



Randwick City Council

Frenchmans Bay

Plan of Management

Adopted May 2002

1.1.1 Part A – Plan of Management



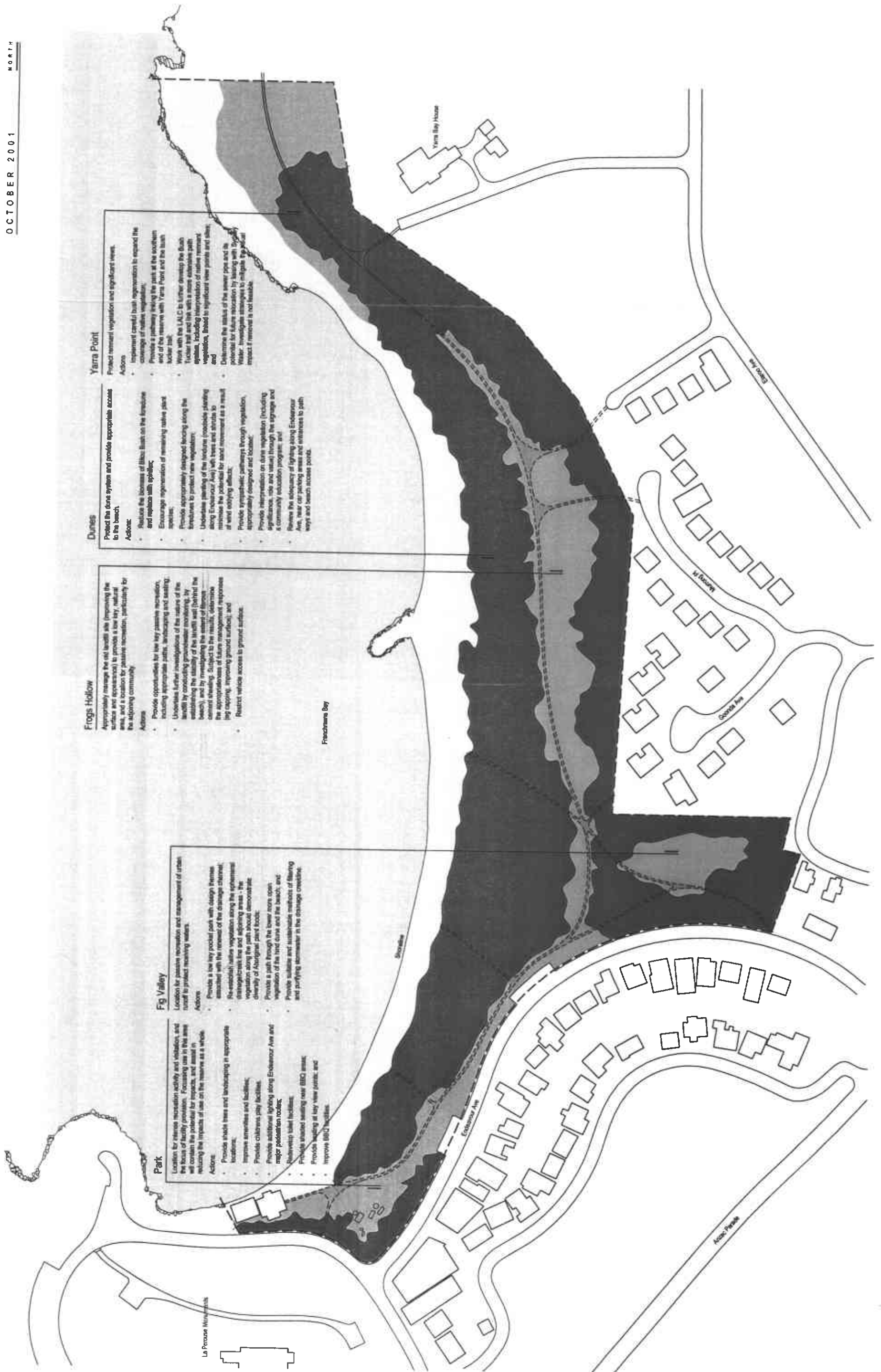
MANAGEMENT
ENGINEERING
ENVIRONMENT

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2. Introduction

2.1 Overview

Frenchmans Bay is a highly significant recreation reserve located on Botany Bay in La Perouse, valued for its social, cultural, historic and natural qualities.

In recognition of the importance of the area, Randwick City Council (Council) has developed a Plan of Management to set a framework for the management, use and enhancement of Frenchmans Bay.

The Plan of Management has been prepared according to the provisions of the *Crown Lands Act 1989* to guide the future use, management and enhancement of the reserve.

The plan focuses on the beach and adjoining area of Crown reserve, referred to as 'the reserve' for the purposes of this report.

2.2 Purpose of the Plan of Management

The Plan of Management will provide an integrated approach to the management of Frenchmans Bay to ensure its place as a premier historical and recreational venue within the City of Randwick.

The Plan of Management recognises the significance of Frenchmans Bay (particularly its environmental, cultural heritage and recreation significance). Community consultation has emphasised the importance of Frenchmans Bay to the community. Community input has indicated a strong community interest in how the use and management of the reserve impacts on surrounding residents and the environment; the significance of the area to the Aboriginal community; and the importance of the area as a recreation destination.

Previous community input to Council has also indicated concerns with various aspects of the reserves, including their use and management (for example, concerns with the vegetated area behind the beach).

The Plan of Management takes these needs into account and provides a proactive management tool to ensure the protection and appropriate management of this highly significant community resource.

Given the significance of Frenchmans Bay and the demands placed on it, ensuring the future sustainability of use is a key emphasis for the Plan of Management. This requires an integrated approach to both the planning process and the management of the reserve.

2.3 Study Area

The Plan of Management applies to the Frenchmans Bay reserve ('the reserve'), which is an area of Crown land located on Botany Bay in the suburb of La Perouse (see Figures 1.1 and 1.2).

Frenchmans Bay is a small bay opening onto Botany Bay at its eastern end. The reserve, which is approximately 2.5ha in area and directly adjoins the beach, is located within the Randwick Local Government Area. The suburbs of Phillip Bay and Little Bay adjoin La Perouse to the east.

The reserve is surrounded by open space reserves to the north and south (Yarra Bay recreation reserve to the north and the Botany Bay National Park to the south); residential dwellings to the east; and Botany Bay to the west.

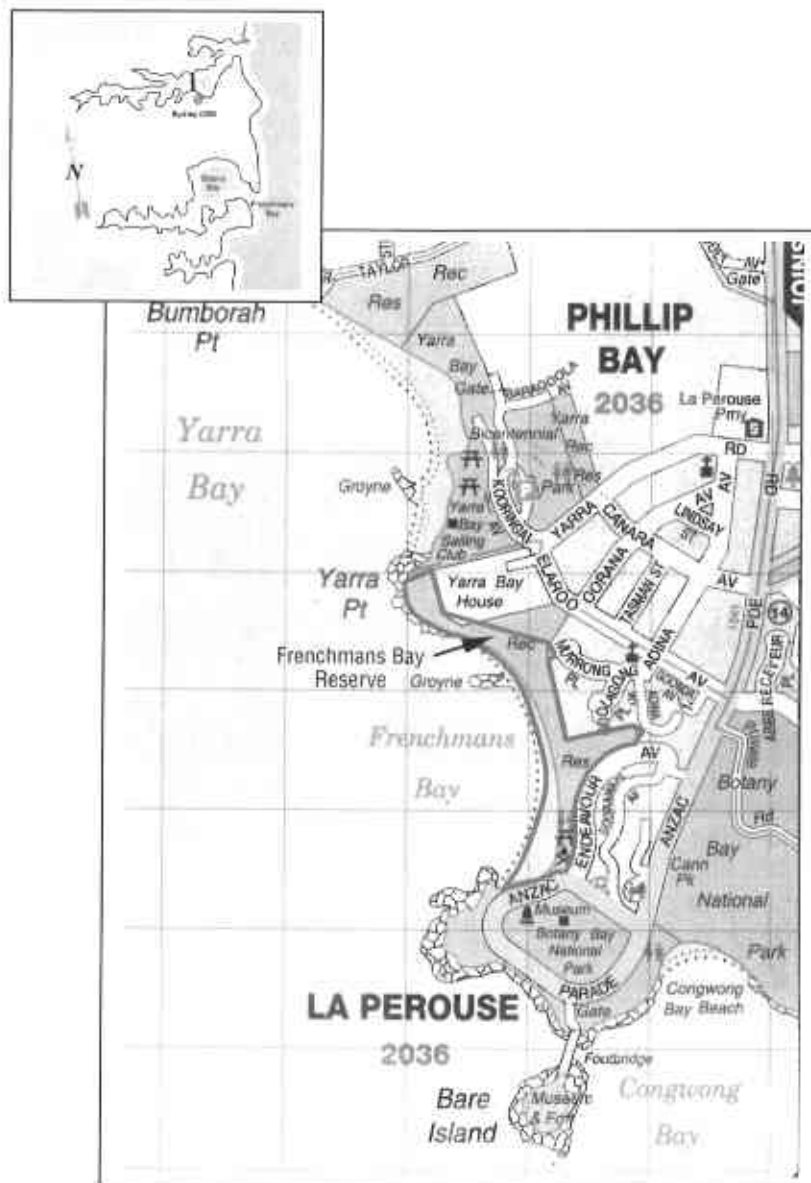


Figure 1.1 Location of Study Area



Figure 1.2 Study Area

2.4 Preparation of the Plan of Management

GHD was engaged by Randwick Council to prepare the Plan of Management.

