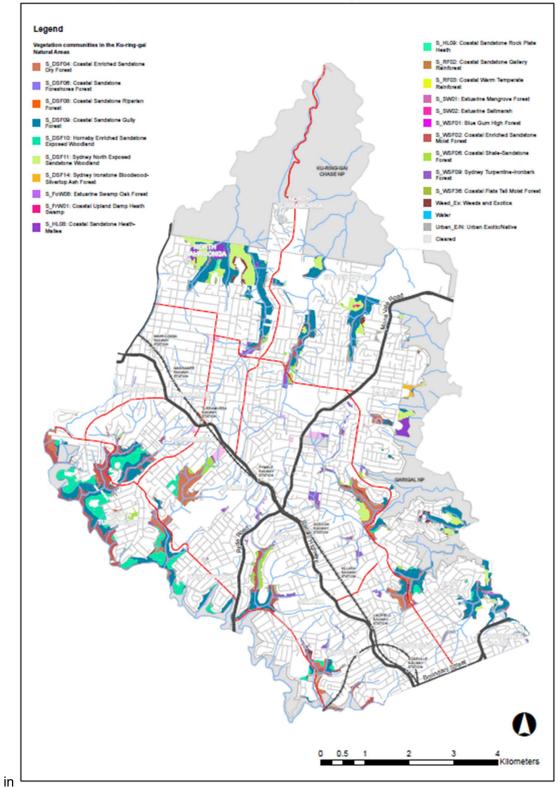
The Ku-ring-gai LGA has three surrounding National Parks: Garigal National Park in the east, Ku-ring-gai Chase National Park in the north, and Lane Cove National Park in the south west.

8.2 Biodiversity values

This section provides a summary of the biodiversity values specific to the Ku-ring-gai natural area reserves that are subject to this Plan.

8.2.1 Vegetation communities

Twenty vegetation communities are found within the Ku-ring-gai Council natural areas (see Appendix A) ranging from dry sclerophyll forests, heathlands, wet sclerophyll forests, forested wetlands, freshwater wetlands and saline wetlands. This variety is the result of regional and local environmental influences including landscape position, topography, aspect, geology, soil type, and variations in local rainfall, and surface and subsurface water flows. There are also several disturbance influences including wildfire and hazard reduction burns, clearing, weed invasion, altered hydrological regimes, and human land use patterns and wildlife interactions including seed



dispersals. The vegetation communities are outlined in Appendix A and their distribution is shown

Figure 4.

There are six Threatened Ecological Communities (TECs) listed under the NSW BC Act present in the Ku-ring-gai natural areas including:

- Duffys Forest Ecological Community in the Sydney Basin Bioregion (Endangered)
- Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (Endangered)
- Coastal Upland Swamp in the Sydney Basin Bioregion (Endangered)
- Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (Endangered)
- Blue Gum High Forest in the Sydney Basin Bioregion (Critically Endangered)
- Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion (Critically Endangered).

There are five TECs listed under the Commonwealth EPBC Act present in the Ku-ring-gai natural areas including:

- Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community (Endangered)
- Coastal Upland Swamps in the Sydney Basin Bioregion (Endangered)
- Subtropical and Temperate Coastal Saltmarsh (Vulnerable)
- Blue Gum High Forest of the Sydney Basin Bioregion (Critically Endangered)
- Turpentine-Ironbark Forest of the Sydney Basin Bioregion (Critically Endangered).

In addition to TECs, the Coastal Shale-Sandstone Forest community is recognised as a regionally significant vegetation community. Approximately 92% of the original extent of the community has been cleared.

The Ku-ring-gai natural areas also contain vegetation including Estuarine Mangrove Forest and Estuarine Saltmarsh, both of which are identified as Protected Marine Vegetation under the *Fisheries Management Act 1994* (FM Act). There are also areas of mapped seagrass meadows downstream of the LGA outside of Council's administration boundary within Middle Harbour which are noted in the interest of contributing to the management of these sensitive environments.

These TECs and other communities are subject to recovery planning through the Saving Our Species Program and as such the land upon which these TECs are situated has been categorised as a natural area and allocated to the Bushland, Wetland, Watercourse or Foreshore further categories as appropriate (see Section 4 of this Plan).

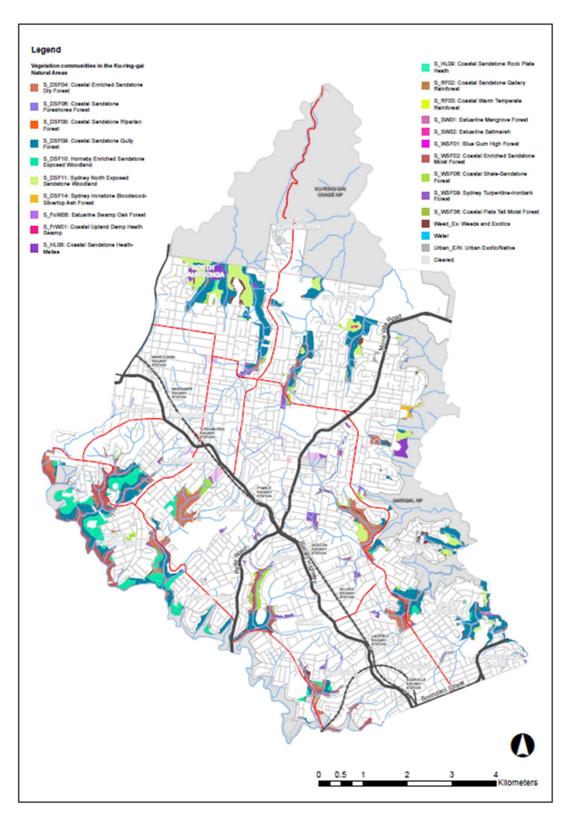


Figure 4 Vegetation communities identified in the Ku-ring-gai LGA natural areas

8.2.2 Flora and fauna species

Knowledge of flora and fauna within the LGA is maintained through Council's flora and fauna database (Biobase). This database is updated regularly with records from the NSW Wildlife Atlas, Wildlife Watch (community sightings), Council and consultants.

As of July 2020, there are 21 threatened flora species that are known to occur within the natural areas subject to this Plan (see Appendix A). There are also three threatened flora species: *Acacia bynoeana, Hibbertia puberula*, and *Persoonia hirsuta* that are considered likely to occur within the Ku-ring-gai natural areas based on the presence of suitable habitat and existing records from the adjacent Ku-ring-gai Chase and Garigal National Parks. Appendix A outlines the species that are known to occur or that are likely to occur including discussion on suitable habitat and known locations for management.

As of July 2020, there are 35 threatened fauna species that are known to occur, or have suitable habitat within, the natural areas subject to this Plan (see Appendix A). This includes 13 mammals, 18 birds, 3 amphibians and 1 reptile. The natural areas subject to this plan are known to provide important habitats for several resident species including the Red-crowned Toadlet, Powerful Owl, and Grey-headed Flying-fox, but also provide habitat for a range of species that are transient or have large home ranges for example the Swift Parrot, Regent Honeyeater, Koala, and Spotted-tail Quoll. Some species known from the adjacent Ku-ring-gai Chase and Garigal National Parks such as the Southern Brown Bandicoot and Giant Burrowing Frog are likely to occur in adjoining natural areas that contain similar habitats. Appendix A outlines the species that are known to occur, or that are likely to occur, including discussion on suitable habitat and known locations for management.

8.2.3 Biodiversity corridors

The biodiversity corridors within the Ku-ring-gai LGA are identified in Council's LEP, DCP and Biodiversity and Riparian Lands Study. These biodiversity corridors link vegetation remnants with regenerated or planted vegetation and form links between regional and local fauna habitat and the Ku-ring-gai natural areas and remnant patches. These areas are not necessarily comprised of continuous vegetation nor do they necessarily form a direct physical connection between fauna habitat, due to the existence of roads and other urban infrastructure.

8.3 Heritage values

Section 36D of the LG Act relates to Community land comprising an area of cultural significance. The natural areas that are subject to this Plan include several Aboriginal and non-Aboriginal heritage items. Council actively works with Heritage NSW to improve our understanding of heritage issues within the LGA and will continue to report on, protect and promote these areas within the LGA.

