

ATTACHMENTS FOR: AGENDA NO. 14/23 COUNCIL MEETING

Meeting Date: Tuesday 12 December 2023
Location: Council Chambers, Level 1A, 1 Pope Street, Ryde and Online
Time: 6.00pm

ATTACHMENTS FOR COUNCIL MEETING

Item		Page
8	ADOPTION OF FIELD OF MARS RESERVE PLAN OF MANAGEMENT AND LAND CATEGORISATIONS	
Attachment 1	Field of Mars Reserve draft Plan of Management for adoption by Council (October 2023)	1
Attachment 2	Field of Mars Reserve (Part) Proposed Recategorisation Public Hearing and Submissions Report prepared by Parkland Planners (17 October 2023)	253
Attachment 3	Field of Mars Reserve draft Plan of Management Public Exhibition Submission Summary (October 2023)	287
Attachment 4	Field of Mars Reserve draft Plan of Management and Land Recategorisation Engagement Methodology Report (September 2023)	294

ITEM 8 (continued)

ATTACHMENT 1



FIELD OF MARS RESERVE

DRAFT PLAN OF MANAGEMENT

"City of Ryde's largest remnant bushland reserve and open space provision with significant environmental, biodiversity and landscape values for public recreation, conservation and the study of native flora and fauna."

City of Ryde
Locked Bay 2069
NORTH RYDE NSW 1670
Phone: (02) 9952 8222
Email: cityofryde@ryde.nsw.gov.au
Website: www.ryde.nsw.gov.au

 City of Ryde
Lifestyle and opportunity
at your doorstep

October 2023

ITEM 8 (continued)

ATTACHMENT 1

TABLE OF CONTENTS

1. INTRODUCTION	6
1.1 Field of Mars Reserve	6
1.2 What is a Plan of Management?	6
1.3 Why Council has prepared this Plan of Management.....	7
1.4 Relationship between Plan of Management and Masterplan	8
1.5 Land to which this Plan applies.....	8
1.6 Preparing this Plan of Management.....	11
1.7 Structure of this Plan of Management.....	12
1.8 Compliance with legislative requirements	13
1.9 Legislative requirements.....	14
1.10 State-level and regional planning documents	20
1.11 Local Planning Controls	27
1.12 City of Ryde strategies, plans and policies	32
2. DESCRIPTION OF FIELD OF MARS RESERVE.....	37
2.1 Location and regional context.....	37
2.2 Brief history.....	40
2.3 Landscape, flora, fauna and natural heritage values	44
2.4 Cultural heritage values	55
2.5 Access, developments and facilities.....	56
2.6 Visitor use, activities and enjoyment	60
2.7 Leases and licences.....	60
2.8 Maintenance and management.....	61
2.9 Condition and use of land and facilities.....	62
3. BASIS FOR MANAGEMENT OF FIELD OF MARS RESERVE	63
3.1 Legislative and policy framework.....	63
3.2 Consultation and community views	63
3.3 Values	69
3.4 Issues or threats	70
3.5 Reserve vision.....	74
3.6 Land categorisation.....	74
3.7 Management objectives.....	76
3.8 Field of Mars Reserve Masterplan	78
4. MANAGEMENT ISSUES AND ACTION PLAN	78
4.1 Management issues and action plan introduction	78
4.2 Action plan tables	78
5. IMPLEMENTATION AND REVIEW	114
5.1 Future uses and developments	114
5.2 Leases, licenses, permits and other estates.....	119
5.3 Implementation.....	123
5.4 Funding.....	124
5.5 Evaluation, reporting and review	125

ITEM 8 (continued)

ATTACHMENT 1

APPENDICES

A	Field of Mars Reserve land Information.....	127
B	Field of Mars Reserve land categorisation map.....	128
C	Field of Mars Reserve Masterplan Report (adopted August 2021)	130
D	Field of Mars Reserve Gazettal Records – Crown Reserve No. R89474.....	210
E	Key Commonwealth and State Legislation	213
F	Field of Mars Reserve condition and use of land and facilities (as at September/October 2020).....	221
G	Field of Mars Reserve native flora list.....	236
H	Field of Mars Reserve native fauna list.....	248

LIST OF TABLES

1.	Field of Mars Reserve, Land Title and Cadastral details.....	9
2.	Compliance with <i>Local Government Act 1993</i> requirements.....	13
3.	Key planning and management directions or implications – State and Regional level strategies and plans	20
4.	Permitted and prohibited land uses – E2 Environmental Conservation and RE1 Public Recreation Zone (<i>RLEP 2014</i>).....	31
5.	Relevant themes, objectives and directions or actions from <i>Our Vision for Ryde 2028</i> <i>Community Strategic Plan</i>	32
6.	Key planning and management directions or implications – City of Ryde strategies or plans	33
7.	Benefits or urban bushland areas in the City of Ryde (from the <i>City of Ryde Generic Plan</i> <i>of Management – Natural Areas, 2021</i>).....	51
8.	Values identified for Field of Mars Reserve and their assessed level of significance	69
9.	Management challenges, issues or threats to values	71
10.	Prescribed “Core objectives for management” for current land categorisations	75
11.	Activities and uses permissible within the Field of Mars Reserve.....	115
12.	Development permissible under this Plan of Management.....	116
13.	Authorised short-term and long-term leases, licences and permits.....	122

LIST OF FIGURES

1.	Field of Mars Reserve, land to which this Plan applies	10
2.	The Plan of Management preparation process.....	11
3.	Zoning plan (extract from the <i>Ryde Local Environmental Plan 2014</i>)	30
4.	Location of Field of Mars Reserve within the wider City of Ryde Local Government Area	38
5.	Field of Mars Reserve Boundary	39
6.	Historical aerial imagery of Field of Mars Reserve	41
7.	Flood prone land, drainage and utilities.....	47
8.	Vegetation communities.....	49
9.	Walking tracks and reserve developments/facilities.....	58
10.	Stage 2 community consultation feedback on the adequacy of management measures in the draft Plan of Management’s Actions List.....	67
11.	Biggest threats to the Field of Mars Reserve as identified in the Stage 1 Community Consultation	71

ITEM 8 (continued)

ATTACHMENT 1

ACKNOWLEDGEMENTS

City of Ryde

Meredith Gray	Open Space Planner
Vince Cusumano	Casual Plan of Management Officer
Simon James	Manager – Parks
Michael Longworth	Senior Coordinator – Parks Planning
Sandra Payne	Natural Areas Coordinator
Kylie McMahon	Manager - Environment
Sean Simpson	Natural Areas Project Officer

Gondwana Consulting

Andrew Ginns	Director
Pamela Fletcher	Registered Landscape Architect
Alan Ginns	Director
Levente Laczko	Graduate Research Assistant

Photographs by: Gondwana Consulting (unless otherwise credited)

This Plan of Management was prepared by:  **City of Ryde** 

Technical content, plans and images (unless otherwise credited): Gondwana Consulting

Plan of Management graphic design layout and images (unless otherwise credited): City of Ryde

Images (unless otherwise credited): Field of Mars Environmental Education Centre

DOCUMENT CONTROL

REVISION	ISSUE DATE	PURPOSE
1	April 2021	Draft Plan of Management - Action Lists for Stage 2 community consultation
2	May 2021	Initial draft Plan of Management for Council Review
3	June 2021	Draft Plan of Management for Native Title Advice
4	July 2021	Draft Plan of Management reformatted by Council
5	July 2021	Draft Plan of Management for Council Report to refer to Minister
6	October 2021	Draft Plan of Management referred to Minister in accordance with <i>Crown Land Management Act 2016</i> requirements
7	February 2023	Draft Plan of Management (with updates from Crown Land)
8	July 2023	Ministerial consent for Public Exhibition of draft Plan of Management
9	August 2023	Public Exhibition of draft Plan of Management
10	October 2023	Draft Plan of Management for Council Report for adoption
11	Pending	Adopted Plan of Management

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

1 INTRODUCTION

1.1 FIELD OF MARS RESERVE

The Field of Mars Reserve is the largest remnant bushland reserve under the care, control and management of the City of Ryde covering approximately 50 hectares.

The Reserve is located in East Ryde – bounded by Cressy Road, Buffalo Creek, Pittwater Road, Moncrieff Drive, Finch Avenue and Kellaway Street. It consists of forty-three blocks of land owned by three land owners – the City of Ryde, NSW Department of Planning, Industry and Environment (Crown Lands), and Transport for NSW.

The Field of Mars Reserve is an extensive area of open space originally reserved for passive recreation in 1887 as part of the Field of Mars Common and now also serving an important bushland and biodiversity protection role and providing environmental education opportunities. It contains important remnants of endemic bushland on Hawkesbury Sandstone and transitional shale sandstone soils, including nine distinct native vegetation communities. The Reserve contains 1 critically endangered and 3 endangered ecological communities, and a number of threatened flora and fauna species, which are protected under various Commonwealth and State legislation.

The Reserve forms part of a wider open space system and habitat corridor network which includes – to the west the Field of Mars Cemetery and linkage parks such as Pidding, Barton and Burrows Parks; and to the east the Lane Cove National Park (managed by the NSW National Parks and Wildlife Service), Buffalo Creek Reserve (managed by Hunters Hill Council) and the Lane Cove River foreshore.

The Reserve also holds significant infrastructure for environmental education – the Environmental Education Centre (within but separate to the Reserve, owned and operated by the NSW Department of Education), the Visitors Centre, and a nearby boardwalk and walking tracks. Both the Visitors Centre and Environmental Education Centre are located close to the Reserve's main entrance on Pittwater Road. Beyond this more accessible and developed area the Reserve has a sizeable network of walking tracks offering opportunities for a range of nature-based leisure and recreation activities in an attractive bushland setting.

The Field of Mars Reserve was formally established in 1975 as a Reserve for "Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna". The Reserve was gazetted as a Wildlife Refuge in 1975 under the *National Parks and Wildlife Act 1974*. It is also listed as an item of National and State significance under *Ryde Local Environmental Plan 2014* (No.105, Heritage).

1.2 WHAT IS A PLAN OF MANAGEMENT?

A Plan of Management is developed to determine and guide the future management of a public open space asset under a Council's management – such as a bushland reserve, park or sportsground.

They are formal documents, adopted by a council, that provide guidance for the future planning and management of these "community lands". Plans of Management achieve this by identifying the values an open space possesses and outlining how the area can be improved, used, managed and maintained into the future. A Plan of Management sets out management objectives and performance targets for public open spaces as well as providing direction and actions for the management and use of these areas.

Plans of Management are important documents, prepared in consultation with the community, and act as an agreement between a Council and the community as to how a place is to be managed and its values protected. Current uses and activities are identified and future uses and activities, including leases and licences, are approved by a Plan of Management.

Both the *Local Government Act 1993* and the *Crown Land Management Act 2016* include provisions regarding the preparation of plans of management for lands under a council's management, how a Plan of Management is to be prepared (including community engagement requirements), and what a Plan of Management must include or address. From 1 July 2018 the *Crown Land Management Act 2016* requires local Councils that are appointed to manage a dedicated or reserved area of Crown land (as is the case for a large part of Field of Mars Reserve), to manage that land as if it were public land under the *Local Government Act 1993* – including applying the Plans of Management requirements of this Act.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

It is important to note that – in providing directions or guidelines, and specific actions, for an area's management – a Plan of Management sets out *what can be done* in managing an area but not that it *must be done*. Normal Council budgeting and decision making procedures still apply in terms of funding and actioning a Plan of Management – see Section 5 for further discussion. However in the management of an area *something cannot be done if it is not consistent with, or approved by, the adopted Plan of Management*.

1.3 WHY COUNCIL HAS PREPARED THIS PLAN OF MANAGEMENT

Field of Mars Reserve is currently managed under the existing *Field of Mars Reserve Plan of Management*, as adopted by the City of Ryde on 9 September 2009. The City of Ryde (Council) is now undertaking a revision and updating of this earlier Plan of Management for the following reasons.

The *Crown Land Management Act 2016* requires local councils that are the appointed "Council-manager" for a Crown Reserve – as City of Ryde is for a sizeable central portion of the Field of Mars Reserve – to prepare new plans of management for these areas by a deadline prescribed in the legislation. This is required even where there is a previous Plan of Management already in place. Council must comply with this legislative requirement.

The earlier Plan of Management is also being updated to enable Council and the community to better manage Field of Mars Reserve in response to evolving management challenges and usage pressures, changing community values or attitudes, and aspirations, and to build on past management measures. It will guide significant future investment in the Reserve and its management. It will also ensure that management and protection of this Reserve fits into the broader scheme of the City's open space network.

Since adoption of the earlier Plan of Management the City of Ryde has also endorsed an updated versions of its "Community Strategic Plan", the current version being *Our Vision for Ryde 2028 Community Strategic Plan 2018*. This document sets out the community's and Council's aspirations and priorities for at least the next 10 years. It is built around the seven those of a vibrant and liveable city, an active and healthy city, a natural and sustainable city, a smart and innovative city, a connected and accessible city, a diverse and inclusive city, and an open and progressive city. Management of the Field of Mars Reserve must align with the relevant directions and strategic objectives of *Our Vision for Ryde 2028* and ensure that the area's use and management remains consistent with the community's expressed values and preferences.

This updated Field of Mars Reserve Plan of Management, and associated Masterplan, will guide Council's on-going management of this important area of bushland within the City of Ryde. It will provide the practical means of establishing and implementing the Reserve's future protection, uses and management. The Plan of Management will also complement, and be consistent with, Council's recently adopted *Natural Areas Generic Plan of Management*. However in recognition of its size and environmental importance the Field of Mars Reserve warrants, as it has before, its own area-specific Plan of Management.

When adopted, this new *Field of Mars Reserve Plan of Management* will supersede and extinguish the previously adopted 2009 Plan of Management.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

1.4 RELATIONSHIP BETWEEN PLAN OF MANAGEMENT AND MASTERPLAN

A specific Plan of Management is typically accompanied by a Landscape Masterplan that shows proposed on-the-ground changes to that open space.

While this Plan of Management will provide the framework for how Field of Mars Reserve will be used, managed and maintained on an ongoing basis, the Field of Mars Reserve Masterplan identifies the provision of facilities over the next 20 years. This facilitates and ensures sustainable and efficient use of resources, and more importantly, that the Park meets and reflects the needs and aspirations of the community and stakeholders.

A copy of the Field of Mars Reserve Masterplan can be found at Appendix C.

1.5 LAND TO WHICH THIS PLAN APPLIES

This Plan of Management refers to the area described as Field of Mars Reserve, East Ryde, covering a total area of approximately 49.839 hectares.

The Reserve is made up of 33 individual land parcels – as listed in Table 1 – comprising:

- 22 parcels of community land owned by the City of Ryde;
- 8 parcels of Crown land (owned by the NSW Department of Planning, Industry and Environment – Crown Lands); and
- 3 parcels owned by Transport for NSW.

ITEM 8 (continued)

ATTACHMENT 1

Table 1 Field of Mars Reserve, land title and cadastral details

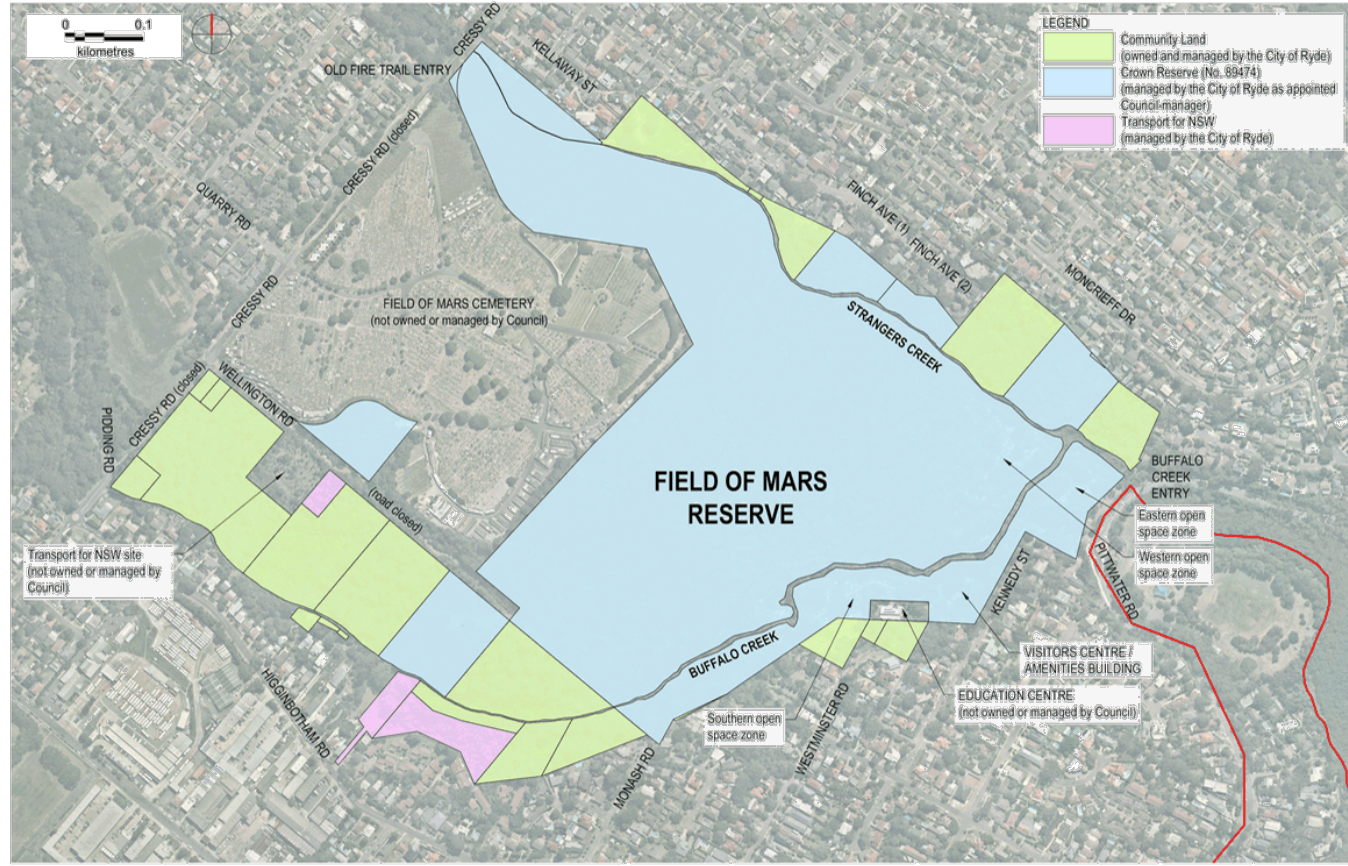
LOT	DP	OWNER	STATUS
3	DP1072597	City of Ryde	Community Land – owned and managed by the City of Ryde
1	DP208410	City of Ryde	
11 (section 1)	DP2183	City of Ryde	
C	DP31192	City of Ryde	
S	DP31252	City of Ryde	
Z	DP31253	City of Ryde	
625	DP31680	City of Ryde	
2	DP419992	City of Ryde	
A	DP433420	City of Ryde	
B	DP433420	City of Ryde	
C	DP433420	City of Ryde	
Z	DP445797	City of Ryde	
1	DP500228	City of Ryde	
4	DP504909	City of Ryde	
1	DP602025	City of Ryde	
1	DP605140	City of Ryde	
3	DP707829	City of Ryde	
8	DP711149	City of Ryde	
306	DP752035	City of Ryde	
308	DP752035	City of Ryde	
102	DP791791	City of Ryde	
5	DP814502	City of Ryde	
7011	DP1069836	State of NSW (Crown Land)	Crown Reserve No. 89474. Reserved for "Public recreation and promotion of the study and the preservation of native flora and fauna" on 20 June 1975. Managed by the City of Ryde as appointed Council-manager.
7358	DP1160800	State of NSW (Crown Land)	
172	DP752035	State of NSW (Crown Land)	
258	DP752035	State of NSW (Crown Land)	
259	DP752035	State of NSW (Crown Land)	
261	DP752035	State of NSW (Crown Land)	
307	DP752035	State of NSW (Crown Land)	
755	DP752035	State of NSW (Crown Land)	
C	DP310314	Transport for NSW	Owned by Transport for NSW, managed by the City of Ryde
2	DP500228	Transport for NSW	
7	DP711149	Transport for NSW	

The relative extent and location of these three tenures is shown on Figure 1. All are classified as "Community Land", and all are managed by the City of Ryde.

The greater majority of the Reserve comprises Crown Reserve No. 89474, which was reserved for the purpose of "Public recreation and promotion of the study and the preservation of native flora and fauna" on 20 June 1975. This reservation revoked a much earlier reservation for public recreation (No. 4785) originally notified on 3 December 1887, as well as consolidating a variety of land additions and subtractions over the subsequent years (see Section 2.2). The former Council of the Municipality of Ryde was appointed trustee of Crown Reserve 89474 on 29 April 1988 (formalising the previous devolution of this care, control and management role to the Council). Copies of the relevant Government Gazette notices for the Crown land portion of the Reserve are provided at Appendix D.

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

The beds of Buffalo and Strangers Creeks are not part of Crown Reserve No. 89474 (as indicated on Figure 1). However, these areas are effectively managed as part of the Field of Mars Reserve.

The Reserve also includes 3 parcels of Crown land owned by Transport for New South Wales – with the City of Ryde having management responsibility for these blocks.

No current Native Title Claims or Aboriginal Land Claims are known to affect the subject lands.

1.6 PREPARING THIS PLAN OF MANAGEMENT

The following process has been followed in the preparation of this Field of Mars Reserve Plan of Management. Figure 2 broadly outlines the overall process overall.

- 
- Inception meeting and site visit. Discussions with Council staff to draw on available in-house expertise and knowledge of the site
 - Collation, review and analysis of background and "directions" documents. Review of the current Field of Mars Reserve Plan of Management (2009) and other available data from Council (including relevant studies, plans and reports prepared subsequent to the 2009 Plan of Management). Sourcing and review of other background information regarding the Reserve and its values, uses, legislative and planning context.
 - Detailed on-ground assessments of the Reserve, undertaken over the course of several site visits – including context and access analysis, site and functional analysis, use and condition assessments, issue identification, and constraints/opportunities assessments
 - Stage 1 community consultation undertaken during October and November 2020 (by the City of Ryde) to gain an understanding of the environmental and community needs for the Reserve as well as to document people's ideas and suggestions as to how the Reserve can be managed, maintained, protected and improved now and into the future. (The outcomes of this community engagement are summarised in Section 4.2).
 - Background research, information gathering and detailed on-site assessment.
 - Stage 1 Community Consultation – community feedback on environmental needs, community needs, ideas and suggestions for the Reserve's management, maintenance and protection. Council liaison with key stakeholders.
 - Review feedback from community and Council. Prepare draft Masterplan, draft Plan of Management – Action Lists and Community Land Categorisation Report.
 - Stage 2 Community Consultation – community feedback on draft Masterplan and draft Plan of Management – Action Lists.
 - Review feedback from community and Council. Refine draft Masterplan and prepare draft Plan of Management.
 - Draft Masterplan for report to Council for adoption.
 - Draft Plan of Management for report to Council for approval to refer to the Minister and place on Public Exhibition.
 - Draft Plan of Management and altered land categorisation of parts of Field of Mars Reserve (Crown Lands parcels of land) referred to Minister for approval to place on place on Public Exhibition.
 - Public Exhibition of draft Plan of Management.
 - Public Hearing for proposed land re-categorisation of parts of Field of Mars Reserve (Council owned Community land).
 - Review feedback from Public Exhibition and Public Hearing. Update draft Plan of Management and Land Categorisation Report (if/as required).
 - Report to Council to adopt the Plan of Management and proposed land re-categorisations.

Figure 2 The Plan of Management preparation process

ITEM 8 (continued)

ATTACHMENT 1

- Preparation of a draft Masterplan, a draft Plan of Management - Action Lists and draft Community Land Categorisation Report, to present preliminary planning and management directions for Council review. Revisions to prepare an agreed draft Masterplan and draft Plan of Management - Action Lists for community consultation.
- Stage 2 community consultation undertaken during April and May 2021 (by the City of Ryde) to seek community feedback on the draft Masterplan and draft Plan of Management - Action Lists.
- Refinement of the draft Masterplan following Stage 2 community feedback, for report to Council for adoption.
- Preparation of a draft Plan of Management and amendments following Council consideration and feedback.
- Draft Plan of Management for report to Council (August 2021) for approval to refer to Minister and place on Public Exhibition.
- Draft Plan of Management inclusive of amendments required by the Minister and/or Crown Lands.
- This draft Plan of Management placed on Public Exhibition for community comment and feedback (as required by the *Local Government Act 1993*).
- Public Hearing for proposed land re-categorisations of parts of Field of Mars Reserve (for Council owned community lands as required by the *Local Government Act 1993*).
- Review and update draft Plan of Management and proposed land re-categorisations (for Council owned community lands if/as required).
- Report to Council for the adoption for the Plan of Management and proposed land re-categorisations.

1.7 STRUCTURE OF THIS PLAN OF MANAGEMENT

This Plan of Management has been divided into five sections as outlined below.

Introduction. Describes the Plan of management; why and how it is prepared; and what land is included in this Plan of Management. Provides the planning and management context for this Plan of Management, describing the applicable legislative requirements of a Plan of Management and linkages to or alignment with other key planning documents.

Description of Field of Mars Reserve. Provides an introduction to Field of Mars Reserve – its assets and facilities, usage, condition and management.

Basis for Management. Identifies and evaluates the role of Field of Mars Reserve, its values, issues and opportunities. Identifies the appropriate Community Land categories to apply to the area as well as broad objectives and directions for the Reserve's management. This section also describes the purposes and uses to be permitted within the Reserve, the intensity of such uses, guidance in considering future possibly unforeseen uses or activities, and the scale and intensity of development within the Reserve. A Masterplan provides an overview of this Plan of Management's broad directions and major on-ground actions.

Management Issues and Action Plans. Identifies broad management issues, management objectives or targets, and a management framework and action plan (founded on specific management actions and guidelines or policies) to protect and enhance the Reserve's values, enjoyment and efficient management. Priorities or timing, the level of resources required (where relevant), and performance measures are included for each management action/guideline. This section also authorises leases, licences, permits, and other interests in the site in accordance with the *Local Government Act 1993*.

Implementation Plan and Review. Addresses factors around funding and implementation of the Plan's key management actions, as well as the process for review and monitoring of the Plan of Management and its recommendations.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

1.8 COMPLIANCE WITH LEGISLATIVE REQUIREMENTS

The *Local Government Act 1993* sets out a number of requirements or factors that must be included in, or addressed by, a Plan of Management for Community Land. This Plan of Management has been prepared in accordance and compliance with these requirements – as shown in Table 2.

Table 2 Compliance with *Local Government Act 1993* requirements

LOCAL GOVERNMENT ACT 1993 REQUIREMENT	RELEVANT SECTION(S) OF THIS PLAN
Description of the condition and uses of the land, and (any) buildings or improvements, as at the Plan of Management's date of adoption	Section 2 and Appendix F
Categorisation of Community Land	Section 3
Core objectives for management of Community Land	Section 3
Purpose(s) for which the land, and any buildings or improvements, will be permitted to be used	Section 3
Purpose(s) for which any further development of the land will be permitted (whether under lease or licence or otherwise)	Section 3
Description of the scale and intensity of any permitted uses or developments	Section 3
Authorisation of leases, licences or other estates	Section 4
Performance targets	Section 4
Means of assessing the achievement of objectives and performance targets	Section 4

This Plan of Management has also been prepared in recognition of, and to realise, the "Principles of Crown land management" as set out in the *Crown Lands Management Act 2016* (the principles of Crown land management are outlined in Section 1.8.2).

ITEM 8 (continued)

ATTACHMENT 1

1.9 LEGISLATIVE REQUIREMENTS

Planning, management and use of the Field of Mars Reserve (and the City of Ryde's other parks and reserves generally) must be consistent with, and is framed by, a range of Commonwealth and State legislation. The most relevant of these, and their implications for the planning and management of Field of Mars Reserve, are summarised below (in chronological order). Further discussion/description of the key Commonwealth and State legislation is provided at Appendix E.

1.9.1 Commonwealth Legislation

Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for the protection and management of the environment, and especially for matters of national environmental significance. These include nationally and internationally significant flora, fauna, ecological communities and heritage places. It provides for the identification and listing of nationally threatened native species and ecological communities, as well as the protection of migratory species and wetlands of international importance ("Ramsar wetlands").

The higher parts of the Field of Mars Reserve contain areas of the Sydney Turpentine-Ironbark Forest community, which is listed as a Critically Endangered Ecological Community under the EPBC Act (as Turpentine-Ironbark Forest in the Sydney Basin Bioregion). Threatened species listed as Vulnerable in the EPBC Act include *Pimelea curviflora* ssp *curviflora* (a native shrub) and the Grey-headed Flying-fox (*Pteropus poliocephalus*).

A number of Key Threatening Process listed under the EPBC Act are relevant to the management of the Field of Mars Reserve, including:

- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants (including aquatic plants);
- Predation by feral cats;
- Competition and land degradation by rabbits;
- Loss of terrestrial climatic habitat caused by anthropogenic emissions of greenhouse gases;
- Predation by the European Red Fox (*Vulpes vulpes*);
- Dieback caused by the root-rot fungus (*Phytophthora cinnamomi*); and
- Aggressive exclusion of birds from potential woodland and forest habitat by over-abundant noisy miners (*Manorina melanocephala*).

Native Title Act 1993

The *Native Title Act 1993* recognises the traditional ownership and interest in land and waters that indigenous Australians hold according to their traditions, laws and customs. It describes the process for the recognition of native title rights – including mechanisms for Aboriginal and Torres Strait Islander People to establish the existence of native title, lodge native title claims, determine and validate the extinguishment of native title, and dealing with land and waters where native title persists.

The *NSW Crown Land Management Act 2016* requires that on Crown land (including where managed by a local council – such as much of the central portion of the Field of Mars Reserve) native title rights/interests must be addressed (unless native title has been surrendered, extinguished or legally determined to no longer exist). Any dealings in land or water by a Crown land manager that affect (impair or extinguish) native title are classified as "future acts" and must comply with this Act. Examples of a "future act", on Crown land, might include the granting of freehold title, or a lease or licence, or the construction of public works. The *Native Title Act 1993* sets out procedures to follow before such "future acts" can be validly carried out.

ITEM 8 (continued)

ATTACHMENT 1

1.9.2 State Legislation

Crown Land Management Act 2016, Crown Land Management Regulation 2018 and "Principles of Crown Land Management"

The *Crown Lands Act 1989* (and some associated legislation) was repealed on 1 July 2018 and has now been replaced by the *Crown Land Management Act 2016 (CLM Act 2016)*. The *CLM Act 2016* more closely aligns the planning and management of Council-managed Crown reserves (as is the case for much of the Field of Mars Reserve) with the management of Community Lands under the *Local Government Act 1993*.

Managers of Crown reserves under the previous legislation are automatically appointed as Crown land managers under the *CLM Act 2016*, and will continue to have management responsibility for these reserves. The *CLM Act 2016* authorises a local council that has management responsibility for an area of dedicated or reserved Crown land (a "council manager") – as the City of Ryde has for much of the central portion of the Field of Mars Reserve (Crown Reserve 89747) – to manage that land as if it were, and in accordance with, the public land provisions of the *Local Government Act 1993*.

Section 3.22 of the *CLM Act 2016* requires (with some specific exceptions) that a Council manager of a Crown reserve "must manage the land as if it were Community Land under the *Local Government Act 1993*" and has "for that purpose all the functions that a local council has under that Act in relation to Community Land (including in relation to the leasing and licensing of Community Land)". The *CLM Act 2016* provides that any existing lease, licence or permit issued under the previous legislation will continue for their agreed term. However from 1 July 2018 all new leases, licences and permits are to be issued under the new legislation.

Section 3.23 of the *CLM Act 2016* requires a Council manager of an area of reserved Crown land to:

- Categorise the land, using the Community Land categories under section 36 of the *Local Government Act 1993* (as discussed further below in reference to the *Local Government Act 1993*); and
- Prepare and adopt a Plan of Management for the reserved Crown land in accordance with the Plan of Management provisions of the *Local Government Act 1993* (Division 2 of Part 2 of Chapter 6 of the Act) – with this applying even where a Crown reserve has a current a Plan of Management under the former Crown lands legislation (as is the case, in part, for Field of Mars Reserve).

The overall result of these legislative changes is that the City of Ryde must prepare this Plan of Management, and manage the Field of Mars Reserve, in accordance with the Community Land provisions of the *Local Government Act 1993* – including in relation to categorisation of the land; the preparation of a Plans of Management; and leases, licences and permits.

The new *Crown Land Management Regulation 2018* supports the *CLM Act 2016*. The Regulation is a statutory document that prescribes principles and rules relating to the use and management of Crown land in NSW.

Similar to the former legislation, the *CLM Act 2016* also sets out the "principles of Crown land management" (in section 1.4) – as:

- (a) That environmental protection principles be observed in relation to the management and administration of Crown land, and
- (b) That the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible, and
- (c) That public use and enjoyment of appropriate Crown land be encouraged, and
- (d) That, where appropriate, multiple use of Crown land be encouraged, and
- (e) That, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity, and
- (f) That Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles.

ITEM 8 (continued)

ATTACHMENT 1

Biodiversity Conservation Act 2016

The new *Biodiversity Conservation Act 2016 (BC Act)* (which replaced the former *Threatened Species Conservation Act 1995* and certain other legislation) aims to ensure a balanced approach to land management and biodiversity conservation across NSW as well as the protection of threatened species and threatened ecological communities. The new legislation only applies to the terrestrial environment.

The *BC Act* sets out a process for listing threatened plants and animals (building on the former threatened species legislation) and provides for the identification and listing of threatened species (Schedule 1), threatened ecological communities (Schedule 2), key threatening processes (Schedule 4), protected animals (Schedule 5) and protected plants (Schedule 6). It establishes new measures for the conservation of areas considered to be "of outstanding biodiversity value", according to established criteria (replacing the critical habitat provisions of the former threatened species legislation).

Three of the Reserve's vegetation communities (see Section 2.3) are listed as Endangered Ecological Communities under the *BC Act* – the Sydney Turpentine-Ironbark Forest, Estuarine Saltmarsh (which conforms to Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions) and Estuarine Swamp Oak Forest (a component of Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions). Two plant species and seven fauna species listed as Vulnerable under the *Biodiversity Conservation Act 2016* also occur in the Reserve (see Section 2.3).

Listed key threatening processes most relevant to biodiversity protection and management at the Field of Mars Reserve include:

- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants (threat = weed);
- Invasion and establishment of exotic vines and scramblers (threat = weed);
- Invasion, establishment and spread of Lantana (*Lantana camara L. sens. lat.*) (threat = weed);
- Invasion of native plant communities by exotic perennial grasses (threat = weed);
- Ecological consequences of high frequency fires (threat = habitat loss/change);
- Clearing of native vegetation (threat = habitat loss/change);
- Infection of native plants by *Phytophthora cinnamomi* (threat = disease);
- Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae (threat = disease);
- Competition and grazing by the feral European rabbit (threat = pest animal);
- Predation by feral cats (threat = pest animal);
- Predation by the European Red Fox (*Vulpes vulpes*) (threat = pest animal);
- Predation by the Plague Minnow (*Gambusia holbrooki*) (threat = pest animal);
- Competition from feral honeybees (threat = pest animal);
- Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners (*Manorina melanocephala*) (threat = pest animal);
- Bushrock removal (threat = habitat loss/change);
- Loss of hollow-bearing trees (threat = habitat loss/change);
- Removal of dead wood and dead trees (threat = habitat loss/change);
- Human-caused climate change (threat = habitat loss/change); and
- Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands (threat = habitat loss/change).

The *State Environmental Planning Policy (Biodiversity and Conservation)* commenced in 2021 and regulates native vegetation clearing in non-rural areas – in conjunction with the new *Biodiversity Conservation Act 2016*.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Biosecurity Act 2015

The *Biosecurity Act 2015* aims to manage biosecurity risks from animal and plant pests and diseases, weeds and contaminants (and replacing the former noxious weeds legislation and numerous other pieces of legislation in 2017). The Department of Primary Industries oversees the Act's operation and implementation, however the Act is chiefly implemented and enforced by "Local Control Authorities", such as local councils, who have specific responsibilities for the regulation of weeds (with co-ordination of weed and pest control efforts also aided by Local Land Services).

Under the Act invasive weeds are known as "priority weeds" of differing classes (or as a "biosecurity matter"), which are considered a "priority" in terms of eradication or control in NSW. Several "regional" priority weeds, listed for the Greater Sydney Region, occur within the Field of Mars Reserve (see Section 2.3.8). The management of vertebrate pests is also an element of a local council's overall land management responsibility. Under the Act Councils have certain legislative requirements to control declared vertebrate pests on Community Land.

Civil Liability Act 2002

The *Civil Liability Act 2002* reformed the common law principles governing negligence liability and, significantly for recreation activities, introduced the requirement for a greater degree of probability in determining whether there is a foreseeable risk of harm to which a reasonable person would have responded. The Act has a broad scope, applying to any claim for harm resulting from negligence and covers personal injury as well as property damage and economic loss.

This Act provides for a general "assumption of risk" (sections 5F to 5I) across many areas, including recreational activities, whereby in most cases there is no duty of care (such as on the part of a site or land manager) to warn another person of a risk that is "obvious". This Act also addresses "inherent risks", or the "risk of something occurring that cannot be avoided by the exercise of reasonable care and skill". Division 5 of this Act specifically addresses "Recreational Activities" with section 5K defining a "recreational activity" in broad terms to include "(b) any pursuit or activity engaged in for enjoyment, relaxation or leisure, and (c) any pursuit or activity engaged in at a place (such as a beach, park or other public open space) where people ordinarily engage in sport or in any pursuit or activity for enjoyment, relaxation or leisure". This Act also defines a "dangerous recreational activity" as a "recreational activity that involves a significant risk of physical harm".

This Act is applicable to the use, visitor enjoyment and management of Field of Mars Reserve in that recreation and leisure activities undertaken in natural settings can carry or be subject to a variety of risks (of differing severity).

Local Government Act 1993 and Local Government (General) Regulation 2021

The *Local Government Act 1993* is the primary legislation governing the management of Community Land by local Councils, including the preparation and operation of Plans of Management. As such, it applies directly to those areas of Field of Mars Reserve that are "Community Land" owned and managed by the City of Ryde.

As explained above, under the new *Crown Land Management Act 2016* the park planning and certain other provisions of the *Local Government Act 1993* now also formally apply to dedicated or reserved Crown lands that are managed by a local council (a "Council manager") – such as much of the central portion of Field of Mars Reserve (Crown Reserve 89474) – in the same manner as they do for Council owned and managed Community Lands.

This Act requires that a Plan of Management be prepared for Community Land. It also requires that areas of "Community Land" be categorised in accordance with this Act's nominated categories of "Natural Area" (further categorised as "Bushland", "Wetland", "Escarpment", "Watercourse" or "Foreshore", or a category otherwise prescribed by the legislation or regulations), "Sportsground", "Park", "Area of Cultural Significance", or "General Community Use". (Categorisation of the Field of Mars Reserve is further addressed in Section 4.6). This Act also sets out "core management objectives" for each of these categories, as a broad guide to management.

Section 632 of the Act authorises a Council to erect notices in a public place relating to matters such as the taking, driving, parking or "use of a vehicle in the place", the "doing of any thing in the place" or the "use of the place or any part of the place". Under NSW law a bicycle is considered a vehicle. Acting contrary to such a notice is considered an offence.

The *Local Government (General) Regulation 2021* provides guidelines and criteria to assist in the categorisation of Community Land, the preparation and adoption of Plans of Management and other management matters (such as the issuing of leases, licences and short term/causal permits on Community Land).

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974 (NPW Act)* contains provisions to protect and conserve habitats, ecosystems and wildlife, landforms/landscapes and natural features of significance as well as to protect places, objects and features of significance to Aboriginal people. It also establishes the NSW National Parks and Wildlife Service and furnishes it with responsibility for the management of National Parks and other conservation reserves as well as other functions.

The Field of Mars Reserve was gazetted as a "Wildlife Refuge" under the *NPW Act* in 1975. Wildlife Refuges are a voluntary program that endeavour to protect and manage wildlife, habitat and natural heritage on a defined area of land (contemporary Wildlife Refuge Agreements are now a voluntary agreement between a landholder and the NSW Biodiversity Conservation Trust under the *Biodiversity Conservation Act 2016*).

Under section 68(2) of the *NPW Act* Wildlife Refuges are deemed to be dedicated for the purposes of:

- (a) Preserving, conserving, propagating and studying wildlife,
- (b) Conserving and studying natural environments, and
- (c) Creating simulated natural environments.

While not prescribing specific management requirements or obligations on the owner or manager of a Wildlife Refuge, the *NPW Act* does provide for a number of offences in relation to these areas – principally relating to harming native fauna and flora, the carrying of firearms and other hunting equipment (including nets and explosives), and the picking or possessing of native plants. Notably in relation to the Field of Mars Reserve, the *NPW Act* makes it an offence to be "accompanied by a dog" in a Wildlife Refuge (section 70(2)(c)).

Also of relevance to the Field of Mars Reserve, the *NPW Act* is the principal legislation governing the protection and management of Aboriginal heritage in NSW. The Act defines an Aboriginal Object as "any deposit, object or material evidence (not being a handcraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains".

All Aboriginal objects, including sites with physical evidence, are protected under the *NPW Act* regardless of their size or level of significance or land tenure (with the exception of Commonwealth Lands).

This Act makes it an offence to damage, deface, destroy, disturb or collect any Aboriginal object or evidence or site without the approval of the Director (with some exceptions).

Eight sites listed on the NSW Department of Planning and Environment on-line Aboriginal Heritage Information Management System (AHIMS) have been recorded within the Field of Mars Reserve – all sites (and other, as yet unrecorded, Aboriginal cultural heritage site or materials on the Reserve) are protected under the *NPW Act*.

1.9.3 Other State and Commonwealth Legislation

A range of other State and Commonwealth legislation may have implications (to varying degrees) for the Reserve's planning, development, management and use.

The more likely of these are listed below (in chronological order).

Commonwealth

- *Work Health and Safety Act 2011* – provides a framework for the protection of workers and other persons against harm to their health, safety and welfare through the elimination of risks arising from work (including in outdoor settings and undertaking potentially hazardous activities).
- *Telecommunications Act 1997* – regulates the activities of major participants in the telecommunications industry and enables licensed "carriers" to install a limited range of facilities (most commonly "low-impact facilities"), including within parks and reserves, without seeking State or Territory planning approval.
- *Disability Discrimination Act 1992* – promotes the rights of people with disabilities and provides protection against discrimination based on defined disabilities (including access to public places and facilities such as open space and parks and other premises used by the community).

ITEM 8 (continued)

ATTACHMENT 1

State

- *Coastal Management Act 2016* – addresses the ecologically sustainable management, use and development of the coastal environment and defined “coastal zone” areas (including coastal zone, coastal use areas and coastal wetlands and their surrounds).
- *Disability Inclusion Act 2014* – provides for the provision of services for, and inclusion of, people with a disability.
- *Local Land Services Act 2013* – addresses land, water, natural resources and biosecurity management. This includes the control of weeds and noxious/pest animals through Regional Weed Committees and Regional Pest Animal Committees – made up of local control authorities, public and private landholders, and community members and co-ordinated by Local Land Services (the City of Ryde is part of the Greater Sydney Local Land Services region).
- *Water Management Act 2000* – to provide for the sustainable and integrated management of water sources, including guidelines to protect and enhance the quality of water in rivers (such as the Lane Cove River).
- *Smoke-free Environment Act 2000* and *Smoke-free Environment Regulation 2016* – prescribes controls regarding smoking tobacco.
- *Companion Animals Act 1998* – requires environmental initiatives by Councils to promote responsible animal ownership, provides for owners to have effective control of dogs and cats in public places, prohibits dogs within food preparation/consumption areas and some recreation areas, and provides for the declaration of “Wildlife Protection Areas”. The Field of Mars Reserve has been declared a Category 1 Wildlife Protection Area, meaning that no cats or dogs are permitted at any time.
- *Protection of the Environment Operations Act 1997* – addresses environmental offences, air quality, water quality, pollution control and noise control. It is also the principal legislation governing waste management and landfill sites in NSW, including the issuing of environment protection licences and environmental auditing requirements.
- *Fire Brigades Act 1989* and *Rural Fires Act 1997* – these address fire and bushfire safety issues, risk reduction and management (including the requirement for Councils to prepare bush fire risk management plans under the *Rural Fires Act 1997*, and local Council responsibility for the construction and maintenance of fire trails on public lands they manage).
- *Contaminated Land Management Act 1997* – regulates contaminated sites in NSW. Older closed landfills are sometimes also managed under this Act (if not regulated by the NSW Environment Protection Authority under the *Protection of the Environment Operations Act 1997*).
- *Fisheries Management Act 1994* – to conserve, develop and share the State’s fishery resources including to conserve key fish habitats, threatened species or populations, and ecological communities of fish and marine/foreshore vegetation (including mangroves and saltmarsh areas).
- *Environmental Planning and Assessment Act 1979* – the primary piece of land use and planning legislation in New South Wales which allows for the creation of a range of environmental planning instruments (at various levels of government) and sets requirements for assessment and approval of activity or development proposals. It also covers the unhealthy building land provisions of the former *Public Health Act 1902* and the subsequent former *Unhealthy Building Land Act 1990*.
- *Heritage Act 1977* – to conserve the State’s heritage being those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance.
- *Soil Conservation Act 1938* – addresses the mitigation of erosion and conservation of soil resources.

ITEM 8 (continued)

ATTACHMENT 1

1.10 STATE-LEVEL AND REGIONAL PLANNING DOCUMENTS

1.10.1 State and Regional level strategies and plans

One state-level policy document, and four regional-level strategies or plans, contain planning and management directions or actions relevant (to varying degrees) for the Field of Mars Reserve.

The main directions or implications for the Reserve contained in these five planning documents are summarised in Table 3 (in chronological order).

Table 3 Key planning and management directions or implications – State and Regional level strategies and plans

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS OR IMPLICATIONS FOR FIELD OF MARS RESERVE
State Level Strategies and Plans	
<i>Government Architect NSW draft Greener Places Policy (2017)</i>	<p>Components of the policy's "green infrastructure framework" (intended to guide the design, planning and delivery of green infrastructure across the state) most applicable to the Reserve are:</p> <ul style="list-style-type: none"> • Parks and open space – to deliver green infrastructure for people; • Connectivity – creating an interconnected network of open spaces; • Urban tree canopy – to deliver green infrastructure for climate change adaptation and resilience; • Bushland and waterways – to deliver green infrastructure for habitat and ecological health; and • Multi-functionality – delivering multiple ecosystem services simultaneously.
Regional Level Strategies and Plans	
<i>Greater Sydney Commission Greater Sydney Region Plan – A Metropolis of Three Cities (2018)</i>	<p>A 40-year metropolitan-scale vision intended to align land use, transport and infrastructure planning to reshape Greater Sydney as three unique but connected cities. Four drivers – infrastructure and collaboration, liveability, productivity, and sustainability. The Reserve falls within the "Eastern Harbour City" with relevant Plan directions being to value green spaces and landscape, use resources wisely, and adapt to a changing world.</p>
<i>Greater Sydney Commission North District Plan (2018)</i>	<p>The <i>North District Plan</i> is a guide for implementing the <i>Greater Sydney Region Plan, A Metropolis of Three Cities</i> at a metropolitan district level. It is a 20-year plan to manage growth in the context of economic, social and environmental considerations. The City of Ryde is located in the "North District" and forms a large part of the "Eastern Harbour City". Among the Plan's vision is for residents across Greater Sydney to have quicker and easier access to a wider range of activities and to improve the city's lifestyle and environmental assets.</p> <p>The Plan identifies 24 "planning priorities" of which the following (all in the "sustainability" stream) are most relevant to the Field of Mars Reserve:</p> <ul style="list-style-type: none"> • Planning Priority N4 - Fostering healthy, creative, culturally rich and socially connected communities; • Planning Priority N15 - Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways; • Planning Priority N16 - Protecting and enhancing bushland and biodiversity;

ITEM 8 (continued)

ATTACHMENT 1

	<ul style="list-style-type: none"> The North District Plan is a guide for implementing the Greater Sydney Region Plan, A Metropolis of Three Cities at a metropolitan district level. It is a 20-year plan to manage growth in the context of economic, social and environmental considerations. The City of Ryde is located in the "North District" and forms a large part of the "Eastern Harbour City". Among the Plan's vision is for residents across Greater Sydney to have quicker and easier access to a wider range of activities and to improve the city's lifestyle and environmental assets. The Plan identifies 24 "planning priorities" of which the following (all in the "sustainability" stream) are most relevant to the Field of Mars Reserve: <ul style="list-style-type: none"> Planning Priority N4 - Fostering healthy, creative, culturally rich and socially connected communities; Planning Priority N15 - Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways; Planning Priority N16 - Protecting and enhancing bushland and biodiversity; Planning Priority N17 - Protecting and enhancing scenic and cultural landscapes; Planning Priority N19 - Increasing urban tree canopy cover and delivering Green Grid connections; and Planning Priority N20 - Delivering high quality open space. <p>Actions identified under these, and other, planning priorities as relevant for the Reserve include:</p> <ul style="list-style-type: none"> Action 10 - Optimise the use of available public land for social infrastructure; Action 11 - Deliver healthy, safe and inclusive places for people of all ages and abilities that support active, resilient and socially connected communities; Action 62 - Protect environmentally sensitive areas of waterways and the coastal environment areas; Action 63 - Enhance sustainability and liveability by improving and managing access to waterways, foreshores ... for recreation, tourism, cultural events and water-based transport; Action 66 - Protect and enhance biodiversity by ... (b) managing urban bushland and remnant vegetation as green infrastructure, and (c) managing urban development and urban bushland to reduce edge-effect impacts; Action 71 - Expand urban tree canopy in the public realm; Action 72 - Progressively refine the detailed design and delivery of (a) Greater Sydney Green Grid priority corridors (b) opportunities for connections that form the long-term vision of the network (c) walking and cycling links for ... leisure and recreational trips (the Lane Cove River is identified as a "priority corridor", including the Great North Walk which passes just east of the Reserve through Buffalo Creek Reserve and is identified as a project "important to the District"); and; Action 73 - Maximise the use of existing open space and protect, enhance and expand public open space by (among other initiatives) "(f) delivering, or complementing the Greater Sydney Green Grid, and providing walking and cycling links for ... leisure and recreational trips".
--	--

ITEM 8 (continued)

ATTACHMENT 1

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS OR IMPLICATIONS FOR FIELD OF MARS RESERVE
Regional Level strategies and plans	
<i>Government Architect NSW Sydney Green Grid (2017)</i>	<p>Sydney Green Grid Plan aims to promote sustainable development while maximising quality of life and wellbeing by delivering an “interconnecting network of open space that will keep the city cool, encourage healthy living, enhance biodiversity and ensure ecological resilience”. The Reserve falls within the North District and is nominated as local open space. The Plan promotes:</p> <ul style="list-style-type: none"> Increasing access to open space; Providing for healthy and active living; Minimising disturbance to riparian areas; and The protection and improvement of the natural character, ecological integrity, visual amenity and public access to foreshores and rivers; Connecting bio-diverse areas to provide ecological connectivity; Raising awareness amongst the community about the values of local bush and fostering community bushcare groups; The protection of heritage places and landscapes, along with cultural heritage. <p>The Kittys Creek corridor, located north of the Reserve, is mentioned as an important cross-connection from the Lane Cove River to Ryde Hospital.</p>
<i>City of Ryde, Hunters Hill and Lane Cove Councils Regional Disability Inclusion Action Plan (2017)</i>	<p>This Plan was prepared jointly by City of Ryde, Hunters Hill and Lane Cove Councils to establish a co-ordinated approach to support and include people with a disability into all aspects of life in the community. A regional commitment, implemented by a list of strategies and actions, are identified to achieve this goal. The City of Ryde was identified as having 4.5% of its population requiring assistance in their day to day lives (slightly less than the Greater Sydney and Australian averages).</p> <p>The Plan identifies a clear set of actions guided by four focus areas of inclusion, one of which is “2 - Creating liveable communities”. The Plan’s consultation activities around creating liveable communities identified frequent responses as “making sure all parks, wharfs, swimming spots are accessible for all abilities and have sufficient accessible toilets” and that a key barrier to accessing community places is the lack of adequate footpaths, ramps and transport provisions. Relevant strategies proposed included to ensure “open spaces and leisure and sporting facilities are accessible” and to “improve accessibility of ... infrastructure assets”.</p>

ITEM 8 (continued)

ATTACHMENT 1

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS OR IMPLICATIONS FOR FIELD OF MARS RESERVE
Regional Level strategies and plans	
<p><i>Hunters Hill Lane Cove Parramatta Ryde Bush Fire Management Bush Fire Risk Management Plan 2019-2024 (draft 2021)</i></p>	<p>This plan – prepared by the Hunters Hill, Lane Cove, Parramatta, Ryde Bush Fire Management Committee – guides participating councils and the fire services (NSW Rural Fire Service and Fire and Rescue NSW) in carrying out bushfire hazard reduction and control activities. These measures include hazard reduction burns, clearing/maintaining asset protection zones, awareness/preparedness and other actions.</p> <p>The Plan recognises “assets”, that require protection or special management measures during fire operations, as well as bushfire risk reduction “treatment strategies and actions” and maps these across the City of Ryde and other council areas. Mapping in the Plan shows the following at, and around, the Field of Mars Reserve:</p> <ul style="list-style-type: none"> Asset protection zones (APZs) along all of the Reserve’s northern boundary, the central portion of the southern boundary (from approximately midway along Higginbotham Road east to Westminster Road) and on all boundaries with the Field of Mars Cemetery; The adjacent residential areas to the north and south of the Reserve as “residential” assets, considered to be at a “very high” level of risk of being impacted by bushfires, with treatments to reduce/manage this bushfire risk identified as hazard reduction (maintaining APZs, and managing fuel loads as required) and community education (annual information and advice); The Environmental Education Centre as a “special fire protection” asset, considered at a “high” risk from bushfire, with identified treatments as hazard reduction (undertaking mechanical or prescribed burning) and preparedness (annual maintenance by private owners); The Visitor Centre as a “special fire protection” asset, considered a “medium” risk from bushfire, with identified treatments as hazard reduction (undertaking mechanical or prescribed burning); and The Field of Mars Cemetery as a “cultural” asset, considered at a “high” risk from bushfire, with identified treatments as hazard reduction (undertaking mechanical or prescribed burning, and maintaining APZs) and preparedness (annual maintenance by private owners) (the Field of Mars Cemetery is also mapped as an “Environmental Vulnerable (Species)” zone). <p>The endangered ecological vegetation communities and cultural heritage sites within Field of Mars Reserve itself are not mapped, or listed as assets, for fire management purposes.</p>

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS OR IMPLICATIONS FOR FIELD OF MARS RESERVE
Regional Level strategies and plans	
<p><i>Local Land Services Greater Sydney</i></p> <p><i>Local Strategic Plan 2021-2026 (2021)</i></p>	<p>Relevant "strategies" for the Greater Sydney Local Land Services include the following.</p> <p><u>Land Management:</u> Projects and advice to assist the protection and restoration of natural assets and the ecosystem services they provide.</p> <ul style="list-style-type: none"> Assist and enable land managers and the community to take actions that protect and enhance the environment Enable actions that manage or address threats degrading local environments, or assist in recovery following disturbance Implement a landscape scale approach to achieve overall environmental improvements <p><u>Biosecurity:</u> Work to prevent plant and animal pests and diseases, reduce the impact of invasive pests on agriculture and the environment, and support animal welfare standards.</p> <ul style="list-style-type: none"> Work with international gateway stakeholders to improve awareness of biosecurity risks Support coordinated pest animal programs with landholders Reduce impact of animal and plant diseases through surveillance and compliance On-going education to increase the capacity of farmers, agencies and the community <p><u>Emergency Management:</u> Support and enable our community to prevent, prepare, respond and recover from natural disasters which impact on agriculture and animals.</p> <ul style="list-style-type: none"> Work closely with Local Emergency Management Committees (LEMCs), and other agencies to improve emergency response capacity Improve awareness in animal owners of high-risk locations for bushfire and flood Greater Sydney Local Land Services staff trained in emergency management response
<p><i>Local Lands Services Greater Sydney</i></p> <p><i>Regional Strategic Pest Animal Plan 2018-2023 (2018)</i></p>	<p>Provides a regional plan which focuses on managing pests to:</p> <ul style="list-style-type: none"> Improve community engagement in biosecurity (including pest animal) management; Improve identification, diagnostic, surveillance, reporting and tracing systems for pest animals; and Increase numbers of well trained and resourced people.
<p><i>Local Lands Services Greater Sydney</i></p> <p><i>Regional Strategic Weed Management Plan 2017-2022 (2019)</i></p>	<p>Provides a regional plan which focuses on managing weeds to improve biosecurity, protect the region's environment, landscape, livelihood, cultural and lifestyle values from weeds by strengthening the sustainability of the natural environment.</p>

ITEM 8 (continued)

ATTACHMENT 1

1.10.2 State Environmental Planning Policies

The following *State Environmental Planning Policies (SEPPs)* are relevant (to varying degrees) to the Field of Mars Reserve.

State Environmental Planning Policy (Resilience and Hazards) 2021

Coastal Management

Chapter 2 of this *SEPP* updates and consolidates the previous and now repealed *SEPP (Coastal Management) 2018*, *Coastal Protection (SEPP 71)*, *Coastal Wetlands (SEPP 14)* and *Littoral Rainforests (SEPP 26)* policies. It gives effect to the objectives of the *Coastal Management Act 2016* from a land use planning perspective, by specifying how development controls are to be applied if they fall within the coastal zone. It spatially defines the four coastal management areas prescribed by the *Act* (through detailed mapping) and specifies assessment criteria applicable for each coastal management area for Councils and other consent authorities to use when applying development controls within a respective zone/zones (as mapped).

Remediation of Land

The overarching objective of Chapter 4 of this *SEPP* is to provide a State-wide planning approach to the remediation of contaminated land. It aims to promote the remediation of contaminated land to reduce the risk of harm to human health or the environment. The *SEPP* requires that remediation works meet certain standards and notification requirements. It operates in conjunction with the *Contaminated Land Management Act 1997*, *Managing Land Contamination Planning Guidelines (1998)* and *Environmental Planning and Assessment Act 1979* to provide the planning framework for the management of contaminated land in NSW. This *SEPP* updates and consolidates the previous and now repealed *SEPP 55 (Remediation of Land) 1998*.

Non putrescible waste was dumped near the confluence of Strangers Creek and Buffalo Creek, near the Reserve's Pittwater Road entrance and carpark, and the general vicinity of today's Visitor Centre and Environmental Education Centre during the 1950s. There could be the potential for other localised site/s of contaminated lands to be identified in the future with the Reserve, and these will be managed appropriately in conjunction with this *SEPP* and relevant legislations.

Chapter 4 of this *SEPP* establishes mandatory considerations for consent authorities when considering development applications in relation to contaminated land, as well as criteria for the remediation of land before development can occur. A statutory site audit (under the *Contaminated Land Management Act 1997*) can be required as a consent condition, or in verifying the completion of remediation works. The *SEPP* applies two categories of remediation – Category 1 remediation (in more sensitive locations/environments) requires development consent from the defined consent authority while Category 2 remediation does not (simply needing notification to a local Council or Minister if lands are in the unincorporated area prior to works commencing), and specifies the criteria for each.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

Vegetation in Non-Rural Areas

Chapter 2 of this *SEPP* aims to protect the biodiversity values of trees and other vegetation in non-rural areas of the State; and preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation. This Chapter applies to the City of Ryde local government area and the E2 – Environmental Conservation and RE1 – Public Recreation zoning as contained within the Field of Mars Reserve. This *SEPP* regulates clearing of vegetation via permits or approval and permitted clearing without development consent in non-rural areas. This *SEPP* operates with the *Biodiversity Conservation Act 2016*, *Local Land Services Act 2013* and the *Local Land Services Amendment Act 2016* to provide a framework for the regulation of clearing of native vegetation in these areas.

This *SEPP* post-dates the *Ryde Development Control Plan 2014* (which makes no reference to the *SEPP*). However, the *Development Control Plan* does address tree protection and management as well as preservation of the urban forest.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Sydney Harbour Catchment

This *SEPP* updates and consolidates the previous and now repealed *State Regional Environmental Plan (Sydney Harbour Catchment) 2005*.

Within Chapter 6 of this *SEPP*, City of Ryde (including the Field of Mars Reserve) is identified within the Sydney Harbour Catchment. Buffalo Creek and Strangers Creek which travel through the Field of Mars Reserve, and the Lane Cove River situated downstream are identified as “Zone 2 – Environment Protection” within the Sydney Harbour Foreshores and Waterways Area.

This *SEPP* establishes a set of planning principles and controls for development in waterway catchments, foreshores and waterway areas. It includes consideration of factors including (but not limited to) water quality and quantity, aquatic ecology, flooding, recreation and public access, total catchment management, land within 100m of natural waterbody and other specific purposes.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This *SEPP* updates and consolidates the previous and now repealed *SEPP (Infrastructure) 2007*.

This *SEPP* assists local governments and the communities they support by simplifying the process for providing essential infrastructure and enabling greater flexibility in the location, development and upkeep of infrastructure and service facilities. It includes specific planning provisions and development controls for a range of infrastructure works or facilities – including parks and other public reserves. The following clauses are of particular relevance for parks and other public reserves, such as the Field of Mars Reserve.

Division 12 allows for certain construction or maintenance works to be undertaken as “exempt development” (subject to certain conditions and compliances set out in Clause 2.74) in parks and other public reserves – including Crown land (under a Crown land manager).

Of relevance to the Field of Mars Reserve, these include (among others) - walking tracks, raised walking paths (including boardwalks), ramps, stairways or gates; bicycle parking or storage facilities, handrail barriers or vehicle barriers, ticketing machines or park entry booths; viewing platforms with an area not exceeding 100m²; play equipment if adequate safety measures (including soft landing surfaces) are provided and, in the case of the construction of such equipment, so long as the equipment is situated at least 1.2m away from any fence; seats, picnic tables, barbecues, bins (including frames and screening), shelters or shade structures; temporary structures; routine maintenance of other infrastructure, including landscaping; routine maintenance of roads that provide access to or within those playing fields, including landscaping; and environmental management works.

Such exempt development must involve “no greater disturbance of native vegetation than necessary” and “not result in an increase in stormwater runoff or erosion” and other prescribed “general requirements for exempt development” outlined in Division 4 of this *SEPP*.

Additionally, Division 12 of this *SEPP* (subject to certain conditions and compliances set out in Clause 2.73) permits specified works to be undertaken on community land or Crown land (under a Crown land manager) without consent “if the development is for the purposes of implementing a plan of management adopted for the land” or “in accordance with the Local Government Act 1993 in relation to Crown managed land managed by a council”. These “development permitted without consent works”. Of relevance to the Field of Mars Reserve, these include (among others) – environmental management works, pedestrian pathways, pedestrian bridges, viewing platforms, visitor information centres, information boards and other information facilities, visitor/user amenities (such as toilets, change rooms, food preparation and related facilities for people using the Reserve), recreation areas and outdoor recreation facilities (excluding grandstands), landscaping including landscape structures or features (such as art work) and irrigation systems, lighting (if light spill and artificial sky glow is minimised in accordance with the Lighting for Roads and Public Spaces Standard), roads, cycleways, ticketing facilities, single storey car parks, maintenance depots and demolition of buildings (other than any building that is, or is part of, a State or local heritage item or is within a heritage conservation area).

ITEM 8 (continued)

ATTACHMENT 1

Division 25 of this SEPP refers to waterway or foreshore management activities. A local Council (as a deemed public authority), does not require development consent to undertake certain waterway or foreshore management activities (including construction works, routine maintenance works, environmental management works and emergency works including works required as a result of flooding, storms or erosion). Waterway or foreshore activities are defined as riparian corridor and bank management, including erosion control, bank stabilisation, resnagging, weed management, revegetation and the creation of foreshore access ways; instream management or dredging to rehabilitate aquatic habitat or to maintain or restore environmental flows or tidal flows for ecological purposes; coastal management and beach nourishment, including erosion control, dune or foreshore stabilisation works, headland management, weed management, revegetation activities and foreshore access ways; salt interception schemes to improve water quality in surface freshwater systems; and installation or upgrade of waterway gauging stations for water accounting purposes.

1.11 LOCAL PLANNING CONTROLS

1.11.1 Planning Ryde Local Strategic Planning Statement 2020

In accordance with a State-wide direction from the (then) NSW Department of Planning and Environment, the City of Ryde has prepared this *Local Strategic Planning Statement* for the local government area.

The *Planning Ryde Local Strategic Planning Statement 2020 (LSPS)* is a high-level plan that brings together state and regional objectives for land use planning and Council's own community planning activities (notably the *Our Vision for Ryde 2028 Community Strategic Plan 2018*) into a single directions document. It will guide land use planning and the delivery of significant infrastructure for the local government area over the next 20 years. The *LSPS* outlines how Council will continue to deliver a high-quality lifestyle, and increased opportunities to work, live and play in Ryde. It will guide all future local planning priorities, decisions and actions. The *LSPS* is an enforceable planning document under Part 3 of the *Environmental Planning and Assessment Act 1979*.

The *LSPS* effectively provides a vision, challenges, targets, priorities and actions for several focus areas. The vision most applicable to the Field of Mars Reserve is the establishment and maintenance of green corridors, with the Reserve part of two identified corridors – Buffalo Creek to the Lane Cove River, and Strangers Creek to North Ryde Common.

Targets in the *LSPS* most applicable to the Field of Mars Reserve include:

- Increase the proportion of the population within 400 metres of public open space greater than 1,500 square metres in size;
- Council's public domain upgrades and program will be based on identified priorities and audits; and
- Local flora and fauna will be effectively conserved.

Relevant priorities include:

- Encourage walking and cycling for recreational purposes, provide facilities for pedestrians and cyclists;
- Prioritise liveability through an attractive, sustainable and well-designed environment;
- Protect and enhance cultural heritage (including places with natural heritage significance);
- Protect and enhance Aboriginal cultural heritage;
- Provide accessible open space to service population needs;
- Ensure open space can be shared and enjoyed by all;
- Protect and enhance bushland, biodiversity, environmentally sensitive waterways, scenic and cultural landscapes;
- Reduce carbon emissions and manage energy, water and waste efficiently;
- Protect and improve the health and enjoyment of the City of Ryde's waterways;
- Provide waste and recycling infrastructure that is designed to ensure safety, efficiency and accessibility of waste, reuse and recycling services, and that does not compromise the public domain; and
- Adapt to the impacts of urban and natural hazards and climate change.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

1.11.2 Ryde Local Environmental Plan 2014

A Plan of Management's provisions must be consistent with the land uses and developments permissible for an area under a Local Environmental Plan and other planning regulations.

The *Ryde Local Environmental Plan 2014 (LEP)* is Council's key local land use planning document. It is shaped in accordance with the relevant standard environmental planning instrument under section 33A of the *Environmental Planning and Assessment Act 1979*.

The *LEP* sets out Council's planning and land use objectives, as well as permitted and prohibited developments and uses as well as other controls, for all parts of the City of Ryde. It designates land use zones, development objectives and permissible uses for all parcels of land (other than any deferred areas).

Under the *LEP* the greater majority of the Reserve is zoned "E2 Environmental Conservation" – as shown on Figure 3. The objectives of this zone are:

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

Two areas zoned "RE1 Public Recreation" occur in the level areas in the east of the Reserve – outside of the bushland areas, from the Reserve's Pittwater Road entry south-west to past the Environmental Education Centre (which is also zoned RE1, but not part of the Reserve) and an area west/south-west of the confluence of Buffalo and Strangers Creeks. The objectives of the RE1 zone are:

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

The Reserve is mostly surrounded by "R2 Low Density Residential" zoned lands. The adjacent Field of Mars Cemetery (lands not owned or managed by Council), which the Reserve wraps around to the west, is zoned "SP1 Special Activities". The closed/unmade portions of Cressy Road bordering the Reserve in the west and Wellington Road penetrating the Reserve's south-west (and the adjacent block owned by Transport for NSW, and not part of the Reserve) are all zoned "RE1 Public Recreation".

Table 4 shows the land uses that are permitted with or without Council consent, and prohibited, within the "E2 Environmental Conservation" and "RE1 Public Recreation" zones.

In addition to its E2 and RE1 zonings, parts of the Field of Mars Reserve are mapped as:

- Acid Sulfate Soils, as Class 2 Acid Sulfate Soils along much of the lower section of Buffalo Creek and its junction with Strangers Creek, with an area of Class 2 Acid Sulfate Soils extending further 1.1km upstream along Buffalo Creek on the *LEP's* Acid Sulfate Soils Map (Sheets ASS_006 and ASS_010); and
- A "Heritage Item – General" (Site I58) covering the entire Reserve, on the *LEP's* Heritage Map (Sheets HER_006 and HER_010), the "Field of Mars Wildlife Reserve" being listed as a feature of "local heritage significance" under the *LEP's* Schedule 5 Environmental Heritage (Part 1 Heritage Items).

Identification as an acid sulfate soils area imposes additional development consent considerations and other requirements to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage – under Clause 6.1 Acid Sulfate Soils, of Part 6 Additional Local Provisions in the *LEP*.

Clause 5.10 Heritage Conservation in the *LEP* similarly requires additional development consent considerations (as well as possibly specific assessments, management plans and other requirements) for sites listed as heritage items in Schedule 5 Environmental Heritage.

The Reserve is not identified or mapped as a flood planning area under the *LEP*.

ITEM 8 (continued)

ATTACHMENT 1



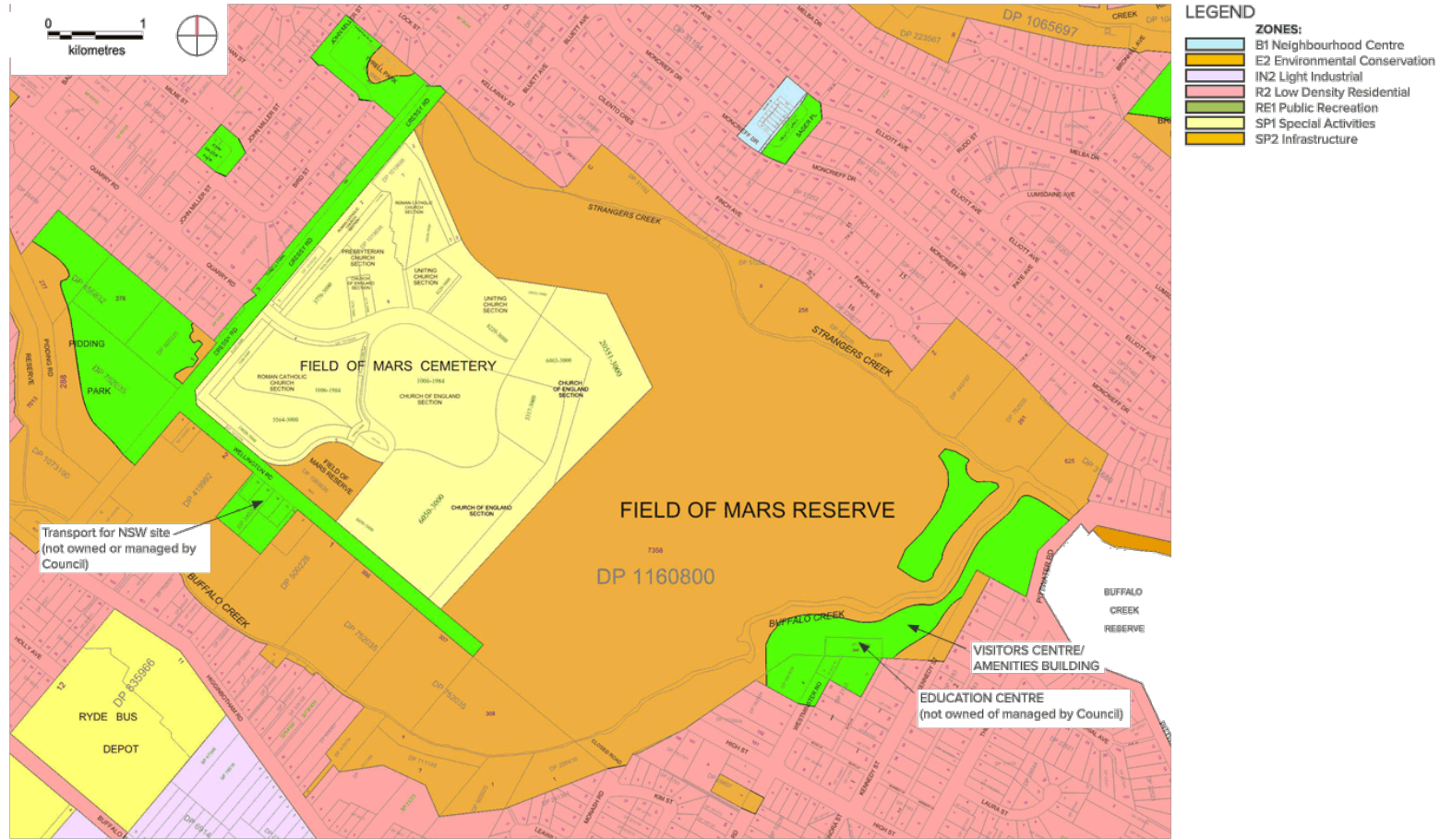
Field of Mars Reserve Draft Plan of Management

1.11.3 Ryde Development Control Plan 2014

The *Ryde Development Control Plan 2014 (DCP)* is a more detailed planning document that sets out standards and controls in relation to both development generally (for individual buildings to town centres) as well as for specific types of activity or development.

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

Table 4 Permitted and prohibited land uses – E2 Environmental Conservation and RE1 Public Recreation Zone (RLEP 2014)

PERMITTED WITHOUT CONSENT (ITEM 2)	PERMITTED WITHOUT CONSENT (ITEM 3)	PROHIBITED (ITEM 4)
E2 Environmental Conservation Zone		
Environmental protection works	Environmental facilities; Oyster aquaculture	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; Any other development not specified in item 2 or 3
RE1 Public Recreation Zone		
Building identification signs; Business identification signs; Environmental protection works	Aquaculture; Business identification signs; Community facilities; Environmental facilities; Kiosks; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Restaurants or cafes; Roads	Any development not specified in item 2 or 3
Definitions: Environmental facilities - means a building or place that provides for the recreational use or scientific study of natural systems, and includes walking tracks, seating, shelters, board walks, observation decks, bird hides or the like, and associated display structures. Recreation areas - means a place used for outdoor recreation that is normally open to the public, and includes (a) a children's playground, or (b) an area used for community sporting activities, or (c) a public park, reserve or garden or the like - and any ancillary buildings, but does not include a recreation facility (indoor), recreation facility (major) or recreation facility (outdoor). Recreation facilities (outdoor) - means a building or place (other than a recreation area) used predominantly for outdoor recreation, whether or not operated for the purposes of gain, including a golf course, golf driving range, mini-golf centre, tennis court, paint-ball centre, lawn bowling green, outdoor swimming pool, equestrian centre, skate board ramp, go-kart track, rifle range, water-ski centre or any other building or place of a like character used for outdoor recreation (including any ancillary buildings), but does not include an entertainment facility or a recreation facility (major).		

The sections of the *DCP* most applicable (to varying degrees) to the Field of Mars Reserve are:

- Tree management, including the preservation of trees and vegetation as well as tree management requirements – in Part 9.5 Tree Preservation;
- Water sensitive urban design guidelines and stormwater and floodplain management – in Part 8.2 Stormwater and Floodplain Management;
- Building sustainability guidelines – in Part 7.1 Energy Smart, Water Wise;
- Sustainable resource management and waste minimization – in Part 7.2 Waste Minimisation and Management;
- All-abilities access considerations – in Part 9.2 Access for People with Disabilities; and
- Parking requirements, and the design and layout of car parking areas – in Part 9.3 Parking Controls.

ITEM 8 (continued)

ATTACHMENT 1

1.12 CITY OF RYDE STRATEGIES, PLANS AND POLICIES

1.12.1 City of Ryde strategies and plans

Several existing Council strategies or plans provide planning and management directions applicable, to varying degrees, to the Field of Mars Reserve – some provide broad principles or directions, and others include more specific recommendations.

The City of Ryde Community Strategic Plan is discussed below, and main directions or implications for the Reserve included in other Council strategies or plans are summarised in Table 6.

Our Vision for Ryde 2028 Community Strategic Plan (2018)

The City of Ryde Community Strategic Plan is Council's, and the community's, ten year plan developed to reflect the aspirations and needs of the Ryde local government area's community. It was prepared in 2017-18 with significant community engagement. The Plan provides a snapshot of the Ryde local government area, the area's community (in terms of demography and cultural diversity) and their priorities, and the challenges and opportunities ahead for Ryde. The *Community Strategic Plan* is intended to help set the priorities and confirm strategies and activities that best achieve the community's desired outcomes for the future. Along with the *Planning Ryde Local Strategic Planning Statement 2020* it is Council's key over-arching guidance document.

Seven key over-arching themes are identified by the Plan. The following themes, and their components objectives or directions – as presented in Table 5 – are the most applicable for the Field of Mars Reserve:

**Table 5 Relevant themes, objectives and directions or actions from
*Our Vision for Ryde 2028 Community Strategic Plan***

THEME	OBJECTIVE	DIRECTION / ACTION
Our natural and sustainable city	Protecting natural areas (Reducing our impact on our natural systems and strengthening the health of our natural corridors)	<ul style="list-style-type: none"> Continuing investment in programs that protect and enhance City of Ryde's natural areas including our bushlands, waterways and eco systems. Collaborating with volunteers, businesses and the community to care for and enhance our natural areas.
Our vibrant and liveable city	Great places, vibrant neighbourhoods	<ul style="list-style-type: none"> Creating ... well-connected open spaces that encourage active lifestyles and social interaction.
Our active and healthy city	Enhanced recreational spaces (Providing opportunities and choice for recreation and active learning and living)	<ul style="list-style-type: none"> Maintaining and promoting Ryde's great public spaces, parks ... and ensuring they are easy to access and safe, and provide diverse opportunities for everyone to meet, play, learn and connect.
Our connected and accessible city	Connections within our City (Improving access to ... recreation and reducing our travel footprint)	<ul style="list-style-type: none"> Continuing to enhance and maintain connections and accessibility to ... open spaces.

ITEM 8 (continued)

ATTACHMENT 1

Other Council strategies or plans

Several existing Council strategies or plans provide planning and management directions applicable, to varying degrees, to the Field of Mars Reserve. The key documents, and their main directions or implications for the Reserve, are summarised in Table 6 below.

Table 6 Key planning and management directions or implications – City of Ryde strategies or plans

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS, IMPLICATIONS OR APPLICABILITY FOR FIELD OF MARS RESERVE
<p><i>City of Ryde Integrated Open Space Plan (2012)</i></p>	<p>Reviews the current provision of open space in the City of Ryde and notes that:</p> <ul style="list-style-type: none"> Field of Mars Reserve is the largest single open space in the City at 49 hectares; Improvements such as the boardwalk at the Reserve has helped accessibility, but for an open space of its size it offers few other public amenities that reflect its importance; The Reserve is the most significant natural and recreation corridor in the City; Steep local topography in the Buffalo Creek Valley is a barrier to north-south access in the suburb, but conversely the Reserve's open space forms a very important link as a natural and recreational corridor between the Lane Cove River, the Great North Walk and Top Ryde; and While the Reserve is first and foremost a bushland open space there are cleared areas, particularly close to Pittwater Road that would meet passive recreation needs without compromise to its integrity. <p>The Plan identifies the Field of Mars Reserve as a "Level 1 Open Space". Level 1 sites are considered to be large in size, or can accommodate large community activities or have a unique landscape setting and are considered a regional attraction.</p> <p>Conclusions made in relation to current participation included:</p> <ul style="list-style-type: none"> The highest participation levels are in informal activities, placing an emphasis on the need for all parts of the City to cater for walking, bushwalking, cycling and informal open space uses (e.g. run-about, play, picnics, BBQs, etc.); and High levels of social interaction/participation in leisure and recreation activities should be reflected in park design (e.g ample seating, places to meet, plenty of shade, play opportunities, etc.). <p>The Plan's demands and needs analysis identified (amongst other conclusions):</p> <ul style="list-style-type: none"> Unstructured recreation, especially walking, aerobics, cycling and swimming account for the highest level of physical activity participation in the City; The natural environment is of high importance to residents; Seniors consider problems of gaining access to open space as their major concern (citing transport and distance issues); Factors that may change demand include climate change, the demography of new residents and communities, changing trends in recreation preference, and changing economic conditions; The capacity of existing parks requires "extension" if current recreation and leisure needs are to be better met; A strategic approach to developing an extensive network of recreational and natural corridors will need to be addressed if the demand for walking, cycling and bushwalking needs are to be met, the natural values of the City are to be enhanced and access to local, district and regional open space is to be improved.