Taking an integrated approach to planning for the future of the reserve involved incorporating the results of a range of technical studies, with the involvement and input of relevant stakeholders. The following tasks were undertaken:

1. Analysis of the site and key environmental and heritage features, including the following studies:
 - Cultural heritage study (undertaken by Navin Officer Consultants);
 - Vegetation study (undertaken by Anne Clements and Associates);
 - Environmental investigation of the old landfill area; and
 - Scenic landscape assessment.
2. Community consultation to determine community needs and values and identify issues and concerns, including the following:
 - Discussions with representatives of key stakeholders/community groups (including the La Perouse Local Aboriginal Land Council and Precinct Committee);
 - Distribution of a newsletter and review of returned 'have your say' forms
 - Written submissions;
 - Calls to GHD's community phone line;
 - Community workshop held on 25 July 2000; and
 - Weekend site visit and discussions with reserve users on Sunday 30 July 2000.
3. Review of previous studies and reports and discussions with Council officers;
4. Summarise key issues in the Issues Report;
5. Prepare draft Plan of Management (including management strategies, guidelines, Masterplan);
6. Publicly display the draft Plan of Management and receive feedback and submissions.



Participants at community workshop

Following exhibition, submissions received will be reviewed and considered by Council, and the final Plan of Management prepared and adopted by Council.

2.5 Structure of the Plan of Management

The Plan of Management is a working document that will be used to guide Council activities relevant to the management of the reserve. The document is divided into two parts:

Part A - Plan of Management text, Action Table and Masterplan

Part A includes four sections. Sections 1-3 contain background information and set context and basis for management. Section 4 provides the management framework. The contents of each section are outlined below:

Section 1 - provides an introduction to the Plan of Management;

Section 2 - outlines the context for planning, which is provided by the existing environment, history and heritage, the significance of Frenchmans Bay, statutory requirements and the existing use of the reserve.

Section 3 - is the Basis for Management, which is provided by community values, the role of the reserve, and a vision and objectives for management.

Section 4 - provides the guidelines for managing Frenchmans Bay, identifying recommended management strategies, actions and priorities. It includes the Action Tables and Masterplan.

Part B - Background Reports

Four background reports have been prepared:

- Issues report - summarising issues and concerns associated with the reserve, based on site investigations and community input (Appendix A);
- Cultural Heritage Report, prepared by Navin Officer Consultants, October 2000 (Appendix B);
- Preliminary (Stage One) Environmental Assessment (focussed on the landfill area), prepared by GHD, October 2000 (Appendix C); and
- Vegetation Study, prepared by Anne Clements and Associates, October 2000 (Appendix D).



Children provide their comments at the community workshop

3. Context for Management

This section outlines the factors that provide the context for management of the reserve. These include:

- *Overall significance of the reserve;*
- *Statutory/legislative requirements and management policies;*
- *Existing environment (including reservation status of the reserve, access, surrounding land uses, vegetation, landforms and visual character);*
- *History of the reserve and items/places of cultural heritage significance; and*
- *Current use of the reserve.*

3.1 Significance

Frenchmans Bay is culturally significant as a result of its history of Aboriginal occupation, and its links to European settlement.

The significance of Frenchmans Bay was assessed against the criteria for listing on the NSW State Heritage Register (Navin Officer, 2000). The Frenchmans Bay Management Area¹ was considered to meet all criteria:

- *Important in the course, or pattern of NSW's cultural history* – The Frenchmans Bay Management Area forms an integral part of the cultural landscape of the north-eastern coastline of Botany Bay, which saw some of the earliest observations of the continent by Europeans and some of the earliest contacts between Europeans and Aborigines on the east coast.
- *Strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural history* – The area is an integral component of the cultural landscape of the La Perouse Peninsula associated with the 1788 visit by Comte de Laprouse and his expedition.
- *Important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW* – Each of the landforms is an integral aesthetic element of the broader cultural and natural landscape of the La Perouse Peninsula and northern Botany Bay coastline.
- *Strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons* – The area has strong and special cultural significance to the Aboriginal community, both locally within La Perouse, and among associated communities throughout NSW and particularly the NSW South Coast.
- *Potential to yield information that will contribute to an understanding of NSW's cultural history* – The area contains a considerable resource of known and potential archaeological sites, the future investigation of which is likely to significantly

¹ The Frenchmans Bay Management Area was defined in Navin Officer's report to incorporate the reserve, and the surrounding area that forms the broader cultural landscape of the reserve.

advance our understanding of the past, in areas poorly supported by the written record.

- *Possessing uncommon, rare or endangered aspects of NSW's cultural history* – Elements rare or unique within the context of NSW or Australian cultural history include the survival of archaeological remains of a 19th century Aboriginal encampment and Mission, situated within a foredune context; the fact that an active body of oral tradition and a continuous social identity remains associated with the place as a result of the continuing presence of the La Perouse Aboriginal community at the site; and the potential for below ground archaeological remains of the La Perouse expedition.
- *Important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or environments* – Several significant features and structures remain in the area to describe the evolution and history of the La Perouse Aboriginal settlement and Mission site.

Frenchmans Bay is also one of four precincts covered by the Botany Bay National Park Conservation Area.

The reserve and Frenchmans Bay is also significant ecologically, providing habitat and a corridor for a range of flora and fauna species (both marine and terrestrial). The beach and associated dune system also form part of the overall Botany Bay coastal system.

The reserve is also highly valued by, and significant to, both the local and wider the community (see Section 3.1) for its visual qualities and recreation opportunities.

3.2 Statutory and Policy Context for Management

Crowns Lands Act 1989

The *Crown Lands Act 1989* governs the planning, management and use of Crown land, including reservation or dedication for a public purpose. Crown land management principles stated in Section 11 of the Crown Lands Act are:

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

The Crown Lands Act does not prescribe the content for the plans of management. A plan of management is acceptable to the NSW Department of Land and Water Conservation (the Department responsible for the management of Crown land) provided the following points are addressed:

- The plan and its outcomes are consistent with Crown land management principles;
- Any proposed uses, development and management practices must conform to the public purpose for the reserved or dedicated land;
- The plan addresses any matters required by the Minister responsible for the Crown Lands Act;
- Submissions about the draft plan are referred to both the Minister responsible for the Crown Lands Act and the local Council for consideration prior to adoption; and
- The draft plan is exhibited for public comment in accordance with the Crown Lands Act and Regulations.

Management and use of Crown Land

Crown land must be managed and used in accordance with the following:

- The principles of Crown land management;
- The reservation; and
- Any conditions and provisions within the specific zoning in the Council's Local Environmental Plan.

Land uses are then more specifically defined by a statutory mechanism (a plan of management), contractual agreements (leases or licences), or both. Relevant case law judgements also influence the policy and practice of land managers.

Crown land may be reserved or dedicated for public purposes. This means that the reserve must provide some public benefit, and that the management and use of the reserve is broadly defined by the purpose of the reservation. There are currently 16 types of public purposes used for reserving Crown Land. One of which is 'Public Recreation', the reservation of the Frenchmans Bay reserves.

Management by a reserve trust is one of the means by which land reserved or dedicated under the Crown Lands Act is managed. Reserve trusts are established as incorporated bodies charged with the care, control and management of the reserve according to the public purpose of its reservation/dedication. The most common form of trust management (approximately 75% of trusts) is corporate trust management by local government Councils.

Management can also be devolved to Council. The reserves in Frenchmans Bay are under both forms of management.

Any new lease or licence will be subject to a 15% levy payable to the Public Management Fund (PRFM) which provides for the equitable distribution across the Crown Reserve system on a statewide basis of proceeds raised in areas of high land/commercial value to those areas where income producing opportunities are limited or do not exist.

Randwick Local Environmental Plan 1998

According to the Randwick Local Environmental Plan 1998, the reserve is zoned 6A (Open Space).

The objectives of the 6A zone are:

- To identify publicly owned land used or capable of being used for public recreational purposes;
- To allow development that promotes, or is related to, the use and enjoyment of open space; and
- To identify and protect land intended to be acquired for public open space.

The following controls apply to the zone:

Development allowed without consent

- Works (but not buildings) involved in landscaping, gardening, or bushfire hazard reduction
- Public utility undertakings
- Recreation

Development allowed only with consent

- | | |
|---|----------------------------|
| • buildings ordinarily incidental or ancillary to landscaping, gardening or bushfire hazard reduction | • community facilities |
| • car parks | • helicopter landing sites |
| • child care centres | • outdoor advertising |
| • clubs | • public transport |
| • communication facilities | • recreation facilities |
| | • restaurants |
| | • roads |

Prohibited development

- Development not listed above.

The relevant clauses of the LEP must be considered with respect to any further development that may occur in, or in the vicinity of, the reserve. A number of specific clauses are relevant, including those that apply to tree preservation orders (clause 28), foreshore scenic protection area (clause 29), protection of heritage items, heritage conservation areas and relics (clause 43), development of potential archaeological sites (clause 44) and development in the vicinity of heritage items, heritage conservation areas and potential archaeological sites (clause 46).