8.3.1 Aboriginal heritage

Ku-ring-gai is rich with Aboriginal cultural heritage and sites, which is significant to the Darramuragal people and overseen by the Aboriginal Heritage Office (AHO) and is a shared responsibility with local government and land managers. Aboriginal heritage including places and objects are protected under the following State legislation:

- National Parks and Wildlife Act 1974 (NSW); and
- Environmental Planning and Assessment Act 1979 (NSW).

Under the *National Parks and Wildlife Act 1974* (NP&W Act) Aboriginal places, objects and features of significance are protected, such as pre-contact features such as scarred trees, middens and artefact scatters, as well as physical evidence such as Aboriginal built fencing, stockyards and fringe camps. An Aboriginal place by meaning of the NP&W Act is a place of special significance to Aboriginal culture and may not necessarily contain Aboriginal objects.

In 2015, the Aboriginal Heritage Office, completed an assessment of Aboriginal sites and study into areas that may have high potential for containing unidentified Aboriginal Heritage items, titled Kuring-gai Council Aboriginal Site Management Report 2015. This report is the main guiding document for council staff when determining development applications and works in natural areas. Prior to this Ku-ring-gai's Aboriginal heritage was largely guided by a heritage study completed in 1988 (see Koettig, M. 1988).

In 2019, two previously unrecorded rock art sites were re-discovered in Ku-ring-gai, along with red hand stencils and shell midden sites that have also been recently discovered within the LGA. The broader northern Sydney region contains several historical sites, including shell middens, axe grinding grooves, ceremonial grounds, burial sites, stone quarries, fish traps and water holes.

8.3.2 Non-Aboriginal heritage

Ku-ring-gai Council is obliged to conserve non-indigenous under the *Heritage Act* 1977 and manage these assets according to the principles contained within the 'Burra Charter'. These places are considered worth keeping because they enrich our lives by helping us understand the past. They become part of the environment of the bushland and if conserved will be valued by future generations. The combination of the setting and the content will enable the land manager to understand and communicate the significance of the place and the importance attached to its conservation.

In 1987, a heritage study was completed with the aim of initiating a process that would see important heritage items protected (Ku-ring-gai Council 1987). This study focused primarily on identification of heritage items within bushland managed or under care control or management of Council and concluded that Ku-ring-gai has an extraordinary wealth and range of heritage places. Items of non-Aboriginal historical interest within or adjacent to Ku-ring-gai Council natural areas include but are not limited to:

- early walking tracks, retaining walls and bridges from pre-1920 that are now part of the extensive Middle Harbour walking track system;
- early stone structures related to industrial land use of the 1920s in Sheldon Forest and Hammond Reserve; and
- a World War II rifle range and Italian Prisoner of War Camp below St Ives Showground.

8.4 Recreational values

Sustained population growth in Ku-ring-gai and in neighbouring LGAs will continue to increase the demand for access to Ku-ring-gai's natural areas for recreational pursuits. The Ku-ring-gai natural area reserves offer a wealth of opportunities for active and passive recreation, focused around the use and access provided by various trails.

The Ku-ring-gai Council Recreation in Natural Areas Strategy 2020 (Ku-ring-gai Council, 2020a) applies to the natural areas within the Ku-ring-gai LGA. For the purpose of the Recreation in Natural Areas Strategy 2020, 'recreation in natural areas' includes activities and experiences:

- that are dependent on the natural environment
- where an appreciation of nature is a key motivational factor;
- that do not require substantial modification of the natural environment; and
- where the natural environment is critical to the participation and satisfaction of participants; not just incidental to it

The recreational activities that are undertaken within the Ku-ring-gai natural areas include track dependant recreation (bush walking, running, dog walking, general access, bird watching, horse

riding), mountain biking (all disciplines), orienteering and rogaining, and rock climbing, abseiling and bouldering. These activities have been identified and adopted through the Ku-ring-gai Council Recreation in Natural Areas Strategy 2020 (Ku-ring-gai Council, 2020a). Each of these recreational activities is discussed below in terms of how the Ku-ring-gai natural areas provide access to the activity.

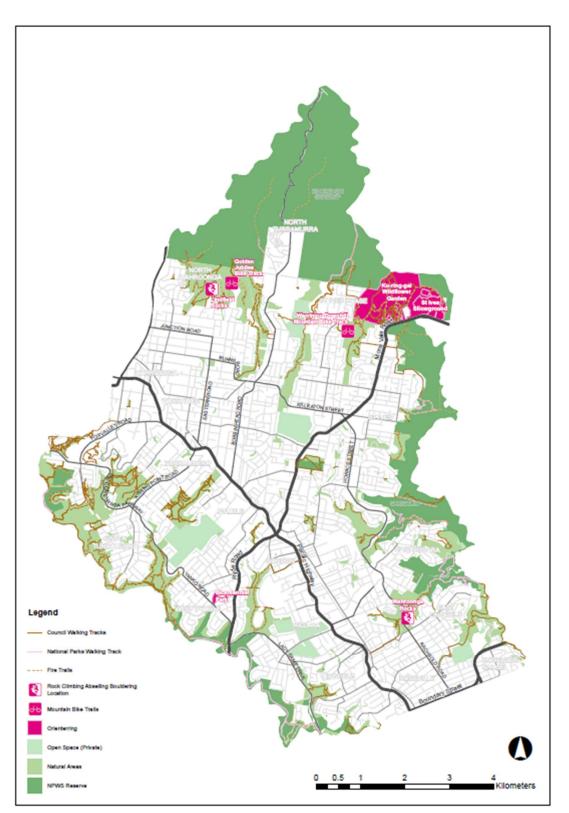
8.4.1 Track dependant recreation

Within Ku-ring-gai's natural areas, most of the recreation is trail dependant. A well-maintained and connected trail network benefits multiple user groups and allows people of all ages and abilities to enjoy and connect with nature through recreation and exploration as well as providing access for other recreation pursuits. These trails are also crucial for fire management, for accessing and servicing utilities and for providing access for environmental monitoring and conservation.

There are currently approximately 46.1 km of fire or service trails and 64.4 km of constructed walking trails in bushland areas, as part of 25 planned routes. In addition, there are many hundreds of kilometres of informal routes linking established trails in bushland. To optimise user experience throughout the trail network, Council is focused on improving infrastructure and access to information. Network expansion will be focused around strategic linkages and multi-use opportunities whilst unused, badly maintained, or inappropriate trails will be closed and rehabilitated.

The major walking trails within the Ku-ring-gai LGA include:

- The STEP Track in South Turramurra;
- Mueller Track and others within the Ku-ring-gai Wildflower Garden (subject to a site-specific plan of management);
- Sheldon Forest Track in Pymble;
- Two Creeks Track in Middle Harbour;
- Sections of the Great North Walk; and
- Sections of the Harbour to Hawkesbury Walk.

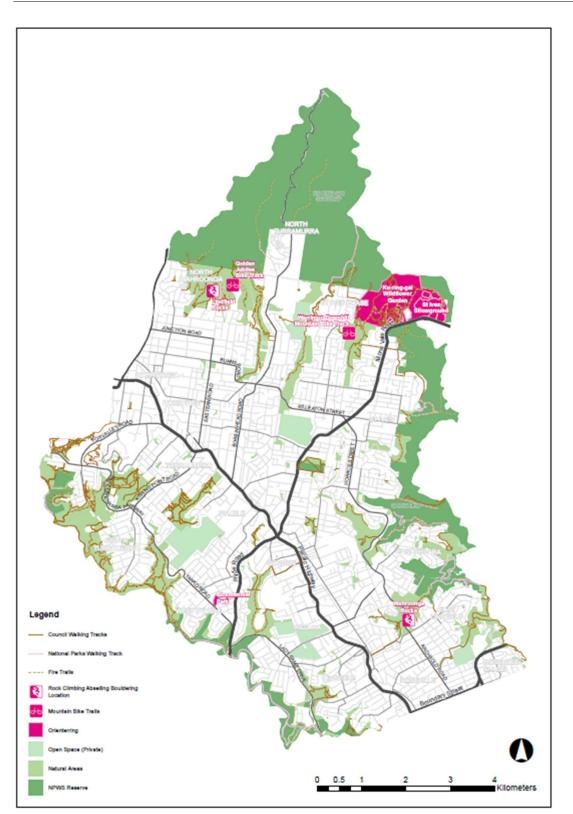


*Figure 5*5 illustrates the recreation, fire trail and walking track networks in the Ku-ring-gai LGA.

