



Echo Point Park

Plan of Management

Adopted 29 June 2004

CONTENTS

1. INTRODUCTION.....	1
1.1 Echo Point Park - Significance	3
1.2 Plan of Management 2002	3
2. HISTORY OF THE SITE.....	6
3. LAND COVERED UNDER THIS PLAN OF MANAGEMENT	13
4. LAND OWNERSHIP AND CLASSIFICATION.....	14
4.1 Ownership of Land	14
4.2 Classification of Land.....	14
4.3 Recommended Changes to Land Ownership and Classification	14
5. CATEGORISATION OF THE LAND.....	16
6. MANAGEMENT OF THE LAND	18
6.1 Community Consultation	18
6.2 Objectives for Land Management.....	19
6.3 Summary of Management Recommendations	37
6.4 Implementation.....	42
7. USE AND CONDITION OF THE LAND AND STRUCTURES ON ADOPTION OF THE PLAN.....	42
7.1 Use of the Land and Structures	42
7.2 Condition of the Land and Structures	42
8. FUTURE USE AND DEVELOPMENT OF THE LAND	46
8.1 Future Use of the Land.....	46
8.2 Future Development of the Land	46
8.3 Scale and Intensity of Permitted Uses.....	47
9. LEASES, LICENCES AND OTHER ESTATES.....	48
10. APPROVALS FOR ACTIVITIES ON THE LAND	49
11. APPENDICES.....	50
APPENDIX 11.1 - Council Advertisement in Koori Mail	51
APPENDIX 11.2 - Statement from Metropolitan Local Aboriginal Land Council	52
APPENDIX 11.3 - Visitor Use Monitoring Survey	55
APPENDIX 11.4 – Visitor Use and Opinion Survey	58
APPENDIX 11.5 - Council Letter to Local Residents.....	61
APPENDIX 11.6 - Community Values and Concerns	62
APPENDIX 11.7 - Section 46 Requirements	65
APPENDIX 11.8 - Section 68 Requirements	67

1. INTRODUCTION

1.1 Echo Point Park - Significance

Echo Point Park is located at Babbage Road, East Roseville, within the Ku-ring-gai Council area, in the northern region of metropolitan Sydney, on the foreshore of middle harbour.

While natural foreshore areas exist in Garigal, Lane Cove and Ku-ring-gai Chase National Parks, Echo Point Park is Ku-ring-gai Council's only park with water frontage, a beach, remnant bushland, mangroves and saltmarsh. In addition to its natural and scenic values, its cultural significance includes seven Aboriginal sites, the site of one of Middle Harbour's first farms, limited remains of Roseville Baths and the old Roseville Bridge, and extensive stone walking tracks, steps, walls and terraced gardens constructed through unemployment relief schemes during the 1930s Depression.

The Park has been popular since the 1920s for passive recreational activities such as picnics and barbecues, walking, exercising dogs, children's play, fishing, paddling and bocce. It is well, though not heavily, used and highly valued by local residents for its beauty and cultural history, its naturalness and informality, and its 'secret place' quality conferred by its discrete location. The entire Park is considered an area of Aboriginal cultural significance by the Metropolitan Aboriginal Land Council, and Ku-ring-gai Council considers it to be an important and culturally significant open space area.

Over the last 30+ years there has been limited maintenance resulting in a general decline in condition of bushland and infrastructure. A Plan of Management was adopted in 1996, but subsequent amendments to the *Local Government Act 1993* have necessitated an upgraded specific plan in line with Council's opinion of the site as an area of natural, cultural and high recreation significance to the community.

1.2 Plan of Management 2003

This Plan of Management for Echo Point Park has been prepared by Ku-ring-gai Council to comply with the 1998 amendments to the *Local Government Act 1993*. As the Park is considered by Council to be 'an area of cultural significance', this Plan is specific to Echo Point Park and updates the site's previous Plan of Management of September 1996.

It fulfils the following objectives:

- to meet Council's legal obligations for community land management
- to provide clear management guidelines for protecting and interpreting the Park's natural and cultural heritage values
- to provide the community with a range of recreational opportunities in a safe environment within a framework which recognises the Park's opportunities and constraints and caters for special needs as far as possible

Other Council Plans of Management relevant to this Plan include:

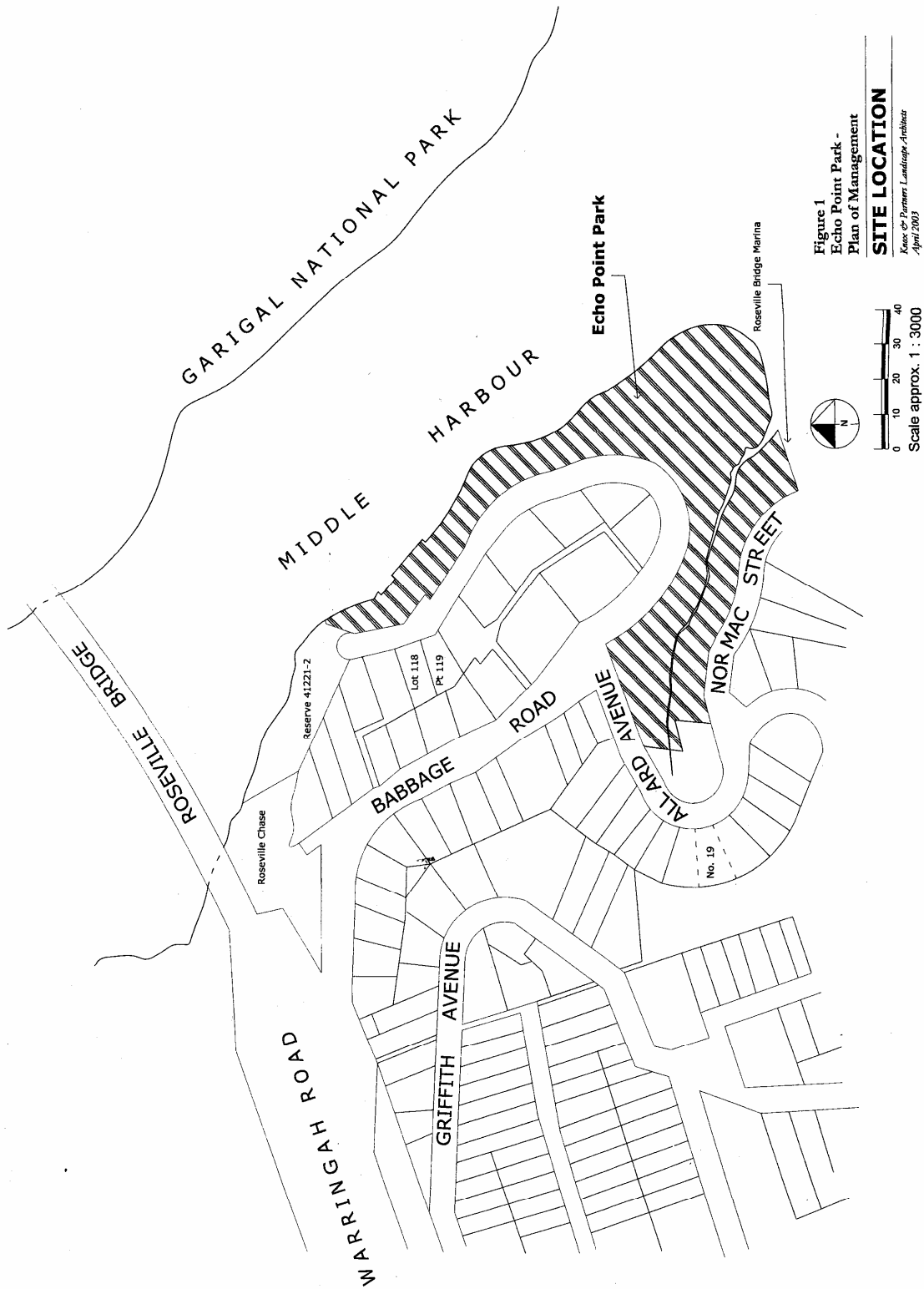
- Generic Plan of Management - Bushland
- Generic Plan of Management - Urban Parks