Mill Pond Catchment Plan

The reserve falls within the area subject to the Mill Pond Catchment Plan. The Mill Pond Catchment plan covers an area of 3,416 ha in the Randwick LGA (including Frenchmans Bay). The primary goal of urban stormwater management plans is to facilitate the coordinated management of stormwater within a catchment to achieve ecological sustainability and to derive social and economic benefits from sound stormwater management practices.

The plan has been prepared to comply with the requirements of the notice issued to Randwick Council by the Environment Protection Authority (EPA) under section 12 of the *Protection of the Environment Operations Act 1997*.

3.3 Existing Environment

3.3.1 Reservation status

The study area consists of the following reserves notified for public recreation (Crown land):

Reserve	Date of Notification	Management
R26569	2/8/1897	Council Trust
R62339	14/11/1930	Devolved to Council
R62422 (part)	9/1/1931	Council Trust
R71492	27/4/1945	Devolved to Council
R77947	2/9/1955	Council Trust
R91547	31/8/1979	Devolved to Council

The Frenchmans Bay reserves also consist of the following:

- An area of land owned freehold by Council at the corner of Endeavour Avenue and Anzac Parade (DP 934156 - lots 1 and 2) - classified by Council as Public Open Space (Randwick City Open Space and Recreation Strategic Plan, 1996);
- Closed road (lot 1 DP 862586); and
- An area of land under Licence 200058 to First Fleet Marine Pty Ltd (directly with the Department of Land and Water Conservation).

Pete's Boatshed

Pete's Boatshed (café/restaurant and boat hire business) is located within the reserve, opposite the intersection between Endeavour Avenue and Anzac Parade. It is located on land subject to a direct lease between the Department of Land and Water Conservation (DLWC) and First Fleet Marine Pty Ltd. Licence 200058 applies to this land for a term of 13 years, expiring on 11 December 2007, for 'Business Purposes & Residence' (which includes boathire, kiosk, restaurant and caretaker's residence).

Council approved a Development Application for alterations/extensions to Pete's Boatshed (subject to conditions) on 17 March 2000. The alterations/extensions will provide for restaurant style dining and include increased seating capacity for 75 persons; plastic screens around the rear ground floor deck; and re-installment and extension of the awning canopy on the northern side of the building.

The operators of Pete's Boatshed also recently sought owner's consent from DLWC to convert the unused decking adjoining the boatshed (remains of mainly demolished Stannard Bros boatshed located to the southwest) for use as an outdoor seating/dining area. The decking is situated within reserve number R77947.

DLWC wrote to Council to determine whether Council had any objection to the lodging of the development application.

Council resolved on 18 September 2001 to advise DLWC that 'it did not object to the lodgement of a development application for the use of the former Stannard Bros

deck for the purposes of outdoor seating/dining associated with the adjoining commercial use'.

Council as Trust Managers will give full consideration to DLWC **Food and Beverage Policy Circular No 2001/03** in the assessment of the DA including the following characteristics:

- ensure that the outlet is as described in the **Food and Beverage Policy on Crown Reserves**
- allows equity of access in opening times and level of dining
- the range of dining shall not exclude any public from access
- exclude licensed bar areas from the Reserve
- no specific areas should be set aside for functions
- the reserve remains the dominant attraction

3.3.2 Access and surrounding land uses

The main access to the reserve is via Endeavour Avenue and Anzac Parade (see Figure 1.1). Bunnerong Road, which flows into Anzac Parade, also provides a main access route to the suburb of La Perouse. Nearby (on-street parking) is available along Endeavour Avenue and the loop road at the end of Anzac Parade.

Surrounding land uses include residential to the east, and reserves to the north and south. Yarra Bay House and the Yarra Bay recreation reserve and sailing club adjoins Frenchmans Bay reserve to the north. The Botany Bay National Park (including the Laperouse monuments and Museum) adjoins the reserve to the south.

Approximately 400m of the reserve has direct street frontage, with the southern end of the reserve directly adjoining Anzac Parade, and Endeavour Avenue running along the south-eastern boundary of the reserve.

A couple of cafes/restaurants are located directly opposite the reserve near the intersection of Anzac Parade and Endeavour Avenue. A number of houses located on the eastern side of Endeavour Avenue are located directly across the road from the reserve.

3.3.3 Physical environment - landforms and distinctive areas

The landform of the reserve is distinctive - two sandstone headlands at either end with numerous and expansive rock outcropping, and a rolling sand dune system that runs the length of the beach.

The headlands enclose the bay and provide some partial protection from north-westerly and south-westerly winds. The rolling dunes rise up to the east, protecting the beach from easterly breezes. The beach has a westerly outlook, giving it a unique orientation amongst Sydney beaches.

The natural dune system has been substantially altered as a result of surrounding development; provision of the small flat grassed park at the southern end of the beach; and landfill activities to the north. The area of the old landfill site towards the north is elevated and exposed to south-westerly winds. A groyne is located on the beach to the north.

The beach's exposure to westerly winds impacts on the development of a topsoil profile that could support tall vegetation. Vegetation and landform has a marked effect on the establishment of microclimates around the site. Behind and below the

vegetated dunes, there are extensive protected areas. Above the dunes (particularly to the north) there are exposed windy sites.

The reserve has a number of distinctive areas (see Figure 2.1), characterised by the combination of landforms and features present. The terms used to describe these areas for the purposes of the Plan of Management are indicated in brackets.

- The flat open grassed park at the southern end and the adjoining beach front – this area has easy access to both Anzac Parade and Endeavour Avenue and receives the highest levels of use (**Park**).
- The sand dunes – including the vegetated area located adjacent the beach to the north of the park area extending behind the beach for the length of the reserve, with the greatest extent in the middle section of the reserve, together with the adjoining section of beach (**Dunes**).
- The remnant creek line (located between Adina Way and Endeavour Avenue) – this area includes a number of significant fig trees and is surrounded by a grassed reserve (**Fig Valley**).
- The covered landfill area and surrounding grassed areas to the north (adjoining Yarra Bay House) - this area is elevated from the beach and is dominated by an uneven and sparsely vegetated/grassed land surface (**Frogs Hollow**).
- The Yarra Point rocky headland and associated remnant vegetation at the northern end of the reserve (**Yarra Point**).

These areas will form 'management zones' for the purposes of the Plan of Management.

3.3.4 **Topography, geology, hydrogeology and soils**

The information below is summarised from the report 'Stage 1 Preliminary Environmental Assessment' prepared by GHD, July 2000. The report is included in Appendix C.

The reserve slopes to the south and west (to sea level), with a topographical high of approximately 10 metres towards the northeast. The slope towards the north of the reserve is pronounced, forming part of the steeply sloping edge of the old landfill area.

A review of the Sydney 1:100 000 Geological Series Sheet (1983), produced by the Department of Mineral Resources, indicates that the reserve is expected to be underlain by medium to coarse grained quartz sandstone with very minor shale and laminite lenses. The beach is expected to comprise coarse quartz sand with varying amounts of shell fragments.

A review of the Soil Landscape Series Sheet 9130 for Sydney (Soil Conservation Service of NSW) indicates that the natural soils present towards the north are classified as Newport, being shallow well sorted siliceous sands overlying moderately deep buried soils including yellow podzolic soils. The natural soils present towards the south are classified as Lambert, being shallow discontinuous earthy sands.

Groundwater movement at the site would be expected to flow in a west to south-westerly direction. The remnants of a natural drainage line are located approximately in the middle of the reserve, between Adina Avenue and Endeavour Avenue, draining to the beach.

Old landfill site

Infilling of a gully behind the sand dunes in the northern area of the reserve (the 'Frogs Hollow' area) is believed to have associated with a Council operated landfill, which operated between the late 1960s to the early-mid 1970s. Types of waste received by the landfill were reportedly building refuse, car bodies, trees and grass cuttings and items collected during monthly Council clean-ups.

It has been reported that storm induced erosion to the landfill around 1978 required Council to undertake some restoration works, involving stabilisation and the placement of imported fill.

Based upon the investigations undertaken, it is believed that the landfill wastes includes metal, glass, plastic, cans, sandstone fragments and readily putrescible material such as grass clippings, food items, paper and timber.

Investigations undertaken reveal that the site geology is expected to be dominated by sand to depth. The site inspection, including a test pit excavated to a depth of 1.2m on the beach, confirmed this assessment.

No evidence of leachate was observed in the vicinity of the landfill site. However leachate generation at any landfill is not constant, but rather will be correlated with local precipitation and hydrogeological conditions. The site inspections were conducted over a period of dry weather, thus reducing the likelihood of visually identifying leachate issues at the site. The site surface over the landfill would be expected to be highly permeable, which is a factor that may contribute to leachate production.

As it had been reported that erosion of the poorly vegetated surface covering of the landfill had resulted in exposure of landfill waste, two surface samples of soils were collected and analysed for a range of contaminants. The concentrations were compared with health based investigation level guidelines published by the EPA applicable to 'parks, recreational open space and playing fields'. The range of contaminants assessed recorded concentrations at either very low levels or at levels below laboratory analytical detection limits. Although the number of surface samples taken was much less than the number recommended by the EPA to characterise an area of this size, it is unlikely that a health risk exists as a result of any impact on surface soils by contaminants in the landfill.

Beach sands taken from the foot of the landfill embankment similarly showed that the landfill had not contaminated the beach sands - at least, not in the top metre or so.

