



MANLY WARRINGAH WAR MEMORIAL PARK

Plan of Management



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“Manly Warringah War Memorial Park Plan of Management”

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Executive Summary

Manly Warringah War Memorial Park is an area of Crown Land reserved for the purposes of “public recreation”. It is managed by the Manly Warringah War Memorial Park (R68892) Reserve Trust, as appointed by the Minister for Lands in August 1997. Warringah Council manages the affairs of the Trust, under the provisions of the *Crown Lands Act 1989*, and is also responsible for the Park’s day-to-day management on behalf of the Trust.

The Park area that is the subject of this Plan covers approximately 377 hectares, as 33 individual land parcels comprising the majority of Crown Reserve 68892 and part of Crown Reserve 83492 as well as several unmade Crown road reserves. This Plan of Management will replace an earlier Plan prepared in 1998.

The Park is located among the suburbs of Manly Vale, North Balgowlah, Allambie Heights and Frenchs Forest on Sydney’s northern beaches. It features an extensive area of typical Sydney sandstone bushland surrounding the 30 hectare sheltered freshwater waterbody retained behind the historic Manly Dam. The area is both a significant environmental and recreation asset and highly valued by the local community as a recreation venue, conservation area, scenic asset and for its water catchment roles. Picnicking, water sports and walking are common recreation pursuits and the Park is a popular venue for mountain biking and waterskiing.

This Plan of Management aims to provide a clear, concise and practical framework for the Park’s future management. A value-based approach to land planning and management has been used. Management actions have been developed to protect and enhance the Park’s values, address any issues that may threaten these values and ensure that the Park is managed in line with current community expectations – and consistent with the purposes for which the area was reserved.

A community consultation process has contributed to the Plan’s preparation, including – wide publicity regarding the Plan’s preparation, Focus Group meetings with organisations and individuals having a particular interest in the Park, exhibition of an *Issues and Directions Discussion Paper* for community feedback, and a Community Workshop involving invited representatives from key stakeholder groups to discuss concerns, opportunities and constraints and to suggest management options to resolve identified issues.

The management vision subsequently developed for Manly Warringah War Memorial Park is – “a *large protected area of bushland and waterways, with a diversity of flora and fauna, high water quality and scenic value, that ensures protection of its natural environment and cultural values, conserves threatened species and communities, provides opportunity for a variety of recreational activities in a low-key natural setting, offers an educational asset and acknowledges its importance as a war memorial park*”.

The following guiding principles of management have been identified for the Park:

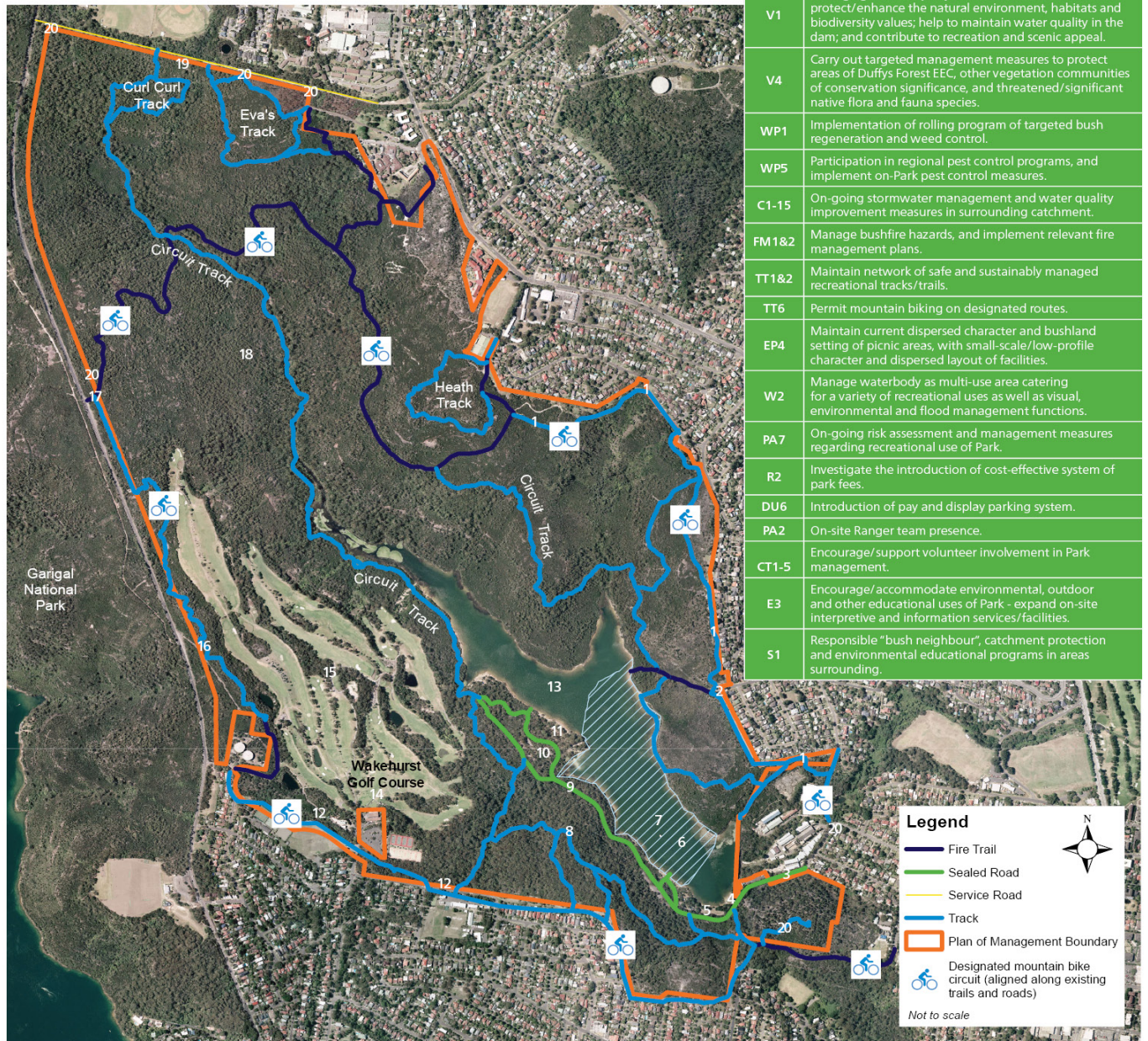
- sustainable management of the Park to protect its natural areas, while providing for a variety of passive and active recreational activities;
- protect and enhance threatened flora and fauna within the Park;
- protect and enhance the water quality of the dam waterbody and Park waterways;
- provide safe, fair and equitable access to the Park and its facilities for all user groups; and
- protect and enhance the Park's heritage.

To implement these principles, and achieve the management objectives identified for both the Park as a whole and individual management zones, a set of prioritised management actions have been set out in Chapter 5 of this Plan. These management actions address the following areas:

- Biodiversity, Catchment and Landscape – comprising separate sets of management actions for native flora and vegetation communities and habitats, native fauna, weeds and pests and introduced animals, catchment and water quality, bushland linkages, and landscape and scenic values;
- Cultural Heritage – comprising separate sets of management actions for Aboriginal cultural heritage, historic (non-Aboriginal) heritage, and war memorial and commemorations;
- Visitor Use, Recreation and Enjoyment – comprising separate sets of management actions for tracks and trails, waterbody, day use areas, access, information and interpretation, educational uses, Wakehurst Golf Course and Wakehurst Couvret Tennis Courts;
- Environmental Management – comprising separate sets of management actions for environmental protection and sustainability, fire management, Park boundary management, surrounding lands uses and park neighbours, and easements; and
- Park Management and Administration – comprising separate sets of management actions for Park administration and management activities, co-operation with other agencies, community involvement, leases and licences and special uses and commercial activities, land tenure issues and boundary rationalisation, and finance and revenue generation.

PLAN OF MANAGEMENT – ACTIONS SUMMARY

Note: this is a summary of the actions. For full details refer to Action Tables in 5.3



ACTION	OVERALL KEY MANAGEMENT DIRECTIONS
V1	Manage greater majority of Park as bushland - to protect/enhance the natural environment, habitats and biodiversity values; help to maintain water quality in the dam; and contribute to recreation and scenic appeal.
V4	Carry out targeted management measures to protect areas of Duffys Forest EEC, other vegetation communities of conservation significance, and threatened/significant native flora and fauna species.
WP1	Implementation of rolling program of targeted bush regeneration and weed control.
WP5	Participation in regional pest control programs, and implement on-Park pest control measures.
C1-15	On-going stormwater management and water quality improvement measures in surrounding catchment.
FM1&2	Manage bushfire hazards, and implement relevant fire management plans.
TT1&2	Maintain network of safe and sustainably managed recreational tracks/trails.
TT6	Permit mountain biking on designated routes.
EP4	Maintain current dispersed character and bushland setting of picnic areas, with small-scale/low-profile character and dispersed layout of facilities.
W2	Manage waterbody as multi-use area catering for a variety of recreational uses as well as visual, environmental and flood management functions.
PA7	On-going risk assessment and management measures regarding recreational use of Park.
R2	Investigate the introduction of cost-effective system of park fees.
DU6	Introduction of pay and display parking system.
PA2	On-site Ranger team presence.
CT1-5	Encourage/support volunteer involvement in Park management.
E3	Encourage/accommodate environmental, outdoor and other educational uses of Park - expand on-site interpretive and information services/facilities.
S1	Responsible "bush neighbour", catchment protection and environmental educational programs in areas surrounding.

NUMBER	ACTION	LOCATION SPECIFIC MANAGEMENT DIRECTIONS
1	TT12&13	Undertake priority safety & erosion works (including track re-routing, widening &/or duplication) from Churchill Cr to Wandella Rd prior to re-opening for shared use (walkers and mountain biking).
2	A6	Retain Nyrang Rd secondary Park access at current size.
3	A2	Redesign/upgrade King St vehicle entry, including footpath and mountain bike tracks for safer access.
4	WM1	Improve landscaping/presentation of existing war memorial and Remembrance Point area.
5	DU2	Manage Picnic Area 1 as more developed, landscaped, modified and intensively managed day use setting.
6	W4	Retain designated/marked waterskiing/powerboat zone and approved times.
7	W9	Formalise Ski Club's use/management of waterskiing zone under an annual licence/agreement (within one year). Conditions to include licence and use fees, fair and equitable allocation of available waterskiing slots between Club and non-Club members, and annual reporting requirements.
8	TT4	Upgrade track standards, signposting and interpretation on walking tracks, in particular the Nature Trail and Wildflower Walk.
9	DU10	Progressively develop high-standard pathway from Picnic Area 1 to Picnic Area 4.
10	DU5	Replace/refurbish three existing amenities blocks to more presentable and functional standard, provide showers and accessible toilets.
11	DU4	Continue to provide wood-burning bbqs in picnic areas.
12	TT14&18	Formalise tracks, or reroute away from, Duffys Forest EEC and footpath opposite Balgowlah North Public School.
13	W1	On-going water quality monitoring within waterbody.
14	WGC4	Wakehurst Golf Club required to prepare an Environmental Management Plan (within 2 years), and implement.
15	WGC2&3	Continue Wakehurst Golf Course and Wakehurst Couvret Tennis Courts leases, but uses not to be expanded beyond current footprints (excluding minor adjustments or give-and-take rationalisation, but with no further bushland clearing).
16	TT10&11	Undertake priority safety works along tracks including The Trig Track prior to re-opening for shared use (walkers and mountain biking), maintain challenging "technical" sections of track with alternative/by-pass routes for walkers where practical.
17	A7	Liaise with RMS to deter, or safely manage (if possible), roadside parking on Wakehurst Parkway.
20	A11	Upgrade, rationalise, formalise and/or realign walking and mountain bike access links to other neighbouring areas and tracks.

1 Setting the Scene

1.1 What is a Plan of Management ?

A Plan of Management is developed, in consultation with the community, to provide direction for the future management, use, development and maintenance of places such as public open space, parks and bushland reserves.

Manly Warringah War Memorial Park is an area of reserved Crown Land (known as a Crown Reserve) for the purposes of “public recreation”. The Park is under the care, control and management of the Manly Warringah War Memorial Park (R68892) Reserve Trust, with Warringah Council both managing the affairs of the Trust and carrying out the day-to-day management of the Park on behalf of the Trust – under the provisions of the *Crown Lands Act 1989*.

It is not a statutory requirement for a Plan of Management to be prepared for a Crown Reserve. However Warringah Council, on behalf of the Trust, has previously chosen to prepare a Plan of Management for the Park – in 1981 and again in 1998 – to ensure that the Park is strategically planned and managed. This Plan will continue this approach to setting out a clear direction and actions or guidelines for the Park’s management.

This Plan of Management aims to provide a clear, concise and practical framework for the management of the Park. A value-based approach to land planning and management has been used. Management Actions have been developed to protect and enhance the Park’s values, address any issues that may threaten these values and ensure that the Park is managed in line with current community expectations – and is managed consistent with the purposes for which the area has been reserved.

The timeframe of this Plan of Management is up to 10 years and the Management Actions identified within the Plan are to be implemented, or progressed, during this period.

1.2 Land to Which This Plan Applies

The land to which this Plan applies is identified in Figure 1 and detailed in Table 1. The greater majority of the 33 individual land parcels within the 376.8 hectares of the Park (to be covered by this Plan) are Crown Land reserved for Public Recreation – predominantly as part of Crown Reserve 68892 and small parts of Crown Reserve 83492 – as well as parts of some unmade Crown road reserves. The current tenure of a small number of land parcels is yet to be fully determined.

Table 1 Lands to Which This Plan Applies

OWNER	REG. NO. (Council)	PARCELS		AREA (ha)
		LOT NO	DP NO	
Reserve 68892 for Public Recreation (notified 8 Dec. 1939, 23 June 1967, 26 Sept. 1969, 2 June 1989, 17 Nov. 1989 and 24 Feb. 1995)				
Crown	C46/7			.0734
Crown	60/16	7312	1146408	.1020
Crown	59/22	2	734661	.1631
Crown	70J/5	2802	727031	.4523
Crown	76/20	7073	1029974	.5297
Crown	70J/4	1	771902	.7036
Crown	76/23	7074	1029974	.8100
Crown	76/22	1549	752038	1.0666
Crown	C46/6	72	504238	1.2771
Crown	59/17	2	710023	1.5928
Crown	C46/4	70	504238	1.9796
Crown	C46/5	71	504238	2.1379
Crown	C46/3	13	504238	2.2292
Crown	C50/4			2.6962
Crown	76/21	1239	752038	2.8667
Crown	59/17	2	67342	3.1174
Crown	C46/7			3.3983
Crown	59/17	77	504237	3.4002
Crown	59/17	76	504237	3.7014
Crown	C50/2	74	504238	3.7879
Crown	59/17	1	67342	4.1364
Crown	59/17			29.2792
Crown	C50/3			37.3642
Crown	59/17			266.4579
Crown	Road			.0471
Crown	Road			.3272
Crown	Road			.3293
Crown	Road			.4509
Crown	Road			.7936
Crown	Road			.9539
		Sub-total R68892		376.2251
Part of - Reserve 83492 for Public Recreation (notified 6 Oct. 1961, 20 June 1969 and 3 Feb. 1989)				
Crown	60/15	Part 7311	1146408	.0154
Crown	60/8	Part 2701	752038	.0595
Crown	60/9	Part 2409	752038	.5204
		Sub-total part R83492		.5954
		TOTAL AREA		376.8205



Figure 1 Lands covered by this Plan of Management

Crown Reserve 68892 covers by far the greater majority of the Park, while those small parts of Crown Reserve 83492 (as covered by this Plan) are located in the Allambie Oval and Roosevelt Avenue area of Allambie Heights.

Crown Reserve 68892 was reserved for public recreation on 8 December 1939 with additional areas gazetted on 23 June 1967, 26 September 1969, 2 June 1989, 17 November 1989 and 24 February 1995. Crown Reserve 68892 was reserved for public recreation on 6th October 1961 with additional areas gazetted on 20 June 1969 and 3 February 1989.

Warringah Council manages the Manly Warringah War Memorial Park on behalf of the Manly Warringah War Memorial Park (R68892) Reserve Trust, which was appointed by the Minister for Lands on 22 August 1997. Warringah Council also manages the affairs of the Trust. Before this time (since 24 April 1953) Council managed the lands that comprised Manly Warringah War Memorial Park in a “trustee” role under the *Public Trusts Act*.

Council has similar roles as Trust Manager for Reserve 83492, appointed on 19 February 1962.

The area known as Aquatic Reserve, located upslope from the Sydney Water pipeline, north of the Park, was previously included in the 1998 Plan of Management. The majority of land at this reserve is used for sports activities. Sports and related infrastructure located here includes; the Warringah Aquatic Centre, sports fields, sports buildings, a skate ramp and car parking. There are also natural bushland and revegetated areas in this reserve. At the time of writing the Council is developing a strategic direction for the Warringah Aquatic Centre and surrounding areas. Given that the land use in the Park and Aquatic Reserve have a different focus, discrete management strategies are required.

Submissions from community consultation indicated concern that land in Aquatic Reserve, that forms the upper catchment of Manly Dam and containing natural bushland including Duffys Forest Endangered Ecological Community, should be included in the Manly Warringah War Memorial Park Plan of Management for greater protection of these natural areas. Excluding Aquatic Reserve from the Park’s Plan of Management will not lessen the protection given to these natural areas. These areas shall continue to receive protection from adopted Council policies and NSW State Government legislation including the Threatened Species Conservation Act 1995, Environmental Planning and Assessment Act 1979 and National Parks and Wildlife Act 1974. Further, any Plan of Management and or strategic plan developed for Aquatic Reserve will include the appropriate management of natural areas as a priority.

1.3 Why and How is Council Preparing this Plan of Management?

The most recent Plan of Management for Manly Warringah War Memorial Park was adopted by Council in July 1998. Although this 1998 Plan was never formally adopted by the Minister for Lands it provided the basis for Council's management of the Park over the subsequent years.

Many of the Plan's strategic initiatives and recommended actions have been completed since its adoption, while other actions are now less relevant. The need for a review of the 1998 Plan and preparation of a new Plan of Management has also become necessary as a means of clarifying the future uses of the Park.

A new Plan of Management is also timely to take a fresh look at the values that the community ascribes to the land and to develop current management actions to maintain, protect and enhance these values – including balancing recreational use of the area with biodiversity conservation and water quality values. A new Plan can also incorporate recent studies and information gathered in relation to the Park, and address changes in applicable legislation and policies.

The objectives of this new Plan of Management are therefore to:

- identify and assess the values of, and held for, the Park;
- identify and assess the key issues for the Park;
- define the role and uses of the Park within the Warringah Local Government Area and the region;
- set a vision for the Park;
- develop Management Actions and an Implementation Plan to protect and enhance the area's key values, as consistent with the public purpose for which the area has been reserved;
- develop a guide for the Park; and
- comply with the principles of Crown land management, as well as applicable legal requirements and policy directions.

There are a number of steps involved in the preparation of a new Plan of Management, including several opportunities for community engagement and input. Key steps the Plan preparation process is illustrated below in Figure 2.



Figure 2 Steps involved in Preparing this Plan of Management

The *Reserve Trust Handbook 2007*, prepared by the former Land and Property Management Authority (now the Crown Lands Division of the NSW Trade & Investment), provides additional details on preparation and content of management plans for Crown Reserves.

In December 2013, after reviewing the draft Plan of Management, the Crown Lands Division of the NSW Trade & Investment – Department of Primary Industries, gave Warringah Council advice recommending that the Public Exhibition and future adoption of the draft Plan of Management be completed under the Local Government Act 1993.

As previous phases and consultation in forming this draft Plan of Management followed similar principles and phases, the decision was made to Publicly Exhibit the draft Plan of Management between 21 December 2013 and 10 February 2014 under the Local Government Act 1993.

Community consultation during the public exhibition period included:

- Notices in local media
- Council Website Homepage and Your Say Warringah
- Emails to stakeholders and Council's community engagement list
- Letterbox notices distributed to residents around the Park's perimeter and;
- Signs encouraging submissions placed within the Park itself.

Two Community Information Days were held on weekends and meetings were held with specific interest groups including representatives from the Manly Warringah Water Ski Club Limited, environmental and mountain biking groups.

By 10 February 2014, the closing date for submissions, 271 submissions had been received.

Proposed changes to the permitted waterskiing times received the most comments from these submissions, followed in order by comments on mountain biking, walking tracks, biodiversity and parking/traffic issues.

See Section 2.3.3.5 for a detailed summary of submission comments.

The comments from these submissions assisted in shaping the final version of the Plan of Management.

1.4 Manly Warringah War Memorial Park – A Brief Description

Manly Warringah War Memorial Park is located among the suburbs of Manly Vale, North Balgowlah, Allambie Heights and Frenchs Forest within the Warringah Local Government Area (LGA). The majority of the Park area to be covered by this Plan is bushland and the area is both a significant environmental and recreation asset. The surface area of Manly Dam covers approximately 30 hectares. The Dam is freshwater, sheltered and deep (in most parts) and is one of the largest freshwater “lakes” in Sydney. Overall the Park is a sizeable area, and a valuable community asset, under Council’s management.

The land uses surrounding the Park are predominantly residential, with suburban homes and a number of retirement villages along the north eastern boundary, and a mix of light industry, housing and open space (playing fields) adjoining the area’s northern boundary. Wakehurst Parkway forms the Park’s western boundary, with Garigal National Park on the opposite side of this arterial road. Figure 3 shows the location, and wider context, of the Park and the surrounding land uses.

The Park is Crown Land reserved for public recreation – with this reservation dating from 1939 for most of the area. Warringah Council is responsible for the Park’s care, control and management.

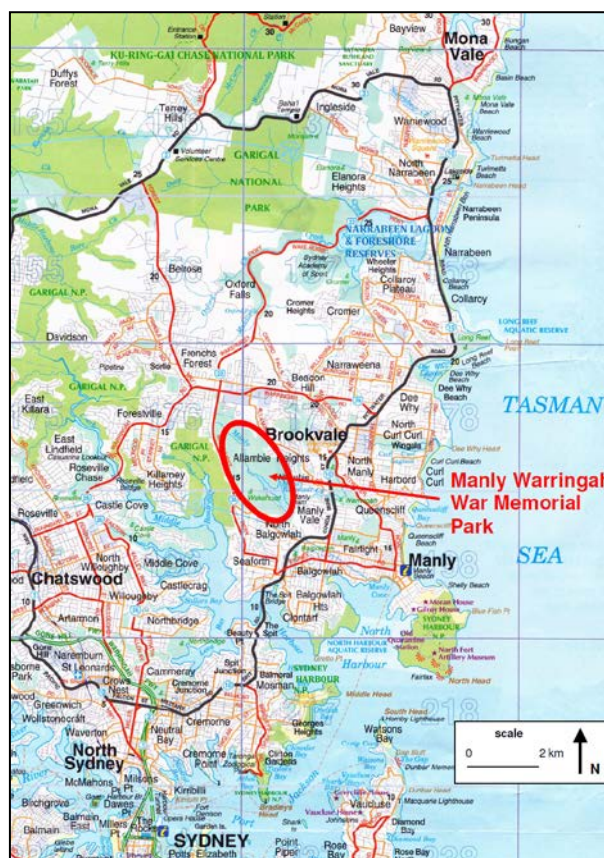


Figure 3 Location plan
(source: UBD Sydney Suburban Map 262)

The greater majority of the Park is land identified as Public Open Space under the Warringah Local Environment Plan 2011.

1.5 History

The Warringah area has long been recognised as being part of the traditional lands of the Guringai people. However more recently this has been contested by claims that the area is located in the traditional lands of the coastal people of the Darug Aboriginal language group. Before European settlement the Park most probably consisted of open bushland with rocky outcrops, waterfalls, gullies and feeder creeks running into the watercourse now known as

Curl Curl Creek. There are a number of Aboriginal heritage sites found within the Park, demonstrating its use and occupation prior to European settlement.

A dam wall was first constructed across Curl Curl Creek in the late 1800's to supply drinking water to the local settlement. This continued until 1936. Management of the bushland catchment of Manly Dam was given to a committee of ex-servicemen around 1920. The committee established some of the picnic areas. Recreational use of the bushland and waterway continued and expanded after 1939 when an area was formally reserved for "Public Recreation" (Reserve 68892). Over the subsequent years, further bushland areas have been progressively added to the Park and other foreshore sites have been developed for more formal recreation. Two areas within the Park catchment were used as land fill sites, at the present Wakehurst Golf Course site and Aquatic Reserve (this latter site is beyond the ambit of this Plan).

1.6 Current Condition and Use

Manly Warringah War Memorial Park consists predominantly of native bushland, providing a relatively natural catchment area for Manly Dam. The bushland areas of the Park provide a large and intact or less-disturbed representative sample of Sydney Sandstone bushland. The Park supports a variety of flora and fauna, including threatened species. The large expanse of bushland provides relief from the urban environment, and there are many vantage points from within the Park where surrounding urban development cannot be seen. Conversely, views of the Park can be enjoyed from many surrounding areas. The Park includes four developed picnic areas and associated facilities/amenities located in bushland settings on the Dam foreshore, as well as a district and neighbourhood playground, an extensive walking track network, an 11 kilometre mountain bike circuit (mostly on the Park), fire trails, a dedicated waterskiing area, the Wakehurst Golf Course and the Wakehurst Couvret Tennis Courts (both of which are located on leased/sub-leased areas within the Park).

The Park is an important recreation destination and asset for the local community, as well as a regional attraction for visitors.

A telephone survey was conducted in April 2008 to inform Warringah Council's *Recreation Strategy*, adopted in 2009. The survey sampled 621 randomly chosen residents, fifteen years and over, asking a series of questions regarding their recreation participation over the last 12 months. Manly Warringah War Memorial Park was identified as the third most used regional or major attraction in Warringah, following Narrabeen Lagoon (first) and the Warringah Aquatic Centre (second).

Further details of the current condition and use of the Park are provided in Section 3 and Appendix A.

1.7 Current and Future Pressures

Manly Warringah War Memorial Park sits within an urban context, with increasing residential populations in its immediate, and regional, surrounds. Greater residential densities and local population numbers are already placing increasing usage pressures on the Park, and these trends will continue in the future. Large areas of public open space will become increasingly important for recreational use, and as "green space", as backyards and private open spaces

continue to shrink. More people will seek to do more things within the Park, potentially leading to greater and more diverse pressures on the area's attractions and values as well as possible conflicts between activities and user groups.

Natural areas of significant size, such as offered by the Park and the adjoining sections of Garigal National Park, will also be increasingly important in breaking up the urban landscape – both physically and visually, as well as in providing a “refuge” from urbanised spaces. However urbanisation and increasing land use densities/intensities will generate direct and indirect impacts on these natural areas – in terms of water quality, weed intrusion, rubbish dumping, utility and service corridors, encroachments, visual intrusion and others.

Careful planning will be required to protect and manage the Park and its values in the face of these external pressures in order to realise the full range of biophysical, recreational, visual and cultural values that the area holds for the community.

1.8 Future Directions for Manly Warringah War Memorial Park

The importance placed on its natural environment and quality of life by Warringah Council and its residents is reflected by the vision statement for Warringah. This vision statement was developed as part of Warringah's Community Strategic Plan 2023 and was established to encompass the next 10 years and beyond.

“A vibrant, caring community thriving in a unique beach and bush environment, supporting a balance of lifestyle, business and recreation.”

Key directions for the future of Manly Warringah War Memorial Park have been reaffirmed or identified through the development of this Plan of Management.

This has drawn upon Council's vision as described above, the management principles as set out in the *Crown Lands Act 1989* (see Section 2.1.1), and the vision as defined in the 1998 Plan of Management. These key directions reflect the community's values identified through the preparation of this new Plan of Management and provide a basis for the development of management actions that will enhance and protect the values ascribed to the Park. A new vision statement for Manly Warringah War Memorial Park is identified in Section 4.2 of this Plan.

The importance of the bushland areas and natural environment, the ability for the Park to provide for a variety of recreational opportunities, the respite it affords from the urban environment and its importance as a war memorial have all been acknowledged as key directions for the future of the Park – and are recognised in the new Park vision.

1.9 Guiding Principles of Management

The Park's guiding principles of management follow from the above key directions, support the vision for the Park (see Section 4.2) and have been used to inform the objectives and management actions as described in Chapter 5.

The following guiding principles of management have been identified for the Park:

- sustainable management of the Park to protect its natural areas, while providing for a variety of passive and active recreational activities;
- protect and enhance threatened flora and fauna within the Park;
- protect and enhance the water quality of the dam waterbody and Park waterways;
- provide safe and equitable access to the Park and its facilities for all user groups; and
- protect and enhance the Park's heritage.

1.10 Structure of this Plan of Management

This Plan of Management has been divided into 6 sections as described below.

- 1. Setting the Scene.** Provides an introduction to Manly Warringah War Memorial Park and identifies the need for a new Plan of Management.
- 2. Preparing this Plan of Management.** Describes the legislative requirements of a Plan of Management and linkages to other planning documents. Summarises the community consultation carried out during the development of this Plan.
- 3. Park Description, Values and Use.** Provides an overview of the Park and how it is valued and used by the community.
- 4. Basis for Management.** Identifies and evaluates the current threats to the Park values. Introduces the new Vision Statement for the Park.
- 5. Management Actions.** Identifies a management framework, founded on specific management actions and guidelines or policies, to protect and enhance the Parks values as well as the Plan's desired outcomes and means of assessing their achievement.
- 6. Implementation Plan.** Identifies the priorities and resource requirements to implement the Management Actions.

2 Preparing this Plan of Management

2.1 Legislative Requirements and Relevant Planning Documents

The Manly Warringah War Memorial Park is a Crown Reserve which Warringah Council manages on behalf of the Manly Warringah War Memorial Park (R68892) Reserve Trust. Warringah Council also manages the affairs of the Trust.

Crown Reserves are parcels of Crown Land retained or acquired by the State and set aside for specific public purposes. Crown Land can be reserved for a multitude of purposes, including public recreation, environmental protection, access, heritage purposes, community purposes, water, among others (LPMA, 2007). The Manly Warringah War Memorial Park is reserved for Public Recreation as Crown Reserve 68892 (as are those parts of Crown Reserve 83492 which are also covered by this Plan).

The *Crown Lands Act 1989* is the principal legislation protecting and governing how these lands may be used and managed for public benefit. The Act describes how a Plan of Management for Crown Land is to be prepared and what is to be included in the Plan.

In addition to the *Crown Lands Act* however there are a number of other legislative requirements and planning documents relevant to the Park. These include the Warringah Local Environmental Plan 2000, the Local Government Act 1993, along with other strategic documents and policies, prepared by either the State or Warringah Council.

Following is a summary of the relevant requirements of the *Crown Lands Act* along with a list of other relevant legislation, policies and planning documents.

2.2 Crown Lands Act, 1989

As on-ground manager (on behalf of the Trust) of the Crown Lands comprising the Park, Warringah Council has the responsibility to manage the Manly Warringah War Memorial Park in accordance with the requirements of the *Crown Lands Act 1989*.

It is not a statutory requirement for a Plan of Management to be prepared for a Crown Reserve. However where a Plan of Management for Crown Land is prepared it must be developed in accordance with the Public Purpose of the reserve and the Principles of Crown Land Management. The Plan must address the objects of the Act and define the value, use, management practices and intent for the broad public purpose for which the land has been reserved or dedicated.

Any Plan of Management for Crown Land must be prepared in accordance with the Act in order to be adopted by the Minister responsible for administering the Act. Appendix B provides further discussion in relation to the *Crown Lands Act* – particularly regarding the requirements for Plans of Management as well as in the areas of public purpose, the objects of the Act, the principles of Crown Land management, reserve trusts, leases and licenses, proceeds from Crown land and reporting.

2.3 Principles of Crown Land Management and Relevant Crown Land Policies

Section 11 of the *Crown Lands Act 1989* provides a set of principles for Crown Land management – as detailed in Appendix B. These principles and how this Plan of Management is compliant with them, is outlined in Table 2 below.

Table 2 Compliance with the Principles of Crown Land Management

Principles of Crown Land Management (Section 11 of the <i>Crown Lands Act 1989</i>)	Compliance with the principles of Crown Land Management
<i>That environmental protection principles be observed in relation to the management and administration of Crown land.</i>	The natural environment is a key value identified by this Plan of Management. Management actions have been created to protect this key value.
<i>That the natural resources of Crown Land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible.</i>	The Plan of Management provides management actions to conserve and protect these natural resources.
<i>That public use and enjoyment of appropriate Crown Land be encouraged.</i>	The Crown Land is reserved for “public recreation”. This reservation is supported by the Plan of Management and the management actions identified provide a means of maintaining and improving the experiences of public use and enjoyment of the Park in a sustainable fashion without detracting from the area’s underlying values.
<i>That, where appropriate, multiple use of Crown Land be encouraged.</i>	There is already a high degree of multiple use of the Park. The Plan encourages and supports the continuation of multiple use.
<i>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.</i>	The Plan of Management aims to protect the values identified for the Park. A vision has been set, and management actions and priorities identified, to ensure protection of its natural environment and cultural heritage and provide for sustainable use of the Park into the future.
<i>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.</i>	Leases, licences or otherwise are only permitted where they are consistent with the values of the Plan of Management and the provisions of the <i>Crown Lands Act 1989</i> .

The following Crown Land Policy may also be relevant to this Plan of Management.

- **Food and Beverage Outlets on Crown Reserves: Policy Position Version 3, 2004.** However this does not apply to mobile vendors – but rather to fixed or built outlets such as kiosks, cafes, restaurants and bistros none of which occur in the Park.

2.4 Other State and Commonwealth Legislation

Below is a list of relevant State and Commonwealth legislation and State policy guidelines which may apply to the future management of the Park.

- **Commonwealth Disability Discrimination Act, 1992** – promotes the rights of people with disabilities
- **Commonwealth Environment Protection and Biodiversity Conservation Act, 1999** – the Australian government's central piece of environmental legislation.
- **NSW Environmental Planning and Assessment Act, 1979** – sets requirements for assessment and approval of activity or development proposals.
- **NSW Heritage Act, 1977** – provides for the assessment, protection and management of non-Aboriginal heritage.
- **NSW Local Government Act, 1993** – governs the functions of Local Government and their relationship to land management.
- **NSW National Parks and Wildlife Act, 1974** – provides for the conservation management and protection of natural and cultural heritage as well as fostering public appreciation, understanding and enjoyment of these values. This includes the protection and management of Aboriginal heritage, including Aboriginal sites and materials.
- **NSW Noxious Weeds Act, 1993** – sets requirements for the control of declared noxious weeds.
- **NSW Protection of the Environment Operations Act, 1997** – addresses air quality, water quality, pollution control and noise control requirements and offences.
- **NSW Rural Fires Act, 1997** – provides for the prevention and management of bushfires.
- **NSW Rural Lands Protection Act, 1998** – provides for the control of pest animals.
- **NSW SEPP 19: Bushland in Urban Areas** – provides for the protection of bushland in public open space zones.
- **NSW Threatened Species Conservation Act, 1995** – identifies and protects native plants and animals in danger of becoming extinct and provides for species recovery and threat abatement programmes.
- **Companion Animals Act, 1998** – *deals with the responsible management and care of companion animals, mainly dogs and cats, in New South Wales.*

2.5 Council's Strategic Documents and Policies

The following Council documents have been used to assist and guide the strategic outcomes of this Plan, ensuring consistency in values, principles and policies. Relevant recommendations from these documents and policies have been incorporated into the Management Actions within this Plan where relevant.

- **Bushland Policy, 2008** – sets goals for bushland management programmes and identifies the approach to managing bushland areas.