8.4.2 Mountain biking

Ku-ring-gai Council owns or manages significant areas of bushland, some with appropriate terrain, substrate and connections for different disciplines of mountain biking. Ku-ring-gai Council's challenge is to respond to the community's desire for improvements to mountain biking infrastructure whilst working to mitigate the environmental concerns related to the activity. Council is focused on providing low impact, high quality mountain biking facilities to fill gaps in the regional mountain biking offering; managing the impacts associated with mountain bike tracks through appropriate construction and maintenance regimes; and working proactively to close and rehabilitate unauthorised or inappropriate mountain bike tracks. Council is also looking for opportunities for regional infrastructure development and strategic linkages.

The Warrimoo Downhill Mountain Bike Track, located within the Ku-ring-gai Creek Reserve, is a highly valued downhill series of tracks and Council has worked with the community at this site to find a sustainable option to provide a continuing downhill mountain biking experience.

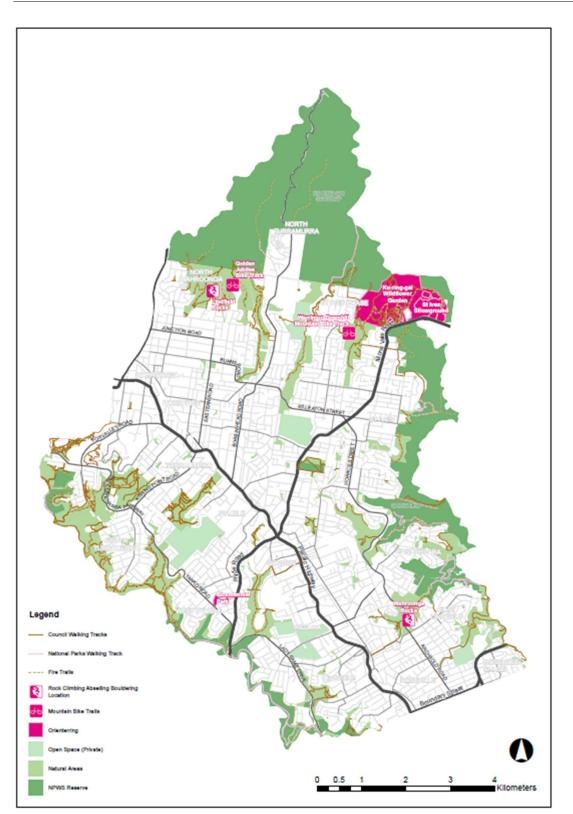


*Figure 5*5 shows the location of the Warrimoo Downhill Mountain Bike Track within the Ku-ring-gai Creek Reserve.

8.4.3 Rock climbing, abseiling and bouldering

Ku-ring-gai is an epicentre of climbing in Sydney. Within Ku-ring-gai, the well-known climbing sites of Cliff Oval at Wahroonga and Lindfield Rocks are highly valued by local climbers, scout groups, emergency services and others. Climbing and bouldering have experienced a surge in popularity in recent years, evidenced by the number of indoor climbing and bouldering gyms.

In 2017, Council assessed the environmental impacts associated with climbing and found that, in general, sites were well looked after and had minimal rubbish and damage to vegetation or other vandalism. Whilst Council acknowledges the use of Cliff Oval at Wahroonga and Lindfield Rocks for climbing, abseiling and bouldering and permits these activities at these sites, Council takes on no liability for any of the infrastructure associated with climbing at these sites and reserves the right to close off public access to these sites, if required.



*Figure 5*5 shows the location of natural areas identified for rock climbing, bouldering and abseiling within the Ku-ring-gai LGA.

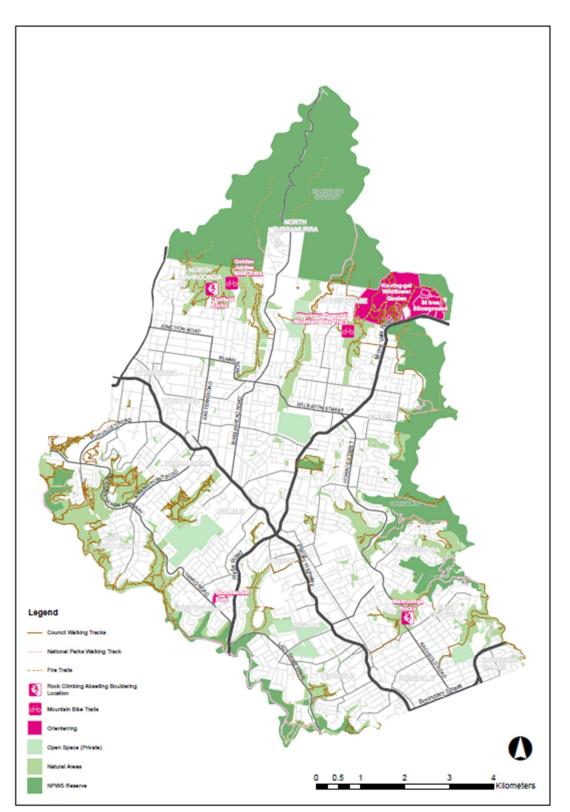


Figure 5 Recreational values in the Ku-ring-gai LGA

8.4.4 Orienteering and rogaining

Orienteering and rogaining involve navigating from point to point. The aim is to use a special orienteering map to navigate around a course. Geocaching is a similar activity undertaken by small groups or individuals. Some orienteering and rogaining events are road based, whilst others move through bushland, open space and other public spaces. Orienteering and rogaining are great ways for people to enjoy natural areas, but these activities must be managed to avoid damage to sensitive environments.

Ku-ring-gai Council has hosted orienteering and rogaining events across parts of Ku-ring-gai for many years and the Ku-ring-gai LGA is a key location for the Sydney Summer Series. Most people involved in orienteering and rogaining do so to enjoy the natural environment and are accepting of conditions regarding no-go zones and sensitive areas.

Council has identified five reserves where, subject to conditions, off-track events have been preassessed for a limited number of events and deemed suitable

- Seven Little Australians Reserve
- Twin Creeks Reserve
- St Ives Showground
- Bradley Park
- Lindfield Soldiers' Memorial Park.

Council has identified six reserves where, subject to conditions, on-track events have been preassessed for a limited number of events and deemed suitable.

- Ku-ring-gai Wildflower Garden (subject to a site-specific plan of management)
- Primula Oval and Princes Park
- Acron Oval and Douglas Street Reserve
- Sheldon Forest/Rofe Park
- Bicentennial Park (subject to a site-specific plan of management) and adjoining bushland, West Pymble
- Wahroonga Park.

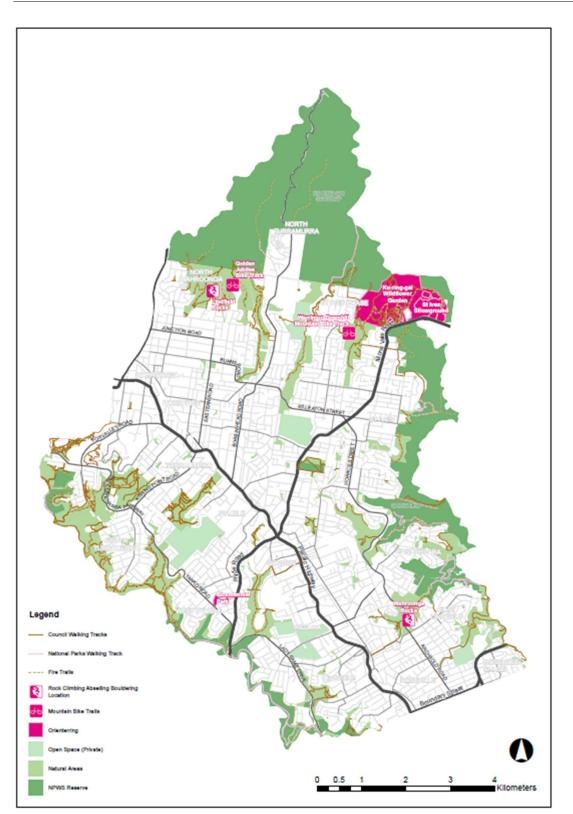


Figure 5 shows the location of natural areas identified for orienteering and rogaining within the Kuring-gai LGA.