ITEM 8 (continued)

ATTACHMENT 1

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS, IMPLICATIONS OR APPLICABILITY FOR FIELD OF MARS RESERVE
<p>(continued) <i>City of Ryde Integrated Open Space Plan (2012)</i></p>	<p>The Plan's "Open Space Structure Plan" identifies the Field of Mars Reserve:</p> <ul style="list-style-type: none"> • As one of five principal bushland reserves; and • Sited within a principal recreational link from Lane Cove River to the west (to link with a north-south link). <p>The Plan's "Recreational Corridor Network Plan" identifies the Kunzea Walk along Buffalo Creek and the Strangers Creek Walk as forming pedestrian links within the corridor from Lane Cove River to Ryde.</p> <p>The "Implementation Plan" proposes (among a suite of actions) that bushland reserves conserve, integrate and enhance natural values into their recreational use and appreciation. Other proposed actions – of varying relevance to the Reserve – include extending the capacity of existing open space as a priority, improving parking provision and efficiency (e.g. use street parking where possible), integrating open space into the Ryde walking network, improving the accessibility to open space and facilities, providing links to adjacent open space, providing wayfinding signage, implementing WSUD with respect to creeks and upgrading creek corridors, incorporating climate change adaptation solutions (especially for flooding issues), interpreting Aboriginal and non-Aboriginal cultural heritage, providing for diversity, and better addressing landscape setting and character.</p>
<p><i>Ryde Biodiversity Plan (2016)</i></p>	<p>The greater majority of Field of Mars Reserve is assessed as being of "High Biodiversity Conservation Significance" (excluding minor cleared areas and highly impacted/disturbed sites). A considerable proportion of the Reserve is considered to be of "Very High Biodiversity Conservation Priority" (approximately 50%), while much of the remainder of the Reserve is ranked as being of "High" or "Moderate Biodiversity Conservation Priority".</p> <p>A significant portion of the Reserve (approximately 50%) is considered to be at a "High Threat" with regards to threats or risks to biodiversity. Identified threats include weed species invading the area (particularly the saltmarsh), impacts at the Reserve edges from adjacent activities and neighbouring properties, increased stormwater runoff and nutrients from adjacent areas impacting on water quality and siltation of the creeks, lack of fire at a suitable intervals, general weed invasion, dumping (particularly of greenwaste), unmanaged recreational use (e.g. informal tracks and inappropriate/damaging activities), domestic pets and introduced fauna, control of vehicles, and development or infrastructure works.</p> <p>Field of Mars Reserve is identified as being part of the several regional (or local) biodiversity corridors or connections, chiefly:</p> <ul style="list-style-type: none"> • The Buffalo Creek Corridor - a regional corridor, linking Burrows Park (located to the west) to the Lane Cove River (located to the east); and • The Strangers Creek Corridor - a local corridor linking Field of Mars Reserve to North Ryde Common (to the north). <p>The Buffalo Creek Corridor is linked to a north-south regional corridor running from Minga Reserve (in the northwest) south to Morrison Bay Park on the Parramatta River. The Strangers Creek Corridor connects to the Kittys Creek regional corridor, running south-east to north-west just north of the Reserve. Other regional corridors run along the western side of the Lane Cove River just east of the Reserve (also connecting with the Buffalo Creek and Kittys Creek Corridors).</p>

ITEM 8 (continued)

ATTACHMENT 1

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS, IMPLICATIONS OR APPLICABILITY FOR FIELD OF MARS RESERVE
(continued) <i>Ryde Biodiversity Plan (2016)</i>	The Plan identifies the following “biodiversity themes” which are applicable to the Reserve: <ul style="list-style-type: none"> • Protecting and managing Ryde’s native vegetation; • Restoring waterways and surrounding environments; • Linking corridors and improving connectivity; • Managing reserves to promote biodiversity and community interaction; and • Protecting urban habitat.
<i>Ryde Resilience Plan 2030 (2020)</i>	Nominates the following relevant goals for a “resilient Ryde” – energy, water and resource security, adaptation to climate change, protection of sustainable natural systems, transport connecting the community, and improved health and well-being. In relation to natural systems, the Plan highlights the importance of managing bushland and natural areas. Stormwater management and water sensitive urban design (WSUD), efficient use of water, and water quality feature in terms of water security. In responding to climate change the management of bushfires, flooding, sea level rise, drought, and air quality are addressed. The Plan notes Council is pursuing active options, particularly developing an extensive bike network, in terms of transport resilience.
<i>Buffalo Creek and Kittys Creek Floodplain Risk Management Plan and Study (2014)</i>	The Management Plan recommends a series of floodplain management measures to be implemented within the Buffalo Creek and Kittys Creek catchments. The Study evaluates options for addressing the identified flood problems, including measures to modify flood behaviour, measures to reduce the exposure of people and property to floods, and measures to improve people’s response to floods.
<i>Sport and Recreation Strategy 2016-2026 (2017)</i>	Identifies the Field of Mars Reserve as a natural area of unique ecological value that is maintained with minimal human intervention and is protected because of its significant ecological value for the Ryde community. Possible recreation activities identified include bushwalking, running, Bushcare programs, bird watching and provision of picnic areas. It also notes that increased recreational use of natural areas and bushland will require careful management and control to minimise harm to the habitat value of these natural areas. Proposed actions of relevance for the Reserve include improving access links to open space, improving accessibility to and within picnic areas, and better access to existing buildings.
<i>City of Ryde Disability Inclusion Action Plan (2017)</i>	To ensure more inclusion the Disability Inclusion Action Plan includes the following actions (amongst many): <ul style="list-style-type: none"> • Incorporate more accessible parking (beyond compliance) (Action 1h); • Improve public domain signage to assist people with disability (Action 1j); and • Improve disabled access in parks (Action 2c).

ITEM 8 (continued)

ATTACHMENT 1

PLAN / STRATEGY / DOCUMENT	KEY DIRECTIONS, IMPLICATIONS OR APPLICABILITY FOR FIELD OF MARS RESERVE
<i>City of Ryde Bicycle Strategy</i> (updated 2022)	<p>Addresses the progressive upgrade of bicycle facilities to meet the active transport and recreational needs of the community. Prioritises the development of selected sections of the "Regional Routes" identified in Sydney's Cycling Future (NSW government's bicycle transport policy dated 2013).</p> <p>Relevant routes to, or in close proximity to, the Reserve include:</p> <ul style="list-style-type: none"> The Southern Orbital Tier 1 (Route RR05) which passes just east of the Reserve along Pittwater Road (linking links North Ryde to Gladesville), described as partially completed with a shared off-road bike path provided in Pittwater Road adjacent to the Reserve (from High Street in the south to Renee Street in the north); Two Tier 2 interconnecting routes – Route RR09 along Higginbotham Road to the south of the Reserve linking Eastwood to Hunters Hill (described as then being an informal on-road route), and RR04 along Cressy Road to the Reserve's west linking North Ryde to Tennyson Point (described as not yet available, with only an informal on-road bike route located further to the west along Badajzo Road). <p>An additional informal on-road bike route was identified as is available to the Reserve's north-east along Moncrieff Drive.</p> <p>Noting: bicycle use is intended for transportation to the entry points to the Reserve. Bicycle use within the Reserve is prohibited.</p>
<i>Field of Mars Reserve Plan of Management (2009)</i>	<p>Council adopted the current Field of Mars Reserve Plan of Management in 2009. When adopted by Council (and endorsed by the NSW Department of NSW Department of Planning and Environment [Crown Lands]) this Plan of Management (2023) document will replace and supersede this earlier (2009) document.</p>

1.12.2 City of Ryde Policies

The following City of Ryde policies are relevant, to varying degrees, to the planning and management of the Field of Mars Reserve:

- *Access Equity Policy (2003);*
- *Asset Management Policy (2019);*
- *Biosecurity Weeds Policy (2020);*
- *Bushcare Policies and Procedures Manual (2007);*
- *Community Buildings Licensing Policy (2013);*
- *Contaminated Land Policy (2008);*
- *Enforcement Policy (2008);*
- *Naming of Parks and Park Facilities Policy (2019);*
- *Open Space Lighting Policy (2019); and*
- *Pesticide Use Notification Plan (2016).*

ITEM 8 (continued)

ATTACHMENT 1

2 DESCRIPTION OF FIELD OF MARS RESERVE

2.1 LOCATION AND REGIONAL CONTEXT

The Field of Mars Reserve is located within the City of Ryde local government area, some 9.5 kilometres north-west of the Sydney CBD on the western side of the Lane Cove River. It is situated within the suburbs of East Ryde, Gladesville and Ryde (as shown on Figure 4) in the East Ward of the City of Ryde.

At just under 50 hectares in size the Reserve is easily the largest single reserve managed by the City of Ryde (the next largest being Meadowbank Park, at just over 25 hectares).

It is also the largest single remnant bushland area under the care, control and management of the City of Ryde. Field of Mars Reserve provides important links to the wider network of open spaces, parks and National Parks in the Council area and beyond.

The Reserve sits entirely within the Buffalo Creek catchment, which covers 550 hectares, with both Buffalo Creek and Strangers Creek traversing the Reserve – as shown on Figures 5 and 7 – to flow into the nearby Lane Cove River (a major tributary to the Parramatta River).

The Reserve is predominantly surrounded by low density residential land uses, with a pocket of light industrial land (including a bus depot) to the south-west.

The surrounding suburbs of North Ryde, Macquarie Park, Ryde and to a lesser extent Gladesville have some areas of medium to high density residential. The nearby suburb of Macquarie Park is identified in the Greater Sydney Commission's *North District Plan* as a strategic priority as an economic, health and education precinct. Major shopping centres are located in Macquarie Park and Top Ryde. Smaller town centres are located more locally in Gladesville, North Ryde, East Ryde and Boronia Park.

The Reserve includes an "outlying" block on the southern side of the unmade/closed section of Wellington Road which is not currently formally part of the Reserve, but is under Council's care, control and management (see Figure 5).

Field of Mars Cemetery (not owned or managed by City of Ryde) is located immediately to the west of the Reserve and is bounded by the Reserve on three sides (south, east and north).

ITEM 8 (continued)

ATTACHMENT 1

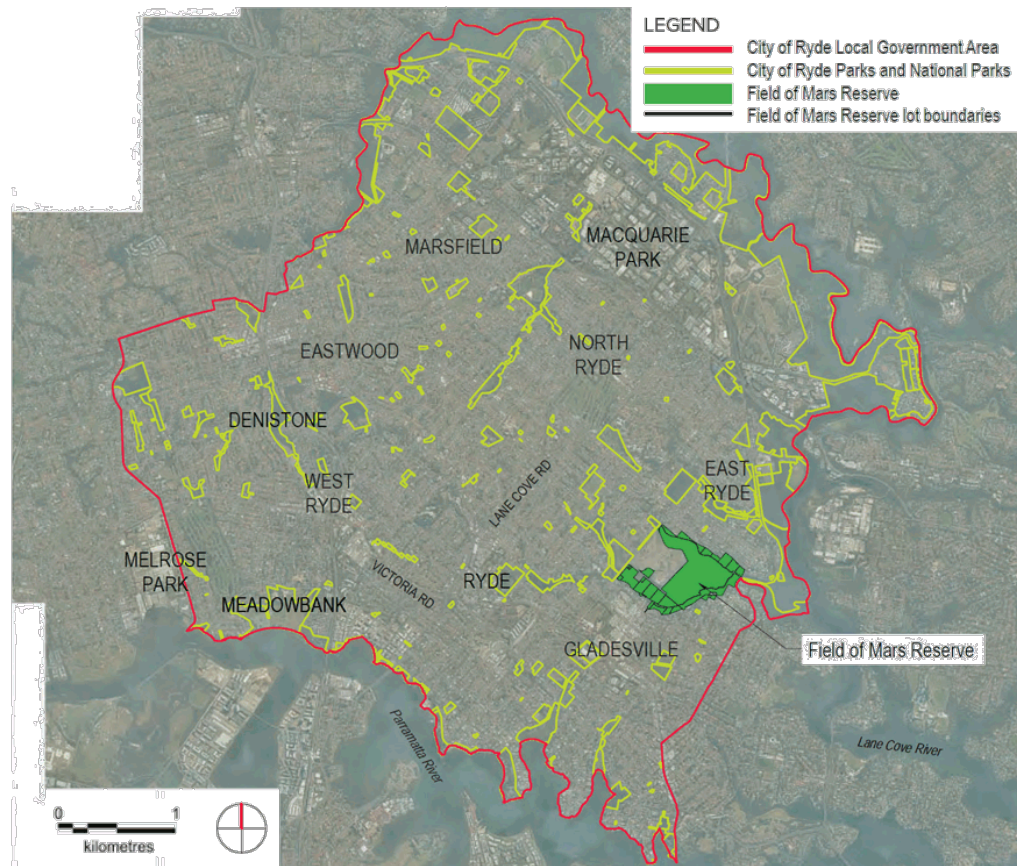


Figure 4 Location of Field of Mars Reserve within the wider City of Ryde Local Government Area

ITEM 8 (continued)

ATTACHMENT 1



Figure 5 Field of Mars Reserve boundary
 Source: City of Ryde

ITEM 8 (continued)

ATTACHMENT 1

2.2 BRIEF HISTORY

The following is a brief chronological history of the Field of Mars Reserve – as collated from *Field of Mars Reserve - An Early History* by Angela Phippen (2019), the site's State Heritage Inventory Listing, the Field of Mars Reserve Plan of Management (2009) and NSW Government Gazette notices.

YEAR(S)	CHRONOLOGICAL HISTORY
Pre 1780	The Ryde area is part of the traditional lands of the Wallumedegal Clan (a clan group within the larger Coastal Dharug Aboriginal people). Aboriginal occupation of the Sydney basin has been dated to before 40,000 years ago (with traditional knowledge holding that occupation extends back to the early stages of the Dreaming).
1792	First land grants in the Ryde, to eight marines, along the northern bank of the river between Sydney and Parramatta in January 1792 (with Governor Phillip naming the area 'Field of Mars' after the Roman god of war, reflecting the settlers' military associations). Subsequent land grants were made to ten emancipated convicts the next month.
1794-5	Further land grants issued.
1803	Most of the accessible land on the Ryde area had been granted, with most settlement based along the Parramatta River and overlooking ridges. Holdings were typically small, from 30 to 100 acres (12 to 40 hectares).
1804	Establishment of the Fields of Mars Common (one of six such "commons" gazetted in 1804) – used for grazing/holding stock, as a source of timber, and a charcoal factory.
1870	Municipal District of Ryde officially proclaimed.
1874	Field of Mars Common described as "a place of undesirables" and resumed as Crown Land, via the <i>Field of Mars Common Resumption Act 1874</i> . Area subsequently cleared for the "laying out of allotments and streets".
1884	25 acres (10.12 hectares) of former Field of Mars Common allocated for the Field of Mars Cemetery.
1887	Dedication of 85 acres (34.40 hectares) for "Public Recreation", as Field of Mars Reserve (R4785), in Government Gazette of 3 December 1887 (origin of today's Field of Mars Reserve).
1889	"Municipal District of Ryde" appointed trustee of Field of Mars Reserve.
1890	Field of Mars Cemetery opens.
1900s to 1950s	Reserve's "remoteness" and lack of development saw it continue to be used as a source of timber and as grazing land for cattle, by squatters including for the construction of "shacks", and to provide building and domestic materials for local residents who also used the area as their "backyard" and playground for recreation activities such as swimming, fishing and prawning.
1906	Municipal District of Ryde name changed to be the "Municipality of Ryde".
1920, 1924 & 1926	Field of Mars Cemetery expanded through revocation of parts of Field of Mars Reserve (R4785).
1930s	Reserve becomes a "refuge" for the unemployed, homeless and transients during the Depression.
1950s	Non putrescible garbage was dumped on the left bank of Buffalo Creek, just upstream from Pittwater Road near the confluence of Strangers Creek and Buffalo Creek [this area was subsequently identified as the Reserve's Pittwater Road entrance and carpark, and general vicinity of today's Visitor Centre and Environmental Education Centre were located].
1950s	Unmanaged/informal public uses of Reserve decline – due to greater surrounding residential development and increasing Council interest/involvement in the Reserve.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve 1943



Field of Mars Reserve 1965



Field of Mars Reserve 2018

Figure 6 Historic aerial imagery (above)

YEAR(S)	CHRONOLOGICAL HISTORY
1955	An "additional" 12 acres (4.86 hectares) on the right bank gazetted for use as a rubbish depot.
1959	Rubbish depot closed and left covered with a layer of ash and industrial slag (however the area remained gazetted as a rubbish depot until 1969).
1964	Council (Municipality of Ryde) granted the Army permission to use specified areas within the municipality for training purposes.
1965	Council's Municipal Engineer proposed piping of Buffalo Creek to allow an area within the Field of Mars Reserve be developed as a major tip/reclamation site for putrescible garbage and filled with waste to a depth of 50 feet. Proposal was a catalyst for significant resident mobilisation and activism in relation to protection of the area and wildlife conservation.
1965	"East Ward Anti Tip Action Committee" (EWATAC) formed.
1966	Army moved into the Field of Mars Reserve, unannounced, to prepare a simulated minefield, however Council withdrew permission following resident protests (50 women, mainly from nearby streets in East Ryde, reportedly flocked to the Reserve to protest).
1966	Ryde-Hunters Hill Flora and Fauna Preservation Society (RHHFFPS) formed, with the original aims of advocating for wildlife conservation and to specifically preserve, manage and develop the Field of Mars Reserve as a flora and fauna sanctuary.

ITEM 8 (continued)

ATTACHMENT 1

YEAR(S)	CHRONOLOGICAL HISTORY
1966	EWATAC and RHFFPS lobby Council to find an alternative municipal tip site, and two petitions from local residents opposing the Buffalo Creek tip proposal presented to Council. In September 1966 Council (Municipality of Ryde) resolved "That the Ryde/Hunters Hill Flora & Fauna Association (sic) be advised that Council agrees to their development of the Field of Mars Park as a flora and fauna sanctuary subject to any development being carried out to the satisfaction of the Council's Municipal Engineer".
1967	Part of Field of Mars Reserve (R4785) revoked for further expansion of Field of Mars Cemetery. Approximately 15 acres (6.07 hectares), in total, of R4785 revoked since 1920s for the Cemetery's expansion – reducing size of Field of Mars Reserve (R4785) to approximately 70 acres (28.33 hectares) in 1967.
1967	Four members of Ryde-Hunters Hill Flora and Fauna Preservation Society named as honorary rangers for the Field of Mars Reserve.
1969	Gazettal of Buffalo Creek waste site 12 acres (4.86 hectares) revoked and re-reserved for public recreation – returning Field of Mars Reserve to 82 acres (33.18 hectares), close to its 1887 original size.
1972	Ryde-Hunters Hill Flora and Fauna Preservation Society proposes extension of the Reserve to include the land between Wellington Road and Strangers Creek – then owned by the Crown, the Council and the State Planning Authority (SPA).
1972	Visitors Centre officially opened, subsequently becomes the "base" of the Ryde-Hunters Hill Flora and Fauna Preservation Society and community involvement in the Reserve.
1973	Crown land between Wellington Road and Strangers Creek added to the Reserve – gazetted as 2 hectares.
1973	State Planning Authority land between Wellington Road and Strangers Creek placed under the care, control and management of Council (Municipality of Ryde) – gazetted as 3 acres 2 rood and 6.25 perches (approximately 1.43 hectares).
1974	Part of the Field of Mars Cemetery revoked and added to the Reserve along with a closed portion of Wellington Road – gazetted as 588 square metres (0.0588 hectares).
1974	A further 3,070 square metres (0.307 hectares) area of Crown land (part of the original R4785, located between the Field of Mars Cemetery and Wellington Road) was added to the Reserve.
1975	Draft Plan of Management for Field of Mars Reserve prepared by the Ryde-Hunters Hill Flora and Fauna Preservation Society.
1975	Field of Mars Reserve proclaimed a Wildlife Refuge under the <i>NPWS Act 1974</i> (9 May) as Field of Mars Reserve Wildlife Refuge No 339.
1975	Original 1887 dedication of Field of Mars Reserve (R4785) for public recreation revoked and reserved for "Public Recreation and Promotion of the Study and Preservation of Native Flora and Fauna" as Field of Mars Reserve, under then <i>Crown Lands Consolidation Act 1913</i> , via NSW Government Gazette 20 June 1975 – gazetted as 34.43 hectares.
1975	"Errata" Government Gazette notice published, correcting Reserve number from R 89473 (as incorrectly listed in June notice) to R 89474.
1977	Plan of Management, prepared under the <i>NPWS Act 1974</i> , adopted by Council and NPWS (and signed by Minister for Lands in August 1978).

ITEM 8 (continued)

ATTACHMENT 1

YEAR(S)	CHRONOLOGICAL HISTORY
1987	Field of Mars Environmental Education Centre established and commenced operation (previously announced by Minister for Education in 1986).
1987	Site of Field of Mars Environmental Education Centre – gazetted as “about 1,900 square metres” – revoked from R 89474 and reserved for “Public School Purposes and Promotion of the Study and the Preservation of Native Flora and Fauna” (via NSW Government Gazette 26 June 1987). Formally gazetted as a “State School” on 1 January 1988.
1988	All lots were again consolidated under the <i>Crown Lands Consolidation Act 1913</i> to create a total Reserve area of 49.76 hectares.
1988	“The Council of the Municipality of Ryde” appointed trustees for “R. 89474 for Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna” (via NSW Government Gazette 29 April 1988).
1990	Draft Plan of Management prepared by Allan Fox and Judith Rawling (never adopted by Council).
1992	City of Ryde proclaimed.
1996	Plan of Management for Buffalo Creek Catchment prepared.
2000s	Access into and through the Reserve rationalised, and environmental information and directional signage installed, along nominated and improved tracks (by City of Ryde and local community).
2000s	Installation of stormwater quality improvement devices and educational signage, funded from the NSW Stormwater Trust.
2000s	Management measures implemented to protect saltmarsh communities.
2000s	Former Council works depot in Wellington Road decommissioned and site rehabilitated to bushland.
2001	Warada Track upgraded, as part Centenary of Federation celebrations.
2001	City of Ryde adopted a <i>Generic Plan of Management for Community Land</i> for the entire local government to comply with amendments in 1998 to the <i>Local Government Act 1993</i> . This Generic Plan of Management addressed the Act’s legislative requirements regarding the management of all community land, and included the Field of Mars Reserve.
2009	<i>Field of Mars Reserve Plan of Management</i> adopted by City of Ryde on 9 September 2009.
2020/21	<i>Draft Plan of Management</i> developed. When adopted by Council (and endorsed by the NSW Department of Planning, Industry and Environment [Crown Land]) this <i>Plan of Management</i> document will replace and supersede this earlier (2009) document.
2020/21	Draft Masterplan developed adopted by Council August 2021.
2023	Draft Plan of Management publically exhibited. Public hearing for land recategorisation of parts of Field of Mars Reserve. Report to Council for adoption of Plan of Management and land categorisations.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

2.3 LANDSCAPE, FLORA, FAUNA AND NATURAL HERITAGE VALUES

The Field of Mars Reserve is the largest remnant bushland area managed by the City of Ryde, and also classified as a "Wildlife Refuge" under the *National Parks and Wildlife Act 1974*. This 49 hectare, relatively compact, area features a varied topography– ranging from shales and sandstones in the higher elevations to alluvial and estuarine flats at the base of the main creekline. This unique setting represents an intact transition of ecological communities that are associated with upper shales to lower wetland areas, supporting 9 native vegetation communities (three of which are endangered). These communities and habitats are home to a diversity of native fauna, a number of which are either threatened or rare in the Sydney region.

As well as being an important area of urban bushland in its own right and a major component of the region's urban ecological communities, the Reserve connects to Lane Cove National Park (via the mouth of Buffalo Creek and Sugarloaf Point). As such it serves an important role as both a regional and local biodiversity corridor along Buffalo and Strangers Creeks.

Overall the Field of Mars Reserve has been assessed as being of "High Conservation Significance Value" and of a "Very High Conservation Priority" within the broader City of Ryde area.

2.3.1 Climate

The Ryde region currently experiences a warm temperate climate, with hot summers and cool to mild winters. The region itself is identified as currently experiencing increased microclimate modifications due to the urban heat island effect. It is considered as being at risk of further intensification of this phenomena, with increased development and changes in regional climate.

In-depth climate data for the Field of Mars Reserve is obtainable from the two major meteorological stations situated adjacent to the Reserve, located at Parramatta (a data set collected between 1967 and 2021) and Sydney Olympic Park (data for 1995 to 2021) – both operated by the Bureau of Meteorology. While these sites are not necessarily proximal to the Reserve itself, their extensive datasets permit an insight into the local climate in the Reserve and its immediate surrounds.

Averaging between these two meteorological datasets, the Field of Mars Reserve experiences:

- A mean daily maximum summer temperature of 28.1° C;
- A mean daily minimum winter temperature of 7.4° C; and
- Mean annual rainfall of 986 millimetres, with the greater amount falling in January to June.

Localised conditions within the Reserve will however vary due to a site's aspect and topographic position as well as vegetation cover – which can all effect local wind and temperature patterns.

The region's bush fire season generally runs from October through to March.

The most recent State of the Climate report (CSIRO & Bureau of Meteorology, 2018) includes the following predictions with a high degree of confidence for Australia:

- Further increase in temperatures, with more extremely hot days and fewer extremely cool days.
- Ongoing sea level rise
- A decrease in cool-season rainfall across many regions of southern Australia, with more time spent in drought.
- More intense heavy rainfall throughout Australia, particularly for short duration extreme rainfall events. An increase in the number of high fire weather danger days and a longer fire season for southern and eastern Australia.

ITEM 8 (continued)

ATTACHMENT 1

2.3.2 Geology, Landform and Soils

In broad landform terms the Field of Mars Reserve is dominated by an east and south-east facing hillslope, with local relief of greater than 40 metres overall. Buffalo Creek is deeply incised in the southern and south-western side of this hill, while Strangers Creek forms a somewhat more shallow and less steep valley in the northern/north-eastern hillslope. Narrow alluvial floodplains and terraces flank the lower reaches of Buffalo Creek as well as widening around the confluence of Buffalo Creek and Strangers Creek (this area's landform was also previously modified by its prior use as a waste dump). In the far north-east Buffalo Creek is flanked, and merges with, small areas of tidal estuarine flats near the car park and Pittwater Road boundary.

The Reserve occupies a significant position, representing a geological transition from a Wianamatta Shale cap at the highest of elevations down to a Hawkesbury Sandstone base before finishing on tributary fed narrow alluvial flats and estuarine saltmarsh.

The Reserve's highest points are immediately surrounding the Field of Mars Cemetery, ranging from 52 metres to around 40 metres above sea level. These areas have a shale-based geology, which transitions to shale/sandstone to the north and east of the cemetery. The Reserve's slopes surrounding the cemetery represent a gradual change to a sandstone base at elevations of between 20m and 10m above sea level, with numerous areas of outcropping sandstone. In the Reserve's east the hillslope runs down to an alluvial floodplain and creek terraces, flanking Buffalo Creek and less extensively Strangers Creek. The Reserve's more modified "parkland" areas are mostly situated on these floodplains and terraces, as well as adjoining more gently sloped areas in the west (below Westminster Road). These floodplains and terraces typically range from 50 to 70 metres wide, and up to 95 metres wide at the confluence of the Reserve's two main drainage lines.

Soils within the Reserve are formed primarily from Hawkesbury Sandstone, resulting in a shallow, sandy soil throughout (owing to its dominant presence as the basal geologic unit). Ridges, slopes and areas of higher elevation within the Reserve demonstrate an increased influence of the Wianamatta Shale capping, resulting in finer soils with a higher clay content. This can extend for some distance down the slope in places. Areas of intermixing between the two geological units see an intermediate soil that is still somewhat sandy, but deeper with higher fertility. At the base of the hillslopes, moving into the floodplain deposits, the soils become predominantly alluvial. On the eastern side of the Reserve, adjacent the estuarine flats, the soils have been disturbed and modified as a consequence of remediation of this area from its former role as a waste facility, and as such they do not reflect the local geology and soil types.

2.3.3 Drainage, Flooding and Water Quality

The Field of Mars Reserve is located at the bottom of the larger Buffalo Creek catchment which takes in part of Ryde, East Ryde and Gladesville (550 hectares in total area). Both Buffalo Creek and Strangers Creek flow roughly west to east through the Reserve. Buffalo Creek is the much larger drainage line, entering the Reserve's south-west corner (just below the point where two major tributaries join to form the main creek channel). Strangers Creek is smaller drainage line, with its headwaters just beyond the Reserve's north-west corner. Small, mostly ephemeral, drainage lines run from the higher boundaries with the Field of Mars Reserve draining to the south-west and west (into Buffalo Creek) and north-east (draining to Strangers Creek). Several similar small drainage lines run from the Reserve's northern residential boundary south and south-west into Strangers Creek. Strangers Creek flows into Buffalo Creek in the north of the alluvial lowlands. From here Buffalo Creek flows east into an intertidal estuary off the Lane Cove River.

Much of Buffalo Creek, and the lower reaches of Strangers Creeks, are at a medium to high risk of flooding, and are classified as a high flood hazard zone (as mapped in the *Buffalo and Kittys Creek Flood Study Draft Flood Study Report, 2014*). The alluvial flats and terraces along Buffalo Creek and the Reserve's low-lying eastern "parkland" zone (including Visitors Centre/amenities building, car park and Pittwater Road entry) are the most vulnerable to flooding – as shown on Figure 7. Broader flooding, elsewhere in the Reserve, is considered a low risk.

The Field of Mars Cemetery and surrounding street stormwater systems are piped to outlets at the edge of the Reserve, which in turn flow overland into the Reserve.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

The *City of Ryde Water Quality Monitoring Report 2018-2019* outlines the current water quality data for the local government area. It suggests that overall, local waterways are classified as highly disturbed ecosystems, owing to high concentrations of ammonia and total phosphorous alongside low dissolved oxygen. These results are typical of urbanised or developed regions, with increased stormwater runoff from impervious surfaces typically being one of the main causes of decreased water quality. This is the case for the Field of Mars Reserve, with many of the surrounding street stormwater outlets flowing overland into the Reserve. These outlets are also a source of contaminants and weed propagules (posing a threat to bushland health and waterway health). Stormwater quality improvement and flow management measures exist at a several locations on or close to the Reserve boundary.

For Buffalo Creek, the cumulative effects of decreased water quality were evident in a markedly lower macroinvertebrate taxa count when compared to historic data for both the Spring 2018 and Autumn 2019 sampling periods, representing historic lows. Poor water quality is currently acknowledged as a threat to existing biodiversity within the Reserve.

A large diameter sewer main (partly as an elevated sewage aqueduct) running through the north-east section of the Reserve is a potential source of contamination due to potential leaks. A sewer main runs almost the entire length of the Reserve's northern boundary, upslope from Strangers Creek, and another sewer main crosses small portions of the Reserve near Westminster Road and Kennedy Street. Sewage overflow incidents have also previously occurred in the Reserve - adjacent to the Field of Mars Cemetery and in the residential area upslope of the Pittwater Road entry. The Transport for NSW site, abutting the Reserve's south-west, is a previously contaminated site, and also a potential source of contaminants in stormwater runoff. Similarly there is the potential for leachate and water quality impacts from the former waste site in the Reserve's flatter north-east.

ITEM 8 (continued)

ATTACHMENT 1

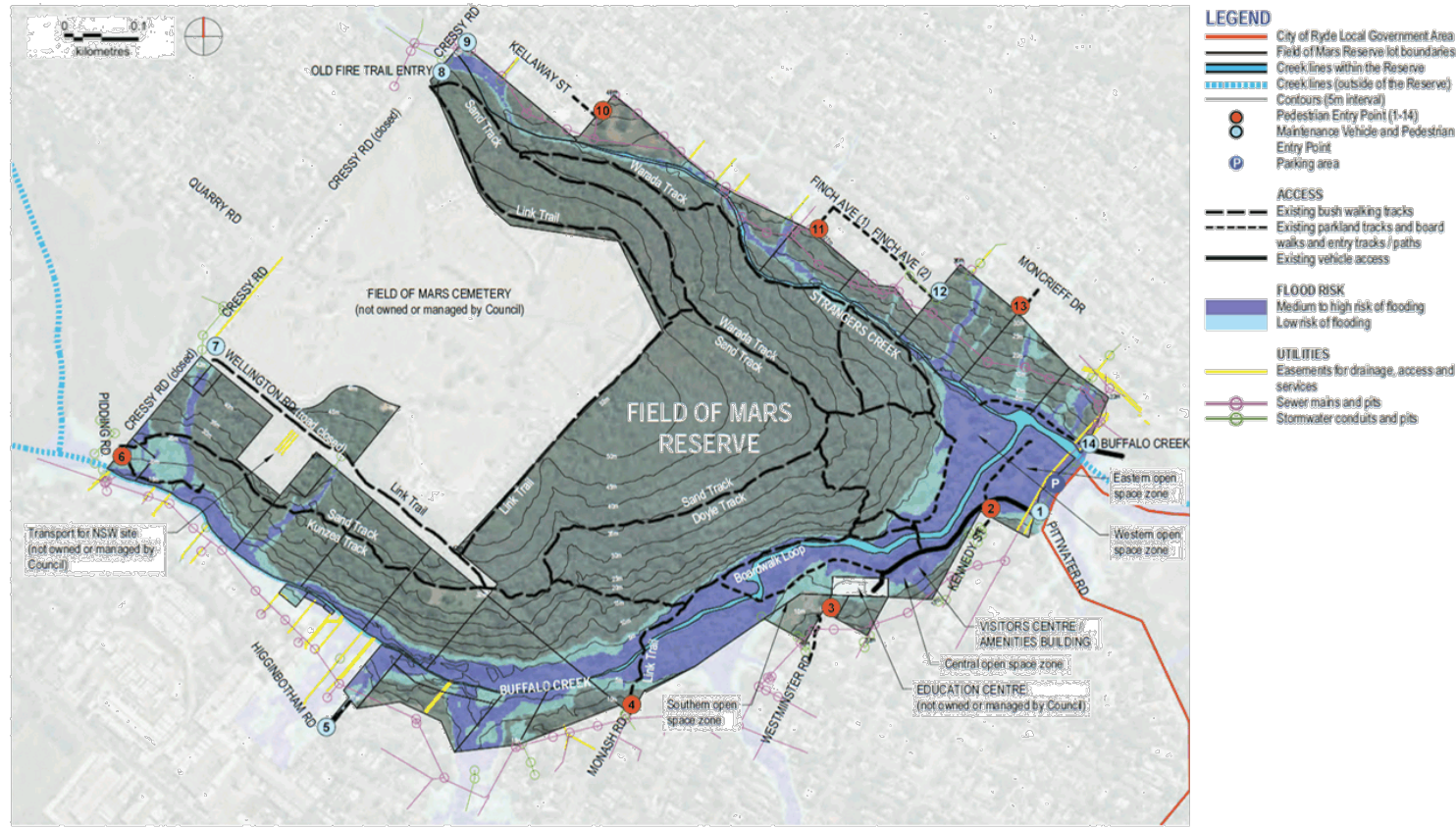


Figure 7 Flood prone land, drainage and utilities

ITEM 8 (continued)

ATTACHMENT 1

2.3.4 Native Vegetation Communities and Native Flora Species

Native Vegetation Communities

Although highly modified in places by past land uses, the Reserve today supports 9 native vegetation communities – as listed and mapped in the *Ryde Biodiversity Plan 2016* and other City of Ryde data – as shown in Figure 8.

The Reserve's hilltop/ridgeline and surrounding slopes support a number of sandstone and shale derived sclerophyll (harder/drier) vegetation communities.

The most widespread of these is Coastal Enriched Sandstone Dry Forest (see Figure 8). This community is described as a Smooth-barked Apple/Red Bloodwood open forest on enriched sandstone slopes found around Sydney and the Central Coast. It commonly occurs on the upper slopes and dry gullies of Sydney urban areas in places that receive greater than 1,000 millimetres of average annual rainfall. Structurally Coastal Enriched Sandstone Dry Forest is a tall open eucalypt forest with an understorey of dry sclerophyll shrubs with ferns, forbs and herbaceous flowering plants amongst groundcovers. Common eucalypt species are Smooth-barked Apple (*Angophora costata*), Red Bloodwood (*Corymbia gummifera*) and Sydney Peppermint (*Eucalyptus piperita*).

On the highest parts of the Reserve (and some adjoining slopes in the south and south-west) areas of Coastal Shale-Sandstone Forest are present – reflecting a higher clay content in the soil from an increased shale influence. This community is described as a tall open eucalypt forest with a sparse layer of dry sclerophyllous shrubs and a grassy ground cover. Predominant tree species include tall Red Bloodwood (*Corymbia gummifera*) and Smooth-barked Apple (*Angophora costata*) alongside Blackbutt (*Eucalyptus pilularis*), Turpentine (*Syncarpia glomulifera*) and Red Mahogany (*Eucalyptus resinifera*).

Sydney Turpentine-Ironbark Forest (a critically endangered ecological community – see Section 2.3.5) is also found in the upper parts of the Reserve – as two patches in the south-west downslope of the Wellington Road reserve and in the north-west along the upper section of Strangers Creek. This community has a canopy dominated by Turpentine (*Syncarpia glomulifera*), and Red Mahogany (*Eucalyptus resinifera*), alongside a mid-storey of mesic (moist/humid) and sclerophyllous shrubs and small trees with a grassy groundlayer.

Wide bands of Coastal Enriched Sandstone Moist Forest are found on the Reserve's lower slopes, and areas closer to the two creeklines or alluvial terraces (see Figure 8). This community is a tall open eucalypt forest. The canopy is dominated by various combinations of eucalypts, (predominantly *Angophora costata*) with a distinctive mesic shrub and small tree layer, often underlain by ferns and twining species.

A small band of Coastal Sandstone Gallery Rainforest occurs along the upper section of Buffalo Creek in the south-western arm of the Reserve. This community is a warm-temperate rainforest that is typified by Coachwood (*Ceratopetalum apetalum*) in the upper stratum with Black Wattle (*Callicoma serratifolia*), Lilly Pilly (*Acmena smithii*), Water Gum (*Tristania laurina*) with Tree Ferns (*Cyathea spp.*) making up the sub-canopy.

Three estuarine communities occur in the north-east portion of the Reserve (and extend further east beyond the Reserve boundary) – as mapped by the *Ryde Biodiversity Plan 2016* and evaluated in-depth by the *Lane Cove Estuary Saltmarsh Site Assessments 2010*. All of these are communities of conservation significance (see Section 2.3.5).

A narrow band of Estuarine Swamp Oak Forest runs along both sides of Buffalo Creek for much of its course downstream from the Visitor Centre. This community has a dense to sparse tree strata dominated by Swamp Oak (*Casuarina glauca*), Grey Mangrove (*Avicennia marina subsp. australasica*), and a variety of Paperbarks (*Melaleuca spp.*) or Lilly Pilly (*Acmena smithii*). The understorey is characterised by frequent vines and a sparse cover of shrubs over an often continuous groundcover of forbs, sedges (such as Spiny-headed Mat-rush (*Lomandra longifolia*), and grasses.

Near the junction with Strangers Creek this Swamp Oak Forest community is increasingly replaced by Estuarine Mangrove Forest which is dominated almost exclusively by Grey Mangrove (*Avicennia marina subsp. australasica*).

ITEM 8 (continued)

ATTACHMENT 1

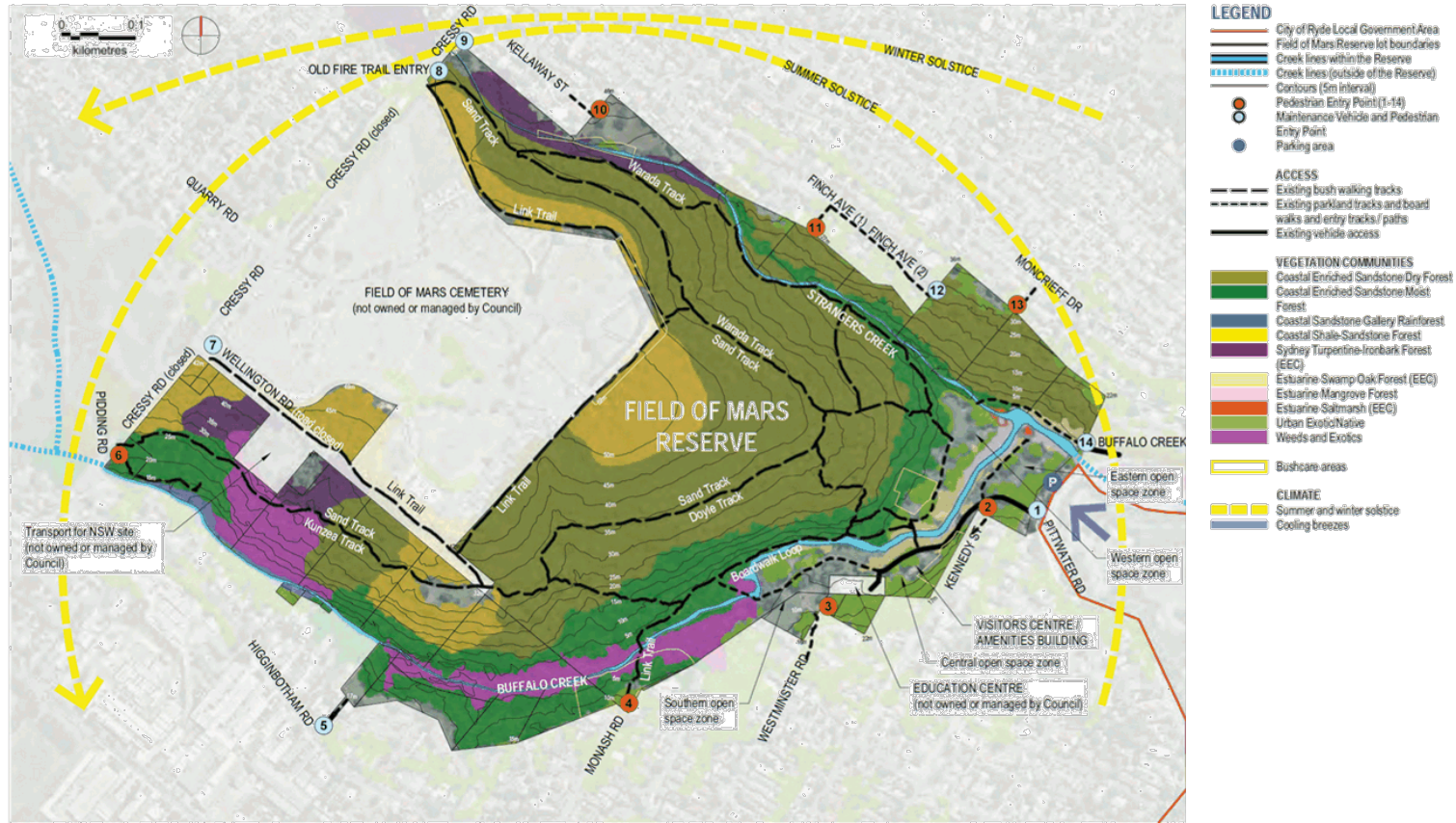


Figure 8 Vegetation communities

ITEM 8 (continued)

ATTACHMENT 1

Patches of Estuarine Saltmarsh Community occur around the junction of Buffalo and with Strangers Creeks and downstream on Buffalo Creek, often located behind the fringing stands of mangroves. Estuarine Saltmarsh occurs in tidal areas and generally consists of low herbs, grasses, rushes, sedges and reeds that are salt tolerant. The Field of Mars Reserve was assessed as having 4,843m² of high priority saltmarsh, which was previously considered to be of predominantly fair to good condition (with some smaller areas of saltmarsh being classed as either very good or poor). These saltmarsh communities are thought to reflect successional phases of the rehabilitation process from previous disturbances or impacts and include a mix of herb-dominated saltmarsh, grass-dominated saltmarsh and transitional freshwater/saltmarsh.

Native Flora Species

Council's native plant species list for the Field of Mars Reserve records a total of 305 native flora species within the Reserve – as listed in Appendix G.

This represents the greatest native floristic diversity in the three urban creek corridors assessed by the *Flora and Fauna Surveys 2017 - Terry's Creek, Kitty's Creek, Field of Mars Reserve and Buffalo Creek Tributaries*. The high number of native flora species present was attributed to the large size of the Field of Mars Reserve, its relatively compact shape (having a smaller perimeter to area ratio) and the Reserve's greater range of vegetation communities. Of the 305 native flora species listed for the Reserve, two are classed as vulnerable and several others are considered to be of conservation interest (see Section 2.3.5 and Appendix G).

Native Fauna Species

Fauna surveys since 2006 have, together, identified a total of 113 native fauna species from the Field of Mars Reserve (vertebrate species only) – as listed in Appendix H.

The *Flora and Fauna Surveys 2017 - Terry's Creek, Kitty's Creek, Field of Mars Reserve and Buffalo Creek Tributaries* identified the Reserve as having the highest vertebrate species diversity within the City of Ryde. Birds are the most abundant and commonly observed vertebrate fauna within the Reserve, likely due to the wide variety of habitats and ecological communities the area provides. A total of 78 native bird species have been recorded. These occupy a variety of feeding guilds (three most common being insectivore, nectarivore and granivore, respectively), body sizes and mobilities.

The recorded bird fauna includes the Powerful Owl (*Ninox strenua*) – a threatened species listed under NSW legislation (see Section 2.3.5 and Appendix H) – which has been recorded roosting in the Reserve. Other bird species of note include the Variegated Fairy-wren (*Malurus lamberti*), Superb Fairy-wren (*Malurus cyaneus*) and Whitebrowed Scrubwren (*Sericornis frontalis*). The Reserve is known to have small isolated, but breeding, populations of these species.

The Reserve also contains remnant-dependent, sedentary and often ground-foraging or shrub-foraging bird species that are currently in serious decline throughout larger bushland remnants. These species include the White-throated Treecreeper (*Cormobates leucophaea*), Eastern Whipbird (*Psophodes olivaceus*), Eastern Yellow Robin (*Eopsaltria australis*), Golden Whistler (*Pachycephala pectoralis*) and Striated Thornbill (*Acanthiza lineata*).

A total of 19 native mammal species have been recorded from the Field of Mars Reserve. As is not uncommon for urban bushland reserves micro-bats figure prominently, making up 12 of these 19 species – including a number of vulnerable species (see Section 2.3.5 and Appendix H). The "larger" mammals are made up of the Swamp Wallaby (*Wallabia bicolor*), Long-nosed Bandicoot (*Perameles nasuta*), Short-beaked echidna (*Tachyglossus aculeatus*), Common Brushtail Possum (*Trichosurus vulpecula*), Common Ringtail Possum (*Pseudocheirus peregrinus*) and Sugar Glider (*Petaurus breviceps*). Arboreal mammals are still relatively common with the Reserve, and the area is also considered a stronghold for the Long-nosed Bandicoot supporting a thriving population of this species. The vulnerable Grey-headed Flying-fox (*Pteropus poliocephalus*) has also been recorded (see Section 2.3.5 and Appendix H).

ITEM 8 (continued)

ATTACHMENT 1

The Reserve's recorded reptile fauna numbers 12 species. The Eastern Water Dragon (*Intellagama lesueurii*) is abundant and highly visible. Other common species include the Broad-tailed gecko (*Phyllurus platurus*) and a variety of skinks – Eastern Water-skink (*Eulamprus quoyii*), Elegant Snake-eyed Skink (*Cryptoblepharus pulcher*), Dark-flecked Garden Sunskink (*Lampropholis delicata*) and Weasel Skink (*Saproscincus mustelinus*). The Red-bellied Black Snake (*Pseudechis porphyriacus*) also occurs within the Reserve.

Only 4 amphibian species are known from the Reserve – the Brown or Striped Marsh Frog (*Limnodynastes peronii*), Common Eastern Froglet (*Crinia signifera*), Leaf-green Tree Frog (*Litoria phyllochroa*) which is considered uncommon, and Perons Tree Frog (*Litoria peronii*). An unidentified species of eel has also been recorded.

2.3.5 Urban Bushland and Conservation Significance

The Field of Mars Reserve is considered a very valuable urban bushland reserve – as a viable remnant of natural bushland which is rare in the region, and as a unique area (within the City of Ryde) for biodiversity for both flora and fauna.

The City of Ryde *Generic Plan of Management – Natural Areas (2021)* described the multiple benefits of "Natural Areas" within in local government area in terms of environmental benefits, personal and individual benefits, social and community benefits and economic benefits. These benefits are listed in Table 7.

Table 7 Benefits of urban bushland areas in the City of Ryde
(from the *City of Ryde Generic Plan of Management – Natural Areas, 2021*)

THEME	BENEFITS
Environmental	<p>Natural bushland in urban areas allow the opportunity to:</p> <ul style="list-style-type: none"> • Provide habitat to prevent or limit flora and fauna species extinction; • Conserve and protect a variety of native vegetation communities and local fauna in their habitat; • Protect and support flora and fauna listed as threatened or endangered under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> or under the <i>NSW Biodiversity Conservation Act 2016</i>; • Promote and encourage species diversity and health of natural ecosystems to support life and the provision of "ecosystem services" (fresh water, clean air, controlling soil erosion, etc.); • Provide important corridor connectivity between areas of bushland/open space to assist fauna movement and strengthen critical green corridor networks and links locally and regionally; • Provide last remaining critical natural spaces free from urban encroachment and development; and • Assist in improving local air quality and health of region.
Personal and Individual	<p>Natural areas:</p> <ul style="list-style-type: none"> • In urban environments provide an opportunity for people to connect with nature either through viewing them, recreating in them, or undertaking regeneration/maintenance works within them; • Are valued for their aesthetic, recreational, educational and scientific values; • Encourage people to recreate through walking or cycling rather than by car, not only improving air quality, but encouraging people to undertake physical activity to improve physical and mental wellbeing; and • Provide a venue both for solitary enjoyment or group activities.

ITEM 8 (continued)

ATTACHMENT 1

THEME	BENEFITS
Social And Community	<p>Natural bushland in urban areas can:</p> <ul style="list-style-type: none"> • Provide the opportunity for people to connect with each other through recreation and through volunteering via regeneration works; • Strengthen social bonds for volunteers undertaking regeneration and conservation works; • Provide alternative venues for individuals, couples, families and social groups to urban parks and sportsgrounds for social and leisure activities; and • Promote an understanding of the connectivity of the natural world.
Economic	<p>Protection and enhancement of natural areas in the urban context:</p> <ul style="list-style-type: none"> • Reduces broader urban heat island effects of adjoining developed areas; • Supports the native plant growing industry and associated landscape supply businesses through undertaking bush regeneration works; • Contributes to savings in associated health costs by having natural areas in proximity for use and enjoyment; • Increases nearby property values due to improved aesthetics and availability of an alternative for leisure / recreation; • Improves work productivity through improved mental and physical wellbeing; and • May attract tourist and visitors to the area, who may then spend in the local commercial district.

The greater majority of Field of Mars Reserve is assessed as being of "High Biodiversity Conservation Significance" (excluding minor cleared areas and highly impacted/disturbed sites) by the *Ryde Biodiversity Plan (2016)*. A considerable proportion of the Reserve is considered to be of "Very High Biodiversity Conservation Priority" (approximately 50%), while much of the remainder of the Reserve is ranked as being of "High" or "Moderate Biodiversity Conservation Priority".

While the woodland in the northern and eastern portions of the Reserve is considered to be of good quality, the Reserve's highest faunal diversity is found in a small corridor between Wellington Road and Buffalo Creek. This area is wetter, weedier and sheltered, supporting more complex ecological niches – particularly in Spring where a degraded area planted with flowering shrub species becomes a hotspot for nectar feeding birds.

The Reserve's urban bushland and biodiversity conservation values are enhanced by its size and relatively compact "core area" which buffers these communities and habitats from the edge effects and impacts that can impair the conservation value of smaller bushland reserves.

As a result, the Reserve has a large array of endemic flora and fauna, several of which are listed under Commonwealth or State legislation or considered rare within the Sydney region.

Those vegetation communities of listed conservation significance found on the Reserve are:

- Sydney Turpentine-Ironbark Forest – which is listed as a Critically Endangered Ecological Community under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and as an Endangered Ecological Community under the NSW *Biodiversity Conservation Act 2016*; and
- Estuarine Swamp Oak Forest, Estuarine Saltmarsh and Estuarine Reedland – all listed as Endangered Ecological Communities under the NSW legislation.

Mangrove and saltmarsh areas are protected under the *Fisheries Management Act 1994 (NSW)*.

ITEM 8 (continued)

ATTACHMENT 1

The recorded native flora and fauna species of conservation significance or interest are (as listed in Appendix G and Appendix H) are:

- *Epacris purpureascens* var *purpureascens* (an erect shrub, 50 to 180cm high) and *Pimelea curviflora* ssp *curviflora* (a sub-shrub or shrub, 20 to 150cm high) – both listed as vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and *NSW Biodiversity Conservation Act 2016*;
- The Grey-headed Flying-fox (*Pteropus poliocephalus*) – also listed as vulnerable under both the Commonwealth and State legislation;
- The Powerful Owl (*Ninox strenua*), Large Bent-wing Bat (or Eastern Bent-wing Bat) (*Miniopterus orianae oceanensis*), Large-footed Myotis (*Myotis macropus*), Yellow-bellied Sheath-tail-bat (*Saccolaimus flaviventris*) and East Coast Free-tailed Bat (*Micronomus norfolkensis*) – all listed as vulnerable in NSW; and
- Six flora species considered rare/uncommon or of conservation interest in the Sydney region (and classified as ROTAPs, a Rare or Threatened Australian Plant, by the CSIRO) – Narrow-leaf Myrtle (*Austromyrtus tenuifolia*), Heath Wattle (*Acacia brownii*), Straight Wattle (*Acacia stricta*), Chaffy Pea-Bush (*Pultenaea paleacea*), *Pultenaea retusa* and Hairy Bush-pea (*Pultenaea villosa*).

2.3.6 Weeds and Introduced Animals

Weeds and Introduced Plants

Many areas of the Field of Mars Reserve's bushland are heavily infested by weeds – particularly along drainage lines, the Reserve perimeter and associated with disturbed locations.

Vegetation mapping for the Reserve (as shown in Figure 8) shows a wide band of “weeds and exotics” extending for over 500 metres along the course of Buffalo Creek, approximately from the Environmental Education Centre upstream to the Higginbotham Road. A large area weed and exotic species (approximately 150 metres by 90 metres) is also mapped downslope from the Transport for NSW block (partial inholding) and along the adjacent section of Buffalo Creek in the Reserve's south-west corner.

Several areas are also mapped as “urban exotic/native” vegetation (see Figure 8):

- In and around the open grassed activity spaces near the confluence of Buffalo and Strangers Creeks;
- Around the Environmental Education Centre and Visitor Centre/Amenities building, and nearby sections of Buffalo Creek; and
- Along the Reserve's residential boundary on Moncrief Drive.

The cleared and grassed “asset protection zones” maintained for bushfire risk management along many parts of the Reserve boundary are also typically dominated by introduced grasses.

The *Flora and Fauna Surveys 2017 - Terry's Creek, Kitty's Creek, Field of Mars Reserve and Buffalo Creek Tributaries* recorded 81 species of weeds or exotic plants within the Field of Mars Reserve in 2017. The higher concentrations of weeds within the Reserve are usually found in those areas with a greater incidence of stormwater outlets draining urban areas (roads, footpaths, car parks, etc.) which mobilises nutrients and concentrates them in Buffalo Creek and Strangers Creek, altering soil characteristics, often favouring exotic species in doing so. Compounding this, private residences adjacent the Reserve contribute typical garden species – termed “garden escapees” – into the immediate area and seedbank, further promoting weeds and introduced species.

Weeds identified as currently threatening vegetation communities within the City of Ryde as a whole include - *Lantana camara* (Lantana), *Asparagus* sp. (Asparagus Fern), *Rubus fruticosus* species aggregate (Blackberry), *Ligustrum sinense* (Small-leaved Privet) and *Ligustrum lucidum* (Large-leaved Privet), *Olea europaea* subsp. *cuspidata* (African Olive), *Cestrum parqui* (Green Cestrum), *Genista monspessulana* (Cape Broom) and *Alternanthera philoxeroides* (Alligator weed, an aquatic weed). All these species, excluding Cape Broom and Alligator weed, occur on the Reserve.

The Reserve contains infestations of Pampas Lily of the Valley (*Salpichroa organifolia*) – a low sprawling or prostrate herb or vine that smothers native vegetation, which spreads via rhizomes and is incredibly difficult to eradicate once established.

Despite a history of disturbance and on-going weed invasion and spread, the Reserve retains a high level of resilience with large areas of intact bush – suggesting a high level of native seed store in the area's soils.

ITEM 8 (continued)

ATTACHMENT 1

Introduced Animals and Pests

Council records list a total of 12 species of introduced fauna for the Field of Mars Reserve. The *Flora and Fauna Surveys 2017 - Terrys Creek, Kittys Creek, Field of Mars Reserve and Buffalo Creek Tributaries* recorded 5 introduced mammal species present within the Reserve. The most significant of these are the voracious predators Cats (*Felis catus*) and Foxes (*Vulpes vulpes*). Black Rats (*Rattus rattus*), Rabbits (*Oryctolagus cuniculus*) and the House Mouse (*Mus musculus*) were also recorded. Other introduced species known to be present include the Common Myna (*Sturnus tristis*), Common Starling (*Sturnus vulgaris*), Rock Dove (*Columba livia*), House Sparrow (*Passer domesticus*) and Spotted Turtle-Dove (*Streptopelia chinensis*).

The Reserve's declaration as a "Wildlife Refuge" under the *National Parks and Wildlife Act 1974* prohibits people bringing dogs into the area – however this is not universally observed (especially given the Reserve's multiple entry points). Wandering domestic dogs and cats also enter the Reserve at times.

The introduced Mosquito Fish or Plague Minnow (*Gambusia holbrooki*) has previously been recorded within the Reserve. Mosquito Fish are aggressive and voracious predators that attack tadpoles and other fish. It is listed as a "key threatening process", for native frog species, under the *Biodiversity Conservation Act 2016*.

2.3.7 Fire

The last significant fire in Field of Mars occurred in 2002, with much of the Reserve burnt except for the sections along Buffalo Creek, south of Wellington Rd and between Strangers Creek and Finch Ave. There is evidence within the area to suggest the occurrence of smaller fires in 2018, mostly in the localised blackening of vegetation from previous fire disturbance events in the more elevated sections of the Reserve.

Much of the Reserve's bushland is known to be fire adapted, requiring infrequent fire events to maintain natural ecological function. Of the three endangered ecological communities present within the Reserve, two have fire interval recommendations identified by the *Ryde Biodiversity Plan (2016)*:

- Sydney Turpentine-Ironbark (shrubby formation) has a recommended fire interval of 25 to 30 years; and
- Coastal Saltmarsh (which is much more sensitive to fire) is classed as "no burning permitted".

The *NSW Guidelines for Ecologically Sustainable Fire Management (2003)*, a component of the *NSW Biodiversity Strategy* list "dry sclerophyll shrub forest" – of which Coastal Enriched Sandstone Dry Forest, that dominates much of the Reserve, is a form – as having a recommended fire interval of 7 to 30 years, with greater than 25 years being desirable.

In the urban bushland context only a small area of the remnant bushland should be burnt at any one time. The ecological consequences of high frequency fires are listed as a "key threatening process" under the *Biodiversity Conservation Act 2016*. Threats to the Reserve's biodiversity have been linked to sporadic intervals between larger fire disturbance events.

The management of fuel loads and bushfire risks is also important to protect life and property around the Reserve. The Reserve does have a history of arson events, with the last suspected arson occurring in 2018. Council's *Bush Fire Prone Land Map 2020* identifies the great majority of the Reserve (most areas upslope of Buffalo and Strangers Creeks) as "Category 1 vegetation" which is considered to be at high risk of bushfire. The Buffalo Creek corridor, upstream approximately of the Environmental Education Centre, is classified as "Category 2 vegetation" (considered to be at medium risk of bushfire), with downstream areas in the Reserve's more open/developed and intensively managed areas mapped as a "Buffer Zone" and classified as a high/medium bushfire risk.

ITEM 8 (continued)

ATTACHMENT 1

2.4 CULTURAL HERITAGE VALUES

2.4.1 Aboriginal Cultural Heritage

The original inhabitants of the City of Ryde area, including the land now known as the Field of Mars Reserve, are the Wallumedegal people of the Coastal Dharug language group. The Lane Cove River valley provided resources (water, food, shelter and raw materials) as well as a culturally significant meeting place for Aboriginal people for potentially more than 40,000 years. Evidence of the Wallumedegal people has been recorded in the Reserve and in adjoining Lane Cove River National Park in the form of shell middens, shelters, engravings and other sites.

The Reserve's creeks and the nearby estuary would have provided a major food source in summer as well as sharp shells that were fashioned for use as cutting tools, fish hooks and spear barbs. The moist gullies would have provided fruits such as figs, lillypilly and berries with the Reserve's drier areas offering nectar from flowers such as banksia and waratah and small animals such as bandicoots, bush rats and possums. The taller forests of the shale ridges with their grassy and bracken understorey is assumed to have been attractive to larger mammals such as kangaroos and wallabies which would have been easier to hunt in this more open setting. Bracken fern root also supplied an important source of carbohydrate in winter. Fire was also used to trap animals and encourage grassy areas which attracted kangaroos. Low intensity burning, in a mosaic pattern, is believed to have been used to ensure open grassy areas for trapping game.

Today the Field of Mars Reserve is located within the area of the Metropolitan Local Aboriginal Land Council.

The Department of Planning, Industry and Environment's on-line Aboriginal Heritage Information Management System (AHIMS) lists recorded "Aboriginal sites" throughout New South Wales (including documented Aboriginal objects and places and declared Aboriginal Places). The AHIMS register lists 8 recorded Aboriginal cultural heritage sites within the Field of Mars Reserve (as at May 2021).

However, the AHIMS register is far from a complete or comprehensive listing, and is focused very much towards tangible Aboriginal cultural heritage sites (where there is remaining physical evidence) with a strong bias towards pre-contact sites.

2.4.2 European/Historic Heritage

European settlement of the City of Ryde dates from the early 1790s – as described in Section 2.2 above.

Today there remain no significant European/historic heritage features within the Reserve. However the entire Reserve is listed and mapped as a feature of "local heritage significance" under the *Ryde Local Environmental Plan 2014* – as Site I58, Heritage Item – General, in Schedule 5 Environmental Heritage (Part 1 Heritage Items) and on the associated Heritage Map Sheets (HER_006 and HER_010).

The Reserve is also listed on the State Heritage Inventory with the following statement of heritage significance – "The Field of Mars Reserve is of heritage significance for its historic, aesthetic, social and research significance as a reserve for the purposes of the preservation of native flora and fauna and the promotion of environmental study; as a viable remnant of natural bushland which is rare in the region; and as a unique area of biodiversity for both flora and fauna in Ryde".

ITEM 8 (continued)

ATTACHMENT 1

2.5 ACCESS, DEVELOPMENTS AND FACILITIES

2.5.1 Access to the Reserve

The Field of Mars Reserve has a reasonable level of service by public transport, cycle routes and entry points to encourage access by visitors and surrounding residents.

Bus routes run along nearby Higginbotham Road in the south and Moncrieff Drive to the north.

A shared off-road path (walkers and cyclists) runs along Pittwater Road and provides access to the main Reserve entry. Informal on road bike routes provide access to the Reserve pedestrian entry points on Cressy Road, Higginbotham Road and Moncrieff Drive.

The only public vehicle access is in the Reserve's north-east corner, via a roundabout on the bend of Pittwater Road (south of the Buffalo Creek road crossing, and a signed "traffic black spot"). This entry directly accesses a sealed parking area, with spaces for 31 vehicles (including 1 marked accessible parking bay). Another nearby off-road car parking area is located on the opposite side of Pittwater Road as apt of the Buffalo Creek Reserve (managed by Hunters Hill Council). Overflow car parking from Buffalo Creek Reserve may use the car parking available at the Field of Mars Reserve.

The short sealed access to the public car park also continues to the west, past a lockable gate, to lead to the internal access way (for authorised vehicles only) to the Visitor Centre/Amenities Building and Environmental Education Centre. The first section of this internal access way is sealed, but then becomes an unsealed/gravel. An unsealed area is located at the end of this access way on the eastern side of the Environmental Education Centre (within the Centre's land). The first (eastern) section (approximately 90 metres) of this internal access way provides temporary parking (for up to 3 buses) for drop off/pick up of school groups to the Environmental Education Centre and a three-point turn area for buses.

No formal parking is provided at the Reserve's numerous pedestrian entry points, however on-street parking is available in these mostly quiet residential streets. The exception is the Pidding Road entry to the Sand Track (walking), in the far south-west, which has no nearby car parking.

Multiple entry points around the perimeter of the Reserve provide good accessibility to the area's walking track network and main activity zones. Pedestrian entry points are well-spaced along the north-eastern and south-eastern Reserve boundaries – with 6 entries (off Cressy Road, Kellaway Street, Finch Avenue and Moncrieff Drive) and 3 entries (off Kennedy Street, Westminster Road and Monash Road) respectively. The south-western boundary is only serviced by only 2 pedestrian entry points (off Higginbotham Road and Pidding Road).

The Reserve abuts the north-eastern, south-eastern and south-western boundaries of the Field of Mars Cemetery – however no formal entries are provided from the Cemetery to the Reserve. The Wellington Road (unformed) road reserve, which is not currently formally part of the Reserve, runs between the Cemetery to the Reserve from the south end of Cressy Road to ultimately connect with the Sand Track in the east. As such this road reserve acts as a Reserve entry point (and defacto walking track). Car parking for this entry is available in Cressy Road and opposite in the off-street parking area in Pidding Park.

Although making the Reserve readily accessible and "permeable" for pedestrians the multiplicity of entry points does present challenges in terms of monitoring and controlling entry to the Reserve by unauthorised users – such as bikes and dog-walkers (bicycles and dogs not being permitted within the Wildlife Refuge).

The Reserve is also connected to a broader network of walking paths or bush tracks, including – a path to the west along Buffalo Creek, Burrows Park to Ryde Park and tracks to the east through Buffalo Creek Reserve connecting with Lane Cove National Park and the Great North Walk.

ITEM 8 (continued)

ATTACHMENT 1

2.5.2 Walking Track Network

The Reserve contains approximately 4.1km of formed, marked, maintained and named walking tracks. These tracks are located throughout the area - but primarily in the lower Buffalo Creek corridor and around the Reserve entry, onto and across the central elevated areas, and along both the north-west and south-west "arms" of the Reserve (west to Cressy Road). The steeper north-east and south-west margins of the Reserve do not have any authorised/managed tracks.

The Reserve's named walking tracks are the Kunzea Track, Sand Track, Warada Track and Doyle Track (as shown on Figure 9). However all tracks share (or overlap) on some sections, including as part of recommended "loop walks" or routes - which leads to a degree of confusion over track naming (and mapping).

The "Boardwalk Loop" is a shorter higher standard walk from opposite the Visitor Centre/Amenities Building, across (via a bridge) and along Buffalo Creek as a mesh boardwalk, before crossing the creek again (via a mesh boardwalk, unfenced) to return past the Environmental Education Centre and along the internal access way.

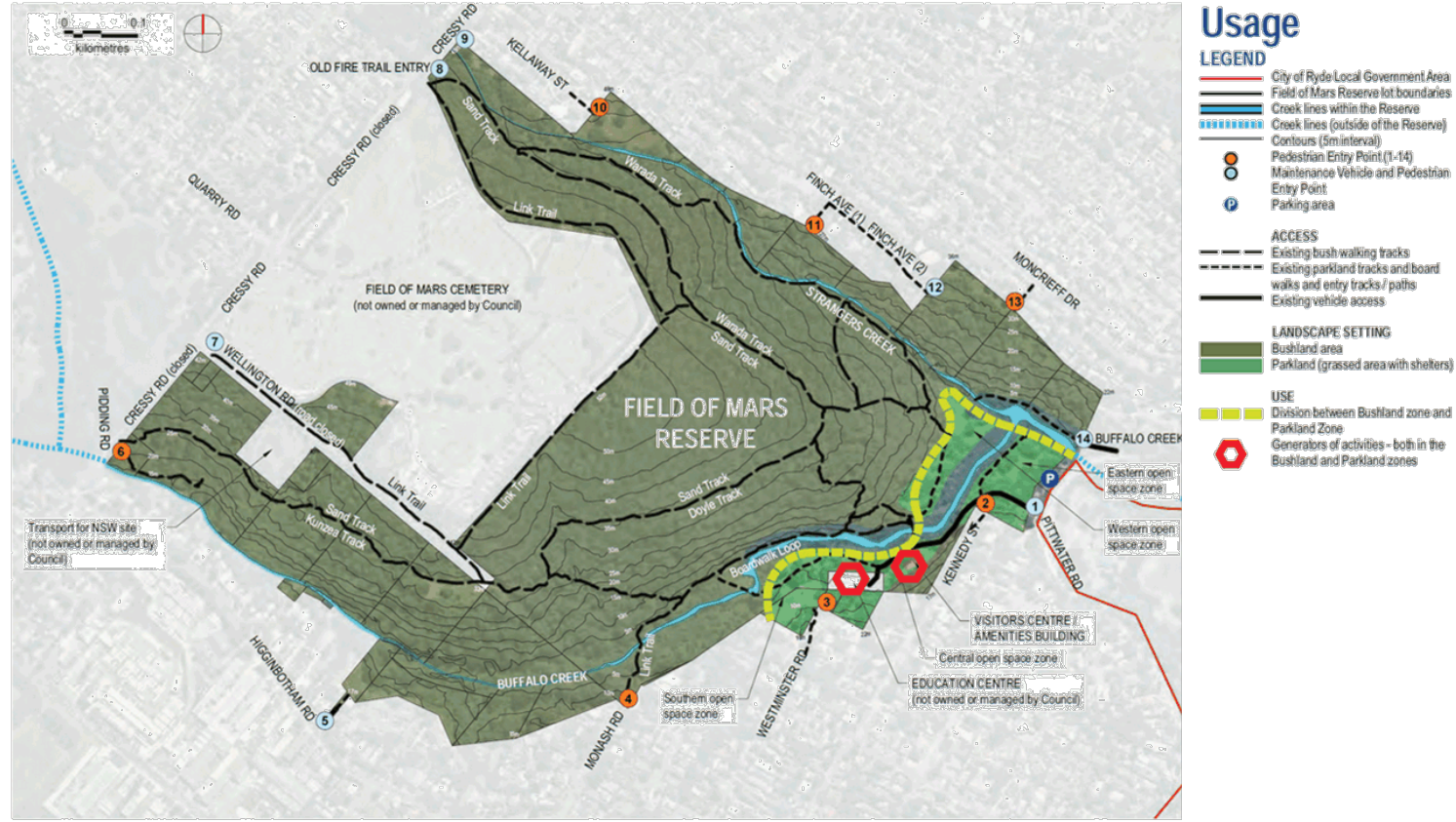
The "Saltmarsh Walk" is a shorter unsealed (compacted gravel timber-edged) path that runs north from the internal access way along the eastern side Buffalo Creek (on the western margin of the grassed day-use area) to near the junction of Buffalo and Strangers Creeks.

Two shorter steeper tracks serve as Reserve entries, off the end of Monash Road and Westminster Road - the former connecting to the Kunzea/Doyle Track and the latter to the grassed flat near the Environmental Education Centre (as shown on Figure 9). Not all of the Reserve's entry points from surrounding residential streets connect directly to the track network, most access grassed "fire breaks" (asset protection zones). This has led to the creation of numerous informal tracks and routes through the nearby bush. However beyond these entry points there appears to be little development of an extensive array of informal tracks off the authorised network or elsewhere in the bushland - aided in part by the Reserve's steep slopes with limited open level areas which discourages a proliferation of tracks.

The unformed Wellington Road reserve (off Cressy Road) is also available for pedestrians, and connects to the track network via the Sand/Kunzea Track. The service vehicle track ("fire trail") around the eastern and northern boundaries of the Field of Mars Cemetery also serves as a walking track (as the Link Track). The service vehicle track along the northern side Buffalo Creek (running west from Pittwater Road) is also used as a walking and access route - connection to the grassed western open space zone.

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

2.5.3 Reserve Developments, Facilities and Park Furniture

The Reserve's more developed facilities are all concentrated in the east and north-east of the area.

The Reserve's main entrance is a double-lane sealed entry road (with a central dividing traffic island) from a roundabout on Pittwater Road. This entry road immediately accesses, via a lockable metal vehicle gate, a sealed and kerbed car park to the north. The car park has a linear layout with 22 parking bays at 90° angle (including 1 accessible parking bay) along its west side and 10 parking bays on the east at parallel parking—. The shared user path (pedestrians and bicycles) along the western side of Pittwater Road is routed through the car park, with sections of new concrete path at each end of this parking area.

An array of signs are located at the Reserve entries.

Immediately past the car park the access way has a lockable metal vehicle gate with access beyond this point intended for authorised vehicles only. The sealed internal access way head roughly westward towards Buffalo Creek for approximately 60 metres to the bus pick up/drop off and turning area (capacity for up to 3 buses). From here the internal access way heads south-west, to roughly parallel Buffalo Creek, before passing the Visitor Centre/Amenities Building to the eastern side of the Environmental Education Centre. This section of internal access way is a narrow unsealed compacted gravel surface which is flanked by plastic bollards in part.

The Visitor Centre/Amenities Building is a brick building with lockable security grills to its windows and doors. It contains male and female toilets as well as an accessible toilet (however access to this is across a section of grass and is not currently meet accessibility compliance requirements). The building has a central room for visitors to the Field of Mars and Ryde Hunters Hill Flora and Fauna Preservation Society volunteers to use and access information. The building has an externally mounted information board. The Visitors Centre is operated on a voluntary basis by the Ryde Hunters Hill Flora and Fauna Preservation Society and only open on weekends and public holidays (opening hours vary from Summer to Winter). The Visitor Centre/Amenities building sits in a mown grassed area with scattered mature trees and a stone cairn, birdbath, concrete plinth, Bicentennial plaque and a metal Reserve map are located nearby. Two backed timber signs are sited near the creek opposite.

The unsealed internal access way terminates at to the east of the Environmental Education Centre. The Environmental Education Centre itself is not part of the Reserve (it is a metal and brick building, fringed with planting areas with compacted gravel pathways).

However, the area surrounding the Environmental Education Centre, within the Reserve, is largely a mown lawn with scattered trees and a section of compacted gravel timber-edged path (connecting to, and part of, the Boardwalk Loop). West and south-west of the Environmental Education Centre is an open grassed area with scattered mature trees rising (with rock floaters and outcrops) to the adjacent residential area. A backed seat, and tall pole supporting multiple floodlights, are located in this area.

Immediately west of the car park, at the main Reserve entry, on the eastern side of Buffalo Creek, is the Reserve's only (developed) picnic area. This is a small (approximately 80 metres long by 40 metres wide) open mown grassed area with scattered mature trees. Two hexagonal timber and metal roofed picnic shelters, each with a picnic table and benches, are located on the margins of the space. Barbeques are not provided. The eastern picnic shelter is accessed by a short sealed path from the nearby accessible parking space in the car park. Recycle and refuse bins are included. The Saltmarsh Walk runs along the western side of this grassed area, beside Buffalo Creek, and ends at a small viewing and interpretive area near the confluence of Buffalo and Strangers Creeks.

On the opposite (western) side of Buffalo Creek is another, less intensively managed, open grassed area (not closely mown and uneven in places) with scattered groves of mature trees bounded by bushland (weedy in part) and the creekline. No facilities are developed/provided in this space, however several of the Reserve's walking tracks pass through or start from this space.

No visitor facilities, other than signage, are provided elsewhere in the Reserve.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

2.6 VISITOR USE, ACTIVITIES AND ENJOYMENT

2.6.1 Visitor Use and Activities

Visitor use of the Reserve is divided into two distinct areas:

- The “parkland” area – located between the Reserve entry and the grassed open spaces around the junction of Buffalo and Strangers Creeks, along the Buffalo Creek corridor to the Visitor Centre and Environmental Education Centre, and the nearby walking tracks (especially the Boardwalk Loop which offers a short easy bushwalk.); and
- The walking track network and bushland areas of the remainder of the Reserve.

The parkland area is the much “busier” and more heavily used portion of the Reserve.

Walking, for leisure or fitness, and experiencing or appreciation of the natural environment are the principal visitor activities. Jogging and personal exercise also occur. These activities are variously undertaken solo, with family or friends, or with children. Picnicking, relaxing, socialising and children’s play are less frequently observed/reported activities – mainly occurring in the open grassed areas near the Reserve car park and entry.

Bushcare and volunteer activities are another way that visitors enjoy and use the Reserve. The City of Ryde and Ryde Hunters Hill Flora and Fauna Preservation Society occasionally offers guided bushwalks (by arrangement).

The Field of Mars Environmental Education Centre operates independently from other visitor uses of the Reserve. The Environmental Education Centre chiefly offers a range of programs for primary and secondary schools which aim to:

- Increase knowledge about and concern for the environment;
- Encourage fieldwork by students; and
- Promote environmental education resulting in action by students for their environment.

Students undertake activities at both the Environmental Education Centre and in the surrounding areas of the Reserve – the Reserve being fundamental to the Environmental Education Centre’s operations.

The Reserve has no on-site pathway lighting, the vehicle access gates are locked overnight, and the toilets operate during daylight hours only. These factors discourage use of the Reserve after dark.

Unauthorised and illegal uses also sporadically occur within the Reserve (such as the use of bikes, entry by dogs or other domestic animals, vandalism, rubbish dumping, lighting of fires, gardens and private encroachments, etc.) and are on-going threats to the protection of the environment.

2.6.2 Visitor Use Numbers

There are no reliable visitor use statistics for the Field of Mars Reserve. No recent surveys of visitor use numbers have been undertaken for the site. Anecdotal reports from Ryde Hunters Hill Flora and Fauna Preservation Society volunteers at the Visitor Centre estimate that “we still see large numbers of people passing by, with the daily count often over 100”.

2.7 LEASES AND LICENCES

The Ryde Hunters Hill Flora and Fauna Preservation Society operates the Visitor Centre on a voluntary basis by agreement with the City of Ryde. This arrangement is not formalised with a lease, licence or agreement.

The Environmental Education Centre is not part of the Reserve, and is operated/managed under a direct arrangement between the NSW Department of Education and the (then) NSW Department of Lands. The Environmental Education Centre does use the Reserve for educational purposes. However, this arrangement is not currently formalised with an agreement.

The Field of Mars Reserve is not listed as one of Council’s approved parks/reserves for personal trainers.

Refer to Section 5 for more specific information regarding leases and licences.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

2.8 MAINTENANCE AND MANAGEMENT

The high use areas and “parkland” zone of the Reserve are maintained by Council’s Operations staff. Generally, this area presents well with little litter or rubbish and mostly minimal evidence of graffiti.

Routine management and maintenance activities at the Reserve is undertaken by the City of Ryde staff and City of Ryde contractors and include:

- Bush regeneration and weed control (in Natural Areas);
- Grassed area maintenance (mowing, edging, line-trimming, herbicide application, cleaning drains and paths, etc.);
- Tree maintenance;
- Roadway, pavements, pathways, and car parking area inspections and repairs;
- Repairs to built structures (including visitor facilities, bridges, boardwalks, lights, etc.);
- Inspecting and repairing fixtures and furniture;
- Walking track maintenance;
- Cleaning and maintain stormwater management and water quality improvement devices; and
- Rubbish and graffiti removal.

To assist in managing the problem of weeds in natural areas the City of Ryde co-ordinates and works with community Bushcare Volunteer Groups. At present the following five Bushcare Groups operate within the Reserve:

- Cemetery Creek Bushcare Group;
- Monash Rd Bushcare Group; and
- Roving Bushcare Group
- Strangers Creek Bushcare Group;
- Visitors Centre Bushcare Group;

Walking tracks in the Reserve’s bushland areas could benefit from more regular maintenance, with evidence of drainage capture and erosion, ponding, track widening and braiding. Sloping sections of track are the more likely to be impaired by these factors.

Since closure of the depot on Wellington Road no management equipment/infrastructure is stored on site in the Reserve. Management vehicles access is available via:

- The main internal access road from Pittwater Road;
- The vehicle track along the north side of Buffalo Creek (also off Pittwater Road);
- The Wellington Road (unmade) road reserve, and fire trails around Field of Mars Cemetery; and
- From several entry points (with locked service access gates) on surrounding streets – at entry (from the south off Higginbotham Road), entries 8 and 9 (from the northwest off Cressy Road), and entry 12 (from the north off Finch Avenue).

Council is not responsible for management and maintenance of the Environmental Education Centre.

Also see Appendix F for a description of the overall condition of the Reserve’s land, buildings and facilities.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

2.9 CONDITION AND USE OF LAND AND FACILITIES

As part of the preparation of this Plan of Management, the condition of the built infrastructure, land and other facilities within the Reserve has been assessed. Types of assets assessed include buildings, car park, paths, lighting, park furniture as well as broad assessments of landscaped areas.