- **Community Facilities Management and Subsidies Policy, 2006** – provides a framework for the equitable, efficient and effective management of Council's community facilities.
- **Cultural Plan, 2007** – supports the expansion and promotion of environmental walks, educational information to explain and celebrate the natural environment and the continuation of cultural events such as the "Ripple Festival".
- **Environmental Sustainability Strategy, 2012-2022** – assists in guiding the community and Council toward a more ecologically sustainable way of living.
- **Generic Bushland Reserves Plan of Management, 2009** – a plan of management for the management of almost 100 reserves (over 300 hectares of bushland in total) throughout Warringah. Provides objectives and management actions for the management of the bushland reserves.
- **Interim Policy on the Management of the Commercial Use of Beaches, Reserves and Buildings/Facilities in Warringah, 2006** – provides a framework for the management of commercial use at the Park and identifies Manly Warringah War Memorial Park as a "restricted area" in terms of its availability for commercial activities (with only privately provided educational activities to be considered, as consistent with a plan of management).
- **Local Habitat Strategy, 2007** – provides management actions to preserve, protect, enhance and restore Warringah's habitat areas. Specific management actions are provided regarding the Park.
- **Manly Warringah War Memorial Park Fire Regime Management Plan, 2006** – provides recommendations for fire management zones, alternatives for fuel management, and strategies to protect Park infrastructure as well as persons and property adjacent the Park.
- **Warringah-Pittwater Bush Fire Risk Management Plan 2010** – aims to reduce the adverse impact of bush fires on life, property and the environment by reducing the number of human-induced bush fire ignitions causing damage to life, property or the environment; managing fuel loads to reduce the spread and intensity of bush fires while minimising environmental/ecological impacts; reducing the community's vulnerability to bush fires and improving its bushfire preparedness; and effectively containing potentially harmful bushfires. The Plan includes provisions for fire management within the Park.
- **Playground Strategy, 2007** - identifies existing playgrounds and management strategies, a playground hierarchy and actions and priorities for specific playgrounds. There is one district playground (in Picnic Area 1) and one neighbourhood playground (off Cootamundra Drive) within the Park, as identified as by the Strategy's hierarchy.
- **Policy for the Use of Council Open Space for Commercial Fitness Groups and Personal Trainers, 2010** – ensures equity in access to public open space, manages the impact of fitness activities on open space assets and addresses public liability risks.
- **Recreation Strategy, 2009** – provides a long term strategic direction for the future provision and management of recreational assets, programmes and services in Warringah, including specific actions relevant to the Park.
- **State of Warringah, 2007** – provides a summary of water quality at Manly Dam and the suitability of the dam for swimming.
- **State of Environment Reports** – State of the Environment (SoE) Reports provide a snapshot of the condition of the environment, pressures impacting on the environment and the responses by Council to address these pressures - including major programmes and achievements at specific sites or Council-wide (since 2006-07 Warringah Council's

SoE Report has been part of the wider Shore Regional Organisation of Councils' environmental reporting).

- **Warringah Bike Plan, 2007** – identifies a vision for cycling in Warringah, identifies a range of bike routes, infrastructure priorities, funding opportunities, education, promotion and events.
- **Warringah Council Community Strategic Plan, 2010** – was Council's primary forward planning document. It includes a 10 year strategic direction for Council, and a detailed four year delivery programme, via the Capital Works Programme for 2010-2014. A number of projects are identified within this programme for the Park.
- **Warringah Design Guidelines Public Spaces, 2003** – provides guidance for signage, furniture and access to public spaces, with a focus on built or more developed sites and streetscapes.
- **Warringah Local Environmental Plan, 2011** – contains the rules and regulations for development in Warringah. Manly Warringah War Memorial Park is included within the Locality G3 Manly Lagoon Suburbs (see Section 2.1.5 below).
- **Warringah Regional Multiple-Use Trail Strategy, 2007** – focuses on bushland areas within Warringah and linkages with neighbouring local government areas. The document is a planning strategy for a regional multiple-use trail network and identifies multiple-use trails within the Park.
- **Mountain Biking in Warringah Research and Directions, 2012** – This document discusses the current status of the provision of mountain biking facilities in Warringah in addition to the complexity of issues surrounding any increase in mountain biking in this area.
- **Community Strategic Plan 2023** – sets a vision for Warringah and identifies goals for achieving the vision.

2.6 Relationship to the Warringah Local Environmental Plan 2011

This Plan of Management identifies appropriate development within the Manly Warringah War Memorial Park. Guiding principles have also been identified to ensure development does not impact on the values of the Park, see Section 5.3.1. Development proposals however may only proceed subject to the development consent requirements of the Warringah Local Environmental Plan 2011. Any development proposals for the Park must therefore be consistent with the Plan of Management, the Warringah LEP 2011 and any other relevant planning policies.

2.7 Review of the 1998 Plan of Management

A Plan of Management was adopted for Manly Warringah War Memorial Park by Warringah Council in 1998. This Plan of Management superseded the 1981 Plan of Management for the Park. Although the 1998 Plan was prepared in accordance with the *Crown Lands Act 1989*, it was never formally approved by the Minister for Lands, as required under the Act. The main direction of the 1998 Plan of Management was to provide a Park which protected its natural areas, as well as providing low key visitor facilities and a range of recreational opportunities.

As part of the process of preparing this new Plan of Management, the actions of the 1998 Plan have been audited and reviewed. The 1998 Plan of Management described a total of 117 actions. Approximately 75% of these actions have been completed, partially completed or are considered to be ongoing actions. The remaining 25% of actions are incomplete. This is largely due to the actions being overtaken by a change in events, or the actions having become redundant over time.

2.8 Consultation

The importance placed by Council on community consultation is highlighted by the Community Consultation Policy, Matrix and Toolkit. These documents provide a framework for community consultation and community engagement and were adopted by Council in February 2011. The following policy statement has been extracted from the Community Consultation Policy, February 2011.

Warringah Council recognises that community engagement and participation processes are a vital part of local democracy. Effective engagement is good business practice and critical to good government. For this reason Council is committed to engaging with the Warringah community

Prior to the adoption of this policy, community consultation was informed by Council's *Community Consultation Matrix (A guide to community consultation)*. This matrix was used to inform consultation for the Manly Warringah War Memorial Park Plan of Management.

A Community Consultation Plan was developed in June 2010 to support the preparation of this new Plan of Management. The Consultation Plan included a number of different methods of community consultation aimed at informing the community of the preparation of the new Plan and seeking information from the community in relation to their values for the Park and views for its future management.

The following is a summary of consultation carried out to form the Draft Plan of Management.

- A general notice in the "Mayoral Column" in the *Manly Daily*
- On-site information posters at key locations within the Park, informing and inviting the community to become involved.
- A "letter box drop" to neighbouring properties around the perimeter of Manly Warringah War Memorial Park, informing them that preparation of a new Plan of Management for Manly Warringah War Memorial Park commenced and requesting their input and comments (eliciting 19 written submissions and 3 phone calls).
- Three Focus Group meetings with organisations and individuals having a particular interest in the Park – grouped by mountain bikers, waterway users, and bushland users (a total attendance of 55 people).
- A survey/questionnaire distributed to identified stakeholder groups and to general Park users (eliciting 54 submissions in total).
- Discussions with relevant Council staff, as well as representatives from the Crown Lands Division and other state agencies, throughout the planning process.

- A follow-up invitation to comment, and simple survey/questionnaire distributed to Park neighbours, (eliciting 20 submissions in total).
- Public exhibition of the *Issues and Directions Discussion Paper*. A memo/poster and copy of the Discussion Paper, and Comments Sheets for easy feedback, were made available at all Warringah Libraries and Customer Service Centres. The exhibition was advertised in the “Mayoral Column” of the *Manly Daily* and information was posted on the www.yoursaywarringah.com.au site as well as posters placed at the Park.
- Email updates to all registered stakeholders for the Plan of Management project, informing people of project progress and release of the *Issues and Directions Discussion Paper* for comment (373 contacts).
- A Community Workshop involving invited representatives from a range of stakeholder groups to discuss concerns, opportunities and constraints and to suggest management options to resolve identified issues (a total attendance of 55 people).
- A news item incorporated in the bi-monthly *Warringah LINC'S Disability Newsletter*.
- Ongoing information and updates provided on the www.yoursaywarringah.com.au online discussion forum.

The preparation of a new Plan of Management for Manly Warringah War Memorial Park and the release of the *Issues and Directions Discussion Paper*, also received considerable coverage in the *Manly Daily*.

All of these consultation efforts involved asking three fundamental questions:

1. Why is Manly Warringah War Memorial Park (Manly Dam) important to you ?;
2. What do you value about the area ?; and
3. How would you like the Park managed in the future ?

Throughout the development of this Plan of Management, input has been sought from the general community, stakeholder groups, Council staff and the Crown Lands Division of the NSW Department of Primary Industries (formerly the Land and Property Management Authority, LPMA, within the Department of Lands). A Working Party made up of Council staff and a representative from the Crown Lands Division was convened at regular intervals to oversee the project and provide input and direction where necessary.

2.9 Community Consultation Report on Values - August 2010

The initial community consultation identified a range of values for the Park, including inherent or underlying values and the usage values ascribed by the community. A number of key points were also highlighted during the initial consultation phase, including:

- shared and common values are held for the Park – with these values common across ages, gender and reasons for use. Such values include maintaining the status quo in terms of the area's use and management, its natural features, the social values and the “peace and quiet” of the place;
- the Park's recreational value – as a venue for walking, mountain biking, picnicking and water-based activities;
- a particularly high value is placed on facilities such as shelters, accessible toilets and disabled parking places by seniors and disability groups; and
- the importance of the Park as a respite from urban living.

Feedback throughout the initial community consultation process highlighted that the majority of people were happy with the Park, the facilities provided and how the area is now used and managed.

This is not to say that some issues of concern were not highlighted in particular areas or around specific matters. However overall the general consensus from the initial community consultation was that most visitors, and others with an interest in or association with the Park, were happy with the Park's current character and management and were comfortable with the "status quo".

A copy of the *Community Consultation Report on Values - August 2010*, prepared by Council at the conclusion of the initial round of consultation is attached at Appendix C.

2.10 Community Workshop – November 2010

A facilitated Community Workshop was held following the release of the *Issues and Directions Discussion Paper*. The Workshop was by invitation, to ensure a balanced representation of key stakeholders. The aim of the workshop was to further engage the community in the process of developing a new Plan of Management for the Park. In particular, the workshop aimed to provide an opportunity for all stakeholders to:

- understand the issues and constraints involved;
- listen to different perspectives;
- discuss potential trade-offs that may need to be made; and
- work together to discuss, deliberate and move towards the resolution of issues.

A total of 55 key stakeholders attended the workshop. Discussion of the options identified within the *Issues and Directions Discussion Paper* was a key component of the workshop. Following is a summary of workshop outcomes. A copy of the *Summary of Community Workshop – held Monday 29th November 2010* can be found in Appendix D. This includes discussion on other general comments made in relation to the Park. Following the format of the *Issues and Directions Discussion Paper* the workshop's discussions were focused on the differing "management zones" suggested in the Paper (these are further described in Section 5.2).

2.10.1 Bushland Management Zone

Workshop discussions regarding the bushland zone were mostly focused around recreational use of the Park's track and trails, and especially the future use of narrower sections of the mountain bike circuit which Council closed to walkers in February 2010. Key outcomes from the discussions were:

- broad support for Option 2 for track and trail management from the *Issues and Directions Discussion Paper* – that is retaining the entire designated mountain bike circuit and allowing for the shared-use, by both mountain bikers and walkers, of all single track sections employing a "risk management" approach;
- a range of views on separating bikers and walkers – with some participants seeking to separate these uses for safety reasons, while others had mixed views on the need or advantages of separating users and disputed the perception of walker-cyclist conflict;
- broad support for minimising impacts on the environment from track and trail maintenance and use;
- broad support for better track design and maintenance; and

- broad support for better education and signage – for both walkers and mountain bikers.

Other issues raised or discussed, but with less prominence or consensus, were – support alternative management options for The Trig Track, perceiving night mountain bike riding as a new issue, the need to plan for and better regulate mountain bike use (such as limiting the numbers of users, a user pays system or the registration of bike users).

2.10.2 Waterbody Management Zone

Workshop discussions around recreational use of the waterbody, and in particular the allocation of access and exclusive use of this feature, offered far more diverse views. In relation to the future management of waterskiing on the dam, comments ranged from – “phasing out water skiing in the future as it is not sustainable in the long term and is not really in keeping with the ... peaceful nature of the Park”, through “have ski free days, including 1 full weekend day”, to support for the status quo. However there was broad support for more equitable recreational use of the waterbody, for further consideration of waterbody recreation issues, and re-examining current uses of the waterway.

2.10.3 Day Use and Urban Edge Zones

Discussion of future management of the Day Use Zone and Urban Edge Zone raised a variety of directions and concerns, the most frequent of which are listed below.

- Support for connecting the picnic areas with a high standard track, offering a mix of booked and “free” tables in the picnic areas, improved catchment management and actions to manage water quality in the dam, addressing feral animal control and managing domestic animals, better weed management, and reducing impacts on the Park from adjacent land uses.
- Some support for additional dog areas within the Park.
- A range of views regarding management of the picnic areas and appropriate standards of development, maintaining the War Memorial and Remembrance Point facilities as a key part of the Park’s identity and the main Park entry.
- Concerns or comments regarding fire management within the Park, car parking

2.11 Submissions on the Issues and Directions Discussion Paper

A report was prepared by Council in January 2011 to summarise the submissions received in response to the Manly Warringah War Memorial Park *Issues and Directions Discussion Paper*. A total of 262 submissions were received, including:

- 219 submissions focussed on waterskiing and the Waterbody Management Zone;
- 17 submissions focussed on the natural values, tracks and trails and the Bushland Management Zone; and
- 26 submissions offering general comments or feedback on the whole Discussion Paper.

Following is a summary of the key findings. A full copy of the submissions analysis report – *Report Summary of Community Submissions on the Manly Dam Issues and Directions Discussion Paper* – can be found in Appendix E.

2.11.1.1 Waterbody Management Zone

The vast majority of submissions focused on the waterbody and waterskiing expressed strong support for maintaining waterskiing at Manly Dam and supporting the “status quo” option as presented in the Discussion Paper. The number of people participating in waterskiing at the dam was a prominent issue, with some submissions raising concerns about equitable access to the waterbody for casual waterskiers (along with a perception that a change to the times available for waterskiing could result in a reduction in allocations to non-members of the Manly Warringah Waterski Club, and the subsequent reluctance to see a reduction in the overall allocation).

The exclusion of other users from the middle section of the waterbody, clashes with other waterbody users and the inappropriateness of waterskiing and powerboating within a predominately natural park were the main issues raised by the 30 submissions that sought less, or no, waterskiing at the Park. Some submissions also requested further detail for issues such as fishing requirements, flood management and maintenance of water quality.

2.11.1.2 Bushland Management Zone

The majority of the 17 submissions addressing tracks and trails within the Bushland Management Zone supported the shared use of the narrow tracks currently only designated for use by mountain bikers and risk management approach. They sought a return to the previous shared use of these tracks, by both walkers and mountain bikers, but with increased risk management techniques.

Several submissions expressed strong views regarding “preserving” and enhancing the Park’s natural values and flora and fauna, especially when addressing recreational use of the area. Night mountain bike riding, paid parking, feral animal control and fire trail clearing were all issues where further discussion or consideration was requested.

2.11.1.3 Day Use Management Zone

Only 10 submissions were received in relation to the Day Use Management Zone (the Discussion Paper did not present any specific management options within this zone). The submissions reinforced a number of important points and issues such as linking the picnic areas via a new walking trail, improvement of amenities, and the need for increased availability of educational material for the public.

Additional discussion was requested into finalisation of the war memorials, the number and type of picnic tables available, and the possibility of re-examining the current booking system.

2.11.1.4 Urban Edge Zone and remaining sections of the Discussion Paper

Only 2 submissions were received in relation to the Urban Edge Zone, raising concerns re formalising and promoting selected park access points and the proposed roundabout at the entrance to the Park.

The remaining sections of the Discussion Paper (addressing the Park Management Zone, Golf Course/Tennis Courts Management Zone, and Park Administration) did not attract the

same level of attention as the topics discussed above. There was a lack of contentious issues discussed in these Zones, and therefore less community interest.

2.12 Public Exhibition and formation of the Final Draft Plan of Management 21 December 2013 to 10 February 2014

In December 2013, after reviewing the draft Plan of Management, the Crown Lands Division of the NSW Trade & Investment – Department of Primary Industries, gave Warringah Council advice recommending that the Public Exhibition and future adoption of the draft Plan of Management be completed under the Local Government Act 1993.

As previous phases and consultation in forming this draft Plan of Management followed similar principles and phases, the decision was made to Publicly Exhibit the draft Plan of Management between 21 December 2013 and 10 February 2014 under the Local Government Act 1993.

The public were notified that the draft Plan of Management was on public exhibition and encouraged to comment via written submission by:

- Notices in the local media
- Information on the Council Website Homepage and Your Say Warringah
- Emailing notifications to stakeholders and Council's community engagement list
- Distributing letterbox notices to residents around the Park's perimeter and;
- Placing signs within the Park.

By 10 February 2014, the closing date for submissions, 271 submissions were received.

The topics most discussed in these submissions (in order of submission numbers, starting with the highest number of submissions) included:

- Waterskiing – 171 submissions
- Mountain biking – 33 submissions
- Walking tracks – 22 submissions
- Parking and traffic issues – 18 submissions
- Biodiversity issues – 15 submissions
- Land planning issues on adjoining or nearby land parcels – 9 submissions
- Commercial activities – 6 submissions
- Dogs in the Park – 5 submissions

- Landscaping – 5 submissions

Proposed changes to the permitted waterskiing times received the most comments, with 171 submissions commenting on that topic alone.

139 supported the status quo of 7 days a week permitting waterskiing.

22 submissions commented that they support changing waterskiing from 7 to 4 days a week.

10 submissions called for total removal of water skiing. Comments included:

33 submissions were received that commented on mountain biking.

14 submissions indicated general support for the draft Plan of Management, including the proposed mountain bike track reroutes to improve safety and the environment.

14 submissions commented that mountain bike tracks should not be “extended” or called for mountain biking in general to be reduced in numbers.

5 submissions had mountain biking comments in specific locations around the Park with concerns on excessive noise, speed or erosion, but did not indicate their general support for or against mountain bike proposals in the draft Plan of Management.

22 submissions commented on walking tracks. Comments included general support for the shared use of mountain bike tracks to allow walking. Tracks to be as natural and as narrow as safely possible. Some opposed any new tracks of any kind

18 submissions on traffic and parking issues. Comments included some support for the new entry design and roundabout, however, most submissions were against this proposal or suggested alternative location at corner of King and Arana Street

15 submissions commented on biodiversity, feral animal control and habitat refuges. Comments included confirm the Park’s Wildlife Protection Area status in the Plan

9 submissions commented on land planning issues on land near or adjoining the Park.

6 submissions commented on commercial activities within the Park. Comments included:

5 submissions commented on Dogs in the Park.

5 submissions commented on Landscaping ideas for the Park.

Other submissions commented on matters including War Memorials, changing the name of Manly Dam, request for playground upgrade, allow horses on tracks, model planes on the lake, increase promotion of the Park’s history, bush fire concerns and the general love of visiting the Park.

The comments from these submissions were reviewed and considered, assisted in shaping the final version of the Plan of Management for Manly Warringah War Memorial Park.

See Table 3 for Summary of Responses to Submissions

Table 3 - Summary of Responses to Submissions

Topic – Waterskiing – 171 Submissions	Comment / Response in final Draft Plan of Management
<p>139 submissions included a comment that supported the status quo of 7 days a week permitted waterskiing, as listed in the 1998 Plan of Management. Comments included:</p> <ul style="list-style-type: none"> • It is a family sport, operating at Manly Dam since 1947, over many generations, that brings the community together • Limited options elsewhere, especially close to disability facilities • There have been very few incidents or safety issues raised • Other water users have many other places to go & 60% of the lake to use when skiing is occurring. Waterskiers only use 40% of lake • It is already hard to find a water ski session under 7 days a week, especially for casual users. Requests for transparent and fairer booking system. • The weekend is the busiest ski time, so removing any part of Sunday would drastically affect the part of the week most used by water ski club members • Some commented that the Draft Plan has inaccurate information on “nearest” equivalent locations for waterskiing, member numbers & objected to the term “form letters” to describe “status quo” on skiing submissions to Issues & Discussion Paper • Many said that all could safely co-exist, with improved signs to communicate safety & access, for example, an authorised corridor • Suggestions that waterskiing has environmental benefits such as reducing algae by circulating water • Noise not the problem it used to be with modern motors & decibel laws • Used by many locals in the area • Current times & situation works well. “If it ain’t broke don’t fix it” • Requested annual reviews to adjust access to current & future water users. 	<ul style="list-style-type: none"> • “Potential use of Council’s booking system” added to Agreement with Manly Warringah Water Ski Club & to start within 1 year of “start of Plan” changed to “adoption by Council”. Increased equity for all users and transparency for bookings in future agreement with the Club. (Action W8) • Action added to investigate corridor to allow safer passage past skiing area for other water users (Action W19) • Timetable to start operating date added – 1 July 2014 & New annual licence with Manly Warringah Water Ski Club - “or specified alternative arrangements in place” removed (Waterbody Measures & Outcomes) • Reference to waterskiing being a “family” sport (Section 3) • Information included on other skiing locations & skiing figures (Section 3) • Term “form letters” removed to describe previous submissions (Sections 2 & 3) • Waterbody usage will be regularly monitored & assessed. (Action W4 & Waterbody Measures & Outcomes)
<p>22 submissions included a comment supporting the change to waterskiing from 7 to 4 days a week. Comments included:</p> <ul style="list-style-type: none"> • Waterskiing had a place at Manly Dam, albeit at reduced days from 7 to 4 days a 	<ul style="list-style-type: none"> • Action added to investigate corridor to allow safer passage past skiing area for other water users (Action W19)

<p>week</p> <ul style="list-style-type: none"> Reduced days will assist in safely sharing the whole lake with other water users including kayakers, paddleboarders, windsurfers & long distance swimmers 	
<p>10 submissions included a comment for total removal of water skiing. Comments included:</p> <ul style="list-style-type: none"> Inappropriate for the peace & tranquillity of the area, being noisy to other visitors Damaging to the environment from erosion & disruption to nesting water birds Unsafe for other concurrent use with other water users 	<ul style="list-style-type: none"> New annual licence with Manly Warringah Water Ski Club to address fair allocation to all waterskiiers (Action W7-10)
Topic – Mountain Bike Tracks – 33 Submissions	Comment / Response in final Draft Plan of Management
<p>14 submissions included a comment generally supporting the proposals in the draft Plan of Management. Comments included:</p> <ul style="list-style-type: none"> Authorised tracks required to link Aquatic Reserve/Sydney Water pipeline Support for Bantry Reserve entry upgrades & reroutes away from Duffys Forest Endangered Ecological Community Include more “black” sections with challenging/technical features Do not excessively widen tracks or remove difficult/challenging sections Extend/create more tracks to cater for increasingly popular sport Support to not permit night riding, though some calls for night riding A mix supporting & against the “shared use” of tracks with walkers Bike riders have a preference for narrower tracks. 	<ul style="list-style-type: none"> Upgrade & reroute sections of track to improve safety & the environment in Plan. Some upgrades may include technical features (Actions TT6-TT25) Night mountain bike riding will not generally be permitted in the Park (Action TT17) To consider, if appropriate, shared-use tracks along all bike tracks (Actions TT6-13) <p>Other than links & reroutes proposed to improve the environment & safety, no “extensions” to bike tracks within the Park are considered in this Plan of Management</p>
<p>14 submissions included a comment generally opposing “new” or “extensions” to bike track or called for limits to bike numbers. Comments included:</p> <ul style="list-style-type: none"> o new tracks for mountain bikes, as this continues to fragment fragile bushland Concerns that increasing tracks & numbers of mountain bikes & spreading weeds & pathogens, impacting on erosion/sedimentation & fauna numbers, especially threatened species like the climbing galaxias, red-crowned toadlet & spotted-tailed quoll. Funds should be redirected towards restoring degraded bush or bike paths on roads Mountain biking on unauthorised tracks seen as “confronting” Limit mountain bikes to fire trails, reduce bike number or create “licence” to regulate numbers A mix supporting & against the “shared use” of tracks Preference for narrow tracks. Do not make tracks wider for bike riding. Strong support to develop “code of conduct” with signage 	<ul style="list-style-type: none"> Other than links & reroutes proposed to improve the environment & safety, no “extensions” to bike tracks within the Park are considered in this Plan of Management Upgrade & reroute proposals seek to address concerns of increased numbers of mountain bikes spreading weeds & pathogens, impacting on erosion / sedimentation & fauna numbers. Upgrades aim to increase track sustainability. <p>Development of “Biking Code of Conduct” supported. (Actions TT6-TT25)</p> <ul style="list-style-type: none"> Bikes will be allowed on permitted tracks, specified in this Plan of Management. (Action TT1) In general, bike tracks will aim to be as narrow as safely possible to minimise environmental impact

<p>5 submissions included a comment on mountain biking in specific locations around the Park with concerns on excessive noise, speed or erosion, but did not indicate general support for, or against, mountain bike proposals in the draft Plan of Management. Comments included:</p> <ul style="list-style-type: none"> • Request to limit Cootamundra Drive reroute proposal to, lessen the impact on the environment • Riders creating noise in a number of locations around the bike track • Concerns generally about speed of riders, including Nyrang Road • General concerns on erosion with calls to maintain tracks in general 	<ul style="list-style-type: none"> • Amendment made to final Plan of Management to limit the reroute at Cootamundra Drive. Focus on safety concern at playground area (Action TT12) • Some reroutes, signs and “biking code of conduct” in draft Plan of Management aim to address issues of noise, speed and erosion in many of the proposed locations. (Actions TT6-TT25) • Night mountain bike riding will not generally be permitted in the Park (Action TT17)
Topic – Walking Tracks – 22 Submissions	Comment / Response in final Draft Plan of Management
<p>22 submissions included a comment on walking tracks. Generally supportive of the Plan of Management, especially the shared use of mountain bike tracks. Comments included:</p> <ul style="list-style-type: none"> • Majority support for the shared use of mountain bike tracks to allow walking, however some preferred separate tracks. • Tracks to be as natural and as narrow as possible • Some opposed any new tracks of any kind • Some submissions were against the proposal for a new track between Picnic areas (Section 2 to Sections 3 and 4), especially a wide, hard surfaced path. Some were for this path & removing walkers off the road, for safety reasons, especially for prams. • A number of comments against the proposed walking track between Curl Curl Track and Evas Track • Concern with erosion on fire trails 	<ul style="list-style-type: none"> • To consider, if appropriate, shared-use tracks along all bike tracks (Actions TT6-13) • In general, walking tracks will aim to be as narrow as safely possible to minimise environmental impact • Retain the proposal to link picnic areas 2 to 3 & 4, as a high priority safety issue. Size & materials to be determined. Community consultation will be conducted (Action DU10) • Proposal for link track between Evas and Curl Curl track to remain, but priority reduced to “low”. (Action TT5) • “Erosion” added to management issues for Fire Trails (FM4)
Topic – Traffic & Parking – 18 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> • That the King Street entry proposal is too engineered and incompatible with the natural setting. Suggestions that an alternate location at corner of King & Arana Street or further within the Park is more suitable. Some support for the current proposal. • Concerns that mountain bikes were occupying spaces used for school drop-offs and pick-ups at Manly Vale Public School. More parking spaces should be provided around the mountain bike track • Concerns raised about the proposed pay and display parking. • Objection to deterring roadside parking at Wakehurst Parkway 	<ul style="list-style-type: none"> • King Street entry proposal to remain, as it is a high priority safety issue. Alternate locations will be considered & assessed. Community consultation will be conducted. (Action A2) • Development of a “Biking Code of Conduct” supported by the Plan, may address parking near school issue. Promotion of alternate parking near track & ongoing liaison with riders may also address this issue. (Actions TT6-TT25 and I1-3) • Pay and display at the Park was previously resolved by Council 28 August 2013. Manly and Warringah residential parking permits allows free parking.(Action DU6)

<ul style="list-style-type: none"> Suggestion to liaise with Roads and Maritime Service (RMS) regarding fauna and pedestrian management along Wakehurst Parkway 	<ul style="list-style-type: none"> “manage (if safe to do so)” added to widen traffic management options (Action A7) “safer access, fauna movements” added to include in Liaison with RMS (Action OA2)
Topic – Biodiversity – 15 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> Confirm in the Plan of Management the Park’s Wildlife Protection Area status Support for the proposed “core fauna habitat and refuge area”, with calls to extend this to the whole Park General support for ongoing bushland regeneration and feral animal control Funding should be directed from new track to restoring degraded areas Clarification requested on “consolidate bushland edges” – Action V5 Liaise with other agencies to minimise impact on environment (and recreation) from low water levels above and below dam wall No mention of “Friends of the Bush” or environmental groups on proposed mountain bike tracks and upgrades, to reduce impact on surrounding bushland 	<ul style="list-style-type: none"> Details on Park’s current status as a Wildlife Protection Area added to “Park Values and Current Uses” and “Continue the Park as a Wildlife Protection Area” added as an action (Section 3.3.1 & Action WP5) Confirm Plan’s intention to keep “core fauna habitat and refuge area”. No plans to extend this area in this Plan. (Action WP5) Bush regeneration and feral animal control to continue (Actions WP1-6) Some track upgrade proposals in draft Plan of Management aim to address erosion, weed control and long-term impact on bushland. (Actions TT6-TT25) Change of wording to “Consolidate... vegetation “edges” by revegetating...” (Action V5) Addition of “water level” to management actions with other agencies (Action OA1) Addition of “bush walkers and environmental groups” to groups to liaise with on track management issues (Action TT9) Addition of “Continue Friends of the Bush” to action to establish “Friends of the Park” (Action C11)
Topic – Land Use Planning – 9 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> That Aquatic Reserve, should be part of the Plan of Management, as it forms the headwater/top of the Manly Dam catchment and contains important natural areas Support to include other parcels of land into the Park’s management Support for creating wildlife corridors linking other reserves to the Park 	<ul style="list-style-type: none"> An explanation on how natural areas are protected and how Aquatic reserve will be managed in other Plans of Management has been added to Section 1.2 - Land to Which this Plan Applies Habitat corridors and including other parcels of land into the Park’s management are supported (Actions BL1 & 2, T1-11)

Topic – Commercial Activities – 6 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> • Opposition to increased commercialisation and exclusive use of Park areas. 	<ul style="list-style-type: none"> • The Plan of Management allows Council to investigate revenue generation options, that are in keeping within the Park's Values (Actions R1 – 7)
Topic – Dogs in the Park – 5 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> • Dogs should not be permitted in any part of the Park, as owners release dogs off lead as soon as they are out of view. • Dogs are often off the lead. Keeping dogs on lead should be patrolled & enforced. 	<ul style="list-style-type: none"> • Dogs will be allowed on lead on bush tracks, but restricted in other areas, including not allowed in picnic areas. (Actions WP7 - 8 & I1 - 2)
Topic – Landscaping – 5 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> • Consultation to occur before landscaping works • New seats around lake and water filling stations around the track 	<ul style="list-style-type: none"> • Consultation and requested works can be actioned in this Plan (Actions L4-5)
Topic – Other General Comments – 14 Submissions	Comment / Response in final Draft Plan of Management
<p>Comments included:</p> <ul style="list-style-type: none"> • The War Memorial in Section 1 should be relocated to a more secluded area. Current Memorial interferes with the most visual/photographed part of the Park. Any future War Memorials must consult with community before installation – 3 submissions • Expressions of general enjoyment of visiting the Park – 2 submissions • Changing the name of Manly Dam to “Manly Lake” or “reservoir” – 2 submissions • Increase promotion of the Park's history – 2 submissions • Request for playground upgrade – 1 submission • Allow horses on tracks – 1 submission • Allow model planes on the lake – 1 submission • Bush fire concerns – 1 submission • Request to review Water Quality Management Plan – 1 submission 	<ul style="list-style-type: none"> • This Plan does not proposed to relocate the War Memorial, however, no additional memorials, other than those already approved, will be established within Picnic Area 1. (Action WM2) • The formal name for the Park is Manly Warringah War Memorial Park. The term Manly Dam is used as a comment term. No other name changes are considered in this Plan • Playground upgrades are allowed for in this Plan, if within existing footprint (Action DU12) • Horses will generally not be permitted on tracks (Action WP9) • Models planes will generally not be permitted in the Park • Bush fire concerns are addressed (Actions FM1-5) • Review of Water Quality Management Plan has been included as an action. (Action W22)

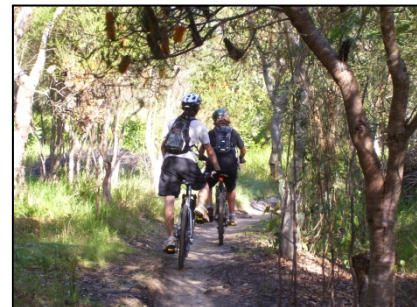
3 Park Description, Values and Use

3.1 Overview

Manly Warringah War Memorial Park is a large bushland reserve within a predominantly urban landscape. The bushland supports a variety of vegetation communities and provides habitat for a range of native fauna. There are a number of vegetation communities, plant species and fauna species found within the Park that warrant protection due to their conservation status. The large size of the reserve and its connections with other remnant bushland reserves provide an opportunity for protection of these significant flora and fauna species and the area's extensive bushland.



The natural environment of the Park also provides an opportunity for recreation within a natural bushland setting. Many activities are undertaken within this setting – such as mountain bike riding, walking and dog walking – catered for by an extensive track and trail network. The bushland also provides an opportunity for a range of environmental education activities.



Located within this natural bushland setting is a sheltered, deep and freshwater dam. The role of the dam is varied: it is a flood mitigation tool for properties around Manly Lagoon; the water is used as a bulk water supply for Manly Hydraulics Laboratory and Water Research Laboratory, as well as for irrigation of Wakehurst Golf Course; the dam is an educational tool for schools and universities; and notably it is used by a variety of recreational pursuits such as waterskiing, fishing, kayaking, swimming and boating, among others.



The Park features an elongated day use area along the dam's south-western margin, and accessed via the main (King Street) entrance to the Park. This area receives high



levels of use by both the local community and visitors from across the region. The four individual picnic areas are accessible to a variety of users, and can be booked for large and small groups. The picnic areas' low key, bushland setting, is a much valued resource. The Park's perimeter provides many opportunities to access the Park and provides its own recreational experiences with the provision of trails and a playground. The Wakehurst Golf Course and Wakehurst Couvret Tennis Courts are also located along the edge of the Park. These are two valuable recreational facilities.



Figure 4 provides an overview of the Park, its layout, and main features.

This Section of the Plan of Management provides information about the Park, its values, condition and use. The information has been used to inform the Management Actions identified later in the Plan.

3.1.1 Regional Bushland Reserve Context

Manly Warringah War Memorial Park is the largest single area of bushland managed by a local council in Sydney's northern beaches. It is a valuable natural area for the protection of native flora and fauna. Linkages to other reserves (both Council managed and National Parks) through bushland corridors, provides an important genetic exchange and contributes to a more sustainable biodiversity for the wider region.

The Park caters for a number of activities that are not considered appropriate in the nearby National Parks, such as waterskiing, dog exercising, golf and tennis. Although visitor use of the main picnic areas at Manly Warringah War Memorial Park is high, the facilities provided reflect the low key, natural setting of the area. Wood fire barbeques are provided and there is a sense of being "in nature" that is not provided at many of the other highly frequented reserves within the region (many of which may have more developed picnic areas, and kiosks or restaurants).

Manly Warringah War Memorial Park plays an important role in the provision of open space within the region. Its role in the region is unique and its attributes are highly valued by the community and visitors to the Park. Table 4 provides a summary of other large bushland reserves within the region which also feature waterways. A comparison with Manly Warringah War Memorial Park is also provided.

3.2 Park Values and Current Uses

This section of the Plan of Management provides an overview of the Park's values, assets and condition and a description of the current uses of the Park.