Appendix H – Plan of Management Legislative Framework

Local Government Act 1993 (NSW)

The purposes of the NSW LG Act are to provide the legal framework for the system of local government for New South Wales, to set out the responsibilities and powers of councils, councillors and other persons and bodies that constitute the system of local government, to provide for governing bodies of councils that are democratically elected, to facilitate engagement with the local community by councils, councillors and other persons and bodies that constitute the system of local government, and to provide for a system of local government that is accountable to the community and that is sustainable, flexible and effective.

Part 2, Division 2, Section 36 of the LG Act requires that Council prepares a plan of management for community land. The key requirements of Section 36 are summarised below.

Under subsection 3, the plan of management must identify the following:

- (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.

The land is to be categorised in accordance with subsection 4, in this case a natural area, and under subsection 5 land that is categorised as a natural area is to be further categorised as one or more of the following:

- (a) bushland,
- (b) wetland,
- (c) escarpment,
- (d) watercourse,
- (e) foreshore,
- (f) a category prescribed by the regulations.

Council has the discretion in most cases to prepare a specific plan of management for an area or a generic plan that applies to more than one piece of land. However, generic plans of management cannot be made for land declared:

- as critical habitat or directly affected by a threat abatement plan or a recovery plan under threatened species laws (sections 36A(2) and 36B(3))
- by council to contain significant natural features (section 36C(2))
- by council to be of cultural significance (section 36D(2)).

Section 36A of the Act relates to community land comprising the habitat of endangered species and requires that any critical habitats listed under the *Threatened Species Conservation Act* 1995 (now replaced with the BC Act) or Part 7A of the *Fisheries Management Act* 1994 (FM Act) are

categorised as a natural area and must have a plan of management that applies to that area of critical habitat only and not to other areas of land. Critical habitats have been transferred into Areas of Outstanding Biodiversity Value (AoOBV) listed under the *Biodiversity Conservation Act 2016*. There are no listed AoOBV within the Ku-ring-gai LGA so a separate plan of management for community land comprising the habitat of endangered species is not required.

Section 36B of the LG Act relates to community land comprising the habitat of threatened species. This section of the LG Act states that community land is directly affected by a recovery plan or threat abatement plan made under the *Threatened Species Conservation Act 1995* (now replaced with the BC Act) or the FM Act only if the recovery plan or threat abatement plan concerned requires measures specified in the recovery plan or threat abatement plan to be taken by a specified council on or in respect of the land. There are currently no areas of community land within the Ku-ring-gai LGA, all or part of which is directly affected by a recovery planning or threat abatement planning under the 'Saving our Species' (SoS) program as the SoS program does not require measures specified in the plan to be taken by Ku-ring-gai Council on or in respect of the land (see Section 2.4.1.2 and Appendix A). As such, a separate plan of management for community land comprising the habitat of threatened species is not required and these natural areas are covered in this Plan. This Plan is however designed to be consistent with the intent of the SoS program and the actions for relevant threatened species contained within.

Section 36C of the Act deals with land containing significant natural features and provides that community land that is the site of a known natural, geological, geomorphological, scenic or other feature that is considered by the council to warrant protection or special management considerations, or that is the site of a wildlife corridor, must be categorised as a natural area. There are no areas of this nature identified by Council.

This Plan has been prepared in accordance with the requirements of the LG Act. The reserves will be managed according to objectives listed in Section 36E and 36J-N of the LG Act and the appropriate categories and further categories as outlined in Section 4 of this Plan.

Reclassification of land

Under the LG Act, Chapter 6, Part 2, Division 1, a council may resolve that public land classified as operational land is to be reclassified as community land. Council must give public notice of a proposed resolution to classify or reclassify public land. The public notice must include the terms of the proposed resolution and a description of the public land concerned. The public notice must specify a period of not less than 28 days during which submissions may be made to the council.

Council may resolve that public land classified as community land is to be reclassified as operational land. A local environmental plan (LEP) that reclassifies community land as operational land may make provision to the effect that, on commencement of the plan, the land, if it is a public reserve, ceases to be a public reserve, and that the land is by operation of the plan discharged from any trusts, estates, interests, dedications, conditions, restrictions and covenants affecting the land or any part of the land, except for:

- (a) any reservations that except land out of a Crown grant relating to the land, and
- (b) reservations of minerals (within the meaning of the CLM Act).

Council may resolve that land dedicated in accordance with a condition imposed under Section 94 of the *Environmental Planning and Assessment Act 1979* is to be reclassified as operational land only if it is satisfied that the land has been found to be unsuitable for the provision, extension or augmentation of public amenities and public services because of any one or more of the following:

- the size of the land,
- the shape of the land,

- the topography of the land,
- the location of the land,
- the difficulty of providing public access to the land.

The council must specify in the resolution the grounds on which it is satisfied the land is unsuitable. Before making the resolution, the council must give public notice of the resolution. The public notice must specify a period of not less than 28 days during which submissions may be made to the council. The net proceeds of sale by a council of any land dedicated in accordance with a condition imposed under section 94 of the EP&A Act must be dealt with under that section as if those net proceeds were a monetary contribution paid instead of the dedication.

Local Government (General) Regulation 2021

Under the LG Act, the Local Government (General) Regulation 2021 (LG Reg) Part 4, Division 1, 107-111 sets the guidelines for the categorisation, use and management of community land. This Plan has been prepared in accordance with the LG Reg, and categorisation of the Ku-ring-gai natural areas is detailed in Section 4 of this Plan.

Crown Land Management Act 2016 (NSW)

The relevant objects of the CLM Act are to provide for the ownership, use and management of the Crown land of New South Wales, provide clarity concerning the law applicable to Crown land. It also requires environmental, social, cultural heritage and economic considerations to be taken into account in decision-making about Crown land, and to facilitate the use of Crown land by the Aboriginal people of New South Wales because of the spiritual, social, cultural and economic importance of land to Aboriginal people and, where appropriate, to enable the co-management of dedicated or reserved Crown land, and to provide for the management of Crown land having regard to the principles of Crown land management.

The CLM Act operates in conjunction with the LG Act. Council are a Crown Land Manager of dedicated or reserved Crown land. A Council Crown Land Manager (CCLM) is authorised to classify and manage its dedicated or reserved Crown land as if it were public land within the meaning of the LG Act, subject to this Division 3.4 of the CLM Act. The CCLM is authorised to manage its dedicated or reserved Crown land as if it were community land or operational land. The Crown land subject to this Plan is managed as if it were community land under the LG Act. The CCLM must assign the land to one or more categories of community land referred to in section 36 of the LG Act (outlined above in Section 2.1.1). The assigned category or categories must be those that the council considers to be the category or categories that are most closely related to the purposes for which the land is dedicated or reserved. The CCLM must give written notice to the Minister of the categories to which it has assigned the land as soon as practicable after assigning them. Plans of Management for the land are to be prepared and adopted in accordance with the provisions of Division 2 of Part 2 of Chapter 6 of the LG Act (i.e. this Plan).

The use of Crown land and permits on Crown land will be issued in accordance with the *Native Title Act 1993*. Council must ensure that any authorisation or restriction of use of Crown land under a Plan of Management is consistent with the *Native Title Act 1993*.

Crown Land Management Regulation 2018

The Crown Land Management Regulation 2018 Division 1 (5) states that a responsible manager of dedicated or reserved Crown land (i.e. Ku-ring-gai Council) may, by a public notice displayed at or adjacent to each entrance to the land, do any of the following:

(a) specify the times during which the land or any part of the land is to be open to the public,

(b) close to the public the whole or any part of the land or any structure or enclosure in or on the land (but only temporarily or periodically if the land is dedicated or reserved for public recreation),

(c) restrict or regulate in any other way the purposes for which the whole or any part of the land, or any structure or enclosure in or on the land, may be used,

(d) prohibit the use of the whole or any part of the land, or any structure or enclosure in or on the land, for any purpose specified in the notice.

The Crown Land Management Regulation 2018 (Part 2 (6)) states that the responsible manager of dedicated or reserved Crown land may set aside any part of the land (including any building or enclosure in or on the land) for any purpose for which the land may be used subject to, and consistent with, any plan of management for the dedicated or reserved Crown land.

Part 2 (8) of the Crown Land Management Regulation 2018 outlines the conditions of entry for dedicated or reserved Crown land and Part 2 (9) outlines the conduct that is prohibited in dedicated or reserved Crown land. The Crown Land Management Regulation 2018 also outlines the licencing arrangement for licences over dedicated or reserved Crown land (Part 4 (31)).