The investigations undertaken, issues identified and recommendations made are described in full in Appendix C.

3.3.5 Vegetation

The information below is summarised from the report 'Vegetation Study Report for the Frenchmans Bay Plan of Management' prepared by Anne Clements and Associates, October 2000. The report is included in Appendix D.

The vegetation in the reserve has been significantly altered since European settlement. This has included clearing at various times, with extensive replanting and revegetation works undertaken by Council in the 1980s.

Vegetation communities

There is clear zonation in the shore vegetation between the beach and Endeavour Avenue:

- Foreshore vegetation dominated by *Chrysanthemoides monilifera* (Bitou Bush) - the infestation covers most of the foredune area to the exclusion of almost all native species with the exception of *Acacia sophorae* (Coastal Wattle) and *Spinifex sericeus* (Beach Spinifex).
- Vegetation landward of the area of Bitou Bush consists mainly of dense thickets of planted hind dune shrubs species, such as *Banksia integrifolia*, *Leptospermum laevigatum* (Coastal Tea-tree), *Melaleuca armillaris* (Bracelet Honey-myrtle), with weed infestation of *Lantana camara* (Lantana). As evidenced by historic photographs of the area, *Banksia integrifolia* naturally occurs in Frenchmans Bay.
- Mown grass of *Pennisetum clandestinum* (Kikuyu) and *Stenotaphrum secundatum* (Buffalo Grass) with scattered planted *Erythrina X sykesii* (Coral Tree)

Species likely to be original as opposed to planted natives (eg Coastal Wattle and Beach Spinifex) were not abundant or well distributed. Beach Spinifex was restricted to foredune areas and not recorded in the less active sand area on the southeastern shore of Yarra Point.

The former landfill site is relatively unvegetated. There has been some recent plantings that are not thriving.

The vegetation recorded at Yarra Point was typical of coastal rocky headlands with the exception of *Carpobrotus glaucescens* (Pigface), *Acacia sophorae* (Coastal Wattle), *Banksia integrifolia*, *Cynodon dactylon* (Couch). Some of the native species occur on coastal sand dunes and these species may have become restricted to the headland as a result of to past land uses.

The native vegetation that would have been located along the drainage line towards the middle of the reserve has mainly been replaced by exotics, with Kikuyu forming the dominant ground cover. There are few *Ficus* species in this area. *Ficus superba* var. *henneana* (Deciduous Fig) is likely the only local native species recorded.

There are seagrasses located within Frenchmans Bay, including mixed *Halophila* (*Halophila* spp. and/or *Zostera capricornia*)

Exotic species

74 exotic species recorded were recording during the study, with four species - *Chrysanthemoides monilifera* (Bitou Bush), *Cestrum parqui* (Green Cestrum), *Cortaderis selloana* (Pampas Grass) and *Lantana camara* (Lantana) declared noxious weeds under the Noxious Weed Act 1993 in the Randwick Local Government Area.

Three species, *Cotoneaster pannosus*, *Protoasparagus densiflorus* (Asparagus Fern), *Tradescantia albiflora* (Wandering Jew) are listed as environmental weeds by Randwick City Council.

The dominant weed species observed during the vegetation study was Bitou Bush.

Conservation significance

National and State

None of the species recorded are of conservation significance at a national or state level.

Regional

Carpobrotus glaucescens (Pigface), was used as an anti-scurvy treatment and a food source by local Aborigines.

Allocasuarina verticillata (Drooping She-oak) is not common on rocky headlands in Sydney.

Of the 24 native species identified by Armstrong et al. (1976) of conservation significance, three were recorded in the current survey:

- *Asplenium obtusatum* (Shore Spleenwort) was recorded near the shore line of Yarra Point;
- *Correa alba* recorded west of the old landfill site; and
- *Leptospermum laevigatum* (Coastal Tea-tree) appears to have been extensively planted on the sands but also recorded west of the old landfill site.

The seagrass located within Frenchmans Bay supports the entire surveyed population of mixed *Halophila* (*Halophila* species and/or *Zostera capricornia*) on the northern shore of Botany Bay, and 35% of the 34.9 ha of seagrasses recorded on the northern shore of Botany Bay (Watford and Williams 1998). As a result, this community is of particular significance.

3.3.6 Visual character

The visual character of the reserve is formed by the natural landscape, together with the surrounding built form. The reserve includes some spectacular scenery, particularly associated with natural elements. Features contributing to its visual character include:

- Frenchmans Bay, the beach and views of water towards Botany Bay;
- Uniform vegetation along the beach;
- Elevated headlands and exposed cliff faces;
- Long distance view across the water to other parts of the city;
- Vegetation of the ridgeline that separates Yarra Bay to the north and Congwong Bay to the south from Frenchmans Bay; and
- The street form of Endeavour Avenue.

Good panoramic views are available within the reserve including:

- Sweeping vistas across Botany Bay from the beach including spectacular views at sunset;
- Pete's Boatshed enjoys views to the north across the Bay to Yarra Point; and
- Commanding views in a natural setting to the south from Yarra Point.

The reserve is important for views from surrounding areas. Views into the reserve from Endeavour Avenue, Anzac Parade, elevated housing in other areas, and from Botany Bay are all significant. Views to Frenchmans from Botany Bay and Prince of Wales Drive at Port Botany (which provides a significant vantage point) are generally

of high scenic value, as the vegetation forms a natural setting, with the headlands framing the beach.

3.4 History and Heritage

The information below is summarised from the Cultural Heritage Report prepared by Navin Officer in October 2000. The report is included in Appendix B.

3.4.1 History

Aboriginal Occupation

The earliest observations of Aborigines at Botany Bay were made in April and May of 1770 by Captain James Cook and Joseph Banks. Within a short period of time after white settlement, the Sydney Aboriginal population was greatly reduced as a result of two epidemics (most probably smallpox). Loss of life on such a scale resulted in a major social reorganisation of Aborigines around the area, with remnants of bands combining to form new groups.

A number of archaeological investigations relating to Aboriginal heritage have been conducted on the La Perouse peninsula. To date it appears that three Aboriginal archaeological sites have been recorded as occurring within the Frenchmans Bay area.

A comprehensive and detailed oral history of the La Perouse Aboriginal people has not been compiled to date. The Aboriginal community retains a significant number of stories and information about their occupation of the land and the history of La Perouse and Frenchmans Bay.

In 1800 there was apparently a relatively large Aboriginal population around the foreshores of Botany Bay and in the gullies north of the bay. From 1810 to 1830, European hunters and fisherman severely disturbed the occupancy of the Aborigines. In the 1880s, a small Anglican mission was established, and on 30 March 1895 seven acres and six and half perches was gazetted as a 'Reserve for the Use of Aborigines'.

By 1976 the 'reserve' had been developed by the Housing Commission as an Aboriginal Housing project and was administered by the Aboriginal Lands Trust. The Lands Trust was abolished in 1983 when new legislation was enacted to set up Aboriginal Land Councils, and the Aboriginal community finally had some autonomy at La Perouse.

In September 1985 Yarra Bay House was handed over to the La Perouse Local Aboriginal Land Council for use as its office.

Local Aboriginal Land Council boundaries are situated so that the Frenchmans Bay study area is within the jurisdiction of the La Perouse Local Aboriginal Land Council.

Native Title Claims

A search of the National Native Title Tribunal Register was undertaken on 19 July 2000.

Three Native Title Claims have been made over areas which include Frenchmans Bay. These are NC97/8, NC97/16 and NC98/10.

The current registration test status of each of these claims is: '*Not accepted for registration*'.

European Occupation

The Explorers

The first documented Europeans to sight Botany Bay were Captain James Cook and the crew of the Bark Endeavour, who entered the bay on 29 April 1770.

Arthur Phillip, in command of the First Fleet, and following the advice of Cook's expedition that Botany Bay was a suitable place for a penal colony, subsequently sailed into Botany Bay on 18 January 1788. Phillip soon realised that Botany Bay did not meet his requirements, and left for Port Jackson.

The Comte de Laprouse, commander of a French scientific expedition, arrived at Botany Bay as the First Fleet departed. He occupied the area for eight weeks, camping at Frenchmans Bay and building a garden and stockage nearby. The actual location of the garden and stockage is not known.

Settlement

Subsequent European settlement in the area occurred by extension from Port Jackson (Pringle 1979). Land grants were made to Europeans from the 1820s onwards.

Troops were stationed on the La Perouse headland from about 1820. Other occupants included boatmen working at the customs station.

In the latter half of the nineteenth century, the suburb of La Perouse continued to be developed, principally by extension of existing facilities. A tramline to La Perouse was opened in 1902 and a jetty constructed on the western side of the headland in 1905. A road linking the tram terminus to the jetty was also constructed, allowing visitors to access the area by ferry from Kurnell (Kass 1989).

During the depression in the 1930s many unemployed people lived in makeshift settlements at Happy Valley, Frogs Hollow and Hill 60. Frogs Hollow has been identified as being located at the northern end of the reserve, adjacent to Yarra Bay headland.

Photographs of Frenchmans Bay in the first decades of the twentieth century show numerous boatsheds along the beach. The boat building industry in the area was changed during the war, when boat construction was centred on the war effort.

Residential development extended southwards from Maroubra after the Second World War. The tram line was removed in the 1960s and a new ring road around the headland was constructed.