A condition assessment of each facility clusters, or main usage areas (and some of the major elements within them) has been determined based on a "Condition Index Rating" ranging from 1 to 5 as follows:

- 1 – A new or near new asset, or an asset in overall excellent condition with only minor decline (normal wear and tear) but causing no serviceability problems;
- 2 – An asset in very good to good condition, but with some early to apparent deterioration that is causing negligible to slight impairment of serviceability;
- 3 – An asset in fair overall condition but with obvious deterioration that is causing some loss of serviceability;
- 4 – An asset in fair to poor overall condition, with obvious to serious deterioration that is starting to limit the asset's serviceability and generating high maintenance costs; and
- 5 – An asset in very or extremely poor condition, with severe serviceability problems or heavily impacted, very high maintenance costs with the asset at the point of requiring rehabilitation or replacement (and assets that have failed, or would be a risk to remain in service).

A detailed description of the condition (using the above criteria) and use of the Reserve's land buildings and facilities, is provided in Appendix F.

ITEM 8 (continued)

ATTACHMENT 1

3 BASIS FOR MANAGEMENT OF THE FIELD OF MARS RESERVE

The future management, use and development of the Field of Mars Reserve is founded on and shaped by a number of considerations. These include legislative requirements and existing planning or policy directions, as well as Council's and the community's aspirations for the area. The Reserve's values, the area's current uses and facilities or developments and their condition, and the issues and pressures or threats to which the Reserve and its values are subject must also be considered. Finally the realities of Council's budget or resources, and management capabilities, must also be acknowledged.

This section draws these considerations together to:

- Derive a "vision statement" for the Reserve;
- Identify the categorisation(s), as required under the *Local Government Act 1993*, applicable to the Reserve and the consequent broad management directions as set by the legislation;
- Define management objectives for the area;
- Describe the permitted purposes and uses of the Reserve, as well as the scale and intensity of these uses and any developments.

Together these form the basis for management of the Reserve and have informed the Management Actions described in Section 4. The Field of Mars Reserve Masterplan, provided in Appendix C, has also been informed by these considerations.

3.1 LEGISLATIVE AND POLICY FRAMEWORK

This Plan of Management must comply with the provisions of the *Crown Land Management Act 2016*, *Local Government Act 1993*, *Crown Land Management Regulation 2018* and *Local Government (General) Regulation 2021* as well as the requirements of other applicable legislation and the current *Ryde Local Environmental Plan 2014* – as described in Sections 1.9 to 1.10. It should also acknowledge the recommendations, directions and findings of existing Council planning documents, strategies, policies and directions – as described in Section 1.12.

3.2 CONSULTATION AND COMMUNITY VIEWS

3.2.1 Stage 1 Community Engagement and Input Measures

Stage 1 Community Consultation was undertaken by the City of Ryde's Community Engagement Team during October and November 2020, prior to preparation of this draft Plan of Management. The aim of the community engagement process was to encourage and provide a range of opportunities for Reserve users, neighbours, community groups, other stakeholders and the wider community to provide their ideas, inputs and opinions about Field of Mars Reserve and its future use, development and management.

The following measures were undertaken by City of Ryde to raise awareness of the draft Plan's preparation and opportunities for input:

- Opportunities for people to be involved or contribute their views, was promoted via the Have Your Say page on Council's website. On the website links were provided to complete an online survey and/or book a one-on-one phone consultation. An email and postal address to receive submissions in writing was also provided.
- Distribution of 2,228 A4 flyers to residents in a 500m radius of the Reserve, containing information and instructions on how to provide feedback to inform the preparation of the draft Field of Mars Reserve Plan of Management and Masterplan;

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

- Fourteen signs were placed at entry points of the Reserve to promote the project and feedback opportunities for park users and interested stakeholders;
- Social media advertisement on the Council's Facebook page to promote the project and consultation opportunities for all stakeholders;
- Newspaper advertisement in the Northern District Times, listing the project and encouraging feedback;
- Links to the Have Your Say website included in the Smarter, Cleaner, Greener eNewsletter, presenting information promoting the project and avenues for feedback and consultation;
- A link to the Have Your Say website included in the City News eNewsletter, promoting the project and opportunities for feedback and consultation;
- Registered phone sessions for interested stakeholders, comprised of a one-on-one discussion over the phone with a member of the project team to ask any questions and provide feedback about the project; and
- The City of Ryde main phone and email address being openly provided for the project, encouraging feedback from the community.

In light of the COVID-19 pandemic, face-to-face communications, such as community drop-in sessions, was deemed unsuitable. This was replaced with the option of one-on-one phone discussions, allowing direct contact with those involved in the project throughout the consultation stage.

Community Inputs

A total of 214 online survey responses were received, alongside 7 email submissions, 5 survey and email submissions, and 3 phone submissions, representing a total of 229 responses throughout the consultation period. Respondents were free to offer multiple comments/inputs to the online survey, focusing on:

- What they value most about the Reserve;
- Site elements they like most of the Reserve;
- Biggest threats to the Reserve;
- Most important areas for future management/maintenance of the Reserve; and
- Most important means of communication regarding the Reserve.

Elements Valued Most About the Field of Mars Reserve (206 response items)

When asked what they saw as the key values to the Reserve, the overarching theme for users of the Reserve was its natural value. An overwhelming 53% of respondents identified the Reserve's habitat value, being home to native wildlife, as their key value. Opportunities for passive recreation (37%) and fresh air, creek lines and natural rock outcrops (37%) were secondary values of the Reserve, further tying into the natural theme of the Reserve. Respondents also identified an escape from suburbia & the city feel (30%) alongside space to explore/connect with the natural environment (30%) as significant values, followed by opportunities to see fauna & flora (28%). The remainder of responses further emphasised the natural values of the Reserve, including a place to learn about native plants and animals (17%), a relaxing environment (15%), walking trail connections to Lane Cove National Park (11%) and health benefits (11%).

It is quite clear that the natural values of the Reserve, connections to nature and the opportunities that connection fosters are highly valued by survey respondents.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Elements Most Liked at the Field of Mars Reserve (156 response items)

The most appreciated elements of the Reserve followed a similar trend to values, being comprised almost entirely of natural site elements and activities. Over 40% of responses listed bushwalks/trails as their most liked element at the Reserve, followed by natural bushland/vegetation (25%), boardwalks (18%), wildlife/birdlife (18%), nature in suburbia/close to home (17%) and natural environment/experience (16%). Further responses list the education/visitors centre (15%) and the ability to escape city/explore nature (14%). Other notable responses include the plants and trees (14%), activities/nature play area (13%), flora and fauna (13%), the creeks/waterways (10%) and the preservation of bushland/habitats (10%). In an open ended comments and suggestions section regarding site elements, the largest response was the protection of the Reserve area/no development (11%).

Biggest Threats to the Field of Mars Reserve (206 response items)

Majority of the threats cited by respondents are related to the degradation of the Reserve's natural environment. Most responses cited weed invasion (56%) to be the biggest threat to the Reserve at present. Following this, other environmental threats include stormwater runoff, water quality and pollution (39%) and illegal dumping and littering (31%). A large proportion of responses list development encroachment as a threat to the Reserve (30%), alongside unauthorised access of dogs and cats (30%) and feral animals (27%). Recreational activity in the form of bicycle/mountain bike use was also cited (20%), alongside poor management of the Reserve itself (16%). Climate change (13%) and lack of fire (12%) are the last specific threats identified by respondents to the Field of Mars Reserve.

Management and Maintenance Priorities (204 response items)

The majority of management and maintenance priorities raised by respondents relate to the protection, management and improvement of the natural environment qualities of the Reserve. Most responses indicate the priority management and maintenance goals to be protection of native wildlife and their habitats (61%), the control of weeds and pest species (51%) and the regeneration of bushland areas (35%). Further responses cite the protection of threatened species/ecological communities (25%), improvement of water quality (25%) and no net loss/protection of bushland areas and corridors (25%) as priority management goals for the Reserve. The improvement of walking trails (16%), bushfire management (11%) and litter prevention (11%) were other priorities.

Open ended response sections regarding suggestions, elements and comments on the Reserve gave respondents the opportunity to have their say in a less structured format – however many responses followed the environmental and natural themes in the previous sections.

Suggestions for improving the reserve were met with an overwhelming need to improve/provide additional signs/information (31%) in conjunction with better weed management (24%) and maintenance/upgrades of the boardwalk/trails (22%). Further suggestions include clear waterways (18%), access to and from the reserve (15%) and improved facilities – toilets, café (11%). A number of responses cite protecting the area/no development (14%) and simply doing nothing (9%) as suggestions for improving the reserve.

Opened ended comments regarding Reserve elements were focused on protecting the area/not allowing development (11%), increased signage and information (10%) and better weed management (9%) as the main feedback points. More seating/picnic areas (7%), the importance/value of the Reserve (7%) and wildlife/habitat/nature protection (7%) were also popular comments raised by respondents.

Open ended comments for the management/maintenance of the Reserve were positive for the most part (13%), whilst also calling for better weed management (13%). This was followed by improved water management/quality (12%) and further calls for protecting the area/no development (12%). More signage/information (9%), bush care/regeneration efforts (9%) and the importance/value of the Reserve (9%) are also cited by respondents as management/maintenance goals. Making up the smaller proportions, responses identify keeping dogs/cats out (7%), maintenance of trails (6%), supporting volunteers/community groups (5%) and better bushfire management (4%).

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Areas for Improved/Important Communication (204 response items)

Respondents were asked their opinion on the area's for improved communication. A large proportion of responses included flora and fauna information (45%), alongside volunteering opportunities (31%), avenues to report issues (27%) and natural area signage (26%) as the primary areas for improved communication. Less common responses included communicating upcoming events (19%) and community interaction with the City of Ryde Council (18%) as areas deemed important or needing improved communication.

3.2.2 Stage 2 Community Engagement and Input Measures

The City of Ryde's Community Engagement Team also conducted Stage 2 community consultation to gather feedback from the community on the prepared draft Plan of Management's Action Lists for the Field of Mars Reserve and the draft Masterplan. This Stage 2 community consultation was undertaken from 26 April to 9 May 2021,

This Stage 2 community consultation was promoted through City of Ryde's Have Your Say website, via flyers to surrounding residents, in an eNewsletter to stakeholders, in other Council newsletters, by signs in the Reserve, an advertisement in the local paper and on social media. The community could provide input via an on-line survey, paper survey (available on request) or at a community drop-in session held within the Reserve in 1 May 2021.

The second round of consultation garnered a total of 89 responses, comprising – 76 completed on-line survey forms, 10 e-mail or written submissions, and 3 face-to-face comments (from the 15 people who attended the on-site drop-in session). Respondents self-described as predominantly "users" of the Reserve (66%) or nearby residents (44%), as well as members of the Ryde Hunters Hill Flora and Fauna Preservation Society (18%) or Bushcare volunteers (14%) (data for on-line survey respondents only, and multiple responses possible).

As shown in Figure 10, the 57 respondents who offered comments on the exhibited Action Lists from the draft Plan of Management all felt that the proposed actions adequately addressed a range of nominated management challenges or issues.

Proposed measures around "improved walking trail[s]" received the highest degree of endorsement – with 82% of respondents feeling this aspect was adequately addressed by the Action Lists. The proposed measures to protect and manage biodiversity were also supported by the majority of respondents – 74% felt the protection (or no nett loss) of bushland areas and corridors was adequately addressed, 72% support for the bushland regeneration measures proposed, and 67% support for actions to protect native wildlife and their habitats.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE DRAFT PLAN OF MANAGEMENT – ACTION LISTS

In your opinion, are the following areas adequately addressed in the draft Plan of Management? (n=57)

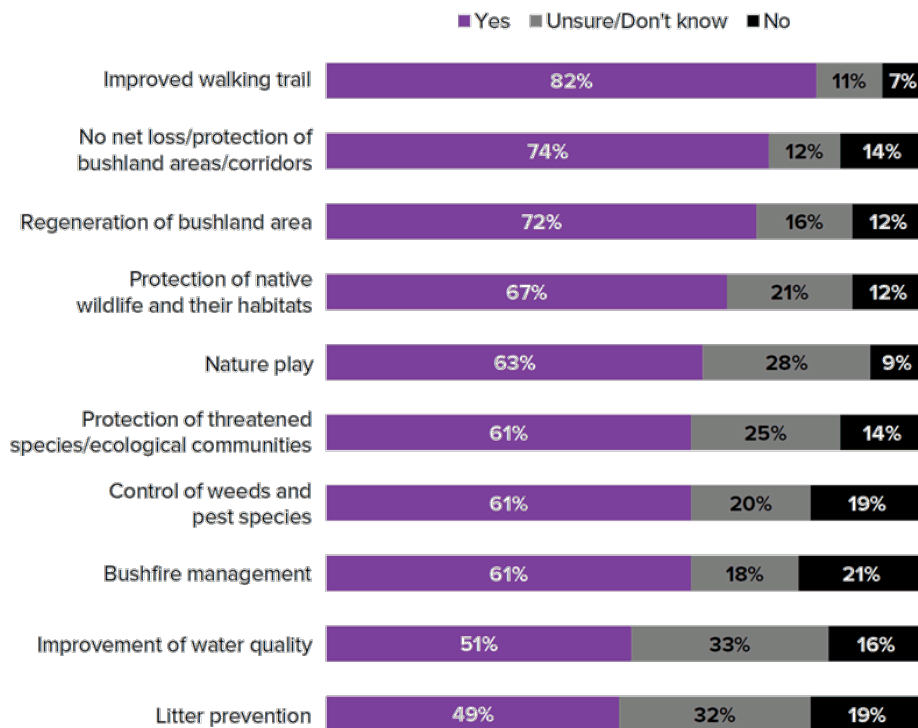


Figure 10 Stage 2 community consultation feedback on the adequacy of management measures in the draft Plan of Management's actions list

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Slightly lower levels of endorsement, but nevertheless by nearly two-thirds of respondents, were expressed for the adequacy of proposed measures around the protection of threatened species or ecological communities (61%, with 25% unsure/don't know) and the control of weed and pest species (also 61% adequacy, with 20% unsure/don't know and 19% of respondents feeling this aspect to be inadequately addressed).

Measures to support nature play were seen as adequate by 63% of respondents.

Those issues where the proposed management actions were seen as requiring greater attention or improvement were:

- Litter prevention – where only 49% of respondents felt this matter adequately dealt with, while 19% considered improved measures were needed (and 32% unsure/don't know);
- Improvements to water quality – just over half (51%) of respondents felt this issue adequately addressed, however 16% felt more attention/emphasis to be warranted (and 33% unsure/don't know); and
- Bushfire management – 21% of respondents felt this topic to be inadequately addressed, but 61% were satisfied with its coverage (and 18% unsure/don't know).

Only 17 people responded to an invitation to offer further comment regarding the draft Plan of Management's Action Lists. The matters that attracted the most comment were – bushfire management (7 comments), protection of the environment/flora/fauna and resourcing and implementation (4 comments each), and water quality and litter (3 comments).

E-mail or written submissions, and feedback from participants at the on-site drop-in session, raised a similar suite of matters to the above (from 13 responses in total):

- Eight comments addressed upgrading/maintaining tracks and access;
- Six comments addressed additional signage and managing prohibited activities (such as dogs, cats, and bicycles);
- Five comments focused on the regeneration or protection of the bush/environment, the protection of wildlife, and bushfire management;
- Seven people offered additional information or corrections; and
- Five comment commended ("well done") or supported the material presented.

Respondents were also strongly supportive of all aspects of the draft Masterplan, with levels of endorsement or support for its various elements ranging from 79% to 94% (and "do not support" not registering higher than 9% of responses in one instance).

The feedback from this Stage 2 community consultation has been used to further inform, and amend, both the draft Plan of Management's Actions List and the draft Masterplan for Field of Mars Reserve.

ITEM 8 (continued)

ATTACHMENT 1

3.3 VALUES

Values are what make a place important, they can be based on a site's inherent attributes (such as heritage or biodiversity values), or be ascribed to a place through development and usage, or as perceived/nominated by the community, or any combination of these.

A Plan of Management is a "values-based document" – meaning that management actions are shaped to reflect, maintain and enhance the values of a place. Values-based planning is seen as preferable, and more long-lasting and durable, than preparing plans of management that are focused on current management issues alone.

A number of core values have been identified for the Field of Mars Reserve. The Reserve's values derive from its diverse vegetation communities and habitats, communities and species of conservation significance, role as a major urban bushland reserve and green open space, its ready accessibility, its educational and nature appreciation facilities and function, extensive walking track network, the community's engagement in the area's protection and management stretching back over many decades, on-going enjoyment of the area for casual or independent leisure and recreation, and the area's scenic quality both for visitors and Reserve neighbours.

Community feedback during Stage 1 Community Consultation (see Section 3.2 above) strongly identified the Reserve's habitat values, natural environment setting and features, passive recreation opportunities and sense of "escaping" suburbia, and the ability to connect with nature and appreciate or view flora and fauna as among the area's most important values.

Table 8 lists the assessed level of significance for each of the major values identified for the Field of Mars Reserve.

Table 8 Values identified for Field of Mars Reserve and their assessed level of significance

VALUE	BASIS OF VALUE AND SIGNIFICANCE	LEVEL OF SIGNIFICANCE
Native vegetation communities	Vegetation community listed as a critically endangered ecological community under national legislation (and endangered under state legislation). Three other vegetation communities listed as endangered ecological communities under state legislation. Transition of ecological communities from shale ridgetops to alluvial wetlands and estuarine areas. Two plant species classed as vulnerable under national and state legislation, and several others of regional conservation interest. Native vegetation/bushland areas highly valued by the community. Largest remnant bushland reserve (and open space) under the City of Ryde's management.	National
Native fauna and habitat	Reserve supports a comparatively large array of native fauna for an urban bushland area (due to variety of habitats, Reserve size and compact shape). One recorded fauna species listed as threatened under national and state legislation, and five other species listed as threatened under state legislation. Habitats and native fauna highly valued by the community. Wildlife Refuge under the <i>National Parks and Wildlife Act 1974</i> and regional biodiversity corridor.	State
Green open space and scenic setting	Largest area of open space, and bushland reserve, in City of Ryde local government area, managed as a district-level park. Enhances amenity of, and views from surrounding properties.	District
Casual leisure, recreation and fitness	Well patronised and valued by the surrounding community for casual/independent leisure, recreation and fitness. Extensive walking track network, boardwalk, and small areas of managed/grassed open space with limited facilities.	Local

ITEM 8 (continued)

ATTACHMENT 1

VALUE	BASIS OF VALUE AND SIGNIFICANCE	LEVEL OF SIGNIFICANCE
Community	On-going community group involvement in Reserve's management.	Local
Environmental education and appreciation	Venue for organised environmental and outdoor education, supported by Dept of Education facility. Volunteer staffed Visitor Centre. Extensive walking track network providing for nature experience/appreciation.	Regional
Aboriginal cultural heritage	Aboriginal cultural heritage sites/features recorded and protected under state legislation.	State
Historic heritage	Reserve's association with the historic Field of Mars Common and evolving/ changing lands uses of the area over time. Associations with emergence of local community environmental activism and management. Listed as a heritage item - of local significance - under the <i>Ryde LEP 2014</i> .	Local

3.4 ISSUES OR THREATS

Threats to the values, and uses, of the Reserve and current or foreseeable management issues need to be considered in shaping a Plan of Management. This is to ensure that threats to values and other management issues are adequately addressed by a Plan's management objectives and actions.

Threats or issues for the Field of Mars Reserve have been identified from:

- On-site inspections and assessments of the Reserve's threats and management issues;
- Discussions with Council staff, and previous Council reports/studies;
- Outcomes of the Stage 1 and Stage 2 Community Consultations (see Section 3.2); and
- Knowledge of similar parks and reserves with comparable values and usage characteristics.

Several threats to the Reserve, and especially its biota, are listed "key threatening processes" under the listed under the *Environment Protection and Biodiversity Conservation Act 1999* or the *Biodiversity Conservation Act 2016* (as discussed in Sections 1.8.1 and 1.8.2).

Respondents to the first round of community engagement (as discussed in Section 3.2) identified the following as significant threats to the Field of Mars Reserve – as shown in Figure 11.

ITEM 8 (continued)

ATTACHMENT 1

BIGGEST THREATS TO FIELD OF MARS RESERVE: (n=206)

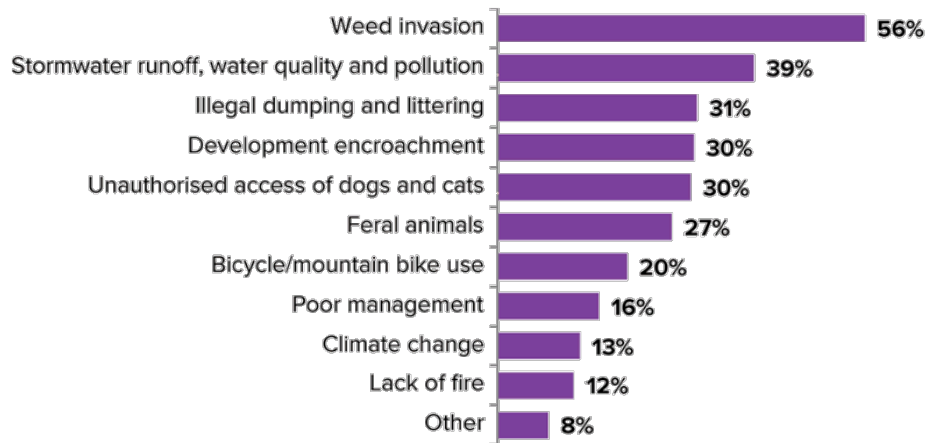


Figure 11 Biggest threats to the Field of Mars Reserve as identified in the Stage 1 community consultation

The major threats, issues or management challenges facing the Field of Mars Reserve, including the issues identified during the Stage 1 Community Consultation, are listed in Table 9 below (excluding small-scale, site-specific or day-to-day operational matters).

Table 9 Management challenges, issues or threats to values

MANAGEMENT CHALLENGES, ISSUES OR THREATS TO VALUES
Bushland Areas and Biodiversity Management
Three legislatively protected endangered ecological community present (one also a nationally listed community) warranting special management/protection
Bushland subject to pressures and degrading factors typical of urban bushland areas – considerable “edge effects” / Retention, protection and appropriate management of bushland area required
Significant flora species warrant special management/protection
Areas of dense weed infestation – and weed spread, both naturally as well as due to stormwater inflows and visitor use (walkers etc.)
Weed invasion due to increased nutrient, pollutant and sediment levels in local waterways / Stormwater flows from adjacent streets and properties introduce litter, spread weeds, increase nutrients and cause sediment impacts
Garden plantings and weeds are invading bushland areas – particularly into cleared areas, from adjacent gardens, and from grassed asset protection zones along boundaries
Many listed environmental weeds present on-site

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT CHALLENGES, ISSUES OR THREATS TO VALUES
(continued) Bushland Areas and Biodiversity Management
Alterations to vegetation communities (extent and structural diversity) due to changed fire regimes
Reduced water quality due to high sediment loads and pollutants from urbanised and industrial catchment
Ponding of stormwater (freshwater) potentially impacting the viability of Estuarine Saltmarsh EEC
Reserve boundaries not well-defined on-ground in places / Instances of lawn or garden encroachment and unauthorised clearing along Reserve's residential boundaries
Too few volunteers to undertake extensive bush regeneration/care activities
Significant native fauna species recorded on, or using, the Reserve
Adverse impacts on native fauna including disturbance to habitat and breeding areas
Predation of native species by cats, dogs and foxes
Feral animals (and wandering domestic pets) present and impacting native fauna / Dogs in bushland/habitat areas can disturb native fauna (even when on-leash – scent, faeces, etc.)
"Trample tracks" causing disturbance to and fragmentation of bushland areas
Lack of connection from several residential road entry points to the Reserve's track network leads to confusion over public access and creation of "trample"/exploratory track
Multiple informal "trample" tracks along boundary and in bushland areas – unauthorised/unmanaged tracks damage to vegetation, promote weed invasion/spread and generate erosion
Impacts of occasional sewage overflows/leaks
Managing bushfire risks for surrounding "life and property" / Residents' concerns that bushland areas and fire risks are may not be adequately managed
Balancing fire hazard reduction obligations and habitat protection / Possible ecological use of fire
Monitoring and management of landfill legacies (leachate discharge and methane emissions)
Need to consider the likely impacts of sea level rise and climate change impacts in estuarine vegetation and bushland management
Lack of interpretation regarding natural heritage values and importance of remnant bushland areas (throughout other areas of the Reserve away from the Visitor Centre, and when Centre is closed)
"Inactivated" street frontage at south end of Cressy Road enables rubbish dumping along Reserve boundary

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT CHALLENGES, ISSUES OR THREATS TO VALUES
Visitor Facilities/Infrastructure, Activity and Amenity Issues
Toilets located distant from main day use areas (parkland zone) and carpark / Toilets at Visitor Centre do not have all-abilities access
Lack of day-use facilities in main parkland zone
Lack of seating throughout the Reserve
Lack of water points throughout the Reserve
Absence of bicycle racks/parking
Not all built facilities/infrastructure are all-abilities accessible
Highest standard walking tracks (boardwalk loop) accesses one of the most heavily weed impacted areas of the Reserve
Sections of boardwalk and uneven/angled, and move under foot (possibly subsiding or failed footings)
Walking track built infrastructure and track "treatments" (e.g. stone steps, cross-drains, etc.) in poor condition in many places
Degradation of track network/track standards due unauthorised access and use (trail bikes, mountain bikes, etc.)
Insufficient signage to inform users re user code of behaviour or "park rules" (including dog regulations), hours of use, litter, smoking, etc.
Existing signage at Reserve entry points is of varying standards and styles, and in varying condition/repair.
Siting of visitor and other facilities to be cognisant of potential impacts from, and effects on, overland/flood flows
Safety Issues
Consider potential Crime Prevention Through Environmental Design (CPTED) issues in plantings and facility design and location
Cyclists' use of Pittwater Road shared path through carpark is potential safety issue
Seclusion of Reserve, with no nearby or easily accessible houses in most parts, is a security concern for some users
Risk of after hours, anti-social and illegal activities at Reserve entry, carpark and nearby areas of Reserve
Reserve Management Issues
On-going liaison with Department of Education re management of Environmental Education Centre and appropriate levels or use, impact management, etc.
Ryde-Hunters Hill Flora and Fauna Preservation Society occupy/operate Visitor Centre on agreement only, no formal lease or licence

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

3.5 RESERVE VISION

A "vision" has been developed to define a guiding purpose for the Field of Mars Reserve. It will also assist in developing specific, site-appropriate, management objectives and actions.

This vision reflects the Reserve's values and uses, addresses current threats and issues, and aligns with the key directions of this Plan of Management.

The vision for the Field of Mars Reserve is:

City of Ryde's largest remnant bushland reserve and open space provision with significant environmental, biodiversity and landscape values for public recreation, conservation and the study of native flora and fauna.

3.6 LAND CATEGORISATION

The *Local Government Act 1993* requires that community land be "categorised" according to one of the five categories of "Sportsground", "Park", "Area of Cultural Significance", "Natural Area" or "General Community Use". The Natural Area category is further divided into five sub-categories – "Bushland", "Wetland", "Escarpment", "Watercourse" or "Foreshore" – as well as a category otherwise prescribed by the legislation or regulations. This applies to the Council-owned community land portions of Field of Mars Reserve.

The *Crown Land Management Act 2016* provides that this same requirement for categorisation now also applies to Crown reserves under the control of a "Council manager" – as applies to Crown Reserve 89474 which forms much of the central portion and land area of Field of Mars Reserve.

Guidelines for the categorisation of these lands, including the attributes or values warranted for areas to be included in the various categories, are provided in the *Local Government (General) Regulation 2021* (sections 102 to 111).

The (then) Department of Local Government's *Practice Note on Public Land Management* (revised edition, 2000) also provides advice and guidelines for categorising community land. It states:

- "Council must have regard to the guidelines in determining a category (cl.9) but are not required to adopt any category merely because the land fits the description in the guidelines. Council should look at all the circumstances of the land in making a decision as to categorisation. For example, a piece of land may seem to satisfy the guidelines for more than one category. Council has a discretion in this case to look at the land in context, taking into account all relevant material before determining a category. It is important that Council be able to justify a decision; and
- It is strongly recommended that the land in each category not overlap. Overlapping categories may cause conflict in management objectives and will create confusion in the minds of Council staff and the community."

The *Local Government Act 1993* also sets out management objectives for each of the above categories, and these provide broad directions to be pursued in an area's management.

The Land Categorisation map for Field of Mars Reserve is provided in Appendix B. The core objectives for each of the land categorisations applicable in the Field of Mars Reserve are provided in Table 10 below.

In the course of preparing this Plan of Management and the Masterplan, a land categorisation review and draft report was prepared for Council's consideration. The recommendations of this report and any proposed re-categorisations of parts of the Field of Mars Reserve was considered after the Field of Mars Reserve Masterplan was adopted by Council.

The draft Plan of Management with altered land categorisations of parts of Field of Mars Reserve (Crown Lands parcels of land) were referred to Minister for approval prior to Public Exhibition.

Land re-categorisations of parts of the Field of Mars Reserve (Council owned Community land) will be done via a Public Hearing conducted in conjunction with the Public Exhibition of the draft Plan of Management and in accordance with the *Local Government Act 1993*. This Plan of Management and any proposed land re-categorisations will be adopted by Council.

ITEM 8 (continued)

ATTACHMENT 1

Table 10 Prescribed “core objectives for management” for current land categorisations

LOCAL GOVERNMENT ACT 1993	CATEGORISATION	PREScribed “CORE OBJECTIVES FOR MANAGEMENT”
Section 36G	Park	<ul style="list-style-type: none"> To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities; and To provide for passive recreational activities or pastimes and for the casual playing of games; and To improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.
Section 36I	General Community Use	<ul style="list-style-type: none"> To promote, encourage and provide for the use of the land, and to provide facilities on the land, to meet the current and future needs of the local community and of the wider public: <ul style="list-style-type: none"> (a) in relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public; and (b) in relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).
Section 36J	Natural Area – Bushland	<ul style="list-style-type: none"> To ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values, the flora and fauna (including invertebrates, fungi and microorganisms), and other ecological values of the land; and To protect the aesthetic, heritage, recreational, educational and scientific values of the land; and To promote the management of the land in a manner that protects and enhances the land’s values and quality and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion; and To restore degraded bushland; and To protect existing landforms such as natural drainage lines, watercourses and foreshores; and To retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term; and To protect bushland as a natural stabiliser of the soil surface.

ITEM 8 (continued)

ATTACHMENT 1

LOCAL GOVERNMENT ACT 1993	CATEGORISATION	PRESCRIBED "CORE OBJECTIVES FOR MANAGEMENT"
Section 36K	Natural Area – Wetland	<ul style="list-style-type: none"> 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; and 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.
Section 36L	Natural Area – Escarpment	<ul style="list-style-type: none"> (a) to protect any important geological, geomorphological or scenic features of the escarpment, and (b) to facilitate safe community use and enjoyment of the escarpment.
Section 36M	Natural Area – Watercourse	<ul style="list-style-type: none"> To manage watercourses so as to protect the biodiversity and ecological values of the instream environment, particularly in relation to water quality and water flows; and To manage watercourses so as to protect the riparian environment, particularly in relation to riparian vegetation and habitats and bank stability, and 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.

3.7 MANAGEMENT OBJECTIVES

The following set of management objectives have been identified for Field of Mars Reserve. They:

- Elaborate and support the Reserve vision;
- Are consistent with the "core objectives for management" for the Reserve's categorisation (as described in Section 3.6 above).
- Provide broad statements of management intent and priority, to guide management actions as well as to assist in making management decisions when responding to unforeseen situations and challenges; and
- Have been used to inform the Reserve's management actions (as detailed in Section 4).

3.7.1 Natural Areas

Management Intent – To maintain the majority of the Reserve as natural bushland and a scenic landscape – protecting significant vegetation communities and species, enhancing bushland quality, maintaining its landscape and scenic values, delivering improved stormwater quality and other environmental services, and as a venue for low-key nature-based recreation and educational uses.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Primary Management Objectives:

- To protect vegetation communities and species legislated as having high conservation value.
- To maintain and enhance the biodiversity, habitat, natural systems, and scenic values of this sizeable natural bushland area.
- To continue bushland and watercourse / wetland restoration, regeneration, revegetation and weed control efforts to improve the natural state and setting of this area.
- To provide sustainable opportunities for dispersed low-key nature-based recreational activities, and appropriate educational uses, within these areas without significantly impacting the wider bushland setting, biodiversity and scenic values or natural processes.

Secondary Management Objectives:

- To assist in maintaining the Park's bushland scenery and skyline, as seen from internal and external vantage points and other Park activity areas.
- To minimise direct and indirect impacts on the Park from adjacent land uses and mitigate hazards that the area's bushland may present for Park neighbours.
- To provide for visitor safety where necessary.
- To maintain links to adjacent / nearby natural and open space areas.

3.7.2 Park

Management Intent – To maintain the Reserve's open space areas as an attractive managed parkland setting, that is valued both as green open space in its own right and as setting for a wide range of casual independent leisure and recreation activities for a larger number and variety of users, with this enjoyment supported by sensitively sited and designed facilities.

Primary Management Objectives:

- To protect the largely undeveloped, green, open space and characteristic "parkland" setting and appeal of this area.
- To offer an attractive space and a range of facilities to accommodate a wide variety of outdoor casual leisure and recreation activities (including passive uses and relaxation, active uses at varying levels of exertion, casual games, family or social/group activities, solo use, cultural activities, and to meet the varied interests of the community for independent outdoor recreation).
- To provide a venue and setting for use by the Field of Mars Environmental Educational Centre in providing outdoor environmental education services.
- To provide a limited suite of sensitively sited and designed facilities to support and encourage casual independent leisure and recreation activities.
- To cater for the entire community (across the area as a whole) – regardless of age, gender, abilities (both physical and mental), income, or cultural background.

Secondary Management Objectives:

- To maintain the Reserve's scenic values, both when viewed from within its parklands and open spaces and as part of the surrounding streetscape.
- To promote connection and integration with the adjoining open space and bushland areas.
- To provide for visitor safety.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

3.8 FIELD OF MARS RESERVE MASTERPLAN

Following the community feedback received in Stage 1 Community Consultation, a draft Masterplan for the Field of Mars Reserve was prepared in conjunction with the development of this Plan of Management. Community feedback on the draft Masterplan Report was received via Stage 2 Community Consultation.

The Field of Mars Reserve Masterplan Report provides a detailed analysis of the Reserve's setting, its values and existing uses. The Masterplan will allow for progressive and staged implementation of improvements to the Reserve over the next 20 years. The Masterplan's elements would be implemented over time, as resources become available (see Section 5).

A copy of the Field of Mars Reserve Masterplan (adopted by Council – August 2021) can be found in this document in Appendix C.

4 MANAGEMENT ISSUES AND ACTION PLAN

4.1 MANAGEMENT ISSUES AND ACTION PLAN INTRODUCTION

This section outlines the actions required to effectively and efficiently manage Field of Mars Reserve ("the Reserve") to implement the objectives set out above.

This Plan of Management expressly authorises those actions and initiatives with the Field of Mars Reserve Masterplan where such matters are not directly referenced in the below Action Plans.

4.2 ACTION PLAN TABLES

The following Action Tables present a variety of management actions that will guide the management of Field of Mars Reserve over a ten year period from the adoption of this Plan of Management.

Management Actions are presented using the five key management directions discussed earlier in this Plan of Management, as listed below.

- Access, Recreational Use and Facilities
- Biodiversity / Environmental Sustainability
- Management and Maintenance
- Community Engagement and Involvement
- Leases and Licences

Within each of these broad management directions actions are then grouped by management issue, associated Objectives / target, relevant management action and performance measures.

ITEM 8 (continued)

ATTACHMENT 1

ACTION PLAN TABLE COMPONENT	COMPONENT EXPLANATION
Management Issue	Broad management issue to be addressed
Objectives / targets	Objectives and targets of the Plan of Management in regard to the land (as per Clause 36 of the <i>Local Government Act 1993</i>) in order to achieve the vision / direction and objectives for Field of Mars Reserve. Objectives are consistent with the core objectives for the relevant categories within the <i>Local Government Act 1993</i> .
Action	Practical actions and tasks proposed to achieve the Plan's objectives and performance targets (as per Clause 36 (3c) of the <i>Local Government Act 1993</i>).
Performance measure	Statement of how Council will assess its performance in delivering against the Plan's objectives and performance targets (as per Clause 36 (3d) of the <i>Local Government Act 1993</i>).
Priority	<p>The priority assigned to each Action:</p> <p>High (H) - Essential to achievement of management objectives, or where there is potential for the public to be exposed to an unacceptable level of risk, or there is potential for a serious threat to Reserve values or the environment and warranting funding consideration until achieved. Typically implemented within 2-5 years from adoption of the Plan.</p> <p>Medium (M) - These actions are desirable to enhance achievement of management objectives, or to address issues that meet a significant community need, or to improve Reserve management outcomes and ideally should be implemented within the life of this Plan. Typically implemented within 4 – 7 years from adoption of the Plan.</p> <p>Low (L) - These actions are useful for the overall management of an area or address issues that have longer-term impacts (such as meeting less urgent community needs or improving inefficient services) and should be undertaken if resources permit. Implemented within 7 – 10 years from adoption of the Plan.</p> <p>Ongoing (O) - the action in question will apply or continue throughout the management of an area and/or the life of this Plan.</p> <p>Note however, that the priority assigned to actions should not mitigate against earlier implementation should the opportunity arise (for example, through specific funding grants / streams or as other opportunities arise).</p>

ITEM 8 (continued)

ATTACHMENT 1



4.2.1 Access, Recreational Use and Facilities

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Pedestrian Access	Provide safe pedestrian access to the Reserve.	Retain and strengthen all existing pedestrian entry points. Implement entry point improvements as per the Masterplan.	Entry points retained, strengthened and improved.	O
		Improve entry signage. Signs to be uniform, consistent style with Council's standard and located in a prominent position at each entry point that does not impede access.	New entry signage developed and installed.	H
		Entry point signs should look to include: <ul style="list-style-type: none"> Indigenous welcome and acknowledgement; Visitor orientation and Reserve recreational use information; and Outline permitted and prohibited activities. 		H
		Improve the visitor entry experience by upgrading entry point track heads with paving, steps and track improvements, as appropriate.	Visitor entry upgrades implemented and maintained as appropriate.	M
		Provide secure bicycle parking racks at entry points located near regional cycle routes.	Bicycle parking racks installed.	M
		Investigate opportunities to improve visitor safety and walking track connectivity at the following locations: <ul style="list-style-type: none"> Pittwater Road between Field of Mars Reserve and Buffalo Creek Reserve (managed by Hunters Hill Council) and linkages to Lane Cove River National Park; Cressy Road near entry 6 (Pidding Rd) and entry 7 (Wellington Rd) and linkages to Burrows Park and Ryde Park; and Cressy Road near entry 8 (old fire trail) and entry 9 (Cressy Rd). 	Potential traffic calming and pedestrian safety improvements investigated on/near Pittwater Road and Cressy/Pidding Roads. Improved safety and track connectivity.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Vehicle Access and Parking	Provision of car park for park users.	Facilitate car parking for park users at the Reserve, via the main car park (entry 1 - Pittwater Rd) during day light hours. Overnight parking and camping onsite is prohibited.	Parking provided for park users in main car park. Car park gate locked daily at sunset and unlock for day light hours.	O
		Existing vehicle gate locations to be retained to restrict unauthorised vehicle entry into the Reserve. Review access control measures and formalise site access arrangements for authorised vehicles.	Vehicle gates locked. Vehicle access is managed appropriately.	O
	Environmental protection of the Reserve via controlled vehicle access and movements into and within the Reserve.	Facilitate safe vehicle movement of authorised vehicles into the Reserve as required (e.g. for maintenance and emergency purposes).	Vehicle access and operations is managed appropriately.	O
		Facilitate safe movement of buses and students for educational purposes (entry 1 - Pittwater Rd) for bus drop off/pick up and turning.	Bus access and operations is managed appropriately.	O
		Investigate the provision of an off-site bus layover area in proximity to the Reserve.		H
		Future internal access way upgrades to use a consistent finish, sensitively consider the adjoining ecological constraints and impacts; as well as accessibility and safety needs.	Internal access way upgraded and maintained appropriately.	M
		Improve maintenance access for authorised vehicles at entry 12 (Moncrieff Dr) and entry 14 (Buffalo Creek) as per the Masterplan. Upgrade the vehicle culvert crossing of Strangers Creek providing access to the western open space zone.	Maintenance access upgraded and maintained appropriately.	H
		Strengthen entry and connectivity to the Reserve from entries 2 – 14 to encourage pedestrian access to the site (without vehicles) and/or encourage the use of alternative parking options, rather than just than the main car park (entry 1 – Pittwater Rd).	Decreased reliance on the main car park and increased use of alternative site entries.	H
		Provide bicycle racks at entries near regional cycle routes to encourage the use of alternative transport to site. No bicycles permitted within the Reserve.	Decreased reliance on the main car park and increased use of alternative transport.	H

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Accessibility	Facilitate access within the Reserve for people with specific and/or mobility needs	Provide accessible parking in main car park (entry 1 – Pittwater Rd).	Accessible parking provided.	O
		Provide accessible path connection between main car park, eastern open space zone, internal access way, Visitors Centre / Amenities Building, Education Centre, Boardwalk loop and western open space zone.	Accessible paths and connections implemented and maintained appropriately.	H
		Provide accessible design principles for picnic area and Visitors Centre / Amenities Building.	Accessible picnic area implemented, and upgrade Visitors Centre / Amenities Building to DDA compliance	H
Reserve user / visitor experience	Enhanced Reserve user and visitor experience and recreational opportunities	<p>Improve the Reserve as per the Masterplan including:</p> <ul style="list-style-type: none"> • Accessible parking; • Provision of bicycle racks at entries near regional cycle routes; • Improve the visitor arrival experience at the main site entry (entry 1 - Pittwater Road) by the use of definition endemic plantings and improved signage; • Improve walking path / track network, as required; and • Ensure Safety in Design principles are followed to ensure visitor safety. 	<p>Staged implementation of the Masterplan and maintained appropriately.</p> <p>Improved visitor experience as determined by observation and qualitative visitor surveys.</p>	H/O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Visitor Centre / Amenities Building	Provide community environmental education opportunities and provide access to public toilets onsite.	Future review to give consideration to the condition of the building to ensure that it is fit for purpose and improved functionality of the building for increased community environmental education purposes. The review will consider: <ul style="list-style-type: none"> Measures to encourage increased visitor awareness and use of the building; Internal layout and use; Site / land stability; Flood mitigation; Building condition and maintenance; and Future environmental constraints and resilience in new builds (e.g. bushfire impacts). 	Review and improve functionality and use of building.	L
		Provide access to public toilet during day light hours.	Access provided, upgraded and managed appropriately	O
		Provide DDA compliant access to Visitors Centre and public toilets.		H
Lighting	Restrict lighting and reduce lighting spill within the Reserve.	Reduce lighting in the Reserve. Implement measure to restrict lighting spill and the impacts on nocturnal wildlife, diurnal wildlife and fauna habitat.	Reduce lighting and manage appropriately.	O
		Lighting from current facilities and/or proposals for new or replacement lighting subject to environmental impact assessment.		O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Bush Walking Tracks	The location, design, standard of construction, and maintenance of walking tracks will minimise direct or indirect impact.	All formal bush walking tracks within the Reserve will be managed as Grade 2 or Grade 3 walking tracks as defined in the Australian Walking Track Grading System. (The primary differentiator between Grade 2 and Grade 3 is the prevailing slope rather than the standard or presence of built structures / track improvements.)	Upgrade bush walking tracks and manage appropriately.	O
		<p>Implement the Masterplan bushwalking track initiatives, including:</p> <ul style="list-style-type: none"> • Provide path to accessible standard between car park, eastern open space zone and Boardwalk Loop. • Upgrade the Boardwalk Loop to accessible standard; • Provide connection between the Boardwalk Loop and the western open space zone to accessible standard; • Provision of a new path linking entry 3 (Westminster Rd) to the Boardwalk Loop. • Upgrade the walking track from entry point 4 (Monash Rd) to the Boardwalk Loop; • Provision of access link supported by wayfinding signs between entry 3 (Westminster Rd), entry 4 (Monash Rd) and entry 5 (Higginbotham Rd) utilising the Asset Protection Zone to link to the broader waking track network. • Close and rehabilitate / regenerate the short dead-end walking track from entry 6 (Pidding Rd) to Buffalo Creek; • Provision of access link supported by wayfinding signs between entry 9 (Cressy Rd), entry 10 (Kellaway St) and entry 11 (Finch Ave 1) utilising the Asset Protection Zone to link to the broader waking track network; • Formalise the existing informal track from entry 11 (Finch Ave 1) to Strangers Creek and the Warada Track; • Upgrade the eastern section of the Warada track providing connection to the western open space zone. • Provision of access link supported by wayfinding signs between entry 12 (Finch Ave 2) and entry 13 (Moncrieff Dr) utilising the Asset Protection Zone to link to the broader waking track network. 	Walking Track initiatives progressively implemented as per the Masterplan and maintained appropriately.	H/M

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Bush Walking Tracks	(continued) The location, design, standard of construction, and maintenance of walking tracks will minimise direct or indirect impact.	Undertake an audit of the existing walking tracks in the Reserve to determine track condition, associated impacts and recommended track improvement works consistent with Grade 2 or 3 walking track standard. Incorporate audit findings on Council's Geographic Information System (GIS) and Asset Management System (AMS).	Audit completed by 2021 for future reference and uploaded to GIS and AMS.	H
		Monitor use of tracks, activities within the Reserve and obtain statistics on community use levels. Consider the use of track counters.	Usage monitored and statistics obtained.	O
		Based on outcomes of the audit, track maintenance, upgrades and improvements will be undertaken to achieve Grade 2 or 3 walking track standard.	Upgrade and improve tracks for safe and sustainable use.	H/M
		Walking tracks to be maintained through a programmed system of monitoring/inspections and maintenance, supported by responsive maintenance works as required. All maintenance, preventative and other works will be documented.	Authorised waking tracks are identified in SLA's and operational maintenance programs for regular inspections and maintenance for safe and sustainable use.	O
		Identify, monitor and close unauthorised / informal or newly formed tracks to ensure the possibility of further damage and fragmentation of the area is reduced and areas can rehabilitate.	Unauthorised tracks are identified, closed and active rehabilitation is developed.	O
		Promote bush walking as an opportunity for the local community to experience the natural environment as part of a healthy lifestyle.	Promotional information developed.	O
		Provide an environmental education and guided walks program for the local community that introduces visitors to the Reserve and promotes its natural values.	Number of educational activities and walks delivered.	O
		Dog walking (on leash or off leash), horse riding, cycling (including BMX and mountain bike riding), motor cycle riding, scooters and other motorised devices (e.g. drones and remote control cars/planes) are not permitted on walking tracks and is not permitted elsewhere within the Reserve.	Provide education on prohibited activities. Monitor the incidence of prohibited activities within the Reserve and implement compliance measures.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Other Recreational Facilities	Provide recreational facilities and structures (such as signage and shelter structures) that complement the Reserve's values and biodiversity conservation objectives and support public recreation.	Recreation facilities within the Reserve will provide opportunities for public enjoyment and appreciation and will not facilitate high impact, intrusive activities – for example, activities negatively impacting or scarring an area site, activities that modify the natural landscape and activities that destabilise or significantly increase potential for erosion impacts.	Impacts on the Reserve from recreation facilities are minimised.	O
		All site improvement works or major maintenance projects to be assessed to determine impact on conservation values of the Reserve, will be designed to minimise impacts on the Reserve and be subject to appropriate environmental planning and approval procedures.	Site improvement works and major maintenance projects assessed prior to works. commencing and monitored during delivery.	O
		Recreational facility detailed design must address the following matters: <ul style="list-style-type: none"> Ecological sustainability of the site and reversibility; Impacts on habitat and habitat value / suitability for species use; The protection of identified values; Does not contribute to fragmentation of bushland areas; Demonstrate a clear connection with the Reserve natural setting; Public accessibility and equity (where applicable); Proposed construction materials and techniques; Aesthetic impacts, both to and from the Reserve; Site amenity and public and staff safety; Pollution impacts and risks; Impact amelioration and remediation measures; and Compliance with Planning for Bushfire Protection standard through design. 		O
		Design and construct facilities that incorporate sustainable design and function and compliance with DDA, BCA, and applicable Australian Standards.	Ancillary structures consider and incorporate sustainable design, DDA, BCA and applicable Australian Standards.	O
		Active sporting facilities will not be provided in the Reserve.	No sporting facilities located in the Reserve.	O

ITEM 8 (continued)

ATTACHMENT 1



4.2.2 Biodiversity / Environmental Sustainability

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Conservation of Biodiversity	Ensure availability for connectivity for fauna and species protection long term is not compromised through development.	Look for opportunities to expand patch sizes, reduce edge effects, improve the quality of vegetation, protect existing bushland areas and the native animal populations they contain, and enhance connection to other bushland areas.	Number of areas providing supplementary planting that strengthen existing bushland and protection of fauna.	O
Natural Landscape	Protect and preserve natural landscape such as rock formations and rock outcrops.	Manage the Reserve to protect and preserve the natural landscape such as rock formations and rock outcrops for environmental, historic, cultural, aesthetic and/or scenic reasons.	Natural landscape such as rock formations and rock outcrops protected and preserved.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Native Vegetation Management	Protect vegetation communities and native flora species. Maintain and enhance natural systems, vegetation communities, biodiversity and habitats.	Manage the Reserve to protect and enhance the natural environment, habitats and biodiversity values as well as to contribute to aesthetic and scenic appeal.	No long-term reduction in, ecological condition of the Reserve – based on survey and monitoring.	O
		Protecting the existing extensive areas of native vegetation and minimising bushland disturbances (to the extent as consistent with other actions identified in this Plan) will be dominant “passive” management measures employed to maintain native flora, vegetation communities and habitat values across most of the Reserve.	Ecological condition of the Reserve is maintained or enhanced – based on survey, monitoring and observation	O
		Bush regeneration, revegetation and weed control will continue to be the major “active” management measures used to maintain and enhance native flora, vegetation community and habitat values of the Reserve.		O
		Stormwater management, sediment-erosion control, fire management and neighbour education/awareness are supporting “active” management measures.		O
		Undertake targeted surveys to clarify the location and extent of known Threatened Ecological Communities, and threatened flora species within the Reserve, including an assessment of condition and threats.	The extent, occurrence and condition of Threatened Ecological Communities and listed threatened species is maintained or enhanced – based on survey, monitoring and observation.	H
		Undertake special management measures as/where required to protect and conserve Threatened Ecological Communities other vegetation communities of conservation significance and threatened or significant native flora species – including relevant measures set out in any applicable Approved Recovery Plans.		H

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Native Vegetation Management	(continued) Protect vegetation communities and native flora species. Maintain and enhance natural systems, vegetation communities, biodiversity and habitats.	Undertake or facilitate periodic flora survey and monitoring within the Reserve, according to a systematic and structured programme to provide long-term and comparable data.	Increased knowledge of native vegetation communities, flora and habitats.	L
		Develop a policy to prevent/minimise the introduction of foreign pathogens, diseases and other material from entering the Reserve, e.g., mulch, soils and plant material. Minimise the risk of noxious weed spread/introduction, introduction of pathogens such as Phytophthora.	Develop policy and manage appropriately.	M
		Ensure grass mowing / slashing within the four Open Space Zones does not result in the incremental expansion of these areas into surrounding bushland (and if necessary, physically define, using low-key measures such as placed logs or posts, the limits of slashed / mown grass areas).	Delineation measures in place to restrict expansion into bushland.	O
		Ensure a consistent approach to management and construction activities by Council within the Reserve. Engage and educate staff, contractors and other agencies on environmentally sensitive areas and mitigation measures aimed at minimising loss or negative impact on environmentally sensitive areas.	Number of capital and non-capital works projects in or adjoining the Reserve that deliver positive environmental outcomes	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Fauna management	To protect native fauna species and their habitats. To support an increase in the diversity, abundance and population resilience of native fauna.	Protect / maintain habitat through protecting the existing areas of native vegetation and minimising bushland disturbances and fragmentation.	Diversity and abundance of native wildlife is maintained or enhanced – based on survey, monitoring and observation.	O
		Undertake special management measures, as / where required to protect and conserve threatened or significant native fauna species – including relevant measures set out in any applicable Approved Recovery Plans.	Native fauna species or populations listed as threatened, or of regional conservation significance, are maintained or enhanced – based on survey, monitoring and observation.	H
		Through site auditing and investigation, identify key threatening processes for priority sites and build a program to ensure protection of these e.g. hollows in areas of key habitat.	Retention of existing critical habitat	H
		Explore opportunities to enhance habitat for wildlife, by providing sufficient vegetation cover and niche habitats. This may also include the protection of nest trees, provision of nest boxes or other habitat “enhancements”, special fire management or protection measures, prioritising bush regeneration or revegetation efforts, and limitations on visitor access and use if warranted.	Habitat enhancement measures identified and implemented annually.	O
		Undertake or facilitate targeted surveys of threatened or significant native fauna species, as/when required, to support their conservation management.	Increased knowledge of native wildlife within the Reserve.	M
		Undertake or facilitate periodic fauna survey and monitoring within the Reserve, according to a systematic and structured programme to provide long-term and comparable data.		L
		Maintain the Reserve’s status as a designated Wildlife Refuge.	Wildlife Refuge designation in force.	O

ITEM 8 (continued)

ATTACHMENT 1

4.2.2 Biodiversity / Environmental Sustainability

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Conservation of Biodiversity	Ensure availability for connectivity for fauna and species protection long term is not compromised through development.	Look for opportunities to expand patch sizes, reduce edge effects, improve the quality of vegetation, protect existing bushland areas and the native animal populations they contain, and enhance connection to other bushland areas.	Number of areas providing supplementary planting that strengthen existing bushland and protection of fauna.	O
Natural Landscape	Protect and preserve natural landscape such as rock formations and rock outcrops.	Manage the Reserve to protect and preserve the natural landscape such as rock formations and rock outcrops for environmental, historic, cultural, aesthetic and/or scenic reasons.	Natural landscape such as rock formations and rock outcrops protected and preserved.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Regeneration and restoration	Local provenance species used in regeneration projects.	Revegetation and supplementary bush regeneration plantings will prioritise the use of local-provenance endemic species, preferably grown from seeds or vegetative material sourced locally from the equivalent vegetation community.	Number of regeneration planting projects using local provenance endemic species.	O
	Increased community awareness of the value of flora and fauna preservation and habitat provision.	Continue to produce educational material to inform the community about flora and fauna preservation and habitat provision in the surrounding area.	Promotional material produced and distributed to community.	M
	Increased community awareness of the value of weed control.	Continue to produce educational material to inform the community about invasive weeds.	Promotional material produced and distributed to community.	M
Contamination Management	Mitigate risks associated with potential contamination and/or acid sulphate soils in the Reserve.	Consider and assess any potential onsite contamination and/or acid sulphate soils when planning and undertaking works onsite.	Implement mitigation measures as required and managed as appropriate	O
		Ensure a consistent approach to management, construction and/or soil disturbance activities within the Reserve. Engage and educate staff, volunteers, contractors and other agencies on potential risks and mitigation measures.		O
Land Management	Expand the Reserve and increase Natural Areas.	Investigate opportunities to increase the size of the Reserve and achieve a net increase of Natural Areas in the City of Ryde.	Investigate opportunities and implement where feasible.	O

ITEM 8 (continued)

ATTACHMENT 1



MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Boundary Management	Encroachments for private use of the Reserve will not be permitted.	Review, survey (where required) and identify encroachments on the Reserve boundaries with adjoining private landholdings.	Land title, land register and maps are reviewed and up to date.	L
		Maintain an inspection regime to identify, monitor and subsequently remove encroachments into the Reserve. Notify the landowner where encroachments occur that City of Ryde is aware of the encroachment and will take action for removal of same.	Encroachments / unauthorised access detected and removed.	O
		Continue community engagement / information on avoiding encroachments and reporting incidences of encroachment.	Encroachments included in Council community engagement mechanisms.	L
	Native vegetation in the Reserve is not impacted by neighbours.	All requests for tree pruning or removal on public land to be assessed by Council's Tree Management Officers and must be approved by and undertaken by Council.	Incidence of native vegetation damage at Field of Mars Reserve / residential boundary.	O
		When unauthorised actions occur to native trees, Council shall implement enforcement procedures, consistent with DCP 2014 Part 9.5 Tree Preservation.		O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Adjoining privately owned land	Promotion of the General Biosecurity Duty of neighbouring property owners to manage the impacts of priority weeds in the Reserve.	The City of Ryde Local Priority Weed Management Plan is implemented, program of private property inspections and community education undertaken.	Reduction in the impact of priority weeds on Field of Mars Reserve.	O
	Management of adjoining lands complements Council's objectives for the Reserve.	Where development occurs to / within bushland adjoining the Reserve, investigate options for conditions of consent to ensure management practices do not compromise adjoining the Reserve (such as weed management programs, reporting to council to demonstrate management or mitigation measures or clauses within Leases/ Licensing).	Adjoining land owners and managers are informed of sensitivity of the Reserve and adequately manage areas.	H

ITEM 8 (continued)

ATTACHMENT 1



MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Pest and domestic animal management	Control of pest animals (such as foxes, feral cats and rabbits) in the Reserve.	Participate in co-ordinated regional pest animal control programmes, as well as undertaking Council initiated control programmes. Foxes, feral cats and rabbits will be priority pest species for control efforts.	Long term reduction in pest species populations. Observations of numbers of pest species recorded via complaints or Council programs / observations to be included in Feral Scan.	O
		Undertake periodic, and opportunistic, monitoring of pest animal populations to inform and target control efforts.		M
	Manage domestic animals and their impacts.	Domestic dogs are not permitted within the Reserve (on leash or off leash) at any time.	Reduction in number of dogs in the Reserve based on survey and observations. Reduced incidence of community complaints of dogs in the Reserve.	M
		Domestic cats are not permitted within the Reserve at any time.	Reduction in number of cats in the Reserve based on survey and observations. Reduced incidence of community complaints of cats in the Reserve.	M
		All other domestic animals/pets, including horses, are prohibited from the Reserve.	Reduction in number of domestic animals/pets in the Reserve based on survey and observations. Reduced incidence of community complaints of domestic animals/pets in the Reserve.	H
	Manage European Honey bees and their impacts.	Manage competition from European honey bees, Apis mellifera by preventing establishment of feral honey bees in the Reserve and not approving the placement of European honey bee hives on public land. Remove feral honey bee hives from tree hollows and nesting boxes where they compete with native wildlife for habitat.	Prevention of the establishment of European honey bee populations in the Reserve.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Fire Management	Manage risks and impacts of bushfire on life, property and the environment.	Implement the actions within the endorsed Bush Fire Risk Management Plan (BFRMP and subsequent updates) incorporating Hunters Hill, Lane Cove, Parramatta and Ryde Local Government Areas. Co-operate with other agencies, such as NSW Rural Fire Service and Fire and Rescue NSW in the management and control of fire within the Reserve – including through hazard reduction burns, clearing / maintaining asset protection zones, and neighbour education / preparedness.	Bush Fire Risk Management Plan (BFRMP) is the principal document guiding fire management in the Reserve.	H
		City of Ryde will participate in reviews and updates of the Bush Fire Risk Management Plan by the Bush Fire Management Committee.	BFRMP reviewed and updated as necessary.	O
		Undertake Asset Protection Zone (APZ) maintenance and hazard reduction as required to minimising fuel loads especially in adjoining residential areas, as identified in the BFRMP.	Annual lineal metres of APZ managed by Council in the Reserve.	H/O
		Monitor fuel loads in the Reserve and action accordingly. Fuel reduction will be achieved through approved hazard reduction burns in consultation with other agencies, such as NSW Rural Fire Service and Fire and Rescue NSW, and manual fuel removal. The removal of weeds, garden refuse and exotic plant material during bush regeneration works will complement fuel reduction efforts.	Number of fuel reduction activities per annum, as per relevant SLA.	H
		Increase neighbour awareness for on-site property fuel load reduction strategies through educational programs to manage risk to the Reserve and support holistic fuel load minimisation activities.	Number of neighbouring residential dwellings participating in resilience programs addressing fire mitigation.	O
		During Total Fire Ban days consider the closure of the Reserve and cessation of management activities.	The Reserve appropriately managed on TFB days.	M
		Investigate what knowledge exists on Aboriginal traditional fire management practices and where and how this knowledge / information may be best applied.	Consultation with cultural burn practitioners.	M

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Fire Management	Undertake fire management practices that are beneficial to maintaining age, structure and species diversity of native vegetation communities.	Appropriate fire thresholds for native vegetation communities will be established in prescribed burn planning. Where feasible monitor prescribed burn sites to:	Implement appropriate fire management practices in accordance with BFRMP that minimises negative impacts on the Reserve.	M
		<ul style="list-style-type: none"> Identify the fire history record for the Reserve and map prescribed burn extents. Establish photographic monitoring points for long term comparison of the site in a representative sample of vegetation communities within the Reserve. Undertake pre burn flora species list using quadrats or transects to determine species and densities. Post burn species lists to be done at statistically and ecologically valid intervals (e.g. 6 months and 1, 2, 3, 5, and 10 years post the fire event). 		H
Management of riparian areas	Protect riparian vegetation to enhance ecological function, reduce erosion and improve water quality.	Identify watercourse / riparian zone buffers and Threatened Species populations / habitats prior to undertaking prescribed burns and incorporate into burn planning.	Riparian zone ecological condition is maintained or enhanced – based on survey, monitoring and observation.	H
		Ensure works carried out along riparian areas comply with environmental approvals and provisions to ensure sensitive areas are protected and adequately planned for.		O
		Manage and enhance riparian zones widths for Buffalo Creek (20m each side) and Strangers Creek (10m each side) through weed control/removal, supplementary planting of endemic species and/or bank stabilisation.		

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Management of endangered estuarine saltmarsh communities	Protect estuarine saltmarsh and enhance ecological function, reduce erosion and improve water quality.	Estuarine Saltmarsh communities in the Reserve will be included in Council's Saltmarsh Management Plan to identify all existing communities, provide recommendations for management and opportunities for expansion.	Saltmarsh Management Plan completed in 2021. Estuarine Saltmarsh is protected and enhanced.	H
		Protect existing endangered saltmarsh communities, identify opportunities to expand saltmarsh and undertake regeneration works to restore saltmarsh.		O
		Utilise protective measures such as delineation to minimise the risk of damage (vehicular or through human recreation) to ensure Council delivers legislative protection outcomes.		H

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Stormwater Runoff and Water Quality	Reduction in gross pollutants, and sediment rich stormwater entering the Reserve.	Planning of water quality improvement works will be undertaken at a sub-catchment scale, taking account of known high discharge sites in the catchment of Buffalo Creek and Strangers Creek.	Sub-catchment planning of works.	O
		Discourage where feasible, new stormwater outlets draining into natural areas where alternate storage, reuse and diffuse source options are available.	Number of new development applications actively incorporating WSUD features into stormwater management plans	O
		Investigate and integrate Water Sensitive Urban Design (WSUD) measures, e.g. bioswales in the Asset Protection Zone between the Field of Mars Cemetery and the Reserve to reduce external nutrient impacts on the Reserve.	Reduction in gross pollutants and sediment in receiving watercourses – based on monitoring and observation.	H
		Maintain existing and explore new opportunities to improve water quality through WSUD and gross pollutant capture where possible in the lower and upper catchments impacting the Reserve and aquatic habitat. Investigate WSUD options in Council Coastal Management and Riparian Plans for contributing to improved water quality outcomes for the Reserve.		H
		Maintain gross pollutant traps, trash racks, bioretention basins and sediment ponds within the Reserve in order to retain maximum effectiveness.		H

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Stormwater Runoff and Water Quality	(continued) Reduction in gross pollutants, and sediment rich stormwater entering the Reserve.	Reduce opportunity for stormwater to enter waterways from neighbouring properties through encouragement of on-site retention and reuse in order to minimise flow impacts in creeklines and reduce pollutant loads.	Number of neighbouring projects or development applications actively incorporating WSUD into stormwater management plans.	O
		Establish a neighbour education / promotional programme targeted at minimising diffuse pollutants such as increased seepage from overuse of fertilisers on lawns / gardens and over watering and run off from hard surfaces (such as pools, tennis courts, courtyards etc).		L
		Continue community awareness campaigns for waterway litter and development pollutant impacts from upper catchment through programs such as 'Get the Site Right' private development sediment and erosion campaign and others.	Reduction in gross pollutants and sediment in receiving watercourses – based on monitoring and observation.	O
		Ensure prompt removal of illegally dumped rubbish at the Reserve boundaries and in proximity to Buffalo Creek and Strangers Creek.	Reduction in gross pollutants and sediment in receiving watercourses – based on monitoring and observation.	O
	Protect natural landforms from hazards and high flow events	Monitor existing landforms, natural drainage lines, riparian zones and watercourses to ensure protection and remediation in increasing high flow events leading to potential landslip or bank modification issues.	Buffalo Creek and Strangers Creek are monitored through council waterway programs and active restoration works provided to provide long term stability.	O
	Water Quality Monitoring	Continue to deliver Council's Water Quality Monitoring Program within Buffalo Creek in order to assess water quality change and riparian bank condition.	Ongoing evaluation of water quality data in Buffalo Creek to inform future management programs.	O
		Use the findings of Water Quality Monitoring to identify long term trends in water quality in Buffalo Creek and prepare remedial actions as necessary.		O
	A reduction in residential seepage / run off into the Reserve.	Establish an education / promotional programme targeted at residents adjoining the Reserve aimed at minimising diffuse pollutants such as increased seepage from overuse of fertilisers on lawns / gardens and over watering and run off from pools, tennis courts and other hard surface.	Reduction in seepage and weed infestations adjacent to residential areas.	L

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Climate Change / Resilience Planning	Climate change measures and resilience planning in the Reserve.	Investigate opportunities to integrate climate change measures and resilience planning to mitigate future risks in the Reserve.	Investigate, implement future management strategies and integrate in future upgrades if/as appropriate.	O
		Monitor impacts on estuarine habitats from increased stormwater and sea level rise.	Monitor to investigate change in levels, habitat impacts for intervention programs.	O
		Monitor Reserve species (flora and fauna) change through surveying to consider degradation from climate related impacts such as heat stress, lack of fire, stormwater nutrient concentrations for adaptation planning and intervention works.	Record changes to plan for replanting, planning of fire as required to prevent further species loss.	O
		Review fire regimes against fuel loads to work with fire agencies for necessary burns as required to ensure minimisation of permanent species loss or degradation from habitat decline as related to climate change or exposure impacts.	increase burns to reduce fuel loads, stimulate seed banks within species and regenerate diverse species for fauna.	O

ITEM 8 (continued)

ATTACHMENT 1



4.2.3 Management and Maintenance

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Management and maintenance activities	To provide effective and efficient management of the Reserve.	Undertake maintenance and improvements within the Reserve in accordance with this Plan of Management and Masterplan, City of Ryde Service Level Agreements and the adopted Ryde Biodiversity Plan.	SLA KPIs are delivered and works program adhered to as reviewed annually.	O
		Expand Council's Asset Management System to include the Reserve's built assets such as roads/internal access, carpark, Visitor Centre/Amenities Building, picnic shelters, walking tracks, signs, other recreational facilities, water quality infrastructure etc.	Asset Management System incorporates the Reserve's assets.	H
		All user facilities and infrastructure within the Park will be maintained in a safe, serviceable and presentable condition through a programmed system of monitoring, maintenance and replacement – supported by responsive and opportunistic maintenance works, as required.	Facilities safe, available, fit for purpose and presentable.	O
		Develop a risk assessment methodology for the Reserve assets, undertake regular risk assessment of assets and implement actions to mitigate identified critical risks.	Risk management applied to the Reserve's assets.	H
		Continue the formal forum for regular engagement with the Field of Mars Environmental Education Centre (FOMEED) and Ryde Hunters Hill Flora and Fauna Preservation Society (RHHFFPS) to ensure organisational alignment on the conduct and management of their activities and their interface with the Reserve.	Open communication with FOMEED and RHHFFPS, including regular meetings.	O
		Council encourages the use of the FOMEED during daylight hours only. Investigate potential to establish a memorandum of understanding and to include hours of operation of the FOMEED.	Review opportunities and establish feasibility for MOU, including hours of operation of the FOMEED.	O
		Establish a formal forum for regular engagement with the Field of Mars Cemetery (lands not owned or operated by Council) to ensure organisational alignment on managing cross boundary impacts of the Cemetery's operation.	Formal forum for regular engagement established. Reduced impacts on the Reserve from Field of Mars Cemetery.	O
		Install regulatory signage and enforce.	New signage installed.	O

ITEM 8 (continued)

ATTACHMENT 1



MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Management of restricted and prohibited activities	Restrict prohibited activities within the Reserve (consistent with the Reserve's designation as a Wildlife Refuge).	Restricted activities within the Reserve include, but is not limited to, dog walking (on leash and off leash), horse riding, cycling (including mountain bike riding), motor cycle riding, scooters and other motorised devices (e.g. drones and remote control cars/ planes), overnight parking, camping, use of BBQs or burners and the use of fire arms is strictly prohibited.	Provide education on prohibited activities. Compliance monitored, tracked and compliance measures implemented. Community feedback and reduced annual number of complaints.	O
Areas of cultural significance	Retain and enhance the cultural significance of the area (namely its Aboriginal, aesthetic, archaeological, historical, technical or research or social significance) for past, present or future generations by the active use of conservation methods.	Identify, retain and conserve significant surviving isolated relics and landscape features.	Identify, protect, report and manage areas of cultural and heritage significance appropriately.	O
		Establish protection guidelines for the preservation of identified archaeological relics. This should take into account surrounding bush regeneration works.		O
		Continue to identify any Aboriginal sites found on the Reserve and consult with the Metropolitan Aboriginal Land Council and the National Parks and Wildlife Services. Include in archaeological survey any Aboriginal historic cultural sites and establish protection criteria to prevent their disturbance.		O
		Identify, retain and conserve local heritage items.		O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Waste dumping / Litter	Reduce number of waste dumping and littering incidents.	Monitor the location and frequency of unauthorised activities such as illegal rubbish dumping. A range of adaptive management measures will be implemented according to ongoing and / or escalating illegal rubbish dumping, in order of increasing effort, as follows: <ul style="list-style-type: none"> Education programs to promote intrinsic values of the Reserve and discourage rubbish dumping. Installation of prohibition signage at known dumping hot spots. Increased presence of Council Rangers and/or surveillance activities in hot spot areas. Prosecution of offenders and publication / promotion of outcomes. 	Reduced number of illegal dumping incidents over time, as recorded by Waste / Compliance Team.	H
		Continue to record dumping locations on Council's GIS.	Understanding of hot spots for dumping.	O
		Provide adequate waste and recycling facilities onsite as appropriate.	Provision and maintenance of waste and recycling bins in select locations in the Reserve.	M
		Clean up litter and rubbish dumping promptly to discourage further incidents.	Community feedback and reduced annual number of complaints.	O
		Implement litter reduction strategies (e.g. filtered water station), encourage low/no waste activities and discourage single use plastics in the Reserve.	Reduced waste and litter in the Reserve.	O
		Continue community engagement / information on litter and illegal dumping of waste and reporting incidences of waste dumping.	Illegal waste dumping included in Council community engagement mechanisms.	L

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Funding	Maximise funding for the management and maintenance of the Reserve.	Ensure that within available Council budgets, Council's delivery programs provide and maintain the Reserve to improved standards over time and meet community expectation.	Delivery programs and associated budget prepared annually.	O
		Identify management programs and actions with potential for external grant funding from third parties.	Funds raised from grant applications per annum	O
		Apply for relevant State and Commonwealth grants for the Reserve management and maintenance as grant opportunities allow.		O

ITEM 8 (continued)

ATTACHMENT 1



4.2.4 Community Engagement and Involvement

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Education - School	Provide school environmental education opportunities in the Reserve.	Education facilities within the Reserve will provide school opportunities for enjoyment, learning and appreciation and will not facilitate high impact, intrusive activities – for example, activities negatively impacting or scarring an area site, activities that modify the natural landscape and activities that destabilise or significantly increase potential for erosion impacts.	School environmental education opportunities provided and impacts minimised.	O
		Provide natural exploration and active play opportunities in open space zones, ensuring these are located outside endangered ecological communities and environmentally sensitive areas such as Estuarine Swamp Oak Forest, Saltmarsh and Mangrove Vegetation Communities.		O
		Provision of educational habitat plantings, natural exploration area and facilities made of natural materials for active play, informal seating and teaching circles adjacent to the Environmental Education Centre.		O
Education - Community	Provide community environmental education opportunities in the Reserve	Education facilities within the Reserve will provide community opportunities for public enjoyment, learning and appreciation and will not facilitate high impact, intrusive activities – for example, activities negatively impacting or scarring an area site, activities that modify the natural landscape and activities that destabilise or significantly increase potential for erosion impacts.	Community environmental education opportunities provided and impacts minimised.	O

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Information Provision and Interpretation	Increase community awareness of the Reserve's values, permissible recreational uses and management.	Undertake a review of nomenclature/naming of walking tracks, walking loops and entry point.	Review completed prior to upgrade of wayfinding signage.	H
		Upgrade and standardise orientation and wayfinding signage throughout the Reserve.	New orientation and wayfinding signs installed throughout the Reserve.	H
		Conduct community environmental education programs (e.g. guided bushwalks, bird watching and activities) to enhance community understanding and appreciation of the Reserve and the range of management issues, challenges and Council's management.	Number of education programs conducted.	O
		Upgrade and standardise interpretive signs in the Reserve. Use a consistent style and construction material for new interpretive signs. Potential interpretive themes include: <ul style="list-style-type: none"> The Reserve's designation as a Wildlife Refuge; Biodiversity values of the Reserve and its role in the broader bushland network in City of Ryde and surrounds; Endangered Ecological Communities and their significance; Natural ecosystems and functions; Aboriginal and historic heritage values specific to the Reserve; Human impacts on urban bushland areas; and Neighbour and visitor responsibilities and recreational use restrictions. 	Interpretive signs within the Reserve upgraded and maintained.	H
		Prepare and update maps as required indicating the location of facilities and opportunities within the Reserve.	Maps prepared and available.	O
		Prepare a community education information and distribute to residents adjoining the Reserve. The community education will incorporate information relating to the value of the Reserve and management approaches including but not limited to encroachments, residential seepage and run off, weeds, domestic animals and fire management.	Prepare community education information and distribute to adjoining residents.	M
		Provide walking track map for the Reserve to encourage and ensure access is defined at established entry points.	Maps prepared and available.	M

ITEM 8 (continued)

ATTACHMENT 1



MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Participation in Bushcare	Bushcare volunteers provide effective assistance with management of bushland in the Reserve.	Actively promote Bushcare at public events and through identified Council media and information programs.	Increased participation in Bushcare	O
		Undertake regular reviews of the Bushcare Program to ensure sufficient planning, support, resources, training and supervision is provided in order to adequately undertake activities.	Bushcare program adequately resourced.	H
		Bushcare program activities support biodiversity management priorities this Plan of Management and Masterplan.	Bushcare work programs support biodiversity management priorities.	O
		Provide training to volunteers to ensure skills, knowledge and individual capabilities are appropriate for the Bushcare work program. Ensure training also addresses Work, Health and Safety aspects of Bushcare program activities.	Volunteers receive training.	O
		Conduct regular surveys of Bushcare volunteers or engagement activities to gauge satisfaction with participation in the program and receive suggestions for an enhanced volunteering experience. Use the results to enhance /improve the Bushcare program experience.	Survey leads to enhanced volunteering experience.	M
Advisory Committee	Transparency in the management of the Reserve.	Consult and update the Bushland and Environment Advisory Committee (BEAC) on the Reserve's management programs and priorities, and key initiatives.	Attendance at quarterly BEAC meetings as required and follow up communication as necessary.	O

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Engagement with key site stakeholder organisations	Transparency in the management of the Reserve.	Continue the formal forum for regular engagement with Ryde Hunters Hill Flora and Fauna Preservation Society (RHFFPS) and the Field of Mars Environmental Education Centre (FOMEED) in relation to matters impacting the Park. Council will continue to liaise with, provide information on and seek feedback on relevant new projects, initiatives in the Reserve and works associated with the implementation of the Plan of Management.	Formal forum with key site stakeholders for regular engagement continued.	O
Engagement with adjoining stakeholder organisation/s	Reduced impacts on the Reserve	Establish a formal forum for regular engagement with the Field of Mars Cemetery (lands not owned or operated by Council) to ensure organisational alignment on managing cross boundary impacts of the Cemetery's operation.	Formal forum for regular engagement established. Reduced impacts on the Reserve from Field of Mars Cemetery.	O
Planning and design of facilities	Undertake planning and design improvements in consultation with residents and the broader community.	Engage with known users, the community and internal Council stakeholders during the planning, and design of new facilities.	Community feedback on planned new facilities or improvements.	O
	Ecological function is not diminished or reduced through built activities / facilities.	When existing built assets reach life expectancy, review the 'fit for purpose' position of the asset and any need to relocate the asset out of environmentally sensitive areas and/or incorporate resilience and climate change measures as required.	Built asset replacement considers potential relocation out of environmentally sensitive areas and/or incorporate resilience and climate change measures as required.	O
Education, science and research	Provide environmental education, science and research opportunities in the Reserve.	The Field of Mars Environmental Education Centre will continue to operate as the key mechanism to reach schools and provide information on the Reserve's values, use, management and the broader environmental application.	Number of schools engaged.	O
		Encourage and accommodate the use of the Reserve as an asset for environmental, outdoor and other educational uses – including community-based environmental education projects.	Number of community-based environmental education projects conducted.	O
		Support research activities in relation to the Reserve and its management, with results of research available to Council.	Number of research activities conducted, and results used to better understand the site.	O
		Only educational uses and / or scientific research that do not significantly impact on the Reserve will be permitted. Monitor areas used by educational / research activities to ensure impacts are acceptable.	Number of educational / research projects approved and conducted.	O

ITEM 8 (continued)

ATTACHMENT 1



4.2.5 Leases and Licences

Field of Mars Reserve Draft Plan of Management

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
Leases and Use Agreements	Ensure that use agreements meet legislative requirements, (including biodiversity protection), adhere to planning environmental protection controls, cater for community needs, and are consistent with Council's objectives.	Expressly authorise Council to enter into leases, licences, permits and other estates for use of the Reserve by the community, individuals, schools and commercial organisations as well as individuals providing facilities and services for public use.	All licences and use agreements comply with legislation and Council policy.	O
	Grant leases, licences and other estates in accordance with the Local Government Act 1993, Crown Land Management Act 2016 and this Plan of Management.	Assess and grant applications for leases, licences, permits and other estates with consideration to: <ul style="list-style-type: none"> The Reserve's gazetted purpose; The core objectives for the relevant Reserve community land category; Designation as a Wildlife Refuge status; The public interest; Impacts to the land and adjoining land use; Ecological considerations on species from use; and Council's planning and regulatory requirements. 		O
	Grant leases, licences, other estates and/or use agreements that are consistent with the Reserve's gazetted purpose for "Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna".	This plan expressly authorises the granting of – licences for periods of up to 3 years, temporary licences (up to 12 months duration), and once-off or set (short) duration activity or event permits, and other estates/approvals (excluding leases) – for educational, scientific, community, social, recreational or park management activities (such as fire management or seed collection). Licences and permits will not be granted for activities that: <ul style="list-style-type: none"> May have a negative impact on bushland areas, endangered ecological communities, threatened species or ecological considerations on species; or Have potential to threaten a species ability to exist or expand within the area proposed for use; or Are inconsistent with, or have unacceptable effects on an area's values; or Exclude or unduly disadvantage other users, or are likely to impair an area's reasonable enjoyment by others; or Place excessive demands on Park management. 		O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
(continued) Leases and Use Agreements	(continued) Ensure that use agreements meet legislative requirements, (including biodiversity protection), adhere to planning environmental protection controls, cater for community needs, and are consistent with Council's objectives.	Licences and permits will only be granted for activities that are consistent with the management intent, objectives and authorised uses of the Reserve.	(continued) All licences and use agreements comply with legislation and Council policy.	O
	Grant leases, licences and other estates in accordance with the Local Government Act 1993, Crown Land Management Act 2016 and this Plan of Management. Grant leases, licences, other estates and/or use agreements that are consistent with the Reserve's gazetted purpose for "Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna".	Licences will only be issued for commercial activities where these are: <ul style="list-style-type: none"> Consistent with, or ancillary to, the Community Land categorisation of the proposed location (and any additional reservation purpose); and Do not involve the erection of any building or other substantial structure, or permanent advertising that detracts from the visual qualities of the area. 		O
		Licences and permits will not be granted for activities that are purely commodity or product marketing oriented.		O
		Formalise arrangements with Ryde Hunters Hill Flora and Fauna Preservation Society for non-exclusive use of the Visitors Centre. This agreement will give due consideration to RHFFPS' long association with the Reserve and the value of the environmental information and education service offered.	Use agreement developed and implemented with RHFFPS.	H
		Investigate potential establish a memorandum of understanding between Council and the Department of Education for educational opportunities within the Reserve.	Review opportunities and establish feasibility for MOU.	L
	Ensure that leases and use agreements are monitored regularly for compliance with conditions.	Monitor terms and compliance of licences and use agreements.	Compliance with terms and conditions.	O
		Review terms and conditions of licence and use agreements and renew as necessary.	Reviews completed.	O

ITEM 8 (continued)

ATTACHMENT 1

MANAGEMENT ISSUE	OBJECTIVES / TARGETS	ACTIONS	PERFORMANCE MEASURE	PRIORITY
External Services, Utilities and Easements	Manage the impacts of easements and utilities on the Reserve	Maintain existing and new easements to ensure impacts to ecological values are minimised or mitigated.	Access to easements is retained for utility operators.	O
		Oppose the creation of any additional services or utility installations, or easements, through the Reserve – unless there is an advantage for the Reserve and its management, or an overriding community benefit.	No new utilities or services installation or easements.	L
		Monitor power pole/s and associated vegetation pruning in the Reserve.	Vegetation monitored and pruned as appropriate beneath the power pole/s.	O
		Develop effective and on-going communication protocols with utility providers operating easements through the Reserve, regarding their management requirements / operations and measures to reduce impacts on ecological values – especially in relation to service access, track maintenance, unauthorised or undesirable access, soil erosion, ecological sensitive areas, vegetation clearing, visual impacts and visitor safety. Negotiate access, maintenance and remediation agreements, standards or protocols where possible.	Effective communication protocols in place between utility providers and Council. Reduced impacts arising from easement presence / management.	L

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

5 IMPLEMENTATION AND REVIEW

5.1 FUTURE USES AND DEVELOPMENTS

5.1.1 Permissible Uses and Developments

The Field of Mars Reserve will continue to provide a resource that encourages, promotes and facilitates recreational, educational and social pursuits in the community whilst protecting and enhancing the area's natural values. Recreational use of Field of Mars Reserve is supported by appropriate ancillary facilities, for example walking tracks, shared paths, seating and shelter, directional and interpretive signage where activities do not compromise the integrity of the natural ecosystems or species within the Reserve. This determination will be confirmed through provision of environmental assessment as due diligence to ensure activities or outcomes do not provide a negative or detrimental impact or conflict legislative permitted use or conservation objectives.