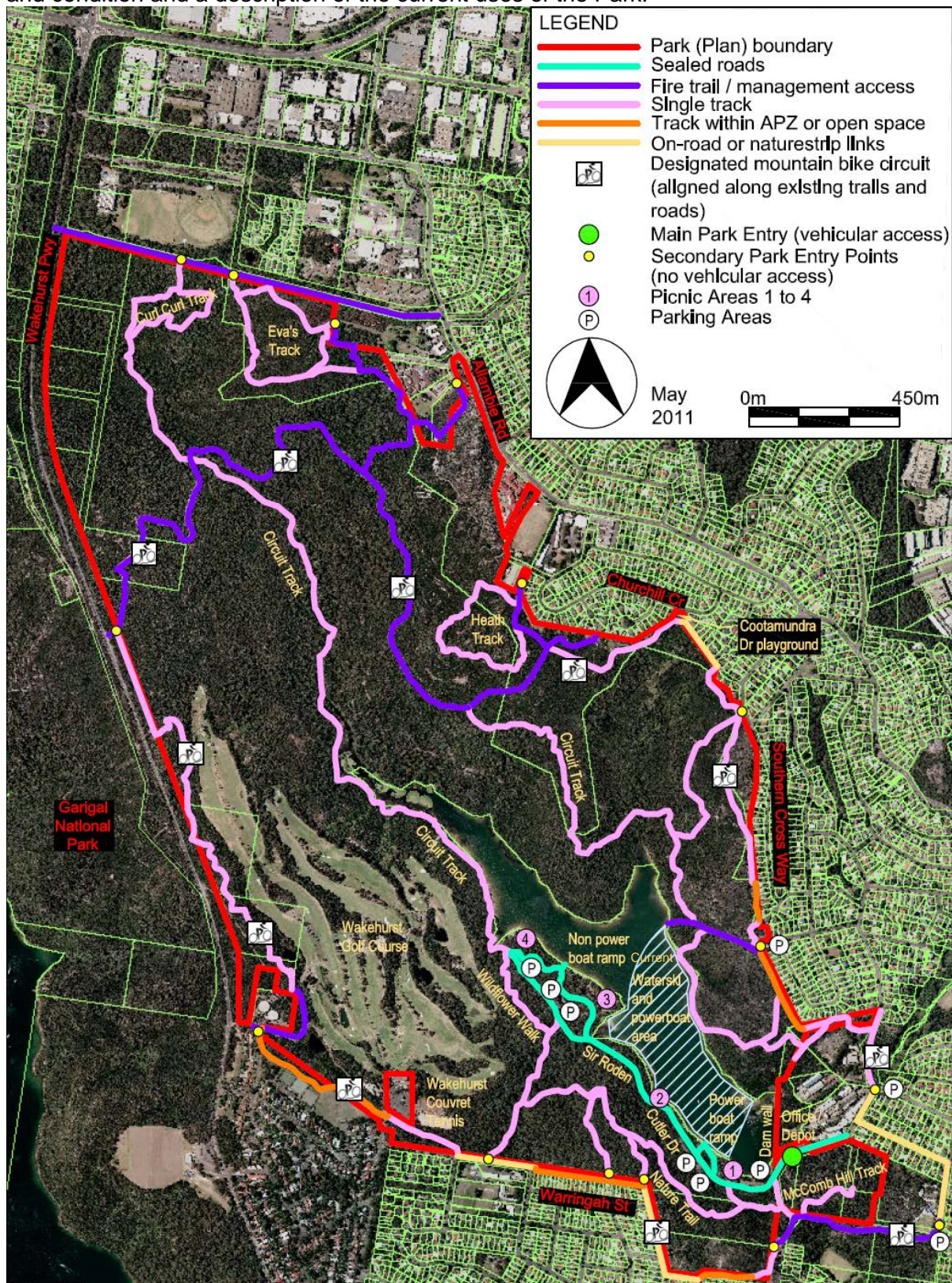


Figure 4 Park overview

Table 4 Comparison With Other Bushland Reserves in the Region

Park	Approx. Size	Main Features
Ku-ring-gai Chase National Park	14,977 ha	<ul style="list-style-type: none"> ▪ Highly visited park with visitors from Sydney, interstate as well as overseas. ▪ Focus of park is nature conservation with recreational opportunities provided in a natural setting. ▪ Visitor centre, information centres, ranger walks, landscaped picnic areas, developed camping areas, walking tracks, shops, boat ramps, marinas, and restaurants/kiosks.
Garigal National Park	2,202 ha	<ul style="list-style-type: none"> ▪ Visitors to park are mainly from the northern beaches and north shore of Sydney. ▪ Focus of park is nature conservation with recreational opportunities provided in a natural setting. ▪ High usage landscaped/developed picnic areas, swimming enclosure, boat ramp, and walking tracks.
Sydney Harbour National Park	392 ha	<ul style="list-style-type: none"> ▪ Highly visited park with visitors from Sydney, interstate and overseas. ▪ Focus of park is nature and heritage conservation as well as public recreation on the harbour and foreshore. ▪ Highly developed settings - including accommodation and conference facilities, cafes/kiosks, regular guided tours, developed picnic areas and walking tracks.
Lane Cove National Park	635 ha	<ul style="list-style-type: none"> ▪ High visitor numbers, mostly from Sydney's north shore. ▪ Focus of park is picnicking and social gatherings, river and bushwalks. ▪ Well developed/landscaped riverside picnic areas, commercial caravan park and camping area, walking tracks, shop, kiosk, boat hire and river boat cruises.
Narrabeen Lagoon and Foreshore Reserves	390 ha (excluding Cromer Golf Course & Narrabeen Sport and Recreation Centre)	<ul style="list-style-type: none"> ▪ Visitors mostly from northern beaches and north shore. ▪ Focus of area is water-based and foreshore recreation, picnicking and social gatherings, and environmental education. ▪ Caravan park, Coastal Environment Centre, NSW Academy of Sport and Recreation Centre, Cromer Golf Course, developed/managed walking tracks and paths, and informal waling routes.
Manly Warringah War Memorial Park	376 ha	<ul style="list-style-type: none"> ▪ Visitors mostly from Warringah and northern beaches. ▪ Focus of park is social gatherings, water sports, bushland recreation and golf/tennis. ▪ Low-key bushland setting picnic areas, walking tracks and mountain bike circuit, water ski area with ski jump, and Wakehurst Golf Course and commercial tennis courts.

3.3 Natural Heritage Values

3.3.1 Native flora, vegetation communities and habitats

The Park is predominantly a bushland reserve, dominated by Hawkesbury Sandstone vegetation, with six native vegetation communities plus areas of highly disturbed vegetation. It is considered a floristically rich area, for an urban bushland reserve, with over 300 native plant species recorded (including 18 different native orchids). The vegetation communities present in the Park are shown on Figure 5 and their conservation status summarised in Table 4 and discussed below.

Table 4 Vegetation Communities of Manly Warringah War Memorial Park and Their

3.4 Conservation Status

Vegetation Community	Occurrence within MWWMP	Legislative Status (TSC Act 1995 listings)	Conservation Status in Warringah [^]		Warringah Conservation Priority*
			% of 1750 extent now remaining	Total % of 1750 extent now reserved (% in OEH national parks) [% in other reserves]	
Sydney Sandstone Ridgetop Woodland (Bloodwood-Scribbly Gum Woodland)	Extensive	Not listed	64.1	47.5 (41.7) [5.7]	3
Coastal Sandstone Heath	Extensive	Not listed	68.0	46.9 (38.4) [8.6]	3
Sydney Sandstone Gully Forest (Peppermint-Angophora Forest)	Common	Not listed	68.7	58.7 (53.0) [5.8]	3
Duffys Forest (Silvertop Ash-Brown Stringybark Forest)	Limited, 3 sites and 1 area	Endangered Ecological Community	16.0 [#]	10.5 (8.0) [2.5] [#]	1
Coastal Sandstone Swamp	Single site	Not listed (but likely to be listed in future, refer text re Scientific Committee preliminary determination)	68.0	41.1 (35.1) [5.9]	2
Artificial Wetland (derived vegetation community, analogous to naturally occurring Coastal Freshwater Lagoon Swamp) – FW	Restricted	Not listed due to being a derived community (but Coastal Freshwater Lagoon Swamp is an Endangered Ecological Community)	N/A	N/A	1
Highly disturbed vegetation	Common	Not listed	N/A	N/A	N/A

[^] source : P & J Smith Ecological Consultants, *Warringah Natural Area Survey: Vegetation History and Wildlife Corridors*, 2005

- A figure of 15% of the pre-1750 area of a vegetation community has been adopted by the Commonwealth and NSW Governments as a benchmark for the minimum proportion of a vegetation community that should be set aside in reserves

* source: P & J Smith Ecological Consultants, *Warringah Natural Area Survey: Vegetation Communities and Plant Species*, 2005

- Priority 1 areas are endangered ecological communities, listed under the TSC Act, 1995, or represent potentially important habitat.
- Priority 2 conservation areas are considered important for the conservation of biodiversity at the local level.
- Priority 3 vegetation communities are considered well represented and common in Warringah.

[#]source: P & J Smith Ecological Consultants, *Survey of Duffys Forest Vegetation Community*, 2000

OEH (Office of Environment and Heritage) formerly the Department of Environment, Climate Change and Water

Sydney Sandstone Ridgetop Woodland (Bloodwood-Scribbly Gum Woodland) and Coastal Sandstone Heath are the most widespread vegetation communities within the Park. Sydney Sandstone Gully Forest (Peppermint-Angophora Forest) occurs mostly along the valleys and creeklines within the Park. These three vegetation communities are well represented throughout Warringah.



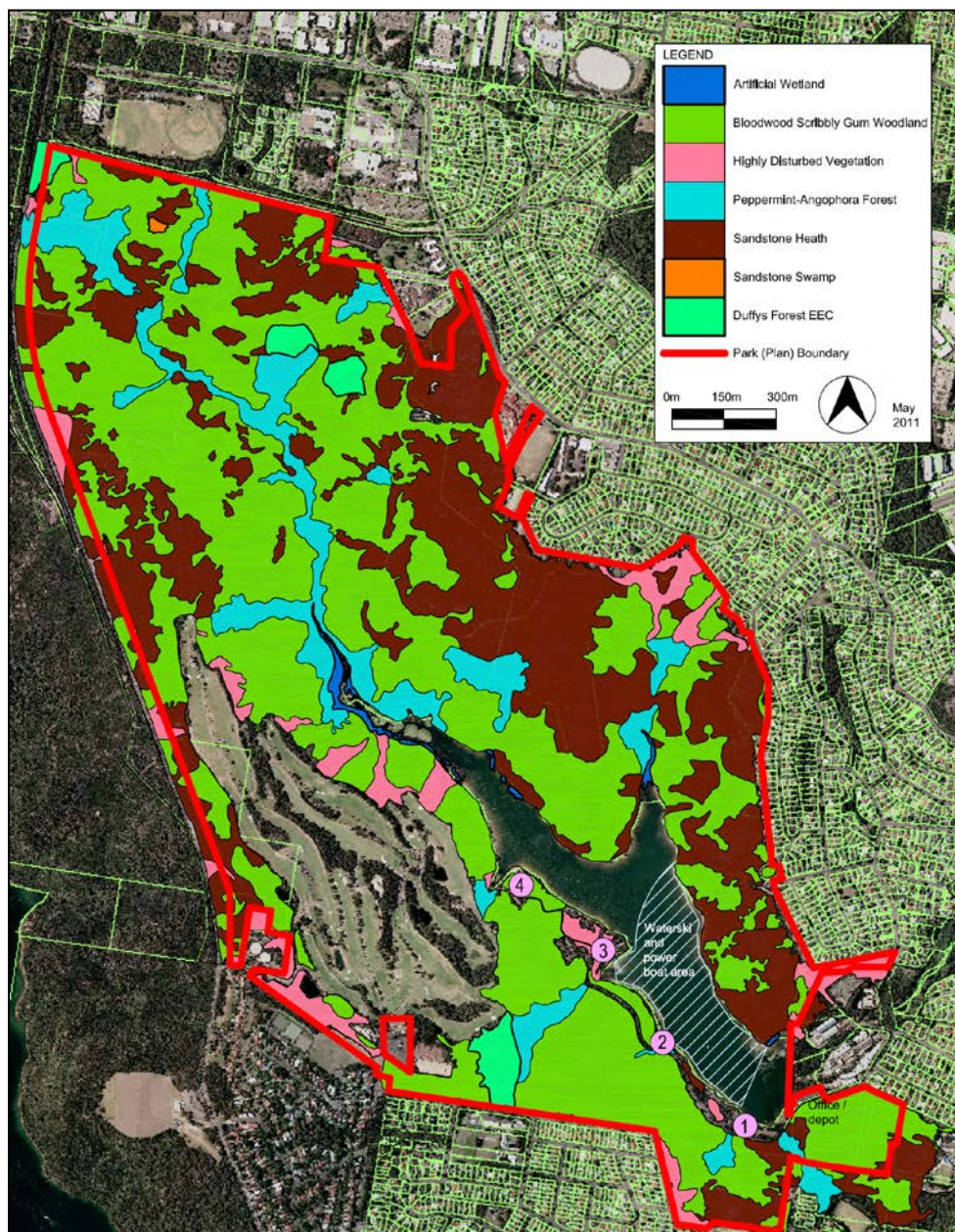


Figure 5 Vegetation communities

Duffys Forest (Silvertop Ash-Brown Stringybark Forest) is listed as an Endangered Ecological Community under the *Threatened Species Conservation Act 1995 (TSC Act)* and is present within the Park.

A single area of Coastal Sandstone Swamp is located in the Park's north. This vegetation type is not, at present, listed under the *TSC Act* however it is considered to be rare in Warringah and is therefore of local conservation significance. The NSW Scientific



Committee (established by the *TSC Act*) has made a preliminary determination to list “Coastal Upland Swamp” in the Sydney Basin Bioregion as an Endangered Ecological Community under the *TSC Act* and this may increase the conservation status of the Park’s Coastal Sandstone Swamp.



A human created vegetation community classified as “artificial wetland” and resembling vegetation found in the naturally occurring Coastal Freshwater Lagoon Swamp community is found in the upper reaches of the dam. Whilst the naturally occurring community is listed under the *TSC Act*, the human created vegetation community is not. It’s similarity to an endangered ecological community however makes it of local significance.

Three threatened plant species, listed under the *TSC Act*, have also been recorded in the Park. Seaforth Mintbush, *Prostanthera marifolia* – an erect, straggly, openly branched shrub



Tetratheca glandulosa (Photo: DEC)

up to 300 millimetres high – has been recorded from three locations within the Park, however its full extent and distribution within the area is not well known. Seaforth Mintbush is considered critically endangered in NSW. *Tetratheca glandulosa* – a small, spreading shrub growing 20-50 centimetres in height often with entwining stems – has been recorded from the picnic areas. It is classed as vulnerable both in NSW and nationally. *Pimelea curviflora* var *curviflora* – a small, erect shrub growing 30-50 centimetres in height - has

also been recorded from the picnic areas. It is classed as a vulnerable species.

Angus’s Onion Orchid, *Microtis angusii* – a terrestrial orchid classed as endangered both in NSW and nationally – was previously thought to have occurred on the Park however this is now unconfirmed.

Angophora crassifolia – a small tree growing to 15 metres high – is also recorded in the Park and has been classified as a rare Australian plant according to the Rare and Threatened Australian Plants list developed by the CSIRO. However this listing has no legal standing.

The large expanse of native vegetation, variety of vegetation communities and varied landscape within the Park provide a variety of habitat conditions for native fauna. Habitat degradation, especially by weed invasion and disturbance, and both feral and domestic animals impact the Park’s native fauna values.

Community consultation has consistently identified the natural environment as one of the most highly valued aspects of the Park. The community particularly appreciates the diversity of flora and fauna found within the Park (both common and rare or endangered species), the large and unfragmented character of the bushland (extending from valley to ridgetop), and the bushland’s “high quality” (as generally weed-free vegetation) and habitat values. The usage and aesthetic benefits of such a large and accessible expanse of the natural environment in an urban setting are also highly valued – notably the area’s “peace and

quiet”, its scenic qualities, and as a place offering a physical, visual and recreational respite from urban living.

3.4.1 Native fauna

The Park’s bushland, waterbody and foreshores provide habitats for a variety of native fauna – including mammals, birds, reptiles, amphibians and fish. However the diversity and abundance of native mammals in the Park is lower than recorded for surrounding national parks – due most likely to its size, “edge effects” and isolation.

Mammals commonly recorded within the Park include the Brushtailed Possum, Ringtail Possum, Brown Antechinus, Bush Rat, Long-nosed Bandicoot and Short-beaked Echidna – however the nocturnal habits of many mammal species means they are less frequently seen by visitors. Reptiles are more readily observed, with common species including the Eastern Blue-tongued Lizard and Eastern Water Dragon. Lace Monitors, Southern Leaf-tailed Geckos, Diamond Pythons and Red-bellied Black Snakes also occur in the Park. Eastern Long-necked Turtles occur in the dam waterbody and larger watercourses. Common Eastern Froglets, Eastern Dwarf Tree Frogs and Eastern Banjo Frogs are also common. Australian Bass are found in both fresh and saltwater and are native to the Manly Dam area, while the dam was also stocked with Silver Perch in the past and this species is believed to still occur in small numbers.



Over 80 species of birds have been recorded in the Park, both waterbirds and terrestrial species (as well as migrant and vagrant species). The Park’s avifauna includes many increasingly rare species in urban bushland areas, such as wrens and thornbills.

Threatened fauna species recorded from the Park include four terrestrial species – Rosenberg's Goanna (or Heath Monitor), the Red-crowned Toadlet and single sightings of the Koala and the Spotted-tailed Quoll – as well as two mobile threatened fauna species have also been sighted in the Park – the Grey-headed Flying-fox and Eastern Bent-wing Bat. All four resident species are considered vulnerable (*TSC Act* listed). The Powerful Owl is regularly sighted within the Park. The Climbing Galaxias (the most northerly population of this small, 150-170 millimetres long, “climbing” species in Australia) is an uncommon species of interest also present on the Park.



The opportunities provided by the Park to see native wildlife, were identified as valuable by many respondents in the community consultation process.

Due to the Park’s diversity and populations of native wildlife, the area has been declared a Wildlife Protection Area, in accordance with the Companion Animals Act 1998.

3.4.2 Weeds, pests and introduced animals

The condition of the Park's bushland is generally good, however at least 100 weed species are known to be present within the area. The Park continues to be impacted by weeds due to regular and on-going human disturbance – particularly around its edges, down creeklines, and along tracks and roads. Aquatic weeds can be a particular problem. Bush regenerators, both volunteer and professionals, rehabilitate the bushland on a regular basis to address areas degraded by weeds and other site disturbances.

A bushland rehabilitation programme was prepared for the Park in 2005 – *Bushland Rehabilitation Program for Manly Warringah War Memorial Park*. It provides an operational plan for the rehabilitation of bushland within the Park over 10 years, until 2015. The broad aims of the plan, as identified within the report, are to:

- improve bushland condition and diversity;
- manage bushland within the broader catchments;
- minimise the risk of spread and impact of *Phytophthora cinnamomi* die back; and
- integrate fire and bushland management within the Park, with consideration of weeds.

The programme identifies “management areas” within the Park as well as a prioritised work programme. A propagation nursery has been established at the Park, in the King Street depot, to supply bush regeneration volunteers (“Friends of the Bush”) with local native plant species required for regeneration works within the Park, and the wider Warringah local government area.

Reports from Park neighbours suggest that rabbits have become an increasing problem within the Park in recent years, and are now regularly seen grazing in the cleared grass margins along the Park's urban edges. Dogs, which are allowed on leash along the tracks and trails within the Park's bushland areas, can disturb wildlife – both directly and indirectly. Foxes exert continuing predation pressures on the Park's fauna. As the Park is a Declared Wildlife Protection Area, cats are prohibited from the Park, and are also prohibited from living within some of the adjoining recent residential developments (through covenants). However feral and domestic cats are a continuing problem on the Park. Feral fish and introduced ducks occur in and around the dam waterbody.

Myrtle rust – a newly described fungus that which affects plants in *Myrtaceae* family (including Australian natives such as bottle brush, tea tree and eucalypts) – has recently been discovered nearby in the Burnt Bridge Creek Catchment and may become a threat to the Park in the future.

3.4.3 Fire Management

Council has legal obligations under the *NSW Rural Fires Act 1997* and *Warringah Pittwater Bush Fire Risk Management Plan* to manage bush fire risk on its own land. As the Park's manager, Council has a responsibility to “protect persons and property” immediately adjacent to the Park from hazards – notably wildfires – originating in the Park. Council also seeks to ensure that its management of the area does not detract from surrounding residents' “quiet enjoyment” of their properties. Conversely having a large natural area

adjacent to their property provides an attractive outlook and is considered by many residents as enhancing their quality of life, as well as improving the monetary value of their property.

The primary risk to Park neighbours is uncontrolled wildfires, with past bush fire incidents requiring evacuation of the retirement homes and other areas along the Park's east side. This area is particularly susceptible to wildfire impacts due to its elevated west-facing position above a bushland slope.

An analysis of fire history data was carried out as part of the Park's 2006 *Fire Regime Management Plan* (refer below). This analysis showed that 76% of the Park had been burnt since 1952, "with the major source of fire emanating from the adjacent Garigal National Park".

The *Manly Warringah War Memorial Park Fire Regime Management Plan* was prepared in 2006 to guide fire management within the Park. This Plan includes – fire management zones, fuel management techniques, measures to protect the infrastructure within the Park, and strategies to protect life and property within or immediately adjacent to the Park. The Plan also provides recommendations in relation to fire trails and a schedule of "hazard reduction" burns up to 2016. The Plan provides a guide only for fire management, as environmental conditions and other events may subsequently delay/prevent or modify the proposed schedule of works. Council Officers are required to undertake appropriate environmental assessments for both clearing and burning for fire management purposes.

The *Fire Regime Management Plan* identifies several "Asset Protection Zones" (APZs) along the Park's eastern and southern boundary, supported by a schedule of prescribed "hazard reduction" burns in the adjacent bushland to manage the fire risk along these urban edges. APZs are areas where the fire fuel load is intensively managed – typically by establishing fuel free zones (such as open grassed areas), slashing, raking, bushland management (such as fire resistant/retarding species selection) and burning. The width of these APZs can vary according to slope, bushland types and the type of assets being protected and their distance from vegetated areas. Along the Park's eastern and southern margins APZs are typically managed as open grassed clearings, varying in width from 10 to 30 metres (on average). These clearings are also used for routing parts of the designated mountain bike circuit and other tracks/trails.

3.4.4 Bushland linkages

Bushland linkages, also called "wildlife corridors", provide a means of movement for individual animals and genetic exchange for flora and fauna. The size of the Park, although large, limits the potential for diversity of flora and fauna. Through bushland linkages, inside and outside the Park, the area can be joined to other bushland reserves within the region.

The habitat value of the Park is improved through such links and corridors, as they increase the area of habitat available to native fauna and flora. They also allow fauna to move from the Park to other remnant bushland reserves, notably Garigal National Park. This movement provides an opportunity for the fauna populations within the Park to survive in the longer term.

Bushland linkages are also known to facilitate the movement of animal-borne pollen and seeds. This again, provides an opportunity for flora populations within the Park to survive in

the longer-term, and can result in the recolonisation of areas of former habitat where plant populations may have died out.

Existing and potential wildlife corridors have been identified through Council's 2005 *Natural Area Survey: Vegetation History and Wildlife Corridors*. Both Priority 1 and Priority 2 corridors are linked to Manly Warringah War Memorial Park. These provide linkages to Garigal National Park (and through to Ku-ring-gai National Park) as well as linkages to smaller nearby Council reserves, such as Allenby Park. These links are important in reinforcing the Parks flora, fauna and habitat values.

3.4.5 Landscape Protection

The landscape of Manly Warringah War Memorial Park is valued for a number of reasons. The Park protects a large intact area of bushland over a varied landscape or landform types. The landscape extends from ridgetops to gullies, it includes rocky outcrops and diverse vegetation communities such as woodlands, forests, heaths, swamps and wetlands. As well as providing a diversity of fauna habitats this bushland landscape assists in protecting water quality within the dam and provides a scenic undeveloped or "natural view" from vantage points within and surrounding the Park. The area's undeveloped character and bushland scenery was highly valued by many respondents in the community consultation process.

3.5 Catchment and Water Quality Values

The dam's immediate catchment – within the Park – is predominantly bushland, with Curl Curl Creek and minor drainage lines discharging into the dam. The Park's bushland and largely intact riparian vegetation assists in maintaining water quality in the dam and downstream sections of Manly Creek. The majority of in-flows are largely free of contaminants. However off-site stormwater impacts have been problematic in the past due in part to pollution from light industry and residential development in the upper catchment beyond the Park. These are now more effectively managed and various water quality improvement measures have since been installed on the creeklines feeding the dam, both within the Park and in the surrounding areas.



Two former landfill sites occur within the catchment, on the site of the Wakehurst Golf Course and Aquatic Reserve (the latter outside the ambit of this Plan) with the potential that these sites are discharging leachate and other pollutants into the groundwater and surrounding areas.

A water quality monitoring programme has been in place at the dam since 1986, however the variables assessed have changed over time. Despite this, considerable data has been collected in relation to water quality within the dam.

Given the dam's significant level of recreational use it is important to ensure the waterbody maintains water quality levels consistent with accepted standards for "primary contact" (that is, for direct-contact recreational use). Blue-green algal blooms have been an issue in the waterbody in the past, and at times have closed the area to swimming. Blue-green algal

blooms can result in the discolouration of water, “scums” on top of the water, an unpleasant odour and some blue-green algae can be toxic. The waterbody was monitored as suitable for swimming 100% of the time in 2009-10, with this result now consistent over several years. A two metre diameter submersible propeller is installed on the dam wall to aid water circulation and reduce the severity and frequency of these occurrences. Regular monitoring continues to be carried out for blue-green algae.

The water within the dam is used by surrounding organisations and also managed for flood safety. Such uses include:

- Manly Hydraulics Laboratory (MHL) and Water Research Laboratory (WRL) draw water from the Dam for their operations and experiments;
- Warringah Council discharges water from the Dam to provide 1.7 metres of flood storage to minimise flood impacts on properties downstream along Manly Creek and around Manly Lagoon;
- Sydney Water discharges water from the Dam to manage and protect its infrastructure (the dam wall); and
- Wakehurst Golf Club Limited has a licence to draw irrigation water from the dam.

The dam’s high water quality, which supports its recreational use, as well as the continuing water quality management efforts employed, were seen as an important aspect of the Park during the community consultation process. Council works with organisations holding licences to extract water from the Dam to maintain minimum water levels set by the licence. The dam was also valued as a tool to minimise flood damage to properties around Manly Lagoon.

3.6 Cultural Heritage Values

3.6.1 Aboriginal Cultural Heritage

The Warringah area has long been recognised as being part of the traditional lands of the Guringai people. However more recently this has been contested by claims that the area is located in the traditional lands of the coastal people of the Darug Aboriginal language group. There is evidence of prior occupation of the Park area by Aboriginal people, through the presence of rock paintings, rock engravings and axe-grinding grooves with several recorded Aboriginal heritage sites within the Park. Most known sites are located within the Park’s bushland areas, however several are located within the boundaries of Wakehurst Golf Course. The protection of these sites is valued by the community, and enforced through State Government legislation. The entire Park is rated as Extremely High for possible Aboriginal heritage areas/values, according to Council mapping, and other sites are most likely yet to be located and documented in the less disturbed bushland areas.

The Office of Environment and Heritage (OEH) in the Department of Premier and Cabinet (formerly the Department of Environment, Climate Change and Water or DECCW) has legislative responsibility for Aboriginal sites, through the *National Parks and Wildlife Act 1974*.

Under this Act landholders/managers have obligations regarding the protection and management of known sites on their lands. The Aboriginal Heritage Office, a specialist agency serving several local councils including Warringah, provides expertise and

assistance in the management of Aboriginal sites within the Council's area. The park is within the Metropolitan Local Aboriginal Land Council area.

3.6.2 Historic (non-Aboriginal) heritage

A dam wall was first constructed across Curl Curl Creek in 1892 by Manly Municipal Council to supply drinking water to the local settlement. The then Metropolitan Board of Water Supply and Sewerage took over management of the dam in 1902 and the dam wall was raised three times in the subsequent decades – in 1909 and 1914, and again in 1922 when it reached its present height. Drinking water was supplied from the dam until 1936, and was reinstated briefly in 1942 when Sydney's water supply was threatened due to a long-running drought. The use of the waterway as local water supply is an important aspect of the area's non-Aboriginal history and heritage.



The dam wall is listed on the State Heritage Register, however it is outside the boundary of the Park and its management remains the responsibility of Sydney Water.

Two historic survey markers, of local interest, and dating back to the mid 1850s are situated in bushland adjacent the Wakehurst Golf Course (adjacent to The Trig Track).

3.6.3 War memorial and commemorations

Manly Dam was established as a War Memorial Park after World War I. A committee of ex-servicemen were given the responsibility of managing the bushland catchment of Manly Dam around 1920. The Manly Warringah War Memorial Park holds particular significance in remembering fallen service personnel from the First and Second World Wars, as well as being of significance to past and present day members of the Defence forces.

The Manly Warringah War Memorial Park Remembrance Trust was established in 1995 to oversee the planning, construction and management of the memorial and special services at the site.

There has been a growing interest in Anzac Day and Remembrance Day services in recent years. As provided for in the 1998 Plan of Management, a war memorial, sculptures and flagpole are located in Picnic Area 1 – the more intensively developed and landscaped of the Park's picnic areas. These are the focus of events on these special days each year. In 1995 the area was re-dedicated to the memory of service personnel as part of the "Australia Remembers" celebrations.



The venue is valued by the community for these memorial services, and the peaceful nature of the Park that adds to its commemorative roles.

3.7 Visitor Use, Recreation and Enjoyment

3.7.1 Access

The easy accessibility of the Park – both the area itself and the waterbody within it – is highly valued by the community. Many users of the Park live in close proximity to the area, often within riding or walking distance and use the area in early mornings and of an evening. Although not an inherent value of the Park, it is a large part of its appeal and results in high levels of use and appreciation by local residents. Community consultation has identified a strong desire for the Park's high accessibility to be maintained.

The 2008 *Warringah Recreation Needs Assessment* found that 39% of residents surveyed had used or visited Manly Dam at least once in the 12 month period prior to August 2008. Manly Warringah War Memorial Park was the third most accessed facility, behind Narrabeen Lagoon (57%) and the Warringah Aquatic Centre (44%). Results also indicated that 76% of those residents rated the overall quality of the facilities they had used as being in good condition, 22% rated them as average condition and no one thought facilities they had used were in poor condition (although 2% were uncertain).

The Park is also an important destination and valued outing for many special user groups such as the elderly and people with a disability. Many of these groups such as the Sunnyfield Association, the Cerebral Palsy Alliance and a variety of retirement homes are located along the north-eastern boundary of the Park and are very regular users (notably on a weekday). Some user groups simply drive through the Park to enjoy the view, while others use the picnic areas and associated facilities. Easy access to these areas is important to these user groups.

There are currently four parking areas within the Park, all are sealed, two servicing Picnic Area 1 and one each for Picnic Areas 3 and 4. At peak times (weekends and public holidays, in particular Christmas Day, Boxing Day, Mother's Day, Father's Day and Easter) all parking bays may be occupied, and access to the Park by vehicle is then managed by the Park's Ranger staff. There are at present four disability parking bays available within the picnicking zone, however these are usually taken up very quickly.



Peak use periods, when the Park's car parking capacity is full or exceeded, can also cause congestion and safety issues at the main Park entrance off King Street – as there is no turn around bay at this point and access along King Street is narrow, making it difficult for vehicles (particularly buses) to turn around.

An accessible pathway was recently established inside the Park's main King Street entry, however pedestrian access to the Park entrance along King Street is hazardous due to the narrow width and absence of a footpath. Once inside the Park people moving between the picnic areas are forced to walk along the roadway between Picnic Areas 2, 3 and 4 due to the absence of an off road track or pathway.

The King Street entry and picnic areas are closed, to vehicles, at night with closing/opening times varying throughout the year.

In addition to the main King Street entry, the Park is also accessible from many points on the surrounding road network and adjoining open space areas – as shown in Figure 4. However only one of these access points, at the end of Nyrang Road, has additional car parking (beyond on-street parking). None of these secondary access points have additional park entry/orientation signage.

There is a large informal lay-by – on Roads and Maritime Services land beside Wakehurst Parkway – on the Park's north-west boundary which is heavily used as a carparking and access point by mountain bikers. There are also two northern entry points to the Park's walking track network from Aquatic Reserve – under and over the water main – however these appear little used. The Park's secondary perimeter access points are not formally closed after-hours.

3.7.2 Tracks and trails

The Park's fire trails, and an extensive network of narrower tracks and trails, provide for recreational use of the bushland setting. Mountain bike riding and casual walking are the main uses of the track network. Less frequent uses include jogging or fitness training, dog-walking (on leash), nature enjoyment/appreciation and educational activities.

The Park offers over 16 kilometres of walking tracks, including 7 identified and marked routes, and a single 11 kilometre mountain bike circuit (not all of which was explicitly approved for mountain bike use under the 1998 Plan of Management). Approximately 4 kilometres of both networks are situated together, on shared-use fire trails and management accesses. Some of the trails within the Park are identified within Warringah's *Regional Multiple-Use Trail Strategy 2007* as "proposed strategic bushland multiple-use trails" – specifically the main mountain bike circuit and the link track to Allambie Heights (Roosevelt Avenue). The strategy recommended upgrading of the "Manly Dam Circuit (eastern and southern strategic sections)".

Walking Track Network

There are 7 identified and promoted walking tracks within the Park, as shown on Figure 6 – the Park Circuit Track (incorporating the Gulgadya Muru self-guided Aboriginal walk) around the dam and adjacent slopes, the Wildflower Walk and Nature Trail radiating from the day-use area, McCombs Hill Track near the Park entry, Curl Curl Track and Eva's Track in the far north, and the Heath Track looping off Allambie Heights.



Several link tracks connect the walking track network to surrounding residential streets on the Park's eastern and southern boundaries. As a result the Park is very "permeable", with multiple access points for nearby residents and visitors, which adds to its levels of use and value for walking.

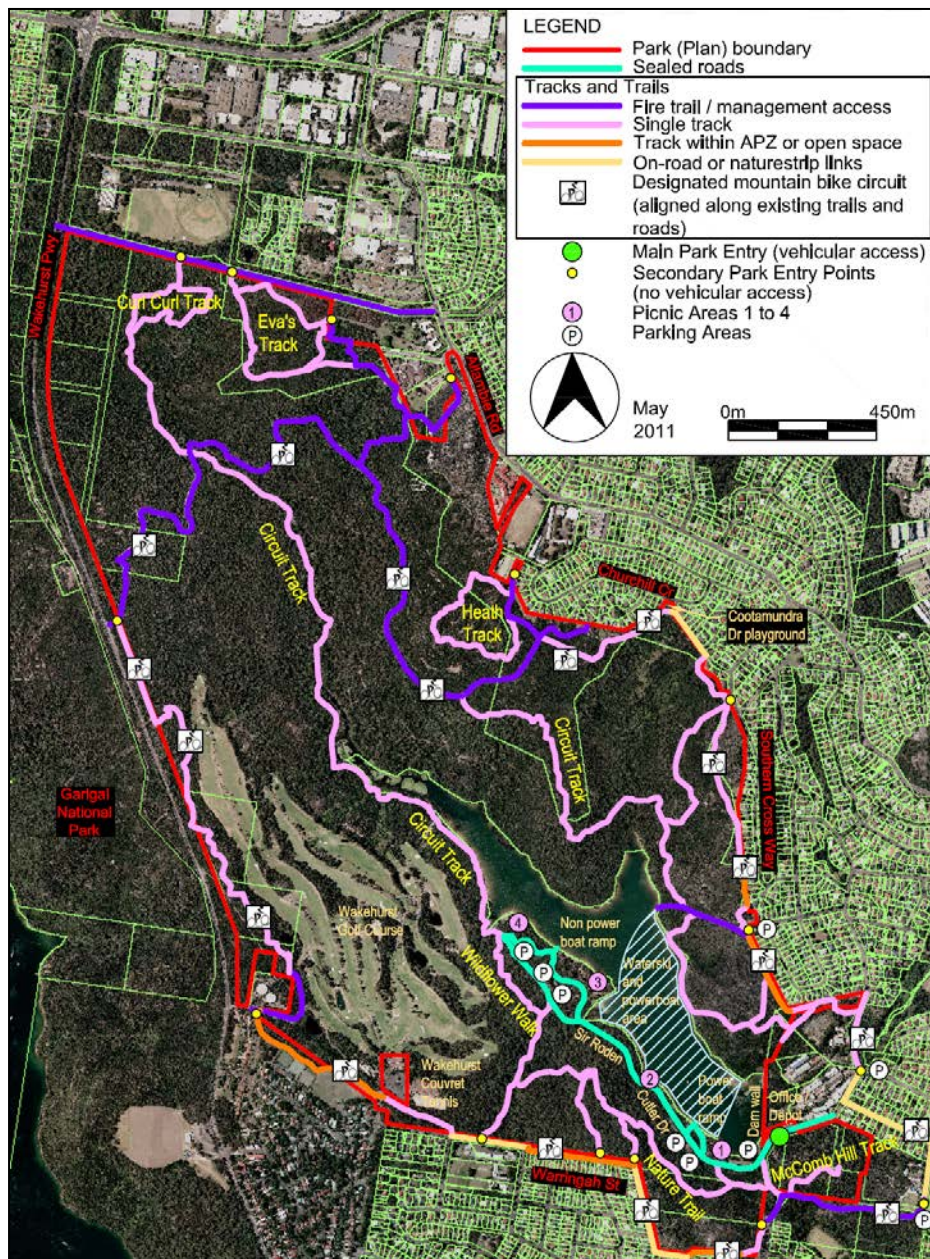
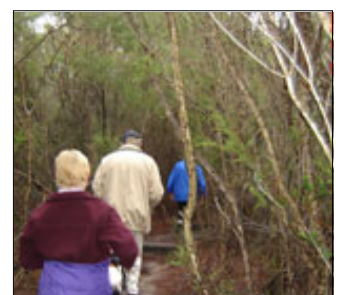


Figure 6 Tracks and trails

The tracks vary in distance and degree of difficulty and include a mixture of narrow or “single tracks”, as well as more open tracks through mown grass “fire breaks” (Asset Protection Zones) on the Park boundary and fire trails or management accesses. These tracks and trails vary in the attractions and experiences they offer – such as bushland, wildflowers, waterside scenery, waterfalls, and panoramic views.