Recreation and Tourism

La Perouse has had a long association with recreation and tourism. As early as the 1830s, the area was a location for society picnic parties from Sydney.

Improved transport links (including the tramline) in the early twentieth century encouraged more tourism to the area. The recreational appeal of the area increased in the 1920s and 1930s, with a number of weekend attractions including the snake pit (still operating), Aborigines making and selling, pony and donkey rides and food vendors.

Archaeological Information

There has not been any systematic or detailed investigation of the archaeological resource in Frenchmans Bay.

Two recordings of archaeological material have been made within the study area. A recording was made of a midden exposure in the middle portion of the reserve which confirms the presence of an archaeological deposit associated with the site of the old Aboriginal Mission and Reserve.

In February 1999, surface runoff erosion along the foreshore (just north of the boat ramp) exposed a late nineteenth century rubbish dump site. This site occurs within an area known to have been subject to residential and commercial activities since at least the 1870s, including Edward Hemming's accommodation house and various boatsheds and other businesses. The recording confirms the survival of, and potential for archaeological deposits associated with these activities, especially within the foreshore and foredune sand bodies of the Frenchmans Bay area.

3.4.2 Heritage sites, items and places

The following sites and places have been identified as occurring, or potentially occurring, within the reserve. Further information is available in the Cultural Heritage Report (Appendix B).

Generalised Places or Cultural Landscapes of Significance:

The Frenchmans Bay study area falls, either partly or wholly, within several previously recognised and broadly defined cultural landscapes or historic precincts:

- La Perouse Headland;
- La Perouse Landing Place;
- Botany Bay Heads; and
- La Perouse Aboriginal Settlement and Mission.

Confirmed Sites and Places

- Site of Former Aboriginal encampment and subsequent Mission and Reserve Area;
- 'Dreaming Trees' (the three large and prominent Fig trees situated in or near the old Aboriginal Reserve area);
- 'Frogs Hollow';
- Yarra Point Aboriginal Midden;
- Frenchmans Bay Aboriginal Midden and Historic Archaeological Deposit;
- Aboriginal Engraving;
- 'First Fleet Marine' Restaurant and Boatshed Building (Pete's Boatshed); and
- Historic archaeological deposit.

Potential Archaeological Deposits and Unconfirmed Sites

- Old Aboriginal Reserve (core area of archaeological potential);
- Old Aboriginal Reserve (secondary area of archaeological potential);
- Sites of stockade and garden constructed by La Perouse;

- Site of former foreshore buildings;
- Customs enclosure;
- Military flagstaff;
- Edward Hemming's accommodation house and stables;
- Boatshed and Fishermans Boathouse;
- Complex of boatshed buildings;
- Commercial buildings including 'the Colonnade'; and
- 'Frogs Hollow'.

The only listings are according to the NSW National Parks & Wildlife Service Register of Aboriginal Sites. Two Aboriginal archaeological sites - a midden at Yarra Point and a rock engraving at Frenchmans Bay - are recorded on the Register of Aboriginal Sites for the Frenchmans Bay area. A third site, a midden at the southern end of Frenchmans Bay, is probably located just outside the reserve area.

3.5 Current Use of the Reserve

Users of Frenchmans Bay consist predominantly of residents from the local area and eastern suburbs, who mainly come as individuals or family groups.

The area also receives a reasonable level of visitation by tourists, and other residents of the Sydney region who come to visit the wider area and surrounding attractions (including those offered by the Botany Bay National Park).

Many visitors to the reserve are attracted by the sheltered conditions, which makes it a particularly good beach/picnic area for families. Frenchmans Bay is also a very popular destination for sailboarding, with the grassed park at the southern end used for rigging and de-rigging activities.

In summary, the main uses undertaken within the reserve include:

- Family picnics/BBQs;
- Social gatherings/picnics eg sporting group annual BBQs, gatherings of different cultural groups;
- Beach and water based recreation (eg swimming, fishing, dinghy hire, sailing, sailboarding, sitting on the beach);
- Walking and dog walking;
- Visiting the cafés in the area (including the café/restaurant located within the reserve); and
- Occasional use by diving centres for courses, access to dive boats etc.

The levels of use and the activities undertaken differ in the different areas of the reserve. Use of the beach decreases in intensity from the south to the north. The main uses of, and the key features/resources offered by, the different management zones are summarised in Table 2.1.

Table 2.1 Management Zones - Key Features and Use

Management zone	Key features	Main use/activities
Park	<ul style="list-style-type: none"> • grassed park • BBQs • picnic shelter • Pete's Boatshed - café/restaurant and boat hire • toilets • level beach access • retaining wall 	<ul style="list-style-type: none"> • experiences the most intensive use, and is the focus for visitation and activities in the reserve • picnics, BBQs, beach access, water based activities, rigging and setting off area for sailboards, social gatherings/picnics
Dunes	<ul style="list-style-type: none"> • vegetated dunes • access paths to beach 	<ul style="list-style-type: none"> • the main use of the vegetated area is access to beach • main uses of the beach in this area are water based activities (such as swimming, sitting on the beach) and walking along the beach
Fig Valley	<ul style="list-style-type: none"> • large fig trees • unformalised drainage course • surrounding grassed areas 	<ul style="list-style-type: none"> • area experiences limited use, mainly by people passing through on their way to other areas
Frogs Hollow	<ul style="list-style-type: none"> • old landfill site • elevated area, mainly grassed with a few shade trees 	<ul style="list-style-type: none"> • the elevated grassed area is used mainly by local residents as a place to meet, sit etc, • used for walking and dog walking • because of the difference in levels, the adjoining area of beach cannot be reached directly from the elevated area – it is mainly accessed from the south (along the beach or through the dunes) – • the area of beach north of the groyne experiences relatively lower levels of use, with the main activities being fishing and walking
Yarra Point	<ul style="list-style-type: none"> • elevated headland with some remnant vegetation • location for the bush tucker trail 	<ul style="list-style-type: none"> • the area experiences low levels of use, mainly by people walking along the trail, and limited passive recreation

4. Basis for Management

The Basis for Management provides the framework within which issues and concerns are assessed, appropriate management strategies and actions are determined, and the Plan of Management is developed and implemented. It is made up of the values, role and management vision and objectives for the reserve.

4.1 Values

Community values can be defined as those properties or attributes of a particular place or area that lead to it being considered highly by members of the community. In other words, values represent 'what is important' about a place.

It is important to approach the management of a public reserve based on an understanding of the community values attached to the reserve, rather than focus directly on the issues and concerns. This is because issues and concerns can change quite quickly, whereas values usually remain relatively constant over time.

Community consultation and discussions with Council assisted with the identification of community values.

Overall, Frenchmans Bay is valued highly by the community as a popular recreation destination, as well as a significant cultural heritage site. The values identified during consultation are outlined below, grouped below according to five main categories.

History and Heritage

Frenchmans Bay has significant historic values as a result of both its links to Aboriginal occupation and European discovery and settlement of Sydney. It forms an important part of one of the most significant cultural heritage areas in Sydney, if not Australia.

The Frenchmans Bay landscape is valued by the local Aboriginal Community as a place of special cultural importance, independent of any material (or archaeological) manifestation of that history. It is an important cultural landscape because of the interrelation between generations of Aboriginal people, and the food and living resources, homes and places of occupation, graves, story places, and the history of events that took place within the area.

The historic significance of the area is also strongly valued by the non-Aboriginal community.

Recreation

Frenchmans Bay is highly valued as a recreation destination, with the following aspects identified as contributing to its value:

- Good beach for families - a safe beach to swim on (calm water);
- A good beach for elderly people - easy to access;
- Popular and well used by windsurfers;
- Close to the National Park and other attractions

- Variety of attractions and things to do (eg swimming, fishing, rock hopping, nearby museum and snake man);
- Offers a safe/protected recreational area enjoyed by many cultures – the BBQ facilities are well used; and
- Room for children to play.

Visual/Scenic

The scenic and visual qualities of the reserve and its surrounding environment are highly valued, with the following aspects identified as contributing to its value:

- It is a beautiful area;
- Excellent views and outlooks;
- Views to rock platform and Botany Bay;
- One of the few 'natural' beaches in this area;
- An oasis in the middle of 'industrial ugliness'; and
- Clean beach.

Natural

Highly valued features of the natural environment include the following:

- The beach;
- Scenic beauty and natural qualities;
- The large fig trees;
- Grassy slopes; and
- Unspoilt area with wildlife, native birds and plants.

Social and Cultural

Frenchmans Bay has high social and cultural values influenced by its history; connections to the local community; and its attraction as a recreation destination. Factors contributing to these values include the following:

- Importance to the Aboriginal community;
- The reserve offers a meeting place/location for social gatherings for people of all nationalities;
- Popular area for local residents - contributes to the amenity and appeal of living in this area;
- Good area to come with all the family (both old and young);
- Good area to take visitors - important tourist attraction;
- The area next to Pete's Boatshed provides a place to sit out in the sun, have something to eat and admire the view;
- Well used by local children for informal play (eg building cubby houses, fishing, crabbing, boating etc); and
- There is a café located right on the water.

4.2 Role of Frenchmans Bay

The 'role' of the reserve is its function in terms of the overall system of open spaces in the Randwick LGA. The role is influenced by the opportunities for recreation and visitation that are offered, and the activities that occur.