Permissible uses and development in Field of Mars Reserve will be consistent with:

- Core objectives and principles for ensuring the protection of biodiversity, flora and fauna as identified in legislation such as the *Biodiversity Conservation Act 2017*, *Environment Protection and Biodiversity Conservation Act 1999* and the *National Parks and Wildlife Act 1974* (insofar as it applies to Wildlife Refuges);
- The Field of Mars Reserve Masterplan Report;
- The values, roles and objectives set out in Section 3;
- The guidelines and core objectives for the relevant category in the *Local Government Act 1993*;
- Activities do not jeopardise the integrity of the land or negative impact as per Council's *Bushfire Risk Management Plan*;
- Uses listed in the *Local Government (General) Regulation 2021*;
- The requirements of the *Crown Land Management Act 2016*, and the *Native Title Act 1993* in the case of Crown land areas;
- Uses permitted on community and Crown land without consent under *SEPP (Transport and Infrastructure) 2021*;
- The objectives for and permissible uses listed under the relevant land zoning in the *Ryde Local Environmental Plan 2014*; and
- Relevant Council policies (refer to Section 1).

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

Any current and planned development and activities should minimise any adverse impacts on both the values and significance of Field of Mars Reserve and any adverse impacts on neighbouring residents and land uses.

In addition to the above, on-going management and any proposed new works or development within Field of Mars Reserve will take into account:

- Planning controls for the land;
- The Reservation purpose of Crown Reserve No. 89474, which is "*The Promotion Of The Study And The Preservation Of Native Flora And Fauna & Public Recreation*";
- The Field of Mars Reserve Masterplan Report;
- Characteristics of the land affected, including natural and cultural heritage values and threats to these values;
- Council's land management obligations under relevant land/resources management legislation and strategies – such as the *Biodiversity Conservation Act 2016*, *Environment Protection and Biodiversity Conservation Act 1999*, *National Parks and Wildlife Act 1974* and *Greater Sydney Local Strategic Plan (Greater Sydney Local Land Services)*, and *Hunters Hill, Lane Cove, Parramatta, Ryde Bush Fire Risk Management Plan*; and
- Existing and future use patterns.

ITEM 8 (continued)

ATTACHMENT 1

Minor changes to Field of Mars Reserve – such as bush regeneration, weed control, and revegetation/replanting programs or replacing damaged track/trail infrastructure or signage – are authorised to be carried out as set out in the relevant service level agreement or as per Council approval for works. The facilities, structures, degree of access/ accessibility and resource/land management measures in Field of Mars Reserve may change over time, reflecting the needs of the community.

The following (as shown in Table 11) are activities or uses that would potentially be permissible within Field of Mars Reserve – dependent on the considerations listed above. This list is not exhaustive, and is indicative only, rather than being limiting or restrictive.

Table 11 Activities and uses permissible within the Field of Mars Reserve

ACTIVITIES AND USES PERMISSIBLE WITHIN FIELD OF MARS RESERVE	
All-abilities access (selected areas, where feasible).	Nature appreciation, bird watching, wildlife viewing, etc.
Biosecurity weed control.	Nature-based independent casual or informal leisure and recreation uses.
Bushland or natural area/resource management demonstration, extension or knowledge-sharing activities – such as field days, site visits or on-site teaching for bush regenerators, natural area managers, professional associations, etc.	Organised outdoor leisure, recreation or community activities (such as Scouting or Guiding activities).
Bushland, wetland and foreshore restoration or regeneration.	Organised, nature-based, outdoor sports or competitive events (such as trail running events or orienteering competitions in designated areas only).
Bushwalking.	Orienteering or rogaining (in designated areas only).
Commercial filming and photography.	Photography and artistic pursuits.
Community gatherings and events.	Picnicking – with facilities or informal/bush picnicking.
Educational or environmental awareness and appreciation uses or events.	Private group leisure or social activities – such as birthday parties, weddings, celebrations, commemorations and dedications.
Escorted/guided nature walks or nature-based activities and other leisure, recreation or tourism experiences.	Provision, operation and maintenance of public utilities and/or infrastructure and access – including stormwater management.
Feral or pest animal control activities.	Public presentations, workshops or lectures/classes, and meetings.
Fire hazard management and fire risk reduction activities.	Rural Fire Service and Fire and Rescue NSW operations.
Geocaching (in designated areas only).	School use – for educational, fitness or well-being activities.
Habitat restoration and enhancement (including habitat manipulation).	Scientific or educational research, studies or investigation – including volunteer or “citizen scientist” programmes.

ITEM 8 (continued)

ATTACHMENT 1

ACTIVITIES AND USES PERMISSIBLE WITHIN FIELD OF MARS RESERVE	
Jogging or fitness training along walking tracks and management accesses.	Seed collection (with appropriate approvals) and soil seedbank translocation.
Native species revegetation and replanting (including replanting of "surplus" grassed areas for bushland restoration or expansion/connection).	Tree planting, removal and maintenance.
Native species conservation, threatened species conservation and biodiversity banking.	Walking for leisure or fitness.

As Council considers necessary, and in accordance with the *Local Government Act 1993* and *Local Government (General) Regulation 2021* and other legislation, development permissible under this Plan of Management may include the following – as shown in Table 12.

Table 12 Development permissible under this Plan of Management

DEVELOPMENT PERMISSIBLE UNDER THIS PLAN OF MANAGEMENT	
Bushland, weed control, revegetation, tree planting and tree care, and habitat management and maintenance works.	Identification, orientation, directional/wayfinding, information, interpretive/educational, warning, regulatory and other signage (or other visitor information media).
Bridges, causeways and decks.	Landscape establishment and maintenance works.
Construction and maintenance of public utilities – including stormwater infrastructure.	Management, service and emergency vehicle access tracks.
Erosion control, stabilisation and remediation works.	Observation platforms and lookouts.
Establishment and maintenance of asset protection zones, accesses, and other fire hazard management and fire-fighting works or facilities (including the provision of on-site fire equipment).	Structures for the purposes of stormwater treatment and or retention (as prescribed in section 28 of the Regulations).
Facilities to support, or ancillary to, visitor access and use of the lands – such as seating, picnic tables, shelters, drinking water, rubbish and recycling bins, drainage/irrigation, landscape or amenity plantings.	Walking tracks, walkways/pathways, shared paths – of varying standards (including improvements such as boardwalks, steps/stairs, safety railings, etc.).

Maintenance of the above, and other, works and developments within Field of Mars Reserve is authorised to be carried on a programmed, "as needed" or responsive, and opportunistic basis. This includes the maintenance, upgrading, closure, and realignment/remediation of existing tracks (as well as informal tracks), the rehabilitation of closed/dis-used routes and the construction of new tracks or alignments.

ITEM 8 (continued)

ATTACHMENT 1

5.1.2 Scale and Intensity of Permissible Uses and Developments

The scale and intensity of development and activities on community land or Crown land within Field of Mars Reserve is generally dependent on:

- The Field of Mars Reserve Masterplan Report;
- The natural and cultural heritage values of the land, and any special protection measures or limitations mandated/ warranted by these values (such as endangered ecological communities, and endangered populations);
- The nature of the approved uses and developments;
- The physical constraints of the land;
- The capability and “carrying capacity” of the land, and its suitability for the proposed development or use;
- Relevant legislation, plans and policies;
- Approved development applications and any conditions;
- Potential impacts on, or conflicts with, existing users;
- Proximity of neighbours, noise-sensitive and parking-sensitive land uses; and
- Permissible times of use.

5.1.3 Approvals for Permissible Activities

General requirements

While a Plan of Management expressly authorises and enables certain functions such as the issuing of leases and licences in Field of Mars Reserve, any development in the Reserve still requires the relevant planning approvals to be undertaken. Capital projects undertaken by Council within Field of Mars Reserve would require community engagement to be undertaken as part of the delivery of the project.

Planning controls established in the *Environmental Planning and Assessment Act 1979* and *Ryde Local Environmental Plan 2014* set the framework for approving permissible activities in Field of Mars Reserve.

In addition, Section 3.39 of the *Crown Land Management Act 2016* requires that Council approval of activities on dedicated or reserved Crown land under Part 1 of Chapter 7 of the *Local Government Act 1993* must comply with the Plan of Management for the land.

Sections 69 to 74 of the *Local Government Act 1993* deal with approvals required for activities on Crown land.

Public works

Where a public work is proposed to be constructed or established on Crown reserves created prior to 23 December 1996 and native title is not extinguished, it is a requirement of the *Native Title Act 1993* that the City of Ryde notify any registered native title claimants, registered native title bodies corporate and representative Aboriginal / Torres Strait Islander bodies and provide them with the opportunity to comment. At the time of adoption of the Plan of Management there were no registered native title claimants or registered native title bodies corporate. The representative Aboriginal body for NSW is NTSCORP Limited.

The *Native Title Act 1993* defines a public work as:

- (a) Any of the following that is constructed or established by or on behalf of the Crown, or a local government body or other statutory authority of the Crown, in any of its capacities:
 - (i) A building, or any other structure (including a memorial), that is a fixture; or
 - (ii) A road, railway or bridge; or
 - (iia) Where the expression is used in or for the purposes of Division 2 or 2A of Part 2 - a stock-route; or
 - (iii) A well, or bore, for obtaining water; or
 - (iv) Any major earthworks; or
- (b) A building that is constructed with the authority of the Crown, other than on a lease.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

On Crown land where it is proposed to construct or establish a public work where native title is not extinguished, 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 or lease as required under the *Native Title Act 1993*.

Where a proposed update of a Park Masterplan or any other plan is the approving documentation for a public work on Crown land, that approval will not be given unless the requirements of the *Native Title Act 1993* have been addressed, including the notification and opportunity to comment noted above.

5.1.4 Prohibited uses and developments

Activities that are prohibited or restricted within Field of Mars Reserve include, but are not limited to:

- Bicycle riding (including BMX, mountain bikes and electric/motorised bike and scooters, unless required for low impact disability access);
- Camping and overnight uses (unless subject to special application/approval);
- On-leash and off-leash dog walking;
- Lighting of fires (unless subject to special application/approval);
- Firearms (unless subject to special application/approval for feral or pest animal control activities);
- Horse-riding;
- Remote control vehicles – including drones, boats, aeroplanes and cars;
- Riding motorbikes, trailbikes or other vehicles off public roads;
- Unauthorised vehicles; and
- Dumping of waste materials (including organic).

The activities which are prohibited in Field of Mars Reserve may be listed on regulatory signs at entry points or at prominent locations within the Reserve. A person who fails to comply with the terms of such a sign is guilty of an offence for which penalties apply under Section 6.3.2 of the *Local Government Act 1993*.

Prohibited uses also include any land uses that are not permitted with or without development consent in the Ryde *Local Environmental Plan 2014*.

Crown land may not be utilised for purposes inconsistent with the purposes for which it is dedicated or reserved (or any purpose incidental or ancillary to a purpose for which it is dedicated or reserved) unless it is authorised by an Act including for any prescribed purpose under Section 2.20 of the *Crown Land Management Act 2016*.

Despite any other clause in this Plan of Management, no future act is permitted on Lot 307 DP752035 unless:

- i. The land becomes excluded land for the purposes of the *Crown Land Management Act 2016*, or
- ii. The act is a tenure which satisfies the requirements of Section 24HA (Management of Water and Airspace) of the *Native Title Act 1993*, or
- iii. The act is a facility which satisfies the requirements of Section 24KA of the *Native Title Act 1993*, or
- iv. The act is a low impact act and satisfies the requirements of Section 24LA of the *Native Title Act 1993*.

Any act authorised under Section 24LA of the *Native Title Act 1993* will terminate, after an approved determination of native title is made in relation to the land or waters, if the determination is that native title exists.

ITEM 8 (continued)

ATTACHMENT 1

5.2 LEASES, LICENSES, PERMITS AND OTHER ESTATES

5.2.1 What is a Lease, Licence and Other Estate?

The *NSW Local Government Act 1993* and the *Crown Land Management Act 2016* allow Councils to grant leases, licences and other estates over all or part of community land.

Section 3.22 of the *Crown Land Management Act 2016* requires, with some specific exceptions, that a Council manager of Crown lands “must manage the land as if it were community land under the *Local Government Act 1993*” and has “for that purpose all the functions that a local council has under that Act in relation to community land (including in relation to the leasing and licensing of community land)”. The *Crown Land Management Act 2016* provides that any existing lease, licence or permit issued under the previous *Crown Lands Act 1989* will continue for their agreed term. However, from 1 July 2018 all new leases, licences and permits will be issued under the new Crown lands legislation.

A lease, licence or permit is a contract between a land owner (or authorised manager) and another entity, granting that entity a right to occupy a particular area for a specific period of time.

Leases, licences and permits formalise the use of community land by groups – such as environmental groups, educational or scientific organisations, community groups, schools, sporting clubs or user groups, or by commercial organisations and individuals providing facilities and/or services for public use.

A lease will be typically required where exclusive use or control of all or part of Field of Mars Reserve is desirable for effective management, to deliver maximum benefits for the Reserve’s values or community, for necessary security and safety measures, or where the relationship between a user/activity and Field of Mars Reserve justifies security of tenure. Leases may be granted for exclusive use to any group or organisation for any community purpose as determined by Council, on such terms as Council may provide.

Licences allow multiple and non-exclusive use of an area. A licence may be required where intermittent or short term use or control of all or part of Field of Mars Reserve is proposed. Several licences for different users can apply to the same area at the same time, provided there is no conflict of interest.

Leases and licences must consider the Reserve’s purpose for “*Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna*”.

The definition of “estate” under Section 21 of the *NSW Interpretation Act 1987* includes other rights over land such as easements, including “interest, charge, right, title, claim, demand, lien and encumbrance, whether at law or in equity”.

5.2.2 Authorised Leases, Licences, Permits and Other Estates

Authorised areas for leases, licences, permits and other estates

A lease, licence, permit, other estate or easement (use agreement) may be granted over all or part of Field of Mars Reserve.

Leased or licenced areas may be renewed or altered in the future to reflect changes in community needs.

Authorised uses and developments under lease, licence, permit or other estate.

In general, Council will balance current community needs with the anticipated use of Field of Mars Reserve in the immediate future, and the anticipated future pressures on these areas, in granting leases, licences and other estates.

This Plan of Management expressly authorises Council to enter into a lease, licence or estate in respect of Field of Mars Reserve for the purpose of appropriate recreational, educational, community, scientific or land management activities – subject to the constraints and considerations discussed below (also see Table 13).

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Granting of leases, licences, permits, other estates and easements for the use or occupation of land covered by this Plan of Management are expressly authorised under Section 46 of the *Local Government Act 1993* are permissible for uses consistent with:

- The provisions listed in the *Local Government Act 1993* (Section 46), its Regulation, and the *Crown Land Management Act 2016*;
- There being a clear reason for granting a lease, and the lease is consistent with the intended use of the land;
- The use being compatible with the core objectives for the category as outlined in the *Local Government Act 1993*;
- The zoning objectives listed in the *Ryde Local Environment Plan 2014*;
- The capability of the land to support the proposed activities to be permitted by the lease or licence
- The acceptability of anticipated environmental impacts of the proposed activities to be permitted by the lease or licence, or any impacts on the land's natural and scenic values, or the disturbance of neighbours;
- The overarching objectives in this Plan of Management;
- Subject to the *Native Title Act 1993*, the Crown land reserve purpose and any secondary interest or short term licence described in Division 2.5 of the *Crown Land Management Act 2016*; and
- There is a very strong link between the nature of the asset or area and the proposed tenant, e.g. a lease of part of the Visitor Centre to Ryde Hunters Hill Flora and Fauna Preservation Society, or a licence to an educational organisation to use an outdoor learning area.

The use must not have a detrimental impact on the land, environment or the community.

The public's right to access the land must be preserved.

Sub-leases are only allowable for the same purpose as the original lease.

Section 47B of the *Local Government Act 1993* places additional limitations on leases and licences in respect of area categorised as Natural Areas. In summary, this section requires that within Natural Areas approval must not be granted to authorise the erection or use of a building or structure except for the following buildings or structures:

- Walkways;
- Pathways;
- Bridges;
- Causeways;
- Observation platforms;
- Signs;
- Information kiosks;
- Refreshment kiosks (but not restaurants);
- Work sheds or storage sheds required in connection with maintenance of the land; and
- Toilets or rest rooms.

This Plan of Management expressly authorises Council to enter into a lease, licence or estate to authorise, at its discretion, a permit to enable a person to do, without the need for public notification, one or more of the following:

- To transport material and equipment required in relation to work that is to be carried out on land adjoining the community land; and
- To remove waste or other material that is consequential to such work.

Such access permits will only be authorised if no other alternative is feasible or practical (and not simply as a cost saving measure), and where such access does not require land/vegetation clearing and does not significantly impact the values of Field of Mars Reserve or compromise the land's management objectives. Council may require a bond in respect of potential damage and restoration/remediation costs, and may also require proof of suitable insurances.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

This Plan of Management expressly authorises the leasing, licencing or granting of other estate in accordance with section 46(1)(a) of the Act if essential for the provision of public utilities and works associated with or ancillary to public utilities.

A lease, license or other estate may be granted, in accordance with 46(1)(a) of the Act, for the purpose of providing pipes, conduits or other connections under the surface of the ground for the connection of premises adjoining the community land to a facility of the council or other public utility provider. Such authorisations will only be issued if there is no feasible alternative to connecting to a facility on the community land, and the values of Field of Mars Reserve are not likely to be significantly impacted and the community land's management objectives are not unduly compromised. Council may require compensation where such works involve the creation of an easement and/or any restriction on the future usage or development potential of the community land.

This Plan of Management expressly authorises the leasing, licencing or granting of other estate to telecommunications carriers on Council owned Community land including, but not limited to, those defined by the *Telecommunications Act 1997*, where the terms of the grant are consistent with Council's obligations under the *Local Government Act 1993*.

Communications infrastructure on Crown Land is leased/licenced directly by the NSW Government, in accordance with Section 3.15 *Crown Land Management Act 2016* and *Crown Land Management Rule 18/01*. Council, as the Crown Land Manager, cannot grant any lease or licence authorising:

- The installation or construction of communication infrastructure on Crown land
- The placement of communications infrastructure on Crown land
- The use of communications infrastructure that is located on Crown land
- Access to communications infrastructure that is located on Crown land.

In accordance with sections 46(c) and 47AA of the Act a lease, licence or other estate in respect of community land may be granted to permit a filming project to be carried out (including the erection and removal of temporary buildings or structures necessary to enable a filming project to be carried out) –where activities by the applicant demonstrate no negative impact to Field of Mars Reserve, reinstatement assurance is provided (by bond) and documentation is provided to Council to outline the extent of activities and footprints to assess environmental impact.

Existing and new easements are to be maintained without undue impact on the function of the Natural Area.

The development of any infrastructure associated with the issuing of any lease, license, permit or other estate would be subject to the relevant planning approvals being granted under the *Local Government Act 1993*, the *Environmental Planning and Assessment Act 1979* and/or the relevant State Environmental Planning Policy.

A lease, licence or permit over Crown land may impact native title rights and interests. Any lease, licence or permit 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. 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.

Use agreement periods

Section 46 (3) of the *Local Government Act 1993* specifies that Council must not grant a lease or licence for a period (including any period for which the lease or licence could be renewed by the exercise of an option) exceeding 21 years, or 30 years with the Minister's consent.

Leased or licensed areas may be renewed or altered in the future to reflect changes in community needs or the management requirements of Field of Mars Reserve.

Short term leases, licences and permits allow the City of Ryde to program different uses at different times.

Leases, licences and permits authorised to be granted within Field of Mars Reserve in the short term (less than 1 year) and long term (more than 1 year) are listed in Table 13.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Table 13 Authorised short-term and long-term leases, licences and permits

SHORT-TERM LEASES/LICENCES/PERMITS (LESS THAN 1 YEAR)	LONG-TERM LEASES/LICENCES (MORE THAN 1 YEAR)
<ul style="list-style-type: none"> Educational or environmental awareness and appreciation uses or events. Scientific research, data collection, experiment, field trial or study purposes. School hiring for educational, fitness or well-being uses. Bushland or natural area/resource management demonstration, extension or knowledge-sharing activities. Seed or soil collection (licences issued under the <i>National Parks and Wildlife Act 1974</i> and the <i>Biodiversity Conservation Act 2016</i> may also be required). Organised nature-based outdoor sports or competitive events (such as orienteering, regaining or trail running). Rural Fire Service and Fire and Rescue NSW operations. Private group leisure or social activities – such as picnics, birthday parties, weddings, celebrations, commemorations and dedications. Public presentations, workshops or lectures/classes, and meetings. Community gatherings and events. Cultural events and public performances. Mobile food and refreshment vending. Commercial filming and photography. 	<ul style="list-style-type: none"> Ryde Hunters Hill Flora and Fauna Preservation Society occupation and use of part of the Visitors Centre/Amenities building. On-going use for educational purposes of Field of Mars Reserve by the Department of Education's Field of Mars Education Centre. Scientific research, data collection, experiment, field trial or study purposes. Bushland or natural area/resource management demonstration, extension or knowledge-sharing activities. Rural Fire Service and Fire and Rescue NSW operations. Organised outdoor leisure, recreation or community activities (such as Scouting or Guiding activities). Escorted/guided nature-based leisure, recreation or tourism uses. Organised nature-based or outdoor sports or recreational pursuits – centred on built facilities/ nodes or specific locations/features. Low intensity refreshment kiosks. Public utilities and/or works associated with relevant legislation such as the <i>Telecommunications Act 1997</i> (applicable on Council owned Community land) is leased/licenced directly by Council. Communications infrastructure on Crown Land are leased/licenced directly by the NSW Government, in accordance with <i>Section 3.15 Crown Land Management Act 2016</i> and <i>Crown Land Management Rule 18/01</i>.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Public notification

Section 47(1) of the *Local Government Act 1993* requires that any proposed lease, licence or estate of community land for a period exceeding 5 years is advertised and community comment sought. Any comment received must be considered by Council. Under Sections 46 and 47 a lease should not proceed if Council has received an objection to the proposed lease, other than with the consent of the Minister administering the *Local Government Act 1993*.

5.2.3 Tendering for Use Agreements

Section 46A of the *Local Government Act 1993* requires Council to follow a tender process for leases, licences and other estates of community land over 5 years, unless the use agreement is to be granted to a non-profit organisation.

Any leases, licences and other estates of community land for commercial uses, regardless of term, will only be entered into after a tender process in accordance with the *Local Government Act 1993*.

5.2.4 Applications for Use of Field of Mars Reserve

Applications for use of the Field of Mars Reserve will be required for private group leisure or social activities such as picnics, birthday parties, weddings, celebrations, commemorations and dedications.

Major events in Field of Mars Reserve will require the organiser to complete a Major Event Application and submit the necessary information so that Council can assess its suitability and environmental impact. The applicant may be required to demonstrate the extent of activity and prepare an environmental risk based assessment prior to approval.

Hire events conducted by Council, individuals, community or sporting groups will be assessed and approved through the issuing of a permit. Use of Crown land and permits on Crown land will be issued in accordance with the *Native Title Act 1993*.

5.2.5 Native Title Considerations for Use Agreements

Prior to the approval, any use agreement on Crown land will require Native Title Manager advice under the *Crown Land Management Act 2016*.

5.3 IMPLEMENTATION

Upon adoption of this Plan of Management Council is obliged to carry out its recommendations in order of priority established in the Action Plans in Chapter 4 over the next 5 to 10 years.

Field of Mars Reserve will continue to be managed by City of Ryde as either owner of Community Land under the *Local Government Act 1993* or as Council Crown Land Manager under the *Crown Land Management Act, 2016*.

It should be recognised however that commencement and completion of the recommended actions in this Plan of Management depends on available Council resources, funding, and Council's priorities in its annual works program (as discussed further in Section 5.4 below).

Implementation of this Plan of Management will involve engagement between Council and all relevant community and third party stakeholders to ensure the recommended actions continue to conserve biodiversity and meet the community's changing needs for Field of Mars Reserve. Community consultation and engagement will be developed in accordance with the specific planning, works and actions for individual sites.

The community will also have an opportunity to participate in reviews and updates of this Plan of Management and subsequent versions when they are placed on public exhibition for comment.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

5.4 FUNDING

This Plan of Management contains a substantial list of management actions. Some of these are management guidelines, providing policies or directions to guide future decision-making for the Reserve's management.

However, many are physical actions that will require the commitment of Council funds or resources – such as staff time – to implement. Council does not have the capacity to undertake all of these, more resource-intensive, management actions immediately.

Management and development of the Field of Mars Reserve will ultimately be reliant on, and largely determined by, the funding and resources available to the City of Ryde.

As such the Reserve's capital works, maintenance demands and other management actions must be assessed against the other priorities of Council. Budget allocations will be assigned as part of Council's wider rolling Council Delivery Program and shorter-term annual Operational Plans, annual budget cycles and works/activity planning for Council's various units.

Council also provides funds and resources for the operational management of the Reserve – including staff salaries, contract services, repairs and maintenance, and the like – and may also potentially raise limited income from the Reserve's use (such as licence payments, permits fees, etc.). However, Council invariably funds the Reserve's management, and development, in excess of any net revenue generated by the area.

In view of these financial realities/constraints a priority was assigned to each Management Action identified in Section 4 – High, Medium or Low – to reflect their relative importance and implementation timing in order to achieve the Plan's objectives. Actions can also be single once-off tasks or, as for many actions, "ongoing" – where the action in question will require funding throughout the Reserve's management and/or the life of this Plan of Management. As noted above, many actions which are of a more management guideline, policy or direction-setting character may not require the direct allocation of resources.

Funding and resources may come from many sources – including specific-purpose grant funding, volunteer involvement, licensee involvement and responsibilities, corporate donations, sponsorship, stakeholder fund raising, bequeaths, and others.

As a result of this "reality", identified Management Actions of different priority may proceed in differing orders or at different rates – and high priority actions need not necessarily precede lower-priority actions. Implementation of some actions may also need to be timed in concert with other actions, as well as in cases being contingent on (or influenced by) the results of other actions, changing management circumstances, or opportunities to gain management efficiencies. In some cases, the resources to deliver a low priority or longer-term action may be available before a high priority action. This may be due to the amount of money required, or the project being funded from resources other than City or Ryde funds, or factors outside of Council's control.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

5.5 EVALUATION, REPORTING AND REVIEW

5.5.1 Evaluation and Reporting

The objectives, actions and performance measures outlined in this Plan of Management provide a basis for qualitative reporting on the performance of the City of Ryde in managing the Field of Mars Reserve and progress in implementing the Plan. Evaluation of performance should be undertaken at the end of each financial year to align with Council's reporting requirements.

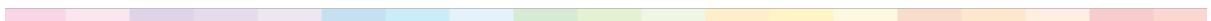
The Reserve's management, development and financial performance should – ideally – be included in Council's Annual Report. Council may also choose to audit and report on the implementation of this Plan of Management as part of its established reporting practices.

5.5.2 Review

Typically, a Plan of Management will remain relevant and have a time horizon of approximately ten years. However, management strategies and actions can be reviewed and updated prior to this "use-by" date if required.

Implementation of this Plan and its ongoing relevance will be reviewed annually as part of Council's internal and external reporting processes.

Consideration of the need for a major review and update of this Plan of Management should occur ten years from the date of adoption of the Plan, if not undertaken prior.



ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

APPENDICES



ITEM 8 (continued)

ATTACHMENT 1

APPENDIX A

Field of Mars Reserve land information

LOT	DP	OWNER	STATUS
3	DP1072597	City of Ryde	Community Land – owned and managed by the City of Ryde.
1	DP208410	City of Ryde	
11 (section 1)	DP2183	City of Ryde	
C	DP31192	City of Ryde	
S	DP31252	City of Ryde	
Z	DP31253	City of Ryde	
625	DP31680	City of Ryde	
2	DP419992	City of Ryde	
A	DP433420	City of Ryde	
B	DP433420	City of Ryde	
C	DP433420	City of Ryde	
Z	DP445797	City of Ryde	
1	DP500228	City of Ryde	
4	DP504909	City of Ryde	
1	DP602025	City of Ryde	
1	DP605140	City of Ryde	
3	DP707829	City of Ryde	
8	DP711149	City of Ryde	
306	DP752035	City of Ryde	
308	DP752035	City of Ryde	
102	DP791791	City of Ryde	
5	DP814502	City of Ryde	
7011	DP1069836	State of NSW (Crown Land)	Crown Reserve No. 89474. Reserved for “Public recreation and promotion of the study and the preservation of native flora and fauna” on 20 June 1975. Managed by the City of Ryde as appointed Council-manager.
7358	DP1160800	State of NSW (Crown Land)	
172	DP752035	State of NSW (Crown Land)	
258	DP752035	State of NSW (Crown Land)	
259	DP752035	State of NSW (Crown Land)	
261	DP752035	State of NSW (Crown Land)	
307	DP752035	State of NSW (Crown Land)	
755	DP752035	State of NSW (Crown Land)	
C	DP310314	Transport for NSW	Owned by Transport for NSW, managed by the City of Ryde.
2	DP500228	Transport for NSW	
7	DP711149	Transport for NSW	

ITEM 8 (continued)

ATTACHMENT 1

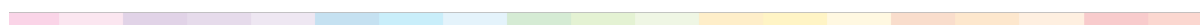


Field of Mars Reserve Draft Plan of Management

APPENDIX B

Field of Mars Reserve Land Categorisation Map (October 2023)

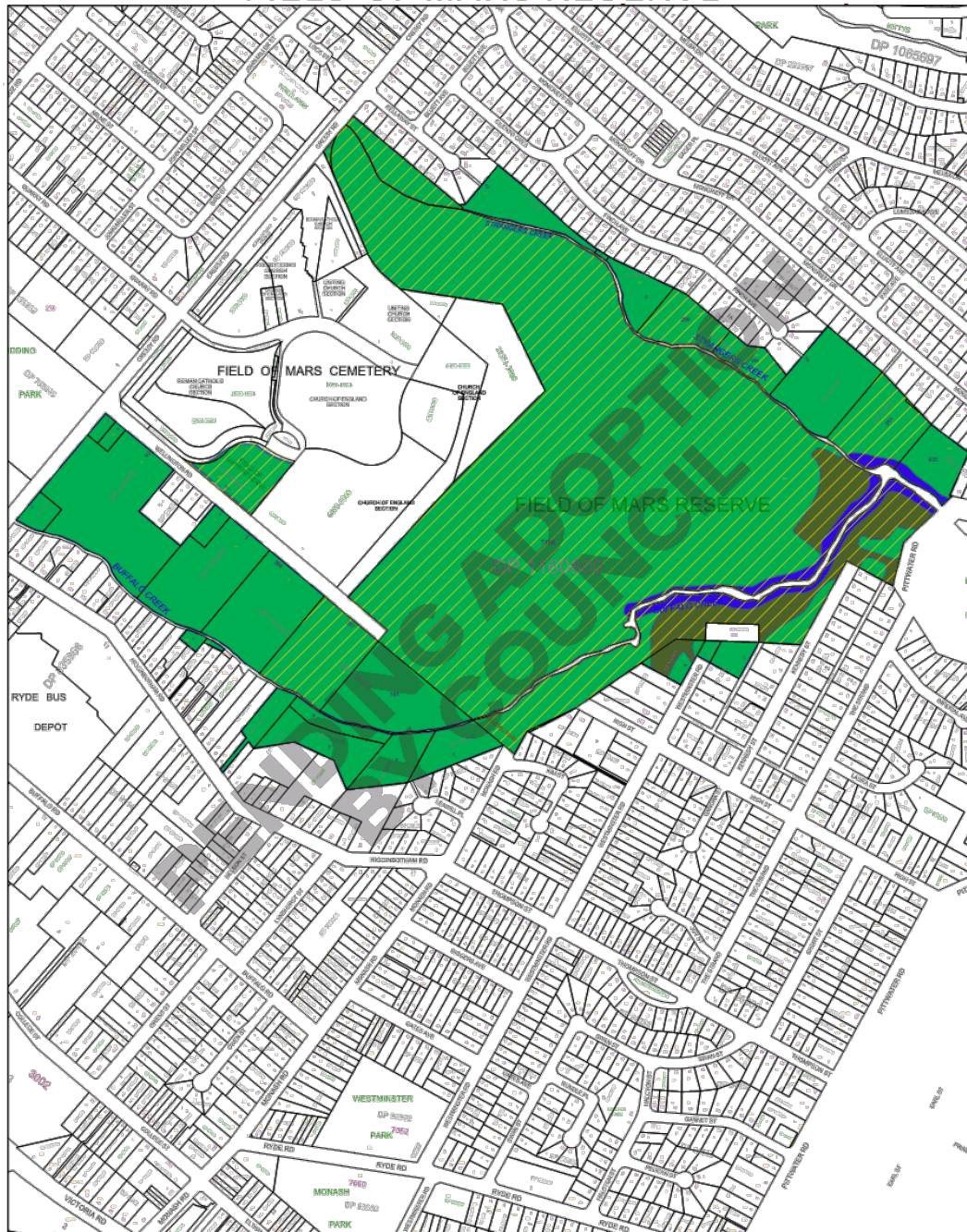
PENDING ADOPTION
BY COUNCIL



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE



Community Land Categorisation Legend



General Community Use	Natural Areas - Wetlands
Natural Areas - Bushland	Parks
Natural Areas - Escarpment	Sportsgrounds
Natural Areas - Foreshore	Park Boundary
Natural Areas - Watercourse	Crown Land

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

APPENDIX C

Field of Mars Reserve Masterplan Report (adopted August 2021).

ITEM 8 (continued)

ATTACHMENT 1



FIELD OF MARS RESERVE MASTERPLAN REPORT

ADOPTED
AUGUST 2021

 **City of Ryde**
Lifestyle and opportunity
@ your doorstep

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTENTS

SECTION 1: INTRODUCTION	3
Introduction.....	4
Background Summary: Matters to be addressed by the Masterplan	5

SECTION 2: CONTEXT ANALYSIS: mapping.....	7
Location in the City of Ryde	8
Biodiversity and Park Connections in City of Ryde	10
Access.....	12
Biodiversity and Park Connections	14
LEP 2014 Zoning	16

SECTION 3: SITE ANALYSIS: mapping and images... 	19
Land Categorisation (2009).....	20
Access and Landscape.....	22
Environment.....	24
Usage	26
Flood Prone Land and Utilities	28
Bushfire Prone Land.....	30
Images - Entry Points	32
Facilities	34
Open Space Zones.....	35
Paths and Tracks	36
Vegetation Impacts.....	38
Signage.....	39

SECTION 4: MASTERPLAN	44
Design Strategy	44
Information.....	47
Detail Plan 1 Eastern Open Space Zone.	51
Detail Plan 2 Western Open Space Zone.....	52
Detail Plan 3 Central and Southern Open Space Zones.	53
Grade 2 Track.....	54
Grade 3 Track.....	55
Precedent Images -	
Entry Treatments and Park Furniture	56
Signs.....	57
Nature Exploration and Edge Management....	58
Bushland Tracks Grade 2.....	59
Bushland Tracks Grade 3.....	61
Accessible Paths / Tracks and Informal Access.....	63
Vegetation Types.....	64
Stormwater Management	65

SECTION 5: IMPLEMENTATION PLAN	66
Project Implementation Plan	67
Section 6: REFERENCES	69
Relevant Acts and Strategic Documents.....	70
Flora and Fauna.....	74
Water Management	75
Reserve Management and History	77
Track Standards / Photo Credits.....	79

This Masterplan Report was prepared by:  **City of Ryde**



Technical content, plans and Images (unless otherwise credited): Gondwana Consulting
Masterplan Report graphic design layout and images (unless otherwise credited): City of Ryde
Images (unless otherwise credited): Field of Mars Environmental Education Centre

Revision	Date	Status
1	March 2021	Initial Draft for Council Review
2	April 2021	Draft for Stage 2 Community Consultation
3	June 2021	Draft updated following Stage 2 Community Consultation
4	July 2021	Draft re-formatted by Council for adoption
5	August 2021	Final adopted by Council
6	October 2023	Updated following public hearing for proposed land categorisations (pending adoption)
7	Pending	Updated with adopted land categorisations

2

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

INTRODUCTION

City of Ryde Council (Council) has a diverse network of open space that covers various levels of recreation use. The Field of Mars Reserve (the Reserve) is the largest remnant bushland reserve under the care, control and management of the City of Ryde covering approximately 50 hectares.

The Reserve is located in East Ryde and it is bounded by Cressy Road, Buffalo Creek, Pittwater Road, Moncrieff Drive, Finch Avenue and Kellaway Street. The Reserve forms part of a wider open space system and habitat corridor network which includes, the Field of Mars Cemetery to the west and linkage parks such as Pidding, Barton and Burrows Parks and to the east, the Lane Cove National Park (NSW National Parks and Wildlife Service) and Buffalo Creek Reserve (Hunters Hill Council).

The Reserve was established as a *Reserve for Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna* in 1975. Council has been the appointed Trustee of the Reserve since 1988. The Reserve is a Wildlife Refuge under the *NPWS Act 1974* and is nominated as a Wildlife Protection Area under the *Companion Animals Act 1998* (CAA). Cats and dogs are excluded from the Reserve at all times.

The Reserve is valued as a significant wildlife refuge. The environmental values of the reserve are paramount and underpin the management protocol for the Reserve. The Reserve represents an intact transition of ecological communities from upper Shale areas to lower wetland areas.

The purpose of this Masterplan is to:

- To locate new and existing facilities such as boardwalks, walking tracks, amenities building, signage etc in a coherent and considered manner
- Review and develop a walking trail hierarchy
- Identify how the Reserve will be upgraded over the next 20 years.

The Masterplan aims to:

- Establish processes that enable the future enhancement and management of the Reserve's Natural Areas, biodiversity and habitat.
- Conserve biodiversity and maintain ecosystem function, protection and conservation.
- Conservation of the natural vegetation of Reserve especially endangered ecological communities and habitat areas for threatened species.
- Establish and manage environmentally and ecologically sensitive areas of remnant bushland, water courses, and wetlands.
- Put in place measures that will minimise and mitigate any disturbance caused by human intrusion.
- Guide Council's management of existing assets, to minimise impacts on natural areas and ensure management aligns with legislative protection outcomes.
- Identify the importance of corridor linkages and connections between the Reserve and other parks and reserves both within the City of Ryde and with neighbouring catchments and Local Government Areas.
- Consider stormwater management in the Reserve and the interrelationship with Buffalo Creek, Strangers Creek and the wider Lane Cove River catchment.
- Ensure the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including places, objects and features of significance to Aboriginal people.
- Ensure that appropriate public use, educational opportunities and enjoyment of the Reserve is encouraged without compromising its natural values.
- Ensure the aims, objectives and actions align with applicable legislations and Council's other adopted plans and strategies such as the *Ryde Biodiversity Plan 2016*.



4

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

BACKGROUND SUMMARY: Matters to be addressed by the Masterplan

(For more detail refer to the summary of background references in Section 5 of this report)

ASPECT GROUP	KEY POINTS / MASTERPLAN OPPORTUNITIES
Access, Use and Circulation	<ul style="list-style-type: none"> Encourage access to the Reserve via public transport. Increase access to open space and provide for healthy and active living, enhance recreational use. Provide visual amenity and public access to foreshores and rivers. Provide facilities for walkers and cyclists (within the context that bike riding and dog walking are not permissible within the reserve). Provide for increased and more accessible use, accommodate access and use by all of the community.
Character and Facilities	<ul style="list-style-type: none"> Protect heritage places and landscapes along with cultural heritage. Provide an attractive, sustainable and well designed environment. Improve waste and recycling facilities. Provide resilient infrastructure. Potential to increase recreational opportunities particularly within the cleared areas near Pittwater Rd. Provide facilities for walkers and passive users such as seating, shade and play areas. Provide facilities for disabled access and improve accessibility to facilities and buildings.
Environment: Flora and Fauna	<ul style="list-style-type: none"> Protect and manage habitat to provide wildlife refuge. Conserve local flora and fauna. Protect the habitat of the rare and threatened species as well as continuing to provide and improve habitat to increase biodiversity. Protect flora species of conservation significance and protect Endangered Ecological Communities from biodiversity threats as highlighted in the Biodiversity Plan 2016.
Environment: Green Corridors	<ul style="list-style-type: none"> Assist with the provision of ecological connectivity. Manage the Reserve within the context of the local green corridors. Enhance the biodiversity values of the Reserve to assist with the functions of the various connected corridors.
Environment: Stormwater Management	<ul style="list-style-type: none"> Protect and improve the natural character and ecological integrity of Ryde waterways. Minimise disturbance to riparian areas. Apply vegetated riparian zone widths as recommended by the NSW Office of Water guidelines, along with allowable activities asset protection, pathways, planting, disturbance, creek crossings and stormwater infrastructure. Manage stormwater using WSUD principles. Include proposals for the riparian zones of Buffalo and Strangers Creeks contained within the City of Ryde Riparian Protection and Rehabilitation Management Plan 2013.
Environment: Threats to Biodiversity	<ul style="list-style-type: none"> Reduce impacts on natural systems. Consider issues of bushfires, flooding, sea level rise, drought and air quality. Address threats to biodiversity through environmental design and management and efficient use of resources. Enhance estuarine communities and identify vegetation under threat of sea level rise and areas into which they can retreat. Develop the Reserve to reflect the Biodiversity Themes established in the Ryde Biodiversity Plan 2016. Implement the relevant recommendations of the Flora and Fauna Study 2017. The Reserve was used for tipping in the areas around the confluence of Buffalo and Strangers Creek and around the Visitors and Education Centres.
Information	<ul style="list-style-type: none"> Notify park visitors of requirements to exclude cats and dogs. Notify park visitors of requirements to protect and manage habitat to provide wildlife refuge. Promote raising awareness amongst the community about the values of local bush. Foster volunteer community bushcare groups. Opportunity to display and interpret biodiversity information.

5

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

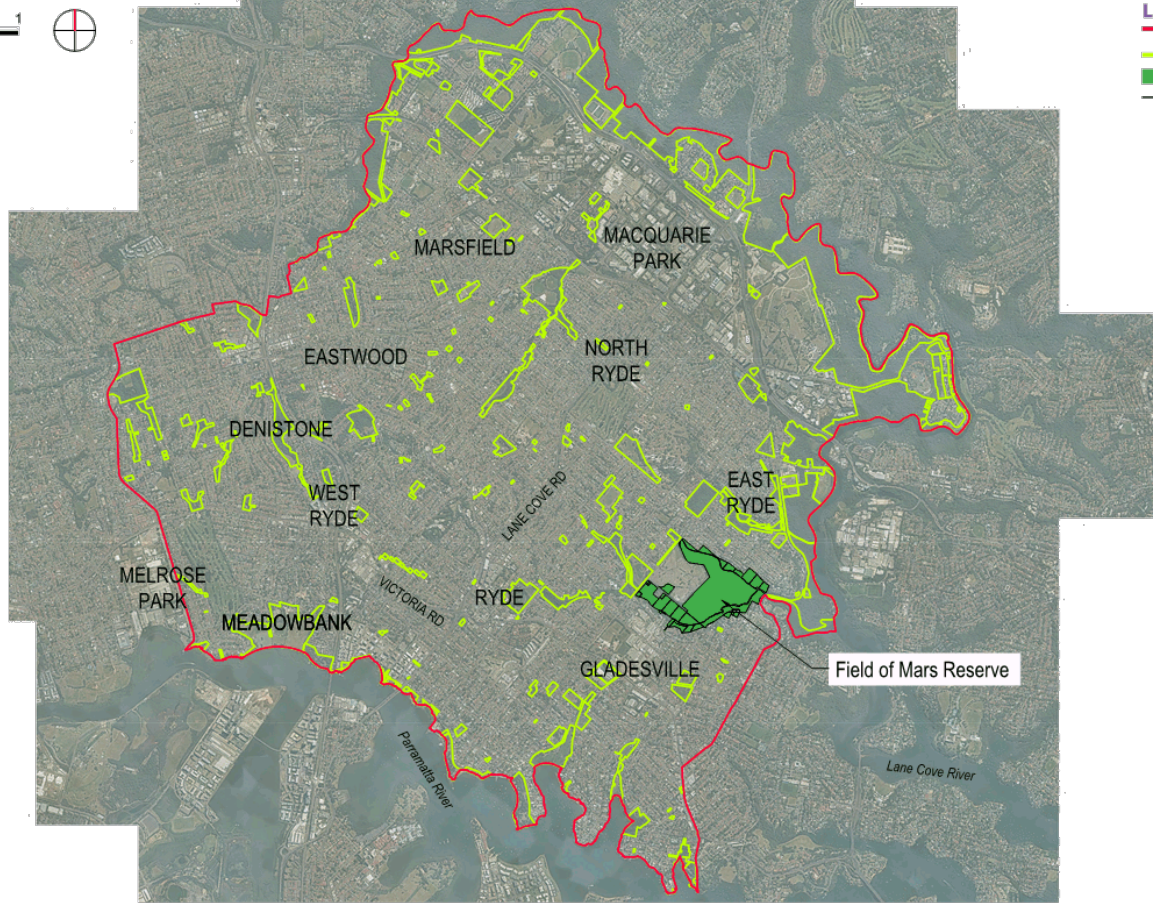


ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Location in the City of Ryde



LEGEND

- City of Ryde Local Government Area
- City of Ryde Parks and National Parks
- Field of Mars Reserve
- Field of Mars Reserve lot boundaries

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Location in the City of Ryde

Notes:

- The Field of Mars Reserve (The Reserve) is located in the suburbs of East Ryde, Gladesville and Ryde, within the City of Ryde local government area.
- The Reserve is located in the East Ward of the City of Ryde.
- Approximately 50 hectares in size, the Reserve is the largest remnant bushland reserve under the care, control and management of the City of Ryde. It provides important links to the wider network of open spaces, parks and National Parks in the City of Ryde.
- Buffalo Creek and Strangers Creek traverse the Reserve and flow into the nearby Lane Cove River, a major tributary to the Parramatta River.
- The Reserve is predominantly surrounded by Low Density Residential land, with a pocket of Light Industrial land and bus transport depot to the south-west.
- The surrounding suburbs of North Ryde, Macquarie Park, Ryde and to a lesser extent Gladesville have some areas of medium to high density residential.
- The nearby suburb of Macquarie Park is identified in the Greater Sydney Commission's North District Plan as strategic priority as an economic, health and education precinct.
- Major shopping centres are located in Macquarie Park and Top Ryde. Smaller town centres are located more locally in Gladesville, North Ryde, East Ryde and Boronia Park.
- Field of Mars Cemetery (not owned or managed by Council) is located immediately to the west of the Reserve. This cemetery is bound by the Field of Mars Reserve on three sides.



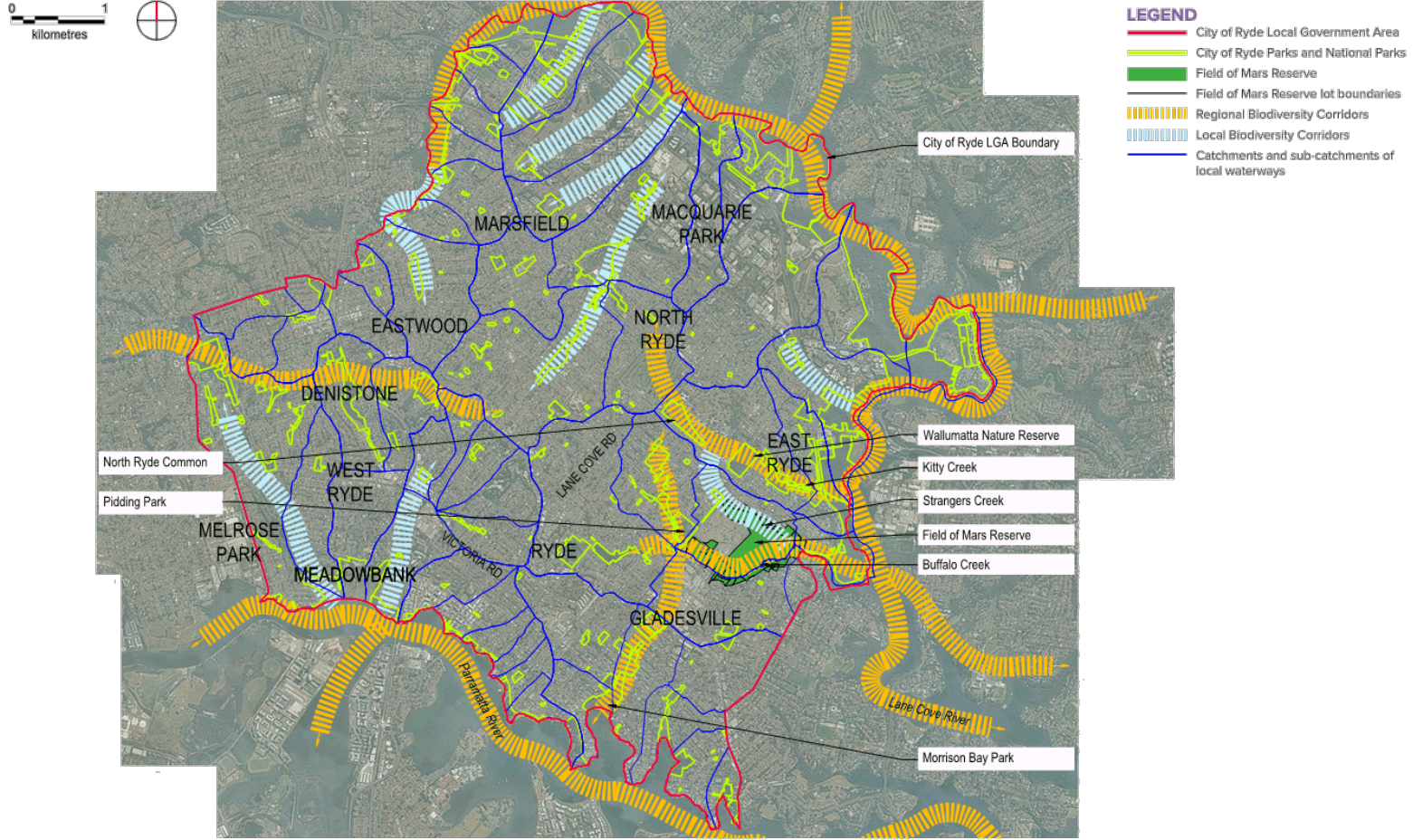
9

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Biodiversity and Park Connections in City of Ryde



10

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Biodiversity and Park Connections in City of Ryde

Notes:

- Field of Mars Reserve forms part of a continuous vegetated corridor along a section of Buffalo Creek, from it's source to the Lane Cove River. It also contains Strangers Creek, a tributary of Buffalo Creek. The Reserve is the largest remnant bushland reserve in the LGA under the care, control and management of Council (approx. 50ha).
- This plan illustrates the Regional and Local Connectivity Corridors over the whole LGA as identified in Council's *Biodiversity Plan 2016*.
- The Parramatta and Lane Cove Rivers form regional corridors along the southern and part of the eastern boundaries of the LGA.
- The Reserve is an important link within a regional corridor from the Lane Cove National Park on the Lane Cove River regional corridor to the reserves to the west of the site (Pidding, Barton and Burrows Parks) along Buffalo Creek.
- This east/west regional corridor is also linked to the south to Morrison Bay Park via another regional corridor running north/south.
- Further, the park is a link in a local corridor from the Reserve, along Strangers Creek, northwest to the regional corridor along Kittys Creek (a link from the Lane Cove River through Wallumatta Nature Reserve to North Ryde Common to the northwest).
- This large bushland area is an important component in the Buffalo and Strangers Creek catchment and can contribute to improved water quality flowing into the Lane Cove River. The Reserve is part of the wider catchment for Sydney Harbour and thus contributes to the level of water quality and marine life eg fish stocks.
- The Reserve has been established as a *Reserve for Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna* (20 June 1975). Council was appointed Trustee of the Reserve on 29 April 1988.
- The Reserve is valued as a significant wildlife refuge. The environmental values of the reserve are paramount and underpin the management protocol for the Reserve.



11

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Access



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Access

Notes:

- Field of Mars Reserve (the Reserve) has a reasonable level of service by public transport, cycle routes and entry points to encourage access by traveling visitors and nearby residents.
- Bus routes** X06 and 506 with stops along Higginbotham Rd give relative easy access to park entry points 4, 5 and 6 in the south as well as to entry points 8, 9, 10 and 11 along the northern boundary from Moncrieff Dr. Bus routes 252, 536 and 538 give access to entry points 1, 2, 3 and 14 in the east and southeast, though with a walk of less than 1km to the Reserve from set down in High St.
- The **cycle network**, which is a mix of off road bike paths and on road bike lanes and informal routes, provides a direct shared off road bike path from Rene St to the north to High St to the south, along Pittwater Rd, to entry points 1 and 14. However, only informal on road bike routes provide access to entry point 5 on Higginbotham Dr, to entry point 6 on Cressy Rd and to entry point 13 along Moncrieff Dr. The remaining entry points are bike accessible along the road network but not via dedicated bike paths or routes. The 2014 Bike Strategy proposes the Southern Orbital route along Pittwater Rd providing north south connection to the eastern edge of the Reserve and the Interconnecting route along Cressy Rd (NE to SW) giving access to the western side of the Reserve. Whilst bikes are prohibited from the Reserve, there is ample opportunity to provide cycle facilities at Reserve entries to encourage access into the Reserve on foot.
- A sealed parking area located off Pittwater Rd, between entry points 1 and 14, provides for visitors traveling by private vehicle to access the reserve from the eastern edge. Car spaces include 31 plus one accessible space. An off road parking area is located opposite at the Buffalo Creek Reserve. It is possible that overflow parking from this area located in the Hunters Hill LGA uses the parking area at the Reserve. Additional parking is available for bus groups visiting the Reserve further into the Reserve. Little to no nearby on street parking is available at 6, however, plenty of on street parking is available in quiet streets at all other entries.
- The Reserve borders the northeastern, southeastern and southwestern boundaries of the Field of Mars Cemetery from which no formal park entries are provided. Pedestrian entry points are well spaced along the northeastern (8-13), eastern (1 and 14) and southeastern (2-4) edges edge of the Reserve. The southwestern edge of the Reserve is serviced with only 2 entry points (5 and 6). Four entry points (6-9) are available where Cressy Rd meets the Reserve. The many entry points provide easy access for neighbouring residents, though a number of these entry points are not clearly identifiable to varying degrees (10, 11, 12 and 13). Entry point 3 is very confusing, given access is provided along a seemingly private driveway within the road reserve. The Reserve connects to a broader network of walking paths/bush tracks including path to the west along Buffalo Creek, Burrows Park to Ryde Park and tracks to the east through Buffalo Creek Reserve connecting with Lane Cove National Park and Great North Walk. (Refer to Site Analysis: Access and Landscape for a details of on Reserve facilities.)



13

CONTEXT ANALYSIS: Biodiversity and Park Connections



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: Biodiversity and Park Connections

Notes:

- Field of Mars Reserve (the Reserve) is part of a connected series of Biodiversity corridors as identified in Context Analysis: Biodiversity and Park Connections in City of Ryde.
- Regional corridors identified in Council's *Biodiversity Plan (2016)* include:
 - The Lane Cove River to the east of the Reserve, running north to south;
 - The Parramatta River to the south, running northwest to southeast;
 - A link from Lane Cove River to the east, through the Reserve along Buffalo Creek to Burrows Park in the west;
 - A link to the west of the Reserve from Parramatta River in the south to Gannan Park in the north;
 - An additional link along Kittys Creek from Lane Cove River to the east to North Ryde Common in the northwest.
- Local corridors identified include a link from the Reserve along Strangers Creek to link to the Kittys Creek corridor to the north.
- These identified corridors provide a linked web of green space to conserve and protect biodiversity. The Reserve plays a key role in this network.
- The *Biodiversity Plan* identifies the vegetation contained within the Reserve has having a high biodiversity conservation significance. The Plan also indicates that around 50% of the vegetation within the Reserve is exposed to impacts from threats to biodiversity values.
- The *Biodiversity Plan* indicates that at least 50% of the vegetation within the Reserve is considered a very high priority for biodiversity conservation, with pockets marked as a high priority and the core area north of Buffalo Creek as moderate.



15

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: LEP2014 Zoning



LEGEND

ZONES:

- B1 Neighbourhood Centre
- E2 Environmental Conservation
- IN2 Light Industrial
- R2 Low Density Residential
- RE1 Public Recreation
- SP1 Special Activities
- SP2 Infrastructure

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

CONTEXT ANALYSIS: LEP2014 Zoning

Notes:

- Field of Mars Reserve (the Reserve) is variously owned by City of Ryde (Council), NSW Department of Planning, Industry and Environment, and Transport for NSW. In 1975 the Reserve was formally established as a Reserve for Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna, with care, control and management devolving upon City of Ryde under the Local Government Act 1975.
 - The bulk of the Reserve is zoned E2 Environmental Conservation under Council's Local Environmental Plan 2014. The objectives of this 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.
 - Pockets of RE1 Public Recreation occur in the level areas in the east of the Reserve (outside of the bushland areas) including the land on which the Education Centre is located. The objectives of this zone are:
 - To enable land to be used for public open space or recreational purposes.
 - To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- The Reserve is surrounded by R2 Low Density Residential.
 - The adjacent land of Field of Mars Cemetery (lands not owned or managed by Council), which the Reserve wraps around to the west, is zoned SP1 Special Activities.
 - The adjacent closed portions of Cressy Rd and Wellington Rd are zoned RE1 Public Recreation.



17

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Land Categorisation (2023)



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Land Categorisation (2023)

Notes:

- Under the *Crown Lands Act 2016* (CLM Act) Council managers must assign to Crown lands under their management one or more land categories of community land as identified in the *Local Government Act 1993* (LG Act) (refer to the Legend on this map).
- Activities and management must occur in accordance with the prescribed core objectives of the nominated land categories as illustrated on this plan. The bulk of the Reserve is categorised as *Natural Area*, which is broken down further into subcategories of *Bushland*, and *Wetland*. Essentially, in relation to *Natural Areas*, the objectives include to conserve and maintain the biodiversity and land; to undertake regeneration; and to allow community use that does not adversely impact on the land.
- Small portions on the eastern side of the Reserve are categorised as *Park*. The objectives listed for *Park* categorisation include facilitate recreational, cultural, social and educational pastimes and activities; provide for passive activities; and develop the land to facilitate these objectives.
- Field of Mars Reserve is visited by members of the general community as well as students from primary, secondary and tertiary institutions across Sydney.
- Within the Reserve is located the Field of Mars Education Centre (operated by the NSW Department of Education) which provides the opportunity for fieldwork, environmental education and education for sustainability to visiting students. This facility, whilst located within the Reserve boundaries, is not owned or managed by Council and not located on land owned by Council and thus is not subject of this Plan.
- A Visitors Centre and Amenities Building is located within the Reserve to the east of the Education Centre and is owned and managed by Council. The Visitors Centre is operated by volunteers of the Ryde Hunters Hill Flora and Fauna Preservation Society (RHHFFPS) generally on weekends. The Visitors Centre provides environmental information about the Reserve and offers guided walks through the bushland. The land on which the Centre is located is categorised as *Park* which is consistent with the objectives listed above to meet the current and future needs of the local community and of the wider public.



21

SITE ANALYSIS: Access and Landscape



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Access and Landscape

Notes:

- Field of Mars Reserve (the Reserve) includes steep slopes with limited open level areas. The steep slopes discourage a proliferation of tracks which in turn limits the incursions into bushland areas and loss of biodiversity. A high proportion of bushland area is available for wildlife refuge.
- Multiple entry points around the perimeter of the Reserve give good access to pedestrian park users and immediate access to bushland areas. The Reserve, however, is closed to bike riders and dog walkers due to its wildlife refuge status. Multiple entry points are difficult to monitor in terms of controlling entry to the Reserve by unauthorised park users.
- The only public vehicle entry (1), is via a roundabout on the bend on Pittwater Rd (south of the Buffalo Creek road crossing), a traffic black spot. Active transport links have been improved at this entry by the recently opened shared path for bikes and pedestrians on Pittwater Rd. This entry provides public access to the sealed parking area located on the eastern boundary of the Reserve and service access to the Reserve.
- Additional service vehicle access can be gained via entries 5 (from the south off Higginbotham Rd), 7 (from the west onto the closed Wellington Rd), 8 and 9 (from the northwest off Cressy Rd), 12 (from the north off Finch Ave) and 14 (east off Pittwater Rd - just north of entry 1).
- Vehicle access (authorised vehicles) to the Education Centre is gained via entry 1 through a lockable vehicle gate located west of the car park, along the internal access way past the Visitors Centre/Amenities Building to the eastern side of the Education Centre.
- An internal bus drop off/pick up/turning area is located on the Reserve below Kennedy St entry 2. Another lockable vehicle gate, for maintenance access to the eastern open space zone is located adjacent to the internal bus turning area.
- The Visitors Centre, operated by the Ryde Hunters Hill Flora Fauna Preservation Society, is an older building which includes amenities. Access to the disabled toilet at the Visitors Centre is across the grass from the unsealed access way.
- Facilities and access around the Reserve are not fully accessible. Access from the disabled car space in the on-site parking area is available to the adjacent park area via a short path but then across the grass. Few of the other park entries are all accessible and few of the walking tracks or footpaths other than the boardwalk loop are all accessible.



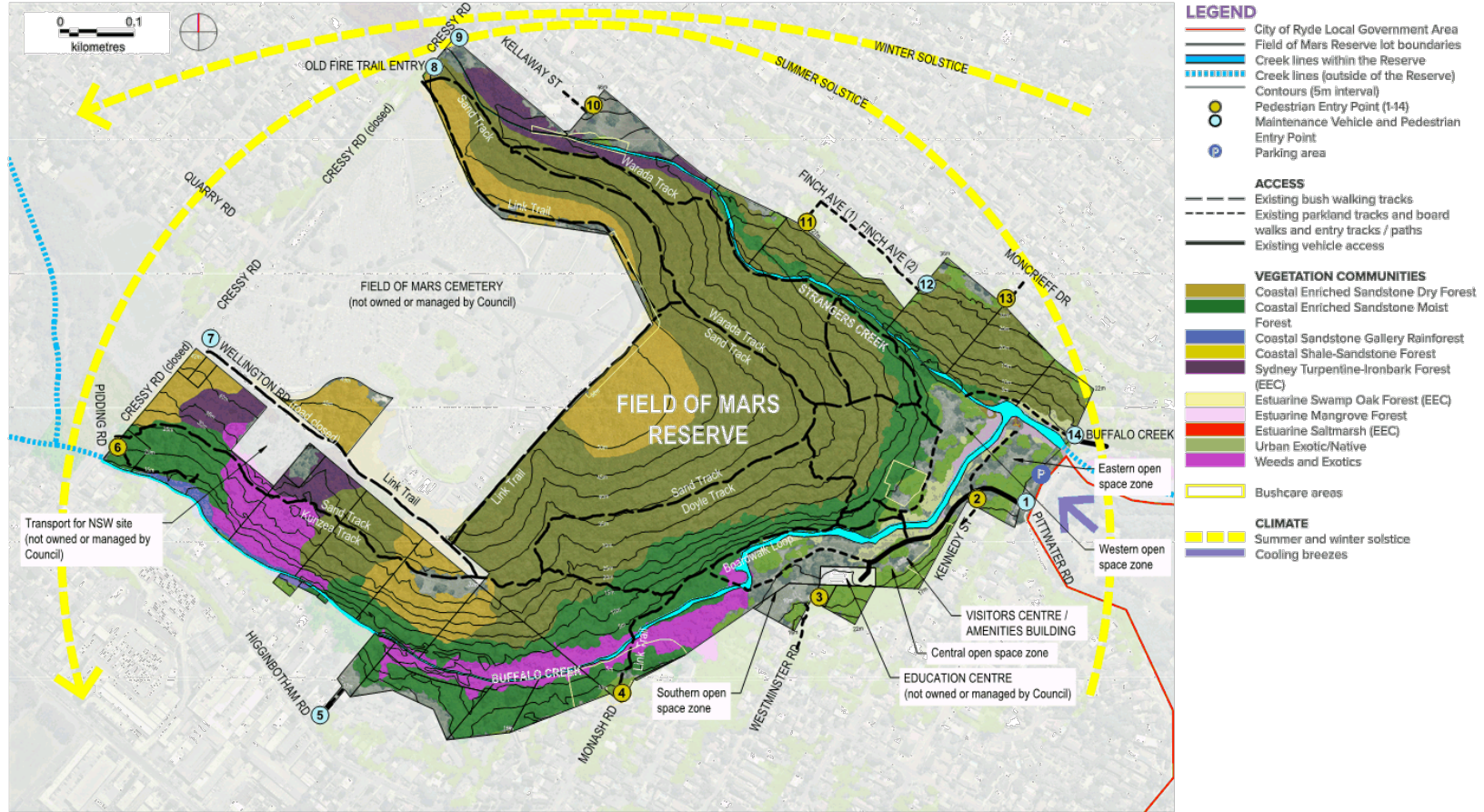
23

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Environment



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Environment

Notes:

- Field of Mars Reserve (the Reserve) contains at least seven (7) vegetation community types (refer to the Legend on this page), three (3) of which are identified as *Endangered Ecological Communities* (EEC) including *Sydney Turpentine-Ironbark Forest*, *Estuarine Swamp Oak Forest*, and *Estuarine Saltmarsh*. The Reserve also contains rare flora and threatened fauna species (as identified under various government legislation).
- The Reserve represents an intact transition of ecological communities from upper Shale areas to lower wetland areas.
- Threats to biodiversity include weed species invading the area particularly the saltmarsh, impacts at the Reserve edges from adjacent activities and neighbouring properties, increased stormwater runoff and nutrients from adjacent areas impacting on water quality and siltation of the creeks, lack of fire at a suitable interval, general weed invasion, dumping particularly of greenwaste, unmanaged recreational use eg informal tracks, bike riding, domestic pets and introduced fauna, control of vehicles, development and infrastructure works.
- The Reserve is a Wildlife Refuge under the *NPWS Act 1974*. The Reserve is nominated as a Wildlife Protection Area under the *Companion Animals Act 1998* (CAA). Cats and dogs are excluded from the Reserve at all times (even if leashed) (Category 1 under the CAA).
- Riding of any type of bike is also prohibited within the Reserve.
- Buffalo Creek flows east to the Lane Cove River, from the reserve under the bridged Pittwater Rd and through Buffalo Creek Reserve.
- Vegetation along Buffalo Creek is a mixture of exotics and native species (urban plantings) and weeds.
- A number of volunteer bushcare groups operate in the Reserve and include volunteers from the surrounding area.
- The Reserve contains predominantly southwest to southeast facing slopes. Northeast forested slopes occur above Strangers Creek and behind the Visitors Centre and the Education Centre and along the southern edge of the Reserve.
- Northeast to northwest slopes are exposed to more sun throughout the year.
- The existing bushland vegetation moderates climate extremes. Cooling breezes blowing west from the Lane Cove River are baffled by the forest vegetation.



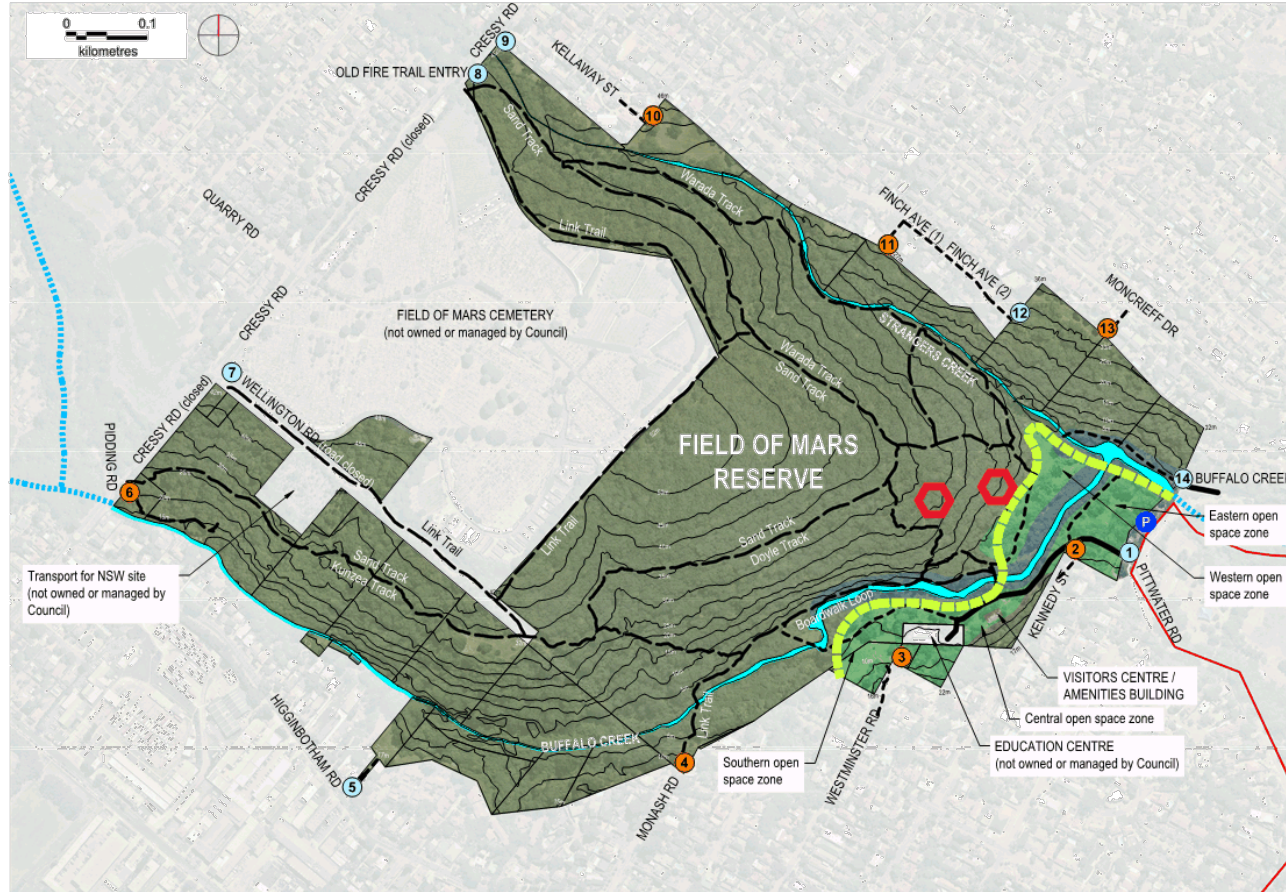
25

ITEM 8 (continued)

ATTACHMENT 1

DRAFT FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Usage



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Usage

Notes:

- The use of the Reserve is divided into two distinct areas. The bushland area over the sloping ground and along the creeks, and the parkland area located southwest of Strangers Creek between the base of the steeply sloping bushland area and the eastern boundary. A small portion of bushland area is located within the parkland, adjacent to Kennedy St on the eastern boundary, but contains no walking tracks or facilities.
- Allowable bushland activities include walking for pleasure, recreation, exercise and / or education, individually, in groups or as part of an organised guided tour. Some walkers however brings dogs into the Reserve and others ride bikes (BMX, motor and others). Both activities are prohibited and both are considered threats to biodiversity.
- Activities within the parkland area include picnicking, relaxing and participation in Education Centre and Visitor Centre organised activities. The attraction of the Reserve for such activities is the natural environment setting and the opportunity to connect with and learn about the bush.
- There is no on site pathway lighting, vehicle access gates are locked overnight and the public toilets operate during day light hours only. These factors discourage use of the Reserve after dark.
- The Reserve provided a significant food source to past indigenous inhabitants of the area, the Wallumedegal people. The creeks, moist gullies and tall forest were a rich source of food. Evidence of past use includes shell middens, rock outcrops and engravings. Protection of the environment and the cultural heritage is integral to the management process.
- Non indigenous use of the area began in the late 1700's with the granting of parcels of land for farming, though some too small to be effective, which saw the establishment of the Field of Mars Common in the early 1800's. By 1887 the Reserve was established for Public Recreation though use as a source of building and domestic materials for local residents and for grazing of cattle continued.
- The Reserve was a refuge for the community during the Depression. In the 1960's a local community group opposed the use the Reserve for a proposed waste tipping site. The Reserve was established as a wild life refuge in the 1970's.
- Some unauthorised and illegal uses within the Reserve (eg. use of bikes, access by domestic animals, vandalism, dumping and lighting of fires) are ongoing threats to the protection of the environment.



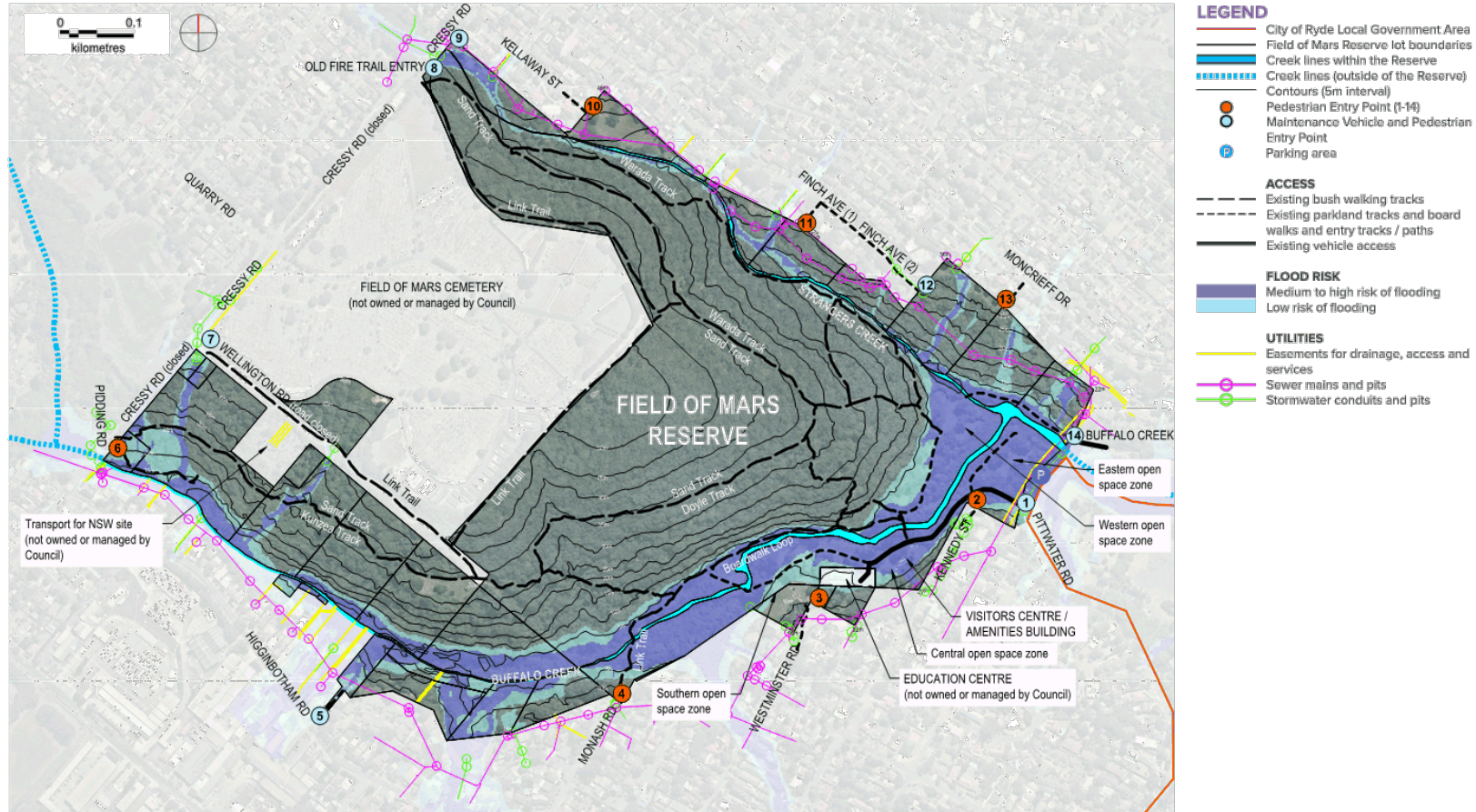
27

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Flood Prone Land and Utilities



ITEM 8 (continued)

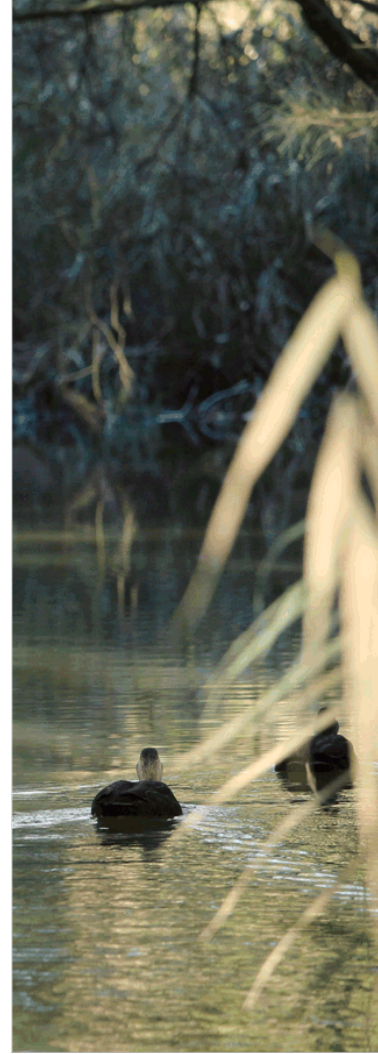
ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Flood Prone Land and Utilities

Notes:

- The potential for medium to high risk flooding threatens much of the low lying level parkland areas of the Field of Mars Reserve (the Reserve), including the car park in Pittwater Rd, the Visitor Centre / Amenities Building, the lower reaches of Strangers Creek and Buffalo Creek. Broader flooding is considered a low risk. Drainage / stormwater outlets located on the boundaries of the Reserve contribute to flooding risk.
- Surrounding street stormwater systems are piped to outlets at the edge of the Reserve which in turn flow overland into the Reserve. These outlets are a source of contaminants and weed propagules and pose a threat to bushland health and creek/river system health.
- A sewer main running through the northeast section of the Reserve is a potential source of contamination due to potential leaks. Overflow sites have previously occurred in the Reserve adjacent to the cemetery and in a residential area upslope of the Pittwater Rd entry.
- A large diameter elevated viaduct carrying the sewer main (sited in an easement) traverses the Reserve on the Pittwater Rd frontage. The viaduct divides the Reserve from the parking area located on Pittwater Rd. The elevated viaduct tends not to impact on the amenity of the Reserve, as planting to the west of the alignment screens the pipe and columns from users in the Reserve.
- Several easements are sited from the adjacent residential areas southwest and northeast of the Reserve (for drainage). Two easements are sited along the southeastern boundary.
- The Transport for NSW site (a past contaminated site) is a potential source of contaminants in stormwater runoff.