Division 2 (12) of the Crown Land Management Regulation 2018 outlines dumping of materials while Division 2 (13) outlines the activities that can be prohibited on Crown land by direction or notice under Part 9 of CLM Act. Division 2 (15) of the Crown Land Management Regulation 2018 allows for Council to authorise the destruction on the land of any plant or animal that is a pest, or subject to the provisions of any Act, the taking from the land of any plant or animal that, in the opinion of the manager, has assumed pest proportions or is required for scientific purposes.

Heritage Act 1977 (NSW)

The *Heritage Act 1977* defines environmental heritage as 'those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance'. The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999 defines cultural significance as 'aesthetic, historic, scientific, social or spiritual value for the past, present or future generations.'

Under the *Heritage Act 1977*, Ku-ring-gai Council is obliged to conserve non-indigenous assets in accordance with the principles of the Burra Charter. The objects of the Act are as follows:

- (a) to promote an understanding of the State's heritage,
- (b) to encourage the conservation of the State's heritage,
- (c) to provide for the identification and registration of items of State heritage significance,
- (d) to provide for the interim protection of items of State heritage significance,
- (e) to encourage the adaptive reuse of items of State heritage significance,

(f) to constitute the Heritage Council of New South Wales and confer on it functions relating to the State's heritage,

(g) to assist owners with the conservation of items of State heritage significance.

Rural Fires Act 1997 (NSW)

This Plan considers the prevention, mitigation and suppression of bush and other fires in local government areas (or parts of areas) and other parts of the State constituted as rural fire districts, provide for co-ordination of bush firefighting and bush fire prevention throughout the State, provide

for the protection of infrastructure and environmental, economic, cultural, agricultural and community assets from damage arising from fires, and for the protection of the environment.

Part 3 of the *Rural Fires Act 1997* provides for the continued coordination and arrangements between bush firefighting authorities within NSW. This includes the establishment of a Bush Fire Coordinating Committee, Bush Fire Management Committee and general bush fire management planning. Bush Fire Coordinating Committees play the primary role to plan for bush fire prevention and coordinate bush firefighting across the State, including the creation of policies to guide Bush Fire Management Committees in undertaking their role. The Ku-ring-gai local government area is managed by the Hornsby Ku-ring-gai Bush Fire Management Committee and the Hornsby Ku-ring-gai Bush Fire Risk Management Plan 2016-2021 (Hornsby/Ku-ring-gai Bush Fire Management Committee, 2016).

In 2002, the Rural Fires Act 1997 and the EP&A Act were amended to include:

- assessment of development against *Planning for Bushfire Protection Guidelines* (Rural Fires Act 1997 Section 100B and the EP&A Act 1979 Section 79BA); and
- the requirement for Council to record lands, which have been identified by the Commissioner of the NSW Rural Fire Service as Bush Fire Prone Land (EP&A Act 1979 Section 146).

Provisions relating to asset protection zones under the *Rural Fires Act 1997* only apply to those dwellings approved after gazettal of Planning for Bushfire Protection Guidelines (RFS 2001) on 1 August 2001. However, owners of properties with dwellings approved before this date can maintain asset protection zones, within their properties, according to the guidance within Planning for Bush Fire Protection: A Guide for Councils, Planners, Fire Authorities and Developers (RFS 2019), following relevant approval processes.

Coastal Management Act 2016

The objects of the *Coastal Management Act 2016* (CM Act) are to manage the coastal environment of New South Wales in a manner consistent with the principles of ecologically sustainable development for the social, cultural and economic well-being of the people of the State. The CM Act replaced the Coastal Protection Act 1979 and establishes a strategic framework and objectives for managing coastal issues in NSW. Under the CM Act the coastal zone consists of four coastal management areas that may overlap:

- Coastal wetlands and littoral rainforests area areas which display the characteristics of coastal wetlands or littoral rainforests that were previously protected by SEPP 14 and SEPP 26
- Coastal vulnerability area areas subject to coastal hazards such as coastal erosion and tidal inundation
- Coastal environment area areas that are characterised by natural coastal features such as beaches, rock platforms, coastal lakes and lagoons and undeveloped headlands. Marine and estuarine waters are also included
- Coastal use area land adjacent to coastal waters, estuaries and coastal lakes and lagoons.

The Ku-ring-gai natural areas contain mapped Coastal wetlands areas (within Moores Creek Reserve and Old She Oak Reserve). The Ku-ring-gai LGA has mapped Coastal environment area and Coastal use area covering Cranbourne East Reserve, Douglas Street Reserve, Surgeon White Reserve, Bushranger Reserve, Old She Oak Reserve, Lindfield Soldiers' Memorial Park, Moores Creek Reserve, Upper Cardigan Reserve, Roseville Bridge Bush, Upper Echo, and Boatshed Bush. The Coastal vulnerability area has not been mapped. This Plan is consistent with the management objectives for the mapped Coastal wetlands areas, Coastal environment area and Coastal use area outlined in the CM Act.

The management objectives specific to mapped Coastal wetlands areas established by the CM Act are:

- (a) to protect coastal wetlands in their natural state, including their biological diversity and ecosystem integrity,
- (b) to promote the rehabilitation and restoration of degraded coastal wetlands,
- (c) to improve the resilience of coastal wetlands to the impacts of climate change, including opportunities for migration,
- (d) to support the social and cultural values of coastal wetlands,
- (e) to promote the objectives of State policies and programs for wetlands management.

The management objectives specific to mapped Coastal environment area established by the CM Act are:

- (a) to protect and enhance the coastal environmental values and natural processes of coastal waters, estuaries, coastal lakes and coastal lagoons, and enhance natural character, scenic value, biological diversity and ecosystem integrity,
- (b) to reduce threats to and improve the resilience of coastal waters, estuaries, coastal lakes and coastal lagoons, including in response to climate change,
- (c) to maintain and improve water quality and estuary health,
- (d) to support the social and cultural values of coastal waters, estuaries, coastal lakes and coastal lagoons,
- (e) to maintain the presence of beaches, dunes and the natural features of foreshores, taking into account the beach system operating at the relevant place,
- (f) to maintain and, where practicable, improve public access, amenity and use of beaches, foreshores, headlands and rock platforms.

The management objectives specific to mapped Coastal use area areas established by the CM Act are:

(a) to protect and enhance the scenic, social and cultural values of the coast by ensuring that -

(i) the type, bulk, scale and size of development is appropriate for the location and natural scenic quality of the coast, and

(ii) adverse impacts of development on cultural and built environment heritage are avoided or mitigated, and

(iii) urban design, including water sensitive urban design, is supported and incorporated into development activities, and

(iv) adequate public open space is provided, including for recreational activities and associated infrastructure, and

- (v) the use of the surf zone is considered,
- (b) to accommodate both urbanised and natural stretches of coastline.

State Environmental Planning Policy (Resilience and Hazards) 2021 and gives effect to the objectives of the CM Act from a land use planning perspective.

The CM Act also outlines implementation of a Coastal Management program. Under Division 4 (22) of the CM Act, a local council is to give effect to its coastal management program and, in doing so, is to have regard to the objects of this Act. A local council is to give effect to its coastal management program in the preparation, development, review, and contents of, the plans, strategies, programs and reports to which Part 2 of Chapter 13 of the LG Act applies.

Environmental Planning and Assessment Act 1979 (NSW)

The EP&A Act establishes the statutory planning framework for environmental and land use planning in NSW. The relevant objects of the EP&A Act are to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources, facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, promote the orderly and economic use and development of land, protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, and promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage).

Part 3 of the EP&A Act establishes a hierarchy of planning instruments within which Councils' planning decisions are made. These include:

(a) strategic plans (comprising regional strategic plans and district strategic plans) and local strategic planning statements,

(b) environmental planning instruments (comprising State environmental planning policies and local environmental plans),

(c) development control plans.

Strategic plans

In 2018, the NSW Government introduced new plans for both metropolitan Sydney and the northern area of Sydney. These are 'A Metropolis of Three Cities – The Greater Sydney Region Plan' and the 'North District Plan' for the northern councils of Sydney. The Ku-ring-gai LGA is part of the North District Plan. The North District Plan provides a 20-year plan to manage growth and achieve the 40-year vision, while enhancing Greater Sydney's liveability, productivity and sustainability into the future.