Other Council policies and State legislation relevant to this Plan include:

- *Crown Lands Act 1989*
- *Environmental Planning and Assessment Act 1979*
- *National Parks and Wildlife Act 1974*
- *Sydney Regional Environment Plan No. 23 - Sydney and Middle Harbours*
- *State Environmental Planning Policy No. 19 - Bushland in Urban Areas*
- *Middle Harbour Catchment Stormwater Management Plan 1999*
- Ku-ring-gai Planning Scheme Ordinance
- Ku-ring-gai Council Access Policy

As no known threatened species or plant communities occur on site, the *Threatened Species Conservation Act 1995* and the *Fisheries Management Act 1994* are not applicable to this Plan.

This Plan of Management should be read in conjunction with Ku-ring-gai Council's *Echo Point Park - Heritage Assessment Report (2002)* which details the site's natural and cultural significance, assesses its constraints and opportunities and outlines a staged program of works, particularly related to heritage conservation issues.



2. HISTORY OF THE SITE

The Indigenous and Non-indigenous history of Echo Point Park is detailed in the *Heritage Assessment Report* (2002). The following chronology is from that report and is repeated here for ease of reference.

Table 1 - Echo Point Park Chronology

Pre 1825	Aboriginal occupation of the site
1825	Samuel Bate and family returned from London to Sydney with numerous trees, plants and seeds.
1829	Richard Bate, 18, explored Middle Harbour by boat and found two men making salt at Echo Point. In January he applied through the Colonial Secretary for a 20 acre land grant in order to grow fruit trees. He received no response, but his initiative inspired further family applications for a land grant.
1829	Samuel Bate and his sons further explored the headwaters of Middle Harbour by boat and occupied Echo Point.
1830	April. Samuel Bate applied to Governor Darling through the Colonial Secretary to rent land at Echo Point but failed to follow it up.
1831	The <i>Sydney Morning Herald</i> referred to Echo Point as Mr Bate's Farm.
1831	S S Sophia Jane, first steamship in Australian waters, visited Echo Point on a pleasure cruise up Middle Harbour.
1833	Henry J Bate's heavily laden boat sunk off Vaucluse returning to Circular Quay.
1834	Reverend Ralph Mansfield applied to Governor Bourke on the Bate's behalf for a land grant at Echo Point.
1835	An 1835 Lands Department map of Middle Harbour showed a hut on Echo Point (Bate 1987 p 98). Surveyor Larmer described Bate at Echo Point as a squatter only, but said he 'had improved it considerably' (Bate 1995).
1839	Governor George Gipps officially granted Samuel Bate 20 acres of land at Echo Point. Two storey timber farm house constructed.
1840	Gordon Parish map showed Bate's 20 acres. John Bate married Julia Phillips of Eliza Cottage, Surry Hills, and brought her to live at Echo Point (Bate 1995).
1841	Census reported 6 people living at Echo Point: John and Julia Bate, baby Sarah, a junior girl and two assigned servants employed as gardeners (Bate 1987 p 120).
1840s	Bate family hit hard by economic depression. Several members lost jobs and left Sydney in search of work and cheaper living.

1847	John Bate informed Surveyor General about illegal Malay and Manila seamen occupying Crown Lands in upper Middle Harbour and removing timber without licences, but no action was taken (Bate 1987, 1995).
1849	Deaths of both Samuel and Richard Bate.
Early 1850s	John Bate's family returned to Echo Point.
1856	Artist Conrad Martens visited Echo Point Farm and did a pencil sketch now housed in the State Library of NSW.
1860	The Bate family offered Echo Point Farm for auction.
1861	The <i>Sydney Morning Herald</i> reported John Bate's experiments with silk production at Echo Point Farm (17.1.1861).
1862	The Bate family sold Echo Point Farm to Henry Milford, a Supreme Court Judge.
1863	The Farm was sold to John Bate's brother-in-law John Baptist.
1886	Echo Point was conveyed to Thomas Moore, a Darlinghurst coach builder who used the farmhouse as a summer residence.
1888	Samuel Bate's original land grant was re-surveyed to dedicate a 100 feet wide strip of land along the foreshore as a Road Reserve (Gordon Parade) for access to the Gordon Subdivision.
1892	Thomas Moore leased the Farm to Courtney Smith as a home for recovering alcoholic men. It was known as 'Resthaven' or the 'Inebriates Home at Middle Harbour'. A weatherboard cottage was built immediately west of the farmhouse in about 1892-93 and was still standing in 1928, although only a few verandah paving stones remained of the farmhouse (Bate 1995).
1898	Henry Lawson undertook treatment at 'Resthaven' for a few months from November, this experience inspiring his short story <i>The Boozers' Home</i> .
c1900	Resthaven closed.
1906	Gordon Parade revoked in favour of a Reserve for Public Recreation. (Shown as 'notified 3.1.1907' on later plans).
1908?	'Plan of Portion, County of Cumberland, Parish of Gordon' map (the updated 1888 survey) showed the 100 foot wide Road Reserve dedication revoked and gazetted as Reserve for Public Recreation on 10.10.1906.
1914	All traces of the Bate's farm had disappeared, except for one decaying mulberry tree and two others under threat of encroachment by bush (Bate 1987). The farmhouse was demolished between 1906 and 1914. Norman Chapman's survey of Echo Farm lands for proposed Roseville Harbour Estate subdivision.
1915	Formation of first bushwalking club in NSW.