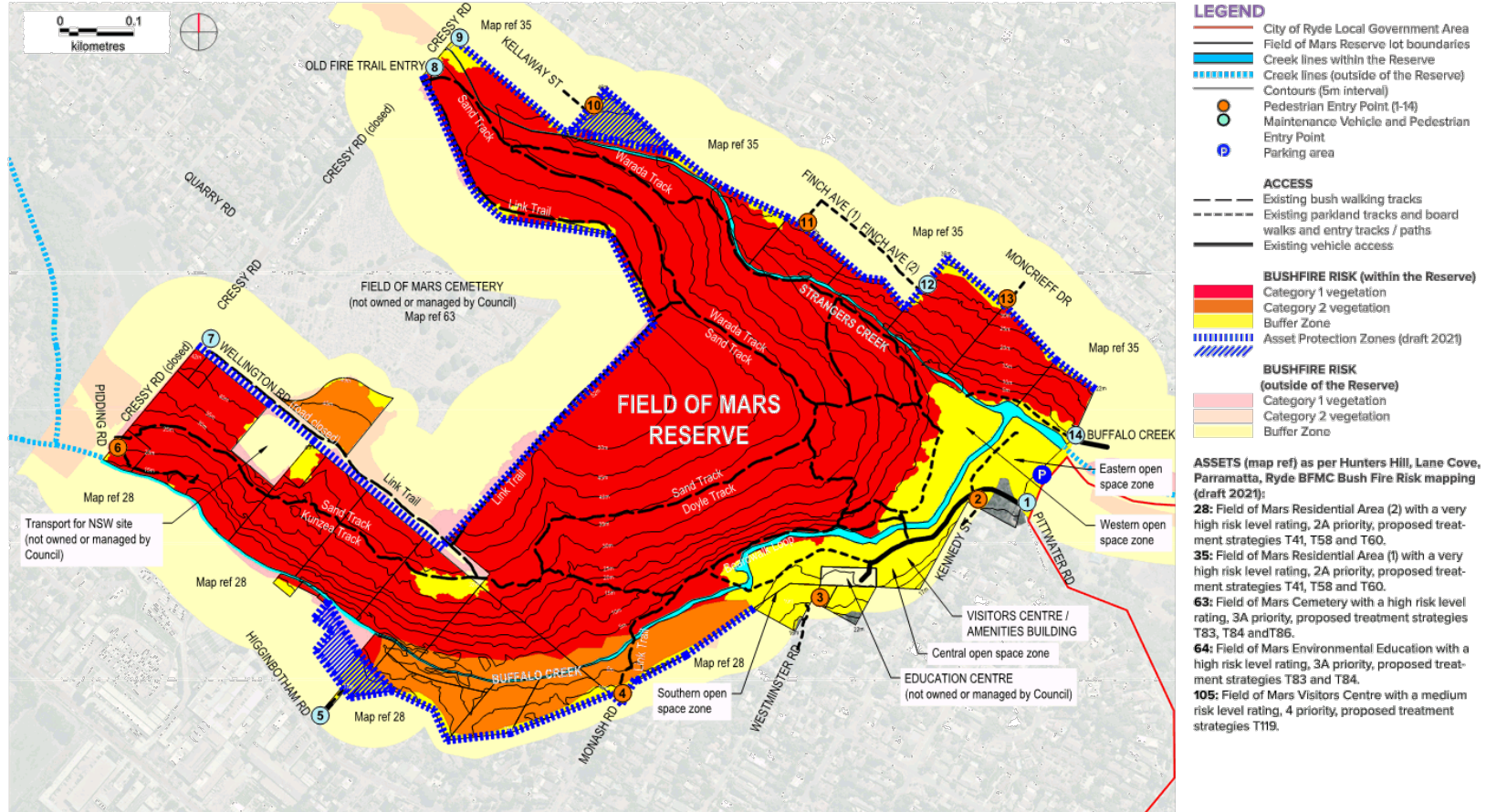
29

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Bushfire Prone Land



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Bushfire Prone Land

Notes:

- Much of the bushland area within the Field of Mars Reserve (the Reserve) is classed as Category 1 vegetation (considered to be high risk for bushfire). The low lying parkland area is zoned buffer and the bushland south of Buffalo Creek is Category 2 (considered a lower bushfire risk than Categories 1 and 3). Buffer zones are nominated around the Category 1 (100m wide) and Category 2 (30m wide) zones of vegetation.
- Asset Protection Zones (APZs) (draft 2021) are nominated along the Reserve boundary to the cemetery, along the northeastern boundary and along part of the southern boundaries where bush located on the Reserve abuts adjacent residential areas. Protected assets are included in the legend on this map along with risk level, priority and proposed treatment to manage the risk.
- Treatments Strategies include:
 - T41 - Hazard Reduction - Land Management Zone Field of Mars - fuel loads to be managed by LGA (FRNSW).
 - T58 - Community Education - annual letter with key bushfire safety by Council.
 - T60 - Hazard reduction - maintain APZ - by Council and AusGrid.
 - T83 - Preparedness - undertake annual maintenance roster by private groups.
 - T84 - Hazard Reduction - undertake mechanical and / or prescribed action by LGA (FRNSW)
 - T86 - Hazard Reduction - maintain APZ by Council.
 - T119 - Hazard Reduction - undertake mechanical and / or prescribed action by LGA (FRNSW).
- The Reserve abuts Cressy Rd along it's unformed sections and these sections are grassed easements. The southwestern boundary of the Reserve is formed by Buffalo Creek.
- The Education Centre and Visitors Centre/Amenities Building area located within the Buffer zone. Access to these sites for emergency vehicles passes through the Buffer zone. These buildings are located within 50m of Category 1 vegetation and are at risk in a bushfire event.
- Access to other areas of the Reserve for bushfire fighting are limited. There are effectively vehicle entry points along the closed Wellington Rd (7), at the northwest corner off Cressy Rd (8 and 9), off Pittwater Rd from both the northern and southern ends on the eastern boundary (1 and 14), off the end of Finch Ave (12) and off Higginbotham Rd midway along the southwest boundary. A fire trail is located around the common boundary between the Field of Mars Cemetery and the Reserve. Lack of adjacent road boundaries limits access for fire fighting.
- Potential new areas of regeneration or forest planting must consider the impacts of bushfire hazard particularly if occurring in the parkland zone.



31

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

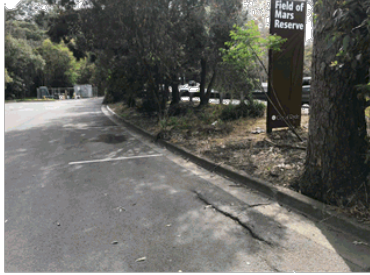
SITE ANALYSIS: Images - Entry Points



Entry 2 (Kennedy St) gives access via a flight of steps to the internal access way (at the bus turning area) and onto the track network (parking in quiet street available).



Entry 3 (Westminster Rd) access is gained along what appears to be a private driveway then via a flight of steps to the southwest of the Education Centre (parking in quiet street available).



Reserve identification sign on Pittwater Rd at the entry to the car park which gives access to entry 1 (a unique sign on the Reserve - metal)



Entry 4 (Monash Rd) access is gained across a grassed nature strip then via a flight of steps into the Reserve onto the track network (parking in quiet street available).



Car park located at Reserve entry off Pittwater Rd with lockable gate entry, 33 car spaces plus an accessible space. The sewer viaduct and screen planting divide Pittwater Rd from the remainder of the Reserve.



Entry 5 (Higginbotham Rd) access is gained via a lockable vehicle gate onto the asset protection zone (parking in the busy street available). There is no gap for pedestrian access.



Entry 1 Pittwater Rd, lockable vehicle gate and gap for pedestrian access, gives entry onto internal access way to Visitors Centre / Amenities Building, Education Centre and the track network.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT



Entry 6 (Pidging and Cressy Rds) gives pedestrian access to the bush track network (very little adjacent street parking available).



Entry 7 (on Cressy Rd) access onto Wellington Rd (closed road) via a lockable vehicle gate with a gap for pedestrian access then onto the bush track network (parking in quiet street available).



Entry 8 (Old Fire Trail off closed portion of Cressy Rd) for service and emergency vehicles with gap for pedestrian access onto the bush track network (parking available in quiet street near entry 9).



Entry 9 (Cressy Rd) for service and emergency vehicles with gap for pedestrian access on asset protection zone (parking available in quiet street).



Entry 10 (Kellaway St) pedestrian access is gained via a flight of steps along a concrete paved easement to the asset protection zone (parking in quiet street available).



Entry 11 (Finch Ave 1) pedestrian access is gained via a flight of steps to the asset protection zone (parking in quiet street available).



Entry 12 (Finch Ave 2) vehicle access is gained via a removable bollard along with pedestrian access down a concrete paved driveway to the asset protection zone (parking in quiet street available).



Entry 13 (Moncrieff Dr) pedestrian access is gained via a flight of steps to the asset protection zone (parking in quiet street available)

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Facilities



The eastern side of the Education Centre (not owned or managed by Council).



The grassed open space north of the Education Centre (not owned or managed by Council) located within the Field of Mars Reserve.



The boundaries of the land on which the Education Centre is sited (not owned or managed by Council) are formed by the gum trees to the west of the building and the planting area to the north.

Visitors Centre / Amenities Building is setback from the internal access way. A dated park map, cairn, memorial stone and commemorative plaque are located nearby.



Visitors Centre / Amenities Building, aging clinker brick building with metal roof, with a meeting room, kitchen and store. Public toilets (male / female / accessible) via external access during daylight hours.



The accessible toilet on the southwest side of the Visitors Centre / Amenities Building is separated from the internal access way by a grassed area (access does not comply with accessible requirements).

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Open Space Zones



The eastern open space zone is located west of the car park off Pittwater Rd and bounded by Buffalo Creek to the west and north. The area contains 2x sheltered picnic settings and a path along the creek.



Western open space zone west off Buffalo Creek and sited at the base of the bushland covered slope in which the bush track network is located. A path links back to the Visitors Centre / Amenities Building.



The southern open space zone located west of the Education Centre and south of Buffalo Creek and sited within Field of Mars Reserve (includes one seat).

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Paths and Tracks



Internal access way from entry 1 (Pittwater Rd) near parking and bus turning area gives connection to Visitors Centre / Amenities Building and Education Centre.



All accessible path from the car park off Pittwater Rd to the eastern open space zone gives non compliant access onto grass. A sheltered picnic setting is located nearby.



Compacted earth / gravel path along Buffalo Creek in the eastern open space zone (looking south). Terminates at a viewing point over the wetlands with habitat information signage in poor condition.



Boardwalk and bridge across Buffalo Creek, located near the beginning of the boardwalk loop - see Visitors Centre in background (does not comply with accessible requirements.)



Compacted earth / gravel path linking the track head to the bushland tracks back to the boardwalk loop and Visitors Centre / Amenities Building.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT



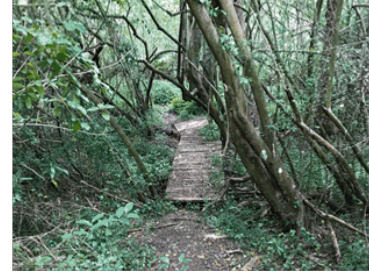
Compacted gravel path from southern end of the internal access way to the beginning of the boardwalk loop (at its southern crossing of Buffalo Creek). Viewing platform with overgrown view of creek.



Entrance to the Warada Track at the Western Open Space Area - via stepped access in a compacted gravel path.



Track head of Kunzea Track at entry 6 (Pidding and Cressy Rds).



A trample track across the grassed western open space zone is from this informal crossing of Strangers Creek (in disrepair) (likely from entry 12 - Finch Ave 2) (intended for closure and removal).

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Vegetation Impacts



Encroachment of weeds (including kikuyu) into the wetlands area - Estuarine Mangrove and Estuarine Saltmarsh (EEC)



Weeds such as Privet border the western open space zone.



Weeds infesting the waterways of Buffalo Creek.



Western open space zone with play building materials provided under the Casuarinas.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Signage



Typical Field of Mars Reserve map sign, indicates track network (details of walk duration, grade and landscape), 'where the visitor is' and prohibited activities (at entries 3, 4, 6, 7, 8 & internal access way).



Typical track head sign, routed painted timber, located at entries 6 and 8, at the Warada Track head (from the western open space zone) and on junctions on the boardwalk track and track network.



A variety of signs ring the Reserve - the *Field of Mars Reserve* at entry 1 (Pittwater Rd) and adjacent to the car park.



The sign for the *Field of Mars Environmental Education Centre* at entry 1 (Pittwater Rd) and adjacent to the car park.



Sign that indicates the Reserve is a *Wildlife Protection Area and Wildlife Refuge*. Located at entries 1, 2, 3, 4, 6, 7, 8, 9, 11, 12 and 14.



Typical 3 sided metal ordinance sign located at several entries to the Reserve including entries 1, 2, 6 (though marks Pidding Park), 9, 10 (at lower end of pathway - not visible from Kellaway St), 11, 12, 13 and 14.



Bikes prohibited sign located at entry 6.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

SITE ANALYSIS: Images - Signage



Environmental information signage (etched metal plate affixed to a rock) located in the western open space zone at the Warada Track Head.



Out of date site map information sign (etched metal plate) located near the Visitors Centre.



Typical environmental information signage (etched metal plate) located in the southern open space zone overlooking Buffalo Creek (now concealed by vegetation).



A unique environmental information sign (painted metal) describing stormwater management, located between entries 8 and 9 at the head of Strangers Creek, isolated by fencing (difficult to access to read).



Environmental information signage (etched metal plate) addressing ways to improve stormwater management, located on the internal access way below entry 2.



Sign that indicates no dogs allowed onto the Reserve, located inside entry 14.



Environmental information signage (etched metal plate) located in the eastern open space zone overlooking the confluence of Buffalo and Strangers Creek.

ITEM 8 (continued)

ATTACHMENT 1

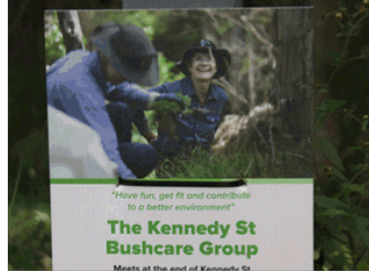
FIELD OF MARS RESERVE MASTERPLAN REPORT



Routed unpainted timber track way finding sign located at the Warada Track Head (off the western open space zone).



Routed treated timber track way finding sign located on the boardwalk loop.



Typical Bushcare Group sign located at entries 4 and 10 and near the Visitors Centre.

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

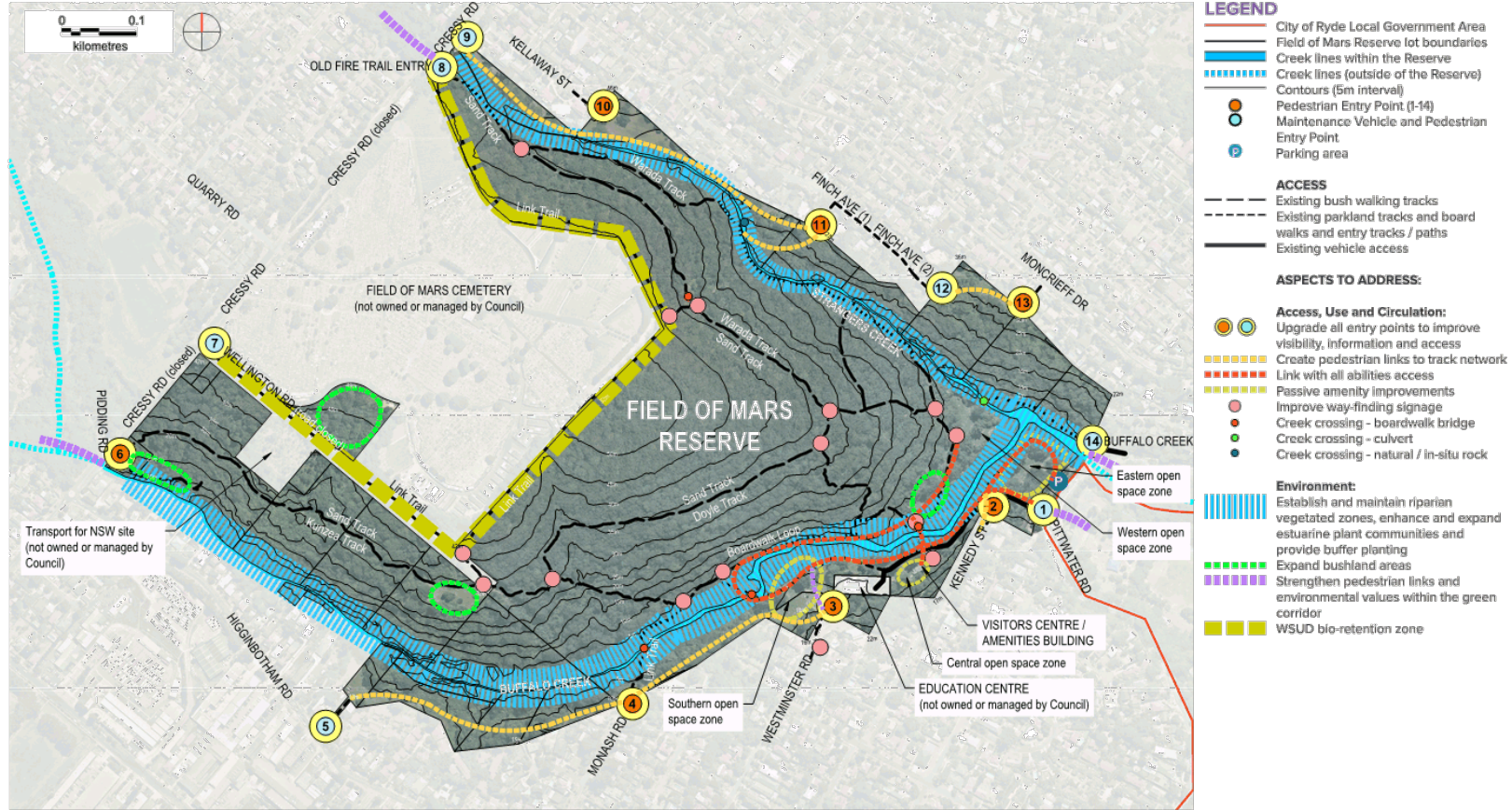


ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Design Strategy



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Design Strategy

ACCESS, USE AND CIRCULATION:

- Upgrade all entry points to encourage and attract more visitors to the Reserve and to improve visibility – improvements to include uniform signage, way finding signage, track surface upgrades, increased all abilities access where possible and secure bike racks.
- Formalise or close informal / trample tracks as required, upgrade all tracks to meet standards, utilise managed asset protection zones to provide pedestrian access.
- Link the park zones, car park and Visitors Centre with all abilities access. Provide an all abilities loop through the bushland as possible. Provide additional dedicated accessible spaces within the car park.

CHARACTER AND FACILITIES:

- To increase recreational use and to attract more visitors, given the Reserve is a level 1 open space area in the Council area, provide for informal recreation activities in the park zone to support play, picnicking, and walking for exercise (within the context of the flooding issues) as well as upgrading the bushland tracks.
- Provide waste facilities to encourage recycling.
- Upgrade all abilities access to the Visitors Centre and accessible toilet.
- Maintain the bushland setting, intensify efforts to control weeds, undertake plantings of indigenous species in the park zone.
- Address Climate Change through provision of shade (planted and structural), selection of plant species (consider long term viability and adaptability to rising temperatures), selection of materials (high albedo reading to reduce heat island effect), provision of drinking water stations and by minimising carbon in the process.
- Provide attractive facilities and diverse opportunities to enjoy the Reserve.
- Facilitate school and community nature and environmental education and activities in the Reserve. To maintain the wildlife refuge values of the Reserve

the Centre should operate in daylight hours only. The Environment Centre (not located on Reserve land but enclosed by the Reserve) also plays a significant role in environmental education.

ENVIRONMENT – FLORA AND FAUNA:

- Avoid directing activities to areas with rare or threatened species or plant communities. Provide access if required to ensure avoidance of impacts on natural systems.
- Maintain existing areas of bushland and increase footprint to ensure protection of core areas.
- All new plantings to be endemic species only, consistent with existing plant community types.
- Undertake staged and on going program of exotic and weed species removal and replacement plantings to maintain habitat options for local fauna.

ENVIRONMENT – GREEN CORRIDORS:

- Improve connections to and from adjacent areas to ensure safe and easy pedestrian access.
- Extend weed free biodiverse bushland plant communities to the boundaries of the Reserve where adjacent to the next link in the green corridors.
- Ensure the riparian corridors are weed free to avoid downstream transference of weed propagules.

ENVIRONMENT – STORMWATER MANAGEMENT:

- Apply vegetated riparian zone widths, 20m each side for Buffalo Creek and 10m each side for Strangers Creek. Undertake weed removal, new plantings and bank stabilisation as proposed in the *City of Ryde Riparian Protection and Rehabilitation Management Plan 2013*.

ENVIRONMENT – THREATS TO BIODIVERSITY:

- To protect from impacts from neighbouring properties use asset protection zones to buffer encroachments and to define boundaries.
- Manage stormwater by implementing WSUD devices as noted in the *Lane Cove River Coastal Zone Management Plan 2013* (bioretention system in

association with the existing wetlands off Higginbotham Rd). Further, manage stormwater outlets located on the Reserve boundaries to protect the environment from erosion, nutrient overload and weed invasion.

- Enhance existing estuarine plant communities through weed control and supplementary plantings, protect from disturbance and impacts, identify areas to which they can retreat during the process of sea level rise. Potential loss of open space within the park zone.
- Extend plantings in the park zone to buffer existing EEC communities without compromising user safety or bushfire risk.

INFORMATION:

- Provide uniform entry signage to include Reserve name and map, 'where you are' (entry ID), available walks, attractions and activities in the Reserve, allowable and prohibited activities, and exclusion of dogs, cats and bikes.
- Provide information at entries in relation to threats to biodiversity including responsible pet ownership, stormwater management, responsible fertiliser use, avoidance of encroachment and responsible green waste management.
- Provide interpretive signs throughout the Reserve about the role of the wildlife refuge, neighbour and visitor responsibilities, local flora and fauna, local natural systems and functions, Aboriginal and non-Aboriginal heritage and culture specific to the Reserve and upgrade and unify way finding signage throughout the Reserve.
- Provide signage to encourage Council supported volunteer bushcare activities.

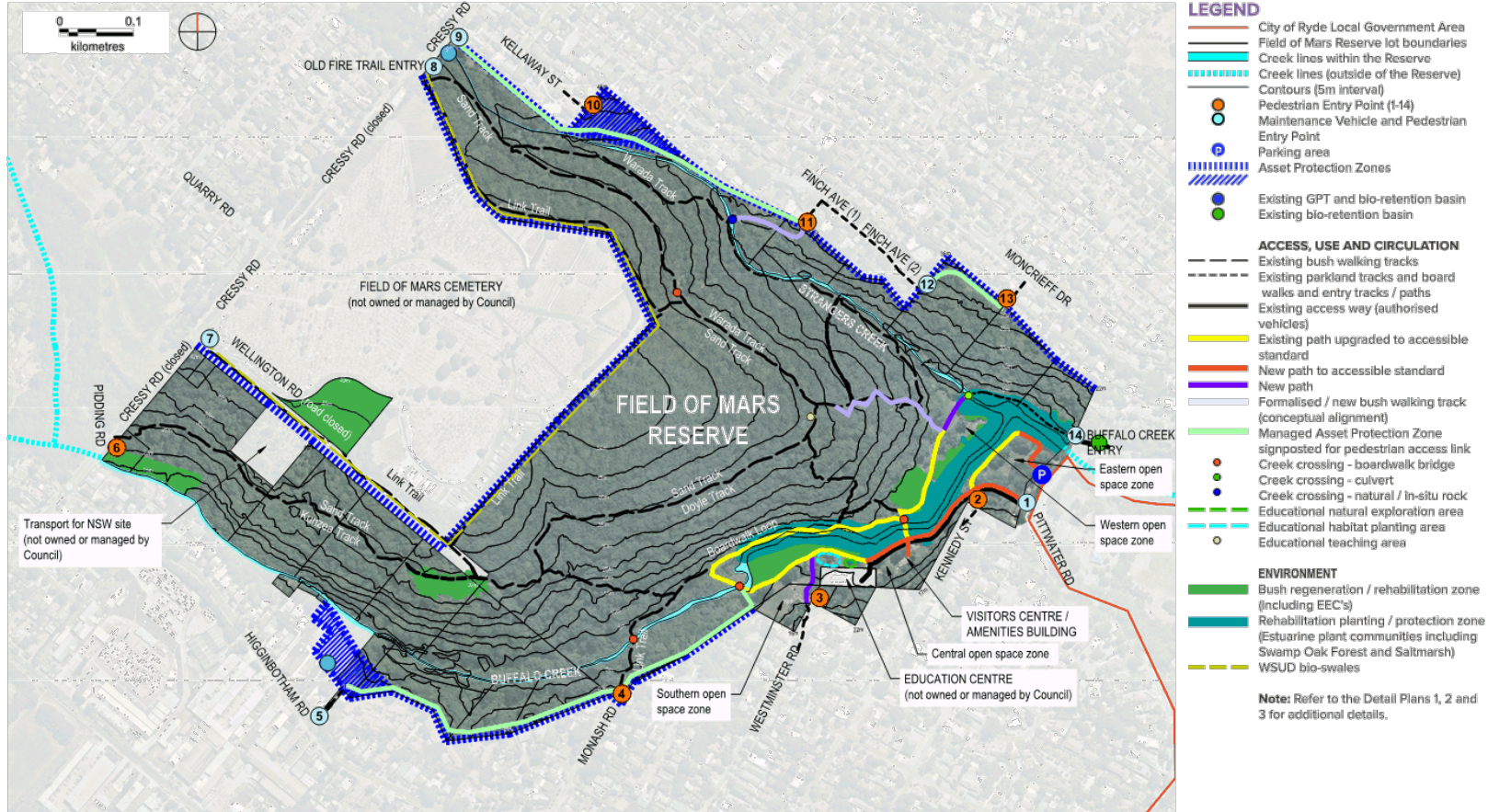
485

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN



Refer to *Masterplan: Information for details of the Masterplan*

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Information

ACCESS, USE AND CIRCULATION:

Entry Points:

- Retain all existing entry points. Provide site specific signs to inform Reserve users of site facilities and 'where they are' as well as details of permitted and non-permitted activities. Signs to be displayed in a prominent position relative to the adjacent street or public footpath. Signs to be consistent with Council's standard. Indigenous welcome and acknowledgments to be included on signage.
- All entry points to be upgraded to acceptable track head standard with paving, pathways and steps as required.
- Provide secure cycle parking racks at entry points positioned on / near regional cycle routes.
- Provide way finding signage from Westminster Rd to the existing steps to the Reserve at entry 3.
- Provide way finding signage in Cressy Rd from entry 9 to entry 8 to encourage access to the Reserve via the Sand Track.
- Provide way finding signage for connectivity between Moncreiff Dr, entry 13, entry 12, Finch Ave and entry 11.
- Provide a pedestrian opening at the vehicle gate at entry 5.
- Formalise or close informal tracks as required and upgrade retained tracks. Refer to Park zone paths and Bush walking tracks below for details.
- Improve arrival experience at main site entry, site frontage (Pittwater Rd) and along the access way with place making elements such as definition native plantings and signage.

- Investigate pedestrian safety improvements and strengthen walking route connectivity:
 - Across Pittwater Rd between Field of Mars Reserve, Buffalo Creek Reserve (Hunters Hill Council) and onwards to Lane Cove National Park (National Parks and Wildlife Service).
 - Cressy Rd near entries 6 and 7 and onwards along Buffalo Creek to Burrows Park and Ryde Park.
 - Cressy Rd near entries 8 and 9.

Existing car park:

- Provide dedicated accessible parking bays in the existing parking area off Pittwater Rd. Locate to access existing and proposed accessible pathways.
- All existing service gate locations to be retained.

Vehicle access:

- Maintain the internal access way from Pittwater Rd as a one lane width, for use by authorised vehicles only.
- Upgrade the internal access way to a consistent finish to improve amenity of the area, accessibility and to reduce contaminants into the stormwater runoff.
- Vehicle access to internal access way to be restricted to authorised vehicles via gates to the west of the car park and west of the bus turning area. Access way gates to be considered for future upgrade to key and remote electronic operation.
- Main car park gate to remain (open sunrise – sunset) to restrict evening use, campervans and illegal dumping.
- Facilitate site access for maintenance and emergency purposes (as required).

- Upgrade maintenance access at entry 12 and from entry 14 and creek crossing point (culvert) to western open space zone.
- Facilitate Education Centre groups arrivals/ departures from Pittwater Rd by way of improved bus drop off/pick up area and turning circle (capacity up to maximum of three buses). Ensure the width of the access way from entry 1 to the bus turning area is sufficient for two passing buses. Investigate alternative bus layover area (off-site) in close proximity to the Reserve.

Park zone paths:

Incorporate accessible design principles:

- Provide an accessible path in combination with the upgrade of the internal access way (authorised vehicles) to provide access from the public car park off Pittwater Rd to the Visitors Centre / Amenities Building (accessible toilet) and Education Centre.
- Provide a new accessible path from the accessible car parking in the car park off Pittwater Rd through the eastern open space zone. This path will be routed around the perimeter of the eastern open space zone and connect to the existing path along the eastern side of Buffalo Creek (which is to be upgraded to accessible path standard). Accessible path connections to be provided to the picnic shelters in the eastern open space zone.
- Upgrade the existing Boardwalk loop track to accessible path standard to provide a return loop from the Visitors Centre / Amenities Building.
- Upgrade and extend the path between the Boardwalk loop and western open space zone to accessible path standard.
- Investigate pedestrian safety and traffic calming improvements to strengthen walking route connectivity.

47

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Information

ACCESS, USE AND CIRCULATION continued:

Park zone paths continued:

Western open space zone:

- Provide a new compacted path across the grassed area, to link the existing track from entry 14. Improve entry 14, track and culvert creek crossing to the western open space zone to also facilitate maintenance access.

Southern open space zone:

- Provide a new path from entry 3 to the Boardwalk loop in line with the existing desire line / informal track across the grassed area.

Bush walking tracks:

- Upgrade existing bushland walking tracks as required to Australian Walking Track Grading System (Grade 2 or Grade 3 dependent on prevailing slope).
- Provide pedestrian access link and wayfinding signage between entries 3, 4 and 5 along the managed asset protection zone to link to the bushland track network.
- Upgrade steps and link walking track from entry 4 to the Boardwalk loop. Ensure full width crossing of wet areas on approach to the Boardwalk loop.
- Formalise the existing informal track and provide new bush walking tracks from entry 11 to link to the Warada Track. Investigate appropriate option to cross Strangers Creek via natural creek crossing with insitu rock.
- Provide pedestrian access link and wayfinding signage between entries 9, 10 and 11 along the managed asset protection zone to link to the bushland track network.
- Signpost the managed asset protection zone from entry 13 to entry 12 for pedestrian access.

- Improve quality and drainage of existing track from entry 14 to Strangers Creek, including creek crossing point (culvert) for bushwalking and maintenance access.
- Provide track improvements to the eastern section of the Warada track (near the track head from the western open space zone) to address erosion issues.
- Provide track connectivity in conjunction with clearly define creek crossing points (structural and natural).
- Provide new tracks within the context of reducing negative impacts on natural systems. Avoid providing new tracks within EEC plant communities or through areas with known presence of rare and endangered species.
- Close the short, dead end section of track from entry 6 to Buffalo Creek and return to a bushland area.
- Facilitate in-field teaching and educational opportunities along the bush tracks in defined areas.
- Provide educational and interpretive signage along walking tracks to highlight local flora, fauna, natural/ environmental characteristics of the Reserve, site history and local indigenous information.
- Investigate the use of track counters on some tracks to quantify the level of track usage.

CHARACTER AND FACILITIES:

Landscape Setting:

- Maintain and enhance the bushland setting through ongoing bush regeneration works, weed control and ongoing replacement of exotic species with endemic species according to identified plant communities.
- Provide shade (planted and structural) to improve amenity.

- Supplementary plantings around the car park and Pittwater Rd site frontage with endemic species without impinging on traffic and safety sight lines.
- Consider revegetating the grass area and remove weeds on the southern side of the internal access way from the viaduct.

Visitors Centre / Amenities Building:

- Link accessible parking in the car park to the Visitors Centre / Amenities Building (with accessible toilet) and the Boardwalk loop.
- Council to give future consideration to investigate / review the condition and improved functionality of the existing building for greater community environmental education purposes. Consideration to be given to land stability, flood mitigation measures, potential climate change measures and other environmental improvements.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Information

CHARACTER AND FACILITIES continued:

Park facilities:

- In the eastern open space zone provide formal and structured picnic area. New picnic shelters to have tables to accessible design standards with connection to accessible path.
- Provide filtered water station near Visitors Centre / Amenities Building.
- In the western open space zone provide materials / items to allow for educational natural exploration. Provide natural measures to discourage entry into EEC plant communities. Provide a naturalistic area for quiet contemplation. Area also suitable for informal and unstructured picnics.
- In the southern open space zone (west of the Education Centre), integrate informal rocks/ sandstone blocks for active recreation, informal seating and teaching circles. Maintain good sight lines for supervision of students during lunch and/ or breaks. Area also suitable for informal and unstructured picnics. Integrate educational natural exploration and educational habitat planting areas in the vicinity of the Education Centre. Include natural shade opportunities.
- In the central open space zone (between the Education Centre and the Visitors Centre / Amenities Building) provide delineation to separate from the access way. Area also suitable for informal and unstructured picnics.

ENVIRONMENT:

Flora and Fauna:

- Maintain and protect the existing footprint of bushland and where possible facilitate opportunities to expand bushland areas.
- Strengthen biodiversity corridors onsite and connections with surrounding area.
- Regenerate and/or revegetate bushland in the areas located:
 - Southwest of the western open space zone.
 - Southwest of the end of Wellington Rd (Pamplins block).
 - Northeast of Wellington Rd (enclosed on three sides by the Field of Mars Cemetery).
 - Southeast of entry 6 (near Pidding Rd entry).
- Protect, manage and monitor the saltmarsh areas within the Reserve:
 - Regenerate the plant communities alongside the saltmarsh communities to provide a buffer from activities within the open grassed areas.
 - Provide natural exploration and active play opportunities in open space zones, ensuring these are located outside endangered ecological communities and environmentally sensitive areas such as Estuarine Swamp Oak Forest, Saltmarsh and Mangrove Vegetation Communities.
 - Regenerate, supplementary plantings within the saltmarsh and undertake weed removal.
 - The proposed accessible path to the perimeter of the eastern open space zone will provide protection to the saltmarsh from mower and brush cutter maintenance of the open grassed area and encroachment of exotic grass species.
- The existing internal access way provides a boundary to the plant communities along Buffalo Creek. Remove exotic grassed areas between the access way and Buffalo Creek and regenerate Estuarine Swamp Oak Forest.
- Regenerate Estuarine Swamp Oak Forest plant community between the existing footpath located in the southern open space zone below the Education Centre and the saltmarsh located on the creek line of Buffalo Creek.
- Undertake a staged and ongoing program of exotic and weed species plant removal and replacement with native plantings to maintain habitat options for local fauna.
- All new planting to be endemic species only, consistent with existing plant community types. Include mid-story and understory species.
- Provide signage to highlight the Reserve's Wildlife Protection Zone status and non-permitted activities which can result in detrimental impacts on the flora and fauna.

Green Corridors:

- Strengthen biodiversity values of bushland within the Reserve to better link with adjacent green/ biodiversity corridors through weed removal and control and supplementary planting of endemic species.
- Manage riparian corridors to avoid downstream spread of weed propagules through weed removal and control, supplementary planting of endemic species and bank stabilisation works.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Information

ENVIRONMENT continued:

Stormwater Management, Water Sensitive Urban Design (WSUD) and Litter Reduction Strategies:

- Manage and enhance vegetated riparian zone widths for Buffalo Creek and Strangers Creek through weed removal and control, supplementary planting of endemic species and bank stabilisation works.
- Maintain existing GPTs, trash racks and bioretention basin within the Reserve. Manage stormwater by implementing WSUD devices as noted in the Lane Cove River Coastal Zone Management Plan 2013 (bioretention system in association with the existing wetlands off Higginbotham Rd). Recommend future consideration by Council for additional upstream measures to be implemented in the surrounding catchment area to provide improved stormwater and environmental outcomes within the Reserve.
- Manage stormwater outlets located on the Reserve boundaries to protect the environment from erosion, nutrient overload and weed invasion by implementing WSUD devices such as gross pollutant traps, trash racks and / or planted swales.
- Investigate and integrate WSUD measures (such as swales and planted areas) between the cemetery and Field of Mars Reserve to reduce external nutrient impacts on the Reserve. Recommended to be contained within the defined Asset Protection Zone.
- Where appropriate, investigate and integrate general WSUD principles around access way, paths, open space zones, car park and surrounding road network.

- Include filtered water station to reduce single use plastic bottles onsite.
- Provide educational and interpretive signage in relation to stormwater management, WSUD and litter reduction strategies.

Climate Change and Resilience Planning:

- Ensure asset protection zones (APZs) are defined and maintained in accordance with the adopted Bush Fire Risk Management Plan. Ensure weeds and garden escape plantings are removed from the APZs and from along the bush edge of the APZs. Manage APZs to minimise weed propagules are not washed into the Reserve bushland areas. Where appropriate include native vegetated edge to define APZ width, provide WSUD outcomes, reduce weeds and litter from entering the Reserve and decrease informal tracks.
- Investigate and integrate progressive upgrade of infrastructure (as required) within the context of rising sea levels, flooding and climate change.
- Recommend future consideration by Council for flood management and mitigation strategies within the Reserve, upstream and the surrounding catchment area.
- Select plant species, from the existing plant lists, known to have a broad climatic tolerance range to tolerate future predicted climatic conditions. Useful tools include www.climatechangeinaustralia.gov.au and www.ala.org.au
- Identify upstream areas into which estuarine plant communities will retreat during sea level rise.
- Minimise the use of carbon in all processes and materials selection.

INFORMATION:

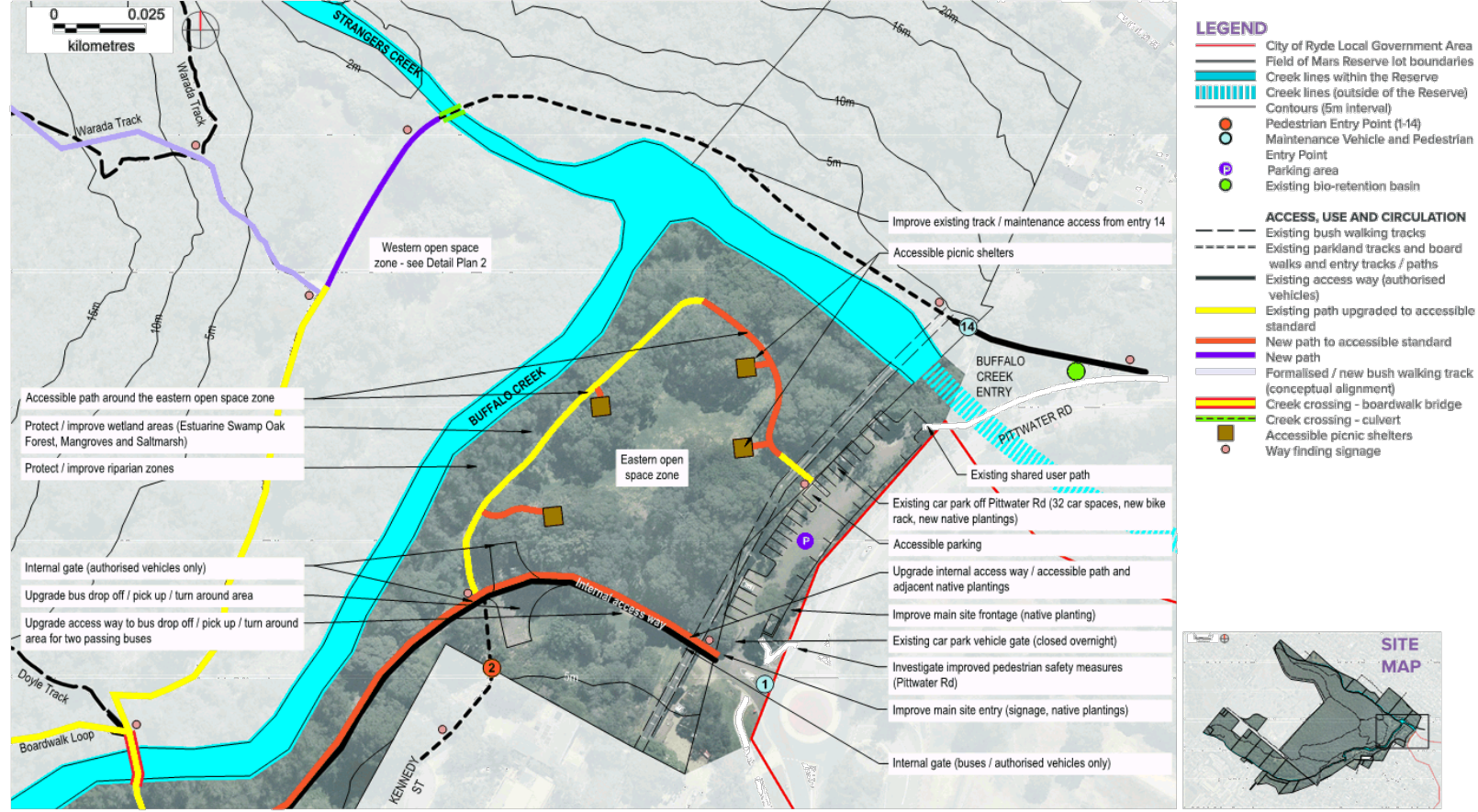
- Interpretive signs to be provided throughout the Reserve about the role of the wildlife refuge, neighbour and visitor responsibilities, local flora and fauna, local natural systems and functions, Aboriginal and non-Aboriginal heritage and culture specific to the Reserve.
- Consistent way finding signage to be provided on accessways, tracks and paths.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

DETAIL PLAN 1: Eastern Open Space Zone

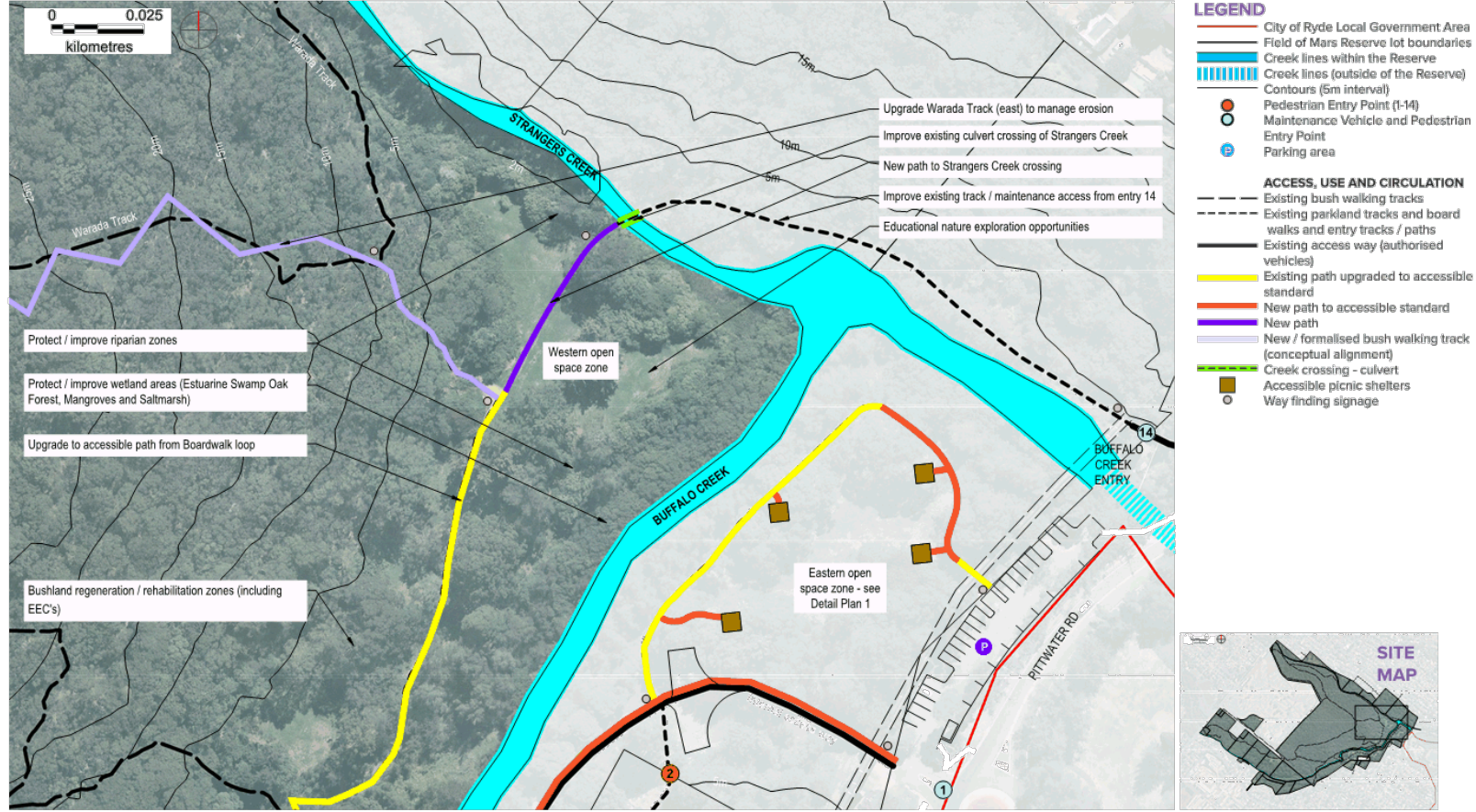


ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

DETAIL PLAN 2: Western Open Space Zone

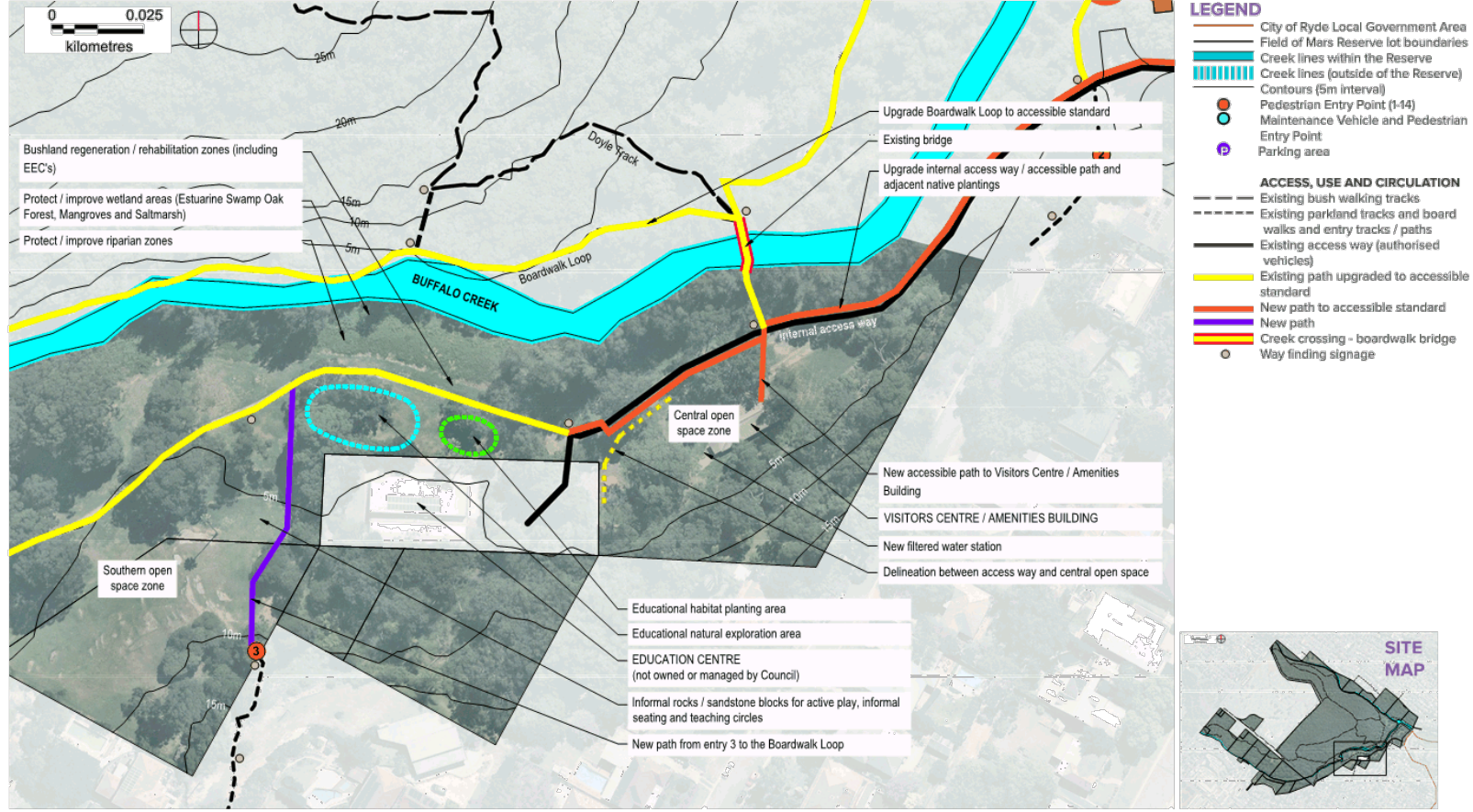


ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

DETAIL PLAN 3: Central and Southern Open Space Zones



53

ITEM 8 (continued)

ATTACHMENT 1

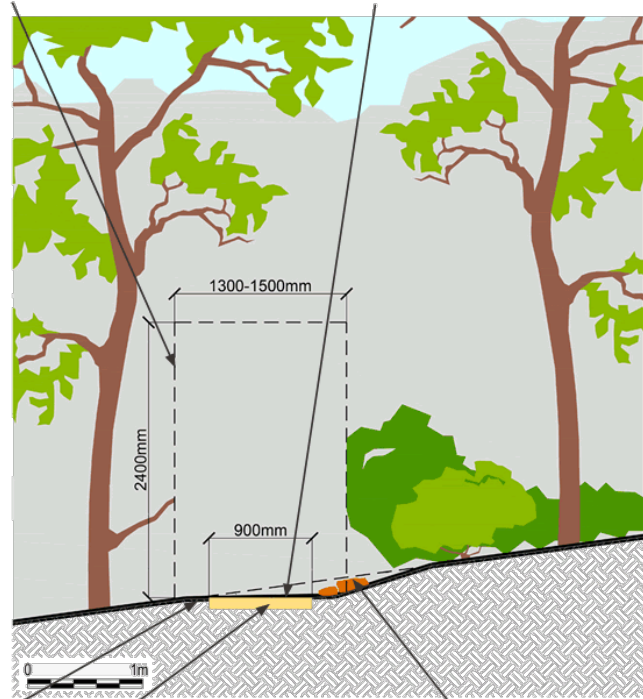
FIELD OF MARS RESERVE MASTERPLAN REPORT

GRADE 2 TRACK

Cross Section

Track corridor - clear a nominal 200-300mm beyond defined track surface (minimum 1.3 to 1.5m wide at shoulder height) and 2.4m high. Clear of trees, over hanging branches and intruding vegetation.

Modified or hardened track surface, 900mm or more wide, generally even surfaced with 1:50 cross fall (2% or 1:15°), well maintained with few obstacles and minimal intrusions.



No windrow or rill along track margins.

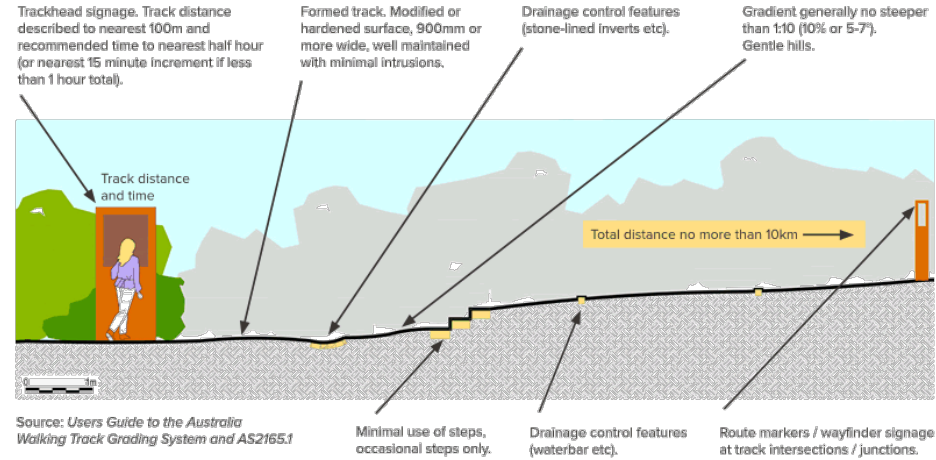
Track:

- Track benched into cross slope, up-slope batter at natural angle of repose;
- Excavate site material, as necessary, to remove organic matter and larger stones. Replace in-situ material (or fill) and compact to 90% as hardened track surface;
- Larger roots cut or covered to provide level track surface with few if any trip hazards.

Rocks removed (or cut flush) to provide level track surface, and randomly placed along track margins (or up-slope of track on benched sections).

Long Section

Users need no previous experience and are expected to exercise normal care regarding their personal safety (AS2165.1). Suitable for most ages and fitness levels.



Source: Users Guide to the Australia Walking Track Grading System and AS2165.1

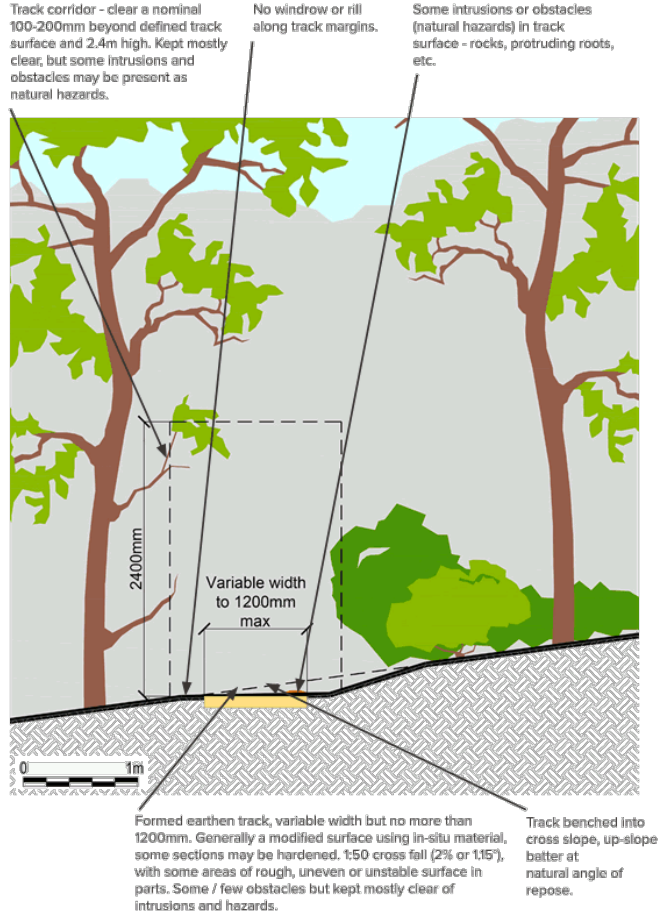
ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

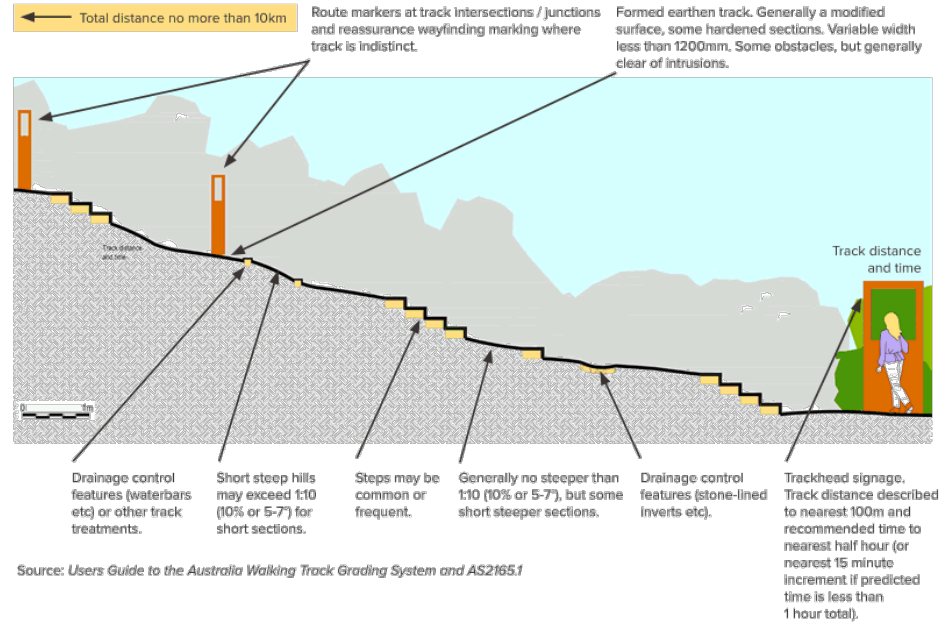
GRADE 3 TRACK

Cross Section



Long Section

Suitable for most ages and fitness levels. Some bushwalking experience recommended but minimum level of specialised skills required. Walkers may encounter natural hazards (steep slopes, rough / unstable surfaces and minor water crossings) and are responsible for their own safety.



ITEM 8 (continued)

ATTACHMENT 1

Park Furniture



Replace existing shelters with metal and timber structures.



Provide wheelchair accessible picnic settings to each picnic shelter.



Provide accessible seats to match picnic table settings.



Provide filtered a water station to reduce the use of plastic bottles.

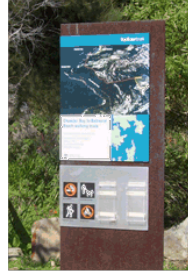


In the southern open space zone integrate informal rocks / sandstone blocks for active recreation, informal seating and teaching circles. 56

Entry Treatments



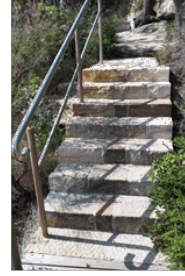
Replace all existing entry signs with a single totem based on the style of the existing Reserve sign on Pittwater Rd, a corten steel blade.



Affix printed aluminum panels to display site map, location, permissible activities, wild life refuge status, walking tracks, biodiversity values, bushcare groups. Investigate options for interchangeable panels.



Present totem signs in a landscaped setting, provide endemic plantings, rebuild steps and pave entry paths to a standard treatment



Replace existing steps with sandstone steps and provide hand railings.



Provide sandstone paving at entries as required to improve amenity and path function.



Provide bike racks to facilitate secure storage at entries to deter bike entry to the Reserve.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

Signs

MASTERPLAN: Precedent Images

Reserve signage to be based on the existing sign on Pittwater Rd - using a corten steel blade on which sign boards are affixed.

Affixed printed aluminum panels to display site map, location, permissible activities, wild life refuge status, walking tracks, biodiversity values, bushcare groups. Options for interchangeable panels to be investigated. Sign palette to include:

- Large totem (2m+ high) at all entries
- Way finding totems (1m high) at track junctions
- Interpretive signs (<1m high) at key locations (existing signs to be removed)



Reserve signage to be based on the existing sign on Pittwater Rd - using a corten steel blade on which sign boards are affixed.



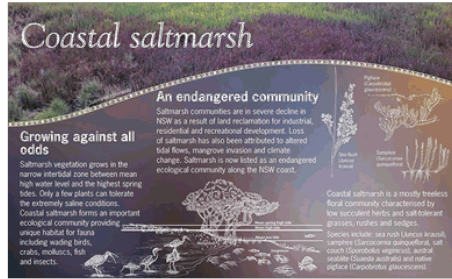
Totem signs to include site map, location, permissible activities, regulatory information, wildlife refuge status, bushcare groups, biodiversity values, responsibilities of users.



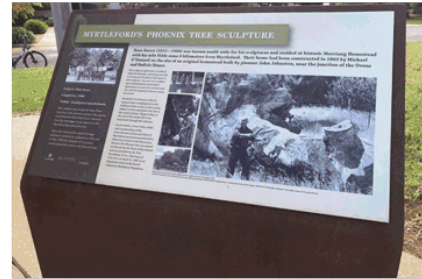
Way finding signage to include track direction, distances and Reserve attractions and facilities affixed to a corten steel blade.



Way finding signage (example only).



Existing interpretive signs to be replaced – printed aluminum panels, affixed to corten steel low height blades, to provide information about indigenous site and local flora and fauna, the role of the Reserve, means to protect the environment, Heritage and cultural values, and stormwater management.



Example of a sign board affixed to a corten steel blade.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Precedent Images

Nature Exploration



Provide materials for natural play.



Encourage investigation and recording of the natural environment.



Encourage access to the bush.



Encourage closer inspection of nature.



Provide outdoor education learning areas.

Edge management



Vegetation area management
- sandstone blocks to mark extent of mown areas.



Vegetation area management
- logs to mark extent of mown areas.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Precedent Images

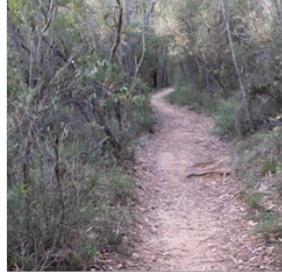
Bushland Tracks Grade 2

Recommended characteristics:

- Track corridor width of 1500mm with height of 2400mm free of small trees and overhanging branches
- Track width of 900-1500mm wide
- Gradient is generally no steeper than 1:10
- Generally a modified or hardened track surface
- Minimal use of steps
- Track is well maintained with minimal intrusions
- Track head signage and route markers at intersections
- Users need no previous experience and are expected to exercise normal care regarding their personal safety / suitable for most ages and levels of fitness
- Time to walk track noted in 15-30 minute increments
(Reference - *Users Guide to the Australian Walking Track Grading System*)

Precedent images show suitable examples of:

- Surface finish
- Simple step and run treatment
- Creek / drainage line crossings
- Drainage treatments



Track features - typical grade 2 track.



Track features - compacted earth (organic matter free) or gravel.



Track features - stone flagging where pavement hardening or infill is required.



Track features - use natural rock platforms for stepping and infill with site stone to create a traffic-able track.



Track features - landing tread stone to armour track and prevent wearing from use.



Track features - sleeper step and runs with sand or compacted fill treads.

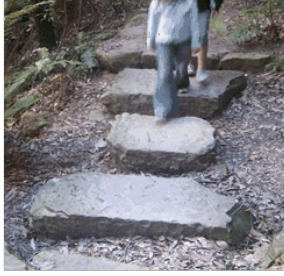
ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

Bushland Tracks Grade 2 continued...

MASTERPLAN: Precedent Images



Track features - stepping stone creek crossing.



Track features - stormwater management using a stone gutter / box drain.



Track features - stormwater management using a drain cut into insitu rock.



Track features - stormwater management using a stone lined invert.



Track features - stormwater management using a sleeper water bar.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

Bushland Tracks Grade 3

MASTERPLAN: Precedent Images

Recommended characteristics:

- Track corridor width of 1500mm with height of 2400mm free of small trees and overhanging branches
- Track width of 900mm but variable to 1200mm
- Gradient may exceed 1:10 for short sections but is generally no steeper than 1:10
- Steps may be common
- Formed earthen track, few obstacles. Generally a modified surface, sections may be hardened
- Track head signage and route markers at intersections and where the track is indistinct
- Users need no bushwalking experience and a minimum level of specialist skills. Users may encounter natural hazards such as steep slopes, unstable surfaces and minor water crossings. They are responsible for their own safety.
- Time to walk track noted in 15-30 minute increments.

(Reference - *Users Guide to the Australian Walking Track Grading System*)

In addition:

- Deviate track alignments to avoid long sections of downhill runs / provide stormwater management treatments to manage water

Precedent images show suitable examples,

in addition to those shown for Grade 2 tracks, of:

- Track surfaces
- Step treatments
- Drainage line crossings



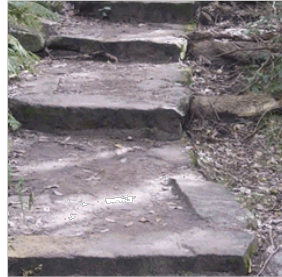
Track features - typical grade 3 track with compacted earth surface.



Track features - passable access across insitu rock.



Track features - rock steps through rocky outcrops



Track features - stone step and runs with compacted fill treads.



Track features - steps cut into insitu rock.



Track features - infill stone flagging and rock leveling to create a passable track over insitu rock outcrops.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

MASTERPLAN: Precedent Images

Bushland Tracks Grade 3 continued...



Track features - use natural rock platforms to create a traffic-able track.



Track features - stepped path at an angle to the slope to manage drainage flows.



Track features - rock lined box drain / gutter.



Track features - mesh deck panel across minor drainage line.



Track features - stepping stones across minor drainage line.

ITEM 8 (continued)

ATTACHMENT 1

Informal Access



Informal access across managed asset protection zones with way finding signage to guide the route.

Accessible Paths / Tracks

MASTERPLAN: Precedent Images

Accessible paths and tracks:

Characteristics:

- Grades in accordance with the AS1428 series.
- Ramps graded no steeper than 1:14 are suitable for a person in a wheelchair.
- Broad, hard surfaced path suitable for wheelchair use.
- Track width is 1200mm or more wide, well maintained with minimal intrusions.
- With track head signage and route markers at intersections.
- Users need no previous experience and are expected to exercise normal care regarding personal safety.
- Time to walk track noted in 15-30 minute increments.
- Steps allowed only with alternate ramp access.



Accessible boardwalk and creek crossing with kick rails.



Accessible park path of crushed sandstone or compacted gravel with timber edge boards.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

Vegetation Types

MASTERPLAN: Precedent Images



Saltmarsh (EEC) found along the creek lines in low lying areas to be protected and regenerated with species typically occurring in this vegetation type.



Estuarine Mangroves found along the creek lines in low lying areas to be protected and regenerated with species typically occurring in this vegetation type.



Estuarine Swamp Oak Forest (EEC) found along the creek lines in low lying areas to be protected and regenerated with species typically occurring in this vegetation type.



Coastal Enriched Sandstone Moist Forest found adjacent to creek lines in low lying areas and at the toe of the slopes to be protected and regenerated with species typically occurring in this vegetation type.



Coastal Enriched Sandstone Dry Forest found over much of the Reserve on sandstone slopes, to be protected and regenerated with species typically occurring in this vegetation type.



Coastal Shale-Sandstone Forest found across the upper slopes, to be protected and regenerated with species typically occurring in this vegetation type.



Sydney Turpentine-Ironbark Forest (EEC) found in pockets on the upper slopes, to be protected and regenerated with species typically occurring in this vegetation type.



Coastal Sandstone Gallery Rainforest, a small pocket along the upper reach of Buffalo Creek, to be protected and regenerated with species typically occurring in this vegetation type.

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

Stormwater Management

MASTERPLAN: Precedent Images

WSUD devices to manage stormwater:

- Trash racks
- Gross pollutant traps (GPT)
- Bio retention basins
- Planted strips
- Planted bio swales
- Rock lined swales



Existing trash rack and bio retention basin at the head of Strangers Creek.



Planted strip of vegetation between access way or paved areas and native vegetation to provide stormwater filtration.



Planted bio retention swales located at stormwater outlets, adjacent to infrastructure such as the car park, along Reserve boundaries and between paved surfaces and creek lines.



Rock lined headwalls and drainage lines to stormwater water outlets to manage erosion, before flowing to planted bio swales.



Useful grass species for mown areas in place of exotic grass species - *Microleaena stipoides* - Weeping Grass.



Typical wetland / bio retention plant species - *Carex appress* - Common Sedge. (Photo - bluedale.com.au)



Typical wetland / bio retention plant species - *Ficinia nodosa* - Knobby Club Rush.

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

PROJECT IMPLEMENTATION PLAN

FIELD OF MARS RESERVE MASTERPLAN - IMPLEMENTATION PLAN

MASTERPLAN AREA	MASTERPLAN ELEMENT/UPGRADE	ASPECT	PRIORITY FOR IMPLEMENTATION
Eastern Open Space Zone	Upgrade picnic facilities and accessible path connections.	Facilities & Circulation	High
Main Entry/car park	Accessible car parking spaces	Access	High
Visitors Centre/Amenities building	Upgrade accessible toilet and accessible path connection from access way.	Facilities & Circulation	High
Wellington Rd	Bush regeneration/rehabilitation zone	Environment	High
Near Entry 6	Bush regeneration/rehabilitation zone and decommission dead-end track	Environment	High
Internal Access Way	Upgrade to accessible standards and for authorised vehicles	Access & Circulation	High
Boardwalk Loop & Western Open Space Zone	Upgrade to Boardwalk and path to accessible standards. New path from creek crossing culvert through Western Open Space Zone.	Circulation	High
Internal Access Way	Delineation between access way and Central Open Space Zone	Access & Circulation	High
Internal Access Way	Upgrade bus drop off/pick up area and turning circle.	Access	High
Internal Access Way	Upgrade vehicle gates to key and remote operations.	Access	High
Tracks	Walking trail audit and review of track/loop names undertaken	Circulation	High
Whole of site	Develop Signage Strategy	Circulation & Education	High
Main Entry (entry 1)	Upgrade with signage, place making elements and plantings to improve arrival experience	Access	High
Secondary Entry (entry 14)	Upgrade secondary entry point, maintenance access and creek crossing culvert	Access & Maintenance	High
Secondary Entries (entries 2 – 13)	Upgrade secondary entry points, signage and cycle racks where adjacent to cycle routes.	Access	High
Southern Open Space Zone	Upgrade informal seating and outdoor educational opportunities.	Facilities & Education	High
Entries 9 – 10 and Entries 12-13 / Tracks	Formalisation of pedestrian access on APZs.	Circulation	High
Main Entry/car park	Cycle racks.	Access	High

67

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

PROJECT IMPLEMENTATION PLAN

MASTERPLAN AREA	MASTERPLAN ELEMENT/UPGRADE	ASPECT	PRIORITY FOR IMPLEMENTATION
Central Open Space Zone	Filtered water station	Facilities	High
All Walking Tracks	Upgrade all existing walking tracks to Grade 2 or 3	Circulation	High/Medium
Secondary Entry (entry 3) / Track	New path from entry 3 to the Boardwalk Loop.	Circulation	High/Medium
Secondary Entry (entry 11) / Track	New path from entry 11 and Strangers Creek crossing to Warada Track	Circulation	High/Medium
Whole of site	Upgrade wayfinding signage	Circulation	High/Medium
Whole of site	Upgrade track head signage	Circulation	High/Medium
Warada Track	New track alignment to address existing erosion issues.	Circulation	High/Medium
Tracks	Provide teaching opportunities along the tracks including break out spaces.	Circulation & Education	High/Medium
Pittwater Rd	Investigate pedestrian safety and traffic calming measures	Access	High/Medium
Pidding Rd/Cressy Rd	Investigate pedestrian safety and traffic calming measures	Access	High/Medium
Whole of site	Upgrade interpretive signage	Education	Medium
Western Open Space Zone	Bush regeneration/rehabilitation zone	Environment	Medium
Southern Open Space Zone	Bush regeneration/rehabilitation zone	Environment	Medium
Off-site and whole of site	Upgrade connectivity to adjacent off-site walking routes	Access	Medium
Whole of site	Provide WSUD devices to manage stormwater at the perimeter of the Reserve.	WSUD	Medium/Low
Whole of site	Implement WSUD device in association with adjacent wetlands as per Lane Cove River Coastal Zone Management Plan 2013.	WSUD	Medium/Low
Entries 4 – 5 to Boardwalk / Track	Formalisation of pedestrian access on APZs	Circulation	Low
Visitors Centre / Amenities Building	Council to give future consideration to investigate / review the condition and improved functionality of the existing building for greater community environmental education purposes. Consideration to be given to land stability, flood mitigation measures, potential climate change measures and other environmental improvements.	Facilities & Education	Low
Whole of site	Incorporate WSUD devices to manage stormwater when undertaking improvement works	WSUD	Ongoing
Whole of site	Protect and enhance the existing EEC's - through weed control, replanting and edge definition protect and improve the saltmarsh areas and the adjacent Estuarine Swamp Oak Forest.	Environment	Ongoing
Whole of site	Undertake ongoing weed control and endemic species plantings / reinforce biodiversity corridor links particularly within the riparian zones / reinforce all EEC communities plant profiles.	Environment	Ongoing
Whole of site	Undertake weed control and native species planting within the riparian zone of Buffalo Creek	Environment	Ongoing
Whole of site	Undertake weed control and native species planting within the riparian zone of Strangers Creek	Environment	Ongoing

68

ITEM 8 (continued)

ATTACHMENT 1



ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Relevant Acts and Strategic Documents

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>NPWS Act 1974</i>	The Field of Mars Reserve (the Reserve) is nominated as a Wildlife Refuge.	Important to protect and manage habitat to provide wildlife refuge.	Environment / Information
<i>Companion Animals Act 1998 (CAA)</i>	The Reserve is designated as a Wildlife Protection Area where dogs and cats are excluded at all times (Category 1 under the CAA).	Important to notify park visitors of requirements to exclude cats and dogs.	Information
<i>Greater Sydney Region Plan - A Metropolis of Three Cities 2018</i>	The Reserve falls within the area of the Eastern Harbour City. It does not fall within the economic corridor from the Sydney CBD to Macquarie Park, nor the health and education precinct of Macquarie Park to the north, Rhodes to the SW or St Leonards to the east. The main train links are sited to the north of the Reserve, from the CBD to Macquarie Park, and south, from the CBD to Parramatta. There are no local light rails links. (Effectively the local area to the Reserve is serviced by buses.) The vision of the Plan is driven by four drivers - infrastructure and collaboration, liveability, productivity and sustainability. Relevant to the reserve are the directions to value green spaces and landscape, use resources wisely and adapt to a changing world.	Opportunity to enhance the bushland, use resources efficiently and effectively and plan for change eg Climate.	Environment
<i>Sydney Green Grid 2017</i>	The report addresses <i>Green, Hydrological, Ecological and Recreational Grid</i> opportunities across Sydney. The Reserve falls within the North District and is nominated as local open space. It is located away from the proposed Urban Renewal Corridors, which are sited to the west (from Ryde to Epping) and to the east (from Chatswood to Hornsby), and the Priority Precincts and Growth Centres of Epping and Macquarie Park to the north. The strategy promotes increasing access to open space and providing for healthy and active living. The report promotes minimising disturbance to riparian areas, the protection and improvement of the natural character, ecological integrity, visual amenity and public access to foreshores and rivers. Further, the connecting of bio diverse areas to provide ecological connectivity. The report promotes raising awareness amongst the community about the values of local bush and fostering community bushcare groups. The report highlights protection of heritage places and landscapes along with cultural heritage. The Kittys Creek corridor, located north of the Reserve, is mentioned as an important cross connection from the Lane Cove River to Ryde Hospital.	Considered in the Sydney Region as a local park. Implement values promoted by the report.	Environment / Access / Information
<i>Planning Ryde Local Strategic Planning Statement 2020 (LSPS)</i>	The LSPS sets the vision for 20 years. The document effectively provides a vision, challenges, targets, priorities and actions for several focus areas. The main relevant vision is the establishment and maintenance of green corridors of which the Reserve is contained within two, Buffalo Creek to the Lane Cove River and Strangers Creek to North Ryde Common. Relevant targets include: <ul style="list-style-type: none"> • Increase the proportion of the population within 400m of public open space greater than 1,500m² in size; • Council's public domain upgrades and program will be based on identified priorities and audits; • Local flora and fauna will be effectively conserve; Relevant priorities include: <ul style="list-style-type: none"> • Encourage walking and cycling for recreational purposes, provide facilities for pedestrians and cyclists; • Prioritise liveability through an attractive, sustainable and well designed environment; • Protect and enhance the cultural heritage (including places with natural heritage significance); • Protect and enhance Aboriginal cultural heritage; 	Manage the Reserve within the context of the local green corridors. Conserve local flora and fauna. Provide facilities for walkers and cyclists (within the context that bike riding is not permissible within the reserve). Provide an attractive, sustainable and well designed environment.	Environment / Access

70

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Relevant Acts and Strategic Documents

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>Planning Ryde Local Strategic Planning Statement 2020 (LSPS) cont'd</i>	<ul style="list-style-type: none"> • Ensure public spaces are well used and enhance local identity; • Provide accessible open space to service population needs; • Ensure open space can be shared and enjoyed by all; • Protect and enhance bushland, biodiversity, environmentally sensitive waterways, scenic and cultural landscapes; • Reduce carbon emissions and manage energy, water and waste efficiently; • Protect and improve the health and enjoyment of the City of Ryde's waterways; • Provide waste and recycling infrastructure that is designed to ensure safety, efficiency and accessibility of waste, reuse and recycling services, and that does not compromise the public domain; • Adapt to the impacts of urban and natural hazards and climate change; 	Provide for increased and more accessible use. Improve waste and recycling facilities.	Access / Facilities
<i>Our Vision for Ryde 2028 Community Strategic Plan 2018</i>	Under several aspirations, Council plans, amongst a suite of intentions, to design places for people, provide sustainable planning and design, enhance recreational spaces, protect natural environments, reduce impacts on natural systems, provide resilient infrastructure, improve access and reduce the travel footprint, and improve community connectedness.	Accommodate access and use by the community.	Access
<i>Ryde Resilience Plan 2030</i>	The plan nominates the following relevant goals for a Resilient Ryde - energy, water and resource security, adaptation to climate change, protection of sustainable natural systems, transport connecting the community, and improved health and well being. For water security, stormwater management and water sensitive urban design (WSUD), efficient use of water and water quality feature. For climate change, management of bushfires, flooding, sea level rise, drought, and air quality is raised. For natural systems, the plan highlights the importance of managing bushland and natural areas. For transport Council is pursuing active options particularly developing an extensive bike network. For health and wellbeing Council is addressing social inclusion, volunteering and safety.	Manage stormwater using WSUD principles. Consider issues of bushfires, flooding, sea level rise, drought and air quality.	Environment
<i>City of Ryde Disability Inclusion Action Plan 2017</i>	To ensure more inclusion the plan includes the following actions amongst many: <ul style="list-style-type: none"> • Incorporate more accessible parking (beyond compliance) (1h); • Improve public domain signage to assist people with disability (1j); • Improve disabled access in parks (2c); 	Provide facilities for disabled access.	Access / Facilities
<i>City of Ryde Integrated Open Space Plan 2012</i>	<p>The Plan reviews current provision of open space in the Council areas and notes that:</p> <ul style="list-style-type: none"> • <i>Field of Mars (Reserve) is the largest single open space in the City at 49 Ha;</i> • <i>Improvements such as the boardwalk at Field of Mars (Reserve) has helped accessibility, but for an open space of its size it offers few other public amenities that reflect its importance;</i> • <i>Field of Mars (Reserve) is the most significant natural and recreation corridor in the City. Steep local topography in the Buffalo Creek Valley is a barrier to north-south access in the suburb, but conversely the open space forms a very important link as a natural and recreational corridor between the Lane Cove River, the Great North Walk and Top Ryde.</i> • <i>While the Field of Mars (Reserve) is first and foremost a bushland open space there are cleared areas, particularly close to Pittwater Road that would meet passive recreation needs without compromise to its integrity.</i> <p>The Plan identifies the Reserve as a Level 1 open space. Level 1 sites are considered to be large in size, or can accommodate large community activities or have a unique landscape setting and are considered a regional attraction.</p>	Potential to increase recreational opportunities within the cleared areas near Pittwater Rd.	Facilities

71

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Relevant Acts and Strategic Documents

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>City of Ryde Integrated Open Space Plan 2012 (cont'd)</i>	<p>Conclusions made on current participation included:</p> <ul style="list-style-type: none"> <i>highest participation across the City is in informal activities placing an emphasis on the need for all parts of the City to cater for walking, bushwalking, cycling and informal open space uses (eg. runabout, play, picnics, BBQs, etc);</i> <i>the high level of social considerations for participation in leisure and recreation activities should be reflected in park design (ample seating, places to meet, plenty of shade, play opportunities).</i> <p>The demands and needs analysis identified amongst other conclusions:</p> <ul style="list-style-type: none"> <i>unstructured recreation, especially walking, aerobics, cycling and swimming account for the highest level of physical activity participation in the City;</i> <i>the natural environment is of high importance to the residents of the City;</i> <i>seniors consider problems of gaining access to open space as their major concern (transport and distance to local open space);</i> <i>factors that may change demand (and thus must be considered as changing needs) include climate change, the demography of new residents and communities, changing trends in recreation preference and changing economic conditions;</i> <i>the capacity of existing parks requires to be extended if current recreation and leisure needs are to be better met;</i> <i>a strategic approach to developing an extensive network of recreational and natural corridors will need to be addressed if the demand for walking, cycling and bushwalking needs are to be met, the natural values of the City are to be enhanced and access to local, district and regional open space is to be improved.</i> <p>The Plan includes an <i>Open Space Structure Plan</i> that identifies the Reserve as one of five principal bushland reserves and sited within a principal recreational link from Lane Cove River to the west to link with a north south link. The included <i>Recreational Corridor Network Plan</i> indicates that the Kunzea Walk along Buffalo Creek and the Stranger Creek Walk form pedestrian links within the corridor from Lane Cove River to Ryde. The implementation plan proposes, amongst a suite of actions, for open space to extend the capacity of existing open space as a priority, improve parking provision and efficiency eg use street parking where possible, integrate open space into the Ryde walking network, improve accessibility to open space and facilities, provide links to adjacent open space, provide wayfinding signage, that bushland reserves <i>conserve, integrate and enhance natural values into their recreational use and appreciation</i>, implement WSUD with respect to creeks, upgrade creeks, incorporate climate change adaptation solutions especially for flooding issues in the Reserve, interpret Aboriginal and non Aboriginal cultural heritage, provide for diversity and address landscape setting and character.</p>	Provide facilities for walkers and passive users such as seating, shade and play areas.	Facilities
<i>Sport and Recreation Strategy 2016-2026</i>	The strategy identifies the Reserve as a Natural Area of unique ecological value that is maintained with minimal human intervention and is protected because of its significant ecological value for the Ryde Community. Possible recreation activities identified include bushwalking, running, Bushcare Programs, bird watching and provision of picnic areas. It goes on to note that <i>increased recreational use of natural areas and bushland will required careful management and control to minimise harm to the habitat value of the City's natural areas</i> . Proposed relevant actions include improving access links to open space and improving accessibility to and in picnic areas and to existing buildings.	Increase recreational opportunities without causing impacts on the natural environment.	Environment / Facilities