The accessibility of the Park’s track network, appeal of walking within the bush and also beside the dam, the “peace and quiet” of the bushland, and the family-friendly character of the tracks (including being able to walk with children riding their bikes, and a non-threatening setting for less experienced bushwalkers) were identified strongly as Park values during



the community consultation process to-date. The “dog friendly” character of the Park, and the extended track network and large area it offers to walk dogs, were also valued.

Mountain Bike Circuit

The 11.2 kilometre mountain bike circuit is located mainly around the periphery of the Park and comprises sections of the fire trail system, fire breaks at the rear of private properties, sections of single track (at present signposted exclusively for mountain bike use) and off-Park sections along residential streets. The circuit provides a variety of conditions for mountain bike riders, including some “technical” sections requiring higher levels of ability. The route overall is rated as requiring a high to medium level of technical ability.

The mountain bike circuit has become an attraction at the regional level and beyond. It is estimated that up to 500 riders per day use the track in peak demand times on weekends, plus regular weekday use. A recent one-off “snapshot” survey of mountain bike usage levels on the mountain bike circuit (on 5 and 7 March 2011) showed the following:

- a low weekday morning usage, around 20 riders per hour, rising to 40 riders per hour afternoon; and
- on Saturday morning the peak usage was 80 riders per hour, largely comprising family groups (parent(s) and child/children) and friends, and an afternoon (after 3pm) average of 40 riders per hour with far fewer family groups.

A counter was installed on the track in September 2013. In October, November, December 2013 and January 2014 an average of 4000 laps were completed each month. The peak times were on Saturdays and Sundays.

The volume of mountain bike riding within the Park, as well as the frequency of use, both appear to be increasing. Anecdotal reports suggest that after-work and weekday use has increased, and the availability of high power LED lights has seen the emergence of night riding in recent years – with an increase in rider numbers into the evening/night, associated noise and light disturbances for adjoining properties, and unknown impacts for the area’s native fauna.

Riders typically use the entire loop, often completing a number of circuits, as well as congregating at more technical sections. The wider sections of the circuit – fire trail and sections along open/grassed boundary fire breaks – are used for multiple purposes including bush walking, dog walking, jogging and scenic viewing.

A five year work programme was proposed in 2008 to address safety issues, critical route upgrading and maintenance along with less urgent improvement works. The works programme has been progressively implemented. The opportunity exists for ongoing involvement from the mountain biking community, both in relation to track planning and maintenance.



The circuit is highly valued as a recreation asset by the mountain biking community. The route is valued for its length, mix of challenging sections and range of standards (that cater for a variety of skill and fitness levels), its loop configuration allowing for convenience and easy navigation, as a safe riding venue (without 4WDs or trailbikes), the proximity to picnic areas and facilities, and high levels of management. The sections of single track are especially valued by mountain bikers, as offering a sense of being “immersed in nature” and the feeling of “being out in the bush”.

In early 2010 Council became aware that parts of the 11.2 kilometre mountain bike circuit then in use were not approved for mountain biking under the 1998 Plan of Management. In February 2010, Council authorised mountain bike (and bicycle) use of this circuit track, through provisions of the 1998 Plan; and as part of the same resolution, prohibited walkers from two sections of narrow single track that form the mountain bike circuit. Figure 7 identifies the two current “bike only” sections of the circuit.

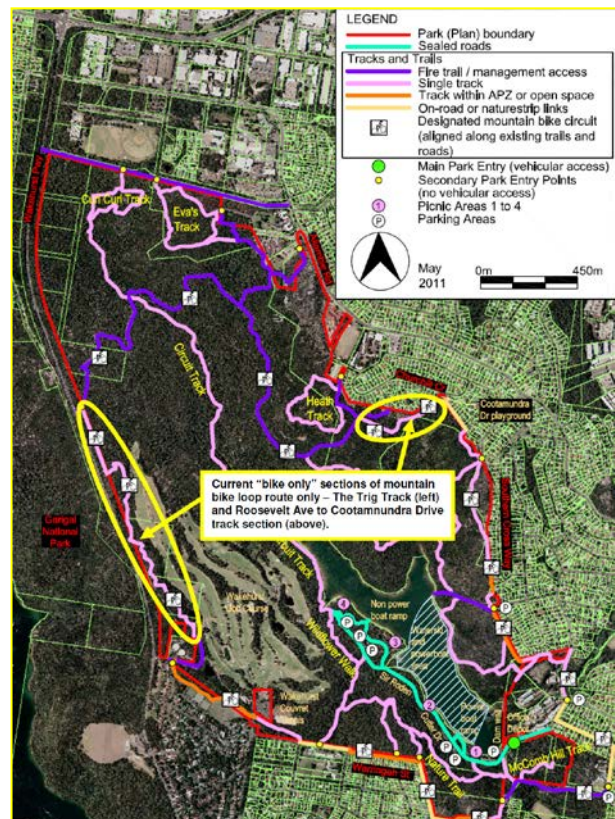


Figure 7 Current “bike only” sections of the mountain bike loop route

Four management options were presented in the *Manly Warringah War Memorial Park Issues and Discussion Paper* to address mountain biking and walking within the Park, and specifically these two narrow sections of the mountain bike circuit. Specific management actions have been developed based on the feedback received, a subsequent risk assessment (as below), Council’s available resources and expertise, and other management considerations.

The management actions for mountain biking in the Park are included within Section 5.3.3 of this Plan of Management.

Risk Management

A risk assessment of sections of the current mountain bike circuit was carried out by Statewide Mutual for Warringah Council in March 2011. The assessment focussed on these two sections currently closed to walkers (the “single track” section known as the “Trig Track” and the single track section in the Cootamundra Drive area). The Risk Assessment identified that:

“there is a risk that if walkers are allowed to share [the] bike trail, the bikers and/or walkers could be injured following a collision with, or in trying to avoid a collision with a walker”

Overall the assessment considered that the narrow track sections could be shared, provided that a range of risk management measures were first implemented. These measures, or possible controls, included:

- signage;
- directing bikers to ride clockwise around the trail, and walkers to walk anti-clockwise on the shared trail sections;
- consult with bikers to identify high speed/high risk locations where interaction with walkers could be of highest risk;
- consider options to provide “run-off” areas;
- bikers to use auditory alerts when approaching “blind” locations;
- walkers to be encouraged to wear high visibility clothing; and
- iPods’ and MP3’s not to be used in nominated shared locations.



Some of these measures present impracticalities in terms of implementation or enforcement.

3.7.3 Waterbody

Manly Dam has a capacity of approximately 2,000 megalitres (ML) and its waterbody is sheltered and deep (in most parts) with a surface area of approximately 30 hectares. The dam wall was first constructed across Curl Curl Creek in the late



1800's to supply drinking water to the local settlement. The dam's role in the supply of drinking water continued until 1936, after which time it became an important recreational facility for the local area and beyond. The waterbody currently provides a valued facility for swimming, fishing, waterskiing, canoe/kayaking and boating, among other activities. Significantly Manly Dam offers the largest, and only, sheltered freshwater “lake” on the northern beaches.

A growing population within the area, and the Sydney region, is placing more and more demand on the waterbody as a recreational venue. This increased demand can create both conflicts in the type of activities undertaken (or competing demands for intended uses) on and around the waterbody, as well as concerns about equitable access to and recreational use of the waterbody.

Waterskiing

Waterskiing has been undertaken on the dam since 1947, with the Manly & Warringah Water Ski Club (the Club) formed from a public meeting called at the direction of the State Government in 1962.

The Club has managed the use of the waterskiing area since then, under various agreements with controlling authorities. The Club has 18 members (boat owner members). There are 160 boat owner “casual users” registered with the Club to use the lake (also known as public users, associate, casual or social members). Over the last year, 40 of the 160 casual users have hired and used the lake, bringing the total of different boat users to 58 over this time. There is an approximate average of 20 “crew” who use the lake with each boat, bringing the total to around 1160 people who may use the lake over the year for waterskiing.



Under the Club’s current terms of use, the club checks the documentation of prospective boat owning users, maintains the ski course and administers the booking system.

Waterskiing is permitted within a designated area of the dam and within specific times each day. Current waterskiing times are shown in Table 5.



A maximum of 2 boats are permitted to use the area at any given time, with bookings made to an allocated time session. There are two AM sessions and two PM sessions available each day. The session times in Table 5 were agreed upon with the aim to share that lake at different times through the week with other water users.

Table 5 Current Waterskiing Timetable

Current Waterskiing Timetable - Daylight Savings Time (the non-daylight savings sessions are everyday 8:00am to 12:30pm & 12:30 to 5:00pm)		
	AM Session	PM Session
Monday	10:00am – 2:30pm	2:30pm – 7:00pm
Tuesday	7:30am – 12:30pm	12:30pm – 5:00pm
Wednesday	7:30am – 1:30pm	1:30pm – 7:00pm
Thursday	10:00am – 2:30pm	2:30pm – 7:00pm
Friday	7:30am – 12:30pm	12:30pm – 5:00pm
Saturday	9:00am – 1:30pm	1:30pm – 7:00pm
Sunday	7:30am – 12:00pm	12:00pm – 4:00pm

Note: There are no changes to the timetable for public holidays

The period of May through to September, allows all sessions to be available to any users to be booked via the Club. From October through to April, the Club members have preferential access to Saturday afternoon, Sunday and Public Holiday Sessions via a roster, with any spare sessions being made available for casual users. All sessions from Monday to Friday and Saturday morning are available to be booked by casual users.

The waterskiing zone is well-marked with buoys across the water surface as well as signs along the water's edge. The designated area covers approximately 40% of the waterbody's surface area, within the mid-section of the dam between Picnic Area 1 and Picnic Area 3, and blocks passage between the lower and upper reaches of the waterbody. A waterski jump is located within the designated area and the waterskiing zone offers tournament (jump and slalom) training as well as a disabled ski course. Figure 8 identifies the waterskiing and powerboat zone.

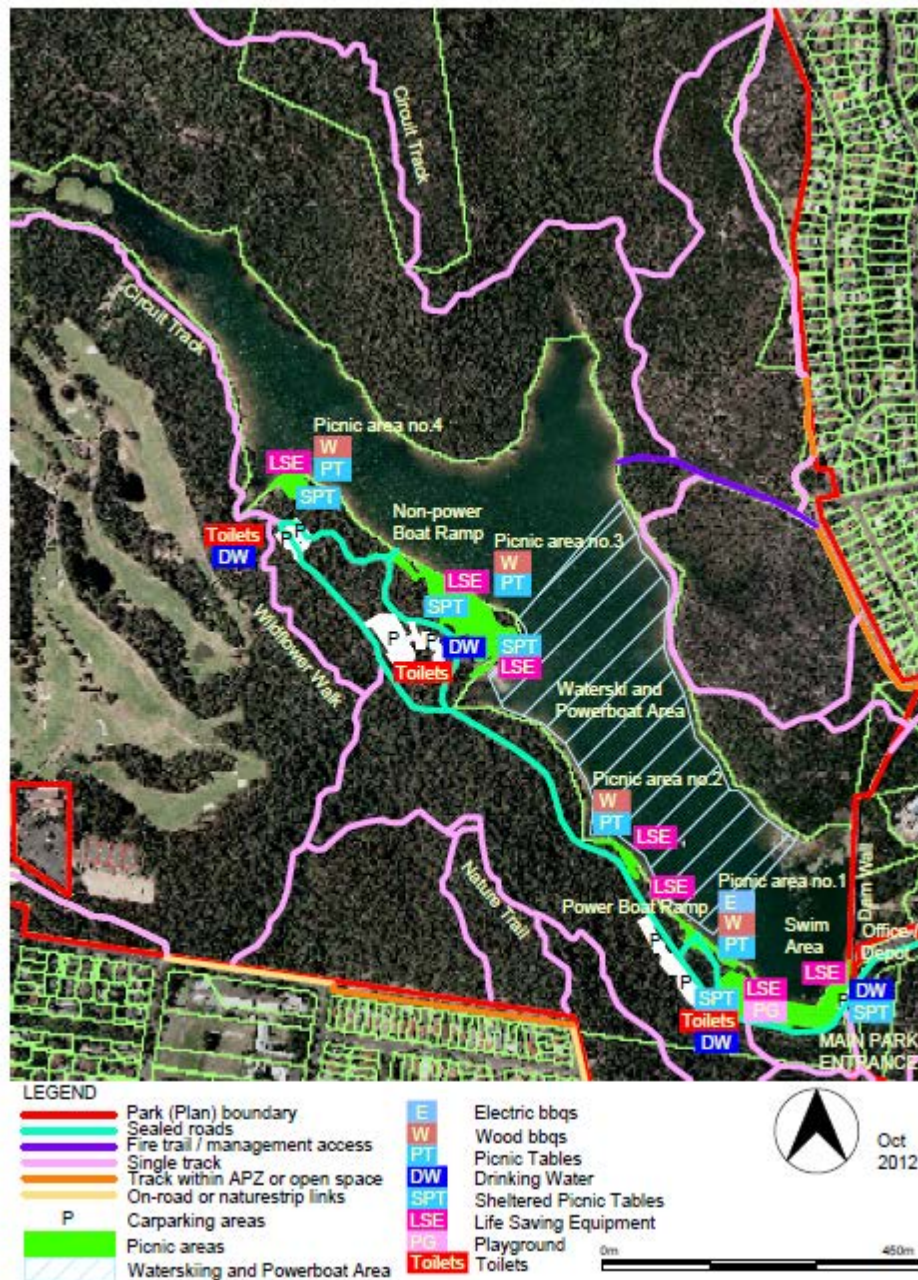


Figure 8 Picnic areas and waterski/powerboat zone

The dam is highly valued by the water skiing community as it is; freshwater and a suitable place for learners through to training for the competitive sport of slalom, jump and trick water skiing, wakeboarding and barefoot skiing where waterskiers can use their own boat and equipment. The nearest venue with a jump and slalom course is 140 km away at Myuna Bay, is a salt water venue and is only available for competition training.

All waterskiers and powerboat users are required to carry the appropriate licences and insurances for those activities.

Other recreational activities make use of the designated water skiing area when skiers and power boats are not on the water, however this is discouraged by current signage at the dam. The location of the waterskiing zone divides the waterbody into three activity areas and restricts the overall recreational use of the dam – especially for long-distance activities and opportunities to use the entire waterbody.

Other recreational users of the waterbody

Manly Dam's waterbody caters for many other recreational pursuits in addition to waterskiing – such as swimming, kayaking, canoeing, sail boarding, boating, model yacht and replica boats and fishing. The venue is used for triathlon training, a range of training uses by local surf lifesaving clubs, and is growing in popularity for paddle boarding (conventional and stand-up).



These activities are permissible within two separate areas of the waterbody – near the dam wall, adjacent Picnic Area 1, and within the northern section of the dam, adjacent to Picnic Areas 3 and 4.

These activities are excluded from the waterskiing zone (located in between them) to reduce conflict and safely separate motorised from non-motorised waterway uses.

The waterbody provides a protected area for these activities and there are few freshwater recreational facilities such as this within the Sydney region. Recreational users include organised groups such as; Scouts, Surf Life Saving Clubs, Swimming Clubs, Triathlon Clubs and the Model Boat Club. Many of these groups also value the resource as a training venue.



Manly Dam is a popular venue for recreational fishing. Three native and three non-native fish can be found at Manly Dam. The dam is periodically re-stocked with Australian Bass and has been stocked with Silver Perch in the past. Section 4, near the wetlands is thought to be the best fishing spot.

Overall the waterbody is a highly valued recreational facility catering for a variety of activities. Users value the venue's sheltered freshwater and (mostly) deep nature, and as a "safe" and attractive place providing for a variety of activities within a bushland setting. It is a venue with the potential to better accommodate these and other water-based recreational uses in the future.

3.7.4 Day use areas

The day use area of the Park comprises the four designated picnic areas located around the south-western edge of the dam. They are a popular northern beaches recreation venue, and the most intensively developed and heavily used part of the Park.

Access to the area is provided via the main entrance to the Park at the end of King Street, Manly Vale. The day use area includes four parking areas, three amenities blocks, a district playground (provided in Area 1) and barbeques (both electric and wood-burning), picnic tables and seat sets, and open grassed picnic spaces. A power boat ramp is provided between Section 1 and 2 and a non-power boat ramp provided adjacent to Section 3, both with vehicle access.

The day use area is particularly popular on public holidays and weekends – with the carparking capacity occasionally exceeded at peak use periods. The picnic areas provide a respite from urban living in an attractive and largely natural surrounds. The areas' accessibility and facilities make them very popular with a wide range of the community – including the young, elderly, active, and passive visitors, as well as special needs groups, educational groups, Church groups and other organisations.

Weekends and public holidays – in particular Christmas Day, Boxing Day, Mother's Day, Father's Day and Easter – are the busiest times for usage and bookings.

These facilities encourage and provide for visitor enjoyment of the Park and waterbody, and are highly valued by the community and an established "family venue" for many residents of the northern beaches. Seating and sheltered areas are particularly important to the elderly and people with special needs. Community consultation and past visitor surveys indicated that visitors are happy with the way these facilities are managed and maintained. The "low-key" and "less developed" nature of the picnic areas, and family-oriented character, are also a large part of the area's appeal. The community consultation process strongly supported the "status quo" – in terms of the amenities/facilities and the type of recreation/relaxation spaces provided – with "minimal structures and signs" and "minimal level of development" being especially important. The bushland setting of the more northern picnic areas – Sections 2, 3 and 4 – and the retention of wood-burning barbeques are both increasingly uncommon in parks across northern Sydney and so are highly valued by users of the Park and part of the area's attraction.



A number of the picnic tables are covered/sheltered, and all are available for booking – on a whole day basis – through Council's Booking System. The current booking fee is \$45 per table or \$65 per covered table. Each table and surrounding area can accommodate up to 50 people. It is recommended that groups over 50 book more than one table. The picnic areas

are popular for large groups, who can reserve all or part of an area, as well as for corporate and organised events. The picnic areas are also a popular venue for community events.,

The community highly values the “clean and well maintained facilities” – toilets, shelters, electric and wood-burning barbeques, playground and garbage bins. The area’s appeal as a location for family and group gatherings, and particularly its appeal as a peaceful setting in natural surrounds, were both expressed strongly in the community consultation process.

The social benefits of having facilities adjacent to other recreation areas and activities – such as waterskiing or mountain bike riding – is also valued by users of the Park.

3.7.5 Playgrounds

The playground within Picnic Area 1 of the day use area is identified as a ‘District Playground’ within Council’s 2007 *Playground Strategy*. District playgrounds service a wider catchment for residents within a suburb and visiting from neighbouring areas. The Cootamundra Drive playground is also within the boundaries of Manly Warringah War Memorial Park, along the eastern boundary within Allambie Heights, and is classed as a “Neighbourhood Playground”



typically catering for a highly localised catchment within walking distance (10 minutes) from residences. A survey was carried out as part of the community consultation for the 2007 Strategy, with 505 respondents who identified the playground within Picnic Area 1 as one of the top 20 most visited parks/playgrounds in Warringah.

3.7.6 Information, Interpretation and Educational Uses

A number of groups use the bushland and dam as an educational venue or asset. Local schools frequently visit the Park, and Rangers regularly provide educational talks/tours and information regarding the natural environment and other Park values. These talks are often provided within the main picnic areas. Council also has a periodic education programme associated with the Park.

Tertiary students use the Park for studies on water quality and the natural environment. The Park also has a wide collection of internet based information, however on-site interpretive material is lacking.



The Park provides an opportunity for general community education regarding the natural environment. A number of information posters are currently provided within the picnic areas giving information about native flora and fauna as well as the dam’s history and current pressures/impacts on the Park. The Wildflower Walk and Nature Trail both lead into the surrounding bushland from the picnic areas and are well suited to educational “walks and talks”.

Council’s “Keeping Our Dam Alive” held during 2007 and 2008 was a programme aimed at educating local residents and visitors on “why Manly Dam is such a special place”. It

provided information on how residents and visitors can help care for the bushland and water quality of the dam. Community events were held at the dam to raise awareness of the programme and an educational kit was developed for local schools.

Warringah Council's 2007 Cultural Plan, generally, supports environmental education through environmental walks, information and cultural events that celebrate the natural environment as well as continuing partnerships with local schools to promote environmental education. Manly Warringah War Memorial Park provides an excellent venue to support these initiatives.

Ranger education talks to groups are valued and the Parks' developed and accessible area provides an opportunity to target a large number of visitors with a variety of interpretive and educational information.

3.7.7 Wakehurst Golf Course

The Wakehurst Golf Course is located within the south-western section of the Park, and covers an area of approximately 50 hectares.

The Wakehurst Golf Club Limited has a lease agreement with Council for the greater majority of this area and its operation as a golf course. However the Clubhouse and most of the adjoining carparking area – which also services the adjacent Wakehurst Couvret Tennis Courts – is located on a separate area of Crown Reserve (Reserve 93184 for Future Public Requirements) which the Club leases directly from the Crown Lands Division (formerly the Land and Property Management Authority) as Special Lease 1970/4

Metropolitan. This smaller area is not part of the Park (and not subject to this Plan's provisions).

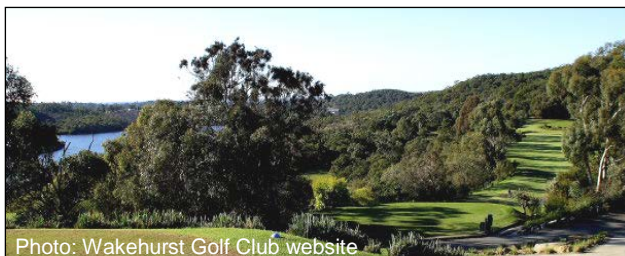


Photo: Wakehurst Golf Club website

The 18-hole course has spectacular views over Manly Dam and the Park's surrounding natural areas. Areas of native vegetation are retained as part of the course layout.

A range of memberships are available to the Golf Club, and the course is accessible to the general public.

The Golf Course site was built up by way of a commercial landfill operation, and there is the possibility that the area is still discharging leachate and other pollutants into the groundwater and surrounding areas. The Park's vegetation mapping shows several plumes of "highly disturbed" vegetation filling the small gullies running downslope from the course and along the lower margins of the fairways. These may be a legacy of past landfill activity, or an off-site flow-on result of water and fertiliser usage on the course above. Wakehurst Golf Club Limited also has a licence to draw water from the dam to irrigate the course.

There are a number of Aboriginal rock engravings located within the boundaries of the golf course. The Park's staff previously assisted in the management of these sites, but this is now largely undertaken by the Wakehurst Golf Club Limited itself.

There are a number of land and environmental issues on the Wakehurst Golf Course lease area that have implications for downslope and other areas of the Park. The effective management of these, as well as the course's integration with the wider Park management objectives and programmes, has varied in the past.

Users of the course value its natural setting, and in particular the quality of the views over the Park and the dam.

3.7.8 Wakehurst Tennis Courts

The Wakehurst Couvret Tennis Courts consist of 10 courts (6 synthetic grass and 4 hard court), floodlit for night use, and associated amenities. They are located immediately east of the Wakehurst Golf Course parking area. The courts are managed as a sub-lease from Wakehurst Golf Club Limited. Parking for the facility is shared with Wakehurst Golf Course and is mostly located on the Club's special lease area from the Crown Lands Division.

3.8 Landscape and Scenic Values

The Park's bushland provides a "green space" within a largely urban setting. Once in the Park, the dominant scene is largely of a natural bushland area and a calm waterway. From many vantage points within the Park, particularly within the lower catchment area, it is hard to see evidence of the surrounding urban development. Bushland details – such as vegetation textures, flowers and rock formations provide aesthetics at the small scale. The Park is also very attractive for many neighbours who overlook the area.



The Park's visual qualities, as a natural green space in an urban environment, and the largely undisturbed skyline giving a feeling of "being in the middle of nowhere", were identified as important values during the community consultation.

3.9 Leases, Licences and Special Uses

3.9.1.1 Special Uses and Commercial Activities

The Park is used, by permission and sometimes at night, by groups such as Scouts and the Defence Force for training and education purposes. Some of the activities include camping, diver training, orienteering and night canoeing. It is also occasionally used as a training venue for emergency services such as the Westpac rescue helicopter, police divers and ambulance service.

Commercial activities at the Park must be in accordance with Council's *Interim Policy on the Management of the Commercial Use of Beaches, Reserves and Buildings/Facilities in Warringah 2006*. This Policy identifies Manly Warringah War Memorial Park as a "restricted area". The approval of commercial activities within the Park would not be consistent with the Policy, with the exception of privately provided educational activities. This Policy is currently under review by Council. Any application for commercial activities within the Park must be in

accordance with the current Policy, as in place at the time of application, and must not impact on the values identified within this Plan of Management.

3.9.1.2 Leases and licences

The following leases, as shown on Figure 9, are current within the Manly Warringah War Memorial Park:

- Wakehurst Golf Club Limited – lease for golf course;
- Wakehurst Couvret Tennis Club – sub-lease, from Wakehurst Golf Club Limited, for tennis courts complex.

The only licence current within the Manly Warringah War Memorial Park is for Wakehurst Golf Club Limited for the extraction of irrigation water from the dam waterbody.

In most cases, granting of a lease or licence (excluding temporary licences) within the Park will require the consent of the Minister for Lands. Longer term of more significant leases and licences are appropriately offered via a public tender process, to ensure equity and transparency. The following issues will usually be considered by the Crown Lands Division when seeking the Minister's consent (as set out in Chapter 14 "Leases, Licences and External Land Management Agreements" of the LPMA *Reserve Trust Handbook 2007*.):

- whether the proposed lease or licence is in the public interest;
- whether the purpose of the proposed lease or licence is compatible with the reserve purpose;
- the environmental impacts of the activities permitted by the lease or licence;
- the proposed term of the lease or licence;
- whether the proposed lease or licence was or is proposed to be selected by public competition or, if not, the circumstances relating to the selection of the proposed lessee or licensee;
- whether the proposed rent represents a proper return to the public for the use of the public land;
- whether the proposed lease or licence will contain provisions for the periodic updating or review of the rent;
- whether the proposed lease or licence contains clauses relating to -
 - the termination of the lease or licence in the event of a revocation of the reserve,

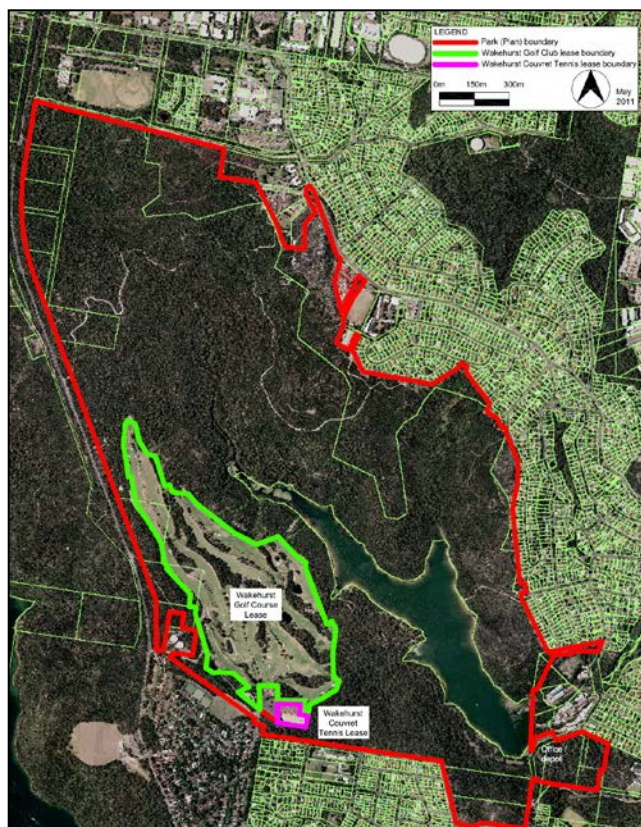


Figure 9 Current leases

- the indemnification of the reserve trust, the Crown and the NSW Government against claims for compensation,
- appropriate insurance provisions.

A Trust does not need approval from the Minister or the Crown Lands Division to grant a temporary licence but it should apply similar consideration (as may be appropriate) to the above in deciding whether or not to grant such a licence.

Section 5.3.5 of this Plan provides management actions in relation to the granting of leases or licenses within the Park.

3.9.1.3 Filming

Over the years, a variety of filming projects have been carried out within the Park – providing a source of income for the Park.

The *Filming Related Legislation Amendment Act 2008* amended the *Crown Lands Act 1989* to allow the granting of a lease or licence for a filming project within a Crown Reserve, regardless of whether the use is consistent with an adopted plan of management or the purpose of the reserve.

Reserve Trusts must still seek Ministers consent for any lease or licence application greater than 12 months, temporary licences may however be granted by the Trust without Ministers consent. The State Government Policy 'Making NSW Film Friendly' encourages filming in Crown Reserves. This is further supported by the *Local Government Filming Protocol 2009*.

3.10 Park Assets

There are a variety of built assets provided within the Park. The largest array of these are provided within the day use areas and are used for recreation and public enjoyment. These include assets such as picnic tables, shelters, boat ramps, toilet blocks, car parks, bins, barbeques, signs, life buoys, memorials, retaining wall, and others. The other major concentration of asset is in the Park office and depot, where they are used for the purposes of park management and administration.

A condition assessment of park assets was carried out for the preparation of this Plan of Management. It provides a description of all built assets within the Park and their condition. Most of the assets provided within the Park can be rated as being in an “adequate” or “good”. A copy of the Condition Assessment Table is provided in Appendix A.

3.11 Park Neighbours

Surrounding land uses generate a range of direct and indirect impacts on the Park, with these often exacerbated by their location upslope along the catchment's ridges. The Park's entire eastern edge, most of its southern boundary and part of its northern margin abut

predominantly residential areas – in the suburbs of North Balgowlah, Manly Vale, Allambie Heights and Frenchs Forest. Facilities offering independent and assisted care for seniors and people with disabilities, as well as primary schools, are also located on or close to the Park's boundary. These areas in particular, provide a higher density of living on the edge of the Park. In addition however, there is commercial and industrial development at the top of the catchment – along, and close to, the northern boundary to the Park (see Figure 4).



Continuing residential development presents silt and sediment issues, and both new and existing urban land uses have on-going water quality implications. Garden plant “escapees” as well as fertiliser and irrigation runoff from surrounding areas impact on the Park's vegetation (made worse at times by the deliberate dumping of garden wastes in the Park). Encroachments have sometimes occurred, with private gardens and furniture being established beyond private property boundaries and into the Park. Uncontrolled dogs and, in particular, cats prey on or disturb native wildlife.

Deliberate rubbish dumping is frequent along the Park's Wakehurst Parkway edge, and off less heavily trafficked roads.

A more subtle, but longer term threat, is the prospect of “visual pollution” from developments and large structures on and near the Park's boundary (and others located some distance away, but still highly visible) that detract from the Park's largely natural skyline and visual catchment – which is a central component of the quality of the recreational experience of Park users.

Council has addressed some of these environmental impacts via the installation of water quality improvement measures on the creeklines feeding the dam, both within the Park and in the surrounding areas, bush regeneration and weed control measures (both contract and community volunteer efforts) and neighbour education/awareness campaigns.

3.12 Park Management and Administration

The current administration and management arrangements have proven effective, throughout the past decades, in protecting and presenting the Park as the valued place it is today.

3.12.1 Warringah Council – Trust Manager

Warringah Council manages the affairs of the Manly Warringah War Memorial Park (R68892) Reserve Trust which was appointed by the Minister for Lands on 22nd August 1997. The Trust – and therefore Warringah Council as the Trust manager – has responsibility for the Park's care, control and management consistent with the dedicated public purpose of the reservation, in this case public recreation, as well as the principles of Crown Land management as set out in the of the *Crown Lands Act 1989*.

A Reserve Trust operates with a degree of autonomy in this care, control and management role and can enter into maintenance contracts, determine the level of development of an area (subject to Crown consent), set entry fees, employ staff, and perform other park management functions. As Trust Manager, these functions for Warringah War Memorial Park are undertaken by Warringah Council.

The Crown Lands Division usually provides Reserve Trusts with operational support, financial assistance and guidance. Under section 122 of the *Crown Lands Act 1989* Reserve Trusts are required to provide an annual report to the Minister which includes (in accordance with Clause 33 of the *Crown Lands Regulation 2000*) details of income, expenditure, assets, liabilities, improvements, leases and licences granted or in force, uses made of the reserve and any matters of pecuniary interest.

Warringah Council, as Trust Manager and day-to-day manager body for the Park, has supported and funded the Park far in excess of any revenue generated by the area, despite the area's use by visitors from a far wider catchment than the immediate LGA.

3.12.2 Staffing and resources

Manly Warringah War Memorial Park is currently managed by Council staff, who also have the responsibility to manage the Stony Range Botanic Garden in Dee Why. The Park Manager and Rangers operate from the Park office and depot compound located at the Park's King Street entrance. Park staff manage the day-to-day activities of the Park – including overseeing maintenance, enforcement of Council's policies and legislative requirements, notification of reserve bookings, responding to complaints, risk management of recreational facilities, notification of closures to the Park (due to maintenance or weather conditions), oversee management of bush regeneration works and other works within the Park, and manage volunteer groups – among other responsibilities.

Park staff are part of Council's Parks, Reserves and Foreshore Group (PRF) which is located at Council's Cromer Office. Bookings for picnic tables and events are managed through Council's PRF Venue Management Team. Park staff who manage the bookings on-site.

3.12.3 Park Office and Depot Compound

A small Park office and depot compound is located adjacent to the Park entry at the end of King Street and on the southern dam wall abutment. This area includes offices, staff facilities, workshops, outdoor and undercover storage and carparking all enclosed by a 1.8 metre high wire mesh fence and lockable gates. It provides the operational base from which the Park staff manage the area and provide information to visitors as required.

3.12.4 Land tenure issues and boundary rationalisation

There are anomalies in the tenure and boundaries of several land parcels around the Park boundary. A number of adjacent areas could be usefully added to the Park to consolidate the area's boundaries and provide a more effective management "edge".

Five parcels of land – 2 narrow blocks in the Park's south-east and 3 larger blocks beside Wakehurst Parkway in the north-west – are subject to land claims under the *NSW Aboriginal Land Rights Act 1983*.

3.12.5 Easements

There are a number of easements throughout the Park – for sewer, water and power lines. These easements are often maintained by other Authorities, such as the Rural Fire Service, NSW Fire Brigades, electricity utilities and Sydney Water. They are maintained for their purpose as an easement/access which may include vegetation clearing or trimming and trail upgrading. The management of these easements however can impact on the surrounding natural environment through vegetation loss, weed introduction or spread and soil erosion/deposition.

3.12.6 Finance and revenue generation

Council's recent annual budget for the management of Manly Warringah War Memorial Park has typically been in the order of \$700,000 annually. This is significantly greater than the revenue generated by the Park – which is usually in the order of \$50,000 to \$60,000 annually. At present revenue generated by the Park chiefly comes from booking fees (for picnic areas, special events, and so on), lease fees from the Wakehurst Golf Club Limited, fees from Manly Water Ski Club, filming fees and other sundry charges.

A park entry fee has been charged at the Park, during peak use periods, in the past. However this proved not to be cost effective and is no longer in place. The introduction of a "pay and display" parking system is proposed to be implemented within the life of this plan.

Council manages a centralised booking system for the picnic areas, the waterbody (excluding waterskiing at this time) and tracks and trails. Bookings are made with Council's Venue Management Team for weddings, filming, functions and community and sports events. People value being able to book areas for group gatherings, especially during peak usage times – including weekends and public holidays and in particular Christmas Day, Boxing Day, Mother's Day, Father's Day and Easter.

Council's *Interim Policy on the Management of the Commercial Use of Beaches, Reserves & Buildings/Facilities in Warringah* (CCS-PL 612) specifically identifies Manly Warringah War Memorial Park as a "Restricted Area" – defined in the interim policy as areas that will not be available for commercial activities and where only privately provided educational activities will be considered (as consistent with a plan of management). This severely limits revenue generating opportunities within the Park. This Policy is under review at present.