1920	Informal baths were established in the location that became the Roseville Baths, as shown in photographs held by Ku-ring-gai History Library. The area was by this time popular for boating, bushwalking and swimming, and readily accessed by ferry from Echo Point across Middle Harbour.
1922	Oscar Ramsay drew proposed Roseville Harbour Estate subdivision of Echo Point land which now belonged to Sir Austin Chapman.
1923	Ku-ring-gai Council first proposed purchase of three lots in Sir Austin Chapman's subdivision for addition to council parklands.
1922 - 1924	Old Roseville Bridge constructed to promote Babbage Road's function as a main link from the lower North Shore to the northern beaches and suburbs. The Bridge was opened in 1924. The ferry service ceased
1925	Ku-ring-gai Council approved a new Roseville Harbour Estate subdivision drawn by Norman Chapman. Lot 139 (DP 13450) was a Reserve by this time.
1926	Department of Lands survey showed 80 feet wide Manly Road to form part access to Roseville Bridge.
1928	Frank Bate visited Echo Point and reported that 'only a few broken down mulberries and quince trees remained', and that there was a long weatherboard building (later than the farm buildings) almost hidden by encroaching scrub at the junction of Allard Avenue and Babbage Road (<i>North Shore Times</i> 9.2.1996).
1928	CJ and CM Highfield acquired Lot 94 (DP 13450).
1929	Elsie Maud Carter acquired Lot 97 (DP 13450).
1930	Lot 97 transferred to Ku-ring-gai Council.
c1932	Most of Echo Point Park's stone walls, steps, footpaths and terracing were constructed as Depression Relief Labour. Picnic shelter shown in current position on 1932 survey of Lot 97 (DP 13450).
c1933	Roseville Baths were modernised, seawall constructed and foreshore extended by filling.
1933	Lot 98 (DP 13450) transferred to Ku-ring-gai Council.
c1935	Caretakers Cottage and additions to Roseville Baths dressing sheds constructed between 1934 and 1938
1948	Ena Dorothy Paine acquired Lots 95 and 96 (DP 13450).
1956	Lot 94 (DP 13450) transferred to Cumberland County Council.
1957	2 Allard Avenue and 21 Normac Street (Lots B and C, or 53 and 52 DP 361885) were transferred to Ku-ring-gai Council.
1961	Lot 94 transferred to Ku-ring-gai Council.
1962	Notice of Resumption transferred Lots 95 and 96 to Cumberland County Council. They were transferred again to Ku-ring-gai Council in 1964.

1964	Reconstruction of Roseville Baths Septic Tank Installation (Roseville Baths File 1947-1966).
1966	Old Roseville Bridge demolished.
1968	Gordon Parade (Public Road Reservation) dedication closed in favour of Reserve for Public Recreation and Public Baths. Ku-ring-gai Council appointed Reserve trustee.
1972	After many years of repairs, Roseville Baths were demolished due to water pollution in Middle Harbour.
1974	Plans to provide a boat rigging and launching site in the Roseville Baths area were abandoned, and the area was upgraded and incorporated in Echo Point Park (<i>Advocate Courier</i> 22.5.74).
1980s	Sandstone work to upper grass terrace constructed by Council worker.
1982	December. The 740 m ² fill area at the Baths site was declared Crown Land and reserved for Public Recreation and Public Baths by Government Gazette.
1987	<i>The Municipality of Ku-ring-gai Heritage Study</i> identified Echo Point Park as a 'site of potential archaeological significance' requiring further research, protection and interpretation; and as a heritage item requiring a conservation / management plan.
1988	Draft Plan of Management for Echo Point Park prepared for Council by Cameron McNamara Consultants to provide framework for bushland management consistent with the requirements of <i>SEPP 19 – Bushland in Urban Areas</i> .
1990	SREP 23 listed the site of Echo Point Farm and the remains of Roseville Baths and old Roseville Bridge as heritage items, the only three items in Ku-ring-gai to be listed.
1991	Ku-ring-gai Council demolished the kiosk and removed for sale the caretaker's cottage.
1995	November. Hornsby-Ku-ring-gai Community College LEAP participants undertook wall and trackwork repairs, step construction, drain installation, gully stabilisation, fauna observation and bush regeneration activities
1996	June. Hornsby-Ku-ring-gai Community College LEAP participants undertook wall and trackwork repairs, erosion control, flora and fauna audit and bush regeneration activities.
1996	Ku-ring-gai Council prepared its generic <i>Bushland Plan of Management</i> .
1996	September. Adoption of <i>Echo Point Park Plan of Management</i> prepared by Mather and Associates Landscape Architects.
2002	Echo Point Park Heritage Assessment Report and program of works prepared for Ku-ring-gai Council by Knox and Partners Landscape Architects, along with an updated Plan of Management to comply with 1999 amendments to the <i>Local Government Act 1993</i> .