72

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Relevant Acts and Strategic Documents

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>City Of Ryde Bicycle Strategy 2014</i>	Addresses the progressive upgrade of bicycle facilities to meet active transport and recreational needs of the community. The strategy prioritises the development of selected sections of the Regional Routes identified in <i>Sydney's Cycling Future</i> (NSW government's bicycle transport policy dated 2013). Relevant routes to the Reserve include: <ul style="list-style-type: none"> the Southern Orbital Tier 1 route RR05 which passes the Reserve to the east along Pittwater Rd. It links North Ryde to Gladesville. Partially completed with a shared off road bike path provided in Pittwater Rd, adjacent to the Reserve, from High St (south) to Renee St (north); Tier 2 interconnecting routes: <ul style="list-style-type: none"> RR09 along Higginbotham Rd to the south of the Reserve linking Eastwood to Hunters Hill. Currently an informal on road route; RR04 along Cressy Rd to the west of the Reserve linking North Ryde to Tennyson Point. Not available at present (an informal on road bike route is located further to the west along Badajzo Rd). An additional informal on road bike route is available to the NE of the Reserve along Moncrieff Dr.	Opportunity to provide entry facilities for the secure parking of bikes to encourage access to the Reserve via cycle routes.	Access / Facilities
Transport NSW	Bus routes around the Reserve occur along: <ul style="list-style-type: none"> Thompson Rd / Higginbotham Rd to the south; Pidding Rd / Badajzo Rd to the west; Twin Rd / Moncrieff Dr to the north; routes run along Pittwater Rd to High St which is south of the Reserve. 	Opportunity to encourage access to the Reserve via public transport.	Access / Information
<i>Ryde Biodiversity Plan 2016</i>	Field of Mars Reserve (the Reserve) is located within the Buffalo Creek Corridor, a regional corridor, linking Burrows Park, located to the west, to Lane Cove River, located to the east. The Reserve is also located within the Strangers Creek Corridor, a local corridor linking Field of Mars to North Ryde Common to the north. The Buffalo Creek Corridor is linked to a north south regional corridor running from Minga Reserve to the northwest, south to Morrison Bay Park on the Parramatta River (another regional corridor running NW / SE). The Strangers Creek Corridor connects to the Kittys Creek corridor, running SE to NW, north of the Reserve. Kittys Creek is linked to the Lane Cove River to the east (another regional corridor running north / south). The Reserve is identified as <i>High Biodiversity Conservation Significance</i> . A high proportion of the Reserve is considered to have <i>Very High biodiversity conservation priority</i> (approximately 50%). The remainder of the Reserve to have rankings of <i>High</i> and <i>Moderate</i> . A significant portion of the Reserve is considered to have a ranking of <i>High</i> with regards to <i>threats to biodiversity</i> (approximately 50%). Threats include weed species invading the area particularly the saltmarsh, impacts at the Reserve edges from adjacent activities and neighbouring properties, increased stormwater runoff and nutrients from adjacent areas impacting on water quality and siltation of the creeks, lack of fire at a suitable interval, general weed invasion, dumping particularly of greenwaste, unmanaged recreational use eg informal tracks, domestic pets and introduced fauna, control of vehicles, development and infrastructure works. <i>Biodiversity Themes</i> identified in the Plan include: <ul style="list-style-type: none"> Protecting and managing Ryde's native vegetation; Restoring waterways and surrounding environments; Linking corridors and improving connectivity; Managing reserves to promote biodiversity and community interaction; and, Protecting urban habitat. 	Opportunity to enhance the biodiversity values of the Reserve to assist with the functions of the various connected corridors. Opportunity to address threats to biodiversity through environmental design and management. Opportunity to develop the Reserve to reflect the <i>Biodiversity Themes</i> established in the <i>Ryde Biodiversity Plan</i>	Environment

73

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Flora and Fauna

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>City of Ryde Flora and Fauna Surveys 2017</i> (Terry's Creek Kitty's Creek Field of Mars Reserve Buffalo Creek tributaries)	<p>A study of vegetation changes on a number of creeklines in the Council area including Field of Mars Reserve between 2007 and 2017. The Reserve contains rare flora and fauna along with 298 identified native species and 81 introduced species. Species listed under the Bonn Convention, species listed as vulnerable in NSW, and species listed federally as vulnerable. The highest faunal diversity is found on the south side of the Reserve between Wellington Rd and Buffalo Creek. The area is wetter and weedier than other portions of the Reserve but provides more shelter and complex habitat niches. Buffalo Creek as it flows downstream and becomes more estuarine supports a different suite of birds. The Reserve includes a thriving Long-nosed Bandicoot population, a diversity of microbats including threatened species, resident breeding pairs of Powerful Owls and Brown Goshawks and a rich variety of small sedentary and migratory birds. Threatened plant species include <i>Epacris purpurascens var purpurascens</i> (recorded 2017), and <i>Pimelea curvifolia var curvifolia</i> (recorded 2007). Both storm flows along the creek and past fires have caused changes to the vegetation over time. Despite a history of disturbance, the Reserve retains a high level of resilience, with large areas of intact bush, suggesting a high level of native seed in the soil. Recommendations of the study include:</p> <ul style="list-style-type: none"> • No whole of reserve burns only mosaic burns allowing for corridors for native fauna to escape along with avoidance of burns in areas with sedentary species, avoid using fire in known breeding areas; • Educate adjacent residents about responsible pet ownership; • Educate and inform bushcare volunteers and Reserve visitors about local native flora and fauna species, habitat and biodiversity; • Retain hollow bearing trees for habitat, isolate with fencing as required, otherwise harvest hollows and retain or supplement with nesting boxes; • Undertake staged removal of woody weeds combined with re-vegetation planting of diverse range of species for habitat, roosting and food, particularly in the area between Wellington Rd and Buffalo Creek; • Exclude poison feral animal controls; • Isolate known breeding areas from noise; • Control lighting to avoid impacts on fauna populations sensitive to light, retrofit existing lighting to comply; • Plant early flowering species along disturbed edges of vegetation to encourage nectivore activity. 	Important to protect the habitat of these rare and threatened species as well as continuing to provide and improve habitat to increase biodiversity. Opportunity to implement the relevant recommendations of the Flora and Fauna Study 2017.	Environment
<i>Sydney Metro CMA Vegetation Mapping SMCMA (OEH 2013)</i>	The Reserve contains several Forest Plant Communities representing an intact transition from upper Shale areas to lower wetland areas. Two of the forest communities are endangered ecological communities (EECs) - <i>Sydney Turpentine-Ironbark</i> and <i>Estuarine Swamp Oak</i> . Additional plant communities include Estuarine Saltmarsh (EEC), Urban exotic / natives, and Weeds and exotics	Opportunity to protect EEC communities from biodiversity threats as highlighted in the <i>Biodiversity Plan 2016</i> . Opportunity to display and interpret biodiversity information.	Environment / Information
<i>City of Ryde Native Plants of the Ryde District 2005</i>	This report identifies a list of 20 Plants of <i>Particular Conservation Significance</i> for the Reserve at Appendix 3.	Opportunity to protect flora species of conservation significance.	Environment

74

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Water Management

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>Guidelines for riparian corridors on waterfront land 2012</i>	The Guideline identifies the width of the riparian corridor under the Strahler System. Buffalo Creek within the Reserve is a watercourse type 2nd order and Strangers Creek is 1st order. NSW Office of Water recommends, for a 1st order watercourse type, a vegetated riparian zone (VRZ) with a width of 10m each side of the creek channel, for 2nd order creek, it recommends 20m each side of the creek channel. Further recommendations include maintaining or establishing fully structured native vegetation to the requisite widths, minimising disturbance to the VRZ, minimising the number of creek crossings (road), locating infrastructure outside of the VRZ, and treating stormwater runoff before discharging into the VRZ. Allowable activities within the VRZ for both stream orders include offsetting for non riparian corridor uses eg asset protection zones, cycleways and paths (maximum 4m wide footprint in the outer half of the VRZ), detention basins (online or within the outer half of the VRZ and not for water quality treatment), stormwater outlets and essential services and road crossings. In addition stream realignment is allowable for 1st order streams.	Apply vegetated riparian zone widths as recommended along with allowable activities.	Environment
<i>Lane Cove River Coastal Zone Management Plan 2013</i>	The Plan provides guidance on future actions within the estuary of Lane Cove River and its catchment in order to achieve long term balanced environmental sustainability. A suite of actions are proposed to address water quality, climate change, aquatic and riparian habitat, foreshore protection and estuary health monitoring and evaluation and apply to the four local councils including City of Ryde. Bushcare programs and sediment and development controls are ongoing actions. High priority actions relevant to the Reserve include creation and enhancement of estuarine wetland communities, bushland rehabilitation and restoration, establishment and support of local bushcare groups, identification of vegetation likely to be under threat with sea level rise and support current monitoring programs. Medium priority actions relevant to the Reserve include monitoring estuarine vegetation communities re climate pressures, comply with environmental best practice, implement WSUD solutions, identify communities at risk from fire, identify foreshore areas required for retreating estuarine communities, liaise with Sydney Water to improve sewer infrastructure, educate the community about adaptation to sea level rise, control invasive pest plants and animals, retrofit WSUD devices, maintain WSUD devices, control fertiliser use. Low priority actions relevant to the Reserve include prevent aquatic diseases and pest, use City of Ryde's WSUD principles within the catchment and replace stormwater pipes with better designed solutions. The Plan cites relevant actions from other reports including for the Reserve catchment a bioretention system to complement the existing wetland in Buffalo Creek catchment to treat a catchment area of approximately 28ha (CoR1). Appendix F includes a water quality review report which notes the existing features within the Reserve - a bioretention basin at the head of Strangers Creek in Cressy Rd, a WSUD wetland off Higginbotham Rd, bushcare sites within the Reserve, and a water quality and biological monitoring site located within the western open space zone. It also notes predicted sea level rise to 2.3m AHD.	Opportunity to enhance estuarine communities and to identify vegetation under threat of sea level rise and areas into which they can retreat. Include proposal to include a bioretention system in association with the nearby existing constructed wetland. Potential loss of open space within the park zone.	Environment
<i>Lane Cove Estuary Saltmarsh Site Assessments 2010</i>	The Report details results of a site survey of saltmarsh in the Reserve. Generally considered to be in good condition in 2010 with the upstream areas below the Educational Centre to be fair only. The boardwalk has improved conditions by isolating saltmarsh from access. Issues include fires from vandalism; high nutrient and sediment loads from urban runoff into Buffalo Cree; debris deposition from tidal flushing; and weed propagules in the system. Noxious weeds are present - Asparagus Fern, Blackberry and Tradescantia. Bushland regeneration, targeted weeding, and supplementary planting is proposed to manage the issues along with the introduction of stormwater upstream measures.	Opportunity to implement measures designed to improve the quality of the saltmarsh areas.	Environment

75

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Water Management

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>City of Ryde Riparian Protection and Rehabilitation Management Plan 2013</i>	<p>The document provides a suite of restoration strategies and treatments for the creeks within the Council area of Ryde. Field of Mars Reserve falls within the middle of Buffalo Creek's catchment and provides bush to buffer the creek from the impacts of the Field of Mars Cemetery. Strangers Creek joins Buffalo Creek just upstream from Buffalo Creek's tidal limit, and drains the other side of the cemetery. Buffalo Creek has significant noxious weed infestations through much of the riparian zone. Works proposed by this report for Buffalo Creek include :</p> <ul style="list-style-type: none"> • BC6 and BC7 (south of Pidding Rd / Cressy Rd) - control noxious and woody weeds and vines, and undertake stability planting using <i>Coastal Sandstone Gallery Rainforest</i> species; • BC8 (upstream of the boardwalk loop) - control noxious and woody weeds and vines, and undertake stability planting using <i>Sydney Turpentine Ironbark Forest</i> or <i>Coastal Sandstone Gallery Rainforest</i> species as appropriate, undertake bush regeneration weed control, and stabilisation of creek banks as required; • BC9-11 (from south of the boardwalk loop to Strangers Creek) - control noxious and woody weeds and vines, and undertake stability planting using <i>Sydney Turpentine Ironbark Forest</i> or <i>Coastal Sandstone Gallery Rainforest</i> species as appropriate, undertake bush regeneration weed control, control groundcover weeds, infill plant for diversity and install interpretive signage along the boardwalk; <p>Works proposed for Strangers Creek include:</p> <ul style="list-style-type: none"> • STR1 (southeast of Cressy Rd to south of Kellaway St entry 10) - control noxious and woody weeds and vines, undertake bush regeneration weed control, and undertake infill planting using <i>Sydney Turpentine Ironbark Forest</i>, <i>Coastal Shale Sandstone Forest</i> or <i>Coastal Sandstone Gallery Rainforest</i> species as appropriate; • STR2 (from south end of STR1 to Buffalo Creek) - control noxious and woody weeds and vines, undertake stability planting using <i>Coastal Enriched Sandstone Sheltered Forest</i> species, undertake bush regeneration weed control, clear vegetation from bush track, monitor bank stability. 	Identify required works on the Masterplan.	Environment
<i>Ryde WaterInfo - Maps and Information</i>	<p>This interactive online facility provides information such as the location of existing WSUD devices:</p> <ul style="list-style-type: none"> • a gross pollutant trap (GPT) and bioretention basin at the head of Strangers Creek between entries 8 and 9; • a GPT and bioretention basin off Higginbotham Rd (to the west of entry 5); • a bioretention basin near entry 14 to treat stormwater prior to entering Buffalo Creek. <p>Also that Strangers and Buffalo Creeks are non perennial stream types.</p>	Noted	Environment
<i>Water Quality Monitoring Report 2018/2019</i>	<p>Water quality testing undertaken in 2018/2019 in the Buffalo Creek catchment occurs at 2 sites near Burrows Park (upstream of Buffalo Creek) and at a third site off Higginbotham Rd south of the Reserve recorded a rapid riparian assessment score of Good (up from Fair in 2017/2018). Recommendations of the Report include continue GPT maintenance and rubbish removal.</p>	Noted	Environment
<i>Stormwater Drainage Upgrade, Mars Lane, Gladesville 2020</i>	<p>Includes the provision of a low mound plus improvements to an existing rock lined channel flowing into the Reserve from Mars Lane to a energy dissipation / sediment basin (rock lined and planted with native grass species).</p>	Noted	Environment

78

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Reserve Management and History

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>Field of Mars An Early History 2019</i>	<p>1804: Establishment of the Fields of Mars Common - used for housing stock, source of timber, charcoal factory.</p> <p>1874: Field of Mars Common Resumption Bill</p> <p>1887: Dedication of 85 acres as Field of Mars Reserve - by 1967 that was reduced to 70 acres. The Reserve continued to be used as a source of timber and for swimming and recreation and by squatters.</p> <p>1950s: non putrescible garbage was dumped on the left bank of Buffalo Creek just upstream from Pittwater Road near the confluence of Strangers Creek and Buffalo Creek and an additional 4.8 hectares (12 acres) on the right bank was gazetted in 1955 for use as a rubbish depot. [In 1987, this was identified as the Reserve's Pittwater Road entrance and carpark and the general area where the Visitor Centre and Environmental Education Centre were located]. The tip was closed in 1959.</p> <p>1965/66: proposal to pipe Buffalo Creek and create rubbish dump to depth of 50 feet (1964 the Army prepared to use the site as a simulated minefield but Council withdrew permission following a residents protest).</p> <p>1966: activism by (East Ward) Anti Tip Action Committee, Ryde-Hunters Hill Flora and Fauna Preservation Society and local residents to halt tipping activities.</p> <p>September 1966: Council resolved; That the Ryde/Hunters Hill Flora & Fauna Association (sic) be advised that Council agrees to their development of the Field of Mars Park as a flora and fauna sanctuary ...</p> <p>1969: 4.8 (12 acres) hectares of land on the right bank of Buffalo Creek which was gazetted as a rubbish depot was revoked and re-reserved for public recreation.²⁴ This brought it up to 82 acres, close to its original size.</p> <p>1972: it was proposed that the boundaries of the Reserve be extended to include the land south-west of Wellington Road and north-east of Stranger's Creek owned by the Crown, the Council and the State Planning Authority (SPA).</p> <p>1972: Visitors Centre opened</p> <p>1973: the crown land noted at 1972 was added to the Reserve and the land under the SPA was placed under the care, control and management of Ryde Council.</p> <p>1974: part of the Field of Mars Cemetery was added to the Reserve along with part of Wellington Rd.</p> <p>1975: Draft Plan of Management prepared by the Ryde-Hunters Hill Flora and Fauna Preservation Society.</p> <p>1975: proclaimed a Wildlife Refuge under the NPWS Act 1974.</p> <p>1975: gazetted as a reserve for 'Public recreation and promotion of the study and preservation of native flora and fauna.'</p> <p>1977: Plan of Management adopted by Council and NPWS.</p> <p>1988: establishment of the Field of Mars Studies Centre.</p> <p>1988: all lots consolidated under the Crown Lands Act - 50.39ha.</p> <p>1990: Draft Plan of Management prepared (not adopted by Council).</p> <p>1996: Plan of Management prepared.</p>	Noted	Information

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Reserve Management and History

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>Field of Mars Reserve Plan of Management 2009</i>	The objectives of the current Plan indicate that <i>the Reserve will be used for low impact, environmental recreation that includes bush walking, bird watching and environmental education. The preservation and restoration of natural features and wildlife habitat corridors will take precedence over other uses. The inclusion of low impact facilities, such as seating, picnic seating, picnic shelters and interpretation signage etc., which enhance enjoyment and understanding of the unique features of the Reserve will be located and maintained in appropriate locations. Carparking and entry gates will be located on the perimeter of the Reserve. Illegal and damaging activities, such as bike riding and dog walking will be actively discouraged and Council will maintain appropriate fire breaks and fire protection zones to protect surrounding properties. Council will encourage neighbours to the Reserve to recognise their responsibility in the ongoing sustainable management of the Reserve. The Plan provides a suite of prioritised actions to support the objectives. The Visitors Centres role is to conserve and preserve the environmental values of the Reserve, promote community awareness of the natural systems and encourage community involvement.</i>	Bike riding and dog walking within the Reserve are prohibited.	Access, Use, Facilities Environment, Information
<i>City of Ryde Mapping</i>	Aboriginal heritage (sites have been noted along both Buffalo and Strangers Creeks) Asset Protection Zones Bushcare areas Bushfire Prone Land (identifies category of vegetation and associated buffers) Flood Risk Land Categorisation (current) LEP 2014 Zoning Walking Track Map	All noted data (except for the Aboriginal heritage sites) is mapped in the Site Analysis mapping portion of this Masterplan Report.	Access, Use, Circulation, Environment, Information
<i>City of Ryde Bushcare</i>	Volunteer Bushcare work occurs at a number of sites within the Reserve: <ul style="list-style-type: none"> • The bushland area NW of Kennedy St (near entry 2) (4th Saturday); • The area sited SW of the western open space zone (north of the boardwalk downstream crossing of Buffalo Creek (3rd Monday); • A strip along the northern side of Strangers Creek south of Kellaway St (entry 10); • An area SE of Buffalo Creek at the Monash Rd entry (4) (every Tuesday); • Off Finch Ave (3rd Sunday). 	Noted	Environment

78

ITEM 8 (continued)

ATTACHMENT 1

FIELD OF MARS RESERVE MASTERPLAN REPORT

REFERENCES: Track Standards / Photo credits

DOCUMENT	KEY POINTS	MASTERPLAN OPPORTUNITIES	ASPECT GROUP
<i>Users Guide to the Australian Walking Track Grading System</i> (Dept of Sustainability and Environment - Victorian Government)	Based on <i>AS2156.1 - 2001 Walking Tracks - Classification and Signage</i> - for Grade 2 tracks the following is indicated: <ul style="list-style-type: none"> • Gradient is generally no steeper than 1:10 • Generally a modified or hardened track surface • Minimum track width of 900mm wide • Track is well maintained with minimal intrusions • With track head signage and route markers at intersections • Users need no previous experience and are expected to exercise normal care regarding their personal safety / suitable for most ages and levels of fitness • Time to walk track noted in 15-30 minute increments • Minimal use of steps 	Noted	Access, Use, Circulation
	Based on <i>AS2156.1 - 2001 Walking Tracks - Classification and Signage</i> - for Grade 3 tracks the following is indicated: <ul style="list-style-type: none"> • Gradient may exceed 1:10 for short sections but is generally no steeper than 1:10. • Formed earthen track, few obstacles. Generally a modified surface, sections may be hardened. • Track width is variable and less than 1200mm wide. • With track head signage and route markers at intersections and where the track is indistinct • Users need no bushwalking experience and a minimum level of specialist skills. Users may encounter natural hazards such as steep slopes, unstable surfaces and minor water crossings. They are responsible for their own safety. • Time to walk track noted in 15-30 minute increments. • Steps may be common. 	Noted	Access, Use, Circulation.
Photo credits	Photos have been sourced from: <ul style="list-style-type: none"> • City of Ryde • Field of Mars Environmental Education Centre • NPWS - NSW • NPWS - Tasmania • Bluedale • Botton + Gardiner • Interpretive Design • Leda • Total Earthcare • Robin Buchanan • Alan Ginns • Pam Fletcher 	Noted	N/A

79

ITEM 8 (continued)

ATTACHMENT 1

APPENDIX D

Field of Mars Gazettal Records – Crown Reserve No. R89474

20 JUNE, 1975] NEW SOUTH WALES GOVERNMENT GAZETTE No. 85 2411

(1269) Sydney, 20th June, 1975.
RESERVES FROM SALE
IN pursuance of the provisions of section 28, Crown Lands Consolidation Act, 1913, I declare that the Crown lands hereunder described shall be reserved from sale for the public purposes hereinafter specified and are thereby reserved accordingly.
M. A. MORRIS, Minister for Lands.

FOR ACCESS
Land District—Braidwood; Shire—Tallaganda
No. 89479, Parish Boyle, County St Vincent, about 21.74 hectares, being the land bounded by portions 380, 314, end of road, portions 315, 319, 320, 321, 322 and 323, the northern boundary of public road 10.17 metres wide and the right bank of the Shoalhaven River, exclusive of an area of about 1.132 square metres resumed in two parts by Tallaganda Shire Council, Gazette 8th December, 1972. Ten. 72-2482.

FOR PUBLIC REQUIREMENTS
Land District—Braidwood; Shire—Tallaganda
No. 89481, Parish Meangora, County St Vincent, 658.4 hectares, being portion 133. Ten. 74-4451.
Land District—Cooma; Shire—Monaro
No. 89480, Parish Branby (Village of Bredbo), County Beresford, 1.482 hectares, being portion 207. Ten. 75-2306.
No. 89478, Parish Callaghan, County Beresford, 26.51 hectares, being portion 141. Ten. 75-2398.
Land District—Moruya; Shire—Eurobodalla
No. 89473, Parish Congo, County Dampier, area 16.19 hectares, being portion 271. Pks 74-703.

FOR KINDERGARTEN
Land District—Warralga; Shire—Yallart
No. 89462, Parish Warralga, County Burnett, about 2.100 square metres, as shown by black hatching on diagram hereunder.
(Affected part of R. 12441 for Preservation of Graves notified 30th August, 1890, is hereby revoked.) Pks 75-236.

FOR PUBLIC RECREATION
Land District—Nowra; Shire—Shoalhaven
No. 89476, Parish Currumbene, County St Vincent, area about 4 hectares, shown by hatched edging on diagram hereunder. Pks 75-340.

DIAGRAM
TOWN HUSKISSON
MOONA STREET
R 89346
75 BI
80
FOR PUBLIC RECREATION & CAMPING
NOTD 27-12-74
Moona Creek
Moona Creek

Land District—Picton; Shire—Wollondilly
No. 89477, Parish Bargo, County Camden, 29.44 hectares, being portions 224 and 225.
NOTE: The whole of R. 87974 for Future Public Requirements, notified 16th October, 1970, is hereby revoked. Pks 75-453.

(1273) Sydney, 20th June, 1975.
DECLARATION UNDER SECTION 25A OF THE CROWN LANDS CONSOLIDATION ACT, 1913, IN RESPECT OF LAND
IN pursuance of the provisions of section 25A of the Crown Lands Consolidation Act, 1913, I declare that the lands particularized hereunder may be dealt with as if they had been acquired under the Closer Settlement Acts or as Crown land within the meaning of the Crown Lands Consolidation Act, 1913.
M. A. MORRIS, Minister for Lands.

SCHEDULE
Land vested in Her Most Gracious Majesty Queen Elizabeth the Second
Land District—Metropolitan; Shire—Sutherland
Parish Sutherland, County Cumberland, firstly 135 square metres, being part of portion 27 (part lot A, F.P. 372840) and being also part C.T. vol. 6363, fol. 245; secondly 365 square metres, being part of portion 27 (part lot B, F.P. 372840) and being also part C.T. vol. 6363, fol. 246, both shown in plan catalogued R. 35034-1603 in the Department of Lands. Rds 74-1276.
Land vested in the New South Wales Planning and Environment Commission
Land District—Moruya; Shire—Eurobodalla
Parish Congo, County Dampier, 16.19 hectares, being portion 271. Pks 74-703.

FOR NON-PROFIT MAKING ORGANIZATIONS
Land District—Gosford; Shire—Wyong
No. 89475, Parish Tuggerah, County Northumberland, area 1.858 square metres, being portion 384.
Title is limited to the surface and to a depth of 20 metres thereof.
(The affected part of R. 63621 for Public Recreation, notified 18th November, 1932, and 26th January, 1973, is hereby revoked.) Pks 74-767.

FOR PUBLIC RECREATION AND PROMOTION OF THE STUDY AND THE PRESERVATION OF NATIVE FLORA AND FAUNA
Land District—Metropolitan; Municipality—Ryde
No. 89473, Parish Hunters Hill, County Cumberland, about 34.43 hectares, being the land shown by green edge on plan Ms 22732 Sy R.
NOTE: R. 4785 for Public Recreation notified 3rd December, 1987, is hereby revoked. Pks 72-1680.

(1274) Sydney, 20th June, 1975.
ADDITIONS TO RESERVES FROM SALE
IN pursuance of the provisions of section 28, Crown Lands Consolidation Act, 1913, I declare that the Crown Lands hereunder described shall be added to the lands within the reserves specified in parentheses hereunder and are thereby added accordingly.
M. A. MORRIS, Minister for Lands.

ITEM 8 (continued)

ATTACHMENT 1

15 August, 1975]

NEW SOUTH WALES GOVERNMENT GAZETTE No. 108

3279

(2458)

Sydney, 15th August, 1975.

LAPSING OF AUCTION PURCHASES

IN pursuance of the provisions of the Crown Lands Consolidation Act, 1913, I declare the undermentioned auction purchases to have lapsed. The lapsing shall not take effect until the expiration of thirty clear days after this notification.

JOHN M. MASON, Minister for Lands.

Land District—Murwillumbah; Shire—Tweed

Parish Cudgen, County Rous, Auction Purchase 1971-20, allotment 1, section 4, of 576.6 square metres at Bogangri, holder, Kenneth Dunn, 32 Uki Road, Bray Park, Murwillumbah 2484. Ten. 75-1943.

Land District—Lismore; Shire—Byron

Parish Byron, County Rous, Auction Purchase 1971-31, allotment 11, section 59, of 663.9 square metres at Watego's Beach, holders, Ronald Kenneth John Meldrum and Margot Anna Meldrum, 248 Doncaster Road, North Balwyn, Vic. 3104. Ten. 75-1947.

Land District—Nowra; Shire—Shoalhaven

Parish Conjola, County St Vincent, Auction Purchase 1974-276, portions 456 of 682.9 square metres at Bandalong (North); holder, Arthur Douglas Moore, 2 Kalang Road, Kenthurst 2154. Ten. 75-3552.

Land District—Taree; Shire—Stroud

Parish Topi, County Gloucester, Auction Purchase 1971-371, portions 90 and 175 of 1.1113 hectares; holder, Edward Patrick Savage. Ten. 75-527.

(2457)

Sydney, 15th August, 1975.

LAPSING OF AFTER AUCTION PURCHASE

IN pursuance of the provisions of the Crown Lands Consolidation Act, 1913, I declare the undermentioned after auction purchase to have lapsed. The lapsing shall not take effect until the expiration of thirty clear days after this notification.

JOHN M. MASON, Minister for Lands.

Land District and Municipality—Coolamundra

Parish Coolamundra, County Harden, After Auction Purchase 1973-229, allotment 14, section 31, of 1.138 square metres at Coolamundra; holders, Robert John McPherson and Marilyn June McPherson. Ten. 74-6422.

(2465)

Sydney, 15th August, 1975.

CANCELLATION OF ANNUAL LEASE

IN pursuance of the provisions of section 72 (4), Crown Lands Consolidation Act, 1913, the undermentioned Annual Lease is hereby cancelled as from 31st December, 1975.

JOHN M. MASON, Minister for Lands.

Land District and Shire—Coonamble

Parish Neibby, County Gregory, Annual Lease 19532. Ten. 74-4506.

(2462)

Sydney, 15th August, 1975.

FORFEITED HOLDING

IN pursuance of the provisions of the Crown Lands Consolidation Act, 1913, I declare the undermentioned holding to be forfeited. The forfeiture of the holding shall not take effect until the expiration of thirty clear days after this notification.

JOHN M. MASON, Minister for Lands.

Land District—Queanbeyan; Shire—Yarrowunla

Parish Ballallaba, County Murray, Special Lease 1953-14, portion 126 of 815.7 square metres; holder, Raymond James Alfred Hannon. Ten. 75-3292.

(2461)

Sydney, 15th August, 1975.

EXTENSION OF TERM OF CONDITIONAL LEASE

THE term of the undermentioned Conditional Lease has been extended to Perpetuity.

JOHN M. MASON, Minister for Lands.

Land District and Shire—Scone

Parish Omadale, County Durham, Conditional Lease 1935-2, portion 71 of 81.54 hectares; holder Neville Douglas Collison, of "Dry Creek", Moonan Flat, via Scone 2337. L.B. 75-387. Ten. 75-2672.

(2459)

Sydney, 15th August, 1975.

ALTERATION OF CONDITIONS OF SPECIAL LEASE

THE conditions of the undermentioned special lease have been altered as shown below.

JOHN M. MASON, Minister for Lands.

Land District—Newcastle; Municipality—Newcastle

Parish and Town Stockton, County Northumberland, Special Lease 1963-8, portion 60 of 739.8 square metres; holder Port Hunter Sailing Skiff Club Ltd. The lease will be subject to the following conditions in lieu of the existing conditions, Regulation 106, subsection Nos 1, 2, 4, 5, 9 to 12, 18, 19, 24 to 26, 28, 44, 57, 59, 65, and 66 and to the following special conditions:

(a) The lessee shall within one (1) year from the date of notification in the Gazette of the granting of the lease or such further period as the Minister may allow erect on the land leased, buildings suitable for the purpose of the lease.

(b) the lessee shall not use any premises on the land leased for a registered club under Part X of the Liquor Act, 1912, or Part IIIA of the Gaming and Betting Act, 1912. Provided that if the lessee applies for and obtains a certificate of registration of the club under either of those Acts, the lessee may make application for the revocation of this condition. Ten. 75-1429.

(2463)

Sydney, 15th August, 1975.

ERRATA

IN the notification appearing in the Government Gazette of 20th June, 1975 (folio 2411), under the heading "Reserves from Sale", the sub-heading For Public Requirements should have read For Future Public Requirements.

Land District—Metropolitan; Municipality—Ryde

IN the notification appearing in the Government Gazette of 20th June, 1975 (folio 2411), under the heading "Reserves from Sale", the reference to Reserve 89473 from sale for Public Recreation and Promotion of the study and the Preservation of Native Flora and Fauna should have been to Reserve 89474 for these purposes. Pks 72-1680.

JOHN M. MASON, Minister for Lands.

(2393)

Western Lands Commission.

Sydney, 15th August, 1975.

ERRATUM

IN the Government Gazette dated 6th June, 1975, showing the notification of the surrender of Western Lands Lease No. 3163 held by B. A. Grigg, and its subdivision into Western Lands Leases Nos 12185 and 12186, the term of both leases should have been shown as having been granted from 23rd May, 1975, to Perpetuity, and not to 4th January, 1979, as shown. (W.L.C. 74/1952).

J. M. MASON, Minister for Lands.

(2502)

Sydney, 15th August, 1975.

NOTIFICATION OF PROPOSED OPENING OF ROAD

IN pursuance of the provisions of the Public Roads Act, 1902, I propose to consider the opening of a certain road as hereunder described.

All persons interested are hereby called upon to set forth in writing and forward to the Under Secretary for Lands within one month from the date of publication of this notice any objections which may appear to them to exist to this proposal.

Plans illustrating this proposal may be inspected at the office of the Department of Lands in Sydney or for a period of one month from the date of this notice, at the office of the Crown Land Agent for the Land District specified in the particular notice.

JOHN M. MASON, Minister for Lands.

Description

Parish Worcester, County Bathurst, Land District Orange, Shire Canobolas

Proposed road opening through portion 68, Rds 74-1925.

Estate of the Late Sydney Hermann Oscar Holtermann

Proposed resumption: about 1.43 hectares, freehold, being part portion 68.

ITEM 8 (continued)

ATTACHMENT 1

29 APRIL, 1988]	NEW SOUTH WALES GOVERNMENT GAZETTE No. 79	2453
<p>The holding is at present occupied under special arrangements with the Department of Lands.</p> <p>Application forms may be obtained at the offices of the Department of Lands, Sydney and Dareton.</p> <p>(87 H 545; CC67/364)</p>	<p>APPOINTMENT OF TRUSTEES:</p> <p>IN pursuance of the provisions of section 37, Crown Lands Consolidation Act 1913, the undermentioned corporations are appointed to be sole trustees of the reserves particularised hereunder.</p> <p>J. R. CAUSLEY, Minister for Natural Resources.</p> <p>Sydney, 29th April, 1988.</p>	
<p>ADDITION TO RESERVE FROM SALE</p> <p>IN pursuance of section 28, Crown Lands Consolidation Act 1913, I declare that the Crown land described hereunder shall be added to the land within the reserve specified in parentheses hereunder and such land is added accordingly.</p> <p>J. R. CAUSLEY, Minister for Natural Resources.</p> <p>Sydney, 29th April, 1988.</p>	<p><i>Land District—Metropolitan; Municipality—Ryde</i> <i>Parish—Hunters Hill; County—Cumberland</i></p> <p>R. 89474 for Public Recreation and Promotion of the Study and the Preservation of Native Flora and Fauna, notified on 20th June, 1975: <i>The Council of the Municipality of Ryde.</i> MN83 R 102.</p>	
<p>FOR PUBLIC RECREATION</p> <p><i>Land District—Mirrool; City—Griffith</i></p> <p>Parish of Jondaryan, County of Cooper, 847.3 square metres, being allotment 10, section 168, Town of Griffith (R. 86857, notified 27th September, 1968).</p> <p>(88 R 19; GH88 R 8)</p>	<p><i>Land District—Metropolitan; City—Liverpool</i> <i>Parish—St Luke; County—Cumberland</i></p> <p>R. 100138 for Long Day Care Centre at Prestons, notified this day: <i>The Council of the City of Liverpool.</i> MN87 H 199.</p>	
<p>NOTIFICATION OF DETERMINATION OF WATER RIGHTS, ETC., CONSEQUENT ON THE ALTERATION OF THE AREA OF AN IRRIGATION FARM LEASE</p> <p>IT is hereby notified in pursuance of section 7A of the Irrigation Act 1912, that consequent on the alteration of the area of Irrigation Farm Lease No. 364, Coomealla Irrigation Area, by the surrender of lot 1153 in Deposited Plan 723194 with effect on and from 21st August, 1987, I, the Minister for Natural Resources—</p> <p>(1) determine that 183 water rights shall attach to the whole of the holding as from 22nd August, 1987;</p> <p>(2) specify that all of the said water rights shall be a fixed charge.</p> <p>(87 H 545; CC67/364)</p>	<p><i>Land District—Metropolitan; City—Parramatta</i> <i>Parish—Liberty Plains; County—Cumberland</i></p> <p>R. 100140 for Long Day Care Centre at Granville, notified this day: <i>The Council of the City of Parramatta.</i> MN87 H 503.</p>	
<p>J. R. CAUSLEY, Minister for Natural Resources.</p> <p>Sydney, 29th April, 1988.</p>	<p><i>Land District—Metropolitan; Municipality—Marrickville</i> <i>Parish—Petersham; County—Cumberland</i></p> <p>R. 100144 for Public Recreation at Fatima Island, Arndcliffe, notified this day: <i>The Council of the Municipality of Marrickville.</i> MN81 H 2749.</p>	
<p>METROPOLITAN LANDS OFFICE</p> <p>22, Main Street Blacktown P.O. Box 878, Blacktown 2148 Ph: (02) 671 8611 FAX 671 8858</p> <p>(4501)</p>	<p>DECLARATION UNDER SECTION 25A, CROWN LANDS CONSOLIDATION ACT 1913, IN RESPECT OF LANDS</p> <p>IN pursuance of the provisions of section 25A, Crown Lands Consolidation Act 1913, I declare that the lands particularised hereunder may be dealt with as if they had been acquired under the Closer Settlement Acts or as Crown land within the meaning of the Crown Lands Consolidation Act 1913.</p> <p>J. R. CAUSLEY, Minister for Natural Resources.</p> <p>Sydney, 29th April, 1988.</p>	
<p>APPOINTMENT OF TRUSTEE</p> <p>IN pursuance of the provisions of section 37, Crown Lands Consolidation Act 1913, the undermentioned person is appointed to be a trustee of the reserve particularised hereunder for the term shown.</p> <p>J. R. CAUSLEY, Minister for Natural Resources.</p> <p>Sydney, 29th April, 1988.</p>	<p>LAND VESTED IN HER MOST GRACIOUS MAJESTY QUEEN ELIZABETH THE SECOND</p> <p><i>Land District—Metropolitan; City—Liverpool</i></p> <p>Parish St. Luke (Sheet 5), County Cumberland, 1 845 square metres, being lot 1, D.P. 716145, and comprising part of the land in Certificate of Title, volume 3257, folio 154. MN87 H 199.</p> <p>NOTE: Dealing No. N665379 for easement for Electricity Purposes and Cableway is not affected by this notice.</p>	
<p><i>Land District—Metropolitan; Municipality—Leichhardt</i> <i>Parish—Petersham; County—Cumberland</i></p> <p>The area at Glebe proclaimed for Public Park on 10th November, 1885, known as Wentworth Park. New trustee appointed: Douglas Charles Phillips, in lieu of Sam Fizman (resigned), for a term commencing on this day and expiring 18th July, 1989. In view of his appointment as trustee, Douglas Charles Phillips is no longer an ex-officio trustee. MN80 R 279.</p>	<p><i>Land District—Metropolitan; City—Parramatta</i> <i>Parish Liberty Plains, County Cumberland, 2 152 square metres, being lot 102, D.P. 731194, and comprising the whole of the land in Certificate of Title, Folio Identifier 102/731194. MN87 H 503.</i></p>	

ITEM 8 (continued)

ATTACHMENT 1

APPENDIX E

Key Commonwealth and State Legislation

KEY COMMONWEALTH LEGISLATION

(in chronological order)

Native Title Act 1993

Native title is the traditional ownership of land and waters that have always belonged to Aboriginal people according to their traditions, laws and customs.

The Commonwealth *Native Title Act 1993* recognises the interest that indigenous Australians may still hold in some areas of Crown land. This Act sets out how native title rights are to be recognised and protected, making provisions for Aboriginal and Torres Strait Islanders establishing the existence of native title, lodging native title claims, determining and validating the extinguishment of native title, and dealing with land and waters where native title may not have been extinguished.

On Crown land native title rights and interests must be addressed unless native title has been extinguished, surrendered or determined by a court to no longer exist. Dealings in land or water that affect (impair or extinguish) native title are referred to as "future acts" and these acts must comply with the *Native Title Act 1993*. This Act specifies procedures that must be followed before future acts can be validly done. For example, a grant of freehold title, lease or licence or the construction of a public work over Crown land may be a future act.

Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* provides a legal framework for the protection and management of the environment, and especially for Matters of National Environmental Significance (Protected Matters). These include nationally and internationally significant flora, fauna, ecological communities and heritage places. It provides for the identification and listing of nationally threatened native species and ecological communities, as well as the protection of migratory species and wetlands of international importance ("Ramsar wetlands").

The objectives of the *EPBC Act* are to:

- Provide for the protection of the environment, especially matters of national environmental significance;
- Conserve Australian biodiversity;
- Provide a streamlined national environmental assessment and approvals process;
- Enhance the protection and management of important natural and cultural places;
- Control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife; and
- Promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.

This Act applies to and endeavours to protect:

- Fauna and flora on land controlled or owned by the Commonwealth;
- Fauna and flora that may be harmed by the activities of the Commonwealth or a Commonwealth agency; and
- Nationally listed threatened species or community which might be significantly impacted by an activity or development.

ITEM 8 (continued)

ATTACHMENT 1

The *EPBC Act* streamlines national environmental assessment and approvals process, protects Australian biodiversity and integrates management of important natural and cultural places. It incorporates referral mechanisms and environmental impact assessment processes for projects of national significance. Triggers for referral to the Commonwealth include significant impacts to listed communities and species. Implications for Ryde include:

- Endangered Ecological Communities (EECs) and Critically Endangered Ecological Communities (CEECs) such as Sydney Turpentine Ironbark Forest, Estuarine Saltmarsh and Blue Gum High Forest;
- Endangered species; and
- JAMBA (Japan-Australia Migratory Bird Agreement), CAMBA (China-Australia Migratory Bird Agreement) and ROKAMBA (Republic of Korea-Australia Migratory Bird Agreement) species.

In the provision of strong protection for threatened species and ecological communities, migratory, marine and other protected species – and promoting the conservation of biodiversity generally – the *EPBC Act* provides for the:

- Identification of key threatening processes (processes that threaten, or may threaten, the survival, abundance or evolutionary development of a native species or ecological community);
- Protection of critical habitat;
- Preparation and implementation of threat abatement plans, and preparation of management plans; and
- Issuing of conservation orders and the regulation of wildlife import/export.

The Sydney Turpentine-Ironbark Forest community, which occurs within the Field of Mars Reserve, is listed as a Critically Endangered Ecological Community under the *EPBC Act*. The Grey-headed Flying-fox (*Pteropus poliocephalus*) which has been recorded from the Reserve, and two native plant species (*Epacris purpureascens* var *purpureascens* and *Pimelea curviflora* ssp *curviflora*) found on the Reserve, are listed as vulnerable under both the *Act*.

KEY STATE LEGISLATION

(in chronological order)

Crown Land Management Act 2016, Crown Land Management Regulation 2018 and "Principles of Crown Land Management"

The *Crown Lands Act 1989* (and some associated legislation) was repealed on 1 July 2018 and has now been replaced by the *Crown Land Management Act 2016 (CLM Act 2016)*. The *CLM Act 2016* improves the governance of Crown land, including Crown reserves (as is the case for much of the Field of Mars Reserve), and more closely aligns the planning and management of Council-managed Crown reserves with the management of Community Lands under the *Local Government Act 1993* as well as providing for strengthening community involvement.

Managers of Crown reserves under the previous legislation are automatically appointed as Crown land managers under the *CLM Act 2016*, and will continue to have management responsibility for these reserves. The *CLM Act 2016* authorises a local council that has management responsibility for an area of dedicated or reserved Crown land (a "council manager") – as the City of Ryde has for much of the central portion of the Field of Mars Reserve (Crown Reserve 89474) – to manage that land as if it were, and in accordance with, the public land provisions of the *Local Government Act 1993*.

Further, with some specific exceptions, section 3.22 of the *CLM Act 2016* requires that a Council manager of a Crown reserve "must manage the land as if it were Community Land under the *Local Government Act 1993*" and has "for that purpose all the functions that a local council has under that Act in relation to community land (including in relation to the leasing and licensing of community land)". The *CLM Act 2016* provides that any existing lease, licence or permit issued under the previous legislation will continue for their agreed term. However, from 1 July 2018 all new leases, licences and permits are to be issued under the new legislation.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Sections 3.22 and 3.23 of the *CLM Act 2016* also stress that the provisions for councils to manage Crown reserves as if they were "Community Land" specifically apply in the case of "land that is a public reserve (as defined in the *Local Government Act 1993*)" – which includes public parks and Crown reserves dedicated or reserved for public recreation where a council has been appointed as manager of the reserve trust (as is the case for the Field of Mars Reserve) – and in this situation a council "must manage the land as a public reserve under that Act" (the *Local Government Act 1993*).

Section 3.23 of the *CLM Act 2016* requires a Council manager of an area of reserved Crown land to:

- Categorise the land, using the Community Land categories under section 36 of the *Local Government Act 1993* (as discussed below in relation to the *Local Government Act 1993*); and
- Prepare and adopt a plan of management for the reserved Crown land in accordance with the plan of management provisions of the *Local Government Act 1993* (Division 2 of Part 2 of Chapter 6 of the Act).

The *CLM Act 2016* provided an initial transition period of 3 years (from commencement) for Councils to have prepared and adopted plans of management for the reserved Crown land under their management – however as at May 2021 this deadline was in the process of being extended. This includes preparing and adopting new, replacement, Plans for Crown reserves having a Plan of Management under the former Crown lands legislation.

The overall result of these legislative changes is that the City of Ryde must prepare this Plan of Management, and manage the Field of Mars Reserve, in accordance with the Community Land provisions of the *Local Government Act 1993* – including in relation to categorisation of the land; the preparation of plans of management; and leases, licences and permits.

Section 3.15 of the *CLM Act 2016* also allows the Minister to make, and publish, Crown land management rules "for or with respect to the management of dedicated or reserved Crown land by Crown land managers".

The new *Crown Land Management Regulation 2018* supports the *CLM Act 2016*. The Regulation is a statutory document that prescribes principles and rules relating to the use and management of Crown land in NSW.

Similar to the former legislation, the new *CLM Act* also sets out the "principles of Crown land management" (in section 1.4) – as:

- (a) "that environmental protection principles be observed in relation to the management and administration of Crown land, and
- (b) that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible, and
- (c) that public use and enjoyment of appropriate Crown land be encouraged, and
- (d) that, where appropriate, multiple use of Crown land be encouraged, and
- (e) that, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity, and
- (f) that Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles."

Biodiversity Conservation Act 2016

Changes to the biodiversity laws within New South Wales came into effect on the 25 August 2017 with commencement of the *Biodiversity Conservation Act 2016*. This new legislation repeals (and replaces) the former *Threatened Species Conservation Act 1995*, the *Nature Conservation Trust Act 2001* and parts of the *National Parks and Wildlife Act 1974*. (The *Native Vegetation Act 2003* was also repealed in August 2017, through amendments to the *Local Land Services Act 2013*.)

The *Biodiversity Conservation Act 2016* aims to ensure a balanced approach to land management and biodiversity conservation across the state, and protect threatened species and threatened ecological communities, through the application of a risk-based approach to regulating interactions and impacts of human activity on native plants, animals and communities. The new legislation only applies to the terrestrial environment.

ITEM 8 (continued)

ATTACHMENT 1

The Act sets out a process for listing threatened plants and animals (now aligned with relevant International Union for Conservation of Nature standards), and establishes the “Saving our Species” biodiversity conservation program for threatened species and threatened ecological communities. Building on the former threatened species legislation this Act continues to provide for the identification and listing of threatened species (Schedule 1), threatened ecological communities (Schedule 2), key threatening processes (Schedule 4), protected animals (Schedule 5) and protected plants (Schedule 6). It establishes new measures for the conservation of areas considered to be “of outstanding biodiversity value”, according to established criteria (replacing the critical habitat provisions of the former threatened species legislation).

Four of the Reserve’s vegetation communities (see Section 2.3) are listed as Endangered Ecological Communities under the *BC Act* – Sydney Turpentine-Ironbark Forest (Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion, which is also listed as a Critically Endangered Ecological Community under the Commonwealth legislation), Estuarine Saltmarsh (which conforms to Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions) and Estuarine Swamp Oak Forest (a component of Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions) and Estuarine Reedland (a component of Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions).

Two threatened fauna species – the Powerful Owl (*Ninox strenua*) and Grey-headed Flying-fox (*Pteropus poliocephalus*) – have also previously been recorded from the Reserve (see Section 2.3.3). Both are listed as vulnerable under this Act.

The Act also establishes a new regulatory framework and method for assessing, managing and offsetting the biodiversity impacts of proposed developments – under an expanded Biodiversity Offsets Scheme. It provides for a private land conservation framework with provision for three tiers of voluntary agreements on private lands – Biodiversity Stewardship Agreements (in-perpetuity agreements for the creation of biodiversity credits), conservation agreements and Wildlife Refuge agreements.

The *State Environmental Planning Policy (Biodiversity and Conservation)* commenced in 2021 and regulates native vegetation clearing in non-rural areas – in conjunction with the new *Biodiversity Conservation Act 2016*.

Biosecurity Act 2015

The *Biosecurity Act 2015* came into force in 2017 (replacing the former noxious weeds legislation and numerous other pieces of legislation). It is intended to provide an updated and more integrated framework for protecting the State from the threat of weeds, pests, diseases and other contaminants. Broadly the Act aims to manage biosecurity risks from animal and plant pests and diseases, weeds and contaminants by:

- Preventing their entry into NSW;
- Quickly finding, containing and eradicating any new entries; and
- Effectively minimising the impacts of those pests, diseases, weeds and contaminants that cannot be eradicated through rigorous management arrangements.

The Department of Primary Industries (which oversees this Act’s operation and implementation) has responsibility for the administration of priority weed control and control of vertebrate pests. However, this Act is chiefly implemented and enforced by Local Control Authorities, such as local Councils, who have specific responsibilities for the regulation of weeds (with co-ordination of weed and pest control efforts also aided by Local Land Services).

Under this Act invasive weeds are known as “priority weeds” of differing classes (or as a “biosecurity matter”), which are considered a “priority” in terms of eradication or control in NSW. As for species previously labelled noxious or environmental weeds, priority weeds are plants that have the potential to pose a biosecurity risk to human health, the economy, the environment or have other social/cultural impacts.

The management of vertebrate pests is also an element of a local Council’s overall land management responsibility. Under this Act Councils have certain legislative requirements to control declared vertebrate pests on Community Land.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

Civil Liability Act 2002

The *Civil Liability Act 2002* reformed the common law principles governing negligence liability and, significantly for recreation activities, introduced the requirement for a greater degree of probability in determining whether there is a foreseeable risk of harm to which a reasonable person would have responded. The Act has a broad scope, applying to any claim for harm resulting from negligence (whether the claim is brought in tort, contract, under statute, or otherwise) and covers personal injury as well as property damage and economic loss.

This Act provides for a general “assumption of risk” (sections 5F to 5I) across many areas, including recreational activities, whereby there is no duty of care (such as on the part of a site or land manager) to warn another person of a risk that is “obvious” unless the person requested information about the risk (or specific other circumstances, such as if there is a risk of death or injury from professional services).

An “obvious risk” is a risk that that would have been obvious to a reasonable person in the same circumstances (as the injured party) or are “risks that are patent or a matter of common knowledge” (section 5F). Risks can be obvious even though there is a low probability of their occurrence, and they can also be obvious even though they are not prominent, conspicuous or physically observable. People, such as recreational participants, are presumed to be aware of an obvious risk – unless they can prove, “on the balance of probabilities”, that they were not aware of it. A person does not need to be aware of the precise risk, but merely the type or kind of risk – the Act places the onus on the injured party.

This Act also addresses “inherent risks”, or the “risk of something occurring that cannot be avoided by the exercise of reasonable care and skill”, with the provision that “a person is not liable in negligence for harm suffered by another person as a result of the materialisation of an inherent risk” but that this does not remove the duty to warn people (such as recreational participants) of a risk (section 5I).

Division 5 of the Act specifically addresses “Recreational Activities” with section 5K defining a “recreational activity” in broad terms to include “(a) any sport (whether or not the sport is an organised activity), and (b) any pursuit or activity engaged in for enjoyment, relaxation or leisure, and (c) any pursuit or activity engaged in at a place (such as a beach, park or other public open space) where people ordinarily engage in sport or in any pursuit or activity for enjoyment, relaxation or leisure”.

In addition to this Act’s “obvious risk” provisions, there is no duty of care owed to a person engaging in a recreational activity if they have been warned of the risk (such as a site manager’s warning(s) to visitors or recreational participants). Such warnings can be oral or in writing, and do not need to be specific but can be a general warning (“so long as the risk warning warns of the general nature of the particular risk”), and there is no requirement to establish “receipt or understanding” of a warning. However, this Act prescribes several qualifications around such warnings – including:

- For incapable persons, the risk warning has to be given either to an accompanying person or a parent of the incapable person;
- The warning must be given prior to engagement in a recreational activity; and
- The fact of a risk warning does not, of itself, mean that the risk is not an inherent or obvious risk or that a duty of care is owed in relation to the risk.

This Act also defines a “dangerous recreational activity” as a “recreational activity that involves a significant risk of physical harm”. Section 5L(1) of this Act excludes liability for negligence by a defendant (such as a park manager) for harm suffered by a person (plaintiff) “as a result of the occurrence of what was an obvious risk of a dangerous recreational activity engaged in by the plaintiff”. This applies whether or not a person was aware of the risk (section 5L(2)).

ITEM 8 (continued)

ATTACHMENT 1

Local Government Act 1993 and Local Government (General) Regulation 2021

All lands owned by a local council fall under the *Local Government Act 1993 (LGovt Act)*, which requires that all lands under a Council's ownership must be classified as either "Operational Land" or "Community Land". Community Land is land which is owned and managed by a council for the benefit and use of the community use – such as neighbourhood parks, sportsgrounds, natural areas and other community facilities. Community land cannot be sold (or leased or licensed for more than 30 years).

The *Local Government Act 1993* is the primary legislation governing the management of Community Land by local councils, including the preparation and operation of plans of management. As such, it applies directly to those areas of Field of Mars Reserve that are "community land" owned and managed by the City of Ryde.

The *LGovt Act* requires that a Plan of Management be prepared for Community Land, and specifies the following in relation to such Community Land plans of management:

- Identify the category of the land – based on its use and/or other ecological, cultural and heritage significance criteria (further discussed below);
- Identify the objectives and performance targets of the plan with respect to the land;
- Identify the means by which the council proposes to achieve the plan's objectives and performance targets;
- Identify the manner in which the council proposes to assess its performance with respect to the plan's objectives and performance targets;
- May require the prior approval of the council to the carrying out of any specified activity on the land;
- Provision of a description of the "condition of the land" and any buildings or improvements on the land;
- Provision of a description of the use of the land and any such buildings or improvements at the date of the adoption of the plan of management;
- Specify the purposes for which the land, any buildings and improvements, will be permitted to be used;
- Specify the purpose for which any further development of the land will be permitted;
- Describe the scale and intensity of such permitted use or development;
- Addressing and meeting the "core" objectives for each land category applied; and
- Express authorisation of any leases or licences that may be issued, as well as any conditions to ensure that the terms of any leases or licences will be consistent with the core objectives for the particular land category in which they occur.

The process for the preparation of a Plan of Management for Community Land is also prescribed in the *LGovt Act*. Section 38 defines the requirements for the public exhibition of a draft Plan of Management, while sections 40/40A and 41 outline the process for adoption and making amendments respectively. Section 39 requires a draft Plan of Management prepared for an area not owned by a Council to be provided for review and comment by the owner of the land (this requirement has implications for plans prepared for areas of Crown land under a Council manager).

Under the *Crown Land Management Act 2016* the park planning and certain other provisions of the *Local Government Act 1993* now also formally apply to dedicated or reserved Crown lands that are managed by a local Council (a "Council manager") – in the same manner as they do for Council owned and managed community lands.

Section 36 of the *LGovt Act* requires that areas of Community Land be categorised in accordance with the Act's nominated categories of "Natural Area" (further categorised as "Bushland", "Wetland", "Escarpment", "Watercourse" or "Foreshore", or a category otherwise prescribed by the legislation or regulations), "Sportsground", "Park", "Area of Cultural Significance", or "General Community Use". This Act sets out "core management objectives" for each of these categories, as a broad guide to management.

The *Local Government (General) Regulation 2021* provides guidelines and criteria to assist in the categorisation of Community Land, the preparation and adoption of plans of management and other management matters (such as the issuing of leases, licences and short term/causal permits on Community Land).

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974 (NPW Act)* establishes the National Parks and Wildlife Service and provides it with responsibility for the management of National Parks and other conservation reserves, native flora and fauna protection, the protection of Aboriginal sites/resources, and administration of the *Biodiversity Conservation Act 2016*.

The *NPW Act* contains provisions for the establishment of national parks and other conservation reserves as well as to protect and conserve habitats, ecosystems and wildlife, landforms/landscapes and natural features of significance.

This Act aims also include “fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation” as well as “applying the principles of ecologically sustainable development”.

The *NPW Act* (section 68(1)) provides for the gazettal, by proclamation in the Government Gazette, of an area as a “Wildlife Refuge”. Wildlife Refuges are usually entered into by a private land owner/manager over a defined area of land as a means of protecting and conserving wildlife on their property and contributing to the conservation of biodiversity more generally. (Contemporary Wildlife Refuge Agreements are now a voluntary agreement between a landholder and the NSW Biodiversity Conservation Trust, under the Conservation Partners Program, under the *Biodiversity Conservation Act 2016*).

Section 68(2) of the *NPW Act* prescribes that Wildlife Refuges are deemed to be dedicated for the purposes of:

- (a) preserving, conserving, propagating and studying wildlife,
- (b) conserving and studying natural environments, and
- (c) creating simulated natural environments.

However, the *NPW Act* does not prescribe specific management requirements or obligations on the owner or manager of a Wildlife Refuge. This Act does provide for a number of offences in relation to these areas.

Section 70 of this Act relates to “Fauna in wildlife refuges and other areas” and provides as follows.

- (1) A person shall not -
 - (a) harm any fauna, or
 - (b) use any animal, firearm, explosive, net, trap, hunting device or instrument or means whatever for the purpose of harming any fauna, being fauna within a wildlife refuge, conservation area, wilderness area or area subject to a wilderness protection agreement.
- (2) A person shall not -
 - (a) carry, discharge or have in the person’s possession any prohibited weapon,
 - (b) carry or have in the person’s possession any explosive, net, trap or hunting device, or
 - (c) be accompanied by a dog, in a wildlife refuge, conservation area, wilderness area or area subject to a wilderness protection agreement.

Section 70 of this Act relates to “Native plants in wildlife refuges, conservation areas and certain wilderness areas” and provides as follows.

- (1) A person shall not pick or have in the person’s possession any native plant within a wildlife refuge, conservation area, wilderness area or area subject to a wilderness protection agreement.

This Act provides for penalties to be applied for the above offences, as well as allowing specified exclusions for land owners/managers and other circumstances.

The *NPW Act* is also the principal legislation governing the protection and management of Aboriginal heritage in the State. This Act defines an Aboriginal Object as “any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

All Aboriginal objects, including sites with physical evidence, are protected under this Act regardless of their size or level of significance or land tenure (with the exception of Commonwealth Lands). This Act makes it an offence to damage, deface, destroy, disturb or collect any Aboriginal object or evidence site without the approval of the Director (with some exceptions).

This Act also provides for the reservation and gazettal of lands as an Aboriginal Area, or the declaration and gazettal of lands as a Protected Archaeological Area.

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

APPENDIX F

Field of Mars Reserve condition and use of land and facilities (as at September/October 2020)

Condition assessment of park facilities - overall condition index:

RATING	DESCRIPTION
1	A new or near new asset, or an asset in overall excellent condition with only minor decline (normal wear and tear) but causing no serviceability problems.
2	An asset in very good to good condition, but with some early to apparent deterioration that is causing negligible to slight impairment of serviceability.
3	An asset in fair overall condition but with obvious deterioration that is causing some loss of serviceability.
4	An asset in fair to poor overall condition, with obvious to serious deterioration that is starting to limit the asset's serviceability and generating rising to high maintenance costs.
5	An asset in very or extremely poor condition, with severe serviceability problems or heavily impacted, very high maintenance costs with the asset at the point of requiring rehabilitation or replacement (and assets that have failed, or would be a risk to remain in service).

ITEM 8 (continued)

ATTACHMENT 1



Condition and use of land and facilities (as at September/October 2020)

	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Developed / modified Zone – Mown parkland areas in the eastern portion of the reserve. Dissected by Buffalo Creek, bounded by Pittwater Rd to the east, Strangers Creek to the north, elevated bushland to the west and residential areas to the south. Contains the Visitors Centre/Amenities building and Education Centre.				
Internal access way	<ul style="list-style-type: none"> • Authorised vehicles only • Road access is gained from a roundabout in Pittwater Road to the reserve at the southeast end of the reserve frontage/ the road gives access to the formed car park via a lockable metal vehicle gate / plus enters the reserve to the west through a lockable metal vehicle gate (with wildlife protection area and wildlife refuge sign prohibiting cats and dogs (penalties apply) and 3 sided narrow finger park and regulatory sign) gap for pedestrian access available / the road travels WNW towards Buffalo Creek where bus parking bays 2x are located (public access terminates here) from where it turns WSW following the alignment of the creek (though offset 150m+) until it terminates at the Education Centre • Signs on the road near the bus bays include speed sign (10km/hr limit), pedestrians about sign, authorised vehicles only sign and a Kennedy St bushcare group sign • South of this road between the roundabout and the viaduct the land is park (with a patchy bitumen access way alongside the viaduct) but appears to be used for vehicle parking / screened from the road by plantings (weedy/) grove of canna lilies west of the viaduct (weeds) • Inlet pipe located south of this road west of the roundabout - is overgrown and probably not operating effectively 	3	This road is in patchy condition/ although appears new at exit from roundabout	Authorised vehicles only. Service access to the reserve, Education Centre and Visitors Centre/Amenities Building/ public access to the parking area / access for public parking on the reserve up to the bus bays when the gate is open

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Parking Area (in Pittwater Road road reserve)	<ul style="list-style-type: none"> • Bitumen sealed linear kerbed car park/ with 21x plus 1x disabled 90° angled parking bays along the reserve boundary and 10x parallel parking bays along the road boundary / lockable metal vehicle gate at the entry from the internal access way / cycle symbols are painted onto internal access way to parking bays • A vegetated traffic island at the gate entry is fenced by plastic post and metal rail fencing and includes a sign for the Environmental Education Centre, speed sign and gates close at sunset sign (the fencing prohibits vehicle access)/ the area also contains a marker for EC NSW cables - additional markers mark a cable alignment running NE/SW through the car park and across Buffalo Creek • New concrete shared path gives access from the NW corner of the roundabout into the car park (shared path is diverted through the car park rather than continuing alongside Pittwater Road) • Accessible ramp 1x located on the NW side of the roundabout (gives access to bitumen pedestrian path on eastern side of Pittwater Road - which services Buffalo Creek Reserve) / ramp accesses bitumen pedestrian path into the car park plus concrete pedestrian path to internal access way to the reserve / large metal finger park sign board located nearby An accessible ramp in the kerb gives access from the disabled parking bay (mid-block) to a concrete path into the adjacent open space (good condition) • An opening in the kerb at the northern end allows untreated stormwater to flow from the car park across a bitumen paved swale to Buffalo Creek • A new shared path exits the car park from the NE corner to return users to the new shared path adjacent to Pittwater Road via a new foot bridge attached to the road bridge (includes new metal safety railing) (approximately 500mm below the road level) / Wildlife Refuge - dogs prohibited sign is located on a power pole adjacent to this path • No parking on Pittwater Road in this area / robust car barrier located on the western side of Pittwater Road (very narrow road shoulder)/ strip of planting between car barrier and car park • Overhead power located on western side of Pittwater Road with road lighting 	1	Good Condition	Parking for reserve users / may also be overflow parking for popular Buffalo Creek Reserve Playground located opposite on the eastern side of Pittwater Road / the internal access in the car park is used as a link in the shared path recently constructed on the western side of Pittwater Road otherwise no dedicated pedestrian or cycle access within the car park / currently the northern end is temporarily fenced as a depot for local construction works (quarantining 5x car bays)/ the car park entry from the internal access way is approximately 10m from the roundabout in Pittwater Road (leaving limited room for queuing cars to enter the car park)

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Picnic area and open space (immediately west of the car park)	<ul style="list-style-type: none"> This area is bounded to the east by the parking area Within the road reserve of Pittwater Road / Buffalo Creek to the north and west / the internal access way to the south An elevated sewer main (viaduct) runs along the eastern edge of this area (adjacent to the car park) The area between the viaduct and the car park is vegetated (planted) An open mown grassed area with scattered mature trees/ hexagonal timber and metal roofed picnic shelters 2x each with a picnic table and benches – one near the access path from the disabled parking space in the car park, the other at the southern end of this area / recycle and refuse bins located at path from disabled parking bay Bushland margins in this area relatively weed free An unlocked chain vehicle gate and adjacent opening in the bollard fencing is located at the SW corner of this area / the opening is wide enough to allow vehicle access/ the opening gives access to a compacted gravel timber edged path running alongside but offset from the eastern edge of Buffalo Creek/ the path terminates near the confluence of Buffalo and Strangers Creeks at a viewing area with an interpretive sign (habitat health) (poor condition) A park map sign showing track routes is located near the internal access way at the SW corner 	3	The bushland margins are weeded/ picnic shelters are in reasonable condition / grass is mown	For day use picnicking a nature based play

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Open space (west of Buffalo Creek)	<ul style="list-style-type: none"> This area is bounded by Buffalo Creek to the east, Strangers Creek to the north, the elevated vegetated area to the west and SW An open grassed area (not closely mown and uneven in levels) with scattered groves of mature trees bounded by bushland (weedy in part) and vegetated creek A track leads from the northern end of this area to the reserve entry on Pittwater Road at the north end of the road frontage (see details below) The Warada Loop Track entry is located on the western edge towards the northern end of the open space/ painted timber routed direction sign (to Warada Track and to Visitors Centre/Amenities Building and Pittwater Road)/ rock with metal inset interpretive sign (describing vegetation along the walk relative to position on the slope)/ track marker (timber bollard with arrows)/ compacted gravel track steps down (sandstone risers) into a drainage swale then climbs the slope to the west A compacted gravel timber edged path leads south from the Warada Track entry to connect with a boardwalk that leads to a bridge (with metal safety railings) across Buffalo Creek opposite the Visitors Centre/Amenities Building/ weedy bushland margins safety railings may be required on some sections >1m above ground An open area in the SW west corner of this area is under regen back to bushland On the west side of the boardwalk bridge over Buffalo Creek is the junction (entry) of the Warada Loop Track (to the north side of the bushland reserve), the Doyle Loop Track (around the southern side of the bushland reserve), the Kunzea Track (from the Pidding Road entry at the SW corner of the reserve) and the Boardwalk Loop (around Buffalo Creek to the west) / all but the Boardwalk Loop form part of the Sand Track which traverses the upper slopes of the bushland reserve from the Pidding Road entry in the SW to the Cressy Road entry in the NW / painted routed timber sign notes the Warada Track and the Dovie to Sand Track 	3	Grass is less frequently mown than for other open space area	Used for nature based play (tepees made from cut tree branches) and access to track heads / can be used for picnicking

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Visitors Centre/Amenities Building and surrounding grounds	<ul style="list-style-type: none"> This area is bounded by Buffalo Creek to the north, escarpment and bushland to the NE, east and SE and by the Education Centre to the west / the gravel internal access way enters this area in the NE corner and terminates in the car park east of the Education Centre Mown grassed area with scattered mature trees/ backed timber and metal seats 2x located near the creek The Visitors Centre/Amenities Building is a brick building with lockable protection grills to windows and doors that contains male and female toilets and a disabled toilet plus a room for visitor and volunteers use to access information / externally mounted info board/ roller door access to building at rear A stone cairn and birdbath is located adjacent to the internal access way in front of the Centre / a concrete plinth and Bicentennial plaque plus a metal reserve map (monochrome graphics not 100% clear) are located nearby A compacted gravel timber edged path leads from the internal access way to the boardwalk bridge over Buffalo Creek / painted routed timber track sign (to Warada, Doyle and Kunzea Tracks plus no dogs cats or bikes - penalties apply) / timber track marker bollard/ plaque mounted on a rock re track upgrade 2009 / plastic bollards line the edge of the creek margin along the internal access way 	3	Building condition unknown / grounds in reasonable condition / margins to the creek could be better planted to improve stormwater treatment from open areas	The Visitors Centre/Amenities Building provides a base for the Ryde Hunters Hill Flora and Fauna Preservation Society generally open on Saturdays and Sundays year round (subject to COVID restrictions/) when open provides maps, brochures and information for park visitors

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Open space west of the Visitors Centre/ Amenities Building (also containing the Education Centre - not part of Reserve, condition not assessed)	<ul style="list-style-type: none"> This area is bounded by Buffalo Creek to the north, bushland to the west, residential areas to the south and the Visitors Centre/Amenities Building area to the east The education Centre is a metal and brick building/ fringed with planting areas with compacted gravel pathways / facility sign / dirt driveway across the grass to the student meeting area / otherwise bollarded against vehicle access/ concrete amphitheatre steps on the north side of the building overlooking mown lawn area (located within the reserve) A small parking area is located to the east of the building (at the end of the internal access way) A compacted gravel timber edged path (Boardwalk Loop) follows the creek line just north of the Education Centre traversing the open grassed area east-west to drop down the bank and cross Buffalo Creek via a mesh boardwalk (unfenced) / before the drop down is an earthen viewing platform (view now overgrown) to creek (timber post and rail fenced edge with interpretive sign (stormwater management) The area north, west and SW of the Centre is open grassed area rising to the residential area to the south (with rock floaters and outcrops) with scattered mature trees/ the land behind the Centre is a vegetated slope / timber and metal backed seat in this area Faint trample track across the grass from the boardwalk loop to the entry point at Westminster Road (runs north-south) Creek margin is weedy in this area Bushland margins are weedy Signs posted for the Kennedy St Bushcare Group (meet 4th Saturday of each month 9am-11am) 		Building condition unknown / grounds in reasonable condition / margins to the creek could be weeded and better planted to improve stormwater treatment from open areas	

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Buffalo Creek	<ul style="list-style-type: none"> Between the confluence of Strangers Creek and the bridge at Pittwater Road contains mangroves Upstream of the confluence the margins are very weedy where adjacent to the open spaces areas 		Unknown condition - despite untreated runoff from the adjacent car park and surrounding residential areas there are mangroves growing	Stormwater management

ITEM 8 (continued)

ATTACHMENT 1

	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Bushland Zone - consists of the bulk of the Field of Mars Reserve / bounded by residential areas to the NE, Field of Mars Cemetery to the NW, residential areas to the south and the developed/ modified zone to the east / a small area of bushland projects into the cemetery area (mid-block on SW edge of the cemetery grounds) / contains several named walking tracks and several entry points from the surrounding areas				
Walking Track Network	<ul style="list-style-type: none"> 4.1km (approx.) of marked, maintained and named walking tracks - comprising Kunzea, Sand, Warada, and Doyle Tracks plus a section of boardwalk (loop) and the Saltmarsh Walk. 	3 & 4	<p>Track condition varies between fair (mostly) or good (in places) to poor (numerous sections) - depending on terrain/slope, drainage, soil type, cross slope, proximity to high use areas and level of investment/development(as well as other, unauthorised, uses in places).</p> <p>Track sections on slopes tend to more often be fair to poor condition - with issues such as erosion, drainage capture, protruding rocks and roots, and short-cutting. Tracks on gentle to flat terrain demonstrate fewer problems - however ponding and braiding/detouring are issues in places. Drainage line crossings are varied - from good (where bridged) to poor (where ill-defined or poorly constructed).</p> <p>Tracks in proximity to the picnic area and Reserve entry, Visitor Centre, and Environmental Education Centre - including the Boardwalk Loop - are generally in good condition However sections of the boardwalk appear impacted by subsidence (or failure or footings/framing) with sections of mobile or shifting and angled decking. Boardwalk lacks toe-board to define edge.</p> <p>A full walking track condition audit was not conducted.</p>	<p>Used by day visitors for walking, running/fitness, and nature appreciation.</p> <p>Boardwalk Loop and walks closer to Environmental Education Centre used by school groups.</p>

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Pittwater Road entry (northern end of road frontage)	<ul style="list-style-type: none"> Accessed by a layback in the kerb of Pittwater Rd, across the new concrete shared path to a bitumen driveway/ traffic signs warning of cyclists 2x / cyclist dismount sign 1x / 3 sided narrow finger park and regulatory sign Bitumen driveway continues to the viaduct/ lockable vehicle gate located at entry to driveway / turnaround area or parking bay located along the driveway adjacent to Buffalo Creek / bitumen driveway leads to a compacted earthen path from the viaduct to the west / this track is marked as an entry point on the brochure but not as a named track/ the path follows the northern side of Buffalo Creek and crosses Strangers Creek west of the confluence with Buffalo Creek from where it leads to the open space located west of Buffalo Creek / a trample track across the grass leads to the entry to the Warada Loop Track Fenced stormwater detention area located between the driveway and the shared path feeds letterbox inlet pit / wildlife protection area and wildlife refuge sign prohibiting cats and dogs (penalties apply) Vegetated (weedy) cliff edge located adjacent to the driveway (north side) 	1	Bushland and creek margins are weed earthen track bumpy and wet in places	Gate appears locked for service access only / some evidence of bike use on the track/ used for pedestrian access
Pittwater Road entry (southern end of road frontage)	<ul style="list-style-type: none"> Main entry via the access road west from the roundabout on Pittwater Road See above sections for details: <ul style="list-style-type: none"> - Internal access way - Parking area (in Pittwater Road) 	1	See above	Pedestrian access is gained via the internal access way or through the car park / no dedicated pedestrian access into the reserve at this entry

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Kennedy Street entry	<ul style="list-style-type: none"> Access is gained via a paved footpath from Kennedy Street kerb to the reserve boundary (cul de sac)/ wildlife protection area and wildlife refuge sign prohibiting cats and dogs (penalties apply)/ 3 sided narrow finger park and regulatory sign / timber post and two rail fence around cul de sac boundary / from the boundary, access is via a timber and paver steps (13x risers) with metal railing, to a paved path then onto sandstone and compacted gravel steps with metal railing / the steps exit onto the level area alongside a bus parking area (2x bays) at the internal access way From the entry point at Kennedy Street a stormwater outflow pipe drains to a rock lined drainage line and pond which flows to Buffalo Creek via a pipe under the internal access way / an interpretive sign (stormwater management) 	3	Reasonable condition / cleared land should be revegetated for erosion control and suppression of weeds	Pedestrian access to track network
Westminster Road Entry	<ul style="list-style-type: none"> No clear indication from Westminster Road of reserve entry / cul-de-sac Access appears to be gained down a private driveway located within the end section of unformed road reserve / a trample track across a grassed area / across a rock outcrop / down timber steps with metal railing (3x treads) / down sandstone and compacted gravel steps to eroded compacted gravel pathway flowing onto grassed open space A Park map sign is located at the base of the timber stairs / indicates tracks and prohibited activities A Wildlife Protection Area and Wildlife Refuge Sign is located at the top of the timber stairs Grassed access along rear of properties on west side of Westminster Road allows access directly into the reserve from rear of private properties 	4 - 5	Substandard access / extreme trip points and hazards	Would be used by locals "in the know" as sign and entry set well away from the road and not visible from the road / pedestrian access to track network

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Monash Road entry	<ul style="list-style-type: none"> At intersection with Kim Street / steep roads adjacent / no footpaths within the road reserves Access across the grassed nature strip to trample track to head of steps / a Park map sign is located at the top of the steps (indicates tracks and prohibited activities) metal railing along trample track with a Wildlife Protection Area and Wildlife Refuge Sign and a Monash Road Bushcare Group sign affixed (meet every Tuesday (9am-11am) / rustic sandstone and compacted gravel steps wind down the slope to join the Kunzea and Doyle Tracks Access adjacent to concrete lined stormwater outlet 	3-4	Substandard access / trip points and hazards / requires upgrade from kerb to reserve boundary at least	Well signposted though located in backstreets / probably limited to locals with knowledge / pedestrian access to track network
Higginbottom Road boardwalk	<ul style="list-style-type: none"> Bitumen driveway between two private property lots to locked metal Reserve gate, opening to grassed APZ at rear of residences leading down to Buffalo Creek 	2 - 3	Bitumen and gate in serviceable condition	Not an obvious Reserve entry. Susceptible to use (and obstruction) by parked private vehicles

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Pidding Road / Cressy Road entry	<ul style="list-style-type: none"> No nearby parking available in Pidding Road or Cressy Road / access via a very narrow footpath on Cressy Rd from the south (confined to one way no passing by car barrier) and along Pidding Road from the west/ a bitumen foot path runs north-south along the unformed section of Cressy Road / painted chainwire mesh and metal fence along the reserve and road boundary / on an extremely busy road Gives access to the SW corner of the reserve to the Kunzea and Sand Tracks/ entry located south of the Cressy Road footpath in the unformed section/ a timber boardwalk from the road reserve (bypassed by a trample track) over a drainage swale to the walking track Proliferation of signs in the area (a Park map sign with tracks and regulatory information) and a Wildlife Protection Area and Wildlife Refuge Sign plus a graffitied Lane Cove River Catchment sign, pushbikes and trailbikes prohibited sign and a warning sign to bus drivers to slow down / a 3 sided sign for Pidding Park/ further along the track where it forks is a painted limber routed sign indicating Kunzea Track and Visitors Centre/ Amenities Building and no dogs. cates or bikes and penalties 	3	Reasonable	Cressy Road is a popular thoroughfare along the formed and unformed sections / the reserve entry is not highly visible to vehicles but noticeable to pedestrians in Cressy and Pidding Roads

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Cressy Road entry (SW corner of Cemetery)	<ul style="list-style-type: none"> Plastic post and metal rail fence around boundary to cul de sac Locked vehicle gate with gaps either side for pedestrian access gives access to a gravel service road which runs along the SW boundary of the cemetery until it meets the Sand Track at the eastern end A Park map sign (with tracks and regulatory information) and a Wildlife Protection Area and Wildlife Refuge Sign are located at this entry appears to be no tracks from this point to the track network A Wildlife Protection Area and Wildlife Refuge Sign and a 3 sided park sign with regulatory information are located at this entry The stormwater from the road surface in Cressy Road drains through an opening into the unformed section of Cressy Road and drains via a grassed swale to a stone paved outflow and detention area into the reserve / this drainage area is fenced with plastic post and rail fencing to prohibit access into this area / a locked chain gate is located at the southern end / a very detailed sign (Strangers Creek Bio-retention basin and Rehabilitation Site) provides information that is not easily accessible by park users/ the post and rail fence continues to the south to the next entry point 	1 - 2	Park map sign has been damaged (bull holes?)	Service vehicle access / pedestrian access to track network

ITEM 8 (continued)

ATTACHMENT 1



	FACILITIES	CONDITION RATING	CONDITION COMMENTS	CURRENT USE
Kellaway Street entry	<ul style="list-style-type: none"> A concrete paved alleyway between two houses and located at the cul de sac end / with multiple steps from the boundary / opening at kerb protected by 2x metal bollards with a Wildlife Protection Area and Wildlife Refuge Sign affixed plus a Finch Ave Bushcare Group sign (meet 3rd Sunday of each month 9-11am) / a 3 sided finger sign located at the park end of the alleyway Opens onto a mown grassed area with no obvious links to the nearby Warada Track 	3	Reasonable	Entry not obvious from the street level (particularly if a car is parked in the vicinity) / pedestrian access to open grassed area
Finch Ave entry (mid-block)	<ul style="list-style-type: none"> A quiet street with ample parking Timber and compacted earth steps between two houses onto a trample track A Wildlife Protection Area and Wildlife Refuge Sign and a 3 sided finger sign located at the boundary 	3 - 4	Reasonable to poor	Likely pedestrian shortcut access to track network
Finch Ave entry (at eastern end)	<ul style="list-style-type: none"> A concrete paved alleyway between two houses an located at the cul de sac end / opening protected by a locked metal bollard A Wildlife Protection Area and Wildlife Refuge Sign and a 3 sided finger sign located at the boundary 	3	Reasonable	Obvious vehicle tracks on the nature strip indicates the accessway is used for vehicle access