The district plans require each council to prepare a Local Strategic Planning Statement (LSPS) for their area to guide future land use planning and development. The LSPS brings together established council policies and community views to set a framework as to how Ku-ring-gai will evolve into the future, while also ensuring that those elements that are special to the character of the area are maintained. The LSPS sets out the 20-year vision for land use in the LGA. This Plan is aligned with these strategic plans. Further information on the LSPS is provided in Section 2.2.

Environmental planning instruments

Environmental planning instruments are statutory plans made under Part 3 of the EP&A Act that guide development and land use. These plans include State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs).

State Environmental Planning Policies

State Environmental Planning Policies (SEPPs) can specify planning controls for certain areas and/or types of development. A SEPP can apply to a specific area or only in specific circumstances. In some cases, a SEPP may override the Ku-ring-gai Local Environmental Plan 2015 and Ku-ring-gai DCP 2008, while in other cases they are applied in conjunction with the LEP and DCP. The SEPPs relevant to this Plan are described below.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

State Environmental Planning Policy (Biodiversity and Conservation) 2021 applies to the Ku-ringgai LGA and applies to land zoned as C2 Environmental Conservation. The aims of this Policy are:

(a) to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and

(b) to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.

Under Part 3 of the SEPP, Council is responsible for issuing permits for clearing of vegetation where the vegetation is declared by the DCP to require a permit for removal. A permit cannot be granted to clear native vegetation in any non-rural area of the State that exceeds the biodiversity offsets scheme threshold. A permit under this Part 3 of the SEPP cannot allow the clearing of vegetation that is or forms part of a heritage item or that is within a heritage conservation area, or that is or forms part of an Aboriginal object or that is within an Aboriginal place of heritage significance, unless the council is satisfied that the proposed activity is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or heritage conservation area, and would not adversely affect the heritage significance of the heritage item, Aboriginal place of heritage conservation area.

State Environmental Planning Policy (Resilience and Hazards) 2021

State Environmental Planning Policy (Resilience and Hazards) 2021 commenced on 3 April 2018 and gives effect to the objectives of the CM Act from a land use planning perspective, by specifying how development proposals are to be assessed if they fall within the coastal zone.

State Environmental Planning Policy (Resilience and Hazards) 2021 applies to the LGA. Some of the natural areas contain mapped Coastal Wetland areas subject to State Environmental Planning Policy (Resilience and Hazards) 2021. These areas are assigned to the wetland further category. The aim of this Policy is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the CM Act, including the management objectives.

State Environmental Planning Policy (Resilience and Hazards) 2021 defines the four coastal management areas in the CM Act through mapping and specifies assessment criteria for each identified coastal management area. Council must apply these criteria when assessing proposals for development that fall within one or more of the mapped areas.

State Environmental Planning Policy (SEPP) Transport and Infrastructure 2021

State Environmental Planning Policy (SEPP) Transport and Infrastructure 2021 assists the NSW Government, private infrastructure providers, local councils and the communities they support by simplifying the process for providing infrastructure. State Environmental Planning Policy (SEPP)

Transport and Infrastructure 2021 has specific planning provisions and development controls for 25 types (sectors) of infrastructure. Certain types of infrastructure are only permitted in certain land use zones while others are permitted on all land. The Ku-ring-gai Local Environmental Plan 2015 does not restrict the undertaking of development by a public authority which is permitted or exempt development pursuant to the State Environmental Planning Policy (Transport and Infrastructure) 2021.

Clause 65 (2) of the State Environmental Planning Policy (SEPP) Transport and Infrastructure 2021 states that development for any purpose may be carried out without consent on Crown managed land, by or on behalf of a Crown land manager of the land (or an administrator of the manager - i.e. Council) if the development is for the purposes of implementing a plan of management adopted for the land under the CLM Act in relation to the land or in accordance with the LG Act in relation to Crown managed land managed by a council. Clause 65 (3) outlines the types of development that may be carried out by or on behalf of a council without consent on a public reserve under the control of or vested in the council (e.g. roads, pedestrian pathways, information boards, landscaping, environmental management works). Clause 66 outlines exempt development, (e.g. construction or maintenance of walking tracks, seats).

Ku-ring-gai Local Environmental Plan 2015

The Ku-ring-gai LEP aims to make local environmental planning provisions for land in Ku-ring-gai in accordance with the relevant standard environmental planning instrument under section 3.20 of the EP&A Act. The planning controls established in the EP&A Act and the LEP set the framework for approving permissible activities in natural areas in the Ku-ring-gai. The LEP was prepared in accordance with the NSW Government's *Standard Instrument LEP*. The LEP applies to most of the land within Ku-ring-gai and came into effect on 2 April 2015.

Within the LEP, the Ku-ring-gai natural areas are grouped into the C2 (Environmental Conservation) Zone. The objectives of the C2 Zone are:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

Environmental protection works are permitted within the C2 Zone without consent. Activities that are permitted with consent include environmental facilities, flood mitigation works, oyster aquaculture, roads, and water storage facilities.

Activities that are prohibited in the C2 Zone include Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; and any other development not specified as permitted without consent or permitted with consent.

Ku-ring-gai DCP

The Ku-ring-gai Development Control Plan (DCP) compliments the LEP and provides the detailed design guidelines to support the Ku-ring-gai LEP. The DCP provides detailed guidelines to guide the design and assessment of development applications for land covered by the Ku-ring-gai LEP (which is most of the Ku-ring-gai LGA). The DCP came into effect on 24 June 2016.

Part 17 of the DCP deals with Riparian Lands and guides development on land identified within the Natural Resource – Riparian Lands Map in the LEP. These riparian lands within the natural areas subject to his Plan have been assigned to the Watercourse further category.

Part 18 of the DCP deals with Biodiversity Controls and the objectives and controls in this Part of the DCP apply to development activities or works that will have an impact on areas identified as Greenweb, as mapped in the DCP. Greenweb (as shown on the Greenweb map - Part 18R.1 of the DCP) is Ku-ring-gai's Biodiversity mapping for the management of significant vegetation and habitat, biodiversity corridors and waterways throughout the LGA and is supported by Terrestrial Biodiversity Map within the Part 6.3 of the LEP. The mapping facilitates a consistent and strategic approach to biodiversity management. The natural areas assigned to the Bushland further category form part of the Ku-ring-gai Greenweb.

Biodiversity Conservation Act 2016 (NSW)

The purpose of the BC 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. Conservation of biodiversity at bioregional and State scales, maintain the diversity and quality of ecosystems and enhancing their capacity to adapt to change and provide for the needs of future generations. Additionally, improve, share and use knowledge including local and traditional Aboriginal ecological knowledge about biodiversity conservation, support biodiversity conservation in the context of a changing climate, assess the extinction risk of species and ecological communities, and identify key threatening processes. Through an independent and rigorous scientific process, support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, support and guide prioritised and strategic investment in biodiversity conservation, and establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change for calculating measures to offset those impacts and for assessing improvements in biodiversity values.

The BC Act identifies those species listed as threatened in NSW (threatened species are listed in Schedule 1), threatened ecological communities (listed in Schedule 2) and implemented the SoS program which is the NSW government's strategic management framework, outlining management actions to secure NSW's threatened plants and animals in the wild for the next 100 years (recovery planning and threat abatement). Key threatening processes are listed in Schedule 4 of the BC Act. This Plan has been written to align with threat abatement plans and recovery plans and strategies identified under the SoS Program. A list of recovery objectives and actions for relevant threatened species is available within Appendix A. Details of the relevant key threatening processes that apply to this plan are also outlined in Appendix B.

The BC Act also establishes a new instrument for the conservation of areas that meet established criteria for an area of outstanding biodiversity value (formerly known as critical habitat under the now repealed *Threatened Species Conservation Act 1995*). As of July 2020, there were no areas of outstanding biodiversity value in the Ku-ring-gai LGA.

Biodiversity Stewardship Sites

Ku-ring-gai Council has two Biodiversity Stewardship Sites that were originally established under the Biodiversity Banking and Offsets Scheme (BioBanking). BioBanking was a voluntary biodiversity offset scheme aimed at helping to address the loss of biodiversity values, including threatened species, due to habitat degradation and loss. The BioBanking Scheme was been replaced by the Biodiversity Offsets Scheme (BOS) under the BC Act which commenced on 25 August 2017. BioBanking Agreements were replaced with Biodiversity Stewardship Agreements. Existing BioBanking agreements, including the two Ku-ring-gai Council agreements, remain in place and are managed under the BC Act as Biodiversity Stewardship Agreements (see Part 5 (13) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017). The Biodiversity Conservation Trust has taken over the management of BioBanking agreements, including administration of annual reports, applications for variations and annual payments.