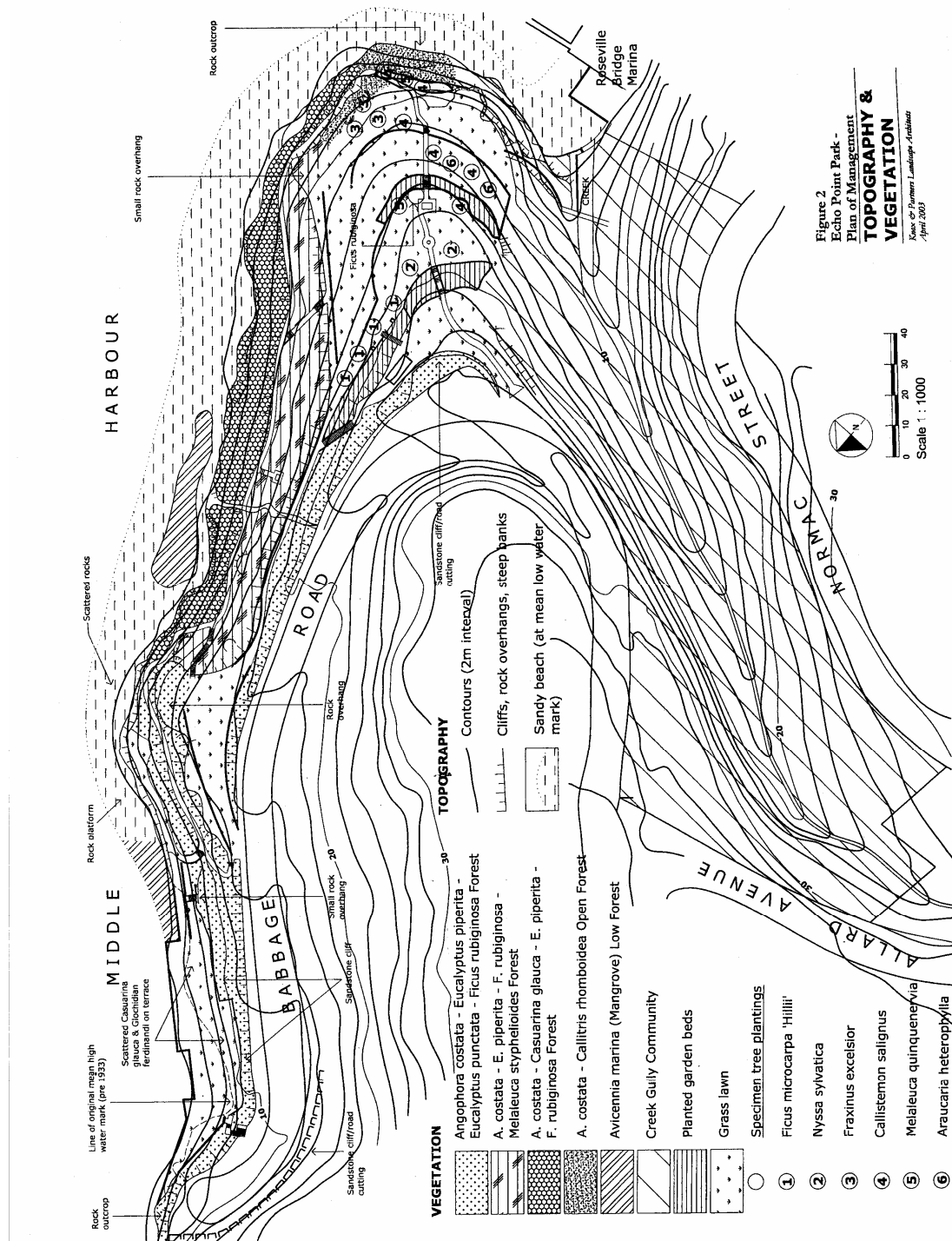


Figure 2
Topography and Vegetation

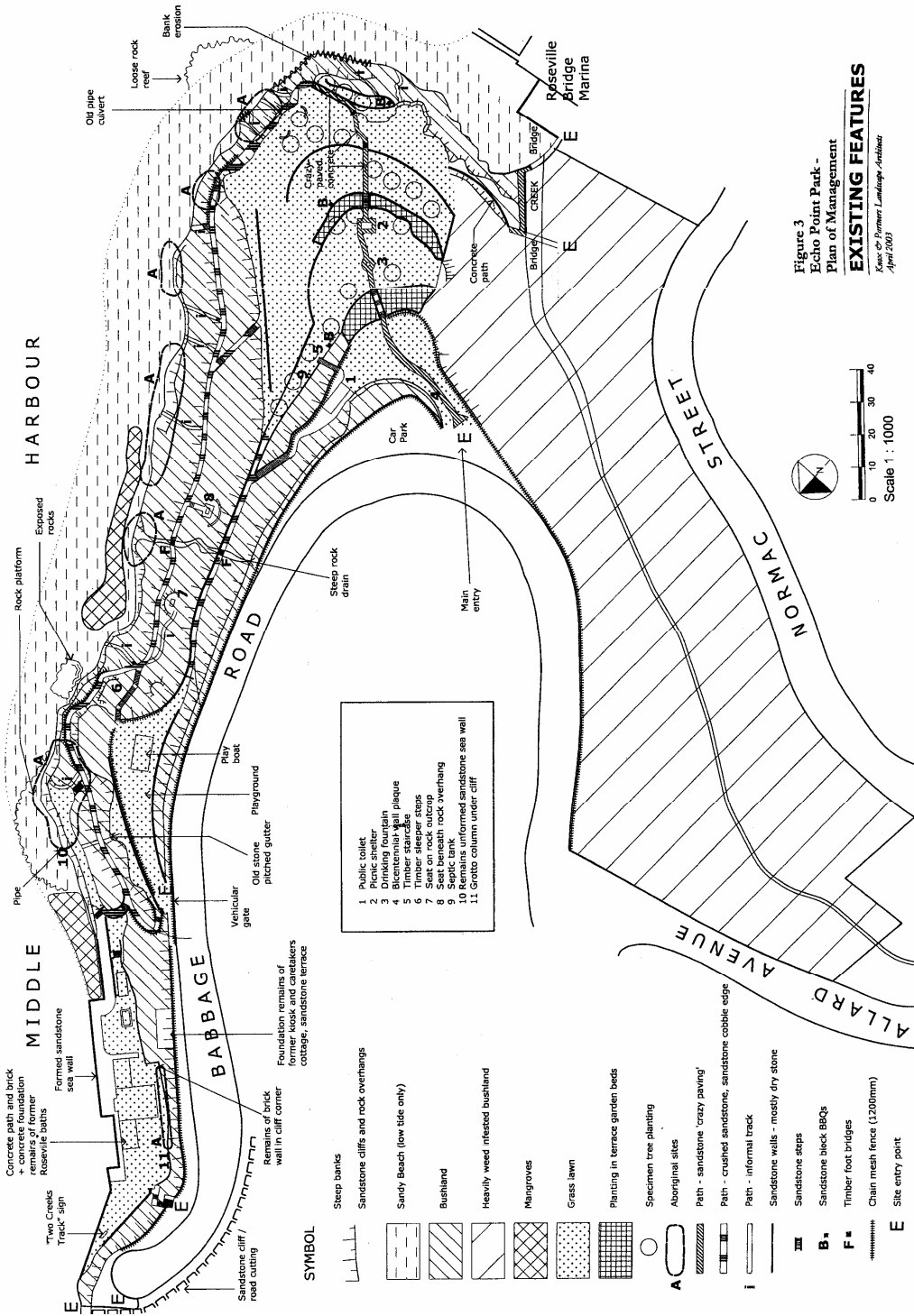


Figure 3
Existing Features



Photo 1. First Roseville Baths from rock overhang above, looking north across Middle Harbour, about 1925. (Ku-ring-gai Library Photo 914: Rex Chad Collection)

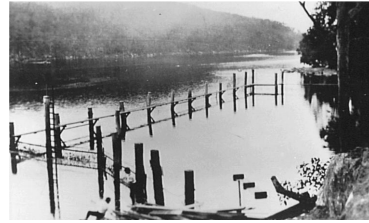


Photo 2. First Roseville Baths 1924, looking east across Middle Harbour. (Ku-ring-gai Library Photo 1498: Ron Edenborough Collection)



Photo 3. First Roseville Baths 1924. Note simple enclosure of timber posts & netting, natural shoreline & men's dressing shed at south-eastern end of pool. (Ku-ring-gai Library Photo 1335: Cazneaux Collection)



Photo 4. The kiosk (Baths entry point) which serviced both the first and second Roseville Baths was constructed by 1929 and demolished in 1991. (Source: Carpenter et al, undated).