ITEM 8 (continued)

ATTACHMENT 1

APPENDIX G

Field of Mars Reserve native flora list

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
Acacia brownii	Heath Wattle	MIMOSACEAE	Shrub	Rare / ROTAP
Acacia falcata	Sickle Wattle	MIMOSACEAE	Shrub	
Acacia floribunda	White Sallow Wattle	MIMOSACEAE	Tree	
Acacia linifolia	Flax-leaved Wattle	MIMOSACEAE	Shrub	
Acacia longifolia	Sydney Golden Wattle	MIMOSACEAE	Shrub	
Acacia myrtifolia	Myrtle Wattle	MIMOSACEAE	Shrub	
Acacia parramattensis	Parramatta Green Wattle	MIMOSACEAE	Tree	
Acacia stricta	Straight Wattle	MIMOSACEAE	Shrub	Rare / ROTAP
Acacia suaveolens	Sweet-scented Wattle	MIMOSACEAE	Shrub	
Acacia terminalis	Sunshine Wattle	MIMOSACEAE	Shrub	
Acacia ulicifolia	Prickly Moses	MIMOSACEAE	Shrub	
Acianthus fornicatus	Pixie Orchid	ORCHIDACEAE	Orchid	
Acmena smithii	Lillypilly	MYRTACEAE	Tree	
Actinotus helianthi	Flannel Flower	APIACEAE	Groundcover	
Actinotus minor	Lesser Flannel Flower	APIACEAE	Groundcover	
Adiantum aethiopicum	Maidenhair Fern	ADIANTACEAE	Fern	
Aegiceras corniculatum	River Mangrove	MYRSINACEAE	Tree	
Allocasuarina littoralis	Black She-Oak	CASUARINACEAE	Tree	
Allocasuarina torulosa	Forest She-Oak	CASUARINACEAE	Tree	
Alocasia brisbanensis	Cunjevoi	ARACEAE	Groundcover	
Alternanthera denticulata	Lesser Joy Weed	AMARANTHACEAE	Groundcover	
Amperea xiphoclada var papillata	Broom Spurge	EUPHORBIACEAE	Shrub	
Angophora bakeri	Narrow-leaved Apple	MYRTACEAE	Tree	
Angophora costata	Sydney Red Gum	MYRTACEAE	Tree	
Anisopogon avenaceus	Oat Spear Grass	POACEAE	Grass	
Aristida ramosa var ramosa	Three-awn Speargrass	POACEAE	Grass	
Aristida vagans	Three-awn Speargrass	POACEAE	Grass	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Asplenium australasicum</i>	Bird's Nest Fern	ASPLENIACEAE	Fern	
<i>Asplenium flabellifolium</i>	Necklace Fern	ASPLENIACEAE	Fern	
<i>Austrodanthonia pilosa</i>	Wallaby Grass	POACEAE	Grass	
<i>Austromyrtus tenuifolia</i>	Narrow-leaf Myrtle	MYRTACEAE	Shrub	Rare / ROTAP
<i>Austrostipa pubescens</i>	Tall Spear Grass	POACEAE	Grass	
<i>Austrostipa ramosissima</i>	Stout Bamboo Grass	POACEAE	Grass	
<i>Avicennia marina</i> var <i>australasica</i>	Grey Mangrove	VERBENACEAE	Tree	
<i>Baeckea linifolia</i>	Swamp Baeckia	MYRTACEAE	Shrub	
<i>Banksia ericifolia</i> var <i>ericifolia</i>	Heath Banksia	PROTEACEAE	Shrub	
<i>Banksia marginata</i>	Silver Banksia	PROTEACEAE	Shrub	
<i>Banksia oblongifolia</i>		PROTEACEAE	Shrub	
<i>Banksia serrata</i>	Old Man Banksia	PROTEACEAE	Shrub	
<i>Banksia spinulosa</i> var <i>spinulosa</i>	Hairpin Banksia	PROTEACEAE	Shrub	
<i>Bauera rubioides</i>	River Rose	BAUERACEAE	Shrub	
<i>Baumea juncea</i>	Bare Twig-rush	CYPERACEAE	Sedge	
<i>Billardiera scandens</i>	Apple Dumplings	PITTOSPORACEAE	Vine	
<i>Blechnum cartilagineum</i>	Gristle Fern	BLECHNACEAE	Fern	
<i>Boronia ledifolia</i>	Sydney Boronia	RUTACEAE	Shrub	
<i>Bossiaea heterophylla</i>	Variable Bossiaea	FABACEAE	Shrub	
<i>Bossiaea obcordata</i>	Spiny Bossiaea	FABACEAE	Shrub	
<i>Bossiaea scolopendria</i>		FABACEAE	Shrub	
<i>Bothriochloa macra</i>	Red-leg Grass	POACEAE	Grass	
<i>Breynia oblongifolia</i>	Coffee Bush	EUPHORBIACEAE	Shrub	
<i>Brunoniella australis</i>	Blue Trumpet	ACANTHACEAE	Groundcover	
<i>Brunoniella pumilio</i>	Dwarf Trumpet	ACANTHACEAE	Groundcover	
<i>Burchardia umbellata</i>	Milkmaids	LILIACEAE	Groundcover	
<i>Bursaria spinosa</i>	Blackthorn	PITTOSPORACEAE	Shrub	
<i>Caladenia catenata</i>	White Fingers	ORCHIDACEAE	Orchid	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Callicoma serratifolia</i>	Black Wattle	CUNONIACEAE	Tree	
<i>Callistemon citrinus</i>	Crimson Bottlebrush	MYRTACEAE	Shrub	
<i>Callistemon linearis</i>	Narrow-leaved Bottlebrush	MYRTACEAE	Shrub	
<i>Callistemon salignus</i>	Willow Bottlebrush	MYRTACEAE	Tree	
<i>Calochilus paludosus</i>	Red Beardie	ORCHIDACEAE	Orchid	
<i>Calochilus robertsonii</i>	Purple Beard Orchid	ORCHIDACEAE	Orchid	
<i>Calochilus</i> sp		ORCHIDACEAE	Orchid	
<i>Calochlaena dubia</i>	False Bracken Fern	DICKSONIACEAE	Fern	
<i>Carex inversa</i>	Knob Sedge	CYPERACEAE	Sedge	
<i>Cassinia aculeata</i>	Dogwood	ASTERACEAE	Shrub	
<i>Cassytha glabella</i>	Devil's Twine	CASSYTHACEAE	Vine	
<i>Cassytha pubescens</i>	Devil's Twine	CASSYTHACEAE	Vine	
<i>Casuarina glauca</i>	Swamp She-Oak	CASUARINACEAE	Tree	
<i>Caustis flexuosa</i>	Curly Sedge	CYPERACEAE	Sedge	
<i>Cayratia clematidea</i>	Slender Grape	VITACEAE	Vine	
<i>Centella asiatica</i>	Swamp Pennywort	APIACEAE	Groundcover	
<i>Ceratopetalum apetalum</i>	Coachwood	CUNONIACEAE	Tree	
<i>Ceratopetalum gummiferum</i>	Christmas Bush	CUNONIACEAE	Tree	
<i>Cheilanthes distans</i>	Cloak Fern	SINIPTERIDACEAE	Fern	
<i>Cheilanthes sieberi</i>	Mulga Fern	SINIPTERIDACEAE	Fern	
<i>Christella dentata</i>	Binung	THELYPTERIDACEAE	Fern	
<i>Clematis aristata</i>	Old Mans Beard	RANUNCULACEAE	Vine	
<i>Clematis glycinoides</i>	Old Mans Beard	RANUNCULACEAE	Vine	
<i>Commelina cyanea</i>	Scurvey Weed	COMMELINACEAE	Groundcover	
<i>Correa reflexa</i> var <i>reflexa</i> (pale yellow flowered)	Common Correa	RUTACEAE	Shrub	
<i>Corymbia gummifera</i>	Red Bloodwood	MYRTACEAE	Tree	
<i>Cryptostylis erecta</i>	Bonnet Orchid	ORCHIDACEAE	Orchid	
<i>Cryptostylis subulata</i>	Large Tongue Orchid	ORCHIDACEAE	Orchid	
<i>Cyathea australis</i>	Rough Tree Fern	CYATHEACEAE	Fern	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Cyperus gracilis</i>	Slender Flat-sedge	CYPERACEAE	Sedge	
<i>Cyperus imbecillis</i>		CYPERACEAE	Sedge	
<i>Cyperus polystachyos</i>		CYPERACEAE	Sedge	
<i>Cyperus sphaeroides</i>		CYPERACEAE	Sedge	
<i>Dampiera stricta</i>	Blue Damperia	GOODENIACEAE	Groundcover	
<i>Daviesia ulicifolia</i>	Gorse Bitter-pea	FABACEAE	Shrub	
<i>Deyeuxia quadriseta</i>	Reed Bent Grass	POACEAE	Grass	
<i>Dianella caerulea</i>	Blue Flax Lily	LILIACEAE	Groundcover	
<i>Dianella revoluta</i>	Spreading Flax Lily	LILIACEAE	Groundcover	
<i>Dichelachne micrantha</i>	Short Hair Plume Grass	POACEAE	Grass	
<i>Dichelachne rara</i>	Plume Grass	POACEAE	Grass	
<i>Dichondra repens</i> (s.lat.)	Kidney Herb	CONVOLVULACEAE	Groundcover	
<i>Digitaria parviflora</i>	Small Flower Finger Grass	POACEAE	Grass	
<i>Dillwynia retorta</i>	Eggs and Bacon	FABACEAE	Shrub	
<i>Dipodium variegatum</i>	Spotted Hyacinth Orchid	ORCHIDACEAE	Orchid	
<i>Dodonaea triquetra</i>	Hop Bush	SAPINDACEAE	Shrub	
<i>Doodia caudata</i> var <i>caudata</i>	Small Rasp Fern	BLECHNACEAE	Fern	
<i>Drosera auriculata</i>	Sundew	DROSERACEAE	Groundcover	
<i>Echinopogon caespitosus</i>	Tufted Hedgehog Grass	POACEAE	Grass	
<i>Echinopogon ovata</i>	Hedgehog Grass	POACEAE	Grass	
<i>Einadia hastata</i>	Salt Bush	CHENOPODIACEAE	Groundcover	
<i>Elaeocarpus reticulatus</i>	Blueberry Ash	ELAEOCARPACEAE	Tree	
<i>Entolasia marginata</i>	Right-angle Grass	POACEAE	Grass	
<i>Entolasia stricta</i>	Right-angle Grass	POACEAE	Grass	
<i>Epacris microphylla</i>	Coral Heath	EPACRIDACEAE	Shrub	
<i>Epacris pulchella</i>	Coral Heath	EPACRIDACEAE	Shrub	
<i>Epacris purpurascens</i> var. <i>purpurascens</i>		EPACRIDACEAE	Shrub	Vulnerable (EBPC Act) Vulnerable (BC Act)
<i>Epaltes australis</i>	Spreading Nut-heads	ASTERACEAE	Groundcover	
<i>Eragrostis brownii</i>	Brown's Love Grass	POACEAE	Grass	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Eucalyptus acmenoides</i>	White Mahogany	MYRTACEAE	Tree	
<i>Eucalyptus haemastoma</i>	Scribbly Gum	MYRTACEAE	Tree	
<i>Eucalyptus oblonga</i>	Sandstone Stringybark	MYRTACEAE	Tree	
<i>Eucalyptus pillularis</i>	Blackbutt	MYRTACEAE	Tree	
<i>Eucalyptus piperita</i>	Sydney Peppermint	MYRTACEAE	Tree	
<i>Eucalyptus punctata</i>	Grey Gum	MYRTACEAE	Tree	
<i>Eucalyptus racemosa</i>	Narrow-leaved Scribbly Gum	MYRTACEAE	Tree	
<i>Eucalyptus resinifera</i>	Red Mahogany	MYRTACEAE	Tree	
<i>Eucalyptus saligna</i>	Sydney Blue Gum	MYRTACEAE	Tree	
<i>Eustrephus latifolius</i>	Wombat Berry	PHILESIACEAE	Vine	
<i>Exocarpos cupressiformis</i>	Cherry Ballart	SANTALACEAE	Tree	
<i>Ficus rubiginosa</i>	Port Jackson Fig	MORACEAE	Tree	
<i>Gahnia clarkei</i>	Tall Saw Sedge	CYPERACEAE	Sedge	
<i>Gahnia erythrocarpa</i>	Red-fruited Saw Sedge	CYPERACEAE	Sedge	
<i>Gahnia sieberiana</i>		CYPERACEAE	Sedge	
<i>Geranium homeanum</i>	Native Geranium	GERANIACEAE	Groundcover	
<i>Gleichenia dicarpa</i>	Pouched Coral Fern	GLEICHENIACEAE	Fern	
<i>Gleichenia microphylla</i>	Scrambling Coral Fern	GLEICHENIACEAE	Fern	
<i>Glochidion ferdinandi</i>	Cheese Tree	EUPHORBIACEAE	Tree	
<i>Glycine clandestina</i>	Love Creeper	FABACEAE	Vine	
<i>Glycine microphylla</i>	Love Creeper	FABACEAE	Vine	
<i>Gompholobium glabratum</i>	Dainty Wedge Pea	FABACEAE	Shrub	
<i>Gompholobium latifolium</i>	Broad-leaf Wedge-Pea	FABACEAE	Shrub	
<i>Gompholobium pinnatum</i>	Pinnate Wedge Pea	FABACEAE	Shrub	
<i>Gonocarpus teucrioides</i>	Germander Raspwort	HALORAGACEAE	Groundcover	
<i>Goodenia hederacea</i> <i>ssp hederacea</i>	Violet-leaved Goodenia	GOODENIACEAE	Groundcover	
<i>Goodenia heterophylla</i> <i>ssp heterophylla</i>	Variable Goodenia	GOODENIACEAE	Groundcover	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Grevillea buxifolia</i>	Grey Spider-flower	PROTEACEAE	Shrub	
<i>Grevillea mucronulata</i>	Green Spider-flower	PROTEACEAE	Shrub	
<i>Grevillea sericea</i>	Pink Spider-flower	PROTEACEAE	Shrub	
<i>Haemodorum planifolium</i>	Strap-leaf Blood-root	HAEMODORACEAE	Groundcover	
<i>Hakea dactyloides</i> (s.str.)	Broad-leaved Hakea	PROTEACEAE	Shrub	
<i>Hakea salicifolia</i> ssp <i>salicifolia</i>	Willow-leaved Hakea	PROTEACEAE	Shrub	
<i>Hakea sericea</i>	Needle-bush	PROTEACEAE	Shrub	
<i>Hardenbergia violacea</i>	Sarsaparilla	FABACEAE	Vine	
<i>Hibbertia aspera</i>	Rough Guinea Flower	DILLENIACEAE	Shrub	
<i>Hibbertia dentata</i>	Twining Guinea Flower	DILLENIACEAE	Vine	
<i>Hibbertia empetrifolia</i>	Trailing Guinea Flower	DILLENIACEAE	Vine	
<i>Hibbertia fasciculata</i>	Bundled Guinea Flower	DILLENIACEAE	Vine	
<i>Hibbertia linearis</i>	Narrow Leaf Hibbertia	DILLENIACEAE	Vine	
<i>Hibbertia riparia</i> (s.lat.)	Erect Guinea Flower	DILLENIACEAE	Shrub	
<i>Histiopteris incisa</i>	Bats Wing Fern	DENNSTAEDTIACEAE	Fern	
<i>Hovea linearis</i> (s.str.)	Narrow-leaf Hovea	FABACEAE	Shrub	
<i>Hydrocotyle peduncularis</i>	Pennywort	APIACEAE	Groundcover	
<i>Hydrocotyle tripartita</i>	Pennywort	APIACEAE	Groundcover	
<i>Hypericum gramineum</i>	Small St John's Wort	CLUSIACEAE	Groundcover	
<i>Hypolepis muelleri</i>	Harsh Ground Fern	DENNSTAEDTIACEAE	Fern	
<i>Imperata cylindrica</i> var <i>major</i>	Blady Grass	POACEAE	Grass	
<i>Isolepis cernua</i>	Nodding Club-rush	CYPERACEAE	Sedge	
<i>Isolepis inundata</i>	Swamp Club-rush	CYPERACEAE	Sedge	
<i>Isopogon anemonifolius</i>	Broadleaf Drumsticks	PROTEACEAE	Shrub	
<i>Juncus continuus</i>		JUNCACEAE	Rush	
<i>Juncus kraussii</i>	Sea Rush	JUNCACEAE	Rush	
<i>Juncus usitatus</i>	Common Rush	JUNCACEAE	Rush	
<i>Kennedia rubicunda</i>	Dusky Coral Pea	FABACEAE	Vine	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
Kunzea ambigua	Tick Bush	MYRTACEAE	Shrub	
Lachnagrostis filiformis	Blown Grass	POACEAE	Grass	
Lambertia formosa	Spiny Mountain Devil	PROTEACEAE	Shrub	
Lasiopetalum ferrugineum var. ferrugineum	Rusty Petals	STERCULIACEAE	Shrub	
Lastreopsis decomposita	Trim Shield-fern	DRYOPTERIDACEAE	Fern	
Laxmannia gracilis (s.str.)	Slender Wire Lily	LILIACEAE	Groundcover	
Lepidosperma gunnii		CYPERACEAE	Sedge	
Lepidosperma laterale	Variable Sword-sedge	CYPERACEAE	Sedge	
Leptocarpus tenax	Slender Wire Grass	RESTIONACEAE	Rush	
Leptospermum arachnoides	Spidery Tea-tree	MYRTACEAE	Shrub	
Leptospermum parvifolium	Small-leaf Tea-tree	MYRTACEAE	Shrub	
Leptospermum polygalifolium ssp. polygalifolium	Yellow Tea-tree	MYRTACEAE	Shrub	
Leptospermum trinervium	Flaky Barked Tea-tree	MYRTACEAE	Shrub	
Lepyrodia scariosa	Scale Rush	RESTIONACEAE	Rush	
Leucopogon ericoides	Pink Beard-heath	EPACRIDACEAE	Shrub	
Leucopogon juniperinus	Prickly Beard-heath	EPACRIDACEAE	Shrub	
Lindsaea linearis	Screw Fern	LINDSAEACEAE	Fern	
Lindsaea microphylla	Lacy Wedge-fern	LINDSAEACEAE	Fern	
Livistona australis	Cabbage Tree Palm	ARECACEAE	Tree	
Lobelia alata	Angled Lobelia	LOBELIACEAE	Groundcover	
Lobelia dentata	Wavy Lobelia	LOBELIACEAE	Groundcover	
Lobelia gracilis	Trailing Lobelia	LOBELIACEAE	Groundcover	
Logania albiflora	Narrow-leaf Logania	LOGANIACEAE	Shrub	
Lomandra cylindrica	Needle Mat Rush	XANTHORRHOACEAE	Groundcover	
Lomandra filiformis ssp. correacea	Wattle Mat Rush	XANTHORRHOACEAE	Groundcover	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Lomandra filiformis</i> ssp. <i>filiformis</i>	Wattle Mat Rush	XANTHORRHOACEAE	Groundcover	
<i>Lomandra gracilis</i>	Slender Mat Rush	XANTHORRHOACEAE	Groundcover	
<i>Lomandra longifolia</i>	Spiny Headed Mat Rush	XANTHORRHOACEAE	Groundcover	
<i>Lomandra multiflora</i> ssp. <i>multiflora</i>	Many Flowered Mat Rush	XANTHORRHOACEAE	Groundcover	
<i>Lomandra obliqua</i>	Twisted Mat Rush	XANTHORRHOACEAE	Groundcover	
<i>Lomatia silaifolia</i>	Crinkle Bush	PROTEACEAE	Shrub	
<i>Marsdenia suaveolens</i>	Scented Marsdenia	ASCLEPIADACEAE	Vine	
<i>Melaleuca decora</i>	White Feather Honey-myrtle	MYRTACEAE	Tree	
<i>Melaleuca ericifolia</i>	Swamp Paper-bark	MYRTACEAE	Shrub	
<i>Melaleuca linariifolia</i>	Snow in Summer	MYRTACEAE	Tree	
<i>Melaleuca nodosa</i>	Ball Honey-Myrtle	MYRTACEAE	Shrub	
<i>Melaleuca stypheloides</i>	Prickly-leaved Paper-bark	MYRTACEAE	Tree	
<i>Micranthemum ericoides</i>		EUPHORBIACEAE	Shrub	
<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass	POACEAE	Grass	
<i>Mirbelia rubiifolia</i>	Heathy Mirbelia	FABACEAE	Shrub	
<i>Mitrasacme polymorpha</i>	Mitrewort	LOGANIACEAE	Groundcover	
<i>Notelaea longifolia</i>	Native Olive	OLEACEAE	Shrub	
<i>Olearia microphylla</i>	Bridal Daisy Bush	ASTERACEAE	Shrub	
<i>Omalanthus nutans</i>	Bleeding Heart	EUPHORBIACEAE	Shrub	
<i>Opercularia aspera</i>	Common Stinkweed	RUBIACEAE	Groundcover	
<i>Opercularia varia</i>	Stinkweed	RUBIACEAE	Groundcover	
<i>Oplismenus aemulus</i>	Basket Grass	POACEAE	Grass	
<i>Oplismenus imbecillis</i>	Slender-leaf Basket Grass	POACEAE	Grass	
<i>Oxalis perennans</i>	Yellow Wood-sorrel	OXALIDACEAE	Groundcover	
<i>Ozothamnus diosmifolius</i>	Paper Daisy	ASTERACEAE	Shrub	
<i>Pandorea pandorana</i>	Wonga Wonga Vine	BIGNONIACEAE	Vine	
<i>Panicum simile</i>	Two-colour Panic	POACEAE	Grass	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Patersonia sericea</i>	Silky Purple Flag	IRIDACEAE	Groundcover	
<i>Pellaea falcata</i> var <i>falcata</i>	Sickle Fern	SINIPTERIDACEAE	Fern	
<i>Persicaria decipiens</i>	Slender Knot Weed	POLYGONACEAE	Groundcover	
<i>Persicaria hydropiper</i>	Water Pepper	POLYGONACEAE	Groundcover	
<i>Persicaria lapathifolia</i>	Pale Knotweed	POLYGONACEAE	Groundcover	
<i>Persicaria strigosa</i>	Spotted Knotweed	POLYGONACEAE	Groundcover	
<i>Persoonia lanceolata</i>	Lance-Leaf Geebung	PROTEACEAE	Shrub	
<i>Persoonia laurina</i> ssp <i>laurina</i>	Laurel Geebung	PROTEACEAE	Shrub	
<i>Persoonia levis</i>	Broad-leaf Geebung	PROTEACEAE	Shrub	
<i>Persoonia linearis</i>	Narrow-leaf Geebung	PROTEACEAE	Shrub	
<i>Persoonia pinifolia</i>	Pine-leaved Geebung	PROTEACEAE	Shrub	
<i>Petrophile pulchella</i>	Conesticks	PROTEACEAE	Shrub	
<i>Phragmites australis</i>	Common Reed	POACEAE	Reed	
<i>Phyllanthus hirtellus</i> (ex <i>P. thymoides</i>)	Blunt Spurge	EUPHORBIACEAE	Shrub	
<i>Phyllota phyllicoides</i>	Heath Phyllota	FABACEAE	Shrub	
<i>Pimelea curviflora</i> var <i>curviflora</i>	Curved Rice Flower	THYMELAEACEAE	Shrub	Vulnerable (EBPC Act) Vulnerable (BC Act)
<i>Pimelea linifolia</i>	Rice Flower	THYMELAEACEAE	Shrub	
<i>Pittosporum revolutum</i>	Rough Fruited Pittosporum	PITTOSPORACEAE	Shrub	
<i>Pittosporum undulatum</i>	Sweet Pittosporum	PITTOSPORACEAE	Tree	
<i>Platynerium bifurcatum</i> ssp <i>bifurcatum</i>	Elk Horn	POLYPODIACEAE	Fern	
<i>Platylobium formosum</i> ssp <i>formosum</i>	Handsome Flat Pea	FABACEAE	Shrub	
<i>Platysace lanceolata</i>	Lance Leaf Platysace	APIACEAE	Shrub	
<i>Platysace linearifolia</i>	Carrot Tops	APIACEAE	Shrub	
<i>Plectranthus parviflorus</i>	Cockspur Flower	LAMIACEAE	Groundcover	
<i>Poa affinis</i>		POACEAE	Grass	
<i>Poa labillardieri</i>	Tussock Grass	POACEAE	Grass	
<i>Podocarpus spinulosus</i>	Plum Pine	PODOCARPACEAE	Tree	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
<i>Polyscias sambucifolia</i>	Elderberry Panax	ARALIACEAE	Shrub	
<i>Pomaderris discolor</i>	Eastern Pomaderris	RHAMNACEAE	Shrub	
<i>Pomaderris elliptica</i>	Yellow Dogwood	RHAMNACEAE	Shrub	
<i>Pomaderris lanigera</i>	Woolly Pomaderris	RHAMNACEAE	Shrub	
<i>Pomax umbellata</i>	Pomax	RUBIACEAE	Groundcover	
<i>Poranthera microphylla</i>	Small Poranthera	EUPHORBIACEAE	Groundcover	
<i>Prasophyllum</i> sp	Leek Orchid	ORCHIDACEAE	Orchid	
<i>Pratia purpurascens</i>	White Root	LOBELIACEAE	Groundcover	
<i>Pseuderanthemum variabile</i>	Pastel Flower	ACANTHACEAE	Groundcover	
<i>Pteridium esculentum</i>	Bracken	DENNSTAEDTIACEAE	Fern	
<i>Pteris umbrosa</i>	Jungle Brake	PTERIDIACEAE	Fern	
<i>Pterostylis concinna</i>	Trim Greenhood	ORCHIDACEAE	Orchid	
<i>Pultenaea daphnoides</i>	Large-leaf Bush-pea	FABACEAE	Shrub	
<i>Pultenaea elliptica</i>		FABACEAE	Shrub	
<i>Pultenaea flexilis</i>	Graceful Bush-pea	FABACEAE	Shrub	
<i>Pultenaea paleacea</i>	Chaffy Pea-Bush	FABACEAE	Shrub	Rare / ROTAP
<i>Pultenaea retusa</i>		FABACEAE	Shrub	Rare / ROTAP
<i>Pultenaea villosa</i>	Hairy Bush-pea	FABACEAE	Shrub	Rare / ROTAP
<i>Pyrrosia rupestris</i>	Rock Felt-fern	POLYPODIACEAE	Fern	
<i>Ricinocarpos pinifolius</i>	Wedding Bush	EUPHORBIACEAE	Shrub	
<i>Rumex brownii</i>	Swamp Dock	POLYGONACEAE	Groundcover	
<i>Samolus repens</i>	Creeping Brookweed	PRIMULACEAE	Groundcover	
<i>Sarcocornia quinqueflora</i> ssp <i>quinqueflora</i>	Samphire	CHENOPODIACEAE	Groundcover	
<i>Schoenus melanostachys</i>	Black Bog-rush	CYPERACEAE	Sedge	
<i>Schoenus apogon</i>	Common Bog-rush	CYPERACEAE	Sedge	
<i>Senecio hispidulus</i> var. <i>hispidulus</i>	Native Senecio	ASTERACEAE	Groundcover	
<i>Sigesbeckia orientalis</i> ssp <i>orientalis</i>	Indian Weed	ASTERACEAE	Groundcover	
<i>Smilax glyciphylla</i>	Sweet Leaf	SMILACACEAE	Vine	

ITEM 8 (continued)

ATTACHMENT 1

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
Sparganium subglobosum	Bur-reed	SPARGANIACEAE	Rush	
Sphaerolobium vimineum	Leafless Globe-Pea	FABACEAE	Shrub	
Sporobolus virginicus var virginicus	Sand Couch	POACEAE	Grass	
Sticherus flabellatus	Shiny Fan-fern	GLEICHENIACEAE	Fern	
Stylidium graminifolium	Trigger Plant	STYLIDIACEAE	Groundcover	
Styphelia longifolia	Five Corners	EPACRIDACEAE	Shrub	
Styphelia triflora	Pink Five-Corners	EPACRIDACEAE	Shrub	
Syncarpia glomulifera	Turpentine	MYRTACEAE	Tree	
Teloepa speciosissima	Waratah	PROTEACEAE	Shrub	
Tetragonia tetragonoides	Warrigal Spinach	AIZOACEAE	Groundcover	
Tetraria capillaris	Hair Sedge	CYPERACEAE	Sedge	
Tetrarrhena juncea	Wiry Rice-grass	POACEAE	Grass	
Themeda australis	Kangaroo Grass	POACEAE	Grass	
Tricoryne simplex	Yellow Rush Lily	LILIACEAE	Groundcover	
Tristanopsis laurina	Water Gum	MYRTACEAE	Tree	
Tylophora barbata	Bearded Tylophora	ASCLEPIADACEAE	Vine	
Typha orientalis	Broad-leaf Cumbungi	TYPHACEAE	Reed	
Veronica plebeia	Creeping speedwell	SCROPHULARIACEAE	Groundcover	
Viminaria juncea	Native Broom	FABACEAE	Shrub	
Wahlenbergia gracilis	Native Bluebell	CAMPANULACEAE	Groundcover	
Woolsia pungens	Snow Wreath	EPACRIDACEAE	Shrub	
Xanthorrhoea arborea	Broadleaf Grass Tree	XANTHORRHOEACEAE	Grass Tree	
Xanthorrhoea media ssp. media	Forest Grass Tree	XANTHORRHOEACEAE	Grass Tree	
Xanthorrhoea minor	Small Grass Tree	XANTHORRHOEACEAE	Grass Tree	
Xanthosia pilosa	Woolly Cross-herb	APIACEAE	Groundcover	
Xanthosia tridentata	Rock Xanthosia	APIACEAE	Groundcover	
Xylomelum pyriforme	Woody Pear	PROTEACEAE	Tree	

ITEM 8 (continued)

ATTACHMENT 1



Field of Mars Reserve Draft Plan of Management

SPECIES NAME	COMMON NAME	FAMILY	HABIT	STATUS
Zieria laevigata	Smooth Zieria	RUTACEAE	Shrub	
Zieria pilosa	Hairy Zieria	RUTACEAE	Shrub	
Zieria smithii	Sandfly Zieria	RUTACEAE	Shrub	

Key:

- EPBC Act = *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
- BC Act = *Biodiversity Conservation Act 2016 (NSW)*
- Rare / ROTAP = ROTAP (Rare or Threatened Australian Plant – CSIRO), or considered rare/uncommon or of conservation interest in Sydney

ITEM 8 (continued)

ATTACHMENT 1

APPENDIX H

Field of Mars Reserve native fauna list

COMMON NAME	SPECIES NAME	STATUS	FLORA AND FAUNA REPORT (YEAR)			CONSULTANT
Amphibians						
Common Eastern Froglet	Crinia signifera		2006	2016	2017	BEC, ACA, AE
Leaf-green Tree Frog	Litoria phyllochroa		2006	2016	2017	BEC, ACA, AE
Perons Tree Frog	Litoria peronii		2006	2016	2017	BEC, ACA, AE
Striped Marsh Frog	Limnodynastes peronii		2006	2016	2017	BEC, ACA, AE
Birds						
Australasian Darter	Anhinga novaehollandiae		2006			BEC
Australian Brush-turkey	Alectura lathamii			2016	2017	ACA, AE
Australian King-Parrot	Alisterus scapularis			2016	2017	ACA, AE
Australian Magpie	Cracticus tibicen		2006	2016	2017	BEC, ACA, AE
Australian Owllet-nightjar	Aegotheles cristatus		2006		2017	BEC, AE
Australian Raven	Corvus coronoides		2006	2016	2017	BEC, ACA, AE
Australian White Ibis	Threskiornis molucca		2006	2016		BEC, ACA
Australian Wood Duck	Chenonetta jubata			2016	2017	ACA, AE
Black-faced Cuckoo-shrike	Coracina novaehollandiae		2006	2016	2017	BEC, ACA, AE
Black-faced Monarch	Monarcha melanopsis	BONN		2016	2017	ACA, AE
Brown Gerygone	Gerygone mouki			2016	2017	ACA, AE
Brown Goshawk	Accipiter fasciatus			2016	2017	ACA, AE
Brown Thornbill	Acanthiza pusilla			2016	2017	ACA, AE
Channel-billed Cuckoo	Scythrops novaehollandiae		2006	2016	2017	BEC, ACA, AE
Chestnut Teal	Anas castanea		2006	2016	2017	BEC, ACA, AE
Crested Pigeon	Ocyphaps lophotes			2016	2017	ACA, AE
Crimson Rosella	Platycercus elegans			2016	2017	ACA, AE
Dusky Moorhen	Gallinula tenebrosa			2016		ACA
Eastern Koel	Eudynamys orientalis			2016	2017	ACA, AE
Eastern Rosella	Platycercus eximius				2017	AE

ITEM 8 (continued)

ATTACHMENT 1

COMMON NAME	SPECIES NAME	STATUS	FLORA AND FAUNA REPORT (YEAR)			CONSULTANT
Eastern Spinebill	Acanthorhynchus tenuirostris		2006	2016	2017	BEC, ACA, AE
Eastern Whipbird	Psophodes olivaceus				2017	AE
Eastern Yellow Robin	Eopsaltria australis		2006	2016	2017	BEC, ACA, AE
Fan-tailed Cuckoo	Cacomantis flabelliformis		2006	2016		BEC, ACA
Galah	Eolophus roseicapillus				2017	AE
Golden Whistler	Pachycephala pectoralis			2016	2017	ACA, AE
Grey Butcherbird	Cracticus torquatus		2006	2016	2017	BEC, ACA, AE
Grey Fantail	Rhipidura albiscapa		2006	2016	2017	BEC, ACA, AE
Intermediate Egret	Ardea intermedia		2006			BEC
Jacky Winter	Microeca fascians		2006			BEC
Laughing Kookaburra	Dacelo novaeguineae		2006	2016	2017	BEC, ACA, AE
Leaden Flycatcher	Myiagra rubecula			2016	2017	ACA, AE
Lewins Honeyeater	Meliphaga lewinii				2017	AE
Little Black Cormorant	Phalacrocorax sulcirostris		2006			BEC
Little Corella	Cacatua sanguinea			2016	2017	ACA, AE
Little Pied Cormorant	Microcarbo melanoleucos		2006		2017	BEC, AE
Little Wattlebird	Anthochaera chrysoptera			2016	2017	ACA, AE
Magpie-lark	Grallina cyanoleuca		2006	2016	2017	BEC, ACA, AE
Masked Lapwing	Vanellus miles				2017	AE
Musk Lorikeet	Glossopsitta concinna			2016	2017	ACA, AE
Nankeen Night-heron	Nycticorax caledonicus		2006			BEC
New Holland Honeyeater	Phylidonyris novaehollandiae		2006		2017	BEC, AE
Noisy Friarbird	Philemon corniculatus		2006		2017	BEC, AE
Noisy Miner	Manorina melanocephala		2006	2016	2017	BEC, ACA, AE
Olive-backed Oriole	Oriolus sagittatus			2016		ACA

ITEM 8 (continued)

ATTACHMENT 1

COMMON NAME	SPECIES NAME	STATUS	FLORA AND FAUNA REPORT (YEAR)			CONSULTANT
Pacific baza	Aviceda subcristata			2016		ACA
Pacific Black Duck	Anas superciliosa		2006	2016	2017	BEC, ACA, AE
Pied Currawong	Strepera graculina		2006	2016	2017	BEC, ACA, AE
Powerful Owl	Ninox strenua	Vulnerable (BC Act)	2006	2016	2017	BEC, ACA, AE
Rainbow Lorikeet	Trichoglossus haematodus		2006	2016	2017	BEC, ACA, AE
Red Wattlebird	Anthochaera carunculata		2006	2016	2017	BEC, ACA, AE
Red-browed Finch	Neochmia temporalis		2006	2016	2017	BEC, ACA, AE
Rufous Fantail	Rhipidura rufifrons	BONN		2016		ACA
Rufous Whistler	Pachycephala rufiventris		2006			BEC
Sacred Kingfisher	Todiramphus sanctus		2006	2016	2017	BEC, ACA, AE
Satin Bowerbird	Ptilonorhynchus violaceus			2016	2017	ACA, AE
Scarlet Honeyeater	Myzomela sanguinolenta			2016	2017	ACA, AE
Silveryeye	Zosterops lateralis			2016	2017	ACA, AE
Southern Boobook	Ninox novaeseelandiae		2006		2017	BEC, AE
Spotted Pardalote	Pardalotus punctatus			2016	2017	ACA, AE
Striated Thornbill	Acanthiza lineata			2016		ACA
Sulphur-crested Cockatoo	Cacatua galerita		2006	2016	2017	BEC, ACA, AE
Superb Fairy-wren	Malurus cyaneus		2006	2016	2017	BEC, ACA, AE
Tawny Frogmouth	Podargus strigoides			2016	2017	ACA, AE
Topknot pigeon	Lopholaimus antarcticus			2016		ACA
Variegated Fairy-wren	Malurus lamberti			2016	2017	ACA, AE
Welcome Swallow	Hirundo neoxena		2006	2016	2017	BEC, ACA, AE
White-browed Scrubwren	Sericornis frontalis		2006	2016	2017	BEC, ACA, AE
White-cheeked Honeyeater	Phylidonyris niger			2016	2017	ACA, AE
White-faced Heron	Egretta novaehollandiae		2006		2017	BEC, AE

ITEM 8 (continued)

ATTACHMENT 1

COMMON NAME	SPECIES NAME	STATUS	FLORA AND FAUNA REPORT (YEAR)			CONSULTANT
White-naped honeyeater	Melithreptus lunatus			2016		ACA
White-plumed Honeyeater	Lichenostomus penicillatus		2006			BEC
White-throated Tree-creeper	Cormobates leucophaea			2016	2017	ACA, AE
White-winged Triller	Lalage sueurii				2017	AE
Willie Wagtail	Rhipidura leucophrys		2006	2016	2017	BEC, ACA, AE
Yellow Thornbill	Acanthiza nana			2016	2017	ACA, AE
Yellow-faced Honeyeater	Lichenostomus chrysops			2016	2017	ACA, AE
Yellow-tailed Black Cockatoo	Calyptorhynchus funereus			2016	2017	ACA, AE
Mammals						
Chocolate Wattled Bat	Chalinolobus morio		2006	2016	2017	BEC, ACA, AE
Common Brushtail Possum	Trichosurus vulpecula		2006	2016	2017	BEC, ACA, AE
Common Ringtail Possum	Pseudocheirus peregrinus		2006	2016	2017	BEC, ACA, AE
East-coast Free-tailed Bat	Mormopterus norfolkensis	Vulnerable (BC Act)		2016		ACA
Large Bent-wing Bat (or Eastern Bent-wing Bat)	Miniopterus orianae oceanensis	Vulnerable (BC Act)			2017	AE
Forest Bat	Vespadelus sp		2006			BEC
Gould's Wattled Bat	Chalinolobus gouldii		2006	2016	2017	BEC, ACA, AE
Grey-headed Flying-fox	Pteropus poliocephalus	Vulnerable (BC Act)	2006	2016	2017	BEC, ACA, AE
Large-footed Myotis	Myotis macropus	Vulnerable (BC Act)	2006		2017	BEC, AE
Little Forest Bat	Vespadelus vulturnus			2016		ACA
Long-eared Bat	Nyctophilus sp				2017	AE
Long-nosed Bandicoot	Perameles nasuta			2016	2017	ACA, AE
Ride's Free-tailed Bat	Mormopterus ridei				2017	AE
Short-beaked echidna	Tachyglossus aculeatus		2006			BEC

ITEM 8 (continued)

ATTACHMENT 1

COMMON NAME	SPECIES NAME	STATUS	FLORA AND FAUNA REPORT (YEAR)			CONSULTANT
Southern Forest bat	Vespadelus regulus			2016		ACA
Sugar Glider	Petaurus breviceps		2006		2017	BEC, AE
Swamp Wallaby	Wallabia bicolor			2016	2017	ACA, AE
White-striped Free-tailed Bat	Austronomus australis		2006	2016	2017	AE, ACA, BEC
Yellow-bellied Sheath-tailed Bat	Saccolaimus flaviventris	Vulnerable (BC Act)			2017	AE
Reptiles						
Bar-sided Skink	Eulamprus tenuis				2017	AE
Broad-tailed Gecko	Phyllurus platurus		2006	2016	2017	BEC, ACA, AE
Dark-flecked Garden Sunsink	Lampropholis delicata		2006	2016	2017	BEC, ACA, AE
Eastern Long-necked Turtle	Chelodina longicollis			2016		ACA
Eastern Water Dragon	Intellagama lesueurii		2006	2016	2017	BEC, ACA, AE
Eastern Water-skink	Eulamprus quoyii		2006	2016	2017	BEC, ACA, AE
Elegant Snake-eyed Skink	Cryptoblepharus pulcher		2006	2016	2017	BEC, ACA, AE
Golden-crowned Snake	Cacophis squammulosus		2006			BEC
Pale-flecked Garden Sunsink	Lampropholis guichenoti		2006	2016	2017	BEC, ACA, AE
Red-bellied Black Snake	Pseudechis porphyriacus		2006	2016		BEC, ACA
Three-toed Skink	Saiphos equalis			2016	2017	ACA, AE
Weasel Skink	Saproscincus mustelinus		2006	2016	2017	BEC, ACA, AE

Information sources:

- From City of Ryde Flora and Fauna Studies 2006, 2007, 2016
- Sourced from Applied Ecology (2017) Flora and Fauna Surveys 2017 - Terrys Creek, Kittys Creek, Field of Mars Reserve and Buffalo Creek Tributaries (Appendix B p259-263)

Key:

- EPBC Act = *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- BC Act = *Biodiversity Conservation Act 2016 (NSW)*
- BONN = Subject to Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals)
- BEC = Biosphere Environmental Consultants
- ACA = Anne Clements and Associates
- AE = Applied Ecology

ITEM 8 (continued)

ATTACHMENT 2



PROPOSED RECATEGORISATION OF
PARTS OF FIELD OF MARS RESERVE

PUBLIC HEARING AND SUBMISSIONS REPORT

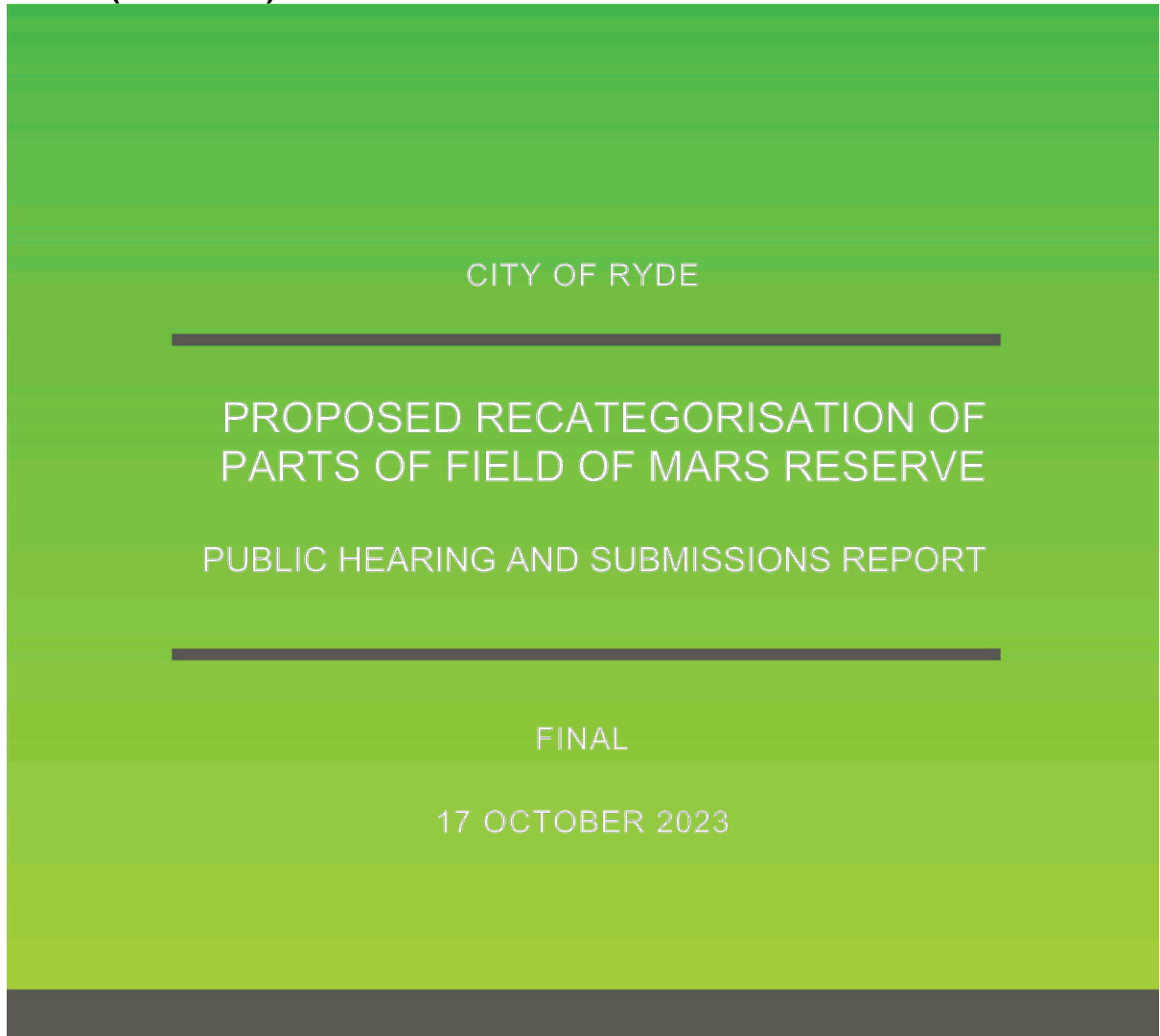
FINAL

17 OCTOBER 2023



ITEM 8 (continued)

ATTACHMENT 2



Parkland Planners

ABN: 33 114 513 647

PO Box 41
FRESHWATER NSW 2096

mob: 0411 191 866

sandy@parklandplanners.com.au

www.parklandplanners.com.au

DIRECTOR: Sandy Hoy

ITEM 8 (continued)

ATTACHMENT 2

CONTENTS

1 INTRODUCTION	1
1.1 Purpose of this report	1
1.2 Land covered by this report.....	1
1.3 Background to the public hearing.....	2
1.4 This report.....	2
2 PLANNING CONTEXT	3
2.1 What is Community and Crown land?	3
2.2 What are the categories of Community land?.....	3
2.3 What are the guidelines for categorising Community land?	4
2.4 Core objectives for managing Community land.....	4
2.5 Guidelines and core objectives for categories for this public hearing	5
2.6 Plans of Management for Community land	6
2.7 Public hearings	6
3 PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE	9
3.1 Features of Field of Mars Reserve	9
3.2 Land ownership	9
3.3 Field of Mars Reserve Masterplan (2021).....	10
3.4 Previous, current and proposed land categorisations.....	10
4 THE PUBLIC HEARING	19
4.1 Advertising and notification.....	19
4.2 Public hearing arrangements	23
4.3 Attendance at the public hearing.....	23
4.4 The public hearing	24
4.5 Submissions.....	24
5 CONSIDERATION OF SUBMISSIONS.....	25
5.1 Introduction	25
5.2 Level of support for proposed recategorisation.....	25
5.3 General comments about recategorisation	25
5.4 Specific comments about the proposed recategorisation.....	26
5.5 Comments about other land Categorisations.....	27
5.6 Comments outside the scope of the public hearing	27
6 RECOMMENDATIONS.....	29
6.1 Consideration of submissions	29
6.2 Recommendations.....	29
6.3 Adoption of proposed recategorisation	30
6.4 Reporting	30

ITEM 8 (continued)

ATTACHMENT 2

Figures

Figure 1	Location of Field of Mars Reserve	1
Figure 2	Classification and categorisation of Community and Crown land	3
Figure 3	Ownership of land in Field of Mars Reserve.....	9
Figure 4	Field of Mars Reserve Masterplan	11
Figure 5	Land categorisation of Field of Mars Reserve - Field of Mars Reserve Plan of Management (2009).....	12
Figure 6	Proposed categorisation of Field of Mars Reserve - Field of Mars Reserve draft Plan of Management (2023).....	12
Figure 7	Images of Area 1	15
Figure 8	Area 1 - Current land categorisation (part of Field of Mars Reserve)	15
Figure 9	Area 1 - Proposed land recategorisation (part of Field of Mars Reserve).....	16
Figure 10	Images of Area 2	16
Figure 11	Area 2 - Current land categorisation (part of Field of Mars Reserve)	17
Figure 12	Area 2 - Proposed land recategorisation (part of Field of Mars Reserve).....	17
Figure 13	Public hearing information on Council's website	19
Figure 14	Recommended recategorisation of Community land in Field of Mars Reserve...	29

Tables

Table 1	Guidelines and core objectives for Community land categories in Field of Mars Reserve	5
Table 2	Minor alterations to Crown Land initial categorisations.....	13
Table 3	Areas of Council owned Community land proposed for category change.....	14
Table 4	Specific comments about the proposed recategorisation	26
Table 5	Comments outside the scope of the public hearing	27

ITEM 8 (continued)

ATTACHMENT 2

1 INTRODUCTION

1.1 Purpose of this report

The purpose of this report is to convey to City of Ryde ('Council') the written submissions and verbal submissions made in relation to a public hearing held on Wednesday 30 August 2023 regarding the proposed recategorisation of two parts of Field of Mars Reserve.

This report has been prepared under Section 40A of the *Local Government Act 1993*.

1.2 Land covered by this report

Field of Mars Reserve in East Ryde is shown in Figure 1.

Figure 1 Location of Field of Mars Reserve



ITEM 8 (continued)

ATTACHMENT 2

1.3 Background to the public hearing

The Field of Mars Reserve Plan of Management (2009) identified land categorisations for Council owned Community land. Council is proposing to change the boundaries of the current categories of Community land in two parts of Field of Mars Reserve to reflect the current and future Reserve use in accordance with the adopted Masterplan and draft Plan of Management (2023), as explained and illustrated in Section 3.

Field of Mars Reserve consists of a large component of Crown lands. Under previous legislation land categorisation was not applicable for parcels of Crown lands under Council's care and control. However, from 1 July 2018 the *Crown Land Management Act 2016* required the appointment of Council as Crown Land Manager and for these Crown lands to be managed as if they were public land under the *Local Government Act 1993*. This requirement included the application of land categorisation and preparation of a Plan of Management for Crown lands. Under the *Crown Land Management Act 2016*, initial land categorisations were applied to Crown Land within Field of Mars Reserve, which were further specified during the draft Plan of Management approval by NSW Office of Crown Lands.

A public hearing is required under Section 40A of the *Local Government Act 1993* ('the Act') to recategorise Community land. Under the Act the public hearing must be chaired by an independent facilitator.

If Council adopts the proposed recategorisation of parts of Field of Mars Reserve, Council will update its Open Space Land Index, Maps and associated Plans to reflect the changes in categorisation.

1.4 This report

The remainder of this report presents the relevant requirements of the *Local Government Act 1993* regarding Plans of Management and categorisation of Community land, and submissions regarding the proposed recategorisation of parts of Field of Mars Reserve.

The submissions comprise verbal submissions made at the public hearing held on 30 August 2023, and online and written submissions received by Council between Tuesday 15 August and Tuesday 26 September 2023.

ITEM 8 (continued)

ATTACHMENT 2

2 PLANNING CONTEXT

2.1 What is Community and Crown land?

The *Local Government Act 1993* sets out a range of requirements for the management of public land that City of Ryde is legally bound to adhere to.

Section 26 of the *Local Government Act 1993* requires that all public land owned by Council must be classified as "Community" or "Operational" land. Field of Mars Reserve comprises Community land owned by City of Ryde and Crown land managed by City of Ryde.

Figure 2 Classification and categorisation of Community and Crown land



Community land is intended to be managed for use by the community for purposes including environmental protection, recreational, cultural, social and educational activities. Community land may only be leased or licensed for up to 21 years without the Minister's consent or up to 30 years with the Minister's consent, it cannot be sold, and its use is restricted to the above purposes.

Conversely, Operational land is land that can be used for any purposes deemed fit by Council, may be used for commercial purposes, be leased for a longer period of time, and can be sold.

2.2 What are the categories of Community land?

The *Local Government Act 1993* requires that all land owned by the Council which is classified as Community land be categorised.

ITEM 8 (continued)

ATTACHMENT 2

As shown in Figure 2, Community land may be categorised as one or more of the following under Section 36(4):

- ☐ Natural Area.
- ☐ Sportsground.
- ☐ Park.
- ☐ Area of Cultural Significance.
- ☐ General Community Use.

Land that is categorised as a Natural Area is to be further categorised as one or more of the following under Section 36(5) of the Act:

- ☐ Bushland.
- ☐ Wetland.
- ☐ Escarpment.
- ☐ Watercourse.
- ☐ Foreshore.
- ☐ A category prescribed by the regulations.

2.3 What are the guidelines for categorising Community land?

Guidelines for categorising Community land as a particular category are in Clauses 102 to 111 of the *Local Government (General) Regulation 2021*.

The Department of Local Government's revised *Practice Note on Public Land Management* (Department of Local Government, 2000) made general recommendations on the guidelines for categorising Community land. The *Practice Note* stated:

"Council must have regard to the guidelines in determining a category (cl.9) but are not required to adopt any category merely because the land fits the description in the guidelines. Council should look at all the circumstances of the land in making a decision as to categorisation. For example, a piece of land may seem to satisfy the guidelines for more than one category. Council has a discretion in this case to look at the land in context, taking into account all relevant material before determining a category. It is important that Council be able to justify a decision."

Also, Council may have a piece of Community land, parts of which may be best managed as different categories, for example a piece of land with remnant bushland in one part and children's play equipment in another. Council is able to categorise land as part 'Natural Area – Bushland' and part 'Park'. It is strongly recommended that the land in each category not overlap. Overlapping categories may cause conflict in management objectives and will create confusion in the minds of Council staff and the community."

2.4 Core objectives for managing Community land

Each category and sub-category of Community land has core objectives that apply to it under the *Local Government Act 1993*. The core objectives outline the approach to management of the land covered by the particular category. The core objectives for each category of Community land are set out in Sections 36E to 36N of the *Local Government Act 1993*.

ITEM 8 (continued)

ATTACHMENT 2

2.5 Guidelines and core objectives for categories for this public hearing

The guidelines and core objectives for the current and proposed categories of Natural Area - Bushland, Natural Area - Wetland, and Park which apply to the proposed changes to categorisation of Field of Mars Reserve are in Table 1.

Table 1 Guidelines and core objectives for Community land categories in Field of Mars Reserve

Category	Guidelines	Core objectives
Natural Area	If the land, whether or not in an undisturbed state, possesses a significant geological feature, geomorphological feature, landform, representative system or other natural feature or attribute that would be sufficient to further categorise the land as bushland, wetland, escarpment, watercourse or foreshore under Section 36(5) of the Act.	<ul style="list-style-type: none"> - conserve biodiversity and maintain ecosystem function 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 or 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. - 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 threat abatement plan prepared under the <i>Threatened Species Conservation Act 1995</i> or the <i>Fisheries Management Act 1994</i>.
Under Section 36(5) of the Act, Natural Areas are required to be further categorised as Bushland, Wetland, Escarpment, Watercourse or Foreshore based on the dominant character of the Natural Area.		
Natural Area – Bushland	<p>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:</p> <ul style="list-style-type: none"> - is the natural vegetation or a remainder of the natural vegetation of the land, or - although not the natural vegetation of the land, is still representative of the structure or floristics, or structure and floristics, of the natural vegetation in the locality. 	<ul style="list-style-type: none"> - 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 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. - protect bushland as a natural stabiliser of the soil surface.

ITEM 8 (continued)

ATTACHMENT 2

Category	Guidelines	Core objectives
Natural Area – Wetland	Land that is categorised as a Natural Area should be further categorised as wetland under Section 36(5) of the 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.	<ul style="list-style-type: none"> - 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, and - restore and regenerate degraded wetlands, and - facilitate community education in relation to wetlands, and the community use of wetlands, without compromising the ecological values of wetlands.
Park	Land that is, or is proposed to be, improved by landscaping, gardens or the provision of non-sporting equipment and facilities, for use mainly for passive or active recreational, social, educational and cultural pursuits that do not unduly intrude on the peaceful enjoyment of the land by others.	<ul style="list-style-type: none"> - encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities, and - provide for passive recreational activities or pastimes and for the casual playing of games, and - improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.

2.6 Plans of Management for Community land

Council must prepare a Plan of Management for Community land (Section 36(1)).

Community land is required to be used and managed according to a Plan of Management applying to the land (Section 35).

Among the requirements of the *Local Government Act 1993* for the contents of a Plan of Management for Community land are:

- ☐ categorisation of the land
- ☐ core objectives for management of the land.

2.7 Public hearings

2.7.1 Why hold a public hearing?

A public hearing is required under Section 40A of the *Local Government Act 1993* and Section 3.23(7)(d) of the *Crown Land Management Act 2016* if:

- ☐ a Plan of Management proposes to categorise (that is, the Plan has not been previously prepared and adopted by Council, or has not categorised Community land) the public land covered by the Plan of Management.
- ☐ a Plan of Management proposes to re-categorise (changing the adopted category) the public land covered by the Plan of Management.

ITEM 8 (continued)

ATTACHMENT 2

Note: Public hearings regarding categorisation or re-categorisation of Community land are not related to reclassification. Reclassification is when Community land is re-classified as Operational land that can then be managed differently and has the ability to be sold by Council. Community land is protected under the *Local Government Act 1993* and cannot be sold.

2.7.2 Who conducts a public hearing?

An independent chairperson conducts the public hearing, and provides a report to Council with recommendations on the proposed recategorisation of Community land.

Under Section 47G of the *Local Government Act 1993*, the person presiding at a public hearing must not be:

- a) A Councillor or employee of the Council holding the public hearing.
- b) A person who has been a Councillor or employee of that Council at any time during the 5 years before the date of his or her appointment.

2.7.3 What happens after the public hearing?

Council must make a copy of the report regarding the outcomes of the public hearing available for inspection by the public at a location within the area of Council no later than four days after it has received the final report from the person presiding at the public hearing.

The Public Hearing Report will be presented to Council for its information when it considers adopting the proposed land recategorisation of parts of Field of Mars Reserve and the draft Plan of Management for Field of Mars Reserve.

Pending the outcome of the public hearing and if Council adopts the proposed recategorisation of parts of Field of Mars Reserve, Council will update associated maps, plans, documents and records to reflect the change in categorisation. Notification of the Council resolution for the land recategorisation and Plan of Management will be provided to community and stakeholders.

ITEM 8 (continued)

ATTACHMENT 2

This page is left blank intentionally

ITEM 8 (continued)

ATTACHMENT 2

3 PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE

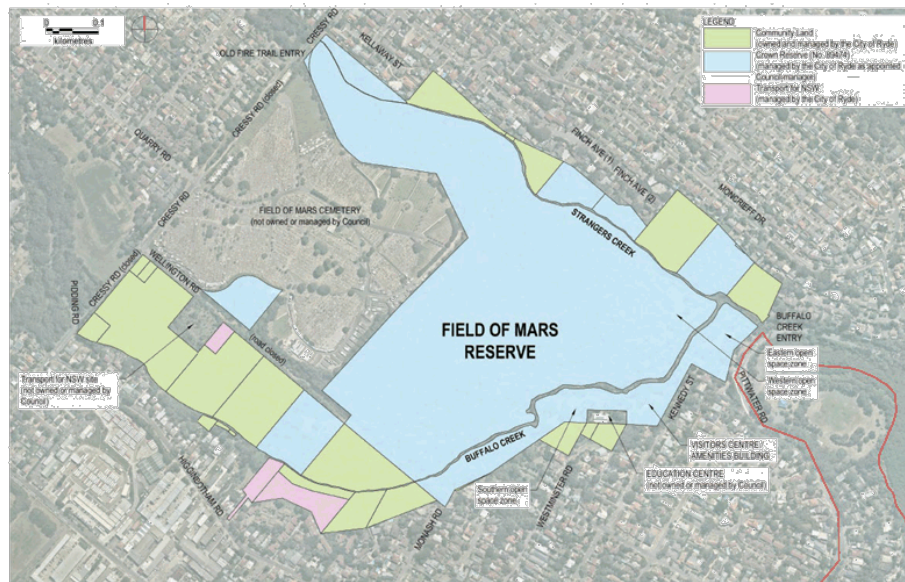
3.1 Features of Field of Mars Reserve

The Field of Mars Reserve is approximately 50 hectares in size and is the City of Ryde's largest remnant bushland reserve. It is a wildlife refuge and category 1 wildlife protection area. Buffalo and Strangers Creeks traverse the site and converge on the north-eastern side of the Reserve. Within the Reserve there is a network of walking tracks, visitors centre with public toilets and picnic area. Several voluntary bushcare groups operate in the Reserve.

3.2 Land ownership

Field of Mars Reserve includes Crown land, Community land owned by City of Ryde, and land owned by Transport for NSW as shown in Figure 3.

Figure 3 Ownership of land in Field of Mars Reserve



Source: Field of Mars Reserve draft Plan of Management (August 2023 pending public exhibition and adoption)

ITEM 8 (continued)

ATTACHMENT 2

Further clarification was provided to a question at the hearing regarding the small parcel of land owned by the Department of Education. The Field of Mars Education Centre (not owned or managed by Council) is situated in the Reserve and is operated by the NSW Department of Education. Students and teachers use the Education Centre and the Reserve itself for educational purposes.

Further explanation was made at the public hearing that new legislation meant that land categorisation was required for Crown lands being used as parkland.

3.3 Field of Mars Reserve Masterplan (2021)

It was explained at the public hearing that Council conducted two rounds of community consultation in 2020 and 2021 to develop the Masterplan for Field of Mars Reserve which was adopted in August 2021.

The Masterplan (refer to Figure 4 below), in conjunction with the draft Plan of Management, provides a 20 year vision on how the Reserve will be managed, protected and enhanced.

As standard practice during the preparation of the Masterplan and draft Plan of Management, Council undertook a review of the land categorisations. This considered existing and future function and natural features of the Reserve. The proposed recategorisation of parts of the Field of Mars Reserve apply to the southern open space zone and the eastern open space zone as shown on the Masterplan.

3.4 Previous, current and proposed land categorisations

3.4.1 Land Categorisations under Plan of Management (2009)

Land Categorisations for Community land in Field of Mars Reserve were adopted by Council on 9 September 2009 as a component of the Field of Mars Reserve Plan of Management (2009). These land categorisations are:

- ☐ Natural Area – Bushland
- ☐ Natural Area – Wetland
- ☐ Park.

Refer to Figure 5 below for the existing Community land categorisation in Field of Mars Reserve.

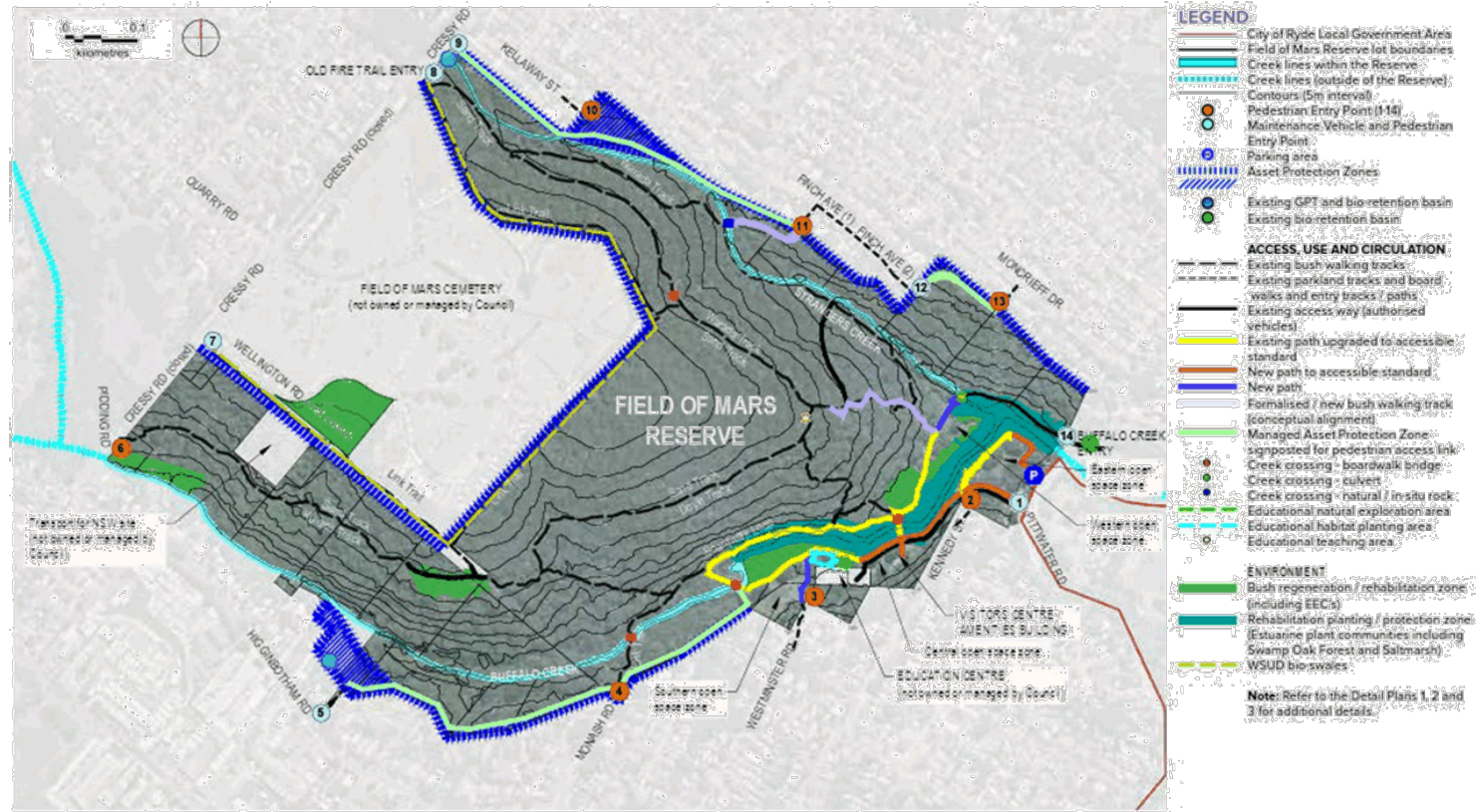
Note:

- ☐ In 2009 Crown land was not required to be categorised under the *Local Government Act 1993*, therefore no categorisations were applicable to the parcels of Crown land in Field of Mars Reserve at that time.
- ☐ The 2009 Plan of Management will be superseded by the new Plan of Management, which was recently on public exhibition and pending necessary approvals.

ITEM 8 (continued)

ATTACHMENT 2

Figure 4 Field of Mars Reserve Masterplan



Source: Field of Mars Reserve Masterplan Report (adopted August 2021)

PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE: PUBLIC HEARING AND SUBMISSIONS REPORT
PARKLAND PLANNERS

ITEM 8 (continued)

ATTACHMENT 2

Figure 5 Land categorisation of Field of Mars Reserve - Field of Mars Reserve Plan of Management (2009)



- Natural Area - Bushland
- Natural Area - Wetland
- Park
- Categorisation not required

Denote the parts of Field of Mars Reserve (Areas 1 and 2) where land recategorisation is being proposed to Council owned Community land

Figure 6 Proposed categorisation of Field of Mars Reserve - Field of Mars Reserve draft Plan of Management (2023)



- | | |
|--|---|
| General Community Use | Natural Areas - Wetlands |
| Natural Areas - Bushland | Park Boundary |
| Natural Areas - Escarpment | Parks |
| Natural Areas - Foreshore | Sportsgrounds |
| Natural Areas - Watercourse | Crown Land |

PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE: PUBLIC HEARING AND SUBMISSIONS REPORT
PARKLAND PLANNERS

ITEM 8 (continued)

ATTACHMENT 2

3.4.2 Land Categorisations under *Crown Land Management Act 2016*

The *Crown Land Management Act 2016* came into effect in 2018. This stipulates that Crown land is to be managed as though it is Community land under the *Local Government Act 1993*, including categorisation.

As required, Council as Crown Land Manager submitted initial land categorisations for Crown land in the Field of Mars Reserve to NSW Office of Crown Lands as Natural Area (without sub-categorisation) and Park.

3.4.3 Land Categorisations under draft Plan of Management (2022-23)

In the course of preparing the Field of Mars Reserve Masterplan (adopted August 2021) and draft Plan of Management, a review of land categorisations was undertaken and the recategorisation of parts of the Field of Mars Reserve was recommended.

The draft Plan of Management (2022-23) was referred to NSW Office of Crown Lands for Ministerial approval to place on public exhibition. This referral included notification for minor alteration of initial land categorisations to Crown land parcels, as detailed in Table 2 below. The alterations to categorisations included sub-categorisation applied to Natural Area – Bushland and to Natural Area – Wetland, and categorisation as Park. Approval was granted by NSW Office of Crown Lands on 28 June 2023 to proceed to public exhibition with the categorisation of Crown land as shown in Figure 6.

Table 2 Minor alterations to Crown Land initial categorisations

		
Lot 7358 DP 1160800 Natural Area – Bushland Natural Area – Wetland Park	Lot 7011 DP 1069836 Natural Area – Bushland	Lot 172 DP 752035 Natural Area – Bushland
		
Lot 258 DP 752035 Natural Area – Bushland	Lot 259 DP 752035 Natural Area – Bushland	Lot 261 DP 752035 Natural Area – Bushland Natural Area – Wetland

ITEM 8 (continued)

ATTACHMENT 2



Lot 307 DP 752035
Natural Area – Bushland

Lot 755 DP 752035
Natural Area – Bushland

Source: NSW Six Maps

These categorisations of Crown lands are a protective measure and are consistent with the adopted Masterplan, existing use, vegetation, management practices and the Field of Mars Reserve's gazetted purpose for "public recreation and the promotion of and study of the preservation of native flora and fauna".

3.4.4 Proposed Land Recategorisations (2023)

Council is proposing to change the boundaries of the current land categorisation of Community land in two areas of the Field of Mars Reserve, as shown in Figures 5 and 6 above and outlined in Table 3 below.

Table 3 Areas of Council owned Community land proposed for category change

Area	Location (part of Field of Mars Reserve)	Proposed Categorisation Change
Area 1	South and south-west of the Education Centre (near Westminster Road pedestrian entry).	Increased area of Natural Area - Bushland
		Reduced area of Park
		Note: Same total area of parkland.
Area 2	North-east of the confluence of Buffalo and Strangers Creeks (near Pittwater Road maintenance vehicle entry).	Increased area of Natural Area - Bushland
		Reduced area of Natural Area - Wetland
		Note: Same total area of parkland.

The proposed changes are consistent with the adopted Masterplan (Figure 4 above), existing use, vegetation, management practices and the gazetted purpose of Field of Mars Reserve for "public recreation and the promotion of and study of the preservation of native flora and fauna".

3.4.5 Proposed Land Recategorisation – Area 1

Area 1 (part of Field of Mars Reserve) is situated to the south and south-west of the Education Centre and in proximity to the pedestrian entry from Westminster Road. Area 1 is characterised by two areas of established bushland vegetation and an open grassed area used for picnics, passive recreation and educational purposes, as shown in Figure 7.

ITEM 8 (continued)

ATTACHMENT 2

Figure 7 Images of Area 1



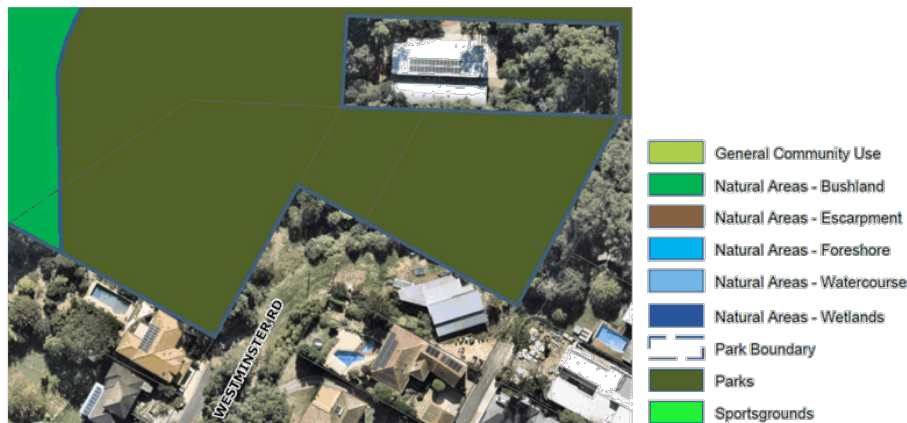
Looking south-west (near Education Centre and Westminster Road park entry)



Looking south-east (near Education Centre and Westminster Road park entry)

The total area of the parcels of land contained within Area 1 is approximately 5,833m², and consists of Council owned Community land categorised as Park as shown in Figure 8.

Figure 8 Area 1 - Current land categorisation (part of Field of Mars Reserve)



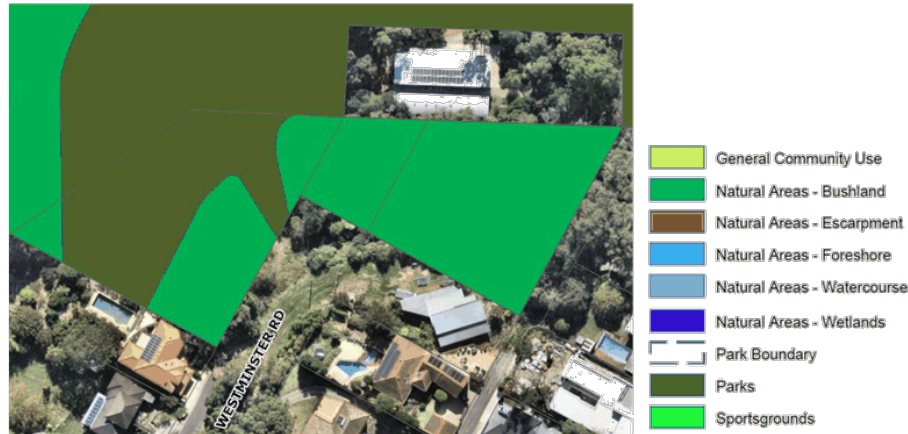
The proposed land recategorisation in Area 1 is for approximately 872m² and 3,070m² (3,972m² combined total) of Council owned Community land to be changed from the Park land categorisation to Natural Area – Bushland land categorisation as shown in Figure 9.

It was explained at the public hearing that a minor alteration is intended to the categorisation. The vegetation islands on either side of the pedestrian entry would be changed from Park to Natural Area – Bushland so the area can be managed as bushland, including that mowing does not occur under trees.

ITEM 8 (continued)

ATTACHMENT 2

Figure 9 Area 1 - Proposed land recategorisation (part of Field of Mars Reserve)



The proposed land recategorisation of Area 1 will increase the Natural Area – Bushland (by 3,972m²) and decrease the area of Park (by 3,972m²) in this area of the Field of Mars Reserve.

The existing open grass area will be retained as Park land categorisation (1,861 m²).

The Masterplan Area 1 proposed for land recategorisation includes improved pedestrian entry from Westminster Road (entry 3) and a formalised pedestrian path between two existing stands of vegetation near the Education Centre.

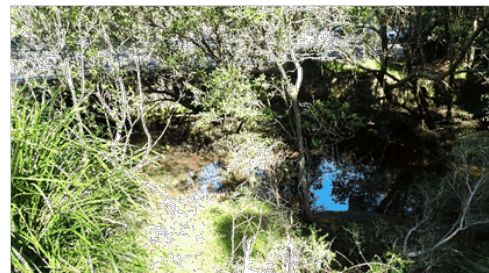
3.4.6 Proposed Land Recategorisation – Area 2

Area 2 (part of Field of Mars Reserve) is the north-eastern most parcel of land (Lot 625 DP 31680) within the Field of Mars Reserve. It is situated to the north-east of the confluence of Buffalo Creek and Strangers Creek, west of the Pittwater Road entry. Area 2 is largely characterised by established bushland vegetation on land with increasing topography extending up towards residential properties boundaries on Moncrief Drive and McCallum Avenue. The lower section of Area 2 is wetland immediately adjacent to the lower extremity of Buffalo Creek. A maintenance vehicle access route into the Reserve extends between the wetland and bushland areas. The topography of the wetland slopes downwards from the maintenance access route to the tidal creekline. Figure 10 shows the bushland and wetland in this area.

Figure 10 Images of Area 2



Looking south-east (Buffalo Creek on right and Pittwater Road maintenance entry ahead)



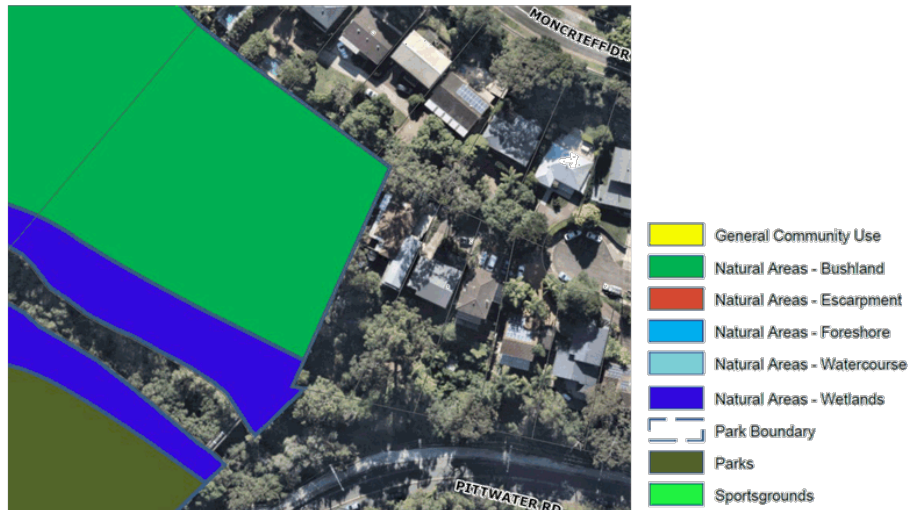
Looking south to Pittwater Road across Buffalo Creek

ITEM 8 (continued)

ATTACHMENT 2

Area 2 is Community land with existing land categorisations of Natural Area - Bushland (4,862m²) and Natural Area - Wetland (1,420m²) with a combined total of 6,282m² (refer to Figure 11). Area 2 includes a combination of bushland vegetation and creekline wetland vegetation.

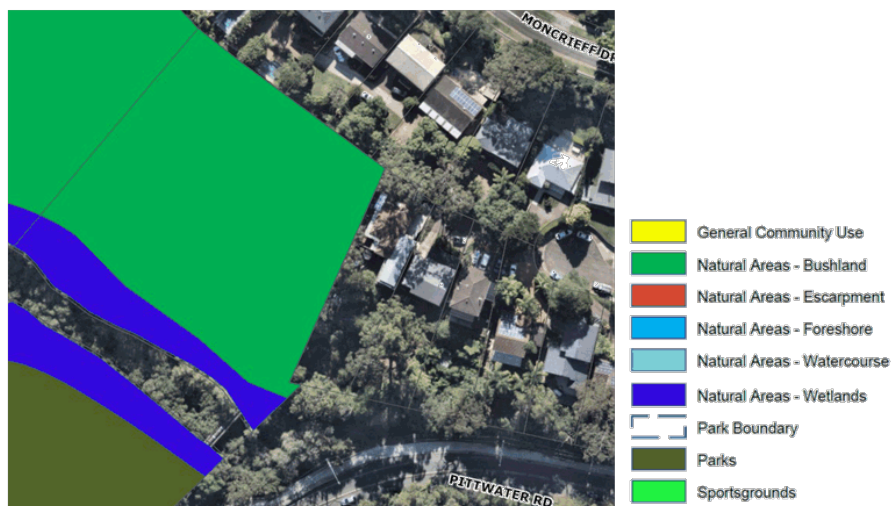
Figure 11 Area 2 - Current land categorisation (part of Field of Mars Reserve)



The proposal for land recategorisation of Area 2 is due to a clear topographical change, with a moderate gradient sloping upwards from the creekline. A minor alteration to the categorisation is proposed so the Natural Area - Wetland categorisation is defined as the lower tidal wetland area, and the Natural Area – Bushland categorisation is defined as the vegetation on the higher ground.

The proposed recategorisation will increase the area of Natural Area – Bushland (5,409m²) and decrease the area of Natural Area – Wetland (873m²) in this area of the Field of Mars Reserve, with a combined total of 6,282m². Refer to Figure 12.

Figure 12 Area 2 - Proposed land recategorisation (part of Field of Mars Reserve)



PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE: PUBLIC HEARING AND SUBMISSIONS REPORT
PARKLAND PLANNERS

ITEM 8 (continued)

ATTACHMENT 2

Note: the section mapped as Buffalo Creek itself (near Area 2) is not Community land therefore land categorisation is not applicable to the creek.

The Masterplan Area 2 proposed for land recategorisation is to the west of the Pittwater Road entry on the northern side of Buffalo Creek (entry 14) Area 2 is recommended for minor track improvement to support the existing uses, as well as rehabilitation of the estuarine planting/protection zone.