The two Biodiversity Stewardship Sites within the Ku-ring-gai are:

- ID 489 which covers Sir David Martin Reserve, Clive Evatt Reserve, The Glade Reserve, and Blackbutt Park; and
- ID 132 which covers Sheldon Forest, Rofe Park, and Comenarra Creek Reserve.

These two Biodiversity Stewardship Sites are identified as natural areas in this Plan.

Biodiversity Conservation (Savings and Transitional) Regulation 2017

Section 10 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017 (Existing strategies for species or ecological communities in Priorities Action Statement continued as strategies of the Biodiversity Conservation Program) states that "A strategy for species or ecological communities set out in accordance with the Threatened Species Priorities Action Statement (PAS) under section 90A of the *Threatened Species Conservation Act 1995* immediately before the repeal of that Act is taken to be a strategy included in the Biodiversity Conservation Program under Part 4 of the new Act". The PAS approach replaced development of Recovery Plans for each threatened species and replaced preparation of Threat Abatement Plans. Under the BC Act the PAS are continued as strategies of the Biodiversity Conservation Program.

Part 5 (13) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017 allows for continuation of BioBanking agreements under the *Threatened Species Conservation Act 1995* as biodiversity stewardship agreements under the BC Act.

National Parks and Wildlife Act 1974 (NSW)

Ku-ring-gai Flying-fox Reserve is subject to a long-term Conservation Agreement with the NSW Government under the *National Parks and Wildlife Act 1974*. The Ku-ring-gai Flying-fox Reserve Conservation Agreement applies to the area of the Ku-ring-gai Flying-fox Reserve / East Gordon Park which is subject to a site-specific plan of management (See Section **Error! Reference source not found.**).

A Conservation Agreement under the *National Parks and Wildlife Act 1974* has also been made for Browns Forest. This Plan is consistent with the purpose, terms and conditions of the Browns Forest Conservation Agreement, in accordance with the provisions of s. 69 (B) of the *National Parks and Wildlife Act 1974*.

Biosecurity Act 2015 (NSW)

The primary object of the *Biosecurity Act 2015* is to provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter. It deals with biosecurity matter, carriers and potential carriers, as well as other activities that involve biosecurity matter, carriers or potential carriers. The act emphasises a shared responsibility of the Federal and State governments as well as local industry and communities to work together to manage biosecurity matters, including weed plants and pest animals.

The natural areas subject to this Plan are subject to actions taken by Council to control biosecurity risks for example weed, pathogen and pest control.

Companion Animals Act 1998

In accordance with the NSW *Companion Animals Act 1998*, Council can prohibit cats and dogs from public lands declared as a Wildlife Protection Area for the purposes of wildlife protection. The natural areas subject to this Plan are identified in large part due to their biodiversity values. The natural areas receive significant investment in ecological restoration, revegetation, vertebrate pest control and threatened species management and are managed for conservation outcomes. The natural areas within the Ku-ring-gai LGA conserve native flora and fauna and provide space for recreational activities such as walking and bird-watching.

To protect these environments, dogs are only allowed in some bushland reserves if they are onleash and under their handler's control. Cats are banned from these reserves. Under the NSW Companion Animals Act 1998 dogs must be on leash while in public unless in an off-leash area or a private residence. "Public place" means:

(a) any pathway, road, bridge, jetty, wharf, road-ferry, reserve, park, beach or garden, and

(b) any other place, that the public are entitled to use.

The Public are entitled to use fire trails and bush tracks; therefore, dogs must be leashed and under control in these areas.

Under the NSW *Companion Animals Act 1998*, Wildlife Protection Areas can be declared as one of two categories:

- Category 1 lands prohibit both cats and dogs as per S.30 c.1(b) and S.14 c. 1(h) of the NSW *Companion Animals Act 1998*.
- Category 2 lands prohibit cats as per S.30 c.1(b) of the NSW Companion Animals Act 1998. Dogs that are on a leash will be permitted on formed tracks, pathways or roads in Category 2 lands.

Currently, dogs and cats are not allowed in Wildlife Protection Areas including the Ku-ring-gai Flying-fox Reserve / Gordon Park in Gordon (subject to a site-specific plan of management, See Section **Error! Reference source not found.**), the Ku-ring-gai Wildflower Garden in St Ives (subject to a site-specific plan of management, See Section **Error! Reference source not found.**), and Brown's Forest in St Ives as these areas are declared as Category 1 lands. Some additional reserves referred to in this Plan may also be declared as Wildlife Protection Areas in the future.

Water Management Act 2000

The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, (among other things) to:

- apply the principles of ecologically sustainable development, and
- protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality, and
- integrate the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna, and
- encourage best practice in the management and use of water.

Controlled activities under the *Water Management Act 2000* are certain types of activities which are:

- carried out on waterfront land, and sepe
- defined as a controlled activity in the Water Management Act 2000.

Waterfront land is land that is 40 metres either side of the bed of any river, lake or estuary, including the bed itself. Examples of controlled activities include:

- erection of a building or the carrying out of a work within the meaning of the EP&A Act,
- removal of material or vegetation from land, whether by way of excavation or otherwise,
- · deposition of material on land, whether by way of landfill operations or otherwise, or
- carrying out of any other activity that affects the quantity or flow of water in a water source.

It is an offence to carry out a controlled activity on waterfront land without approval, or in breach of the conditions of an approval. A development which requires both development consent and an approval under the *Water Management Act 2000* will be processed as integrated development. Before granting development consent Council must request the Minister to indicate whether the approval would be granted and the general terms of the approval. As a 'public authority' Council is exempt from the need to obtain a controlled activity approval.

Protection of the Environmental Operations Act 1997

The *Protection of the Environmental Operations Act 1997* (POEO Act) is the main legislation which enables Council to regulate activities and (unlicensed) premises to avoid and minimise negative environmental impacts. The EPA is the appropriate regulatory authority for the activities specified in Schedule 1 of the POEO Act (scheduled activities). In most cases, local councils are the regulatory authorities for non-scheduled activities, except activities undertaken by a public authority which the EPA will regulate or where a public authority has been declared the appropriate regulatory authority.

The POEO Act enables Council to investigate complaints and issue Prevention Notices and Clean Up Notices. In cases where council undertakes a clean-up, there is provision for a Compliance Cost Notice to be served on the polluter.

Environment Protection & Biodiversity Conservation Act 1999 (Cth)

The relevant objects of the Commonwealth EPBC Act are to provide a framework for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance. The EPBC Act also promotes ecologically sustainable development through the conservation and ecologically sustainable use of natural resources and promotes the conservation of biodiversity and provide for the protection and conservation of heritage through Indigenous cooperation and participation. The EPBC Act establishes a requirement for Commonwealth environmental assessment and approval for actions that are likely to have a significant impact on any Matters of National Environmental Significance protected under the EPBC Act, and in doing so, provides conservation listings for threatened species separate to those listed under State legislation.

The EPBC Act requires the preparation of recovery plans for listed threatened species, endangered ecological communities and threat abatement plans for listed key threatening processes. A list of recovery objectives and actions for relevant threatened species is available within Appendix A. Details of the relevant key threatening processes that apply to this plan are outlined in Appendix B.

Native Title Act 1993 (Cth)

The *Native Title Act 1993* recognises and protects native title. It provides that native title cannot be extinguished contrary to the Act. The *Native Title Act 1993* was introduced following the High Court Mabo judgment (*Mabo v Queensland* [No. 2] (1992) 175 CLR 1) and amended following the High Court's Wik decision (*Wik Peoples v Queensland* (1996) 187 CLR 1). The Native Title Act does four major things of relevance to Council:

- recognises native title rights exist in Australia where those rights have not been extinguished (e.g. by the grant of a freehold title)
- validates certain past actions carried out by governments
- includes a 'future act regime' that allows for governments to continue undertaking certain activities on the Crown estate where native title has not been extinguished
- states that compensation may be owing to native title holders for certain past and future acts.