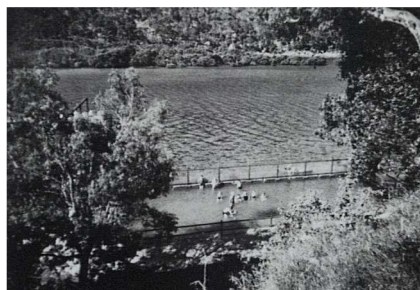


Photo 5. Second Roseville Baths, post 1933, looking north across MH. Timber deck surround not evident. (Ku-ring-gai Library Photo 1038: Michael Kartzoff Collection).



Photo 6. Second Roseville Baths, post 1939, looking north west to old Roseville Bridge. (Ku-ring-gai Library Photo 1039: Michael Kartzoff Collection).

Site Photographs

3. LAND COVERED UNDER THIS PLAN OF MANAGEMENT

This Plan applies to Echo Point Park which is located in East Roseville, east of Roseville Bridge and close to the boundaries of Warringah and Willoughby Shires. It is bounded on the north and north-west by Babbage Road, on the west by Allard Avenue, on the south and south-east by Normac Street and Roseville Bridge Marina, and on the east and north-east by the mean high water mark of Middle Harbour. (Refer Figure 1).

The Park to date has comprised Lots 96, 97 and 98 (DP13450), Crown Reserve R 86886, some unallocated Crown Land and part Babbage Road. This Plan of Management (2002) also includes the adjoining Council-owned Lots 94, 95 and 139 (DP 13450), and Numbers 2 Allard Avenue and 21 Normac Street (Lots B and C - 53 and 52 - DP 361885), all of which were excluded from the previous Plan (1996).

Table 2 - Echo Point Park: Land Description

Location (Refer Figure 1)	East Roseville, bounded by Babbage Road and Middle Harbour (mean high water mark)
Area	Approx 3.4 hectares (excluding beach below mean high water mark)
<u>Title Information</u> <ul style="list-style-type: none"> • Lots 94 - 98, 139 (DP 13450) • Lots B & C (53 & 52) (DP 361885) (2 Allard Ave and 21 Normac St) • Part Babbage Road • R 86886 • Unallocated Crown Land (Refer Figure 2) 	<u>Land Ownership</u> <ul style="list-style-type: none"> • Ku-ring-gai Council • Ku-ring-gai Council • NSW Crown land (under care, control and management of Ku-ring-gai Council) • NSW Crown Reserve (Trust Manager: Ku-ring-gai Council) • NSW Crown land (administered by Dept. Land & Water Conservation) – formerly vested in Maritime Services Board
<u>Land Classification</u> <ul style="list-style-type: none"> • Lots 94 - 98, 139 (DP 13450) • Lots B & C (53 & 52) (DP 361885) • Part Babbage Road • R 86886 • Unallocated Crown Land 	<ul style="list-style-type: none"> • Community Land • Community Land • Crown Land • Crown Reserve for Public Recreation and Baths • Crown Land
Zoning	6 (a) Open Space - Recreation
<u>Land Categorisation</u> (Refer Figure 3)	<ul style="list-style-type: none"> • Natural Area <ul style="list-style-type: none"> - Bushland - Foreshore • Park • Area of Cultural Significance <ul style="list-style-type: none"> - Indigenous - Non-indigenous

4. LAND OWNERSHIP AND CLASSIFICATION

4.1 Ownership of Land

About half of the Park is owned by Ku-ring-gai Council. The other half is NSW Crown land administered by the Department of Infrastructure, Planning and Natural Resources, managed by Council as Trust Manager or under the care, control and management of Council. (Refer Table 2 and Figure 3).

4.2 Classification of Land

The land owned by Council in the Park is Public land and is classified as community land under the *Local Government Act 1993*. As Crown Land is not public land, it is not classifiable under the Act and therefore not subject to its community land requirements. However, to facilitate Park management this Plan considers all lands within Echo Point Park as community land.

The whole of the Park is zoned 6(a) Open Space - Recreation under the Ku-ring-gai Planning Scheme.

4.3 Recommended Changes to Land Ownership and Classification

Crown Reserve R 86886 and the small portion of unallocated Crown land should be legally added to Echo Point Park and classified as community land. This requires a formal application from Ku-ring-gai Council to the Department of Land and Water Conservation.

That part of the Crown-owned Road, east of the Babbage Road carriageway, which overlaps the Park is recommended in this Plan of Management to be legally added to Echo Point Park. This requires formal application from Ku-ring-gai Council to the Department of Land and Water Conservation to close that portion of Road and vesting of the land to Council so that Council can rezone it 'Open Space' and set it aside as a public reserve. This would improve environmental protection and enable some of the design and management recommendations outlined by this Plan of Management. (Refer Figure 2 for locations of Crown Reserve R 86886, the unallocated Crown Land and the portion of Crown-owned Road that overlaps the Park).

Crown Reserve 41221-2, which adjoins Echo Point Park to the north-west, was part of the original Gordon Parade Road Reservation rededicated as a Reserve for Public Recreation in 1906 or 1907. While this would be another logical addition to the Park, Ku-ring-gai Council opted for its exclusion and management under Council's Bushland Management Plan. This land is currently unzoned and requires acquisition by Council, appropriate zoning for environmental protection and classification as community land. (Refer Figure 1).