Despite this policy a number of approved commercial operations have been undertaken in the Park in the past – such as canoe and sailboard hire – but none have been sufficiently viable/successful to continue for an extended period.

Revenue generation options must also recognise a prior agreement between Warringah and Manly Councils, dating from the period of the Manly and Warringah District Parks Joint Committee (which included the Park) from 1953 to 1991 when Manly Council provided some of the Park's management funding. On Manly Council's withdrawal from this Joint Management Agreement in 1991 it was agreed that *"... the residents of the Municipality of Manly shall be entitled thereafter to access and use of the Manly Dam Reserve on the same conditions as those which apply from time to time to the residents of the Warringah Shire."*

4 Basis for Management

4.1 Overview of Threats to Values and Management Issues

This Section of the Plan of Management sets the scene for the development of management actions for the Park. Table 6 identifies the key values held for the Park and the issues and/or threats to each of the values. These, along with the community's values and aspirations for the Park as expressed through the various stages of the consultation process, form the basis for management of the Park and have informed the development of Management Actions as described in the following Chapter.

Table 6 Basis for Management

VALUES		ISSUES / THREATS	
NATURAL HERITAGE VALUES			
Native flora, vegetation communities and habitats			
<ul style="list-style-type: none">- Large bushland reserve within an urban landscape with over 75% of the reserve as bushland.- Supports three vegetation communities which are either listed under the TSC Act or are of other conservation significance.- Supports threatened flora.- Varied landscape and vegetation communities, and a large bushland area, provide a variety of habitats to support fauna within the Park.- The Park supports a diversity of flora and high quality bushland.- The Park provides a respite from the urban environment and provides “peace and quiet”.- Bushland provides a scenic value.		<ul style="list-style-type: none">- Special management/protection is required of endangered ecological communities, communities of local conservation significance and threatened or significant species.- Pressure from weeds and feral/domestic animals requires ongoing management- Ongoing need to raise community awareness due to “edge effect” disturbance and pressure such as garden plant escapees, fertiliser use and uncontrolled or polluted stormwater runoff.- Fragmentation of bushland by tracks and associated erosion and sedimentation problems.- Management (ongoing clearing) of easements by other Authorities impacting on vegetation and erosion.- Balance of bushland protection with recreational use, fire management and provision of easements.- Illegal vegetation clearing and property encroachments.	
Native Fauna			
<ul style="list-style-type: none">- Park provides for a variety of fauna and provides opportunity for viewing native wildlife in a predominantly urban area.- Supports 4 resident species considered		<ul style="list-style-type: none">- Weed impacts of urban boundaries.- Dumping and spread of aquatic weeds in the waterbody – such as <i>Salvinia molesta</i>, <i>Egeria densa</i> and <i>Nymphaea Mexicana</i> (Mexican or	

VALUES	ISSUES / THREATS
<p>vulnerable under the TSC Act.</p> <ul style="list-style-type: none"> - Supports the Climbing Galaxias, the most northerly population of this species in Australia, among other species of interest 	<p>Yellow Waterlily).</p> <ul style="list-style-type: none"> - Bush regeneration requires ongoing funding to keep areas weed free. - Presence of dogs (even on lead) can distress or deter wildlife. - Dumping of pest animals in the waterbody - ducks, fish and turtles. - Enforcement of 'no cats' covenants in adjacent residential areas is difficult. - Rabbits have become an increasing problem in recent years. - On-going threats related to fox predation. - Garden plant "escapees", fertiliser, sediment and stormwater runoff from surrounding areas impact on the Park's vegetation.
Fire Management	
<ul style="list-style-type: none"> - Council has responsibility to protect persons and property, immediately adjacent to the Park, from hazards such as wildfires. - Council manages the bushland in accordance with the Park's Fire Regime Management Plan (Eco Logical 2006). - Asset Protection Zones are maintained along the Park's boundaries to manage fire risk along the urban edge. 	<ul style="list-style-type: none"> - Persons and property, immediately adjacent the Park, are at risk from wildfires, this includes nursing homes and special accommodation facilities along the north-western boundary. Fire threats can also extend to more distant properties due to spot fires and ember attack. - Fire management needs to be planned and implemented in accordance with relevant policies and legislation. - Fire management is typically a top priority, and often an emotional issue, for people next to bushland areas.
Bushland Linkages	
<ul style="list-style-type: none"> - Bushland linkages / wildlife corridors provide a means of genetic exchange for flora and fauna between other bushland reserves in the area. - The viability of fauna and flora within the Park, and the variety of fauna and flora, can be improved by the successful management of bushland linkages. - Existing and potential corridors to the Park have been identified (see P&J Smith 2005b). 	<ul style="list-style-type: none"> - Bushland linkages need to be protected and enhanced to enable movement of flora and fauna between reserves in Warringah. - Isolation of flora and fauna can result in a decrease in biodiversity within the Park. - Other area adjoining the Park could be considered as linkages, including links to Burnt Bridge Creek and District Park, in future reviews of Local Habitat Strategies.
Landscape Protection	
<ul style="list-style-type: none"> - The Park protects a large intact area of bushland and habitat. - This is the largest Park managed by local government within the Northern Beaches. Larger parks within the region are managed by National Parks. - The Park provides protection for the catchment as the majority of the catchment is 	<ul style="list-style-type: none"> - Continuing urban development provides increased pressures on the Park, increased number of visitors, increased edge effects and potential for pollution. - Large bulk or high rise developments in the Park's visual catchment, and/or on the skyline, detracting from the area's visual appeal.

VALUES		ISSUES / THREATS	
within the boundaries of the Park			
CATCHMENT AND WATER QUALITY VALUES			
<ul style="list-style-type: none">- Predominantly bushland catchment- The Park's natural bushland and largely intact riparian vegetation assist in maintaining water quality in creeks and dam.- Water quality monitoring provides data for water safety and changes over time.- Two metre diameter submersible propeller installed near the dam wall aids in water circulation and reduces the severity and frequency of blue-green algal blooms.- Good water quality readings support the significant level of recreational use on the dam.- The dam is valued as a tool to minimise flood damage to properties around Manly Lagoon.- The dam water is important as a bulk water supply for the Manly Hydraulics Laboratory and Water Research Laboratory as well as the Wakehurst Golf Course and downstream for the Warringah Golf Club.		<ul style="list-style-type: none">- Two former landfill sites occur within the catchment, potentially impacting water quality.- Ongoing need for water quality management / improvements.- Ongoing need for neighbour education to maintain good water quality in feeder creeks and the dam.- Fertiliser, sediment and stormwater runoff from surrounding areas impact on the Park's water quality.- Sewerage overflows can adversely impact on water quality.- Blue-green algal blooms or poor water quality can significantly impact on the recreational use of the dam.	
CULTURAL HERITAGE VALUES			
Aboriginal Cultural Heritage			
<ul style="list-style-type: none">- There is evidence of Aboriginal occupation within the Park.- The Park provides an opportunity for education regarding Aboriginal culture.		<ul style="list-style-type: none">- Protection of known, newly located and unrecorded Aboriginal heritage sites threatened if management of these areas is not ongoing.- Opportunities to involve Aboriginal people in protecting and presenting the Park's Aboriginal heritage.	
Historic (non-Aboriginal Heritage)			
<ul style="list-style-type: none">- There are a number of heritage items within the Park that provide a link with past use.- There are also records which provide a link with the Park's, and the dam's, past use.		<ul style="list-style-type: none">- Protection of heritage items threatened if management of these areas is not ongoing.	
War memorial and commemorations			
<ul style="list-style-type: none">- The Park was established as a War Memorial Park after World War 1.		<ul style="list-style-type: none">- Emphasis on recognition of the Park being a War Memorial Park.	
<ul style="list-style-type: none">- The Park provides a venue to remember and commemorate fallen service personnel and respect members of the Defence forces.- War memorials provide a venue for Anzac Day and Remembrance Day services.- Peaceful nature of the Park adds to its commemorative role.		<ul style="list-style-type: none">- Incomplete "initial" war memorial.	

VALUES		ISSUES / THREATS	
VISITOR USE, RECREATION AND ENJOYMENT			
Access			
The Park is accessible to people of all ages and abilities.		<ul style="list-style-type: none">- Number of disability parking bays is limited.- The main entrance becomes congested during peak usage periods and it is difficult for vehicles to turn around.- Pedestrian access to the Park entry along King Street is not well provided for.- Amenities in Area 1 are not true “accessibility” toilets.- Amenities generally are in need of upgrading to cater for increasingly high community expectations.- Amenities and facilities require a high level of maintenance.- Safe pedestrian access between Area 2 and Area 4 is not provided.- Carparking at secondary Park access points can cause congestion on residential streets.- Multiple access points can make managing visitor entry and activities difficult.- Entry point off Wakehurst Parkway may be hazardous.	
Tracks and trails			
<ul style="list-style-type: none">- Walking track network- Over 16 kilometres of walking tracks are provided, over 7 defined routes.- The Walking tracks and trails vary in distance and degree of difficulty and cater for a variety of users.- The Walking tracks and trails vary in attractions and experiences- The Park’s track network is easily accessible- Tracks and trails are “family friendly and “dog friendly”. They provide an opportunity to enjoy the “peace and quiet” of the bushland.- Mountain bike circuit- An 11 kilometre mountain bike circuit is provided.		<ul style="list-style-type: none">- Sustainable management of walking track and mountain bike circuit is needed to reduce impact on surrounding natural areas.- Safety of walkers and riders on shared use sections.- Community attitudes are divided on need for off leash dog areas within the Park.- Mountain bike circuit- Mountain bike traffic currently goes through the Cootamundra Drive Reserve and playground.- Mountain biking along the Park boundary can disturb adjoining residences.- There is an increase in demand for use of the mountain bike circuit, therefore increasing use and pressure on the circuit.	
<ul style="list-style-type: none">- Users value the variety of experiences provided by the circuit, narrow trails, wide trails, technical sections, etc.- Single track sections are especially valued by the riders.- The circuit caters for up to 500 riders per day during peak periods, attracting riders from beyond the local area.		<ul style="list-style-type: none">- Emergence of night riding and unauthorised track construction- Mountain bike “code of conduct” is not readily advertised.- Mountain bike “code of conduct” not adhered to by all riders- Mountain bikers desires for greater/other uses of the circuit and other tracks and	

VALUES		ISSUES / THREATS	
<ul style="list-style-type: none">- Proximity of track to picnic areas and facilities is valued by the riders		<ul style="list-style-type: none">- differing aspirations for the mountain bike circuit.- Some sections of the circuit are beyond the Park boundary.- Requests for events	
Waterbody			
<ul style="list-style-type: none">- Manly Dam is one of the largest freshwater lakes in Sydney.- Sheltered and deep freshwater lake provides a number of opportunities for recreation.- Waterskiing- There is a long history of waterskiing on the dam. It has been undertaken since 1947 and generations of families have become members of the Club.- The waterskiing zone offers tournament (jump and slalom) training as well as a disabled ski course.- Only waterskiing zone within the northern beaches, nearest comparable venue is in western Sydney.- Other recreational users of the dam- The dam provides a venue for a variety of recreational pursuits such as swimming, kayaking, canoeing, sail boarding, model boats and fishing.- The water quality, fresh water and clean, is highly valued by these user groups.- Many groups/organisations also value the dam as a training venue.- Dam is periodically re-stocked with Australian Bass for recreational fishing.		<ul style="list-style-type: none">- Growing population within the area and the region is placing more demand on the dam as a recreational venue.- Pollution of water from outside sources can disrupt recreational use of the dam.- Visitor safety needs to be appropriately managed to reduce risk to people when using the waterbody.- Waterskiing.- A sheltered freshwater waterskiing venue is a rare recreational asset in northern Sydney.- Complex time allocation for use of waterskiing zone.- Designated waterskiing area represents a disproportionately large allocation of the waterbody.- Waterskiing zone divides the waterbody into three use areas and restricts movements between the areas, reducing recreational use of the whole waterbody.- Noise from waterskiing can detract from the enjoyment of the area.- Current booking system can result in exclusion of non-members of the Ski Club from using the waterskiing zone.- Requests for events	
Day use areas			
<ul style="list-style-type: none">- The day use area is a popular venue. It provides picnic and barbeque facilities, and associated amenities, within a bushland setting.- The picnic area is valued as it can be booked for large and small groups, and is most popular on Public Holidays and weekends.- The wood fire barbeques are particularly valued as the Park is one of the few places that provides such an experience in the region.		<ul style="list-style-type: none">- Picnic areas are approaching capacity, in peak periods, in regard to the number of picnic tables/sites that can be accommodated without detracting from visitor experiences and crowding the area.- Limits on the level and intensity of site and facility development is required to maintain the low-key character of the area.- The booking fee for picnic areas considered prohibitive by some user groups.- Excessive use of a bookings-only approach can disadvantage “walk-up” or occasional visitors.- Collection of kindling and firewood from nearby bushland can impact on the habitat value of these areas.- Requests for events	

VALUES		ISSUES / THREATS	
Playgrounds			
<ul style="list-style-type: none">- Two playgrounds are provided within the Park. A District Playground is provided within the Picnic Area 1 and a Neighbourhood Playground is provided within Cootamundra Drive Reserve, along the eastern boundary of the Park.- These playgrounds cater for two distinct user groups.- A survey carried out for the preparation of the 2007 Playground Strategy identified the playground within Picnic Area 1 in the top 20 most visited parks/playgrounds in Warringah.		<ul style="list-style-type: none">- The Cootamundra Drive Reserve playground is in need of upgrading to meet Australian Standards.	
Information, Interpretation and Educational Uses			
<ul style="list-style-type: none">- Local schools value the Park as an educational venue/tool. Rangers provide educational talks and tours and information regarding the natural environment.- Tertiary students use the Park for studies on water quality and the natural environment.- The Park provides an opportunity for general community education regarding the natural environment and the Parks’ cultural history. High visitor use, easy accessibility and short walks within close proximity to the Day Use area all provide opportunity for education.- The Park is an important venue for cultural, recreation and community events.		<ul style="list-style-type: none">- Educational talks and tours require funding.- Educational use of the Park could be promoted and accommodated more than it is now.- Improve educational and interpretative signage within the Park	
Wakehurst Golf Course and Wakehurst Couvret Tennis Courts			
<ul style="list-style-type: none">- Wakehurst Golf Course provides a valuable recreational facility.- Views from the 18-hole golf course, over the dam and the natural setting of the golf course are highly valued.- A number of Aboriginal rock engravings are located within the boundaries of the golf course, management of these sites is by the Club.- Wakehurst Couvret Tennis Courts provide a valuable recreational facility.		<ul style="list-style-type: none">- Irrigation and use of fertilisers and pesticides on the golf course, and leachate from its previous role as a landfill site, could impact on groundwater, the water quality of Manly Dam and could degrade downslope vegetation.- Effective management is required for Aboriginal sites, weed and feral animal control, fire management, irrigation and runoff, fertiliser and herbicide use and environmental performance monitoring could be considered as conditions in future leases- Wakehurst Couvret Tennis Courts are now managed as a sub-lease, from the Wakehurst Golf Club Limited.	
Landscape and Scenic Values			
<ul style="list-style-type: none">- The Park provides a “green space” within a largely urban setting.- The overall scene, once in the Park, is of a natural bushland area and calm waterway.- It is hard to see evidence of the surrounding		<ul style="list-style-type: none">- Protection of the Parks’ skylines and views will require provisions/measures in planning instruments beyond this Plan of Management, as well as negotiation with providers and other agencies.- Protection of the low-key, informal natural	

VALUES		ISSUES / THREATS	
urban development from many vantage points within the Park. - Park neighbours value the bushland setting and views over the Park.		setting of the picnic areas	
PARK MANAGEMENT AND ADMINISTRATION			
Management compound			
- The park management compound provides a venue for the operations of the Park. It includes offices, staff facilities, workshop, storage and carparking for staff.			
Land tenure issues and boundary rationalisation			
- Consolidation of the Park boundaries could provide a more effective management “edge”.		- Anomalies in land tenure and boundaries of several parcels around the Park boundary. - Five parcels of land within the Park are subject to land claims under the NSW Aboriginal Land Rights Act 1983.	

4.2 Vision Statement

The key values, issues and threats that apply to Manly Warringah War Memorial Park have been identified throughout this Plan of Management. A vision statement has been developed to define a guiding purpose for Manly Warringah War Memorial Park. The statement aims to protect the values of the Park from the issues and threats of today and into the future.

The vision statement draws upon Council's own vision statement, as well as the management principles as set out in the *Crown Lands Act 1989*, and the vision identified for the Park in the 1998 Plan of Management. Following is the vision statement for Manly Warringah War Memorial Park:

A large protected area of bushland and waterways, with a diversity of flora and fauna, high water quality and scenic value, that ensures protection of its natural environment and cultural values, conserves threatened species and communities, provides opportunity for a variety of recreational activities in a low-key natural setting, offers an educational asset and acknowledges its importance as a war memorial park.

5 Management Actions

5.1 Overview

This section of the Plan sets out the management strategies – as both policies and management directions or guidelines, as well as more specific on-ground or tangible actions – that Council will implement to realise the Park vision and to achieve the management objectives identified for different parts of the Park (as discussed further below).

5.2 Management Zones – Management Intent and Objectives

The *Manly Warringah War Memorial Park Issues and Directions Discussion Paper 2010* identified six “management zones” for the Park. Management Zones are a way of defining different areas within the Park based on the values that management aims to protect and the types of activities and uses that are permitted. Zoning is a useful way of summarising the broad management intent of particular areas of the Park – describing management objectives and, importantly, management priorities for different Park areas. The following management zones – as shown on Figure 10 – have been identified:

- Bushland Zone;
- Waterbody Zone;
- Day Use Zone;
- Urban Edge Zone;
- Park Management Zone; and
- Golf Course and Tennis Courts Zone.

Management Zones, and the management intent and objectives identified for each, provide the context and an overall management direction within which sit the more specific management actions (as described in the remainder of this chapter).

This Plan of Management aims to give direction to any issues that may arise during the life of the Plan. It is never possible to foresee all the challenges, issues and changing circumstances that may arise in managing a diverse area of public land. Management Zones, and the management intent and objectives identified for each, provide a decision framework against which to consider future unforeseen situations and management issues/challenges each time a new management response is required. In addressing unforeseen issues, it is also important to refer back to the Park’s underlying values. The management directions and actions provided seek to ensure that these values are protected and enhanced

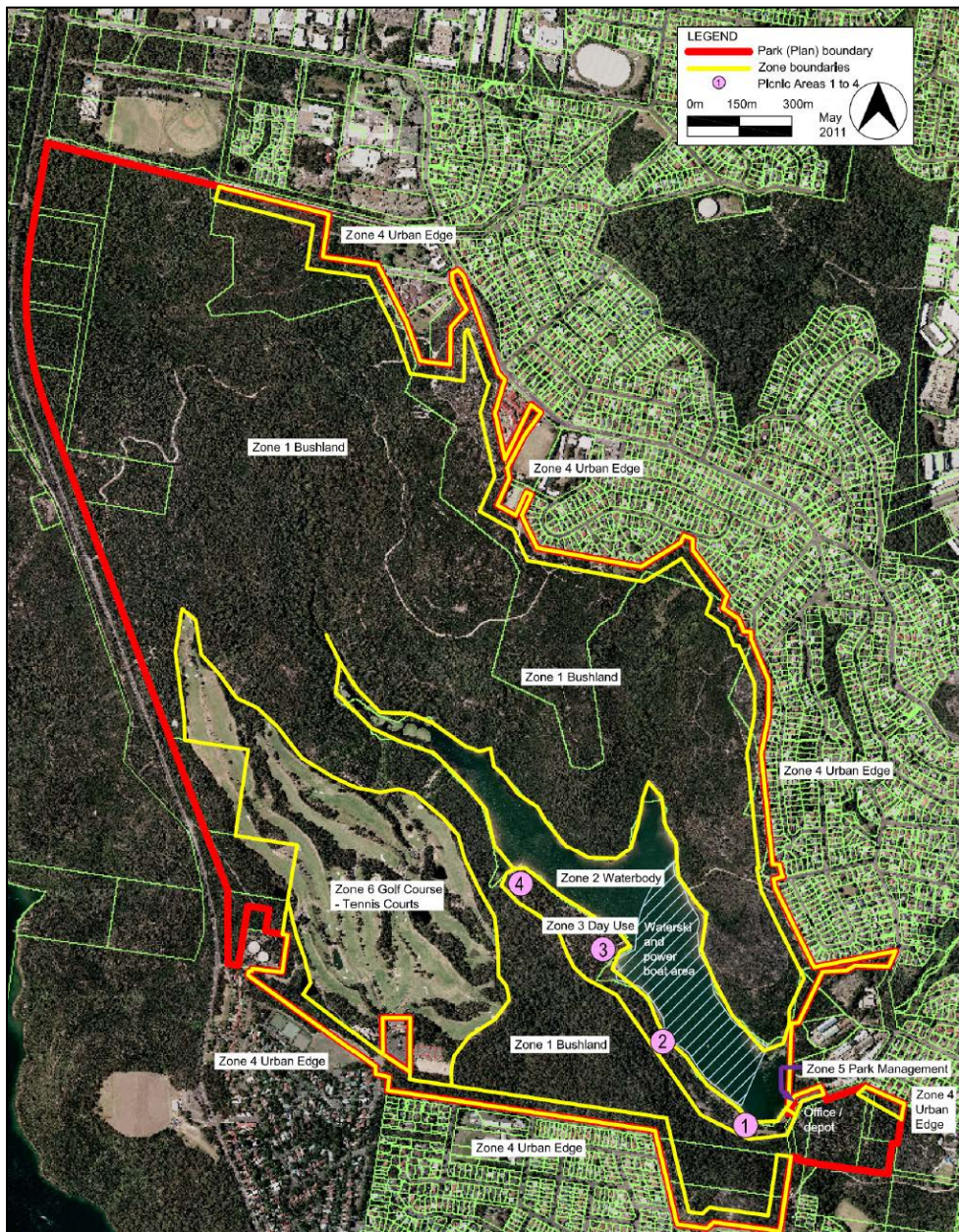


Figure 10
Management
zones

A statement of management intent has been described for each zone, as well as primary and secondary or supporting management objectives – defined as follows:

- primary management objectives are the over-riding or over-arching management objectives for a zone – they are the most important outcomes that management should achieve, and take the main role in driving/shaping management actions, and take priority in the case of any conflicting issues/outcomes; and
- secondary, or supporting, management objectives are other objectives that may be pursued within the primary purpose – once the primary management objectives have been realised, and as long as these secondary actions do not conflict with or compromise the primary purpose.

5.2.1 Bushland Zone

Management Intent – To maintain the greater majority of the Park as natural bushland and a scenic landscape, protecting communities and species of high conservation value, while providing for sustainable dispersed recreational and educational uses without significant impact on natural systems.

Primary management objectives:

- To protect communities and species legislated as having high conservation value.
- To maintain and enhance the natural systems, biodiversity, habitat, and scenic values of a large natural bushland area.
- To provide sustainable opportunities for dispersed track-based recreational, community and educational uses without significant impact on natural systems.
- To provide for visitor safety.

Secondary management objectives:

- To maintain links to adjacent or nearby natural areas.
- To assist in managing water quality in Manly Dam.
- To accommodate occasional “special use” recreational, community and or educational activities, with prior approval.
- To assist in maintaining the Park’s undeveloped bushland skyline, as seen from internal vantage points and use areas.

5.2.2 Waterbody Zone

Management Intent – To manage the waterbody as both a recreational and flood management asset, ensuring that water quality is suitable for swimming, and providing for safe, equitable and sustainable recreational use.

Primary management objectives:

- To collaborate with other agencies involved in the dam’s management, and manage water levels in the dam to meet flood management requirements while also catering for recreational use and visual appeal.
- To manage water quality in the dam suitable for swimming and other “primary contact” uses, and to provide for equitable and fair recreational access to and use of the waterbody catering for a range of sustainable water-based activities and uses.
- To provide for visitor safety.

Secondary management objectives:

- To manage impacts from recreational use of the waterbody on surrounding Park values and uses.
- To accommodate occasional “special use” recreational, community or educational activities, with prior approval.

5.2.3 Day Use Zone

Management Intent – To maintain the existing “picnic areas” along the south-western margin of the dam as the Park’s main vehicle-accessible day-use area, offering a range of attractive recreational settings and facilities varying from landscaped areas with high-level facilities to low-key bushland settings and catering for a range of sustainable low-impact uses.

Primary management objectives:

- To offer a high quality day-use experience for park visitors - providing for visitor vehicle access and accommodating a range of mainly passive day-use recreational activities.
- To provide safe access to the adjacent waterbody.
- To offer a range of recreational settings and standards of facilities, while retaining the low-key and less-developed character of the area.
- To maintain the War Memorial and Remembrance Point facilities as a key part of the Park's identity.
- To provide facilities and access to accommodate use by the elderly, mobility impaired or people with a disability (both individuals and groups).
- To provide for visitor safety.

Secondary Management objectives:

- To maintain the zone as series of separate, day-use areas of differing standards and character.
- To maintain a Council-managed booking service, while also providing access for "impromptu" visitors.
- To provide additional picnic and associated facilities, if warranted by demand and use levels – but only where perceptions of crowding and overdevelopment can be managed/mitigated and quality visitor experiences maintained.
- To rationalise and improve the Park's entry, and vehicle access/parking within this zone, including the introduction of paid parking.
- To promote links (walking and mountain bike tracks) to areas adjoining the Park, between picnic areas and other locations within the Park.
- To accommodate occasional "special use" activities, events and services, with prior approval.

5.2.4 Urban Edge Zone

Management Intent – To manage those sections of the Park boundary adjacent to residential areas and other developments to effectively manage hazards and adverse impacts for Park neighbours, as well as minimising adverse impacts from adjoining land uses on the Park and its values.

Primary management objectives:

- To minimise the risks to life and property posed by occasional wildfires on the Park.
- To reduce direct and indirect impacts on the Park and its values from adjacent land uses, as well as to avoid adverse impacts on Park neighbours from on-Park activities.
- To provide secondary visitor access points.

Secondary management objectives:

- To provide sustainable opportunities for dispersed recreational and educational uses, without significant adverse impacts on adjacent natural areas and systems.
- To assist in managing the quality of stormwater entering the Park.

5.2.5 Park Management Zone

Management Intent – To provide a location for Park staff, management facilities, equipment and administration.

Primary management objective:

- To provide an accessible, efficient low impact area for the location of Park management – with appropriate facilities, equipment, administration and information to the community.
- To provide for staff and visitor safety

Secondary management objective:

- To improve presentation and/or screening of the existing yard and parking area as seen from the Park entrance.
- To assist in management of the Community Native Nursery within the Park Management Zone.

5.2.6 Golf Course and Tennis Courts Zone

Management Intent – To provide for continued operation of the Wakehurst Golf Course and Wakehurst Courvet Tennis Courts, while protecting natural and cultural heritage values across this area and minimising adverse impacts from these facilities and their management on surrounding areas of the Park.

Primary management objectives:

- To provide for continued operation of the Wakehurst Golf Course in accordance with its agreement(s) with Council.
- To provide for continued operation of the Wakehurst Courvet Tennis Courts in accordance with its lease agreement(s) with Council.

Secondary Management objectives:

- To ensure that natural and cultural heritage values across the Golf Course area are protected and appropriately managed.
- To ensure effective management of, and the minimisation of adverse impacts from, activities on the Golf Course and Tennis Courts on the Park, its natural systems, the dam waterbody, and other values.
- To work with Wakehurst Golf Club to manage hazards to visitors in areas adjacent to the Golf Course.

5.3 Management Actions

The following Action Tables present a variety of management actions – comprising both policies and management directions or guidelines, as well as more specific on-ground or tangible actions – that will guide the park’s management over the coming 10 years. The management actions have been identified in response to the Park’s values, the threats to these values and other management issues, community values and aspirations as expressed through the various community consultation measures during the Plan’s preparation, and the stated Park vision and management objectives.

Management Actions have been grouped into specific value or operational areas (which approximate the value descriptions used in the preceding sections of the Plan), as follows:

- Biodiversity, Catchment and Landscape – comprising separate sets of management actions for native flora and vegetation communities and habitats, native fauna, weeds and pests and introduced animals, catchment and water quality, bushland linkages, and landscape and scenic values;
- Cultural Heritage – comprising separate sets of management actions for Aboriginal cultural heritage, historic (non-Aboriginal) heritage, and war memorial and commemorations;
- Visitor Use, Recreation and Enjoyment – comprising separate sets of management actions for tracks and trails, waterbody, day use areas, access, information and interpretation, educational uses, Wakehurst Golf Course, and Wakehurst Couvret Tennis Courts;
- Environmental Management – comprising separate sets of management actions for environmental protection and sustainability, fire management, Park boundary management, surrounding land uses and park neighbours, and easements; and
- Park Management and Administration – comprising separate sets of management actions for Park administration and management activities, co-operation with other agencies, community involvement, leases and licences and special uses and commercial activities, land tenure issues and boundary rationalisation, and finance and revenue generation.

Each value or operational area is preceded by a goal, or goals, and the objectives that the management actions are intended to achieve.

Within the Action Tables, individual management actions are presented in the following style, for ease of reference and use:

- **bold text** – indicates notable initiatives or changes in direction from past management practices;
- *italic text* – indicates management directions that are related to policy, guidelines or processes/procedures; and
- plain text – indicates tangible actions or specific on-ground tasks.

The Action Tables also include an indication of the order of resources required, priority and implementation responsibilities for each management action – as a guide to the Plan’s implementation or operation. Resource requirements are generalised according to the following categories, with more detailed cost estimates and timing for specific management actions identified in Chapter 6:

- high – actions that are significant projects, typically requiring sizeable capital works or other funding;
- moderate – actions that will require special allocations in the Park’s or Council’s operational budgets, additional resourcing, may extend over a number of funding cycles, and/or require a level of capital works funding;
- negligible or minor – actions that are routinely part of the Park’s management and can be met from normal Park or Council operational budgets;
- not applicable (n/a) – actions that are of a policy nature or guidelines, that do not have a resource requirement attached or where implementation/operational costs are part of other actions.

The identified priorities give an indication of both the relative importance, and preferred timing, of each action – as follows.

- **HIGH** – Essential to achievement of the Park’s 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 Park values or the environment and warranting funding consideration until achieved.
- **Medium** – These actions are desirable to enhance achievement of the Park’s management objectives, or to address issues that meet a significant community need, or to improve Park management outcomes and ideally should be implemented within the life of this Plan.
- **Low** – These actions are useful for the overall management of the Park 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.
- Where relevant, actions have also been identified as “Continuing” – where the action in question will apply or continue throughout the Park’s management and/or the life of this Plan.

Responsibilities for the implementation of each management action have been identified to the very general level only. Responsibility for the majority of management actions has been allocated to Warringah Council, as manager of the Manly Warringah War Memorial Park (R68892) Reserve Trust and the body with primary carriage of the Park’s care, control and management. Management actions allocated to Warringah Council, as Trust Manager and therefore on-ground manager, have also been differentiated chiefly by those most likely to be undertaken by the Park’s on-site managers and those more likely to be progressed by other parts of Council. Individual Council sections or business units have not been identified, to allow for organisational change and the allocation of tasks to the most appropriate section of Council. Management actions have also been allocated to external agencies or stakeholders where appropriate. Management actions that require works or programmes beyond the Park’s boundary, and hence beyond the Trust’s control, have been identified as requiring liaison between the Trust and Warringah Council – and Manly Council where relevant – as the responsible local government bodies for the Park’s surrounds.

Intended outcomes, and associated performance measures or means of assessing and tracking progress towards the stated management objectives, are identified following the Action Table for each general value or operational area as a whole.

Fig. 11 - PLAN OF MANAGEMENT – ACTIONS SUMMARY

Note: this is a summary of the actions. For full details refer to Action Tables in 5.3



ACTION	OVERALL KEY MANAGEMENT DIRECTIONS
V1	Manage greater majority of Park as bushland - to protect/enhance the natural environment, habitats and biodiversity values; help to maintain water quality in the dam; and contribute to recreation and scenic appeal.
V4	Carry out targeted management measures to protect areas of Duffys Forest EEC, other vegetation communities of conservation significance, and threatened/significant native flora and fauna species.
WP1	Implementation of rolling program of targeted bush regeneration and weed control.
WP5	Participation in regional pest control programs, and implement on-Park pest control measures.
C1-15	On-going stormwater management and water quality improvement measures in surrounding catchment.
FM1&2	Manage bushfire hazards, and implement relevant fire management plans.
TT1&2	Maintain network of safe and sustainably managed recreational tracks/trails.
TT6	Permit mountain biking on designated routes.
EP4	Maintain current dispersed character and bushland setting of picnic areas, with small-scale/low-profile character and dispersed layout of facilities.
W2	Manage waterbody as multi-use area catering for a variety of recreational uses as well as visual, environmental and flood management functions.
PA7	On-going risk assessment and management measures regarding recreational use of Park.
R2	Investigate the introduction of cost-effective system of park fees.
DU6	Introduction of pay and display parking system.
PA2	On-site Ranger team presence.
CT1-5	Encourage/support volunteer involvement in Park management.
E3	Encourage/accommodate environmental, outdoor and other educational uses of Park - expand on-site interpretive and information services/facilities.
S1	Responsible "bush neighbour", catchment protection and environmental educational programs in areas surrounding.

NUMBER	ACTION	LOCATION SPECIFIC MANAGEMENT DIRECTIONS
1	TT12&13	Undertake priority safety & erosion works (including track re-routing, widening &/or duplication) from Churchill Cr to Wandella Rd prior to re-opening for shared use (walkers and mountain biking).
2	A6	Retain Nyrang Rd secondary Park access at current size.
3	A2	Redesign/upgrade King St vehicle entry, including footpath and mountain bike tracks for safer access.
4	WM1	Improve landscaping/presentation of existing war memorial and Remembrance Point area.
5	DU2	Manage Picnic Area 1 as more developed, landscaped, modified and intensively managed day use setting.
6	W4	Retain designated/marked waterskiing/powerboat zone and approved times.
7	W9	Formalise Ski Club's use/management of waterskiing zone under an annual licence/agreement (within one year). Conditions to include licence and use fees, fair and equitable allocation of available waterskiing slots between Club and non-Club members, and annual reporting requirements.
8	TT4	Upgrade track standards, signposting and interpretation on walking tracks, in particular the Nature Trail and Wildflower Walk.
9	DU10	Progressively develop high-standard pathway from Picnic Area 1 to Picnic Area 4.
10	DU5	Replace/refurbish three existing amenities blocks to more presentable and functional standard, provide showers and accessible toilets.
11	DU4	Continue to provide wood-burning bbqs in picnic areas.
12	TT14&18	Formalise tracks, or reroute away from, Duffys Forest EEC and footpath opposite Balgowlah North Public School.
13	W1	On-going water quality monitoring within waterbody.
14	WGC4	Wakehurst Golf Club required to prepare an Environmental Management Plan (within 2 years), and implement.
15	WGC2&3	Continue Wakehurst Golf Course and Wakehurst Couvret Tennis Courts leases, but uses not to be expanded beyond current footprints (excluding minor adjustments or give-and-take rationalisation, but with no further bushland clearing).
16	TT10&11	Undertake priority safety works along tracks including The Trig Track prior to re-opening for shared use (walkers and mountain biking), maintain challenging "technical" sections of track with alternative/by-pass routes for walkers where practical.
17	A7	Liaise with RMS to deter, or safely manage (if possible), roadside parking on Wakehurst Parkway.
18	F2	Manage central area of Park, within Bushland Zone, as "core fauna habitat and refuge area".
19	TT5	Develop walking track link between Curl Curl Track and Eva's Track, past waterfall.
20	A11	Upgrade, rationalise, formalise and/or realign walking and mountain bike access links to other neighbouring areas and tracks.

Biodiversity, Catchment and Landscape

Value: NATIVE FLORA, VEGETATION COMMUNITIES AND HABITATS

Goal: Maintenance and enhancement of the Park's native flora, vegetation communities and habitats, and the protection of communities and species of high conservation value.

Objectives:

- A. To protect vegetation communities and native flora species legislated as having high conservation value, or assessed as of regional conservation significance.
- B. To maintain and enhance the Park's natural systems, vegetation communities, biodiversity and habitats.
- C. To maintain the greater majority of the Park as a large continuous natural area.