Dealings in land or water that affect (impair or extinguish) native title are referred to as 'future acts' and these acts must be done in compliance with the *Native Title Act 1993*. Native title managers (i.e. Council) perform an important legislative function in ensuring compliance with native title obligations.

Local government activities on crown land may trigger the native title compliance procedures detailed in the *Native Title Act 1993*. The compliance procedure required for many (but not all) local government activities involves providing native title claimants / holders with a written notice about the proposed activity and an opportunity to comment, the same procedural rights as an ordinary titleholder or the right to negotiate, or in some cases no procedural right, depending on the nature of the future act. These procedures apply where native title exists including some areas where a native title claim has not been made, although legally they only apply where native title does exist.

Local councils are responsible for compliance with native title legislation for Crown reserves they manage. Council are committed to managing Crown land consistently with the *Native Title Act 1993*.

Council will obtain written advice from a qualified native title manager that this Plan complies with any applicable provision of Commonwealth native title legislation (as required by the Crown Land Management Act).

Alignment with Council Strategic Plans and Objectives

The Ku-ring-gai Community Strategic Plan (CSP) sits at the top of Council's strategic planning framework and provides long term direction for the organisation to align its delivery of the community's policies, programs, projects and services. It also integrates with key Council plans and policies and acts as a guide for other stakeholders (organisations, government agencies, business and individuals) in planning and delivering services for our area.

In 2018, the New South Wales (NSW) Government introduced new plans for both metropolitan Sydney and the northern area of Sydney. Ku-ring-gai is part of the North District Plan which provides a 20-year plan to manage growth and achieve the 40-year vision for metropolitan Sydney, while enhancing Greater Sydney's liveability, productivity and sustainability into the future.

The district plans require each council to prepare a Local Strategic Planning Statement (LSPS) for their area to guide future land use planning and development. The LSPS brings together established council policies and community views to set a framework as to how Ku-ring-gai will

evolve into the future, while also ensuring that those elements that are special to the character of the area are maintained.

Ku-ring-gai Community Strategic Plan Themes and Objectives	Ku-ring-gai LSPS Priorities	Council Management Approach
 Theme 1: Community, People and Culture C3. Community connectedness C3.1 A community where opportunities are provided for all voices to be heard and where community stewardship, participation and engagement is supported and promoted C4. Healthier lifestyles C4.1 A community that embraces healthier lifestyle choices and practices C7. Emergency management C7.1 An aware community able to prepare and respond to the risk to life and property from emergency events 	K14. Providing a range of cultural, community and leisure facilities to foster a healthy, creative, culturally rich and socially connected Ku-ring-gai K15. Strengthen recognition and support for Aboriginal communities and cultural heritage K17. Providing a broad range of open spaces, sporting and leisure facilities to meet the community's diverse and changing needs K39. Reducing Councils, the community's and the natural and built environment's vulnerability and increase its resilience to the impacts of climate change	 Provide innovative and sustainable approaches for the community to access natural areas for active and passive recreation Provide opportunities for community stewardship, participation and engagement through volunteer care groups Maintain a network of sustainable walking and cycling links for leisure and recreation Promote opportunities for the community to embrace nature based recreation for fitness and wellbeing and to encourage active and healthy lifestyles Provide well-planned and sustainable infrastructure including sustainable recreation opportunities (sporting and recreation facilities, walking tracks and trails), to support future growth and changing community needs Undertake risk mitigation measures to reduce the impact of emergency events and provide community education to increase preparedness and resilience including the management of fire and flood hazards

Table 7 Alignment with Council Plans and Approaches

Theme 2: Natural Environment	K18. Ensuring recreational activities in natural areas	Promote community awareness and involvement
N1 Appreciating Ku-ring-gai's unique natural environment	are conducted in harmony with the local environment	and build biodiversity partnerships
 N1.1 A community empowered with knowledge, learning and information that benefits the environment 	and within ecological limits K28. Improving the condition of Ku-ring-gai's bushland and protecting native terrestrial and aquatic flora and fauna and their	 Provide opportunities for community stewardship, participation and engagement through volunteer care groups
N2. Natural Areas	habitats	 Promote partnerships with educational institution,
 N2.1 Our bushland is rich with native flora and fauna 	K29. Enhancing the biodiversity values and	government and non- government organisations
N3. Natural Waterways	ecosystem function services of Ku-ring-gai's natural	Conserve and enhance
 N3.1 Our natural waterways and riparian 	assets K30. Improving the quality	biodiversity and strengthen ecosystem functions, services and resilience
areas are enhanced and protected	and diversity of Ku-ring-gai's urban forest	Implement measures to
N4 Climate Change	K31. Increasing, managing	minimise and manage impacts from threats and
• N4.1 A community addressing and responding to the impacts of climate change and extreme weather events	and protecting Ku-ring-gai's urban tree canopy	pressures to natural areas
	K32. Protecting and improving Green Grid connection	 Provide for the restoration and regeneration of the land through bush regeneration services and associated
	K34. Improving connections with natural areas including river and creek corridors, bushland and National Parks	 works Provide well-planned and sustainable infrastructure including sustainable recreation opportunities
	K35. Protecting and improving the health of waterways and riparian areas	Improve water quality entering our waterways through green infrastructure and maintenance of water
	K36. Enhancing the liveability of Ku-ring-gai's urban environment through integrated water infrastructure and landscaping solutions K39. Reducing Councils, the community's and the	 quality devices Undertake risk mitigation measures to reduce the impact of emergency events and provide community education to increase preparedness and resilience including the management
	natural and built environment's vulnerability and increase its resilience to the impacts of climate change	 of fire and flood hazards Burning undertaken within ecological regimes and/or using cultural practices

Ku-ring-gai Community Strategic Plan Themes and Objectives	Ku-ring-gai LSPS Priorities	Council Management Approach
		resulting in positive outcomes
 Theme 3: Places, Spaces and Infrastructure P1 Preserving the unique visual character of Ku-ring-gai P1.1 Ku-ring-gai's unique visual character and identity is maintained P5 Heritage that is Protected and Responsibly Managed P5.1 Ku-ring-gai's heritage is protected, promoted and responsibly managed P6. Enhancing recreation, sporting and leisure facilities P6.1 Recreation, sporting and leisure facilities are available to meet the community's diverse and changing needs P7. Enhancing community buildings and facilities P7.1 Multipurpose community buildings and facilities are available to meet the community's diverse and changing needs 	K1. Providing well-planned and sustainable infrastructure to support growth and change K12. Managing change and growth in a way that conserves and enhances Ku-ring-gai's unique visual and landscape character K13. Identifying and conserving Ku-ring-gai's environmental heritage K16. Protecting, conserving and managing Ku-ring-gai's Aboriginal heritage assets, items and significant places K17. Providing a broad range of open spaces, sporting and leisure facilities to meet the community's diverse and changing needs K18. Ensuring recreational activities in natural areas are conducted in harmony with the local environment and within ecological limits K19. Providing well maintained, connected, accessible and highly valued trail networks and recreational infrastructure where locals and visitors can enjoy and connect with nature K33. Providing a network of walking and cycling links for leisure and recreation	 Provide well-planned and sustainable infrastructure including sustainable recreation opportunities (sporting and recreation facilities, walking tracks and trails), to support future growth and changing community needs Improve the condition of Ku- ring-gai's bushland and native terrestrial and aquatic ecosystems through well managed sustainable recreational infrastructure and accessible trails Development within and adjacent to natural areas maintains aesthetic landscape values and avoids, minimises or offsets natural and cultural impacts Lands are managed to minimise impacts to European and Aboriginal heritage Prevent unauthorised construction of recreation infrastructure within natural areas Ensure recreation does not impact Aboriginal heritage items and significant places

Ku-ring-gai Community Strategic Plan Themes and Objectives	Ku-ring-gai LSPS Priorities	Council Management Approach
 Theme 5: Local economy and employment E3 Tourism and visitation opportunities E3.1 Ku-ring-gai has a range of activities and experiences that attract visitors 	K19. Providing well maintained, connected, accessible and highly valued trail networks and recreational infrastructure where locals and visitors can enjoy and connect with nature K24. Diversifying Ku-ring- gai's local economy through the expansion of tourism and the local visitor economy	Provide well-planned and sustainable infrastructure including sustainable recreation opportunities (sporting and recreation facilities, walking tracks and trails), to support future growth and changing community needs.