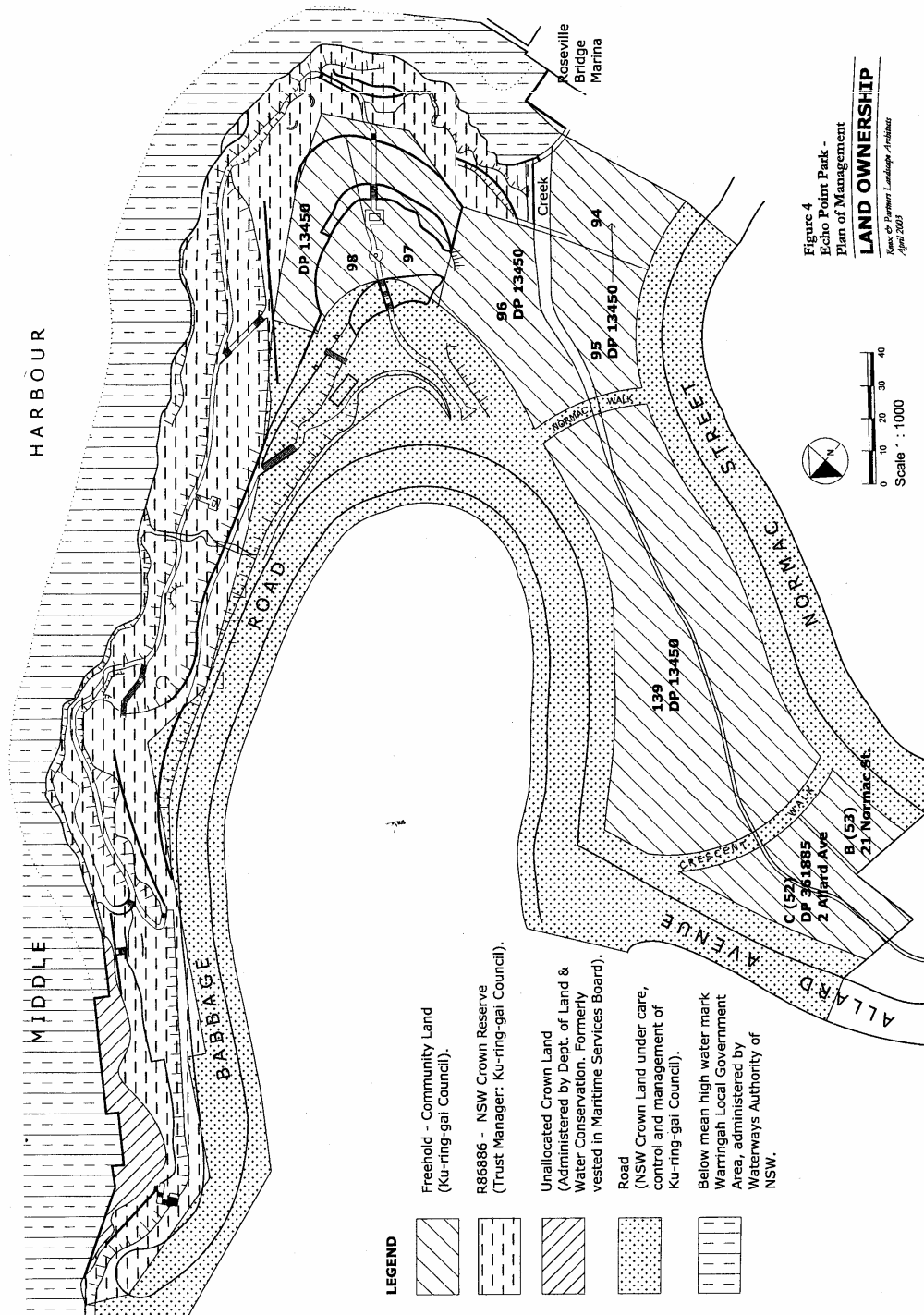


Figure 4
Land Ownership

5. CATEGORISATION OF THE LAND

The *Local Government Act 1993* (s 36 (4) and (5)) requires Plans of Management for community land to categorise land in order to affirm land use and/or physical landscape characteristics and so to determine core management objectives, performance targets and practical means of their achievement and assessment.

Under the *Local Government Act*, plans of management apply to Community land. Echo Point Park, in addition to Council-owned land, also includes Crown land. This Plan of Management has been written to conform with the Act's provisions to cover the park in its entirety in order to facilitate Park interpretation and management.

It does, however, also provide for management, use and development of the Crown land and Reserve consistent with the principles of Crown land management in the *Crown Lands Act 1989* (s 11) which are:

- a) that environmental protection principles be observed in relation to the management and administration of Crown land
- b) that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible
- c) that public use and enjoyment of appropriate Crown land be encouraged
- d) that, where appropriate, multiple use of Crown land be encouraged
- 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.

This Plan of Management categorises Echo Point Park as:

- Natural Area (Bushland)
- Natural Area (Foreshore)
- Park

Given the Indigenous and Non-Indigenous cultural significance of the land this plan also includes the core objectives for the land as if it were categorised as an Area of Cultural Significance.

Categories overlap in practice but to simplify management are as shown on Figure 5 and discussed in detail in Tables 3 to 7.