Management Actions, Priorities and Responsibilities (V):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
V1	<i>Manage the greater majority of the Park as bushland - both within the Bushland Zone and elsewhere - to protect and enhance the Park's natural environment, habitats and biodiversity values as well as to assist in maintaining water quality in the dam and contribute to the area's recreation and scenic appeal. (C, B)</i>	n/a	HIGH continuing	Park management Council
V2	<i>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 the dominant "passive" management measures employed to maintain native flora, vegetation community and habitat values across most of the Park. (C, B)</i>	n/a	HIGH continuing	Park management Council
V3	<i>Bush regeneration, revegetation and weed control will continue to be the major "active" management measures used to maintain and enhance the Park's native flora, vegetation community and habitat values. Stormwater management and sediment-erosion control/remediation will be important supporting "active" management measures. Fire management (including the use of fire as an ecological management tool) and neighbour education/awareness will also be supporting "active" management measures. (C, B, A)</i>	n/a	HIGH continuing	Park management Council RFS

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
V4	Undertake special management measures as/where required to protect and conserve the areas of Duffys Forest Endangered Ecological Community, other vegetation communities of conservation significance, and threatened or significant native flora species within the Park – including relevant measures set out in any applicable Approved Recovery Plans under the <i>Threatened Species Conservation Act 1995</i> . This may include limitations on visitor access and use if warranted. Seek management advice from the Office of Environment and Heritage and other specialist agencies, where required. (A)	Minor	HIGH	Park management Council OEH
V5	Consolidate the Park's bushland margins, to minimise native vegetation "edges" and revegetate clearings/incursions into the bushland, where practical and consistent with bushfire management and park boundary management objectives. (B, A)	Minor	Medium	Council Trust Crown Lands Division
V6	<i>Revegetation and supplementary bush regeneration plantings will only use local-provenance endemic species, preferably grown from seeds or vegetative material sourced (under managed conditions) from within the Park.</i> (B, A)	Minor	Medium continuing	Park management Council
V7	Undertake or facilitate periodic bushland condition assessments - to assist in formulating, targeting and monitoring bush regeneration and weed control measures as well as to monitor for any outbreaks of Myrtle Rust. (B, A)	Minor	Medium	Park management Council Other agencies/institutions
V8	Undertake or facilitate further investigations into the extent, location and status of all threatened or significant native flora species within the Park (A)	Minor	Medium	Park management Council Other agencies/institutions
V9	Undertake or facilitate large-scale vegetation surveys across the Park if required for bushfire planning/management or if the opportunity arises as part of wider vegetation survey programmes (by Council, Crown Lands Division, OEH, or others). (B, A)	Minor	Low	Park management Council Other agencies/institutions Volunteers

Catchment management actions (refer section C) and park neighbour programmes (refer section S) will also contribute to maintenance and enhancement of the Park's native flora, vegetation communities and habitats.

Performance Measures and Outcomes:

- No long-term reduction in, or further significant fragmentation of, the Park's bushland area – based on survey and monitoring.
- Condition of the Park's bushland maintained or enhanced – based on survey, monitoring and observation.
- Extent, occurrence and condition of significant vegetation communities, listed threatened species, and species of regional conservation significance maintained or enhanced – based on survey, monitoring and observation.
- Increased knowledge of the Park's native vegetation communities, flora and habitats.

Value: NATIVE FAUNA

Goal: An increase in the diversity, abundance and population resilience of native fauna, and the protection of fauna of high conservation value.

Objectives:

- A. To protect native fauna species legislated as having high conservation value, or assessed as of regional conservation significance.
- B. To support an increase in the diversity, abundance and population resilience of native fauna.

Management Actions, Priorities and Responsibilities (F):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
F1	<i>Habitat protection – through protecting the existing extensive areas of native vegetation and minimising bushland disturbances and fragmentation both within the Bushland Zone and elsewhere (to the extent as consistent with other actions identified in this Plan or unless for works otherwise approved in this Plan) – will be the dominant “passive” management measures employed to support native fauna populations within the Park. (B, A)</i>	n/a	HIGH continuing	Park management Council
F2	<i>The central area of the Park – a large and less accessible bushland area contained within the Bushland Zone bounded by the main fire trail (and shared walker/mountain bike route) to the north and east, the Trig Track (and Wakehurst Parkway) in the west, and the upper reaches of the Dam and northern end of Wakehurst Golf Course to the south (as shown in Figure 12) – will be managed as a “core fauna habitat and refuge area”. No further fragmentation, intensification of uses, or new uses or developments will be permitted in this area. This includes no new tracks or trails (including parallel or duplicate trail sections), no additional vegetation clearing, and no new or additional uses/developments including leases, licences and as far as possible easements). That section of the Circuit Track through this area – north from the Dam to the main fire trail – will not be significantly upgraded, and educational signage to be designed and installed. (B, A)</i>	Minor	Medium continuing	Park management Council

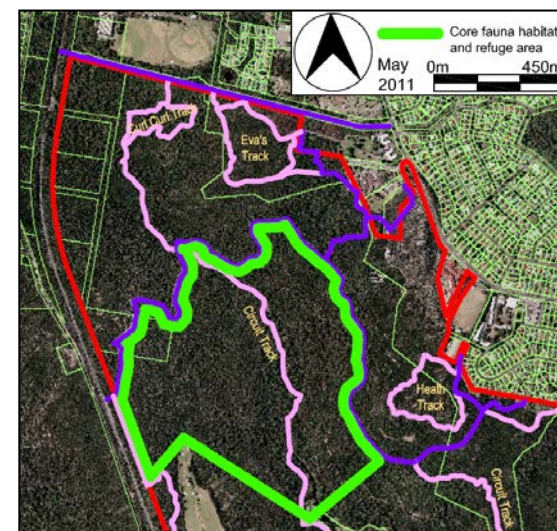
Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
F3	Undertake special management measures, as/where required to protect and conserve threatened or significant native fauna species within the Park – including relevant measures set out in any applicable Approved Recovery Plans under the <i>Threatened Species Conservation Act 1995</i> . This may include limitations on visitor access and use if warranted. Seek management advice from the Office of Environment and Heritage and other specialist agencies, where required. (A)	Minor	HIGH	Park management Council (OEH)
F4	<i>Wildlife may be actively managed (including relocation or habitat/nest manipulation) in and around the Day Use Zone and at other locations, where/when required, for visitor and public safety reasons. (-)</i>	Negligible	HIGH continuing	Park management
F5	Undertake or facilitate targeted surveys of the Park's threatened or significant native fauna species, as/when required, to support their conservation management. (A)	Minor	Medium	Park management Council (Other agencies/institutions Volunteers)
F6	Undertake or facilitate periodic fauna survey and monitoring within the Park, according to a systematic and structured programme to provide long-term and comparable data on the Park's wildlife. (A)	Minor	Low	Park management Council (Other agencies/institutions Volunteers)

Bushland linkages (refer section BI), park neighbour programmes (refer section S) and catchment management actions (refer section C) will also contribute to protection of the Park's native fauna.

Performance Measures and Outcomes:

- Diversity and abundance of the Park's native wildlife is maintained or enhanced (consistent with naturally occurring/sustainable levels) – based on survey, monitoring and observation.
- Park's native wildlife population is comparable to that of other, ecologically similar, large bushland conservation reserves in the northern Sydney region – based on survey, monitoring and observation.
- Native fauna species or populations listed as threatened, or of regional conservation significance, are maintained or enhanced – based on survey, monitoring and observation.
- Increased knowledge of the Park's native wildlife.

Figure 12 Core fauna habitat and refuge area



Issue: WEEDS, PESTS AND INTRODUCED ANIMALS

Goal: Minimal weed and pest numbers and impacts within the Park, and controlled access by approved domestic animals.

Objectives:

- A. To reduce the occurrence and impacts of weeds and pests within the Park.
- B. To manage domestic animals and their impacts on and within the Park.

Management Actions, Priorities and Responsibilities (WP):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WP1	<i>Bush regeneration will be used as a primary form of weed control and habitat restoration within the park. (A)</i>	n/a	HIGH continuing	Park management Council
WP2	Continue to prepare and implement a rolling programme of weed control and bush regeneration efforts within the Park, with adequate on-going commitments to follow-up works at treated sites (both existing sites and future sites) to ensure effectiveness. Priorities for these measures will include: <ul style="list-style-type: none"> declared noxious weeds, and environmental weeds with a high potential for spread; vegetation communities of high conservation significance; habitats/populations of native flora and fauna species of high conservation significance; areas of new weed incursion and/or high resilience disturbed sites and existing weed infestations; areas vulnerable to weed invasion/spread (such as creeklines, roadsides, tracksides and major visitor nodes); park boundaries; and visitor use areas. (A) 	High	HIGH continuing	Park management Council (Volunteers)
WP3	<i>Bush regeneration and weed control efforts will be linked to stormwater management measures, wherever possible, for maximum effectiveness. (A)</i>	Negligible	HIGH continuing	Park management Council
WP4	A monitoring programme will be prepared and implemented targeting areas vulnerable to the introduction and spread of weeds – including the risk of aquatic weed introduction or spread in/on the waterbody. This will include regular monitoring of the waterbody, Park boundary and high visitor use areas as well as periodic monitoring of Park access roads, fire trails and tracks/trails. (A)	Minor	Medium	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WP5	Continue the Park as a Wildlife Protection Area and participate in co-ordinated regional pest animal control programmes, as well as Council initiated control actions. Foxes, Feral Cats and Rabbits will be priority pest species for control efforts. (B)	Moderate	HIGH continuing	Park management Council
WP6	Continue the periodic monitoring of pest animal populations to inform and target control measures. (B)	Minor	Medium continuing	Park management
WP7	<i>Dogs - excluding guide and assistance dogs - will continue to be prohibited from the Park's internal road network, carparks, and all picnic areas. Dogs will not be permitted to enter any part of the waterbody. This will include regular visitation by Council rangers to 'hotspot' areas such as Nyrang Rd firetrail. (B)</i>	n/a	Medium continuing	Park management Council
WP8	<i>Dogs will be permitted on the Park's track and trail network and on the modified Park edges of the open/grassed Asset Protection Zones along the eastern and southern boundaries, but only if on a leash and under full control. This policy will be periodically reviewed – especially in regard to taking dogs into the Park's more natural areas, possible impacts on the area's biota, visitor safety and nuisance issues, and the perceptions of other visitors – and dogs may subsequently be banned from all or part of the Park. Dog owners/walkers will be required to collect and remove all dog faeces from the Park. (B)</i>	Minor	Medium continuing	Park management Council
WP9	<i>Other domestic animals/pets, including horses, will be prohibited from the Park, and the relevant Council by-laws notified and enforced within the area (by Park and Council staff). (B)</i>	Minor	Medium continuing	Park management Council

Park neighbour programmes (refer section S) and catchment management actions (refer section C) will also contribute to managing weeds and pests and their impacts within the Park.

Performance Measures and Outcomes:

- Weed control and bush regeneration programme in place and regularly reviewed.
- Weeds and pest species regularly monitored.
- Reduction in the extent of weed degraded bushland – based on monitoring, observation and bush regeneration team reporting.
- Reduced incidence of new weed infestations/introductions – based on monitoring, observation and bush regeneration team reporting.
- Participation in regional feral animal control programmes
- Reduced populations of, and adverse impacts of, pest animals – based on monitoring and observation.
- Dogs and other domestic animals effectively managed within the Park – with fewer incidents involving unleashed dogs.

Value: CATCHMENT AND WATER QUALITY

Goal: A protected and managed catchment that contributes to high water quality in Manly Dam, ensuring that the water body is maintained as an important recreational and environmental resource and operates effectively as a flood management asset

Objectives:

- A. To assist in managing water quality in Manly Dam;
- B. To assist in managing the quality of stormwater entering the Park
- C. To manage water quality in the dam suitable for swimming and other “primary contact” uses.
- D. To collaboratively manage water levels in the dam to meet flood management and other water users requirements, while also catering for recreational use and aesthetics.

Management Actions, Priorities and Responsibilities (C):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
C1	<i>Maintaining the greater majority of the Park as bushland will be an important contributor to maintaining water quality in the Dam (refer Section V). (A, C)</i>	n/a	HIGH continuing	Park management Council
C2	The Trust will encourage Council to identify off-Park pollutant sources and major stormwater source/discharge points within the Dam's catchment and progressively undertake (if on Council land) or encourage (if on other tenures) water quality improvement measures and improved stormwater management. Off-Park stormwater and water quality management measures could include signage, “drain stencilling” and other community awareness measures as/where appropriate. (B, A, C)	Moderate	HIGH	Trust Council
C3	The Trust will encourage Council to maintain existing water quality improvement measures on feeder creeks, drainage lines and the urban stormwater system within the Dam's catchment. Install additional stormwater management and water quality improvement measures where warranted (locating any works/infrastructure off-Park as far as possible). (B, A, C)	Moderate	HIGH continuing	Trust Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
C4	The Trust will encourage Council to carry out a risk assessment of creek and drainage lines entering the Park to assess the likelihood of toxic materials from a traffic or industrial accident, or other source, entering these watercourses and then the Park. Install interception ponds or other preventative measures (locating any works/infrastructure off-Park as far as possible) where required according to a prioritised programme. (B, A)	Minor (Moderate if works required)	Medium	Trust Council Other agencies
C5	The Trust will encourage Council to establish a reporting and response system, involving Council and notification from other appropriate agencies, in case of an accident that might pollute the creeks or stormwater entering the Park. (B, A)	Negligible	Medium	Trust Council Other agencies
C6	Periodically monitor creeklines and stormwater channels entering the Park for evidence of altered flow regimes and possible pollutants – such as altered/increased flow rates, increased erosion or deposition, gross pollutants, turbidity, or water surface slicks/sheen. (B, A, C)	Minor	Low continuing	Park management Council
C7	The Trust will encourage Council to survey roads and streets adjoining the Park and identify road edge conditions which allow overland flow into the Park's bushland. Prioritise roads for kerb and guttering to re-channel overland flow into the managed stormwater system. (B, A)	Minor	Low	Trust Council
C8	Periodically monitor groundwater from the former landfill site under the Wakehurst Golf Course – and encourage Council to monitor groundwater from the former landfill site under Aquatic Reserve – for the levels of leachate, and other contaminants. Identify and undertake any remediation or control measures, where practical and in collaboration with other agencies, as informed by monitoring results. (A, C, B)	Moderate	Medium continuing	Council Park management Trust
C9	<i>Liaise with Sydney Water regarding the condition and maintenance/upgrading of the sewer main through the Park, and reporting leak detection and repair response times as well as site clean-up/remediation. (A, C)</i>	Negligible	Low continuing	Park management Council Sydney Water
C10	Continue water quality monitoring within the Dam - for algal levels, faecal coliform bacteria and other pollutants - as a part of Council's wider water quality monitoring programme. Undertake more frequent or additional water quality monitoring within the Dam as/when warranted, particularly faecal coliform monitoring. Apply the Australian and New Zealand Environment Conservation Council (ANZECC) revised <i>Australian and New Zealand Guidelines for Fresh Water Quality</i> (2000) as the standard for assessing water quality in the Dam. (A, C)	Moderate	HIGH continuing	Council Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
C11	Continue use of the Council-managed propeller attached to the Dam wall, as a means of preventing or reducing algal blooms in the lower Dam. (C, A)	Minor	HIGH continuing	Park management
C12	Advise visitors - via on-site and off-site/pre-visit means - of any water quality issues and restrictions/recommendations regarding recreational use of the waterbody, when required in response to water quality monitoring and major rainfall/inflow events. (C)	Minor	HIGH continuing	Park management Council
C13	<i>Liaise with the Office of Environment and Heritage regarding possible inclusion of the Dam on that agency's "Harbourwatch" or "Beachwatch" water quality advisory system. (C)</i>	Negligible	Low	Council OEH
C14	<i>Co-operate with other water users to maintain water levels in the Dam within an appropriate range for effective flood mitigation as well as for environmental and aesthetic purposes and to meet the requirements of the other water extractors (including environmental flows in Manly Creek and downstream water users) (refer section OA1). (D)</i>	Negligible	HIGH continuing	Council Park management Other agencies
C15	Continue use of the Council-managed scour valve on the Dam wall to help regulate water levels in the dam and to provide for environmental flows downstream in Manly Creek. (D)	Negligible	Medium continuing	Park management Council

Park neighbour programmes (refer section CI) will also contribute to managing water quality within the Park.

Performance Measures and Outcomes:

- Waterbody continues to meet accepted standards for swimming – based on results of blue-green algae and other water quality testing.
- Improved quality and management of stormwater entering the Park – based on sediment, contaminants and gross pollutant levels.
- Groundwater from old landfill sites monitored, and leachate/contaminants managed to minimise impacts on waterbody and Park values.
- Dam water levels managed to effectively meet multiple objectives across all water users – based on water level monitoring and satisfaction of usage requirements.

Value: BUSHLAND LINKAGES

Goal: Improved links to adjacent or nearby bushland reserves, providing opportunity for fauna movement and the genetic exchange.

Objectives:

- A. To maintain and enhance links to adjacent or nearby natural areas.
- B. To support the protection of native flora and fauna populations both within the Park and within adjacent or nearby natural areas.

Management Actions, Priorities and Responsibilities (BL):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
BL1	<i>Maintain sections/borders of bushland corridors within the Park and/or links to surrounding natural areas. Avoid siting new tracks/trails and facilities, or otherwise disturbing bushland, where this would compromise links to adjacent or nearby natural areas. (A)</i>	Negligible	Medium continuing	Park management Council Other agencies
BL2	<i>The Park's western boundary (opposite Garigal National Park), north-western areas (linking across the Warringah Aquatic Centre site and Aquatic Reserve), eastern boundary (adjacent to Southern Cross Way), and south-east corner (connecting to Condover Reserve) are priority areas for maintaining or reinforcing wildlife corridors or bushland links. (A, B)</i>	Negligible	Medium continuing	Park management
BL3	The Trust will encourage Council to continue – amongst other tree planting initiatives – an indigenous street tree planting programme for streets neighbouring and around the Park (where appropriate, and at least maintaining a minimum native to non-native species ratio and excluding problem exotic species) to provide greater opportunity for fauna movement between the Park and other nearby natural areas. (A)	Minor	Medium	Trust Council Park management

Park neighbour programmes (refer section C) and co-operating with other agencies (refer section OA) will also contribute to maintaining and improving links to adjacent or nearby bushland reserves.

Performance Measures and Outcomes:

- Links to surrounding natural areas are maintained and enhanced.
- Observed increased incidence of indigenous street trees in areas around the Park.

Value: **LANDSCAPE AND SCENIC VALUES**

Goal: A natural landscape of high scenic quality, from both within the Park and when viewed from outside areas.

Objectives:

- A. To maintain and enhance the scenic values of a large natural bushland area in an urban context.
- B. To promote the maintenance of the Park's largely undeveloped bush skyline, as seen from internal vantage points and visitor use areas.
- C. To maintain the Park as a "peaceful green oasis" with a sense of the being within a natural environment/setting, without the visual and land use intrusions of the urban environment

Management Actions, Priorities and Responsibilities (L):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
L1	<i>Maintaining the greater majority of the Park as bushland will be an important contributor to protecting its scenic qualities and views (refer Section V). (A, C)</i>	n/a	HIGH continuing	Park management Council
L2	<i>The Trust will encourage Council to investigate appropriate planning controls that may be applied in adjoining urban areas (within the Park's visual catchment) to ensure retention of the natural skyline as seen from within the Park and especially from key visitor use areas, and to minimise the visual intrusion/impacts of residential and other urban developments. (B, C)</i>	Negligible	HIGH	Trust Council
L3	<i>The Trust will encourage Council to identify within Council's planning and development approvals system those properties or areas surrounding the Park where development applications will be referred to Park management for comment. (B, C)</i>	Negligible	Medium	Trust Council Park management
L4	<i>Maintain the current dispersed character and largely bushland setting of the existing picnic areas and internal carparks, as well as the small-scale and low-profile character of Park buildings and infrastructure. (A, B)</i>	n/a	HIGH continuing	Park management
L5	<i>Possible impacts on the landscape and scenic values will be considered in all future Park developments – at all scales from tracks/trails to new structures or facilities (and including consideration of the visual impacts of visitor use – such as carpark "glare" and people in the landscape). (A, B)</i>	Negligible	Medium continuing	Park management Council Other agencies

Performance Measures and Outcomes:

- No further visual intrusion/impacts on Park's skyline due to urban development – as assessed by photopoint recording.
- Consideration of Park's visual qualities included in Council's planning and development approvals system.
- Existing low-key bush-setting character of Park maintained – as determined by user/community feedback and landscape/visual assessments.

5.3.1 Cultural Heritage

Value: ABORIGINAL CULTURAL HERITAGE

Goal: Protection of Aboriginal cultural heritage sites and values within the Park, and promotion of Aboriginal heritage to Park visitors.

Objectives:

- A. To manage Aboriginal cultural heritage sites and values in accordance with *National Parks and Wildlife Act 1974*.
- B. To reduce the deterioration of Aboriginal cultural heritage sites within the Park.
- C. To increase visitor awareness of Aboriginal cultural heritage and of the continuing importance of the Park to Aboriginal people today.
- D. To work with appropriate Aboriginal people and groups in management of the Park's Aboriginal cultural heritage sites and values.

Management Actions, Priorities and Responsibilities (ACH):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
ACH1	<i>Ensure Aboriginal heritage sites are appropriately managed throughout the Park, as consistent with the National Parks and Wildlife Act 1974. (A)</i>	Minor	HIGH continuing	Park management
ACH2	Actively manage those Aboriginal heritage sites (in the non-leasehold areas of the Park) which are being impacted by visitor access, or natural factors (such as runoff or overgrowth), to reduce the deterioration and enhance the level of protection of these sites. (A, B)	Minor	HIGH continuing	Park management
ACH3	<i>Liaise with the Office of Environment and Heritage as well as appropriate Aboriginal people/groups (e.g. the Metropolitan Local Aboriginal Land Council, Aboriginal Heritage Office and local Elders) regarding the management and protection of Aboriginal heritage sites within the Park. (A, B, D)</i>	Negligible	Medium continuing	Park management Council Other agencies

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
ACH4	Identify locations/features of high archaeological sensitivity – where there is a greater likelihood of Aboriginal heritage sites remaining (such as rock platforms, creeklines and rock overhangs) – and apply additional precautions for Park maintenance or development works in these locations. (A)	Minor	Medium	Park management
ACH5	<i>Provide advice, with reference to the Office of Environment and Heritage, to the Wakehurst Golf Club Limited regarding the management of known, and potential, Aboriginal heritage sites within the Wakehurst Golf Course lease area (refer section WGC6).</i>	Negligible	Medium continuing	Park management Other agencies
ACH6	<i>Continue to strategically limit visitor knowledge of the location of and access to Aboriginal heritage sites. This is the principal management tool and means of protecting these places. (A, B)</i>	Negligible	Medium continuing	Park management Council
ACH7	<i>Actively involve Aboriginal people in protection and presentation of the Park's Aboriginal cultural heritage. (D, A)</i>	Minor	Medium continuing	Park management
ACH8	Provide interpretive and educational material/resources regarding the Park's use by Aboriginal people, surviving Aboriginal evidence (generically) and continuing importance for Aboriginal people today. (C)	Minor	Medium	Park management Council
ACH9	<i>Investigate possible Aboriginal sites that may be accessed for visitor appreciation – where supported by the Office of Environment and Heritage as well as appropriate Aboriginal people/groups (e.g. the Metropolitan LALC and Aboriginal Heritage Office) and only where adequate management can be provided to protect and present these sites. (C, D, A)</i>	Minor	Medium	Park management Council Other agencies
ACH10	<i>Investigate funding to undertake a systematic survey to identify and record Aboriginal heritage sites. Undertake survey if funding can be secured, and involve the local Aboriginal community in the survey process. (A, D)</i>	Negligible	Low	Park management Council

Performance Measures and Outcomes:

- Compliance with relevant legislation.
- Protective management of Aboriginal heritage sites – as assessed by periodic inspection and condition assessments (in collaboration with appropriate Aboriginal people/groups).
- Suitable public information available regarding Park's Aboriginal heritage values.
- Reduced deliberate and inadvertent visitor damage to Aboriginal heritage sites – as assessed by periodic inspections.
- Effective liaison with the OEH, Metropolitan LALC and Aboriginal people/groups.

Value: HISTORIC (NON-ABORIGINAL) HERITAGE

Goal: Recognition and management of historic heritage features, and greater opportunities for visitors to appreciate the Park's recent history and historic features.

Objectives:

- A. To identify and manage historic heritage sites.
- B. To increase visitor awareness of the Park's past and historic heritage sites.

Management Actions, Priorities and Responsibilities (HH):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
HH1	Identify and document historic heritage sites/features within the Park and provide appropriate management and protection for these features where warranted. (A)	Minor	Low	Park management Council Other agencies
HH2	<i>Give greater prominence to the Park's past, and social history, in information and interpretation efforts.</i> (B)	Minor	Medium	Park management Council

Performance Measures and Outcomes:

- Increased knowledge, and active management (if necessary) of historic heritage sites/items.
- Suitable public information available regarding the Park's historic heritage values.

Value: **WAR MEMORIAL AND COMMEMORATIONS**

Goal: A respectful venue for war memorials and commemorations, and recognition of the Park's origin as a war memorial reserve.

Objectives:

- A. To maintain the War Memorial and Remembrance Point facilities as a key part of the Park's identity.
- B. To continue to accommodate military and related commemorations within the Park.
- C. To improve awareness of the Park's establishment as a War Memorial Park after World War I.

Management Actions, Priorities and Responsibilities (WM):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WM1	Improve the landscaping and presentation of the existing war memorial located in Picnic Area 1, and the general area and surrounds of Remembrance Point, recognising this memorial as the principal commemorative features/location within the Park. (A)	Minor	HIGH	Park management Manly Warringah War Memorial Park Remembrance Trust
WM2	No additional memorials, other than those already approved, will be established within Picnic Area 1. (A)	n/a	Medium continuing	Park management Council
WM3	Promote the use of the reserve name "Manly Warringah War Memorial Park", as well as Manly Dam, in promotional and interpretive material for the Park. (C)	Negligible	Medium continuing	Park management Council Trust
WM4	Facilitate continued use of the Park for remembrance ceremonies, with the scale of events to be in keeping with the established Park values and low-key setting. (B)	Negligible	HIGH continuing	Park management Council

Performance Measures and Outcomes:

- Improved presentation of Remembrance Point area – as informed by user/community feedback.
- Continued commemorative uses of Park.
- Additional available information, and greater community acknowledgement, of the Park's memorial/commemorative origins and values.

5.3.2 Visitor Use, Recreation and Enjoyment

Value: TRACKS AND TRAILS

Goal: A system of tracks and trails that enable a variety of recreational activities, and provide opportunities to experience and appreciate the Park's natural environment, without significant impact on Park values or user conflicts.

Objectives:

- A. To provide sustainable opportunities for dispersed track-based recreational, community and educational uses, predominately in a bushland setting and without significant impact on the Park's natural/cultural heritage, landscape and scenic values.
- B. To provide for the multi-use of fire trails and other tracks where appropriate.
- C. To offer a range of recreational uses – with varying experiences, degrees of challenge and exertion - and continue to cater for both walking and mountain biking within the overall track/trail system.
- D. To provide, as far as practical, a safe track/trail network as consistent with the intended uses and with minimal conflict between users.
- E. To provide for visitor safety

Management Actions, Priorities and Responsibilities (TT):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT1	<i>The current extent and configuration of the existing recreational tracks/trails network within the Park will generally be retained – with the additional or modified track/trail sections, changes to approved uses, as set out below (and in sections DU and A) as well as minor re-routings and other works. (A, B, C, D)</i>	n/a	HIGH continuing	Park management
TT2	Continue to maintain a network of safe and sustainably managed routes – of differing track standards/conditions, distance/duration and character – within the Park, to offer a choice of experiences. This network will include bush tracks and fire trails in the Park's bushland areas, sealed or high standard pathways in the Park's more developed areas or along the Park's margins, and cleared asset protection zones along the Park's margins. Track/trail re-routings and works may be undertaken as required for user safety and to minimise adverse impacts on the Park's values (in addition to the works set out below, and in sections DU and A). Informal and unauthorised tracks will be closed and rehabilitated (A, B, C, D, E)	Moderate	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT3	<i>All fire trails within the Park's bushland zone will normally be available for use by walkers (except when closed due to management, safety or other reasons – refer section TT19 below). (B, E)</i>	Negligible	Medium continuing	Park management
TT4	Upgrade track standards/conditions, signposting and interpretation for all tracks, in particular the Nature Trail and Wildflower Walk to cater for less experienced and less confident users and offer a convenient bushland experience close to the picnic areas. (C, A, E)	Moderate	Medium	Park management Council
TT5	Develop a track link between the Curl Curl Track and Eva's Track in the north of the Park, via the scenic waterfall on the upper reaches of Curl Curl Creek, to provide a greater variety and continuation of tracks in that area. (A, C, D)	High	Low	Park management Council
TT6	Mountain biking will be permitted on the existing well-established and well-used "loop route" – as shown on Figure 13 and Figure 11. This route is predominantly fire trails, wide bush tracks and cleared asset protection zones – which can be shared with other users, as has been the situation for many years. It also includes some sections of narrower bush tracks that require various works before they are suitable for shared use, as determined by the 2011 risk assessment. These narrower bush track sections will be approved for mountain bike use only in the immediate term - as shown on Figure 13 and at Figure 11 (also refer sections TT10 and TT12). Following completion of the works outlined in sections TT10 and TT12 below, the entire mountain bike loop may be shared by mountain bikers and walkers in accordance with the management actions outlined in this section. The full loop route includes several sections outside the Park boundary, may also be under Council management as local roads and open space. (C, B, D, A, E)	High	HIGH continuing	Park management
TT7	The approved mountain biking loop route will be clearly identified on-site to all visitors along with appropriate use and behaviour messages, including displaying a "biking code of conduct" at strategic points, and safety warnings. This will be done through orientation/entry signage, route identification/naming and reinforcement/reminder signage, route marking, direction marking, or other measures as most effective. Behaviours will be monitored, with appropriate management actions taken to encourage the code of conduct (D, B, E)	Moderate	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT8	Existing track treatments on the approved mountain biking loop will be maintained as required – and new or additional track treatments installed – for user safety, to minimise adverse impacts on the Park's values, and to minimise the likelihood of detouring/avoidance and the development of unauthorised alternative tracks (input will be sought from mountain bikers, and other relevant users, regarding the design and siting of track treatments). (D, B, A)	Moderate	Medium continuing	Park management
TT9	<i>Liaise with representatives of mountain bike riders, bush walkers and environmental groups regarding sustainable management and maintenance of the approved mountain biking loop, including catering for a cross section of riders and abilities as well as providing for rider and visitor safety (refer section CI). (D, B, A, C, E)</i>	Minor	Medium continuing	Park management Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT10	<p>The following priority works, or other appropriate management measures, will be undertaken in the short term on that section of the approved mountain biking loop from Kirkwood Street, then adjacent to Wakehurst Parkway, north to the Park's main fire trail (known as The Trig Track, as shown on Figure 11 and Figure 13):</p> <ul style="list-style-type: none"> chicanes, or other slowing/warning devices, and signage will be installed at each end of this section, alerting all users to the shared narrow track and applicable precautions; treatments to improve user safety and reduce potential accidents/conflicts on the higher risk parts of this track will be implemented – such as measures to reduce mountain bike speeds on sharp/blind curves, vegetation trimming to improve sightlines on sharp/blind curves, treatments of hazardous drops and steep/loose sections (Park Managers will liaise with mountain bikers, and other relevant users, as to the most effective means to reduce mountain bike speeds and increase user safety – for possible application here and elsewhere in the Park); and specifying a clockwise (south to north) travel direction only, for mountain bikes. <p>Such works will also be subject to an environmental constraints analysis and environmental assessment, however user safety and risk management will be priority considerations.</p> <p>Prior to the completion of these, or other appropriate, works this section of track will be managed as a mountain bike route only – with walkers and other users prohibited. Following the completion of these works this section of track may be managed as a shared bush track for mountain bikers, walkers and other users. (D, A, C, B, E)</p>	Moderate	HIGH	Park management
TT11	<p>Short sections of alternative track routes, either shared use or for walkers only, may be established around more challenging "technical" sections of existing track on The Trig Track once it is being managed for shared use. These "technical" sections will be appropriately identified on-site as requiring higher mountain biking skill levels. Input will be sought from mountain bikers regarding the identification and management of these "technical" track sections. This approach may also be used on other parts of the approved mountain biking loop. (D, A, C, E)</p>	Minor	Medium	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT12	<p>That section of the approved mountain biking loop from the Roosevelt Avenue fire trail access in the west to Cootamundra Drive in the east (as shown on Figure 11 and Figure 13) will be managed, in the immediate term, as a mountain bike route only – with walkers and other users prohibited. This section of track will be upgraded or replaced, in the short term, to make this link suitable, and approved, for shared use by mountain bikers, walkers and other users. This will be realised by:</p> <ul style="list-style-type: none"> implementing a similar suite of priority works and management measures as identified for The Trig Track (refer section TT10 above) on this section of narrow bush track, including route realignment where necessary and installing additional chicanes or mountain bike slowing measures in the vicinity of the Cootamundra Drive playground; or <p>Such works will also be subject to an environmental constraints analysis and environmental assessment, however user safety and risk management will be priority considerations. Mountain biker access to the technical section and rock ledge/jump (known as “the nineteenth hole”) will be provided for in each of the above alternatives. (D, A, C, B, E)</p>	Moderate	HIGH	Park management
TT13	<p>User safety and erosion on the two sections of the approved mountain biking loop to be upgraded or redeveloped as shared routes (for mountain bikers, walkers and other users) – the Trig Track and in the Roosevelt Avenue/Cootamundra Drive to Nyrang – Wandella Rd area – will be monitored for at least 12 months following the opening of these routes to shared use and the risks associated with shared use of these sections reassessed at the end of this period. If the safety record of these sections, or their risk assessment, is unacceptable then either section may revert to mountain bike use only or additional safety measures implemented. (D, A, C, B, E)</p>	Minor	HIGH	Park management
TT14	<p>The short section of track from Kirkwood Street to the vantage point (and Wakehurst Golf Course service access) east of the water reservoirs will be upgraded to accommodate both walker and mountain bike traffic. Duplication of this short section of the approved mountain biking loop track, or other route realignment in this area (including east to Bantry Reserve and Upper Clontarf Street), will be considered to separate walkers and mountain bikers. (A, D, E)</p>	Minor	Medium	Park management

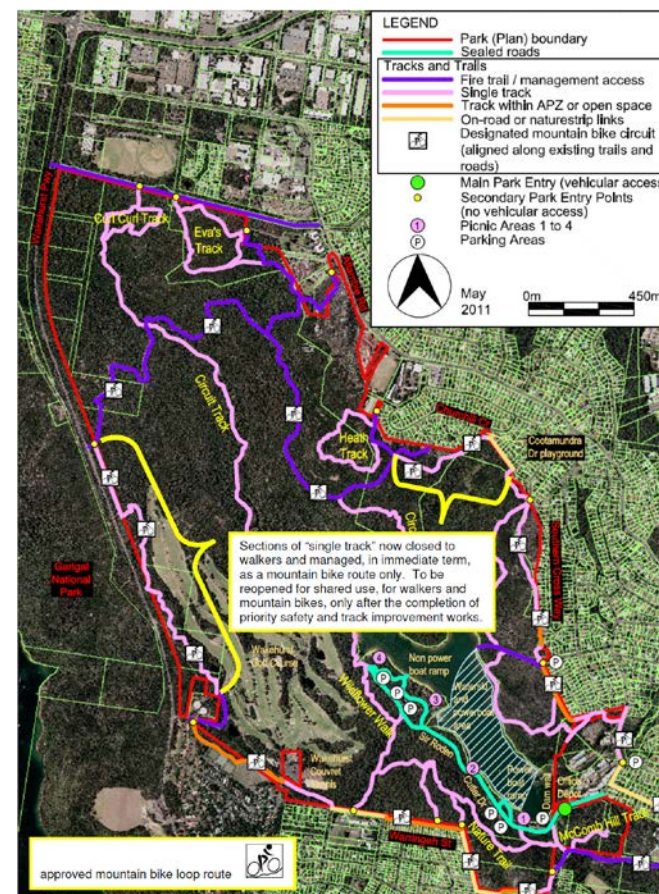
Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT15	<i>Liaise with the neighbouring institutions regarding possibly re-routing that section of the approved mountain biking loop further south (downslope, and off the Park) and away from residences at the south end of Maroa Crescent. Measures to improve user safety will also be discussed with neighbouring institutions in relation to that section of the approved mountain biking loop outside the Park in the Maroa Crescent, Wandella Road and Mermaid Pool area. (D, A, E)</i>	Negligible (Minor to Moderate if implemented)	HIGH	Park management Council Other agencies
TT16	Investigate the practicality and implications of relocating that section of the identified mountain biking loop now located outside the Park along the northside of Manning Street (opposite Balgowlah North Public School) to a new section of mountain bike only track a short distance inside the Park boundary in this area. Implement if feasible, and the environmental impacts are acceptable and funding available. (D, A)	Negligible (Moderate if to be implemented)	HIGH	Trust Park management
TT17	Night mountain bike riding will not generally be permitted in the Park. (A, D, E)	Negligible	HIGH continuing	Park management
TT18	Investigate and implement, if possible, rerouting track away from, Duffys Forest EEC west of Wakehurst Golf clubhouse.	Minor	HIGH continuing	Park management
TT19	<i>Continue to allow the use of the tracks and trails network for community and recreational uses and events – where consistent with the values of the surrounding Park areas – with prior approval (and subject to permit approval, with conditions, as appropriate – refer section LL), where other users are not unduly disadvantaged and Park neighbours unduly effected, without unacceptable impacts on the tracks/trails and associated infrastructure. (Refer to section LL in relation to managing commercial activities on the tracks and trails network.) (A, C)</i>	Negligible	Medium continuing	Park management
TT20	All approved tracks and trails will be maintained through a programmed system of inspections and maintenance, supported by responsive maintenance works as required. All maintenance, preventative and other works will be documented. Informal and unauthorised tracks will be closed and rehabilitated – and track alignment, design and treatments will endeavour to minimise the likelihood of the creation of unauthorised/alternative tracks. (A, B, D)	Moderate	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
TT21	The approved mountain biking loop and other tracks/trails may be temporarily closed due to wet weather, for maintenance or other Park management operations, for visitor safety, or as determined by the Park Manager. Closures of the mountain biking track will be notified via Council's web site and social media (A, B, D, E)	Negligible	HIGH continuing	Park management Council
TT22	<i>The Trust will encourage Council to liaise with Manly Council regarding that section of the approved mountain bike loop located between Bantry Reserve, the Seaforth Bowling Club and Kirkwood Street (within the Manly Local Government Area) to ensure a co-ordinated and consistent approach to the route's maintenance, management and use. (D, A)</i>	Negligible	HIGH continuing	Trust Council Park management Manly Council
TT23	<i>The Trust will encourage Council to liaise with the University of NSW regarding that section of the approved mountain bike loop located on the university's land to ensure a co-ordinated and consistent approach to the route's maintenance, management and use. (D, A)</i>	Negligible	Medium continuing	Trust Council Park management University of NSW
TT24	<i>Liaise with other agencies (such as the Rural Fire Service, electricity utilities and Sydney Water - refer section U1) as required regarding maintenance scheduling, standards and environmental safeguards that should, preferably, be applied on those sections of the Park's fire trail and tracks network that are subject to maintenance by other agencies.</i>	Negligible	Medium continuing	Park management Council Other agencies
TT25	<i>The Trust will encourage Council to liaise with the National Parks and Wildlife Service regarding linking tracks between the Park and Garigal National Park. (A, C)</i>	Negligible	Low	Trust Park management Council NPWS (OEH)

Performance Measures and Outcomes:

- Track network maintained at least at current extent – as assessed by occasional route mapping.
- Maintenance programme in place with tracks maintained to planned/determined standards – as assessed by regular track condition audits, works reporting and user feedback.
- Track safety standards achieved – as assessed by number of reported incidents/accidents.
- Track use restrictions (including compliance with designated mountain bike circuit) and track closures observed/enforced – as assessed by observed compliance levels, and required enforcement actions.
- Priority works undertaken on The Trig Track and Roosevelt Avenue/Cootamundra Drive section of mountain bike circuit – works complete, tracks safe and re-opened for shared use when approved.
- Additional track upgrading works, and new links, progressively implemented – works complete.
- Track usage levels maintained, or growing, but within acceptable environmental impact limits – as assessed by regular track use surveys and impacts monitoring.
- Increased stakeholder involvement in track management – as assessed by participation hours and projects.
- Progress made in collaborative track management with adjoining landholders.