The main role of the reserve at Frenchmans Bay is to provide a local and regional recreation resource for a variety of activities, ranging from water based recreation to use of the adjoining reserve.

Although the reserve was designated for public recreation, it does however play another role - the fact that it is a reserve ensures protection of its other significant qualities (including historic and natural qualities).

In summary, the role of Frenchmans Bay focuses on:

- Recreation and community use - providing opportunities for a range of recreation activities, and the overall enjoyment of a scenic natural area, as well as an important destination and meeting place, both for residents of the surrounding area and other community uses (such as social gatherings); and
- Protection of significant natural and historic qualities - protecting a culturally and historically significant and highly valued area, as well as protecting the natural environment and scenic beauty of the area (eg the vegetation on the dunes plays an important role in stabilising the dune system).

4.3 Vision and Objectives for Management

A vision and objectives for management have been identified to guide and direct the management of the reserve. These can be also be considered as 'desired outcomes' or overriding 'guiding principles' which define the expectations and directions for decision making in relation to the management and use of Frenchmans Bay.

4.3.1 Vision for Management

The vision for Frenchmans Bay 'sits above' the management objectives, providing the overall direction for the Plan of Management. It defines where Council and the community would like Frenchmans Bay to be in the future, and the direction that management activities (through the implementation of the Plan of Management) should take.

Management Vision

Frenchmans Bay is a significant natural resource where opportunities for recreation are carefully integrated with the protection of the natural environment, cultural heritage values and the needs of the local community.

4.3.2 Management Objectives

Management activities directed at achieving this vision will need to satisfy a number of objectives formulated according to several categories. The implementation of these objectives will occur by means of specific management strategies and actions, proposed in Section 4. The management objectives have been developed to ensure

that the plan of management satisfies the principles of Crown land management. Proposed management objectives are listed below in Table 3.1, together with the relevant principle of Crown land management (as detailed in Section 2.2).

Table 3.1 Management Objectives

Category	Management Objective	Relevant Principle of Crown Land Management
Recreation and Use	<p>Provide opportunities for a range of low key, predominantly unorganised recreation activities, with a focus on water-based recreation.</p> <p><i>This will include locations for use of different types and intensities, with a focus on providing for a richer recreation experience, ensuring protection of the natural environment and minimising impacts on residential amenity.</i></p>	c, d, e
Natural Environment and Vegetation	<p>Ensure that the natural environment is protected and enhanced, and that use of the reserve minimises impacts to the environment.</p> <p><i>A key focus should be the establishment of a sustainable vegetation community that ensures protection of the natural dune system and responds to the environmental qualities of different areas and the needs of the community.</i></p>	a, b, e
Heritage	<p>Recognise and protect the significance of Frenchmans Bay as part of a wider cultural landscape with significant heritage values.</p> <p><i>This should include protection of the particular qualities that contribute to its overall cultural heritage significance.</i></p>	b
Visual and Landscape	<p>Enhance and protect the scenic quality of the reserve, recognising the importance of the natural environment to the overall scenic quality of the area.</p>	b
Facilities, Services and Infrastructure	<p>Provide and maintain services and facilities to support the range of activities that take place, enabling a high quality recreation experience and appropriate community use consistent with the principles of Crown land management.</p> <p><i>A key focus should be improving the quality of facilities; providing appropriate connections and access through and along the reserve; and enhancing safety and security.</i></p>	c, f

5. Managing the Frenchmans Bay Reserve

The overall management objectives, and the proposed focus for management of the difference areas within the reserve, provide the direction for management of Frenchmans Bay. Management strategies and associated actions are proposed within this section, to address the identified issues and achieve the management objectives.

5.1 Direction for Management and Decisions Regarding Land Use

Decisions regarding the management of the reserve should have regard to the proposed management objectives. Land uses, and management of the reserve, should be consistent with the management objectives listed in Section 3.3. This in turn will ensure that management is consistent with the principles of Crown land management, as required by the Crown Lands Act.

This plan provides the broad framework for the overall management of activities and land uses within the reserve (including decisions regarding land use). The plan effectively provides a direction for management decisions. More specific and detailed requirements should be established in conjunction with detailed designs prepared (for example) for any new paths, facilities etc; and the conditions of approval applied to development applications for any developments that may be proposed (eg for the redevelopment of the remains of the Stannard Bros boatshed).

Any proposals for land use and new facilities would need to be consistent with the management vision and objectives for the overall management of the reserve, and the proposed management focus for the different areas (or zones) within the reserve, as described below.

5.1.1 Management Zones

As outlined in Section 2 (and depicted in Figure 2.1), the reserve consists of a number of areas or zones, which differ in terms of their use, characteristics and environment. The areas also differ according to the issues identified. For this reason, the management direction for each should respond appropriately, and these management zones will form the basis for a number of the proposed actions (listed in Table 4.3). It is important to recognise the direction that management should take in each of these zones.

The proposed management direction for each zone is summarised in Table 4.1.

Table 4.1 Management Direction for Each Zone

Zone	Recommended Management Direction
Park	Location for intense recreation activity and visitation, and the focus of facility provision. Focussing use in this area will contain the potential for impacts, and assist in reducing the impacts of use on the reserve as a whole.
Dunes	Protect the dune system and provide appropriate access to the beach.
Fig Valley	Location for passive/informal recreation and management of urban runoff to protect receiving waters.
Frogs Hollow	Appropriately manage the old landfill site (improving the surface and appearance) to provide a low key, natural area, and a location for passive recreation, particularly for the adjoining community.
Yarra Point	Protection of remnant vegetation and significant views.

5.2 Performance Measures and Assessment Tools

Performance Measures

Performance measures for the overall management objectives and the specific management zones are suggested below.

Performance measures for the management objectives

Management Objective	Performance Measures
Provide opportunities for a range of low key, predominantly unorganised recreation activities, with a focus on water-based recreation.	Opportunities for public access, community use and recreation are provided, and community satisfaction
Ensure that the natural environment is protected and enhanced, and that use of the reserve minimises impacts to the environment.	Improved water quality of receiving waters. Reinstatement of an appropriate and sustainable dune vegetation community. Protection and increased diversity of terrestrial flora and fauna. Protection of the dune system. Preservation, growth and increased diversity of marine and intertidal flora and fauna.
Recognise and protect the significance of Frenchmans Bay as part of a wider cultural landscape with significant heritage values.	Public recognition of the cultural heritage significance of the Frenchmans Bay area. Formal protection of significant heritage items and places.
Enhance and protect the scenic quality of the reserve, recognising the importance of the natural environment to the overall	All future works and management activities have regard to scenic quality. Any new facilities, landscaping etc are

Management Objective	Performance Measures
scenic quality of the area.	consistent with the visual significance of the reserve.
Provide and maintain services and facilities to support the range of activities that take place, enabling a high quality recreation experience and appropriate community use consistent with the principles of Crown land management.	Facilities are provided that complement the significance of the reserve and meet visitor needs.

Performance measures for the individual management zones

Management Zone	Performance Measures
Park	<p>An attractive high quality and well maintained park is provided, offering facilities and landscaping that complement the reserve and meet visitor needs.</p> <p>The number of complaints associated with maintenance of this area reduces.</p>
Dunes	<p>Provision of a sustainable vegetation community that meets the needs of the environment and addresses the concerns of the local community.</p> <p>Access paths to the beach are provided and used with minimal impact to surrounding vegetation or the dunes.</p>
Fig Valley	<p>Provision of an appropriate and sustainable vegetation community that meets the needs of the environment and local community.</p> <p>Opportunities for passive/informal recreation are provided.</p> <p>Impacts of stormwater drainage on the beach and the quality of receiving waters are minimised.</p>
Frogs Hollow	<p>The old landfill site is stabilised and provides the location for public access and passive/informal recreation.</p> <p>The old landfill site is monitored and results regularly reported.</p> <p>Any issues identified are addressed.</p> <p>The number of complaints associated with the maintenance of this area reduces.</p>
Yarra Point	<p>Protection and increased diversity of terrestrial flora and fauna.</p> <p>All future works and management activities have regard to scenic quality.</p>

Assessment Tools

The success of the plan's implementation could be assessed, relative to each of the above performance measures, in a number of ways, depending on Council's preferences. This could include the following assessment tools undertaken regularly:

- Documentation of sites where works are undertaken;

- Assessment of spending and time spent in maintenance and management activities;
- Assessment of maintenance standards;
- Mapping of vegetation (flora surveys);
- Fauna surveys;
- Mapping of erosion;
- Monitoring of dune and sand movement;
- Water quality monitoring;
- Installation of groundwater monitoring wells;
- Monitoring of leachate; and
- Visitor satisfaction surveys.

5.3 Management Strategies

Suggested management strategies to achieve the objectives of the plan, and respond to the issues described in the Issues Report (Appendix A) are listed below. The issues that will be addressed by the implementation of the individual strategies are also summarised. These strategies will either apply to a particular management zone or the whole reserve. This is also indicated below.

Recreation and Use

Management Strategy	Management Zone	Issue Addressed
Ensure appropriate access to the beach and through the reserve.	Whole reserve	Need for adequate and appropriate access to different areas within the reserve, that minimises impacts to the environment and dune system.
Promote opportunities for a variety of recreation activities, with the focus of high intensity use at the southern end.	Number of zones	Concerns with the environment, appearance of, and facilities available in the park area at the south. Need for a recreation area within the reserve where use can be concentrated. Need for a diversity of recreation experiences and opportunities, including areas for quiet enjoyment and use by local residents.
Minimise the impact of dogs on the recreation experience of reserve users.	Whole reserve	Impact of dogs, including the presence of dogs in different areas, dogs off their leash, and dog droppings.