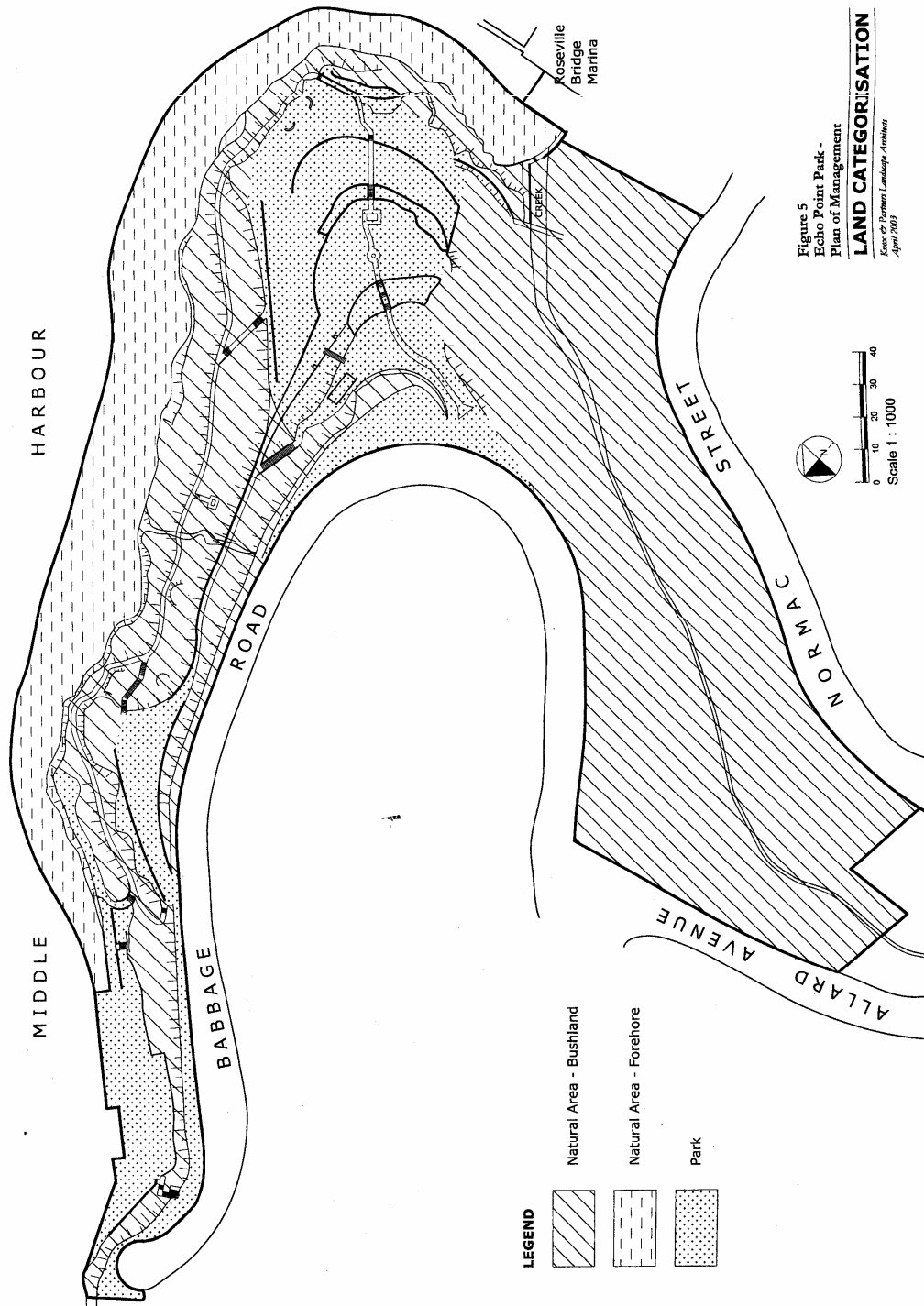


Figure 5
Land Categorisation

6. MANAGEMENT OF THE LAND

6.1 Community Consultation

Under the *Local Government Act 1993*, Councils must provide for community consultation when preparing plans of management for community land. This is both a community right and an opportunity to improve the formulation of effective land management strategies.

Ku-ring-gai Council has fulfilled its requirements under the Act by consulting with the Aboriginal community and with local residents and other interested parties.

6.1.1 Consultation with Aboriginal Community

Echo Point Park's importance as an area of cultural significance was recognised by Council when it adopted the Park's first Plan of Management in 1996. Ku-ring-gai Council has complied with Clause 20 of the Local Government (General Regulation) through:

- placement of a notice at Echo Point Park (27.09.01-31.10.01)
- two advertisements in the Koori Mail (3.10.01 and 17.10.01) (Refer Appendix 11.1)
- written notice to the Metropolitan Local Aboriginal Land Council (MLALC), which represents the traditional Aboriginal owners associated with the Community land

In addition, three representatives from the MLALC visited the Park in October 2001 and February 2002 to determine a position on the site's Aboriginal cultural significance and to assist with the archaeological investigation and assessment for the *Echo Point Park – Heritage Assessment Report*. (Refer Appendix 11.2 for MLALC letter supporting that Report's recommendations for managing Aboriginal sites at Echo Point Park).

6.1.2 Consultation with Local Residents

In summer 1991 Ku-ring-gai Council undertook a Visitor Use Monitoring Survey to determine park use, frequency and capacity. (Refer Appendix 11.3 for survey data). Although no formal analysis was made of the data, it served to illustrate that:

- a) between 30 000 and 60 000 people visited the park annually
- b) the park was used on weekends up to 7 times more than on week days
- c) the most popular time to be in the park on weekends was from 2.00-6.00pm
- d) the majority of park users were adults and children engaged in passive recreation activities
- e) the most popular area of use on weekends was the grass terraces
- f) the most popular activity in this area on weekends was picnicking
- g) the second most popular activity was fishing, on the beach and at the former Baths site, particularly between 6am to 12pm and 6pm to 8pm

A second and more qualitative visitor use survey was conducted in August 1992 by Harding, Hage and Morton to assess user preferences in relation to park use. The majority of visitors were from local suburbs in the Ku-ring-gai, Willoughby and Warringah areas. Most were family picnic groups, while many used the park for walking or exercising dogs. A large percentage of people were first-time visitors, and most enjoyed the park for its natural appearance and scenic values, its quiet and accessibility. Minor complaints related to lack of facilities and poor pedestrian access, particularly for the aged and disabled. (Refer Appendix 11.4 for survey data).

When preparing each plan of management for Echo Point Park (1996 and 2002), Council wrote to local residents to explain the need for an updated plan and seek their input. (Refer Appendix 11.5). Their values and concerns about the Park are summarised in Appendix 11.6 and addressed specifically in the management Tables in Section 6.2.

6.1.3 Consultation with Other Parties

Council has also consulted with:

- The neighbouring Warringah Shire Council and Willoughby City Council
- Waterways Authority of NSW
- NSW National Parks and Wildlife Service
- Relevant Council staff

6.2 Objectives for Land Management

The *Local Government Act 1993* (s 36) requires each land category to be managed according to prescribed core objectives. Individual plans of management may add other desired objectives and define their own performance targets and means of achievement and assessment. Broadly, these are as follows:

- Objectives - broad goal statements
- Performance Targets - strategy frameworks for physical works
- Means of Achievement - actions to be undertaken
- Means of Assessment - how to measure whether the actions taken have achieved stated objectives

This Draft Plan of Management for Echo Point Park details its objectives, targets and means for each land category in tabular form, with the exception of 'Natural Area', below, which is further divided into 'Bushland' and 'Foreshore' and discussed in the Tables. (Refer Tables 3 to 7). See Section 6.3 for a summary of management recommendations, and Figure 5 for their locations.

As stated in Section 5, this Plan will also manage the lands in accordance with the core objectives for land categorized as an Area of Cultural Significance.

Natural Area

The core objectives for management of community land categorized as a natural area are:

- 1) To 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
- 2) To maintain the land, or that feature or habitat, in its natural state and setting
- 3) To provide for the restoration and regeneration of the land
- 4) To 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
- 5) To 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 *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*.