Figure 13 Approved mountain bike loop route



Value: **WATERBODY**

Goal: A waterbody that is enjoyed for recreation - providing for safe, equitable and sustainable visitor use and enjoyment without impairing other Park values.

Objectives:

- A. To provide for equitable recreational access to and use of the waterbody, catering for a range of sustainable water-based activities, events and uses.
- B. To provide for visitor safety.
- C. To manage impacts from recreational use of the waterbody on surrounding Park values and uses.

Management Actions, Priorities and Responsibilities (W):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
W1	<i>Continue to ensure that water quality in the Dam meets accepted recreational use standards – through catchment management (bushland protection, stormwater management and off-Park measures) and water “mixing” use of the propeller (refer Section C). (A, B)</i>	(refer Section C)	HIGH continuing	(refer Section C)
W2	<i>Manage the Dam waterbody as a multi-use area catering for a variety of recreational uses (as below) - as well as visual, environmental and flood management roles (refer Sections C and L). (A, B)</i>	n/a	HIGH continuing	Park management Council Other agencies
W3	<i>The existing designated and marked waterskiing and powerboat zone will remain in place and at its current extent. (A, B)</i>	Minor	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
W4	<p>Standard approved times for waterskiing and powerboat use within the designated waterskiing and powerboat zone, per week, will be as follows:</p> <ul style="list-style-type: none"> • Five (5) weekdays, Saturday, Sunday – see Table 7 <p>Occasional waterskiing and powerboat use of the designated waterskiing and powerboat zone, outside of the standard approved days and times, may be permitted on a case-by-case basis and with prior approval including for major and special event uses.</p> <p>Annual review to be conducted on the standard approved times for waterskiing and powerboat use. These times may be altered by Council resolution and without amendment of this Plan of Management.</p> <p>(A, B, C)</p>	Minor	HIGH continuing	Park management
W5	<p><i>A maximum of two power boats will be permitted to use the designated waterskiing and powerboat zone at any given time. (A, B, C)</i></p>	Negligible	HIGH continuing	Park management
W6	<p><i>Waterskiing and powerboat use may be cancelled, at the Park Manager's discretion, on public holidays, peak use days or in response to park crowding or safety concerns as well as to accommodate special events or permit-approved uses of the waterbody. The Park Manager will also have the discretion to extend approved waterskiing times, or for permit-approved uses of the waterbody. (A, B, C)</i></p>	Negligible	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
W7	<p><i>The Manly Warringah Water Ski Club's use and management of the designated waterskiing and powerboat zone will be formalised under a licence/agreement with Council, to be in place within one year of this Plan's adoption by Council. The licence/agreement will address, among other matters:</i></p> <ul style="list-style-type: none"> <i>the Club's usage rights and management role in relation to the approved designated waterskiing and powerboat zone;</i> <i>the timing and duration of waterskiing sessions;</i> <i>the fair and equitable allocation of all available waterskiing sessions between Club members and non-Club members (across weekdays and Saturdays, mornings and afternoons, and over any single one month period);</i> <i>managing access to and use of the ski jump;</i> <i>booking protocols for non-Club members (such as promotion and intending user awareness, how far in advance bookings will be allocated, expression of interest procedures if warranted and measures for allocating over-subscribed sessions, and other operational matters)</i> <i>transparency of all bookings</i> <i>the use of or integration with Council's booking system;</i> <i>safety requirements and applicable rules and regulations for use;</i> <i>usage fees and charges, for both Club-members and non-Club members;</i> <i>"in-kind" contributions to the area's management by the Club, if appropriate;</i> <i>boat registration and crewing requirements;</i> <i>insurance requirements – addressing the type and level of coverage required, and the situations/locations for which coverage is necessary;</i> <i>the provision and maintenance of on-water infrastructure (specifically the ski jump, zone boundary marker buoys, slalom course markers and other assets as agreed with Council);</i> <i>compliance and infringement procedures; and</i> <i>annual reporting.</i> <p><i>The licence/agreement will be subject to an annual review or as required.</i> (A, B, C)</p>	Minor	HIGH	Park management Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
W8	<i>The above licence/agreement between the Manly Warringah Water Ski Club and Council is to be in place within one year of the adoption of this Plan.</i> (A, B, C)	Minor	HIGH	Park management Council
W9	<i>If, during the life of this Plan, the Manly Warringah Water Ski Club no longer seeks usage rights and a management role in relation to the designated waterskiing and powerboat zone, recreation management of this area will revert to Council. Council may seek the participation of other interested parties in using and managing this area as a waterskiing venue – applying a similar annual licence arrangement and conditions as described above. Council may also consider managing waterskiing and powerboat use of the zone itself.</i> (A, B, C)	Minor	Medium	Park management Council
W10	Work with the Manly Warringah Water Ski Club and other waterskiing and powerboat users, to develop a code of conduct for waterskiing and powerboating on Manly Dam. The code of conduct for waterskiing and powerboating will be distributed to all booked and intending users of the designated waterskiing and powerboat zone, as well as clearly displayed at the southern (motorised) boat ramp and made available on the Park's (Council's) website and social media. (A, B, C)	Minor	HIGH	Park management
W11	To enable use of the designated waterskiing and powerboat zone Council will be responsible for maintenance and management of the southern (motorised) boat ramp as well as all safety and regulatory signage (both land and water based). (A, B)	Minor	HIGH continuing	Park management
W12	<i>Non-motorised uses of the waterbody will continue to be permitted in the lower and upper reaches of the Dam (during normal Park opening hours). Non-motorised uses of the designated waterskiing and powerboat zone will be prohibited during standard approved times for waterskiing and powerboat use and during any relevant Council approved events outside of these times.</i> (A, B, C) (see Table 7 for times when water skiing is permitted).	Negligible	HIGH continuing	Park management
W13	<i>The lower/eastern end of the waterbody will continue to be managed as the Dam's principle swimming and waterplay area, with shoreline management and other facilities appropriate to support this use.</i> (A, B, C)	Minor	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
W14	Alert recreational users – through on-site signs and other measures – of the upper/western headwaters of the waterbody to the conservation significance of the artificial wetland community on the Dam's upper reaches, and measures or applicable restrictions to minimise their impacts on this shoreline vegetation. (C)	Negligible	Medium	Park management
W15	<i>Continue to allow the use of the waterbody for community and recreational uses and events – where consistent with the area's values – with prior approval (and subject to permit approval, with conditions, as appropriate – refer section LL), where other users are not unduly disadvantaged. (Refer to section LL in relation to managing commercial activities on or around the waterbody.)</i> (A, B, C)	Negligible	Medium continuing	Park management
W16	Signage and other on-site information, as well as off-site/pre-visit information, will be used to make visitors aware of the safety issues around the waterbody and to take reasonable measures to ensure their own safety. (B)	Minor	HIGH continuing	Park management
W17	Continue to provide suitable lifesaving equipment at strategic locations around the waterbody. (A, B)	Minor	HIGH continuing	Park management
W18	<i>Continue to monitor and manage the waterbody shoreline to minimise any occurrence and effects of wake/wash erosion, undercutting, informal/trample access points, and other pressures.</i> (C)	Minor	Medium continuing	Park management
W19	Investigate, and implement if possible, a safe water corridor for non-motorised water users to pass by the waterskiing and powerboat zone.	Moderate	Medium	Park management
W20	<i>Review the Water Quality Management Plan for Manly Dam by Dominic Cheng (1993) and continue to implement or update, if required.</i>	Moderate	Medium	Park management

Performance Measures and Outcomes:

- Waterbody usage by user types monitored.
- Waterbody serving as a multiple-use recreation venue – as assessed by observed/approved recreational activities, and user feedback.
- Annual review to be conducted on waterbody usage and the standard approved times for waterskiing and powerboat use. These times may be altered by Council resolution and without amendment of this Plan of Management.
- New licence/agreement with Manly Warringah Water Ski Club to be in effect within one year of the Plan's adoption by Council
- Align waterskiing bookings with Council processes
- Infrastructure and facilities, including lifesaving equipment, in place and maintained to support recreational use of waterbody – as assessed by regular facilities and safety audits, and user feedback.

Table 7 Timetable of permitted waterskiing times at Manly Warringah War Memorial Park

Waterskiing Timetable - Daylight Savings Time (the non-daylight savings sessions are every day 8:00am to 12:30pm & 12:30 to 5:00pm)		
	AM Session	PM Session
Monday	10:00am – 2:30pm	2:30pm – 7:00pm
Tuesday	7:30am – 12:30pm	12:30pm – 5:00pm
Wednesday	7:30am – 1:30pm	1:30pm – 7:00pm
Thursday	10:00am – 2:30pm	2:30pm – 7:00pm
Friday	7:30am – 12:30pm	12:30pm – 5:00pm
Saturday	9:00am – 1:30pm	1:30pm – 7:00pm
Sunday	7:30am – 12:00pm	12:00pm – 4:00pm

Value: DAY USE AREAS

Goal: Continued management of the Manly Dam picnic areas as a regionally unique and highly valued passive recreation venue, offering predominantly low-key facilities in attractive bushland settings catering for a range of sustainable low-impact uses.

Objectives:

- A. To maintain the Day Use Zone as a series of discrete, and largely separate, picnic/day-use areas.
- B. To offer a range of recreational settings and standards of facilities, while retaining the bushland setting and un-crowded natural character of the picnic precinct as a whole.
- C. To manage Picnic Areas 2, 3 and 4 as bushland setting, low-key and less-developed or formalised venues.
- D. To manage Picnic Area 1 as the more landscaped and developed venue with a higher standard of visitor facilities.
- E. To provide for equitable access to the picnic/day-use areas.
- F. To provide for visitor safety.

Management Actions, Priorities and Responsibilities (DU):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
DU1	<i>The existing four picnic areas, and the extent of mown grass within each picnic area, will not be significantly expanded during the life of this Plan.</i> (A, B, C, D)	n/a	HIGH continuing	Park management
DU2	Picnic Area 1 will continue to be managed as the Park's more developed, landscaped, modified and intensively managed picnic setting. (A, B, D)	Moderate	HIGH continuing	Park management
DU3	Picnic Areas 2, 3 and 4 will be maintained in accordance with their existing character - as low-key, dispersed layout, bushland settings. (A, B, C)	Moderate	HIGH continuing	Park management
DU4	Wood-burning barbeques will continue to be provided, and firewood will continue to be supplied to centralised points. Use of the wood-burning barbeques will be subject to fire bans/restrictions as necessary (refer section FM5). (B)	Minor	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
DU5	Refurbish or rebuild the three existing amenities blocks to a more presentable and functional standard, in accordance with Council's Public Amenity Improvement Programme, and improve accessibility. An increase in the footprint of each building is acceptable in any redevelopment/rebuilding of these facilities as long as that increase is in keeping with the intended character of the picnic area in which it is located. The priorities for upgrading will be – the amenity block in Picnic Area 1 (to be the highest standard amenities block in the Park), the amenities block in Picnic Area 3, and the small amenities block in Picnic Area 4. Showers will be included as part of the amenities blocks in Picnic Areas 1 and 3. (B, C, D)	High	HIGH	Park management Council
DU6	Introduction of pay and display parking system	High	HIGH	Park management Council
DU7	All visitor facilities and infrastructure within the Day Use Zone will be maintained in a safe, serviceable and presentable condition through a programmed system of maintenance and replacement, supported by responsive and opportunistic maintenance works, as required. (A, B, F)	Moderate	HIGH continuing	Park management
DU8	<i>Existing picnic tables will be replaced as maintenance, condition and safety requires.</i> (B)	n/a	HIGH continuing	Park management
DU9	Shade shelters may be built over selected individual picnic tables as needed, especially in exposed sites. Natural shade will also be employed where suitable. (B, C, D, F)	Minor	Medium	Park management
DU10	A high-standard pathway (with an appropriate hardened/sealed surface, including a boardwalk) will be progressively developed to extend from Picnic Area 1 to Picnic Area 4 - to provide dedicated pedestrian access between these areas, and move pedestrians away from the picnic area access road. (A, B, F)	Moderate	HIGH	Park management
DU11	Improvements to the picnic areas will be progressively implemented – such as signage or fencing upgrading, or installing waste/recycling stations to replace rows of “wheelie bins” – but only in keeping with the intended character and capacity of the individual picnic area in question. (A, B, C, D, F)	Minor	Medium	Park management
DU12	<i>The existing playground in Picnic Area 1 will be retained and maintained. No additional playground facilities will be developed elsewhere in the Day Use Zone.</i> (D, B, F)	n/a	Medium continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
DU13	A booking system, with fees, will continue to be offered for picnic tables, group shelters, the lake and open space areas within the Park. However some “non-bookable” picnic tables will be retained in each of the four picnic areas, to cater for more casual or impromptu visitor use. The reservation period for picnic table bookings may be reviewed and, if practical, modified to accommodate increased “turnover” and use of the picnic area. (E)	Minor	Medium continuing	Park management Council
DU14	<i>Continually improve the reservation and payment system for picnic table and other bookings. (B, E)</i>	Negligible	Low	Council Park management
DU15	Include advice regarding the table/shelter booking system, and the availability of some unreserved tables on a “first-come” basis in the Park’s pre-visit information. (E)	Negligible	Medium	Council Park management
DU16	<i>Continue to allow use of the existing picnic areas for community and recreational uses and events – where consistent with the areas’ values and character – with prior approval (and subject to permit approval, with conditions, as appropriate – refer section LL), without unacceptable impacts on an area’s on-going amenity and visitor infrastructure, where other users are not unduly disadvantaged. (Refer to section LL in relation to managing commercial activities on the tracks and trails network.) (B, E)</i>	Negligible	Medium continuing	Park management

Performance Measures and Outcomes:

- Day use area usage levels maintained, or growing, but within acceptable social and environmental impact limits – as assessed by regular usage surveys and impact monitoring.
- Existing character of the four picnic areas maintained, and incremental development avoided – as assessed by regular facilities audits and user feedback.
- Visitor facilities/infrastructure within the four picnic areas maintained as safe, serviceable (consistent with relevant standards), presentable and meet community expectations – as assessed by regular facilities audits, and user feedback.
- Amenities blocks refurbished or replaced.
- High-standard pathway constructed from Picnic Area 1 to Picnic Area 4.
- Booking system continuously improved, and some “non-bookable” picnic tables identified.

Value: ACCESS

Goal: Safe, improved, convenient and equitable access to the Park across a range of transport modes.

Objectives:

- A. To ensure safe visitor access.
- B. To accommodate use by the elderly, mobility impaired and people with a disability (both for individuals and groups).
- C. To rationalise and improve the Park's main entrance, and vehicle access/parking within the Day Use Zone.
- D. To provide secondary visitor access points and ready access to the Park from surrounding areas.

Management Actions, Priorities and Responsibilities (A):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
A1	Provide additional accessible parking bays – for elderly and mobility impaired visitors – within the existing car parking areas, and especially in proximity to the more developed facilities of Picnic Area 1. (B, A)	Minor	HIGH	Park management
A2	Redesign and upgrade the Park's main King Street entrance, with provision for improved traffic management at peak times and including a footpath along King Street to provide safe pedestrian access to the Park. A concept plan, giving one possible solution for upgrading the main park entry, is shown on Figure 14. (C, A)	High	Medium	Park management Council Trust
A3	<i>Investigate the feasibility of realigning the Sir Roden Cutler VC Memorial Drive (accessing the picnic areas) away from Picnic Area 3 and onto the higher/western side of the existing carpark - to remove through traffic from the picnic area's vicinity. Implement if feasible, and the environmental impacts are acceptable and funding available. (C, A)</i>	Minor (High if to be implemented)	Low	Council Park management Other agencies
A4	Maintain the Park's internal roads and carparks through a programmed system of maintenance, supported by responsive and opportunistic maintenance works, as required. (C, A)	Moderate	HIGH continuing	Council Park management
A5	Reseal and upgrade the larger parking area for Picnic Area 1 in the short term – including improved drainage, traffic barriers, signage and other treatments appropriate for a bush-setting carpark. (C, A)	High	Medium	Council Park management
A6	Retain the existing Nyrang Road parking area as a secondary Park access point, but this site will not be expanded during the life of this Plan. (D)	Minor	HIGH continuing	Park management Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
A7	The Trust will encourage Council to liaise with the Roads and Maritime Service (RMS) regarding measures to manage (if safe to do so) or deter roadside parking on Wakehurst Parkway at the north-western entry to the Park's main fire trail (while ensuring that this entry is kept clear as a management and emergency access point). (D, A)	Minor	Medium	Trust Park management Council RTA
A8	The Trust will encourage Council to promote the existing off-street carpark at the southern end of Gibbs Street as a Park access point, but only for use outside school hours of an evening and on weekends. Provide additional screening for adjacent residences if warranted. (D, A)	Minor	Medium	Trust Park management
A9	The Trust will encourage Council to promote the existing off-street carpark on Upper Clontarf Street at the eastern side of Bantry Reserve (before the entrance to the Wakehurst Golf Course) as a Park access point to the approved mountain bike loop – especially as a weekday access point. (D, A)	Minor	Medium	Trust Park management
A10	<i>The Trust will encourage Council to liaise/negotiate with Manly Council regarding the development of a contained informal (unsealed) parking area off Kirkwood Street (within the Manly Local Government Area) as an additional access point to the approved mountain bike loop and the Park generally. Develop if feasible/agreed (as joint project or with possible Council contribution). (D, A)</i>	Negligible (Moderate if to be implemented)	Low	Trust Council Park management Manly Council
A11	Rationalise, upgrade, formalise and/or realign the Park's entry points, which may include new connections to/from Aquatic Reserve playing fields, Wakehurst Parkway, Condover and David Thomas Reserve and investigating dual purpose use for new and existing walking and mountain bike use on/to track network. (D, A)	Moderate	Medium	Park management
A12	Continue to operate a booking system for the Park including most picnic tables and group shelters, and open space areas, within all picnic areas (but with some "non-bookable" tables), and also for large group bookings (refer section DU).	(refer section DU)	Medium continuing	(refer section DU)
A13	<i>Continue to review opportunities to enhance the Park's accessibility for a broad range of community and user groups. (B)</i>	Negligible	Low continuing	Park management

Performance Measures and Outcomes:

- Additional accessible parking bays in place across all on-park parking areas.
- Larger Picnic Area 1 parking area resealed and upgraded.
- Main King Street entrance upgraded with improved traffic management and pedestrian safety.
- Internal vehicle access and carparking operates safely and efficiently – as assessed by observed congestion, accidents/incidents and user feedback.
- Secondary Park entry points, with carparking, promoted and receiving increased use – as assessed by ad hoc monitoring and observations.
- Park accessible to a broad range of community/user groups – as assessed by regular user surveys/observations, and range of users evident.

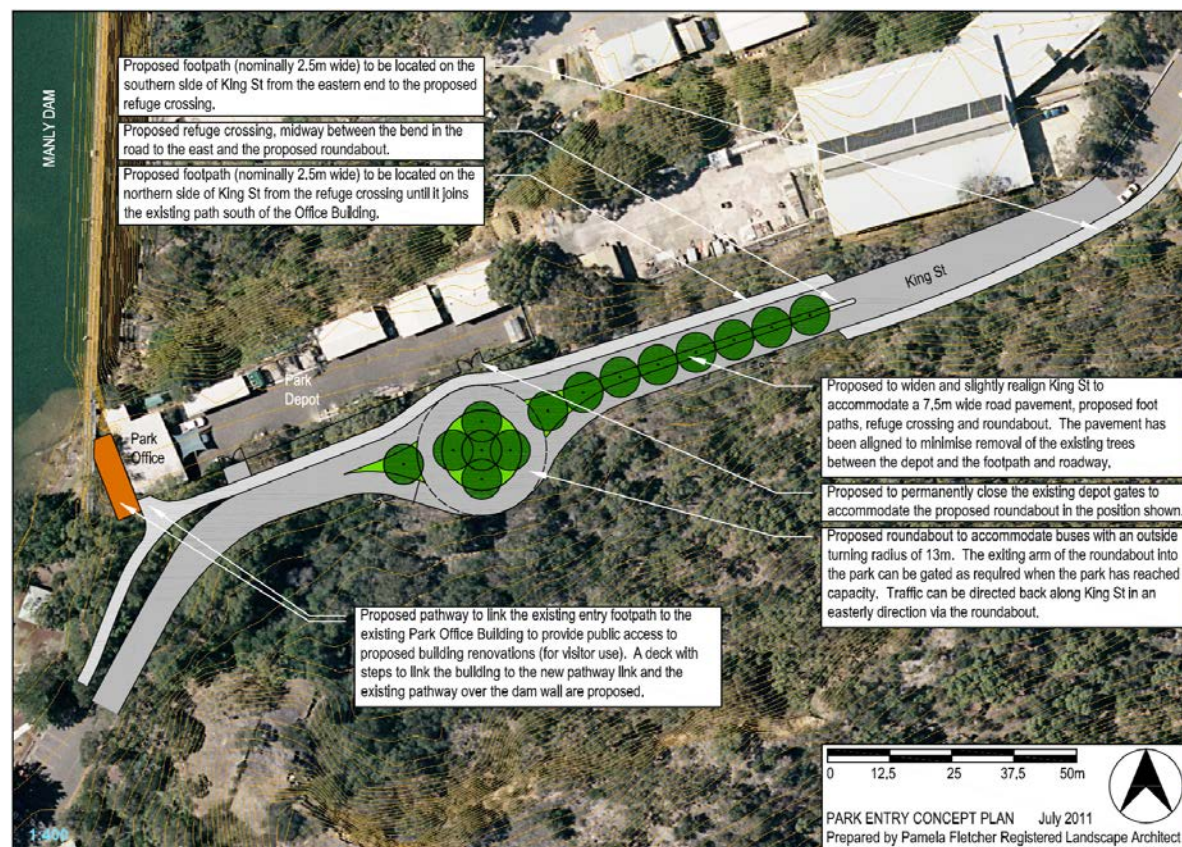


Figure 14 Possible upgrading of main Park entry (concept only)

Value: **INFORMATION AND INTERPRETATION**

Goal: Improved opportunities for visitor awareness provided within the Park and in Park promotional material

Objectives:

- A. To improve visitor awareness in relation to safety, usage and protocols for recreation within the Park and on the waterbody.
- B. To provide interpretive signage along the track and trail system, improving visitor awareness of the Park's natural and cultural heritage and other values.
- C. To ensure appropriate dissemination of information relating to water quality, track closures and other park use and management issues.
- D. To improve on-site face-to-face interpretive services.

Management Actions, Priorities and Responsibilities (I):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
I1	Provide improved welcome, orientation and visitor information signage at the main Park entry. (A, B, C)	Minor	Medium	Park management
I2	Maintain Park entry, orientation, visitor information and regulatory signs at existing and additional secondary Park entry points and other key locations. (A, B, C)	Minor	Medium continuing	Park management
I3	Update the Park brochure, website information and other promotional/pre-visit information as/when required – to ensure that intending visitors have easy access to the latest information concerning the Park. (A, C)	Minor	HIGH continuing	Park management Council
I4	Maintain and update – and supplement where appropriate – the Park's existing comprehensive range of web-based and hard-copy interpretive brochures and information. (A, C)	Minor	Medium continuing	Park management Council
I5	<i>Provide water quality advice to dam users as/when warranted (refer section C). (C)</i>	Negligible	HIGH continuing	Park management
I6	<i>Provide information regarding track closures to Park users as/when required (refer section TT). (C)</i>	Negligible	HIGH continuing	Park management

Performance Measures and Outcomes:

- Positive visitor/user feedback regarding Park information and interpretation.
- Adequate and effective on-site signage maintained – as assessed by regular facilities audits, and user feedback.
- Pre-visit and off-site Park information provided – as assessed by user feedback, and comparable service standards to other Council information provision.

- Current access and safety information provided for visitors, and intending visitors, in a timely and efficient manner – as assessed by user feedback and enforcement requirements.

Value: **EDUCATIONAL USES**

Goal: Improved educational use opportunities within and in relation to the Park.

Objectives:

- A. To encourage and promote the use of the Park for education.
- B. To improve recognition, understanding and appreciation of the Park and its values.

Management Actions, Priorities and Responsibilities (E):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
E1	<i>Encourage and continue to accommodate use of the Park as a venue and asset for environmental, outdoor and other educational uses – including community-based environmental education projects. (A, B)</i>	Minor	Medium continuing	Park management
E2	Provide opportunities for environmental education along the track and trail network, with walking tracks in the Park's east and south a priority area ahead of the approved mountain bike loop. (A, B)	Minor	Medium	Park management
E3	Expand on-site interpretive and information services and facilities – including possible features such as “outdoor classrooms”, group seating areas and additional on-site interpretation (both signs and other media). Consider the visual and environmental impact of these actions prior to approval and implementation. (A, B)	Minor	Medium	Park management
E4	Continue talks to students and interest groups on an as needed basis. This may or may not be on a fee-paying basis (A, B)	Minor	Low	Park management
E5	<i>The Trust will encourage Council to foster relationships with the Coastal Environment Centre and Manly Environment Centre in relation to educational ventures. (A, B)</i>	Negligible	Low	Trust Park management

Performance Measures and Outcomes:

- Increased educational use of Park – as assessed by booking data, requests, user surveys and observation.
- Increased capacity to deliver educational activities/use, and additional infrastructure /facilities provided to support educational activities/uses – as assessed by regular facilities audits, and user feedback.
- Increased delivery of face-to-face educational services – as assessed by staff time commitments to education services, and user feedback.

Value: **WAKEHURST GOLF COURSE**

Goal: Continued operation of the Wakehurst Golf Course, while protecting natural and cultural heritage values across this area and minimising adverse impacts from these facilities and their management on surrounding areas of the Park

Objectives:

- A. To provide for continued operation of the Wakehurst Golf Course in accordance with their lease agreement with Council.
- B. To ensure that natural and cultural heritage values across the Golf Course area are protected and appropriately managed.
- C. To ensure that any adverse impacts from the Golf Course, and the management of these facilities, on surrounding areas of the Park (including the Dam) and neighbours are effectively managed and minimised.
- D. To provide for visitor safety in the Golf Course vicinity

Management Actions, Priorities and Responsibilities (WGC):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WGC1	<i>Continue management of the Wakehurst Golf Course consistent with its present lease with Council. (A)</i>	n/a	Medium continuing	Council Wakehurst Golf Club
WGC2	<i>The Wakehurst Golf Course will not be expanded beyond its current footprint during the life of this Plan – beyond minor adjustments, preferably on a give-and-take basis, to take account of current inconsistencies in boundary definition and the developed/used course area. (B, C, D)</i>	n/a	HIGH	Council Wakehurst Golf Club
WGC3	<i>Negotiate a set of environmental management criteria and reporting requirements with the Wakehurst Golf Club Limited during renewal of their lease agreement with Council. The lease agreement will define and set limits on any further development within the lease area. (A, B, C)</i>	Minor	HIGH	Council Park management Wakehurst Golf Club

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WGC4	Wakehurst Golf Club Limited will be required to prepare an Environmental Management Plan for the operation, management and maintenance of the golf course within two years of the commencement of this Plan. The Environmental Management Plan is to be approved by Council and the Crown Lands Division. (B, C)	Negligible	HIGH	Council Park management Crown Lands Division Wakehurst Golf Club
WGC5	Ensure run off from the Golf Course site does not negatively impact on water quality in the dam or downslope vegetation. (C)	Minor	HIGH	Park management Wakehurst Golf Club
WGC6	Advise Wakehurst Golf Club Limited on appropriate improved/additional management measures to protect those Aboriginal heritage sites within the lease area, with reference to the Office of Environment and Heritage. (B)	Negligible	Medium	Park management Wakehurst Golf Club Other agencies

Performance Measures and Outcomes:

- Wakehurst Golf Course managed within its current footprint and to an agreed lease – as assessed by extent of Golf Course, and compliance with current/new lease.
- Environmental Management Plan prepared and endorsed for Golf Course's operation, including protection of on-site and surrounding values – EMP approved by Council and Crown Lands Division.
- Off-site impacts from Golf Course site and operation managed/minimised – as assessed by impact monitoring and observation.

Value: WAKEHURST COUVRET TENNIS COURTS

Goal: Continued operation of the Wakehurst Couvret Tennis Courts, while minimising adverse impacts from these facilities and their management on surrounding areas of the Park

Objectives:

- A. To provide for continued operation of the Wakehurst Couvret Tennis Courts in accordance with appropriate sub-lease or lease agreements;
- B. To ensure that any adverse impacts from the tennis courts, and the management of these facilities, on surrounding areas of the Park (including the dam) and neighbours are effectively managed and minimised.

Management Actions, Priorities and Responsibilities (WCT):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
WCT1	<i>Continue management of the Wakehurst Couvret Tennis Courts as a tennis facility consistent with present sub-lease with Wakehurst Golf Club Ltd. (A, B)</i>	n/a	Medium continuing	Council Wakehurst Couvret Tennis
WCT2	<i>The Wakehurst Couvret Tennis Courts, and associated facilities within the current sub-lease area, will not be expanded beyond their current footprint during the life of this Plan – beyond minor adjustments, preferably on a give-and-take basis, to take account of current inconsistencies in boundary definition and the facility's developed/used area. (A, B)</i>	n/a	HIGH	Council Wakehurst Couvret Tennis
WCT3	<i>At expiry of the current sub-lease with the Wakehurst Golf Club Limited, negotiate renewal of the Wakehurst Couvret Tennis Courts lease agreement directly with Council and include a set of environmental management criteria and reporting requirements. The new lease agreement will define and set limits on any further development within the lease area. (A, B)</i>	Minor	HIGH	Council Park management Wakehurst Couvret Tennis
WCT4	Ensure run off from the Wakehurst Couvret Tennis Courts site does not negatively impact on surrounding vegetation. (C)	Minor	HIGH	Park management Wakehurst Couvret Tennis

Performance Measures and Outcomes:

- Wakehurst Couvret Tennis Courts managed within its current footprint and to agreed sub-lease, and renewed lease directly with Council – as assessed by extent of complex, and compliance with current/new lease.
- Environmental management criteria and reporting requirements included in lease when renewed.

5.3.3 Environmental Management

Issue: ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

Goal: Effective management of the Park to support environmental protection and sustainability

Objectives:

- A. To apply minimum impact, sustainability and reversibility principle as far as practical in the Park's management.
- B. To ensure future development within the Park is approved and in keeping with the Park's management intent, character and values and is implemented without significant impact on the Park's values.

Management Actions, Priorities and Responsibilities (EP):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
EP1	<i>All major new works or major maintenance projects undertaken on the Park, likely to entail significant environmental impacts, will be subject to appropriate environmental impact assessment and approval procedures. (A, B)</i>	Minor	HIGH continuing	Park management Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
EP2	<p><i>Park development proposals must address the following (among other/site specific issues):</i></p> <ul style="list-style-type: none"> <i>environmental sustainability and reversibility;</i> <i>the protection of identified values;</i> <i>demonstrate a clear connection with the Park's role and natural bushland setting;</i> <i>public accessibility and equity (where applicable);</i> <i>consistency with the character and scale of a site and any existing facilities;</i> <i>aesthetic impacts, both to and from the Park;</i> <i>site amenity and public and staff safety;</i> <i>pollution impacts and risks;</i> <i>traffic and access matters (where applicable);</i> <i>indigenous planting/landscaping or screening; and</i> <i>impact amelioration and remediation measures. (A, B)</i> 	Minor	HIGH continuing	Park management Council
EP3	<i>Maintenance and upgrading work of walking tracks, mountain bike track, fire trails and other park facilities will be carried out under the direction of the Park Manager. Works in environmentally sensitive areas to be undertaken by Park Staff or other specialists. (A, B)</i>	n/a	HIGH continuing	Park management
EP4	<i>Continue to implement standard designs for track/trail development, track signage, interpretive signage, park structures, park furniture and park brochures. Designs to be in keeping with the Park's low-key character and natural setting. (A, B)</i>	n/a	Medium continuing	Park management Council
EP5	<i>Preference will be given to the use of recycled products and natural construction materials wherever possible and fit-for-purpose. (A)</i>	Negligible	Medium continuing	Park management
EP6	<i>Detailed design and construction specifications for the provision of new or upgraded facilities will include environmental protection measures and bushland restoration provisions (where undertaken in natural areas). (A, B)</i>	Minor	HIGH continuing	Park management
EP7	<i>Local indigenous native species will be employed in any landscaping carried out within the Park (with the exclusion of turf and grasses where essential, and cultural plantings associated with the Park's role as a war memorial). (A, B)</i>	Minor	Medium continuing	Park management

Performance Measures and Outcomes:

- Minimum environmental impact/disturbance due to Park developments and maintenance works – as assessed by pre and post works impact observation/recording, and inclusion of impact mitigation/amelioration or remediation measures.