Natural Environment and Vegetation

Management Strategy	Management Zone	Issue Addressed
Improve the environment of the old landfill site.	Frogs Hollow	Presence of the old landfill site and associated concerns (eg perceived impacts, appearance, low levels of use, lack of monitoring, potential

Management Strategy	Management Zone	Issue Addressed
Replace existing vegetation with a sustainable vegetation community, responsive to the environment and community needs.	Dunes	instability). Number of concerns with existing vegetation (including large number of weeds eg bitou bush, density, height, safety and security, fire risk, vandalism, overgrown paths, amount of dead vegetation, lack of native and culturally valued species) and the need to stabilise the dunes, provide habitat and a wind break.
Increase community awareness of the significance of vegetation on the dune system.	Dunes	The significance, value of, and need for, a vegetated dune system is not fully appreciated by the community.
Reduce erosion and wear throughout the reserve.	Number of zones	Erosion and wear (including beach erosion, localised scouring, wear, creation of informal paths and depletion of vegetation) is an issue in a number of areas.
Reduce the impacts of stormwater drainage.	Whole reserve	Water pollution and the impacts of stormwater and urban runoff (eg rubbish near stormwater outlets, water quality impacts, impacts on seagrass beds).
Ensure ongoing protection of all significant vegetation.	Fig Valley, Yarra Point.	Presence of significant vegetation, including figs near the drainage line (in Fig Valley) and the small area of remnant vegetation at Yarra Point.
Expand and link the Bush Tucker trail to a system of paths throughout the reserve.	Yarra Point	Bush Tucker trail could be further developed and expanded.

Visual and Landscape

Management Strategy	Management Zone	Issue Addressed
Ensure a diversity of spaces and settings that recognise scenic values and significant views.	Whole reserve	Concerns that the high scenic values of Frenchmans Bay are not sufficiently recognised, and that several features impact on this significance (eg the old sewer pipe near Yarra Point).
Provide consistent treatments to all landscape elements, services and facilities.	Whole reserve	Some landscape features and development detract from the visual quality of the reserves.
Improve the environment of the old landfill site.	Frogs Hollow	Concerns with the appearance of the old landfill site, including erosion, rubbish, lack of vegetation, uneven surface etc.
Provide landscaping and vegetation species appropriate to Frenchmans Bay.	Whole reserve	Many plantings and species are inconsistent with the significance of Frenchmans Bay.

Heritage

Management Strategy	Management Zone	Issue Addressed
Recognise overall heritage significance and ensure protection of significant sites and places.	Whole reserve	Need for recognition and protection of the history and heritage significance of Frenchmans Bay.
Provide information on the history of Frenchmans Bay and its heritage significance.	Whole reserve	The history of Frenchmans Bay, and its heritage significance, are not interpreted clearly to the public.
Ensure that Aboriginal history and heritage is appropriately recorded and preserved.	Whole reserve	The Aboriginal history and heritage of this area (including the original Mission and Aboriginal Reserve) and the wider La Perouse area, has not been adequately document.

Facilities and Services

Management Strategy	Management Zone	Issue Addressed
Improve the quality and safety of all services and facilities.	Park	Facilities, particularly those in the grassed park at the southern end of the reserve, are of a poor standard.
Improve the standard of lighting.	Park, Dunes	Lighting is inadequate in some areas, particularly along Endeavour Avenue adjacent the car parking, leading to security concerns.
Provide a planned approach to the provision of all future services and facilities.	Whole reserve	Facilities have not always be planned, designed and located appropriately.

Management and Maintenance

Management Strategy	Management Zone	Issue Addressed
Ensure management arrangements take into account community values and interests.	Whole reserve	Management of Frenchmans Bay should take into account both the needs of the Aboriginal and non-Aboriginal community.
Ensure maintenance activities are adequate, consistent and recognise the significance of the reserve.	Whole reserve	Concerns with the adequacy of general maintenance activities (eg as clearing of rubbish bins at the right times), and that management and maintenance does not always recognise the significance of the reserves.
Ensure appropriate management structures for the reserve as a whole.	Whole reserve	Council is not the gazetted reserve trust manager for all Crown reserves within Frenchmans Bay.
Negotiate appropriate lease arrangements for the use of the Stannard Bros boatshed deck by Pete's Boatshed	Park	The owners of Pete's Boatshed intend to submit a development application to convert the decking adjoining the boatshed for use as an outdoor seating/dining area.

5.4 Management Priorities

Several priorities for the implementation of the Plan of Management have been identified and are discussed below. These should be the focus of management activities over the short to medium term. Specific strategies and actions are set out in Tables 4.2 and 4.3.

Recognising the historical and cultural significance of Frenchmans Bay

A key priority is providing appropriate and sensitive interpretation of key areas and the reserve as a whole, and ensuring the protection of cultural heritage values. The findings and recommendations of the Cultural Heritage Report (Navin Officer, 2000) should inform management (refer Appendix B). Appropriate actions have been included in the following actions plans.

Managing the dune vegetation

Developing a sustainable vegetation community (particularly along the dunes) that is sensitive to environmental demands, responsive to different locations, habitats, soil conditions, recreation and community needs and concerns, is a key priority for management. The findings and recommendations of the Vegetation Study (Clements, 2000) should be reviewed and considered (refer Appendix D).

This should include replacing Bitou Bush with Beach Spinifex and associated species. It is recommended that fencing on the beach be provided to ensure the Spinifex dominated vegetation cover is maintained, and not lead to erosion and loss of the existing park area. The fencing should not reduce the amount of land available for recreation. Planting of native trees/shrubs of an appropriate height is recommended for the hind dune (along Endeavour Avenue) to reduce wind eddying effects and subsequent erosion. Use of lawn grasses in the dune area is not recommended as these are considered unlikely to survive the salt spray and sand movement experienced in this area. Fire was recommended as a possible management tool for reducing the biomass of Bitou Bush.

Appropriate actions have been included in the following actions plans.

Management sensitive to the needs of the Aboriginal community

This should include liaison and involvement of the community in management activities; management directed at recognising and protecting the cultural values of the area; and considering the implications of land and native title claims for Council's management of the area. The recommendations of the Cultural Heritage Report (Navin Officer, 2000) should be considered (Appendix B).

Appropriate actions have been included in the following actions plans.

Appropriately monitoring and managing the old landfill area.

The findings and recommendations of the Stage 1 Environmental Assessment (GHD, 2000) should be reviewed and considered (refer Appendix C) and more detailed studies undertaken as appropriate.

Appropriate actions have been included in the following actions plans.

Identify principles for future proposed use of the old Stannards boatshed

The proposed use of the old Stannards boatshed deck (located in the reserve) for outdoor seating/dining, by the owners of Pete's Boatshed, will be subject to a lease in the event that the development application (DA) is approved. This facility would need to be operated in accordance within the DLWC policy No 97/09 'Food and Beverage Outlets on Crown Reserve', and appropriate principles included in their lease. Table 4.3 contains principles to guide the lease, should the DA be approved. These will need to be further developed following adoption of the plan, in response to the information contained within the DA and conditions of consent.

Providing a system of pathways to link different areas of the reserve

Pathways should be provided to allow access to the beach and along the reserve (ie both through and within the reserve). Pathways should provide both access and a recreation experience in their own right. The pathways should also allow better access for the local community to the areas they want to visit, reinforcing traditional/historical links. Pathways are proposed to provide access both to the beach, and along the reserve from north to south (linking with the bush tucker trail).

Appropriate actions have been included in the following actions plans and indicated on the masterplan.

Managing stormwater

Implementing the recommendations of the Mill Pond Creek Catchment Stormwater Management Plan, including appropriate stormwater control, will assist in reducing the potential impacts of stormwater (and associated rubbish) on the beach and seagrass beds.

Appropriate facilities and infrastructure

The quality of the facilities should be improved so that they enhance, rather than detract from, the recreation experience of reserve users. Facilities provided (eg lighting) should also assist in improving security and perceptions of safety for reserve users and nearby residents. Facilities should be focussed within the Park management zone, to provide for the concentration of use in this area. However other improvements proposed (eg improving surface and appearance of the old landfill site/Frogs Hollow area; low-key improvements/facilities in the Fig Valley area; and a north south path) will also provide opportunities for low key, passive recreation, and local use of other areas.

5.5 Action Tables

The strategies listed in Section 4.3 will be implemented through a range of actions, listed in the Action Tables. Table 4.2 lists actions that apply to the management of the reserve as a whole (grouped according to the different categories management objectives), while Table 4.3 lists actions specific to individual management zones.

5.6 Masterplan

The Masterplan (Figure 4.1) acts as a visual guide for management decisions, helping to direct those decisions towards achieving the objectives for the reserve. It details key priorities for the different management zones.