It was explained at the public hearing that topography was used to adjust the categorisation of the wetlands area.

The person at the public hearing enquired where is the border between Natural Area - Wetland and Natural Area - Bushland, and whether a surveyor was used to determine the proposed changes. Council officers explained that a surveyor was not necessary as Council used their mapping tools, existing land boundaries and the site contours. It should be noted that the flow of creeks and rivers can change naturally over time, so the creek line itself may not be entirely accurate. The border between the wetland and bushland reflects the natural topography under general conditions. Water from the creek does not extend up the hill except during flood. Occasionally Council updates their mapping to NSW Land and Property Information (LPI) land boundaries.

ITEM 8 (continued)

ATTACHMENT 2

4 THE PUBLIC HEARING

4.1 Advertising and notification

4.1.1 Public notification and exhibition requirements

Section 38 of the *Local Government Act 1993* states that Councils must give “public notice” of a draft Plan of Management, and the length of time that it must be on public exhibition and for submissions to be made. The public notice contents are set out in Section 705 of the Act.

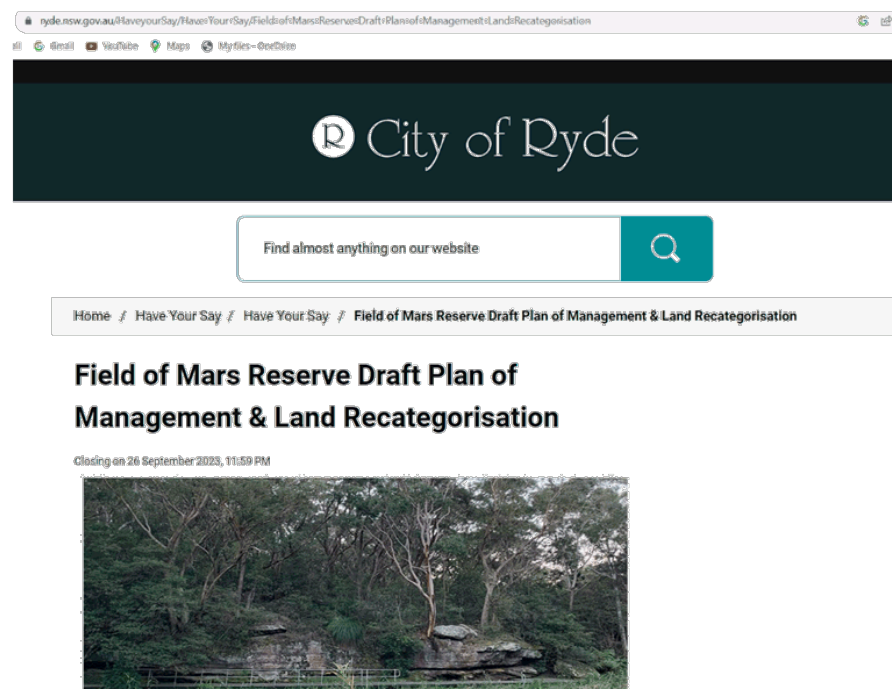
Specific details about the community engagement processes undertaken by Council for this public hearing are contained within the *Field of Mars Reserve Draft Plan of Management and Land Recategorisation Engagement Methodology Report (August/September 2023)* as prepared by City of Ryde.

4.1.2 Online notification

Council notified the community of the public hearing on its website www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM from Tuesday 15 August until Tuesday 26 September 2023. The Have Your Say page on Council's website is shown in Figure 13.

A background information document explaining the proposed recategorisations, the public hearing, and an online submission form, were also provided on the web page.

Figure 13 Public hearing information on Council's website



ITEM 8 (continued)

ATTACHMENT 2

In late 2020 and mid 2021 the City of Ryde asked for your input, views and thoughts on how Field of Mars Reserve can be managed, protected and improved now and into the future.

Based on your feedback, Council prepared a [Masterplan](#) which was adopted in August 2021. The draft Plan of Management has been prepared and approved by Council and the Minister responsible for Crown Lands for public exhibition. The draft Plan of Management is now on public exhibition until **Tuesday 26 September 2023**.

The purpose of the draft Plan of Management is to identify objectives, targets and propose strategies to protect and guide future maintenance and management of Field of Mars Reserve. To view the draft plan, please click ['Field of Mars Reserve Draft Plan of Management'](#).

Council is also proposing to recategorise small portions of Field of Mars Reserve to reflect the Reserve's natural features and Reserve use. For more information on the proposed recategorisations and public hearing, please click ['Field of Mars Reserve Proposed Land Recategorisation Public Hearing Background Information'](#).

Council would like to receive your feedback on the draft Plan of Management and proposed land recategorisations for parts of Field of Mars Reserve.

What is the Field of Mars Reserve?

Located in East Ryde, the Field of Mars Reserve is the largest remnant bushland reserve under the care, control and management of the City of Ryde covering approximately 50 hectares. This protected Wildlife Refuge includes natural area (bushland), sections of Buffalo and Strangers Creeks, walking tracks, Visitors Centre/amenities building, Environmental Education Centre, picnic area and car park. The Reserve contains several endangered ecological communities and threatened species and provides significant habitat for native birds and animals.

Why is a Plan of Management needed?

The draft Plan of Management for Field of Mars Reserve identifies objectives, targets and proposes strategies to protect and guide the future maintenance and management of this Reserve, in accordance with the *Local Government Act 1993*, *Crown Land Management Act 2016* and *National Parks & Wildlife Act 1974*.

Why is a Land Recategorisation public hearing needed?

In accordance with the *Local Government Act 1993* and *Crown Land Management Act 2016*, Council owned land classified as 'Community Land' or Crown Land managed by Council as 'Community Land', must be assigned a 'Land categorisation'. These land categorisations provide guidelines and objectives for land use and management.

Under previous legislation, Crown Land within the Field of Mars Reserve did not require a land categorisation. However, the *Crown Land Management Act 2016* required Crown Land managed as community land to be assigned land categorisations. Changes in legislation over time has necessitated the previous Plan of Management (adopted 2009) and the land categorisation for the Reserve to be reviewed and updated.



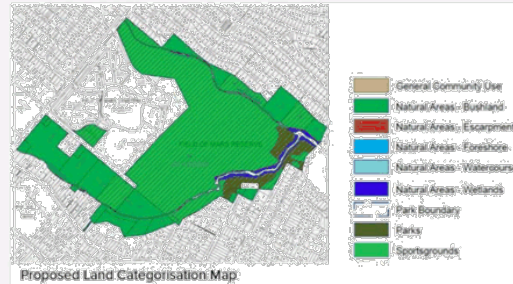
Land Categorisation Map (2009)

[View the Land Categorisation Map \(2009\) >](#)

ITEM 8 (continued)

ATTACHMENT 2

In preparing the Field of Mars Reserve Masterplan (now adopted) and draft Plan of Management, Council reviewed the existing land categorisations and are proposing land recategorisation changes to some small portions of Field of Mars Reserve to better reflect the Reserve's natural features, enable the adopted Masterplan and Reserve use.

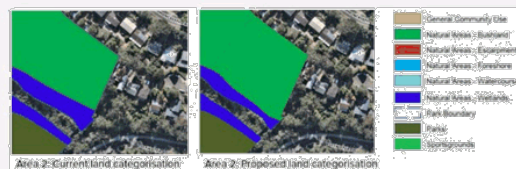


[View the Proposed Land Categorisation Map \(2023\) >](#)

Area 1 (part of Field of Mars Reserve): Situated to the south and south-west of the Education Centre and in proximity to the pedestrian reserve entry from Westminster Road. It is characterised by a combination of established areas of vegetation and an open-grassed area used for picnics, passive recreation and educational purposes.



Area 2 (part of Field of Mars Reserve): Situated to the north-east of the confluence of Buffalo Creek and Strangers Creek. It is largely characterised by established bushland vegetation on land with increasing topography extending up towards residential properties boundaries on Moncrief Drive and McCallum Avenue. The lower section of Area 2 is wetland immediately adjacent to the lower extremity of Buffalo Creek.



A public hearing is required under Section 40A of the *Local Government Act 1993* to recategorise community land. Under the *Act* the public hearing must be chaired by an independent facilitator. Council has engaged Sandy Hoy, Director, Parkland Planners for this public hearing.

For more specific information please refer to the [Field of Mars Reserve Proposed Land Recategorisation Public Hearing Background Information](#).

Background Information

- [Field of Mars Reserve draft Plan of Management](#)
- [Field of Mars Reserve Proposed Land Recategorisation Public Hearing Background Information](#)
- [Land Categorisation Map - Proposed \(2023\)](#)

ITEM 8 (continued)

ATTACHMENT 2

Related Information +

HAVE YOUR SAY

You can Have Your Say on the Field of Mars Reserve Draft Plan of Management and Land Recategorisation in a number of ways including via the online submission form, email, post, or registering for the Public Hearing.

Council has engaged an independent facilitator, Parkland Planners, to conduct the public hearing and reporting for the proposed land recategorisation component of this Have Your Say. Submissions relating to the proposed land recategorisation will be shared with Parkland Planners for reporting purposes.

Online Form

Please complete the online form to provide your feedback on the draft Plan of Management and proposed land recategorisation. Submissions will be received up until **11.59pm on Tuesday, 26 September 2023**.

Complete the Online Form >

Written Submissions

Written submissions must be clearly marked as 'Field of Mars Reserve Draft Plan of Management' or 'Field of Mars Reserve Proposed Land Recategorisation'.

All submissions must be received by **Tuesday, 26 September 2023**.

Email cityofryde@ryde.nsw.gov.au
Post City of Ryde, Locked Bag 2069, North Ryde NSW 1670

Public Hearing for Proposed Land Recategorisation

Local residents are invited to attend the public hearing on the proposed land recategorisation in accordance with the *Local Government Act 1993*. Council will use an independent facilitator, Sandy Hoy, Director, Parkland Planners, to conduct the public hearing.

Residents will be able to attend the public hearing in person:

Date: Wednesday 30 August 2023
Time: 4.30pm – 6.00pm
Location: Wallumetta Meeting Room, Ryde Library, 1 Pope Street, Ryde
Registration: Advanced registration is required and places are limited. Registrations for the public hearing close **12.00noon on Monday 28 August 2023**.

How do I participate in the public hearing?

Please register by **12.00noon on Monday 28 August 2023** to participate in the public hearing. You can complete the online registration form via the link below or if you don't have internet access, please call Customer Service on (02) 9952 8222.

Registrations for the Public Hearing have now closed.

Privacy Statement

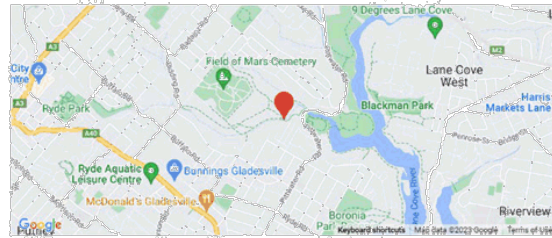
Personal information collected from you (including responses to forms and surveys) is held and used by Council under the provisions of the Privacy and Personal Information Protection Act 1998. The supply of information is voluntary, however if you cannot provide or do not wish to provide the information sought, Council may be unable to process your application or request or consider your submission. Please note that the exchange of information between the public and Council may be accessed by others and could be made publicly available under the Government Information Public Access Act 2009 (GIPA Act). If you require further information please contact Council's Customer Service Centre on 9952 8222.

ITEM 8 (continued)

ATTACHMENT 2

Location

Field of Mars Reserve, Pittwater Road, East Ryde 2113 [View Map](#)



Contact Us

Share     

4.1.3 Other notification methods

In addition to the Have Your Say website shown above, Council also notified Reserve users and the community by:

- ☐ 14 x A2 signs at entry points to Field of Mars Reserve
- ☐ an A4 flyer to residents within a 500 metre radius of the Reserve on Tuesday 15 August 2023
- ☐ Have Your Say eNewsletter to 188 community members, groups, past Have Your Say respondents and other stakeholders on Tuesday 15 August 2023
- ☐ 'Smarter Cleaner Greener' eNewsletter to 3,478 subscribers on Wednesday 16 August and Tuesday 19 September 2023
- ☐ open community consultations advertisements in *The Weekly Times* every Wednesday between 15 August and 26 September 2023.

4.2 Public hearing arrangements

The public hearing was held on Wednesday 30 August 2023 from 4.30pm to 6.00pm in the Wallumetta Room, Ryde Library, 1 Pope Street, Ryde.

Six residents registered in advance to attend the public hearing and were provided with the option to submit any comments or questions before the hearing.

4.3 Attendance at the public hearing

As required under Section 47G of the *Local Government Act 1993*, Council appointed an independent chairperson, Sandy Hoy, Director of Parkland Planners, to chair the public hearing.

ITEM 8 (continued)

ATTACHMENT 2

Meredith Gray (Open Space Planner) and Sandra Payne (Team Leader Natural Areas) provided information and answered questions on Council's behalf during the public hearing.

Sabrina Colatosti (Community Engagement Coordinator) and Daniel Severino (Community Engagement Officer) from Council's Community Engagement Team assisted residents, Council staff and the Chair with running the public hearing.

One community member attended the public hearing. Apologies in advance were received from two community members who had registered to attend.

4.4 The public hearing

Ms Hoy opened the public hearing at 4:40pm.

Ms Hoy explained the purpose of the public hearing, the legislative basis for categorisation of Community land, and the requirement for public hearings, based on the background information document provided online.

The question that the Chair asked people attending the hearing to address was:

Do you agree or not with the proposal to recategorise parts of Field of Mars Reserve? Why or why not?

The community member asked questions and made comments about the proposed recategorisation of land, the Masterplan and matters relating to management of the Reserve at the public hearing. The content of verbal submissions which are relevant to the proposed recategorisation are outlined in more detail in Section 5 of this report. Other comments and questions were noted but are outside the scope of this report.

With there being no further submissions or questions, Ms. Hoy closed the hearing at 5.25pm. The chair and Council staff remained at the hearing venue until the advertised closing time of 6pm in case of any late arrivals.

4.5 Submissions

Submissions about the proposed recategorisation of parts of Field of Mars Reserve could be made:

- ☐ via the online submission form on the Have Your Say page at www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM from Tuesday 15 August until Tuesday 26 September 2023
- ☐ verbally at the public hearing on Wednesday 30 August 2023
- ☐ in writing to Council until Tuesday 26 September 2023 by:
 - email: cityofryde@ryde.nsw.gov.au
 - post: City of Ryde, Locked Bag 2069, North Ryde NSW 1670.

ITEM 8 (continued)

ATTACHMENT 2

5 CONSIDERATION OF SUBMISSIONS

5.1 Introduction

Feedback on the proposed recategorisation was received via the public hearing (6 registrations, with one person in attendance), written submission via email (one submission), and online form submissions (13 submissions of which 10 provided comment). No postal submissions were received.

Verbal and written submissions relating to the proposed recategorisation of two parts of Field of Mars Reserve are set out below, according to:

- ☐ general comments about recategorisation
- ☐ specific comments about the proposed recategorisation
- ☐ other land categorisations in the Reserve outside the scope of the public hearing
- ☐ other topics outside the scope of recategorisation and the public hearing.

5.2 Level of support for proposed recategorisation

The attendee at the public hearing, one written submission, and the 9 online submissions which provided comment all supported the proposed recategorisations of Area 1 and Area 2 as set out below.

5.3 General comments about recategorisation

The public hearing attendee was comfortable with the proposed recategorisation of Area 1 and Area 2 because it reflects the actual vegetation on the ground, it is a gain for the fauna and flora, and it will result in an increase in land categorised as Natural Area - Bushland.

The attendee also noted that it is their understanding that other stakeholders they have spoken with are also comfortable with the draft Plan of Management and proposed land recategorisation.

One online survey respondent commented that the proposed land recategorisations are supported (Respondent 13).

One written submission received on behalf of their organisation's membership commented that they supported the recategorisation of areas in the Reserve to more appropriately reflect the actual nature of the land (Respondent 14).

ITEM 8 (continued)

ATTACHMENT 2

5.4 Specific comments about the proposed recategorisation

Detailed comments about the proposed recategorisation of Areas 1 and/or 2 are in Table 4.

Table 4 Specific comments about the proposed recategorisation

Source	Submission	Council response
Area 1		
Public hearing	An increase in Natural Area - Bushland categorisation compared to Park categorisation will result from the recategorisation	Noted
Public hearing	Recategorisation as Natural Area - Bushland will keep staff with mowers away from the bushland	Noted
Online survey 1	I am comfortable that the recategorisation provides a more accurate recognition of the land use in this area of the Reserve. Some areas of bushland previously identified as general parkland are now identified as Natural Areas.	Noted
Online survey 2	I support the proposed land categorisation of Area 1 as: 1) I endorse the expansion of natural areas within the City of Ryde. 2) It will allow for increased protection, the potential for further native regeneration hence improved habitat and biodiversity values of this area.	Noted
Online survey 3	The proposals are supported.	Noted
Online survey 4	We support the recategorisation of area 1	Noted
Online survey 5	agreed	Noted
Online survey 8	We support this amendment.	Noted
Online survey 10	I believe this is a suitable proposal.	Noted
Online survey 11	Changed (sic) are supported	Noted
Area 2		
Online survey 1	I am comfortable that the recategorisation provides a more accurate recognition of the land use in this area of the Reserve. Some areas of bushland previously identified as wetland are now appropriately identified.	Noted
Online survey 2	I support the proposed land categorisation of Area 2 as it aligns more closely with the current natural environment hence facilitating the management of the area.	Noted
Online survey 3	The proposals are supported.	Noted
Online survey 4	We support the recategorisation of area 2	Noted
Online survey 5	I would suggest keeping the wetland expanse untouched	Noted
Online survey 8	We support this amendment.	Noted
Online survey 10	I think this is a suitable change of categorisation.	Noted
Online survey 11	Changed (sic) are supported	Noted

Note: Three online survey respondents did not provide comment (Respondents 6, 7 and 12).

ITEM 8 (continued)

ATTACHMENT 2

5.5 Comments about Other Land Categorisations

The online survey provided the opportunity for comment on other land categorisations in the Field of Mars Reserve, which are outside the scope of the public hearing.

One online survey respondent commented that all categorisations are logical and based on the systems present (Respondent 11).

5.6 Comments outside the scope of the public hearing

Submissions made at the public hearing and from the online written submissions which are not related to the proposed recategorisations are set out in Table 5. Council will consider these comments before finalising the Plan of Management for Field of Mars Reserve.

Table 5 Comments outside the scope of the public hearing

	Submission	Council response
Public hearing	<p>Concern that future construction work on access paths and bush track upgrades don't disturb and damage the natural value of the Reserve.</p> <p>Resident noted they would appreciate further consultation closer to the time of such planning works in the Reserve.</p>	<p>Council will undertake path/track upgrades in the future, such as sandstone steps. Staff and contractors are required to consider any environmental impacts prior to and during works. As standard practice Council staff liaise with key stakeholders such as the Ryde Hunters Hill Flora and Fauna Preservation Society and the Field of Mars Environmental Education Centre prior to these types of upgrades.</p>
Public hearing	<p>Bushcare and weed management need to be done sensitively.</p> <p>Exotic weeds such as <i>Lantana</i> are important as habitat for some small birds which rely on exotic weeds.</p>	<p>Agreed. Weed management needs to be considered and managed progressively and sensitively over time. It is a delicate balance.</p> <p>Actions and strategies for Bushcare, maintenance and weed management practices are considered in the draft Plan of Management.</p>
Public hearing	<p>The Buffalo Creek catchment is vast. Weed management is expensive.</p>	<p>Agreed. Weed management in the Reserve is a large undertaking for Council. This is a long term and ongoing process for Council. Actions and strategies for weed management are considered in the draft Plan of Management.</p>
Public hearing	<p>Have vegetation and maintenance works taken place in Field of Mars Reserve behind the Westminster Road houses?</p>	<p>Yes, some bush regeneration works and weed removal have been undertaken in this area recently. <i>Ludwigia</i>, an aquatic weed, has been identified. <i>Ludwigia</i> is a targeted weed which is a priority for removal by Council. Other vegetation with habitat values, such as the coral trees, have been preserved and there are no plans to remove them.</p>
Public hearing	<p>Some smaller birds such as wattlebirds, Black-faced Monarch and smaller honeyeaters found near Westminster Road are not found anywhere else in the Reserve. If the vegetation is opened up too much the Noisy Mynahs would move in.</p>	<p>Noted. Bush regeneration and weed management needs to be considered and done sensitively to consider the local birds and wildlife.</p>

ITEM 8 (continued)

ATTACHMENT 2

	Submission	Council response
Public hearing	Are there any plans to replant <i>Casuarina</i> trees south of the Education Centre on the other side of the path where flash floods have occurred? Flooding damaged the creek banks.	Yes, there is opportunity for new tree planting there, but <i>Casuarina</i> may not be the most appropriate species for this area as they can prevent growth of other vegetation and cause issues for endangered saltmarsh. The area being referred to is identified in the Masterplan as a Bush regeneration / rehabilitation zone for future realisation.
Online survey 9	Dog friendly better paths	Field of Mars Reserve is a Wildlife Refuge under the <i>National Parks and Wildlife Act 1974</i> and a Category 1 Wildlife Protection Area under the <i>Companion Animal Act 1998</i> . In accordance with the legislation, dogs and cats are not permitted in the Field of Mars Reserve to protect native wildlife and biodiversity. The Field of Mars Reserve Masterplan was adopted by Council in August 2021. This Masterplan included extensive site analysis, developed a walking path/track hierarchy and provided recommendation for future walking path/track upgrades to be implemented progressively over the next 20 years, subject to funding availability.

ITEM 8 (continued)

ATTACHMENT 2

6 RECOMMENDATIONS

6.1 Consideration of submissions

The online, written and verbal submissions regarding the proposed recategorisation of two parts of Field of Mars Reserve were carefully considered and assessed below.

The public hearing attendee and all 9 online survey respondents which provided comment all support the proposed recategorisation of Area 1 and Area 2. The key reason given for supporting the proposal is that the proposed changes to categorisations more accurately reflect the boundaries of vegetation types and land use in Field of Mars Reserve, allowing for more effective management of natural areas by Council.

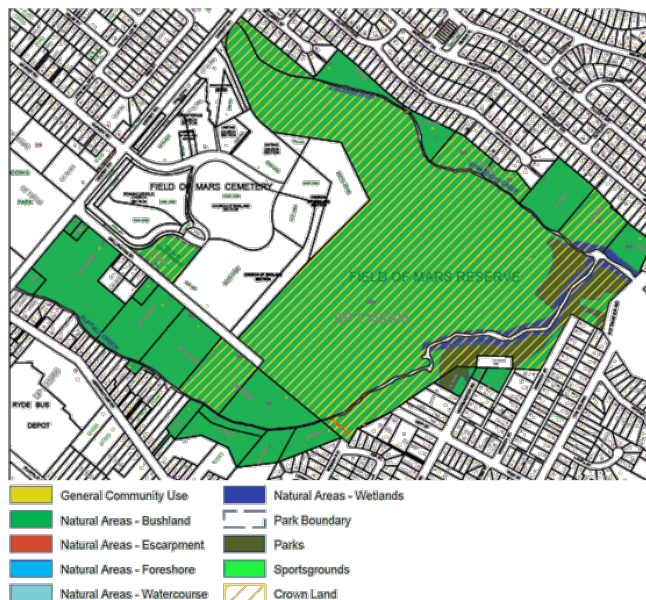
One online survey respondent noted that other land categorisations in the Reserve are logical. No other submissions were received on the categorisations of the remainder of the Reserve.

6.2 Recommendations

Based on the representations and written submissions to the public hearing on 30 August 2023, and online and written submissions made to Council by 26 September 2023, my recommendations to City of Ryde are that Council:

1. Note the verbal, online and written submissions made in Section 5.
2. Recategorise the two parts of Field of Mars Reserve (Area 1 and Area 2) according to the proposed categorisation map which was publicly exhibited, as shown in Figure 14 below.

Figure 14 Recommended recategorisation of Community land in Field of Mars Reserve



PROPOSED RECATEGORISATION OF PARTS OF FIELD OF MARS RESERVE: PUBLIC HEARING AND SUBMISSIONS REPORT
PARKLAND PLANNERS

29

ITEM 8 (continued)

ATTACHMENT 2

6.3 Adoption of proposed recategorisation

The public hearing report will be presented to Council for its information as part of its approval of the proposed recategorisation, adoption of the Field of Mars Reserve Plan of Management, and subsequent implementation of the Masterplan (2021) and Plan of Management (2023).

Section 114 of the *Local Government (General) Regulation 2021* states that if Council receives any submission objecting to the proposed categorisation of land, and the Council adopts the categorisation without amending the categorisation that gave rise to the objection, the resolution by which Council adopts the categorisation must state the Council's reasons for categorising the relevant land in the manner that gave rise to the objection. No objections were received.

If Council adopts the proposed recategorisation of two parts of Field of Mars Reserve (Areas 1 and 2), Council will update its Open Space Land Index and Maps to reflect the changes in categorisation.

If Council decides to alter the proposed recategorisation of Community land from that considered at the public hearing, Council must hold a further public hearing (Section 40A(3) of the *Local Government Act 1993*).

6.4 Reporting

Within four days of receiving this final report, Council is required under Section 47G(3) of the *Local Government Act 1993* to make a copy of this report available for inspection by the public at a location within the area of the Council. It is recommended that Council:

- ☐ send a copy of the public hearing report to the people who attended the public hearing and/or made a written submission.
- ☐ keep a copy of the public hearing report for inspection at Council's Customer Service Centre and Ryde Library.
- ☐ post an electronic copy of the public hearing report on Council's website.



Sandy Hoy
Director
Parkland Planners

17 October 2023

ITEM 8 (continued)

ATTACHMENT 3

**FIELD OF MARS RESERVE
DRAFT PLAN OF MANAGEMENT
PUBLIC EXHIBITION SUBMISSIONS SUMMARY**
(as at 12/10/2023)

1	Online - PoM	Overall I am very pleased with the plan. I think conversation and preservation efforts are to be commended. Continuing support of education facilities is fantastic. I hope in the future there is growth for local university research projects on the flora and fauna of the area. Efforts to secure land to further expand this special region of our council are welcomed and I am glad it is not going to be reduced in size or devalued. We have experienced first hand the benefits of having the flora and fauna in our local area and look forward to enjoying them for many years to come. I think it is important to have no bikes and no sporting facilities but I also think runners and bush walkers should be supported. I am extremely pleased to read of plans to restore native areas that have been inundated with weeds. I am very happy with this plan of management.	<ul style="list-style-type: none"> - Feedback noted. - The "study and preservation of native flora and fauna" remain as defined components in the Crown Reserve purpose. - Wildlife refuges under the National Parks and Wildlife Act 1974 provide recognition for "studying wildlife" and "studying natural environments". - "Educational or environmental awareness and appreciation uses or events", "School use" and "Scientific or educational research, studies or investigation – including volunteer or "citizen scientist" programmes" are listed as a permissible activity in the Plan of Management. - Education - School, Education - Community and Education, science and research are identified in the Plan of Management - Action List. - Expansion of the Reserve is an ongoing priority as opportunities for expansion of the Reserve is subject to availability of land, negotiation with external organisations (eg. NSW Government departments) and/or the necessary legislative processes. - Bike riding is a prohibited activity in the Field of Mars Reserve in the Plan of Management. - Restrictions are listed on the regulatory signs. - The management of restricted and prohibited activities are identified in the Plan of Management - Action Lists. - Bushwalking and jogging on tracks is listed as a permissible activity in the Plan of Management. - Bush regeneration and invasive weed management are identified in the Plan of Management - Action Lists. - No change to Plan of Management.
2	Online - PoM	Thank you for the opportunity to comment on the Draft Field of Mars Reserve Plan of Management. The Field of Mars Reserve is an amazing area of remnant bushland and Ryde City Council should be commended for its management of the Reserve in the past. My particular interest and concern is the protection of the habitat it provides to a very diverse population of native birds, particularly many small bush birds which are increasingly difficult to find in the Sydney urban landscape. The Draft Plan of Management appears to continue to recognise the important natural values of the Reserve and strengthens the maintenance and protection of those values. I support the Plan's implementation but I would like to request that several issues are taken into consideration in implementing the Plan of Management. 1Weed management and Bushcare activities are carefully considered before action is taken to remove populations. At present many of the small native birds that are found in the Reserve, particularly along the creek lines, are dependent on weed populations for food resources and for shelter from larger aggressive native birds such as Noisy Miner and Pied Currawong. Restoration activities need to be balanced carefully against the loss of important habitat. 2Any developments proposed in the Reserve to provide upgraded paths to meet accessible standards should be carried out with the least possible effect on habitat. 3Sufficient funding in budgeted in future years to enable the Plan of Management to be effectively implemented.	<ul style="list-style-type: none"> - Feedback noted. - Protection of habitat values of the Field of Mars Reserve is strongly presented through out the Plan of Management and in applicable policy and legislations, such as Biodiversity Conservation Act 2016, National Parks and Wildlife Act 1974 and Biodiversity Plan 2016. - Weed management needs to be considered and managed progressively and sensitively over time. - Bush regeneration and invasive weed management are identified in the Plan of Management - Action Lists. - Council will undertake path/track upgrades (eg. accessible paths) in the future. Staff/contractors are required to consider any environmental impacts prior to and during works. - The Plan of Management and Masterplan are intended to enable Council to assign resources and funding for implementation as well as seek other forms of external funding (eg. grants). - No change to Plan of Management.
3	Online - PoM	I fully endorse the Draft Field of Mars Reserve Plan of Management. It significantly strengthens the protection of the Reserves biodiversity and natural features, has emphasis on continued improvement whilst allowing development to support community amenity and environmental education.	<ul style="list-style-type: none"> - Feedback noted. - No change to Plan of Management.
4	Online - PoM	The Field of Mars should continue to be maintained and enhanced within the current management principles which protect its natural values, existing flora and fauna and use for passive recreation, nature appreciation, education and field work. Pest species such as introduced animals, particularly predators, and invasive plants spreading as weeds need to be controlled within an adequately funded targeted reduction program, with priority for areas of high conservation.	<ul style="list-style-type: none"> - Feedback noted. - No change to Plan of Management. - Feedback noted. - Pest and domestic animal management and invasive weed control are identified in the Plan of Management - Action Lists. - No change to Plan of Management.
		Bush regeneration is critical to maintain and extend the bushland, hopefully with application of 'cultural burns' when conditions are suitable; the wetlands and saltmarsh zones require greater attention to improve their health and diversity.	<ul style="list-style-type: none"> - Feedback noted. - Bush regeneration, fire management and management of endangered estuarine salt marsh communities are identified in the Plan of Management - Action List. - No change to Plan of Management.
		The proposed land recategorisations are supported.	<ul style="list-style-type: none"> - Feedback noted and forwarded to the independent facilitator preparing the public hearing report for the proposed land re-categorisations. - If proposed land recategorisations are adopted by Council, the Plan of Management will be updated to include the new land categorisation map.

ITEM 8 (continued)

ATTACHMENT 3

4	(conf'd)	Access of dogs and bicycles requires greater control due to their known range of impacts.	<ul style="list-style-type: none"> - Feedback noted. - Field of Mars Reserve is a Wildlife Refuge under the National Parks and Wildlife Act 1974 and a Category 1 Wildlife Protection Area under the Companion Animal Act 1998. In accordance with these legislations, dogs are not permitted in the Field of Mars Reserve to protect native wildlife and biodiversity. - Bicycle riding is a prohibited activity in the Field of Mars Reserve. - These restrictions are listed on the regulatory signs. - The management of restricted and prohibited activities; and domestic animal management are identified in the Plan of Management - Action Lists. - No change to Plan of Management.
5	Online - PoM	<p>Field of Mars EEC is a Public school for special purposes tht located and operates within Field of Mars Reserve. https://fieldofmars.schools.nsw.gov.au/about-us.html Every year the EEC provides fieldwork experiences for many schools from around Sydney and greater NSW. The students ages range from 5 -18 School groups vary in size from very small HSC-level classes right up to large cohorts of 150 or more. Occasionally there will be two groups from different schools visiting on the same day. In order to run a safe, worthwhile educational program in Field of Mars Reserve there are many things that must be considered. These include:</p> <ul style="list-style-type: none"> - Safe, efficient bus loading and unloading systems - Bush tracks whose surface offers a good balance between safety and adventure - Quality native remnant bushland that can be safely accessed by track - Scenic natural clearings in the bush where low-impact learning activities can take place with groups of up to 30 students - Management of human impacts such as those caused by dogs, bikes, weeds, stormwater pollution. - Safe, well-maintained open parkland areas where student groups can eat, play and engage in more active activities. - A network of paths that offer a variety of experiences and levels of challenge which are wide enough for groups to pass each other (or members of the public) - Main pedestrian entrances that have a real "wow" factor with dramatic weed-free rock escarpments, scenic filtered views of water, natural vegetation, native animals and a minimum of anthropogenic noise (such as traffic) <p>Following is 21 points of specific feedback on some of the actions in the draft plan of management:</p> <p>1. Action: "Improve entry signage" (page 80) Feedback: wording on signage be in plain english and understandable by children. All entry signage to be consistently of the type shown as "totem sign" in the masterplan: precedent images (appendix C)</p> <p>2. Action: "Facilitate safe movement of buses and students for educational purposes (entry 1 - Pittwater Rd) for bus drop off/pick up and turning" (page 81) Feedback: The current arrangements for buses are far from ideal. I suggest the following simple short term mitigation measures be given high priority:</p> <ul style="list-style-type: none"> - Subtle trimming of vegetation (Pittosporum) on the N side of the access road at entry 1 to allow two buses to easily pass each other, and on rare occasions, unload when there are more than 2 buses. - Replace/modify some of the large sandstone boulders that border the bus bay/turning area so they are lower in profile (<30cm in height) This will make a big difference for buses to safely manoeuvre in the area (bus overhangs have been known to catch the taller boulders) - "Bus parking only" signage in bus reversing bay to eliminate the frequent situation where members of the public park their vehicles in the bus turning/parking area forcing buses to manoeuvre in soft/unsafe areas. - Investigate a short section of all-weather path across the triangle of grass in front of the current reserve signage (this can be part of the "accessible path connection between main car park and eastern open space zone" suggested elsewhere in the POM). <p>This will help</p> <ol style="list-style-type: none"> a) people viewing the signage b) ensure safe movement around the area when buses are in operation c) avoid the boggy area that often forms after wet weather <ul style="list-style-type: none"> - Ensure that future kerbing and drainage works east of the large steel gate at entrance 1 (under the aqueduct) allow for the continuation of the situation where there is room for two buses to safely pass each other. <p>3. Action: "Investigate the provision of an off-site bus layover area in proximity to the Reserve." (page 81) Feedback: We welcome this however we urge that any such arrangement should not lead to any future situation where less than 2 buses safely cannot safely deliver and unload passengers at the same time (there are occasions where multiple school groups using different bus companies are using the same area.</p>	<ul style="list-style-type: none"> - Feedback noted. - Whilst the Environmental Education Centre (EEC) itself does not form part defined areas of the Field of Mars Reserve, their teachers/students are regular users of the Reserve. The EEC staff were consulted during the development of the Masterplan (adopted August 2021) and draft Plan of Management to best consider their educational needs and usage of the Reserve. - No change to Plan of Management. <ul style="list-style-type: none"> - Feedback noted. - Signage type, content and format to be considered during detailed design in conjunction with the Plan of Management, Masterplan (adopted August 2021) and Park Signage Strategy. - No change to Plan of Management. <ul style="list-style-type: none"> - Feedback noted. - This is a short term operational consideration and has been raised with the Parks and Operations team for their consideration. - Masterplan (adopted August 2021) provides recommendation for future management of buses. - Masterplan (adopted August 2021) provides recommendation for pathway improvements. - No change to Plan of Management. <ul style="list-style-type: none"> - Feedback noted. - Improved bus drop off/pick up area and turning circle (capacity up to maximum of three buses); and width of the access way from entry 1 to the bus turning area sufficient for two passing buses identified in the Masterplan (adopted August 2021) but is yet to be realised. - An alternative bus layover area (off-site) is intended in close proximity to the Reserve, as identified in the Masterplan but is yet to be realised. - No change to the Plan of Management.

ITEM 8 (continued)

ATTACHMENT 3

5 (cont'd)	<p>4. Action: "Improve maintenance access for authorised vehicles at entry 14 (Buffalo Creek) as per the Masterplan. Upgrade the vehicle culvert crossing of Strangers Creek providing access to the western open space zone." (page 81)</p> <p>Feedback: We welcome this action and would like to see this particular access trail turn into an all weather trail connection suitable for occasional pedestrian use (this makes sense given the proposed extension to the gravel path in the western open space zone). We would like to see any upgrades to the vehicle culvert crossing of Strangers Creek to keep the same low visual profile (in other words ensure that this crossing it does not look like a vehicle trail when viewed from the western open space zone).</p> <p>5. Action: "Provide accessible path connection between main car park, eastern open space zone, internal access way, Visitors Centre / Amenities Building, Education Centre, Boardwalk loop and western open space zone." (page 82)</p> <p>Feedback: While we support the idea of this connection we find it hard to see how a new accessible path can be made to fit into the narrow flood prone pinch point where the existing access road goes between a rock overhang and mangrove wetlands. Can we assume that the "path" will use the exiting road for this particular section?</p> <p>6. Action: "Provide DDA compliant access to Visitors Centre and public toilets." (page 83)</p> <p>Feedback: If a new accessible path is to be built linking the access rd (and any new accessible paths proposed elsewhere) to the visitor centre then can we ensure it will be built on the eastern side of the visitor centre (near the old aluminium sign) so there is a crossroads-style arrangement with the access road and track to the bridge? This would keep the busy areas to the E of the visitor centre and avoid detract from the visual qualities of the area to the W of the visitor centre (the central open space area).</p> <p>7. Action: "Upgrade the Boardwalk Loop to accessible standard" (page 84)</p> <p>Feedback: We request that any toe-rails that may be added to the boardwalk be: - as close as possible to the edge (to allow for easy passing) - of contrasting colour that will catch peoples eye and reduce the likelihood of tripping on the toerail itself.</p> <p>8. Action: "Provision of a new path linking entry 3 (Westminster Rd) to the Boardwalk Loop." (page 84)</p> <p>Feedback: It is EXTREMELY important that any such path be routed well to the west of the natural rock outcrop and large isolated Eucalyptus tree. This is important for numerous reasons: - It would create a natural "out of bounds" perimeter for school children visiting the EEC when they are playing during their lunch - It would minimise the chance of skidding and slipping during active games and activities - It would minimise the mixing of members of the public and school groups - It would preserve the current natural, uncluttered feel to the western open space area</p> <p>9. Action: "Upgrade the walking track from entry point 4 (Monash Rd) to the Boardwalk Loop" (page 84)</p> <p>Feedback: We strongly support this. Please ensure the track has a reasonable width (the current track is very narrow) and is graded.</p> <p>10. Action: "Provision of access link supported by wayfinding signs between entry 3 (Westminster Rd), entry 4 (Monash Rd) and entry 5 (Higginbotham Rd) utilising the Asset Protection Zone to link to the broader waking track network." (page 84)</p> <p>Feedback: We strongly support in the idea of a pedestrian access link between entry 3 (Westminster Rd) and entry 4 (Monash Rd) as it would create a worthwhile loop walk when combined with the boardwalk, however we see less need for this link to continue on to entry 5 (Higginbotham Rd). We would, however, prefer the proposed Warada track upgrade (see #13 below) PRIORITISED over any new links such as this one.</p> <p>11. Action: "Provision of access link supported by wayfinding signs between entry 9 (Cressy Rd), entry 10 (Kellaway St) and entry 11 (Finch Ave 1) utilising the Asset Protection Zone to link to the broader waking track network" (page 84)</p> <p>Feedback: If all this involves is some wayfinding signs then we are supportive of this action. However we are not in favour of prioritising a more formalised track along the route described. One of our staff used to live in E Ryde and walked to and from Field of Mars EEC along this route every day. He never saw another person using this route. We understand that council has a goal of providing more access links to local residents but in this case we do not think it will be used enough to warrant the expense of anything more than a few signs along this particularly weedy edge of the reserve. Lastly, as mentioned elsewhere we would prefer priority be given to the Warada track upgrade (as well as upgrades to other tracks in the heart of the reserve that traverse areas with higher natural value and are receive more regular use).</p> <p>12. Action: "Formalise the existing informal track from entry 11 (Finch Ave 1) to Strangers Creek and the Warada Track" (page 84)</p> <p>Feedback: While we like the idea of this we do not think it will be used much at all. It may provide a handy link to a very small amount of locals but it will be expensive (as it is quite steep and winds it's way around various substantial rock outcrops) and is very weedy. Again, as mentioned elsewhere we would like to see the Warada track (and other tracks that showcase the bushland better) prioritised for upgrade.</p>	<p>- Feedback noted. - Included in Masterplan (adopted August 2021). - Intended for maintenance/emergency vehicles only. - To be considered during detailed design. - No change to Plan of Management.</p> <p>- Feedback noted. - Included in Masterplan (adopted August 2021) and grant funding has been source for implementation. - This is an internal access way and is not a gazetted road. The accessible path is intended to be primarily for pedestrians and/or those with disability mobility devices. Access to be for authorised vehicles only (eg. maintenance and emergency vehicles). - No change to Plan of Management.</p> <p>- Feedback noted. - Included in Masterplan (adopted August 2021) with the access path situated to the eastern side of the Visitors Centre and in alignment to the boardwalk bridge. Grant funding has been source for implementation. - To be considered during detailed design. - No change to Plan of Management.</p> <p>- Feedback noted. - Accessible path/boardwalk included in Masterplan (adopted August 2021). Grant funding has been sourced for implementation. - To be considered during detailed design. - No change to Plan of Management.</p> <p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - To be considered during detailed design. - No change to Plan of Management.</p> <p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - Masterplan provides a walking path hierarchy with recommended track grades and designs/characteristics. - To be considered during detailed design. - No change to Plan of Management.</p> <p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - Operational matter for consideration during detailed design and implementation stages. - No change to Plan of Management.</p> <p>- Feedback noted. - Access link included in Masterplan (adopted August 2021). - Operational matter for consideration during detailed design and implementation stages. - No change to Plan of Management.</p> <p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - Operational matter for consideration during detailed design and implementation stages. - No change to Plan of Management.</p>
------------	---	---

ITEM 8 (continued)

ATTACHMENT 3

5 (cont'd)	<p>13. Action: "Upgrade the eastern section of the Warada track providing connection to the western open space zone." (page 84) Feedback: We would like to see the ENTIRE Warada track upgraded to a high quality grade 3 track (as shown on pp 61-62 of the masterplan) as a HIGHEST PRIORITY. In addition to this: - We would like the track upgrade to consider whatever changes to the alignment are needed to ensure that the current erosion and other problems (drainage capture and erosion, ponding, track widening and braiding) do not happen again. - We would like the Warada track to be wide enough for people to easily pass each other - We would like the upper section of the Warada track to be aligned with some subtle zig zags that will slow walkers (and discourage mountain bikers) - We would like the Warada upgrade works to occur on a section-by-section basis which take place during school holiday periods - We would like the Warada track upgrade to include at least two natural open spaces where a group of people (such as a school group or bird watching group) can gather. One of these (Natural flat rock platform) already exists. There are other areas that could be utilised thus such as the large natural rock bench a few meters to the SW of the current track in it's mid-section.</p> <p>14. Action(s): Dog walking (on leash or off leash), horse riding, cycling (including BMX and mountain bike riding), motor cycle riding, scooters and other motorised devices (e.g. drones and remote control cars/planes) are not permitted on walking tracks and is (are) not permitted elsewhere within the Reserve. (page 85) AND "Recreation facilities within the Reserve will provide opportunities for public enjoyment and appreciation and will not facilitate high impact, intrusive activities – for example, activities negatively impacting or scarring an area site, activities that modify the natural landscape and activities that destabilise or significantly increase potential for erosion impacts." (page 85) Feedback: Further to our feedback on the Warada track upgrade we would like the design and alignment of the track upgrade to avoid going straight down the slope. This would help to minimise erosion and ensure the new track does not become another defacto downhill mountain bike track (this has been a catalyst in the deterioration of this track in the past.)</p> <p>15. Action: "Develop a policy to prevent/minimise the introduction of foreign pathogens, diseases and other material from entering the Reserve, e.g., mulch, soils and plant material. Minimise the risk of noxious weed spread/introduction, introduction of pathogens such as Phytophthora." (page 89) Feedback: Consider installing a boot-brush fixture and Phytophthora/personal biosecurity information signage near the Pittwater rd bus bay entrance pinch-point.</p> <p>16. Action: "Manage the Reserve to protect and preserve the natural landscape such as rock formations and rock outcrops for environmental, historic, cultural, aesthetic and/or scenic reasons." (page 91) Feedback: We recommend that council specifically task any contractors working on bush regeneration, revegetation and weed control contractors to keep the rock escarpment zone between entry #2 (Kennedy St) and the rear of the Visitor centre free from weedy overgrowth. This escarpment is very visible and highly valued by visitors to the reserve, most of whom travel along the main access road (from Pittwater rd). This should be a high priority.</p> <p>17. Action: "Establish a neighbour education / promotional programme targeted at minimising diffuse pollutants such as increased seepage from overuse of fertilisers on lawns / gardens and over watering and run off from hard surfaces (such as pools, tennis courts, courtyards etc)." Feedback: We suggest there be a particular emphasis on the suburban edge where E Ryde abuts the reserve N of Strangers creek</p> <p>18. Action: "Investigate opportunities to increase the size of the Reserve and achieve a net increase of Natural Areas in the City of Ryde." (page 92) Feedback: We strongly support this action, particularly where any new land additions to the reserve would add quality landscape and vegetative (such as dramatic rock outcrops and/or bird habitat) features that are easily accessible from 9or in close proximity to) existing tracks and access points. We recommend that this action be made a high priority in the plan.</p> <p>19. Action: "Education facilities within the Reserve will provide school opportunities for enjoyment, learning and appreciation and will not facilitate high impact, intrusive activities – for example, activities negatively impacting or scarring an area site, activities that modify the natural landscape and activities that destabilise or significantly increase potential for erosion impacts." (p106) Feedback: Consult with EEC when upgrading and maintaining tracks so that tracks might include a few wider sections of track (or open areas adjacent to the track) in certain identified areas which can be used as high value "activity zones" for classes of schoolchildren and community groups. These zones would, of course need to be sited away any from environmentally sensitive and easily eroded areas but would need to be in areas with natural interesting natural features such as rocky areas, flowering plants as well as have some extant canopy cover for shade during hotter times of the year.</p> <p>20. Action: Manage and enhance riparian zones widths for Buffalo Creek (20m each side) and Strangers Creek (10m each side) through weed control/removal, supplementary planting of endemic species and/or bank stabilisation. (p97) Feedback: We strongly support this action</p>	<p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - Operational matter for consideration during detailed design and implementation stages. - No change to Plan of Management.</p> <p>- Feedback noted. - Path included in Masterplan (adopted August 2021). - Operational matter for consideration during detailed design and implementation stages. - Erosion control measures are considered in the Plan of Management and Masterplan. - Riding of mountain bikes is a prohibited activity in the Field of Mars Reserve. This restriction is listed on the regulatory signs. - The management of restricted and prohibited activities is identified in the Plan of Management - Action Lists. - No change to Plan of Management.</p> <p>- Feedback noted. - Operational matter for consideration. - No change to Plan of Management.</p> <p>- Feedback noted. - Operational matter for consideration. - Bush regeneration and Invasive Weed Management are identified in the Plan of Management - Action List. - No change to Plan of Management.</p> <p>- Feedback noted. - Operational matter for consideration. - No change to Plan of Management.</p> <p>- Feedback noted. - This is an ongoing priority as opportunities for expansion of the Reserve is subject to availability of land, negotiation with external organisations (eg. NSW Government departments) and/or the necessary legislative processes. - No current change to Plan of Management. - If additional parcels of land are added to the Field of Mars Reserve in the future, relevant maps and land index would be updated in the Plan of Management in due course.</p> <p>- Feedback noted. - The Masterplan and Plan of Management identify future path/track upgrades. Staff/contractors are required to consider any environmental impacts prior to and during works. As standard practice Council staff liaise with key stakeholders (eg. Ryde Hunters Hill Flora and Fauna Preservation Society and Field of Mars Environmental Education Centre) prior to these types of upgrades. - Operational matter for consideration during detailed design and implementation stages. - No change to Plan of Management.</p> <p>- Feedback noted. - No change to Plan of Management.</p>
------------	---	--

ITEM 8 (continued)

ATTACHMENT 3

5	(cont'd)	21. Action: "Upgrade and standardise interpretive signs in the Reserve. Use a consistent style and construction material for new interpretive signs" Feedback: Wording on signage to be in plain english and understandable by children Use low-profile signage which is only noticeable when within a few meters of the sign itself. In this way signs will not distract from natural sight-lines and/or detract from the visual qualities of the area.	- Feedback noted. - Signage type, content, format and surrounding context to be considered during detailed design in conjunction with the Plan of Management, Masterplan (adopted August 2021) and Park Signage Strategy. - No change to Plan of Management.
6	Online - PoM	at 4.2 ACTION PLAN TABLES: I suggest raising priority of bushcare related to H all around. (O/H and H only) Also a more clear, qualifying and quantifying measures instead of using the term "fostering bushcare community group"	- Feedback noted. - Definitions of Action Plan priorities eg. High (H) and Ongoing (O) are provided on page 79 of the Plan of Management. Council maintains a longstanding and ongoing commitment bushcare activities and bush regeneration in the Reserve. High priority implementation timeframes are considered to be 2-5 years in duration. Whereas, Ongoing priority is a considered to be continuous implementation. - The term "fostering bushcare community group" is acknowledged as being from the Government Architect NSW Sydney Green Grid (2017) - ie. not a Council document. - The Plan of Management - Action Plan details a number of objectives/targets and performance measures relating to specific bushcare actions/activities. - No change to Plan of Management.
7	Online - PoM	Parts of the vegetation mapping of the reserve are incorrect. Mostly this will not affect the PoM, however, two sites contain Blue Gum High Forest which is a threatened ecological community, under State and Federal legislation. The sites are: the Monash Rd BushCare area; and one site on the opposite side of Buffalo Ck (33.8168 deg S, 151.1290 deg E). I would be happy to provide other details if needed.	- Feedback noted. - The vegetation mapping contained within the Plan of Management was prepared using the Ryde Biodiversity Plan (adopted 2016) with vegetation mapping from NSW Office of Environment and Heritage (OEHS 2013). The Biodiversity Plan will be updated by Council in the foreseeable future and will include more updated vegetation mapping using more recent information. Any future updates to the Biodiversity Plan will be applicable to Field of Mars Reserve. - No change to Plan of Management.
8	Online - PoM	In general I'm in agreement but I'm also concerned that the diversity of usage isn't being addressed. In particular, 1) upkeep and upgrade of walking tracks in the steep areas. 2) walking trails / access into sectors that are currently not accessible.	- Feedback noted. - Track upgrades and DDA compliant accessible paths included in Masterplan (adopted August 2021) and grant funding has been sourced to commence implementation. - Masterplan provides a walking track hierarchy with recommended track grades and designs/characteristics. - Upgrades, audits, usage and management of walking tracks identified in the Plan of Management - Action Lists. - No change to Plan of Management.
9	Online - PoM	This looks like a positive and comprehensive plan. It has positive steps to improve biodiversity and habitat corridor connections to external bushland. It is good to see that the bushland tracks will remain largely untouched as they provide a genuine bush experience for walkers. There are a number of threatened or rare plants near these bush tracks and extreme care needs to be taken whenever any track maintenance is proposed. The Cemetery 2 bushcare group has been overlooked. It would be great if Council can allocate sufficient funds to support the proposed improvements, eg. weed reduction along Buffalo Creek. Thank you for the opportunity to comment and well done on a comprehensive plan.	- Feedback noted. - The Masterplan and Plan of Management identify some future path/track upgrades. Staff/contractors are required to consider any environmental impacts prior to and during works. - Cemetery Creek Bushcare Group is one of five valued voluntary bushcare groups operating in the Field of Mars Reserve. Bushcare groups are acknowledged on page 61 of the draft Plan of Management. - Bush regeneration and invasive weed management are identified in the Plan of Management - Action Lists. - The Plan of Management and Masterplan are intended to enable Council to assign resources and funding for implementation as well as seek other forms of external funding (eg. grants). - No change to Plan of Management.
10	Online - PoM	The masterplan looks good. It will be good to see the recommendations actioned.	- Feedback noted. - Masterplan adopted (August 2021). - No change to Plan of Management.
11	Online - PoM	Our use of the reserve has been encouraged because of the lack of easy access into and through the reserve and by the lack of facilities. The creeks present as stormwater drains and bushland is depreciated by weeds and waste. The PoM analysis and master plan are comprehensive and the proposed improvements are commendable.	- Feedback noted. - Stormwater runoff, water quality, bush regeneration, invasive weed management and waste/litter are identified in the Plan of Management - Action Lists. - No change to Plan of Management.
12	Online - PoM	I'm disappointed to see that only very minimal action has been assigned to address the large weeds and exotics section on the western end of Buffalo Ck to the south of the TfNSW block. With such beautiful vegetation in other parts of the park it would be a missed opportunity to expand these into the degraded weedy areas. Expanding the bushland area in this area would connect the communities between the southern most part of the reserve with those adjacent to Cressy Rd along the Kunzea Track and improve the biodiversity and conservation of the reserve. Can this area please be included in the Expand Bushland Areas design strategy.	- Feedback noted. - This parcel of TfNSW land does not currently form part of the Field of Mars Reserve. - The Masterplan (adopted August 2021) identifies an area adjacent to Buffalo Creek (on the the western side of the Reserve, near Cressy Rd) as a "Bush Regeneration/Rehabilitation Zone". - Bush regeneration and Invasive Weed Management are identified in the Plan of Management - Action List. - No change to Plan of Management.

ITEM 8 (continued)

ATTACHMENT 3

13	Online - PoM	consider making it dog friendly. currently park is not used because dogs are not allowed.	<ul style="list-style-type: none"> - Feedback noted. - Field of Mars Reserve is a Wildlife Refuge under the National Parks and Wildlife Act 1974 and a Category 1 Wildlife Protection Area under the Companion Animal Act 1998. In accordance with these legislations, dogs are not permitted in the Field of Mars Reserve to protect native wildlife and biodiversity. - The management of restricted and prohibited activities; and domestic animal management are identified in the Plan of Management - Action Lists. - No change to Plan of Management.
14	Online - PoM	As a very regular user of the reserve, I don't think allowing cars to park in the reserve is a good idea. I am worried about the impact on animals in the area around the proposed parking.	<ul style="list-style-type: none"> - Feedback noted. - This matter has been considered in the preparation of Masterplan (adopted August 2021) and the Plan of Management. There is 1 x existing car park at the Field of Mars Reserve (entry off Pittwater Rd) and bus drop off/pick up area. Vehicular access within the Reserve is intended to be restricted to authorised vehicles only (eg. maintenance and emergency vehicles). - No change to Plan of Management.
15	Online - PoM	I think this is timely and important plan to preserve and enhance this important wildlife reserve in the Ryde area and I support this plan of management.	<ul style="list-style-type: none"> - Feedback noted. - No change to Plan of Management.
16	Online - PoM	Generally a positive PoM. Plans are logical and constructive.	<ul style="list-style-type: none"> - Feedback noted. - No change to Plan of Management.
17	Online - PoM	(no comment provided)	- N/A
18	Email	Thank you for the opportunity to comment on the draft Field of Mars Reserve Plan of Management. Our Society appreciates the level of consultation in which our Society was engaged during the process of developing this Plan, and generally supports the new plan. In particular, we support the provisions for controlled environmental burns of sections of the bushland to restore natural habitats, and recategorisation of areas in the Reserve to more appropriately reflect the actual nature of the land. We look forward to continuing our positive relationship with City of Ryde to support management of the Field of Mars Reserve.	<ul style="list-style-type: none"> - Feedback noted. - Fire management identified in the Plan of Management - Action List. - Land recategorisation feedback noted and forwarded to the independent facilitator preparing the public hearing report for the proposed land re-categorisation. - No change to Plan of Management.
19	Public Hearing Land Recat	Concern that future construction work on access paths and bush track upgrades don't disturb and damage the natural value of the Reserve. Resident noted they would appreciate further consultation closer to the time of such planning works in the reserve.	<ul style="list-style-type: none"> - Feedback noted. - Council will undertake path/track upgrades in the future (e.g. sandstone steps). Staff/contractors are required to consider any environmental impacts prior to and during works. As standard practice Council staff liaise with key stakeholders (eg. Ryde Hunters Hill Flora and Fauna Preservation Society and Field of Mars Environmental Education Centre) prior to these types of upgrades. - No change to Plan of Management.
		Bushcare and weed management need to be done sensitively. Exotic weeds such as Lantana are important as habitat for some small birds which rely on exotic weeds.	<ul style="list-style-type: none"> - Feedback noted. - Agreed. Weed management needs to be considered and managed progressively and sensitively over time. It is a delicate balance. - Actions and strategies for Bushcare, maintenance and weed management practices are considered in the Plan of Management. - No change to Plan of Management.
		The Buffalo Creek catchment is vast and weed management is an immense job for Council.	<ul style="list-style-type: none"> - Feedback noted. - Agreed. Weed management in the Reserve is a large undertaking for Council. This is a long-term and ongoing process for Council. Actions and strategies are considered in the Plan of Management. - No change to Plan of Management.
		Have vegetation and maintenance works taken place in Field of Mars Reserve behind the Westminster Road houses?	<ul style="list-style-type: none"> - Feedback noted. - Yes, some bush regeneration works and weed removal have been undertaken in this area recently. Ludwigia, aquatic weed, has been identified. This is a targeted weed which is a priority for removal by Council. Other vegetation with habitat values (eg. the coral trees) has been preserved and there are no plans to remove them. - No change to Plan of Management.
		Near Westminster Road there are some smaller birds (e.g. wattibirds, black-faced monarch and honeyeaters) which are not found anywhere else in the Reserve. If the vegetation was to be opened up too much the noisy mynahs would move in.	<ul style="list-style-type: none"> - Feedback noted. - Bush regeneration and weed management needs to be considered and done sensitively to consider the local birds and wildlife. - No change to Plan of Management.
		Are there any plans to replant Casuarina trees south of the Education Centre on the other side of the path where flash floods have occurred? Flooding damaged the creek banks.	<ul style="list-style-type: none"> - Feedback noted. - Yes, there is opportunity for new tree planting there, but Casuarina may not be the most appropriate species for this area as they can prevent growth of other vegetation and cause issues for endangered saltmarsh. - The area being referred to is identified in the Masterplan as a Bush regeneration / rehabilitation zone for future realisation. - No change to Plan of Management.

ITEM 8 (continued)

ATTACHMENT 3

20	Online - Land Recat	Dog friendly better paths	<ul style="list-style-type: none">- Feedback noted.- Field of Mars Reserve is a Wildlife Refuge under the National Parks and Wildlife Act 1974 and a Category 1 Wildlife Protection Area under the Companion Animal Act 1998. In accordance with these legislations, dogs and cats are not permitted in the Field of Mars Reserve to protect native wildlife and biodiversity.- Field of Mars Reserve Masterplan was adopted by Council in August 2021. This Masterplan included extensive site analysis, developed a walking path/track hierarchy and provided recommendation for future walking path/track upgrades to be implemented progressively over the next 20 years, subject to funding availability.- No change to Plan of Management.
----	---------------------------	---------------------------	---

Submissions closed midnight 26/9/2023

ITEM 8 (continued)

ATTACHMENT 4

**FIELD OF
MARS RESERVE**

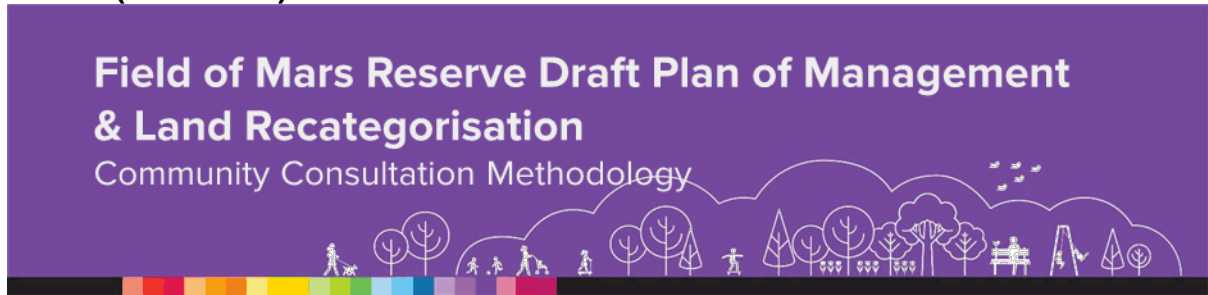
Draft Plan of
Management &
Land
Recategorisation



ENGAGEMENT METHODOLOGY
AUGUST/SEPTEMBER 2023

ITEM 8 (continued)

ATTACHMENT 4



Date	Tool	Stakeholders	Overview	Engagement
Tue 15 Aug to Tue 26 Sept 2023	Have Your Say Website	Website users	A project webpage with background information, FAQs, related information and opportunity provide a submission via the online survey.	451 users reached 392 users engaged
Tue 15 Aug to Tue 26 Sept 2023	Online Form	Website users	An online submission form where stakeholders could provide their feedback. This was accessed via Council's Have Your Say webpage.	16 submissions received
Tue 15 Aug to Tue 26 Sept 2023	Written Submissions	All stakeholders	The City of Ryde email and postal address were provided and open for feedback from the community.	1 email submission
Tue 15 Aug to Tue 26 Sept 2023	Signage	Field of Mars Reserve Users	Park signage was placed to promote the project and feedback opportunities for park users and interested stakeholders.	14 x A2 signs at entry points of the reserve
Tue 15 Aug 2023	A4 Flyer	Surrounding residents – adjacent to park (500m radius)	An A4 flyer was letterbox dropped to promote the project and feedback opportunities for surrounding local residents.	2401 flyers approximately
Tue 15 Aug 2023	Have Your Say eNewsletter	Community groups, Past HYS submitters internal & external stakeholders	A targeted eNewsletter was sent to relevant community stakeholders to provide an opportunity to give their feedback.	188 eNewsletters distributed 119 eNewsletter opened

ITEM 8 (continued)

ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation

Community Consultation Methodology (continued)



Date	Tool	Stakeholders	Overview	Engagement
Wed 16 Aug 2023 & Tue 19 Sept 2023	Smarter Cleaner Greener eNewsletter	Smarter Cleaner Greener Subscribers	Listed in Smarter Cleaner Greener to promote the project and consultation opportunities for all stakeholders.	3478 eNewsletters distributed 1261 eNewsletters opened & 3478 eNewsletters distributed 1250 eNewsletters opened
Wed 30 Aug 2023	Public Hearing 4.30pm to 6.00pm	All interested stakeholders	Local residents are invited to attend the public hearing on the proposed land re-categorisation in accordance with the Local Government Act 1993. Council have used an independent facilitator, Sandy Hoy, Director, Parkland Planners, to conduct the public hearing.	6 registered 1 attendee 2 apologies
Every Wed between 15 Aug to 26 Sept 2023	Open community consultations advertisement in The Weekly Times	Newspaper subscribers	Listed in open community consultation Newspaper advertisement to promote the project and consultation opportunities for all stakeholders.	38,000 total print readership
Tue 15 Aug to Tue 26 Sept 2023	Information phone line and email	All Stakeholders	The City of Ryde main phone and email address was provided for the project and was open for feedback from the community.	N/A

ITEM 8 (continued)

ATTACHMENT 4



Date	Tool	Stakeholders	Overview	Engagement
		Field of Mars Consultative Committee		
Tue 15 Aug, Wed 23 Aug, & Wed 13 Sep 2023	Presentations	Sport, Recreation and Leisure Working Group	Face-to-face presentation by Council staff to relevant committees/ working groups	3 committee / group presentations provided
		Sustainability Working Group		

ITEM 8 (continued)

ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation Appendices



HAVE YOUR SAY WEBSITE

Home / Have Your Say / Have Your Say / Field of Mars Reserve Draft Plan of Management & Land Recategorisation

Field of Mars Reserve Draft Plan of Management & Land Recategorisation

Closing on 26 September 2023, 11:59 PM



In late 2020 and mid 2021 the City of Ryde asked for your input, views and thoughts on how Field of Mars Reserve can be managed, protected and improved now and into the future.

Based on your feedback, Council prepared a [Mastersplan](#) which was adopted in August 2021. The draft Plan of Management has been prepared and approved by Council and the Minister responsible for Crown Lands for public exhibition. The draft Plan of Management is now on public exhibition until **Tuesday 26 September 2023**.

The purpose of the draft Plan of Management is to identify objectives, targets and propose strategies to protect and guide future maintenance and management of Field of Mars Reserve. To view the draft plan, please click ['Field of Mars Reserve Draft Plan of Management'](#).

Council is also proposing to recategorise small portions of Field of Mars Reserve to reflect the Reserve's natural features and Reserve use. For more information on the proposed recategorisations and public hearing, please click ['Field of Mars Reserve Proposed Land Recategorisation Public Hearing Background Information'](#).

Council would like to receive your feedback on the draft Plan of Management and proposed land recategorisations for parts of Field of Mars Reserve.

What is the Field of Mars Reserve?

+

Why is a Plan of Management needed?

+

Why is a Land Recategorisation public hearing needed?

+

Background Information

+

Related Information

+

ITEM 8 (continued)

ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation Appendices (continued)



HAVE YOUR SAY WEBSITE (continued)

HAVE YOUR SAY

You can Have Your Say on the Field of Mars Reserve Draft Plan of Management and Land Recategorisation in a number of ways including via the online submission form, email, post, or registering for the Public Hearing.

Council has engaged an independent facilitator, Parkland Planners, to conduct the public hearing and reporting for the proposed land recategorisation component of this Have Your Say. Submissions relating to the proposed land recategorisation will be shared with Parkland Planners for reporting purposes.

Online Form

Please complete the online form to provide your feedback on the draft Plan of Management and proposed land recategorisation. Submissions will be received up until 11.59pm on Tuesday, 26 September 2023.

[Complete the Online Form >](#)

Written Submissions

Written submissions must be clearly marked as 'Field of Mars Reserve Draft Plan of Management' or 'Field of Mars Reserve Proposed Land Recategorisation'.

All submissions must be received by **Tuesday, 26 September 2023**.

Email cityofryde@ryde.nsw.gov.au
Post City of Ryde, Locked Bag 2069, North Ryde NSW 1670

Public Hearing for Proposed Land Recategorisation

Local residents are invited to attend the public hearing on the proposed land recategorisation in accordance with the Local Government Act 1993. Council will use an independent facilitator, Sandy Hoy, Director, Parkland Planners, to conduct the public hearing.

Residents will be able to attend the public hearing in person:

Date: Wednesday 30 August 2023
Time: 4.30pm - 6.00pm
Location: Wallumetta Meeting Room, Ryde Library, 1 Pope Street, Ryde
Registration: Advanced registration is required and places are limited. Registrations for the public hearing close 12.00noon on Monday 28 August 2023.

How do I participate in the public hearing?

Please register by 12.00noon on Monday 28 August 2023 to participate in the public hearing. You can complete the online registration form via the link below or if you don't have internet access, please call Customer Service on (02) 9952 8222.

[Register for the public hearing >](#)

ITEM 8 (continued)


ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation

Appendices (continued)

A4 FLYER

FIELD OF MARS RESERVE City of Ryde
DRAFT PLAN OF MANAGEMENT AND LAND RECATEGORISATION



At the end of 2021 the City of Ryde asked for your views, needs and preferences on how Field of Mars Reserve can be managed, protected and improved now and into the future.

Based on your feedback, Council prepared a Masterplan which was adopted in August 2021 and a Draft Plan of Management which is now open for public consultation until **Tuesday 26 September 2023**.

The purpose of the draft Plan of Management is to identify objectives, targets and strategic strategies to protect and guide future maintenance and management of Field of Mars Reserve.

Council is also proposing to decommission certain portions of Park of Mars, a reserve which protects the Reserve's natural features and preserves them.

To view the Field of Mars Reserve Draft Plan of Management and for more information on the proposed land recategorisation, please visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM.

The City of Ryde invites you to provide your feedback on the Field of Mars Reserve Draft Plan of Management and Land Recategorisation.

Please see the back of this flyer for information on how you can Have Your Say.

HAVE YOUR SAY

How do I give my feedback?
You can Have Your Say on the Field of Mars Reserve Draft Plan of Management and Land Recategorisation in a number of ways, including:

Online Complete the online submission form at www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM or scan the QR code

Email cityofryde@ryde.nsw.gov.au

Post City of Ryde, Locked bag 2069, North Ryde NSW 1670

Written submissions must be clearly marked as 'Field of Mars Reserve Draft Plan of Management' or 'Field of Mars Reserve Proposed Land Recategorisation'.

All submissions must be received by **Tuesday, 26 September 2023**.

Scan to Have Your Say

Translation Assistance
한국어
中文

LET'S TALK

Public hearing for proposed land recategorisation
Local residents are invited to attend the public hearing on the proposed land recategorisation in accordance with the Local Government Act 1993. Council will use an independent facilitator (Parkland Planners) to conduct the public hearing.

Residents will be able to attend the public hearing in person.

Date Wednesday 30 August 2023

Time 4:30pm – 6:00pm

Location Walumetta Meeting Room, Ryde Library, 1 Pope Street, Ryde

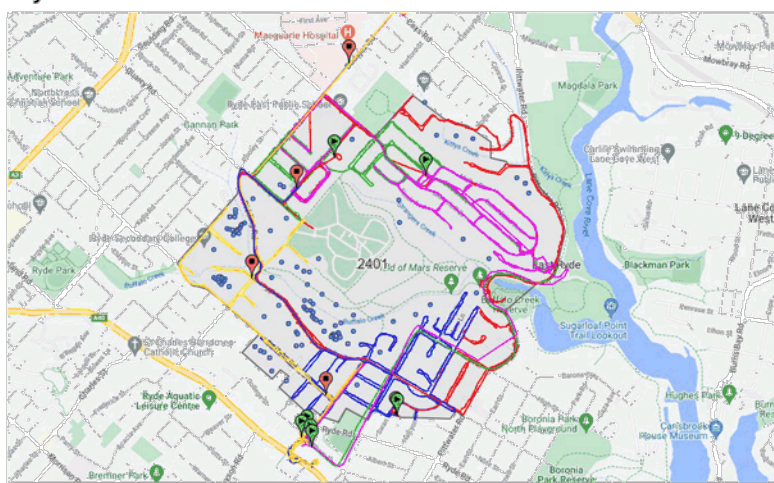
Advanced registration is essential. Registrations for the public hearing close 12:00noon on Monday, 28 August 2023.

Please visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM or scan the above QR code to register.

City of Ryde

For more information
Visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM
Phone Customer Service on 9952 8222
Email cityofryde@ryde.nsw.gov.au

Flyer distribution area



ITEM 8 (continued)

ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation

Appendices (continued)

PARK SIGNAGE

FIELD OF MARS RESERVE DRAFT PLAN OF MANAGEMENT AND LAND RECATEGORISATION


In late 2020 and mid 2021 the City of Ryde asked for your input, views and thoughts on how Field of Mars Reserve can be managed, protected and improved now and into the future.

Based on your feedback, Council prepared a Masterplan which was adopted in August 2021 and a draft Plan of Management which is now on public exhibition until **Tuesday 26 September 2023**.

The purpose of the draft Plan of Management is to identify objectives, targets and propose strategies to protect and guide future maintenance and management of Field of Mars Reserve.

Council is also proposing to recategorise small portions of Field of Mars Reserve to reflect the Reserve's natural features and Reserve use.

To view the Field of Mars Reserve draft Plan of Management and for more information on the proposed land recategorisations, please visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM



HAVE YOUR SAY

How do I give my feedback?
You can Have Your Say on the Field of Mars Reserve Draft Plan of Management and Land Recategorisation in a number of ways, including:


Online Complete the online submission form at www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM or scan the QR code

Email cityofryde@ryde.nsw.gov.au


Post City of Ryde, Locked bag 2059, North Ryde NSW 1670

Written submissions must be clearly marked as 'Field of Mars Reserve Draft Plan of Management' or 'Field of Mars Reserve Proposed Land Recategorisation'.

All submissions must be received by **Tuesday, 26 September 2023**.



Scan to Have Your Say



Translation Assistance
한국어
中文

LET'S TALK

Public hearing for proposed land recategorisation
Local residents are invited to attend the public hearing on the proposed land recategorisation in accordance with the Local Government Act 1993. Council will use an Independent facilitator (Parkland Planners) to conduct the public hearing.

Residents will be able to attend the public hearing in person.


Date Wednesday 30 August 2023


Time 4.30pm – 6.00pm

Location Wallumetta Meeting Room, Ryde Library, 1 Pope Street, Ryde

Advanced registration is essential. Registrations for the public hearing close **12.00noon on Monday, 28 August 2023**.

To register, please scan the above QR code or visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM

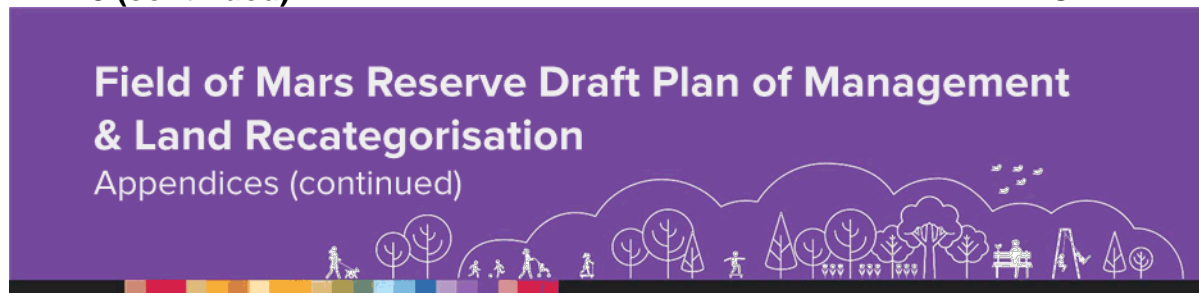


 **City of Ryde**



For further information
Visit www.ryde.nsw.gov.au/HYS/FieldOfMarsPoM
Phone Customer Service on 9952 8222
Email cityofryde@ryde.nsw.gov.au

ITEM 8 (continued)


ATTACHMENT 4



HAVE YOUR SAY NEWSLETTER

 **City of Ryde** 

Field of Mars Reserve Plan of Management & Land Recategorisation



In late 2020 and mid 2021 the City of Ryde asked for the community's input, views and thoughts on how Field of Mars Reserve can be managed, protected and improved now and into the future.

Based on the feedback received, Council prepared a Masterplan which was adopted in August 2021 and a draft Plan of Management which is now on public exhibition until Tuesday 26 September 2023.

The purpose of the draft Plan of Management is to identify objectives, targets and propose strategies to protect and guide future maintenance and management of Field of Mars Reserve.

Council is also proposing to recategorise small portions of Field of Mars Reserve to reflect the Reserve's natural features and Reserve use.

To view the Field of Mars Reserve Draft Plan of Management and for more information on the proposed land recategorisation of parts of Field of Mars Reserve, please visit the [Have Your Say](#) page.


Council invites you to provide your feedback on the Field of Mars Reserve Draft Plan of Management and/or proposed land recategorisation of parts of Field of Mars Reserve.

Please see below for information on how you can Have Your Say.

Have Your Say

You can Have Your Say on the Field of Mars Reserve Draft Plan of Management and/or proposed land recategorisation of parts of Field of Mars Reserve in a number of ways including via the online submission form, email, post, or registering to attend the Public Hearing.

[Visit the Have Your Say page](#)

 **Online Form**

Complete the online submission form to provide feedback on the Field of Mars Reserve Plan of Management & Land Recategorisation.

Submissions will be received up to 11.59pm on Tuesday, 26 September 2023.

[Provide Feedback via the Online Form](#)

Written Submissions

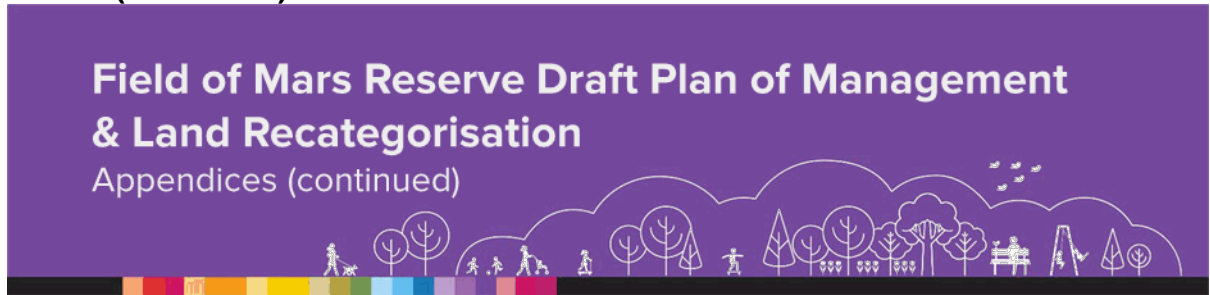
Written submissions must be clearly marked as 'Field of Mars Reserve Draft Plan of Management' or 'Field of Mars Reserve Proposed Land Recategorisation'.

Email: cityofryde@ryde.nsw.gov.au
Post: City of Ryde, Locked Bag 2069, North Ryde NSW 1670

All submissions must be received by Tuesday, 26 September 2023.

ITEM 8 (continued)

ATTACHMENT 4



HAVE YOUR SAY ENEWSLETTER (continued)

Public hearing for proposed land recategorisation

Local residents are invited to attend the public hearing on the proposed land recategorisation in accordance with the *Local Government Act 1993*. Council will use an independent facilitator, Sandy Hoy, Director, Parkland Planners, to conduct the public hearing.

Residents will be able to attend the public hearing in person:

Date: Wednesday 30 August 2023

Time: 4.30pm – 6.00pm

Location: Wallumetta Meeting Room, Ryde Library, 1 Pope Street, Ryde

Registration: Advanced registration is required and places are limited. Registrations for the public hearing close 12.00noon on Monday 28 August 2023.

How do I participate in the public hearing?

Please register by 12.00noon on Monday 28 August 2023 to participate in the public hearing. You can complete the online registration form via the link below. If you are unable to complete the form online, please call Customer Service on (02) 9952 8222.

[Register for the public hearing](#)

For more information

To learn more about the Field of Mars Reserve Draft Plan of Management and proposed land recategorisation of parts of Field of Mars Reserve, please visit the [Have Your Say page](#), call Customer Service on 9952 8222 or email cityofryde@ryde.nsw.gov.au.

ITEM 8 (continued)

ATTACHMENT 4

Field of Mars Reserve Draft Plan of Management & Land Recategorisation Appendices (continued)

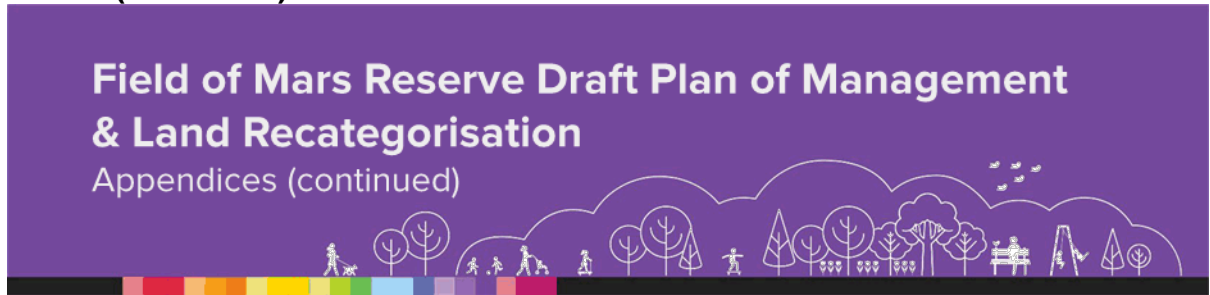


SMARTER CLEANER GREENER ENEWSLETTER



ITEM 8 (continued)

ATTACHMENT 4



**NEWSPAPER AD - OPEN COMMUNITY CONSULTATIONS
THE WEEKLY TIMES**

HAVE YOUR SAY

OPEN COMMUNITY CONSULTATIONS

You are invited to have your say about documents, projects and proposals that are currently on public exhibition, or provide feedback on services and concerns that affect the community.

- Sportsground Allocation Policy Review (Closing 31 August 2023)
- Charity Creek Cascades - Dog Off-Leash Trial (Closing 6 September 2023)
- City of Ryde Events Plan 2024-2028 (Closing 10 September 2023)
- City of Ryde – Ward Boundary Review (Closing 11 September 2023)
- Field of Mars Reserve Draft Plan of Management & Land Recategorisation (Closing 26 September 2023)
- Dog Off-Leash Trials 2023 (Closing 20 March 2024)

Want to find out more?

To find out more about one of the above projects or for information on how to provide feedback, please visit www.ryde.nsw.gov.au/haveyoursay or call Customer Service on 9952 8222.