- Adequate environmental evaluation of Park development proposals, as commensurate with type/level of development and potential – as assessed by proposal assessment documentation and policy/regulatory compliance.
- Compliance with relevant standards and best practice guidelines – as assessed by project reporting, and regular facilities audits.

Value: FIRE MANAGEMENT

Goal: Effective management of fire hazards to minimise damage from wildfires, to the Park and its assets/values and to Park neighbours.

Objectives:

- To minimise the risks to life and property posed by occasional wildfires in the Park.
- To manage fire trails to ensure protection of assets and minimal impact on bushland or water quality.

Management Actions, Priorities and Responsibilities (FM):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
FM1	<i>Continue to manage fire hazards in accordance with the Rural Fires Act, directions set out in the Warringah Pittwater Bush Fire Risk Management Plan and other relevant policies and legislation. (A)</i>	Minor (Moderate by others)	HIGH continuing	Park management Council RFS Other agencies
FM2	Implement the key directions of the Park's Fire Management Plan (2006) and update as needed in response to fire incidents and ongoing fire management – includes hazard reduction activities and any associated environmental assessment/approval requirements. (A)	Moderate	HIGH continuing	Park management Council RFS Other agencies
FM3	<i>The Trust will encourage Council to liaise with Park neighbours to assist in the management of fire risks to their properties and explain on-Park fire hazard management measures. (A)</i>	Minor	Medium continuing	Trust Park management Council
FM4	<i>Ensure that fire trails are managed, both by Park managers and other agencies/utility providers, as far as practicable to reduce adverse bushland, erosion, water quality and visual impacts. (B)</i>	Minor (Moderate by others)	Medium continuing	Park management RFS Other agencies
FM5	<i>Manage visitors' use of wood-burning barbeques in the picnic areas in accordance with prevailing fire hazard ratings, and notify and enforce total fire bans as required. (A)</i>	Negligible	HIGH continuing	Park management

Performance Measures and Outcomes:

- Successful completion of annual hazard reduction measures – as assessed against programme targets.
- Reduced incidence of damage to on-Park, and neighbouring, assets.
- Environmentally sensitive management of fire trails – as assessed by pre and post works impact observation/recording, and compliance with best practice guidelines.
- Increased neighbour awareness and implementation of fire hazard reduction measures – as demonstrated by greater incidence of private property hazard reduction efforts.

Value: **PARK BOUNDARY MANAGEMENT**

Goal: Management of the Park boundary to maximise protection of the natural environment and other values within the Park while not adversely impacting Park neighbours.

Objectives:

- A. To manage the Park's edge to ensure protection of natural environment and biodiversity values.
- B. To minimise adverse impacts on Park neighbours from on-Park activities.

Management Actions, Priorities and Responsibilities (B):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
B1	Continue to manage sections of the Park's eastern and southern boundaries, where abutting residential properties, as open grassed Asset Protection Zones to reduce fire risks to adjacent properties (also refer to section FM). (A, B)	Minor	HIGH continuing	Park management
B2	<i>Remove dumped rubbish along the Park boundary as soon as possible after its detection.</i> (A, B)	Minor	Medium continuing	Park management
B3	<i>Exercise vigilance in detecting weed infestations and risks, stormwater and sediment sources, potential fire risks, pollution sources, unauthorised clearing or track creation, encroachments and other adverse impacts/pressures along the Park boundary. Implement appropriate protection, control, remediation, enforcement or preventative/education measures as required (refer sections</i>	(refer sections WP, C, FM, TT and S)	HIGH continuing	(refer sections WP, C, FM, TT and S)

	<i>WP, C, FM, TT and S). (A, B)</i>			
B4	<i>Identify opportunities to minimise and consolidate the Park's "exposed" bushland edge (refer section T). (A)</i>	(refer section T)	Medium	(refer section T)
B5	<i>The existing playground off Cootamundra Drive, within the Park, may be retained and will be maintained (and the play equipment replaced as/when necessary), but with no significant expansion of the playground's footprint. (A, B)</i>	Minor	Medium continuing	Council

Park neighbour programmes (refer section S) will also significantly contribute to management of the Park's boundaries.

Performance Measures and Outcomes:

- Maintenance of open grassed Asset Protection Zones.
- Reduced incidence of dumped rubbish along the Park's boundary – as assessed by ad hoc monitoring and observations, and community reports.
- Reduced incidence of adverse impacts along the Park's boundary – as assessed by monitoring, observations and enforcement actions
- Cootamundra Drive playground maintained.

Issue: **SURROUNDING LAND USES AND PARK NEIGHBOURS**

Goal: Increased awareness by Park neighbours of their possible impacts on the Park and its values, and their co-operation/support to reduce these effects.

Objectives:

- A. To reduce the effect of surrounding land uses on the Park and its values.
- B. To reduce the on-Park impacts of weeds and pest/introduced animals within areas surrounding the Park.
- C. To further promote awareness and support for the Park and its values among neighbours.

Management Actions, Priorities and Responsibilities (S):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
S1	The Trust will encourage Council to continue responsible “bush neighbour”, catchment protection and environmental educational information, awareness and education programmes in areas surrounding the Park to encourage neighbours’ co-operation and involvement in the Park’s management. Priority information to provide for park neighbours includes - responsible pet ownership, suitable indigenous plants for gardens, minimising fertiliser use, responsible disposal of garden waste, urban wildlife, stormwater management and environmentally responsible fire protection measures. (A, B, C)	Minor	HIGH continuing	Trust Council Park management
S2	Police encroachments, swimming pool overflows/discharges, green waste dumping, general rubbish dumping and other detrimental actions along the Park’s urban boundaries. (A, B)	Minor	HIGH continuing	Park management Council
S3	<i>The Trust will encourage Council to negotiate improved weed control programmes, managed water and fertiliser use, and the staged removal/replacement of introduced plant species (and in particular species with weed or high spread potential) within the Dam’s catchment on land not managed by Park staff – in particular Aquatic Reserve and the Frenchs Forest Business Park. Similar measures will be pursued for Wakehurst Golf Course (refer section GC). (A, B, C)</i>	Negligible	Medium continuing	Trust Council Park management
S4	<i>The Trust will encourage Council to liaise with Manly Hydraulics Laboratory and Water Research Laboratory regarding bush regeneration and weed control on their lands adjacent to the Park. (A, B)</i>	Negligible	Medium continuing	Trust Park management Council

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
S5	<i>The Trust will encourage Council to ensure all development adjacent to or in areas around the Park complies with relevant DCPs, Water Sensitive Urban Design criteria and requirements for planting local native species. (A, B)</i>	Negligible	Medium continuing	Trust Council

Performance Measures and Outcomes:

- Greater neighbour/community awareness of Park values and increased incidence of positive/supportive behaviours – as assessed by ad hoc monitoring /observations, community reports, and participation in volunteer activities.
- Reduced incidence of green waste. dumped rubbish swimming pool discharge and other impacts along the park's residential boundary – as assessed by ad hoc monitoring and observation, enforcement levels, and community reports.
- Reduced incidence and severity of encroachments – as assessed by ad hoc monitoring and observations, enforcement actions and community information.
- Enhanced complementary management of bushland and stormwater on adjacent lands/developments – as assessed by greater co-operative management and reduced off-site impacts for Park.

Issue: EASEMENTS

Goal: The sympathetic management of easements within the Park.

Objectives:

- A. To minimise adverse impacts from the presence and management of utility easements within the Park.
- B. To avoid the creation of any additional easements through the Park.

Management Actions, Priorities and Responsibilities (U):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
U1	<i>Develop effective and on-going communication protocols with utility providers operating easements through the Park regarding their management requirements/operations and measures to reduce impacts on the Park and its values – especially in relation to service access, track maintenance, unauthorised or undesirable access, soil erosion, vegetation clearing, visual impacts and visitor safety. Negotiate access, maintenance and remediation agreements, standards or protocols where possible. (A)</i>	Negligible	HIGH continuing	Park management Council
U2	<i>Oppose the creation of any non essential additional (foreign) utility easements through the Park. (B)</i>	n/a	HIGH continuing	Trust Council

Performance Measures and Outcomes:

- Effective communication protocols in place between utility providers and Park Managers/Council.
- Reduced adverse impacts from easement presence/management – as assessed by ad hoc monitoring and observation, and user/community reports.
- No new non essential easements established.

5.3.4 Park Management and Administration

Issue: PARK ADMINISTRATION AND MANAGEMENT ACTIVITIES

Goal: Management of the Park in an effective and efficient manner, and improved presentation of the Park Office/Depot.

Objectives:

- A. To provide an on-site management presence.
- B. To provide an effective and efficient Park management, administration and reporting regime.
- C. To provide a safe, accessible, efficient, low-impact area for the location of Park management facilities, equipment and administration.
- D. To improve presentation and/or screening of the existing yard and parking area as seen from the Park entrance.

Management Actions, Priorities and Responsibilities (PA):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
PA1	Carry out additional landscaping and screening along the Park Office/Depot's southern side to improve its presentation and screening from the Park entry road. (D)	Minor	Medium	Park management
PA2	Continue the provision of an on-site Management and Ranger team presence, and ensure adequate staffing levels and Ranger availability, as essential for the Park's effective, efficient and safe management. (A)	High	HIGH continuing	Council
PA3	<i>Continue staff professional development activities, and liaison with the managers of adjacent natural lands where appropriate, to stay up-to-date regarding natural area and recreation management. (A)</i>	Minor	Medium continuing	Council Park management
PA4	Continue the lock-up of the Park's main entry outside opening hours. (B)	Minor	HIGH continuing	Park management
PA5	Continue after hours security patrols of the Park each day as required (A)	Minor	HIGH continuing	Park management
PA6	<i>Walker-only access to the Dam wall will continue to be permitted during Park opening hours. Outside of these hours the dam wall gates are to be locked at each end. (B)</i>	Minor	HIGH continuing	Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
PA7	Investigate risk management issues associated with recreational use of the Park and other risk issues – including initial and ongoing risk assessment as required. Address any issues identified. (B)	Moderate	HIGH continuing	Park management Council
PA8	Ensure there is adequate management and emergency vehicular access to and within the Park. (B)	Minor	HIGH continuing	Park management
PA9	Continue the periodic monitoring and analysis of park usage, including monitoring levels of visitor use of the waterbody and the track/trail network. (B)	Minor	Medium continuing	Park management
PA10	Continue to liaise with Council's Compliance section to ensure enforcement of Park regulations on an as needs basis. (B)	Minor	Medium continuing	Park management Council
PA11	Continue to apply waste minimisation, recycling and energy efficiency practices across all aspects of Park management. (B)	Minor	Medium continuing	Park management
PA12	Continue to catalogue Park reports, studies and other information. The Trust will encourage Council to have these available on Warringah's library data bases and libraries (with advice regarding the best means of identifying, protecting and presenting relevant material). Investigate opportunities to make this information available on Council's website. (B)	Negligible	Low continuing	Council Trust
PA13	Progressively collate all relevant educational material, environmental, historical, usage and other data in relation to the Park and make this readily accessible to the community. (B)	Negligible	Low continuing	Council Park management
PA14	<i>Continue to support research activities in relation to the Park, with results of research available to Council. (B)</i>	Minor	Low continuing	Park management Council
PA15	<i>Maintain the status-quo of Park management with the Park under the day-to - day care, control and management of Warringah Council. (B)</i>	Negligible	HIGH continuing	Council Crown Lands Division
PA16	<i>Liaise with the Crown Lands Division regarding their investigations into potentially formalising a single Reserve Trust for the Park, for both Reserve 68892 and that part of Reserve 83492 within the Park, for subsequent Council consideration. (B)</i>	Negligible	HIGH	Council Crown Lands Division
PA17	Prepare an annual report for the Minister for Lands – as required under the <i>Crown Lands Act 1989</i> – that includes details of income, expenditure, assets, liabilities, improvements effected, leases and licences granted or in force, uses made of the Reserve, any particulars of pecuniary interests recorded and other matters as set out in the Act. (B)	Minor	HIGH continuing	Trust Council Park management

Performance Measures and Outcomes:

- Adequate Park staffing and management levels – as assessed by the total (paid) time inputs of Management, Ranger, and other Council staff, involved in the Park's management.
- Continued provision of an on-site Council management and ranger presence.
- Serviceable Park management access network maintained.
- Recreational, and other, risks effectively managed – as assessed by ongoing completion of risk assessments as/when required, and implementation of risk management actions.
- Park usage and values data collected, compiled and applied in operational and future management.
- Reduced levels of vandalism and anti-social/after-hours behaviour.
- Park office/depot screened from entry road.
- Park management reporting commitments met.
- Park continues to be managed by Warringah Council.
- Annual report prepared for the Minister for Lands – as assessed by compliance with statutory requirements.

Issue: CO-OPERATION WITH OTHER AGENCIES

Goal: Advantages for the Park's management, and mutual benefits, through co-operation with other agencies.

Objectives:

- A. To work co-operatively with other relevant agencies, to benefit the Park and its management.
- B. To reduce any impacts from the activities of other agencies on the Park and its values.

Management Actions, Priorities and Responsibilities (OA):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
OA1	<i>Liaise as required with representatives from Sydney Water, Manly Hydraulics Laboratory, Water Research Laboratory regarding their involvement/interest in the Park, its resources/values and water level management. (A, B)</i>	Negligible	Medium continuing	Park management Council Other agencies
OA2	<i>Liaise with the Roads and Traffic Authority regarding sympathetic management of that section of Wakehurst Parkway along the Park's western boundary -</i>	Negligible	Medium	Park management Council

	<i>particularly regarding weed, stormwater, safer access, fauna movements and sediment control as well as measures to address rubbish dumping. (A, B)</i>		continuing	RTA
OA3	<i>Liaise as required with Manly Council regarding sympathetic management of those areas of the Manly Local Government Area that adjoin the Park (also refer to section TT20 regarding that section of the approved mountain bike loop within the Manly Local Government Area). (A, B)</i>	Negligible	Low continuing	Council Park management Manly Council
OA4	<i>Liaise as required with utility providers operating easements through the Park (refer section U). (A, B)</i>	(refer section U)	HIGH continuing	(refer section U)
OA5	<i>Liaise with the National Parks and Wildlife Service regarding management of the adjoining area of Garigal National Park, as well as the management of those values within the Park values for which the National Parks and Wildlife Service (and Department of Environment, Climate Change and Water) has a legislative role/responsibility. (A, B)</i>	Negligible	Low continuing	Park management Council NPWS (OEH)

Also refer to community involvement (refer section CI) regarding working with volunteers, stakeholders and the community to benefit the Park's management.

Performance Measures and Outcomes:

- Improved management co-operation between agencies with operations below the dam wall.
- Improved management of the Park's western boundary – as assessed by an observed reduction in on-Park impacts from Wakehurst Parkway and closer management integration with Garigal National Park.
- Observed reduction in on-Park impacts from management of Bantry Bay Reserve and adjacent areas in Manly Council LGA.
- Ongoing liaison and co-operation with the NPWS (OEH).

Value: **COMMUNITY INVOLVEMENT**

Goal: Successful volunteer programmes and community involvement aimed at protecting the Park and its values and benefiting the Park's management.

Objectives:

- A. To improve community involvement in protection of the Park and its values.
- B. To strengthen the community's ties with the Park and its protection.

Management Actions, Priorities and Responsibilities (CI):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
CI1	Continue Friends of the Bush and through this programme establish a "Friends of the Park" or similar programme to encourage volunteer activities including bush regeneration, participation in "clean-up" days and walks in the Park. (A, B)	Minor	HIGH continuing	Park management Council Volunteers
CI2	Liaise with representatives of mountain bike riders and other relevant groups using the Park to provide input to Council's decision-making in regard to the planning, design and maintenance of walking and mountain biking opportunities within the Park and sustainable management with a minimum of environmental impact and disruption to other users and Park neighbours. (A, B)	Minor	Medium continuing	Park management Council Volunteers
CI3	Use volunteers in track/trail maintenance and development, on approved projects and under the supervision and direction of Park management. (A, B)	Minor	Medium continuing	Park management Volunteers
CI4	Continue to involve the community in recording and monitoring Park's native vegetation and wildlife - through Community Wildlife Surveys, plant identification, weed reporting, significant species alerts, other initiatives. (A, B)	Minor	Low continuing	Park management Volunteers
CI5	The Trust will encourage Council to promote volunteer initiatives, such as "streamwatch" and the stormwater "drain stencilling" programmes (refer section C2) in streets around the Park. (A, B)	Negligible	Medium continuing	Trust Council Volunteers

Performance Measures and Outcomes:

- Increased volunteer participation in Park management – as assessed by total participation hours, and range of tasks featuring community/volunteer involvement.
- Increased volunteer numbers.
- Greater up-take of off-Park sustainability initiatives benefiting the Park – assessed as part of Council's wider environmental sustainability reporting.

Issue: LEASES AND LICENCES, SPECIAL USES AND COMMERCIAL ACTIVITIES

Goal: Equitable use of the Park and the protection of Park values

Objectives:

- A. To recognise current leases and licences, and provide guidelines for future leasing or licencing within the Park.
- B. To accommodate occasional special uses, events or activities, with prior approval.
- C. To ensure any leases, licences or additional use agreements protect the Park's values, have minimal impact on other users, and can be effectively managed.
- D. To contribute to revenue generation.

Management Actions, Priorities and Responsibilities (LL):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
LL1	<i>The existing lease agreement with Wakehurst Golf Club Limited for the management and use of the Wakehurst Golf Course (refer section WGC) is expressly authorised by this Plan - until the end of its current term. (A, D)</i>	n/a	HIGH continuing	Park management Council
LL2	The re-issue of the lease with Wakehurst Golf Club Limited - for largely the same area as now occupied by the Wakehurst Golf Course (refer section WGC2), but excluding the Wakehurst Couvret Tennis Courts sub-lease area (refer sections LL3 and LL4 below), and with the conditions as identified in this Plan and as otherwise identified by Council - is expressly authorised by this Plan. (A, C, D)	Negligible	HIGH continuing	Council Park management
LL3	<i>The existing sub-lease agreement for the Wakehurst Couvret Tennis Courts (with Wakehurst Golf Club Limited, refer section WCT) is expressly authorised by this Plan - until the end of its current term. (A, D)</i>	n/a	HIGH continuing	Park management Council
LL4	The re-issue of a new lease, directly with Council, for the Wakehurst Couvret Tennis Courts - for the same area as now occupied by the Tennis Courts and associated facilities (refer sections WCT2 and WCT3), and with the conditions as identified in this Plan and as otherwise identified by Council - is expressly authorised by this Plan. (A, C, D)	Negligible	HIGH continuing	Council Park management
LL5	<i>Beyond the approved leases (or current sub-lease) for the Wakehurst Golf Course (LL1 and LL2 above) and the Wakehurst Couvret Tennis Courts (LL3 and LL4 above), no new leases affording long-term exclusive use of any part of the Park will be authorised during the life of this Plan. (A)</i>	n/a	HIGH continuing	Council Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
LL6	The existing licence agreement with Wakehurst Golf Club Limited, to draw irrigation water from the dam waterbody, is expressly authorised by this Plan - until the end of its current term. Upon expiry the on-going reissue of this licence for individual licence periods of no more than 3 years at a time, is expressly authorised by this Plan (with any appropriate conditions Council or the Crown Lands Division require). (A, C, D)	Negligible	HIGH continuing	Council Park management
LL7	<p><i>This plan expressly authorises the granting of – licences for periods of up to 3 years (by Council and with concurrence of the Minister for Lands where required), temporary licences (up to 12 months duration), 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 will only be granted as consistent with the provisions of the Crown Lands Act 1989 and the Crown Lands Regulation 2006.</i></p> <p><i>Licences and permits will not be granted for activities that:</i></p> <ul style="list-style-type: none"> <i>- may have a negative impact on natural areas, on endangered ecological communities or threatened species, on historical or cultural sites; or</i> <i>- are inconsistent with an area's values, or have unacceptable affects on the Park's values or intended character and settings; or</i> <i>- exclude or unduly disadvantage other users, or are likely to impair an area's reasonable enjoyment by others; or</i> <p><i>In addition, licences and permits will only be granted for activities that are consistent with the management intent, objectives and uses of the Park Management Zones (as described in Section 5.2 of this Plan) within which the activity will operate/occur. Licences, permits and activity applications will be subject to particularly stringent assessments within the Bushland Zone.</i></p> <p><i>Licences will only be issued for commercial activities where these are:</i></p> <ul style="list-style-type: none"> <i>- consistent with, or ancillary to, the Park's current reservation purpose (and any additional reservation purpose); and</i> <i>- do not involve the erection of any permanent building or other permanent substantial structure, or permanent advertising that detracts from the visual qualities of the Park.</i> <p>(A, B, C, D)</p> 	n/a	HIGH continuing	Council Park management

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
LL8	<i>Licences and permits will not be granted for activities that are purely commodity or product marketing oriented. (A, C)</i>	n/a	HIGH continuing	Council Park management
LL9	<i>Inquiries and use/activity applications from commercial interest or organised ("members only") groups will be assessed and reviewed to ensure that the Park's values, intended character and settings, and visitor experiences are not compromised; and on-going exclusive use arrangements are not created. (A, B, C)</i>	n/a	HIGH continuing	Park management Council
LL10	<i>Licences or permits will be granted for filming within the Park, as required by the Filming Related Legislation Amendment Act 2008, and as consistent with relevant Council policies and other regulations. (A, B, C, D)</i>	n/a	HIGH continuing	Park management Council

Performance Measures and Outcomes:

- Continuation, with amendments upon renewal, of the current two leases and one licence agreement.
- Licences, permits and other estates comply with specified guidelines and restrictions.
- Financial impacts

Issue: LAND TENURE ISSUES AND BOUNDARY RATIONALISATION

Goal: Identification of boundary land tenure and consolidation with the Park where appropriate

Objectives:

- A. To clarify Park boundary and land tenure issues.
- B. To provide a more effective management “edge” for the Park.
- C. To expand the Park’s reservation purpose to include recognition of the area’s environmental and conservation values.
- D. To provide statutory planning recognition of the Park’s environmental and conservation values.

Management Actions, Priorities and Responsibilities (T):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
T1	<i>Liaise with the Crown Lands Division to include “flora and fauna protection”, or “environmental protection”, or similar, as an additional secondary/supporting Reservation Purpose for those Crown Lands comprising the Park and, where appropriate, for future Crown Land additions to the Park. (C)</i>	Minor	Medium	Trust Council Crown Lands Division
T2	<i>Identify opportunities to consolidate the Park’s boundary – and realise these as/where practical – to minimise the amount of bushland edge exposed to pressures and impacts from adjacent urban or disruptive land uses. (B, A)</i>	Minor (but any land transfer or acquisition costs undetermined)	Medium	Park management Council
T3	<i>Liaise with the Crown Lands Division regarding incorporation of the following unmade road reserves, following necessary road closures, into the Park: - the eastern end of Manning Street (north of, behind, Warringah Street); and - the road reserve between Kalaui Street and Water Reserve Road. (A, B)</i>	Minor (but any land transfer or acquisition costs undetermined)	HIGH	Council Trust Crown Lands Division
T4	<i>Liaise with the Crown Lands Division regarding formal closure of those Crown Road Reserves now within Park (remaining as unmade roads) and their consolidation into the wider area of the Park.</i>	Minor	Medium	Council Trust Crown Lands Division
T5	<i>Liaise with the Crown Lands Division regarding addition of the small triangular land parcel north-west of Condoover Reserve and off the northern end of Water Reserve Road - owned by the former Department of Infrastructure, Planning and Natural Resources, and containing part of the Park’s management trail network and the mountain bike circuit - into the Park. (A, B)</i>	Minor (but any land transfer or acquisition costs undetermined)	Medium	Council Trust Crown Lands Division

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
T6	Survey and describe those part lots/portions, now included within the Park, as discrete lots/portions (to comply with the requirement for Trust areas to follow defined cadastral boundaries, and to simplify Trust reporting obligations).	Minor	Medium	Council Crown Lands Division
T7	<i>Avoid the addition of narrow, irregular or outlying land parcels to the Park where these do not offer major conservation benefits. (B)</i>	n/a	HIGH continuing	Council Trust Park management
T8	The Trust will encourage Council to investigate the practicality of incorporating the bushland areas of Condover Reserve into the Park as per the <i>Condover Reserve Plan of Management</i> Action: C5 “investigate the possibility of managing the bushland in Condover Reserve together with the Manly Warringah War Memorial Park as one continuous bushland reserve”. Implement if practical, and following consultation with the Crown Lands Division.	Negligible	Low	Trust Council Crown Lands Division
T9	<i>Identify and prioritise other possible sites/actions for Park boundary consolidation, as opportunities arise. (A, B)</i>	Negligible	Medium	Park management Council
T10	<i>The Trust will encourage Council to liaise with the Roads and Traffic Authority regarding the boundary of the Wakehurst Parkway Road Reserve along the Park’s western boundary, and any implications this holds regarding the location and management of Park facilities and visitor use sites. Resolve any land tenure anomalies and management responsibilities if possible, without further compromising the Park boundary. (A, B)</i>	Minor	Medium	Trust Park management Council RTA
T11	<i>Negotiate with the Metropolitan Local Aboriginal Lands Council regarding the status of land claims affecting small parts of the Park. (A)</i>	Minor	Medium	Council Metropolitan LALC Crown Lands Division
T12	<i>Investigate the suitability of rezoning parts of the Park as “E2 Environmental Conservation” under the applicable Warringah Local Environmental Plan (preferably as part of a Council-wide consideration of potential E2 rezonings if practical). Rezone if appropriate. (D)</i>	Negligible	Low	Council

Performance Measures and Outcomes:

- Reservation Purpose amended.
- Identified land parcels added to the Park.
- Park boundary rationalised, to improve values protection and effective management, where/when practical.
- Wakehurst Parkway boundary clarified and any tenure, management or facility anomalies resolved.
- Aboriginal land claims intentions clarified and outstanding claims resolved, without impacting on the Park’s values.
- Appropriate parts of the Park rezoned as “E2 Environmental Conservation” under the Warringah LEP.

Issue: FINANCE AND REVENUE GENERATION

Goal: Improved revenue generation from Park usage and other sources

Objectives:

- A. To improve revenue generated from use of the Park.
- B. To increase revenue generation options, where in keeping with the Park's values.

Management Actions, Priorities and Responsibilities (R):

Action No.	Actions (relevant objectives in brackets)	Implementation		
		Resource Estimation	Priority	Responsibility
R1	<i>The Trust will encourage Council to amend Council's current interim policy on the Commercial Use of Reserves in relation to the Park, and investigate a wider range of possible commercial and other revenue generation options (that are consistent with the licence/permit provisions of section LL and values of the Park). (A, B)</i>	Negligible	Medium	Trust Council
R2	<i>Introduce a cost-effective system of park fees, including paid parking – focused on the Day Use Zone, and including measures to accommodate regular/repeat visitors if practical. (A, B)</i>	Moderate	Medium	Council Park management
R3	<i>Increase the Park's range of environmental education and other services, and venues, to include fee for service activities. (A, B)</i>	Minor	Medium	Park management
R4	<i>Consider revenue generation during all lease renewal negotiations, and as standard licence and permits conditions (consistent with Council's policies). (A)</i>	Negligible	Medium continuing	Park management Council
R5	<i>Continue to support filming in the Park, consistent with Council's policies (also refer section LL10). (A)</i>	Negligible	Medium continuing	Park management Council
R6	<i>Continue to review Park fees, booking and usage fees, bonds and other fees and charges annually (as part of Council's wider annual publication of fees and charges). (A, B)</i>	Negligible	Medium continuing	Council Park management
R7	<i>Regularly pursue grant funding assistance in areas relevant to the Park's values and management. (B)</i>	Minor	Low continuing	Park management Council

Performance Measures and Outcomes:

- Additional revenue generated, without compromising Park values or management.
- Additional revenue generation opportunities identified and realised, without compromising Park values or management.
- Interim policy on the Commercial Use of Reserves clarified in relation to the Park.

6 Funding and Implementation

6.1 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 Park'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 Manly Warringah War Memorial Park will ultimately be reliant on, and largely determined by, the funding and resources available to Council. As such the Park's management actions must be assessed against the other priorities of Council, and budget allocations assigned as part of Council's wider Warringah Community Strategic Plan 2023, annual budget cycles and business planning for Council's various units.

Council's current *Delivery Program* includes the 2013-14 budget as well as proposed four year forward budgets and works programmes for Council's key service areas (of which the Parks, Reserves and Foreshores and Natural Environment areas are the service areas most applicable to the Park's management). The plan also includes a schedule for works under the Section 94A Developer Contributions Plan. Funding has been allocated for capital or major works at the Park from all of these funding sources – as identified in Table 8 below.

Council also provides funds for the operational management of the Park – including staff salaries, contract services, repairs and maintenance and the like (in the order of \$700,000 per annum) – and raises a modest income from usage and licence fees and other minor income sources (in the order of \$50-\$60,000 per annum). Warringah Council supports and funds the Park's management far in excess of any revenue generated by the area. The Crown Lands Division's policy in respect of Crown Reserves is that income generated by a Trust should be reinvested in those reserves under the Trust's management – supported by annual income and expenditure reporting obligations. It is also current Crown Lands Division policy that 15% of any proceeds from leases or licences are paid to the Public Reserve Management Fund (over a threshold of \$15,000 value, and where this disbursement of 15% of the lease/licence proceeds is specified in the lease/licence documentation) – and so are not available for "reinvestment" on the Park.

In view of these financial realities/constraints a priority has been assigned to each management action – as shown in the actions Tables in Chapter 5 – to reflect their relative importance and implementation timing in order to achieve the Plan's objectives (but also noting that actions which are of a more management guideline, policy or direction-setting character may not require the direct allocation of resources).

In terms of the resourcing and timing of management, the assigned priorities can be described as follows.

HIGH – Considered “essential”, and will be considered in Council's funding processes annually until they can be resourced, then included in the Management Plan and business plan of the relevant unit within Council each year until completed.

Medium – Considered “desirable”, and should be implemented within the life of this Plan and will be reviewed by the responsible unit within Council each year as to their current relevance/importance and consideration for resourcing and/or placement on relevant work plans.

Low – Considered “useful” or longer-term actions, and should be undertaken if resources permit but may not be allocated appropriate resources until formally reviewed or until resources are available for such actions and relevant units within Council should consider including these actions in their respective work plans each year.

Actions can be single tasks or identified as “continuing” – where the action in question will require funding throughout the Park's management and/or the life of this Plan.

Recognising that funding and resources may come from many sources, including volunteer involvement or specific-purpose grant funding, 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 be 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 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 Council funds, or factors outside of Council's control. Funding details are from the approved Council budget 2013/2014.

6.2 Implementation

Many of the management actions set out in the Action Tables in Chapter 5 are continuing or routine Park management operations, or are policies and guidelines for application when the given issues or circumstances arise. However others are tangible works, many involving a considerable commitment of funds and resources and so need to be programmed into a prioritised forward “works” schedule.

As a guide to the Plan's implementation Table 8 presents those significant management actions identified in Chapter 5 considered high or medium priorities for funding, and noting if a task is already included in Council's budget or forward works planning. Existing identified funding for initiatives/actions at the Park over the 2013 to 2017 period (as detailed in Table 8) includes over \$1.4m from Council's capital works program 2013/2014 budget. Actions that can be expected to be funded within Council's normal operating budget for the Park have not been listed. Note also that some major new initiatives or directions contained in this Plan,

such as changes to recreational access and use of the waterbody, do not figure in Table 8 as they do not entail significant cost component.

**Table 8 Implementation, High and Medium Priority Management Actions
(excluding routine Park management operations)**

ACTION		FUNDING and SOURCE
Site-specific or One-off Management Actions		
HIGH Priority Actions		
Additional off-Park water quality improvement measures and improved stormwater management. (C2)	For future consideration	
Water quality monitoring within the dam - for algal levels (continuing), faecal coliform bacteria and other pollutants. (C10)	Funded in Manly Dam's annual operational budget and included in a LGA-wide water monitoring programme	
Priority safety and upgrading works including to develop the Trig Track for shared use. (TT10)	Contribution of \$190,898 from 2013-14 Capital Works budget	
Priority safety and upgrading works including to develop the Roosevelt Ave - Cootamundra Dr to Nyrang – Wandella Rd sections of mountain bike circuit for shared use (TT12 & 13)		
Priority safety and upgrading works to develop Manning Street sections of mountain bike circuit for shared use (TT16)		
Refurbish 3 amenities blocks in existing picnic areas. (DU5)	Contribution of \$550,000 from 2015-16 Capital Works budget	
Progressively develop high-standard path from Picnic Area 1 to Picnic Area 4. (DU10)	Partially funded *	
Medium Priority Actions		
Upgrade walking tracks and directional signage, in particular the Nature Trail and Wildflower Walk. (TT4)	Partially funded *	
Redesign and upgrade King Street entry and provide safe pedestrian access. (A2)	Contribution of \$375,000 from 2015-16, 2016-17 Capital Works budgets	
Upgrade car parking at Picnic Area 1. (A5)		
Continuing Management Actions		
HIGH Priority Actions		
Rolling programme of weed control and bush regeneration efforts (including adequate follow-up maintenance works). (WP2)	Contribution from Manly Dam's annual operational budget	
Maintenance of existing off-Park water quality improvement and stormwater management measures. (C3)	For future consideration	
Maintenance of safe and sustainable track and trail network. (TT2, TT6, TT8 & TT19)	Funded in Manly Dam's annual operational budget	
Maintenance of signage on approved mountain biking loop route. (TT7)	Funded in Manly Dam's annual operational budget	
Maintenance of the existing picnic areas and associated facilities. (DU2, DU3 & DU6)	Funded in Manly Dam's annual operational budget	
Maintenance (minor) of internal roads and carparks. (A4)	Funded in Council's annual operational budget	
Rolling programme of bushfire hazard management and implementation of Fire Management Plan. (FM2)	Funded in Council's annual operational budget	
Monitoring and management of recreational use and other risks. (PA7)	Funded in Manly Dam's annual operational budget	

ACTION		FUNDING and SOURCE
Medium Priority Actions		
Participate in co-ordinated regional pest control programmes, and Park-specific pest control measures. (WP5)		Funded in Manly Dam's annual operational budget
Monitor groundwater from former landfill sites and undertake any required remediation or control measures. (C8)		For future consideration

* = Partially funded under Capital Works allocations for "Manly Dam renewals – tracks, trails, pathways in picnic areas" of, \$77,026 in 2013-14, \$78,673 in 2014-15, \$79,585 in 2015-16 and \$81,972 in 2016-17

Note: Funding details are from the approved Council budget 2013/2014

Glossary

Bush Track	A narrow, unsealed, defined and cleared route through bushland passable to walkers (and other non-motorised users subject to design standards, and if approved).
Continuing	As required throughout the life of this Plan.
EEC	Endangered ecological community (as listed under the <i>Threatened Species Conservation Act, 1995</i>)
Fire Trail	A constructed, usually unsealed, management access passable to vehicles (typically by 4WDs).
High Priority	Management actions essential to achievement of the Park's 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 Park values or the environment – to be considered in Council's funding processes annually until resourced.
Immediate Term	12 months or less.
LALC	Local Aboriginal Land Council
Long Term	6 years and beyond.
Loop Route (mountain biking)	The 11 kilometre route encircling Manly Dam (and Approved Mountain Biking Loop surrounding areas) which is identified and promoted as permissible for mountain bike (and bicycle) traffic.
Low Priority	Management actions useful for the overall management of the Park or addressing issues having longer-term impacts - to undertake if resources permit.
Medium Priority	Management actions desirable to enhance achievement of the Park's management objectives, or to address issues that meet a significant community need, or to improve Park management outcomes – to be implemented within the life of this Plan.
OEH	Office of Environment and Heritage
Path/Pathway	A high standard route, usually sealed or hardened, typically through a landscaped open space or bushland setting easily passable to walkers (and other non-motorised users if approved).
RFS	Rural Fire Service
RTA (RMS)	Roads and Traffic Authority (now part of the Department of Transport, Roads and Maritime Services - RMS)
Short term	1-2 years.
Single Track	A narrow, unsealed, defined and cleared route through Track bushland passable to walkers (and other non-motorised Trail users subject to design standards, and if approved).
Trample Track	Unplanned and unauthorised pedestrian or other (non-motorised) route developed and maintained through usage, typically following "desire lines" or short-cuts.
Weekdays	Monday to Fridays (inclusive)

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