Table 4.2 Action Table - Overall Reserve

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Ensure appropriate access to the beach and through the reserve.	Provide pathways as indicated schematically on the Masterplan, based on a detailed site analysis and design brief.	high
Minimise the impact of dogs on the recreation experience of reserve users.	Council rangers continue to enforce Council policies in relation to dogs.	ongoing
Reduce erosion and wear throughout the reserve.	Regrade the lawn area and define clear pathways, including appropriately located and designed pathways to the beach (as set out in the Masterplan).	medium
Reduce the impacts of stormwater drainage.	Implement the recommendations of the Mill Pond Creek Catchment Management Plan, including the provision of signage, education, and appropriate solid removal devices.	high
Provide consistent treatments to all landscape elements, services and facilities.	Produce a coordinated design guideline for landscape elements, services and facilities provided within Frenchmans Bay, consistent with other beaches in the Randwick LGA Review all landscape elements, services and facilities in terms of consistency with these guidelines. Coordinate landscape materials to establish consistency within the Frenchmans Bay reserve.	medium
Provide landscaping and vegetation species appropriate to Frenchmans Bay.	The recommendations of the Masterplan and species list (Clements, 2000) should be referred to for future plantings.	ongoing
Ensure a diversity of spaces and settings that recognise scenic values and significant views.	Choose, locate and design landscaping and facilities to recognise views to Botany Bay.	ongoing
Provide information on the history of Frenchmans Bay and its heritage significance.	Provide educative signs at appropriate locations, including reserve entry points etc. Undertake a community education program (eg information brochure available at surrounding cafes, the museum and distributed to residents of nearby suburbs; a series of articles in the local press; information on Council's web site etc). Involve the local Aboriginal community in the development and provision of appropriate interpretative material.	medium
Recognise overall heritage significance and ensure protection of significant sites and places.	Provide legal protection for significant sites by listing them on the Heritage Schedule of the LEP and where appropriate on the State Heritage Inventory. Ensure potential impacts on archaeological sites and potential sub surface deposits are assessed	high

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
	<p>prior to development or works within the study area.</p> <p>Develop an overall heritage management policy/plan for that portion of the La Perouse and Frenchmans Bay landscape that is considered to be culturally and scenically significant (including definition of the landscape and scenic elements which need to be retained).</p>	
Ensure that Aboriginal history and heritage is appropriately recorded, preserved and communicated.	<p>Conduct a comprehensive oral history recording project with the aim of documenting the surviving oral history relating to the La Perouse Aboriginal community and mission.</p> <p>Promote the Aboriginal history and cultural heritage of the area in consultation with the local community, in such a way that heritage values or sites and features are not degraded.</p>	high
Provide a planned approach to the provision of all future services and facilities within Frenchmans Bay.	Follow the Plan of Management and Masterplan as a guide to all development.	ongoing
Ensure management arrangements take into account community values and interests.	<p>Continue to communicate with the Local Aboriginal Land Council, the La Perouse Precinct Committee and any groups with a direct interest in Frenchmans Bay, in relation to the implementation of the Plan of Management and management activities.</p> <p>Formulate and instigate, in consultation with the local Aboriginal community representatives, an appropriate means of promoting regular communication and liaison between the community and Council. This should include agreement on a set of mutually agreed protocols for information exchange and the reporting of community views.</p> <p>Provide information to the general community (who may not be involved in organised groups) about management activities and priorities (eg as regular updates in the local press, leaflets distributed at local schools/shops/cafes, information on Council's web site, signage and community noticeboards).</p>	high
Ensure appropriate management structures for the reserve as a whole.	Liaise with DLWC regarding Council's gazettal as the reserve Trust Manager for all Crown reserves at Frenchmans Bay.	low
Ensure maintenance activities are adequate, consistent and recognise the significance of the reserve.	<p>Communicate the recommendations of the Plan of Management to Council's local maintenance staff and Council rangers.</p> <p>Follow up reported maintenance problems with appropriate works and actions.</p>	ongoing

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
	Identify existing services and facilities that require immediate maintenance and carry out appropriate actions in accordance with the Plan of Management.	

Table 4.3 Action Table - Management Zones

Park

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Promote opportunities for a variety of recreation activities, with the focus of high intensity use at the southern end.	<p>Improve the quality of the Park at the southern end by:</p> <ul style="list-style-type: none"> • reviewing previous detailed landscape plans in consultation with the community; • providing shade trees and landscaping in appropriate locations; • improving facilities (as indicated on the Masterplan); • providing childrens' play facilities. 	medium
Improve the standard of lighting.	Provide additional lighting along Endeavour Avenue and areas indicated by the Masterplan.	high
Improve the quality and safety of all services and facilities.	<p>Redevelop toilet facilities.</p> <p>Provide shaded seating near BBQ areas and seating at key view points.</p> <p>Improve BBQ facilities.</p>	medium
Negotiation appropriate lease arrangements for the use of the Stannards boatshed deck by Pete's Boatshed.	<p>The lease should include principles similar to the following:</p> <ul style="list-style-type: none"> • Lease area – confined to the building envelope • Reservation – the existing designation 'Public Recreation' is appropriate. • Development – any development should be restricted to one storey above the deck area. • Appearance – the building form and appearance should be consistent with the adjoining boatshed and in keeping with the high scenic values of this area, and views from other areas. • Permitted use, operation and management – in accordance with DLWC policy No 97/09 'Food and Beverage Outlets on Crown Reserve'. 	medium

Dunes

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Replace existing vegetation with a sustainable vegetation community, responsive to environment and community needs.	<p>Based on the findings of the Vegetation Study:</p> <ul style="list-style-type: none"> • reduce the biomass of Bitou Bush on the foredune and replace with spinifex; • encourage regeneration of remaining native 	high

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
	plant species; <ul style="list-style-type: none"> • provide appropriately designed fencing along the foredunes to protect the Spinifex; • consider planting of the hindune (roadside planting along Endeavour Avenue) of trees and shrubs (eg Eucalyptus botryoides and Banksia integrifolia) to minimise the potential for sand movement as a result of wind eddying effects; and • consider the use of fire and a management tool to reduce the biomass of Bitou Bush. 	
Ensure appropriate access to the beach and through the reserve.	Provide sympathetic pathways through vegetation, appropriately designed and located, based on a detailed site analysis and design brief.	high
Increase community awareness of the significance of vegetation on the dune system.	Provide information on dune vegetation (including significance, role and value) through the following: <ul style="list-style-type: none"> • provide educative signs near the vegetation describing its value and role, need for dune stabilisation etc; • undertake a community education program (eg information brochure, discussions) of adjoining landowners regarding the importance of dune vegetation. 	medium
Improve the standard of lighting.	Review the adequacy of lighting along Endeavour Avenue, near car parking areas and entrances to path ways and beach access points, and provide additional lighting where appropriate.	high

Fig Valley

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Ensure ongoing protection of significant vegetation.	Based on the findings of the Vegetation Study: <ul style="list-style-type: none"> • re-establish native vegetation along the ephemeral drainage/creek line and adjoining areas - the vegetation along the path should demonstrate diversity of Aboriginal plant foods, ranging from Dioscorea sp (Native Yam), Correa alba (White Correa), Carpobrotus glaucescens (Pigface) and Kennedia prostrata (Dusky Coral pea); • provide a path through the lower more open vegetation of the hind dune and the beach; and • design the path and planing in consultation with a botanist, landscape architect and the local community. 	medium

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Reduce the impacts of stormwater drainage.	Install an appropriate solid removal device at the drainage line (a gross pollutant trap, Net-tech and Continuous Deflective Separation systems were recommended by the Mill Pond Catchment Management Plan).	high
Promote opportunities for a variety of recreation activities.	Provide a low key pocket park associated with the drainage channel (including appropriate interpretation) at Fig Valley, as indicated on the Masterplan.	low

Frogs Hollow

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Improve the environment of the landfill site	In accordance with the findings of the Stage 1 Preliminary Environmental Assessment: <ul style="list-style-type: none"> • install at least three groundwater monitoring wells and conduct groundwater monitoring; • subject to the monitoring results, determine the appropriateness of management responses (eg capping, improving ground surface); • restrict vehicle access to ground surface; • determine the stability of the landfill wall (behind the beach); and • investigate the area of fibrous cement sheeting with a view to removal or covering. 	high
Promote opportunities for a variety of recreation activities.	Provide opportunities for low key passive recreation, including appropriate paths, landscaping and seating, as outlined on the Masterplan, based on a detailed site analysis and design brief.	low

Yarra Point

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Ensure ongoing protection of significant vegetation.	Based on the findings of the Vegetation Study: <ul style="list-style-type: none"> • Implement careful bush regeneration to expand the coverage of native vegetation; and • Consider providing a path and appropriate interpretation of remnant vegetation to link with the existing Bush Tucker trail. 	medium
Ensure a diversity of spaces and settings that recognise scenic values and significant views.	Determine the status of the sewer pipe and its potential for future relocation by liaising with Sydney Water. Investigate strategies to mitigate the visual impact if removal is not feasible.	low

MANAGEMENT STRATEGIES	ACTIONS	PRIORITY
Expand and link the Bush Tucker trail to a system of paths throughout the reserve.	Work with the LALC to further develop the Bush Tucker trail and link with a more extensive path system, including interpretation of native remnant vegetation.	medium
Promote opportunities for a variety of recreation activities.	<p>Provide a pathway linking the park at the southern end of the reserve with Yarra Point and the bush tucker trail, based on a detailed site analysis and design brief.</p> <p>Provide appropriate interpretative material associated with the pathway, linked to significant view points and sites.</p>	Medium