TABLE 3 – MANAGEMENT OF NATURAL AREA (BUSHLAND)

Objectives	Performance Targets	Means of Achievement	Means of Assessment
The core objectives for management of community land categorised as bushland are:			
a) To ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land	<ul style="list-style-type: none"> • Manage landscape processes to favour locally indigenous flora and fauna • Exclude human access from some areas in order to protect habitat • Maximise fauna habitat – especially for small birds and ground-dwelling fauna 	<ul style="list-style-type: none"> • Manage site bushland in accordance with KC's adopted <i>Bushland Plan of Management (1996)</i> <ul style="list-style-type: none"> – Relevant legislation – Relevant Council policies. • Install selective fencing and defined access routes as required • Refer (d) below • Retain decaying/senescing plants as habitat and organic matter • Letter box drop neighbours with cat information 	<ul style="list-style-type: none"> • Undertake survey to establish extent and scope of flora and fauna presence • Ongoing annual monitoring to confirm status quo or existing standard to measure variance. Look for: <ul style="list-style-type: none"> – increased native flora and fauna presence – decreased maintenance levels – landscape features in good condition
b) To protect the aesthetic, heritage, recreational, educational and scientific values of the land	<ul style="list-style-type: none"> • Protect existing aesthetic character • Enhance aesthetic experience • Remove elements which obscure or distort understanding of site's natural history, and reveal those elements which enhance it • Maintain existing water views • Maximise educational potential of bushland 	<ul style="list-style-type: none"> • Develop further lookouts, prominences, rich ascent and descent experiences • Demolish exposed and redundant piping • Remove weeds and overgrowth from cliff faces and rock outcrops • Improve visual quality of creek water. Refer Table 4 (Foreshore) and (e) below. • Remove painted graffiti from rock outcrops • Re-establish physical connections between historical sites (eg rock ledges, middens and creek; road and jetty site) • Plant no species taller than 1.2m in identified view corridors. Refer Table 5 (Park). • Develop appropriate interpretation materials • Promote use of site to local schools 	<ul style="list-style-type: none"> • Assessment by open space management staff • Visitor survey to assess aesthetic response • NPWS approval • MLALC approval • School participation

Objectives	Performance Targets	Means of Achievement	Means of Assessment
c) To promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion	<ul style="list-style-type: none"> Contain pedestrian movement in bushland areas to safe and formal (controlled access) paths 	<ul style="list-style-type: none"> Emphasise and encourage use of existing formal (controlled access) paths Remove and discourage informal (uncontrolled access) paths. Replant informal tracks. Install formal (along-contour) public walking and bushland maintenance track(s) through Lot 139 	<ul style="list-style-type: none"> Regular monitoring to confirm: <ul style="list-style-type: none"> – disuse of existing informal paths – no further informal paths
	<ul style="list-style-type: none"> Establish stronger links between Echo Point Park and the Community 	<ul style="list-style-type: none"> Encourage volunteer Bushcare Group Incorporate Echo Point Park in Middle Harbour Foreshore Track 	<ul style="list-style-type: none"> Assessment of Bushcare Group activities Usage levels of MHF Track
	<ul style="list-style-type: none"> Promote visitor health and safety at contact points with polluted water 	<ul style="list-style-type: none"> Install relevant signs as appropriate 	<ul style="list-style-type: none"> Annual report/summary to consider reported health incidents concerning polluted water, sharks etc
d) To restore degraded bushland	<ul style="list-style-type: none"> Include Lot 139, Number 2 Allard Avenue and 21 Normac Street in Echo Point Park to increase area of managed bushland 	<ul style="list-style-type: none"> KC (land owner) to include Lots in Park and its Bushland Plan of Management 	<ul style="list-style-type: none"> Land covered in Plan of Management
	<ul style="list-style-type: none"> Restore bushland areas of the Park towards original vegetation communities 	<ul style="list-style-type: none"> Implement Bushland Management Programs consistent with Bushland POM 	<ul style="list-style-type: none"> Ongoing monitoring to confirm improved bushland quality (reduced weed growth, increased numbers of locally indigenous plant species and more diverse vegetation strata in close approximation to desired vegetation communities)

Objectives	Performance Targets	Means of Achievement	Means of Assessment
	<ul style="list-style-type: none"> Remove weeds from bushland 	<ul style="list-style-type: none"> Implement phased removal of African Olives (<i>Olea africana</i>). Determine whether or not they were used by Bates family as rootstock for fruiting European Olives and have any cultural significance. If so, several mature specimens could be retained for their historic and interpretive value, but should have fruits removed before ripening. If not, all specimens should be removed and gradually replaced with locally indigenous species of similar size. Implement phased removal of woody weeds from Lots 94, 95 and 139, and 2 Allard Avenue and 21 Normac Street. Gradually replace with locally indigenous wet sclerophyll species through land management programs. 	<ul style="list-style-type: none"> Condition of natural areas in Echo Point Park Site inspections to verify ongoing removal of African Olives and other woody weeds
	<ul style="list-style-type: none"> Minimise exotic plant invasion, especially from nearby residential gardens and KC-owned lands adjacent to Echo Point Park 	<ul style="list-style-type: none"> Improve environmental quality of Number 19 Allard Road through Bushland Plan of Management. Enlist cooperation of adjoining landowners to minimise unauthorised dumping of garden refuse into bushland Evaluate development/landscape proposals for adjoining properties and, where appropriate, impose conditions to prohibit or remove invasive plants 	<ul style="list-style-type: none"> Level of support from adjoining residents to reduce impacts on bushland adjoining this property Regular inspection of adjoining properties to confirm compliance Conditions imposed on Development Proposals
e) To protect existing landforms such as natural drainage lines, watercourses and foreshores	<ul style="list-style-type: none"> Prevent / minimise soil erosion 	<ul style="list-style-type: none"> Manage stormwater flows to minimise sources of erosion. Encourage diverse and vigorous understorey and groundcover planting 	<ul style="list-style-type: none"> Regular monitoring to confirm reduced siltation, improved water quality, and landscape features not defaced or degraded
	<ul style="list-style-type: none"> Minimise siltation at creek junction with Middle Harbour 	<ul style="list-style-type: none"> Investigate outcome of stormwater quality improvement device in creek 	<ul style="list-style-type: none"> Device investigated and installed if appropriate Regular monitoring to confirm satisfactory function
	<ul style="list-style-type: none"> Improve water quality in lower reaches of creek 	<ul style="list-style-type: none"> Investigate outcome of Gross Pollutant Trap at junction of creeks at Allard Road 	<ul style="list-style-type: none"> Device investigated and installed if appropriate Regular monitoring to confirm satisfactory function
	<ul style="list-style-type: none"> Protect all rock overhangs and outcrops 	<ul style="list-style-type: none"> Organise visitor movement to avoid damage to rocks. 	